



BANK OF GREECE
EUROSYSTEM

Working Paper

Monetary time series of Southeastern Europe from the 1870s to 1914

members of the SEEMHN
data collection task force
with a foreword by Michael Bordo
and an introduction by Matthias Morys

SEEMHN

94

FEBRUARY 2009

WORKING PAPER WORKING PAPER WORKING PAPER WORKING PAPER

**MONETARY TIME SERIES OF SOUTHEASTERN
EUROPE FROM THE 1870S TO 1914**

*Members of the SEEMHN Data Collection Task Force
With a Foreword by Michael Bordo
And an Introduction by Matthias Morys*

BANK OF GREECE
Economic Research Department – Special Studies Division
21, E. Venizelos Avenue
GR-102 50 Athens
Tel: +30210-320 3610
Fax: +30210-320 2432

www.bankofgreece.gr

*Printed in Athens, Greece
at the Bank of Greece Printing Works.*

*All rights reserved. Reproduction for educational and non-commercial purposes is permitted
provided that the source is acknowledged.*

ISSN 1109-6691

Editorial

The South-Eastern European Monetary History Network (SEEMHN) is a community of financial historians, economists and statisticians, established in April 2006 at the initiation of the Bulgarian National Bank and the Bank of Greece. Its objective is to spread knowledge on the economic history of the region in the context of European experience with a specific focus on financial, monetary and banking history. The SEEMHN Data Collection Task Force aims at establishing a historical database with 19th and 20th century financial and monetary data for the countries in the region. A set of data has already been published as an annex to the 2007 conference proceedings, released by the OeNB (2008, *Workshops*, no 13).

The second stage of the SEEMHN Data Collection Task force includes reports from all participating central banks. For each country, historical aggregates are preceded by a description of the country's monetary events and explanatory remarks. The data set refers to banknotes in circulation, reserves, discount rates and exchange rates. The frequency is monthly and the time span covers the period from 1870 and beyond to 1914. A foreword on the paramount importance of historical data series is supplemented by Prof. Michael Bordo (Rutgers University). An introduction on cross-country historical comparison is written by Dr. Matthias Morys (University of York).

Here we present data displays for each country written by Kliti Ceca, Kelmend Rexha and Elsida Orhan for Albania (Banka e Shqipërisë); Thomas Scheiber for Austria-Hungary (Oesterreichische Nationalbank); Kalina Dimitrova (Balgarska Narodna Banka) and Martin Ivanov (Bulgarian Academy of Science) for Bulgaria; Sophia Lazaretou for Greece (Bank of Greece); George Virgil Stoenescu, Elisabeta Blejan, Brindusa Costache and Adriana Iarovici Aloman for Romania (Banca Națională a României); Milan Sojic, Ljiljana Durdević, Sanja Borković and Olivera Jovanovic for Serbia (Narodna Banka Srbije). We strongly believe that by making the historical time series available to a wider audience for the first time ever, research interests in monetary and financial economics in this part of Europe will be further stimulated.

February, 2009

Sophia Lazaretou
SEEMHN Coordinator
Member of the Scientific and Organizing Committee

**MONETARY TIME SERIES OF SOUTHEASTERN
EUROPE FROM THE 1870S TO 1914**

*Members of the SEEMHN Data Collection Task Force
With a Foreword by Michael Bordo
And an Introduction by Matthias Morys*

Contents

Foreword.....	p.9
<i>by Michael Bordo</i>	
South-Eastern European Monetary History in a Comparative Perspective, 1870s to 1914.....	p.11
<i>by Matthias Morys</i>	
Albania.....	p.35
<i>by Kliti Ceca, Kelmend Rexha and Elvida Orhan</i>	
Austria-Hungary.....	p.37
<i>by Thomas Scheiber</i>	
Bulgaria.....	p.63
<i>by Kalina Dimitrova and Martin Ivanov</i>	
Greece.....	p.87
<i>by Sophia Lazaretou</i>	
Romania.....	p.153
<i>by George Virgil Stoenescu (Coordinator)</i>	
<i>Elisabeta Blejan, Brîndușa Costache and Adriana Aloman</i>	
Serbia.....	p.181
<i>by Milan Šojić, Ljiljana Đurđević and Sanja Borković</i>	

Foreword

This cross-national collaboration of scholars from six South East European countries puts together for the first time a comprehensive collection of monetary data from circa 1880-1914. The countries covered include; Albania, Austria-Hungary, Bulgaria, Greece, Romania, and Serbia. For each country, monthly data on four key series for monetary analysis are compiled; exchange rates, gold reserves, bank notes and central bank discount rates. Each country study uses standardized definitions of each series to facilitate cross-country comparison. The individual country data compilations are preceded by an introduction which provides an institutional and historical narrative on the South East Europe region and its monetary institutions and standards.

A collection of data like this one is crucial to the writing of the monetary history of the individual countries and of the region. This was the approach followed by Milton Friedman and Anna Schwartz in writing **A Monetary History of the United States: 1867-1960**. Statistical series such as these serve as the skeleton for the study. Institutional detail and historical narrative will put flesh on the bones.

As Matthias Morys points out in his excellent introduction, South East Europe has been relatively neglected in most studies of European Economic History. One reason is the relative economic and political backwardness of most of the countries (with the exception of Austria-Hungary) compared to the core countries of Western Europe. This data base should serve as an important starting point to help fill the gap in our knowledge. The proposed “Monetary History of South East Europe” could complement Alexander Gershenkron’s seminal **Economic Backwardness in Historical Perspective** which first put the economic history of South East Europe on the global economic history map.

Prof. Michael D. Bordo

Rutgers University and NBER
bordo@eco.rutgers.edu

South-Eastern European Monetary History in a Comparative Perspective, 1870s–1914¹

Dr. Matthias Morys

University of York

1. Introduction

Southeastern European monetary history is no longer *terra incognita*. The South-Eastern European Monetary History Network (SEEMHN), which brings together all the central banks from Austria in the west to Turkey in the east, has worked hard to illuminate their monetary histories since the network was launched in 2006. Next to the organisation of annual conferences, the network set up a task force with the purpose of collecting historical monetary time series. The long-term goal is to publish all the pre-1950 monetary data in a publication jointly edited by the Oesterreichische Nationalbank, the Balgarska Narodna Banka and the Bank of Greece. Such a publication would help overcome the “statistical dark ages”, which all too often have prevented monetary economists and economic historians from Western Europe and North America from including Balkan countries into their samples. As a quick glance at some literature on the history of central banks and central banking shows, virtually no attention has been paid to the Southeastern European experience (with the possible exception of Austria).²

Esse est percipi (Berkeley) – in this sense, the Southeastern European central banks and academics united in this network hope that academic interest in this part of

¹ I would like to thank all participants of the South-Eastern European Monetary History Network (SEEMHN) for their very substantial efforts in collecting and describing the monetary data of their countries and for asking me to write this cross-country comparison and attempt to put the South-Eastern European experience in historical perspective. *Email to mm585@york.ac.uk*

² O. Feiertag and M. Margairaz, eds., *Politiques et pratiques des banques d'émission en Europe (XVII^e – XX^e siècle)*. *Le bicentenaire de la Banque de France dans la perspective de l'identité monétaire européenne* (Paris: Albin Michel, 2003). F. Capie, Banking in Europe in the Nineteenth and Twentieth Centuries: The Role of the Central Bank, in: *The State, the Financial System and Economic Modernization*, eds. R. Sylla, R. Tilly, and G. Tortella (Cambridge: Cambridge University Press, 1999). C. Goodhart, *The Evolution of Central Banks*, 2nd eds. (Cambridge, Mass.: MIT Press, 1988).

Europe will be stimulated by making the historical data available for the first time ever.

While such a publication is the medium-term aim, the task force set itself as a first goal to provide four key monetary time series for the period until the First World War: exchange-rates to the European core countries of England, France, and Germany; the discount rate of the bank of note issue; gold reserves; and bank notes in circulation (which constitute, under pre-1914 conditions, the main component of the monetary base). In what follows, each central bank will describe and report its own data, accompanied by some remarks on coinage legislation, the bank of note issue, gold cover ratios and rules of convertibility (of bank notes into species).

In this introductory chapter, we will first provide some political and economic background information to the history of the Balkan countries before the First World War, and we will point to some parallels between the pre-1914 situation and the challenges Southeastern Europe is facing today (Section 2). Subsequently, we will, based on the data and the information provided by the individual central banks, attempt to put the Southeastern European experience in historical comparison with the rest of Europe, as far as minting legislation (Section 3), the structure of the banks of note issue (Section 4), and the exchange-rate experience (Section 5) are concerned. While our results are necessarily preliminary, they might point to some interesting questions for further research.

2. Political and economic aspects of the Balkan peninsula, 1870s–1914; parallels to today’s challenges in Southeastern Europe

Two features, in particular, differentiated the Balkan peninsula from Western Europe in the 19th century: economic backwardness and retarded nation building and state formation. In 1870, GDP per capita levels were at roughly one third of the level of the European core economies of England, France and Germany.³ Even if we doubt the accuracy of 19th century GDP figures, virtually all economic indicators available suggest that Western Europe was substantially richer than Southeastern Europe

³ M. Morys, South-Eastern European Growth Experience in European Perspective, 19th and 20th centuries, in: *Monetary and Fiscal Policies in South-Eastern Europe: Historical and Comparative Perspectives (Conference Proceedings of the 1st meeting of the South-Eastern European Monetary History Network)*, eds. R. Avramov and S. Pamuk (Sofia: Bulgarian National Bank, 2006), p. 39.

throughout the 19th century.⁴ The other feature was the legacy of living over centuries in the competing sphere of influence of Austria, the Ottoman Empire, and Russia. Only the economic decline of the Ottoman Empire and the rise of Balkan nationalism in the 19th century allowed the peoples of Southeastern Europe to seek their own destiny and to form nation states along West European models. All this came late, and often in a slow and confusing process of transition from being part of the Ottoman Empire to some form of autonomy within it, to be followed by full-fledged independence. Serbia, the first Balkan country to achieve some form of autonomy in 1815, for instance, had to wait another 63 years to achieve independence at the Congress of Berlin (1878). By the outbreak of the First World War, five Balkan countries had achieved independence⁵: Serbia (1815/1878), Greece (1832), Romania (1859/1878), Bulgaria (1878/1908) and Albania (1912). To this we add Austria-Hungary and the Ottoman Empire, the two countries that were slowly but surely receding from the Balkans over the course of the 19th and early 20th centuries.⁶

This very distinct process of state formation is important in our context for three reasons. First, the late state formation gives a natural beginning for the monetary history of Southeastern Europe and their banks of note issue. As table 2 shows, most of the banks of note issue were founded in the 1870s and 1880s, when Balkan independence gained momentum following the Russian-Turkish war (1877-1878) and the congress of Berlin (1878). Second, more so than in other countries, there always was a noticeable nationalistic component to minting legislation and the establishment of a bank of note issue. In the Serbian case, for instance, minting legislation was passed shortly before achieving full-fledged independence and was seen by contemporaries as part of achieving exactly that.⁷ Third, as all institutions had to be newly created, the need to live with compromises of the past was absent. Whereas

⁴ M. Mazower, *The Balkans* (New York: Phoenix Press, 2001), pp. 17–44.

⁵ Where two years are given, the first one refers to some sort of autonomy that was achieved prior to internationally-recognised independence.

⁶ The Ottoman Empire poses a specific problem in our context, as the Imperial Ottoman Bank, founded in 1856 and granted the exclusive right of note issue, was not succeeded by the current Turkish central bank (i.e., the Türkiye Cumhuriyet Merkez Bankası). This sets the Turkish case apart from the other South-Eastern European countries where the legal identity of the current central bank is identical to the original bank of note issue.

⁷ Gnjatovic, The Introduction of the Limping Gold Standard in the Principality of Serbia, in: *Monetary and Fiscal Policies in South-Eastern Europe: Historical and Comparative Perspectives (Conference proceedings of the 1st meeting of the South-Eastern European Monetary History Network)*, eds. R. Avramov and S. Pamuk (Sofia: Bulgarian National Bank, 2006).

post-unification Italy, for instance, had six banks of note issue as a legacy of its multi-state past, all Balkan countries granted exclusive rights of note issue to a single bank.⁸

Before putting the minting legislation, the structure of the banks of note issue and the exchange-rate experience of the Southeastern European countries in a European perspective, we shall briefly pause and ask ourselves what, if anything, of all this is still relevant to today's challenges facing Southeastern Europe. In some respects, the late 19th century and the early 21st century bear a striking resemblance. In both cases, the Southeastern European countries obtained room for political manoeuvre only recently, be it from the Ottoman Empire back then and from the Soviet Union after 1989. The economic situation is not altogether different either. With the exception of Austria, Slovenia, and Greece, all Southeastern European countries have actually fallen back (albeit some only slightly) compared to England, France, and German GDP per capita levels in the time period 1870–2001.⁹ In other words, rapid growth is needed as much today as it was back then. But not only the diagnosis but also the therapy appears somewhat similar. Just as Southeastern European countries are eager to introduce the Euro these days, they were keen on adopting French minting legislation and the gold standard in the late 19th century. With this current perspective in mind, we shall now proceed to some remarks on the minting legislation in Southeastern Europe before the First World War.

3. Coinage legislation

The 19th century Balkan peninsula was not only a most colourful mixture of peoples but also of coins. Circulation of foreign coins was not unusual in the 19th century, but it was much more widespread in the Balkans than anywhere else in Europe. The principality of Serbia (i.e., the nascent Serbian state after gaining autonomy in 1815 and before recognition of full independence in 1878), for instance, accepted some dozens of different coins from the Ottoman Empire, England, France, Germany, Austria-Hungary and other Balkan countries for the purpose of tax collection.¹⁰ This *macédoine* of coins explains why one of the first steps taken after

⁸ With the exception of Greece, cf. Table 2.

⁹ Morys, South-Eastern European Growth Experience in European Perspective, 19th and 20th centuries.

¹⁰ Gnjatovic, The Introduction of the Limping Gold Standard in the Principality of Serbia, p. 48.

gaining independence (often even before that, cf. Table 1) was to establish a system of national coinage, combined with attempts at withdrawing all foreign coinage.

As Table 1 shows, in this endeavour of establishing a national coinage system all countries turned to the Latin Monetary Union (LMU), in which France was by far the most important player.¹¹ Even Austria-Hungary, politically and economically by far the most potent country in Southeastern Europe, tried to align its currency system with France in 1867. Two questions are interesting in this context: First, what exactly does it mean to align the national coinage system with the standards of the LMU? Second, is adopting the LMU principles necessarily equivalent to adopting bimetallism (which was at the heart of the original 1865 agreement between France, Italy, Belgium and Switzerland)?

The origins of the LMU standards are to be seen in the French coinage act of 1803 which established 1 French franc as equal to 5 grams of silver (with a fineness of 900/1000, i.e. the 1 French franc coin contained 4.5 grams of pure silver). Silver coins were minted as 5, 2, 1, 0.5 and 0.2 francs; gold coins – in a gold-silver ratio of 15.5 : 1 and with fineness of 900/1000 – were minted as 20 and 10 francs. This system, conventionally referred to as bimetallism, came under substantial pressure after the immense gold findings in California (1848) and Australia (1851): “cheap” gold came to drive “expensive” silver out of circulation. The only solution left to France – as well as to Italy, Belgium, and Switzerland, which all had a very similar system – was to reduce the silver content of the silver coins from 900/1000 to 835/1000; in other words, full-bodied coins were turned into token coins in order to retain them in circulation. However, solving one problem only created another one. As coins circulated freely among these four countries, the creation of token coins meant that countries were flooded with foreign coins whose intrinsic value was lower than their face value; something, which was in evident contradiction to the concept of a commodity standard. The only solution to this problem was the creation of the LMU in 1865: on the one hand, foreign coins, including token coins, were accepted at public tills; on the other hand, the minting of token coins was strictly limited (to 6 franc per inhabitant) so as to eliminate excessive seigniorage (which would have accrued at the expense of the government required to accept the token coins).

¹¹ For the following, we largely draw on L. L. Einaudi, *European Monetary Unification and the International Gold Standard* (Oxford: Oxford University Press, 2000).

Table 1: Coinage Acts, Monetary Commissions and Monetary Conventions in Southeastern Europe, 1867–1892

<i>Country</i>	<i>Date</i>	<i>Coinage act, monetary commission, or monetary convention</i>	<i>Monetary standard (as intended)</i>	<i>Accordance with 1865 LMU principles?</i>	<i>Name of currency unit</i>
Austria-Hungary	14.4.1867	monetary commission	gold	as far as gold coinage concerned	Gulden (guilder)
	31.7.1867	monetary convention (with France)	gold	as far as gold coinage concerned	
	2.8.1892	coinage act	gold	no	krone
Bulgaria	27.5.1880	coinage act	gold	yes	lev
Greece	10.4.1867	coinage act	bimetallism	yes	drachma
	26.9.1868	monetary convention (with LMU)	bimetallism	yes	
Romania	4.5.1867	coinage act	gold	as far as gold coinage concerned	leu
	15.6.1890	coinage act	gold	yes	
Serbia	20.11.1873	coinage act	bimetallism	yes	dinar

Note: With the exception of Austria-Hungary, all dates given refer to the Julian calendar.

Sources: Avramov (1999), Avramov (2006), Einaudi (2000), Gnjatovic (2006), Lazaretou (2006), Morys (2006), Ministère des Finances (1869), Radovanovic (1999).

It is important to keep in mind that reducing the fineness of silver coins had not altered the gold-silver ratio of 15.5: 1. This is because one coin – the 5-franc coin – had deliberately been left unchanged at the original fineness of 900/1000 in the 1865 LMU agreement. To put it another way, in 1865 already LMU bimetallism rested on a single silver coin only; all other silver coins (i.e., all denominations below 5 francs) had been reduced to token coins. This helps explain why LMU countries could switch so easily to the gold standard in the early 1870s, when increased global silver production, combined with demonetizations of silver in large parts of Europe made silver rather than gold the “cheap” metal again. If a government wished to transit to gold, no costly measures such as re-minting were required. The government only needed to restrict the unlimited coinage of silver on private account; which is exactly

what France and Belgium, the first two LMU countries to switch to gold in September 1873, did.

We had to elaborate on these subtleties of the LMU, because it is often erroneously argued that following the LMU principles is equivalent to adopting bimetallism. After September 1873, the LMU coinage principles were perfectly compatible with adherence to the gold standard (as the French and the Belgian cases demonstrate), provided the unlimited coinage of silver on private account was restricted.

However, even before 1873, adopting the LMU coinage standards did not necessarily imply bimetallism. The cases of Austria-Hungary and Romania may help demonstrate this. Starting in the late 1860s, people felt that the pressure on the price of silver was mounting in international bullion markets. Hence, came the idea to adopt the LMU coinage system only as far as the gold coins were concerned; all silver coins – including the 5-franc piece – were to be minted at the reduced fineness of 835/1000. Austria-Hungary even negotiated accession to the LMU in 1867 on the basis that such agreement would only hold for the gold coins (i.e., the mutual obligation to accept LMU gold coins – but not silver coins – at public tills).¹² The Romanian coinage act of 1867 tells a similar story. Worried over the sustainability of bimetallism, Romania adopted the LMU standards, but minted all silver coins at the reduced fineness of 835/1000.¹³ The Austro-Hungarian and the Romanian decisions of 1867 were hence not only important events for the two countries themselves, but they also reveal some more insight into how the world was slowly converging on the gold standard.¹⁴

Why was the French coinage system so attractive to the Southeastern European countries? The French coinage system was not only “rational” and “modern” in the sense that it was based on the metric system (as opposed to the English coinage system, its only serious rival), but it was also the most widely used one in Europe. In the 1860s, the four LMU countries combined had a population more than twice as

¹² Morys, *The Classical Gold Standard in the European Periphery: A Case Study of Austria-Hungary and Italy, 1870–1913* (Ph.D. thesis London School of Economics and Political Science, 2006), pp. 67–87.

¹³ Ministère des Finances, *Procès-verbaux et rapport de la commission monétaire, suivis d'annexes relatifs à la question monétaire* (Paris: Imprimerie impériale, 1869), p. 157.

¹⁴ On the other hand, Greece, adopting its legislation at around the same time, was apparently less concerned over the future of bimetallism and followed the LMU legislation *à la lettre*.

large as the UK and a combined GDP that was some 40% higher than British GDP.¹⁵ Both factors combined explain why in 1867, at the First International Monetary Conference, held in Paris, countries from all over the world agreed that the French coinage system should be universally adopted.¹⁶ While such a global unification of coinage never materialized, the main obstacle to such a scheme was absent in Southeastern Europe: following political independence, there was no national coinage system in place whose very existence would have generated switching costs. Not only was there nothing to lose, but Southeastern European countries had everything to gain from a world class product made in France: reducing transactions costs (cf. Serbian exchange-rate as reported), potentially better access to West European capital markets, and overall reputational considerations all militated in favor of adopting the French coinage system.¹⁷

We shall conclude this section with some caveats. First, basing the national coinage system on LMU standards did not necessarily imply joining the LMU. As a matter of fact, only Greece ever joined the LMU. The intentions of the other four countries to join the LMU were all frustrated sooner or later. Still, it is worth pointing out that most of the desired advantages of the LMU coinage system were also available without formal membership, and even acceptance of coins at public tills abroad was widespread (but obviously not enforceable).

Second, coinage acts often say little about the actual monetary standard. Lax monetary and fiscal policies often resulted in inconvertibility and *cours forcé* (i.e., bank notes are given legal tender status), which implied a paper standard rather than a commodity standard. We will return to this issue later when discussing the exchange-rate experience of the Southeastern European countries before the First World War and show that most of them followed the gold standard only for a very short period of time after the turn of the century.

¹⁵ A. Maddison, *The World Economy. Historical Statistics* (Paris: OECD Development Centre Studies, 2003).

¹⁶ Reti, *Silver and Gold: The Political Economy of International Monetary Conferences. 1867–1892* (Westport (CT), London: Greenwood, 1998).

¹⁷ It is worth noting that all the South-Eastern European coinage legislation was based on the LMU standards with the exception of the Austro-Hungarian 1892 coinage act (cf. Table 1). By this time, the French coinage system had lost some of its appeal for reasons that are explained in Morys, *The Classical Gold Standard in the European Periphery: A Case Study of Austria-Hungary and Italy, 1870–1913*, pp. 67–113.

Last but not least, we want to point to two idiosyncrasies of coinage in Southeastern Europe. First, all minting took place abroad (with the exception of Austria-Hungary). While this is a purely technical matter, it is testimony to how complicated and costly coinage was under 19th century conditions. Second, none of the Southeastern European countries knew free coinage on private account (again with the exception of Austria-Hungary). In theory, free coinage on private (i.e., coinage on private account) is a crucial pillar of every commodity standard, for it allows the intrinsic value of a coin to decline to its face value if necessary. That such a scenario was not even contemplated shows that the Southeastern European governments anticipated that their currencies would remain rather weak.

4. The banks of note issue: when did central banking emerge in Southeastern Europe and who owned the banks of note issue?

This section is deliberately titled “banks of note issue” rather than “central banks”. While SEEMHN is an initiative sponsored by the Southeastern European central banks, it is far less clear what these banks were alike in the decades following their foundation in the 19th century. This section shall be devoted to asking (rather than answering) one of the key questions that is likely to play a central role in future research: When did the banks under consideration actually become central banks?

Forrest Capie, who has written extensively on the emergence of central banks in 19th and 20th centuries Europe, attributes two main functions to a central bank: “One is macro, the preservation of price stability; the other is micro, the preservation of financial market stability. It is the latter though that really defines central banking. It is the peculiar position of the monopoly note issuer and holder and provider of the ultimate means of payment that allows, almost obliges, the institution to behave as the lender of last resort.”¹⁸ Let us start with the first function: Under 19th century conditions, achieving price stability meant that bank notes were readily convertible into gold (and/or silver) at the bank of note issue. The requirement of gold cover prevented the over-issuance of notes, thereby guaranteeing price stability. The five

¹⁸ Capie, “Banking in Europe in the Nineteenth and Twentieth Centuries: The Role of the Central Bank,” p. 118.

banks we are studying all conformed to this pattern: They were granted from their respective governments the exclusive¹⁹ right to issue bank notes.

Table 2: Banks of Note Issue in Southeastern Europe, 1870s–1914

		<i>Name in the 19th century</i>	<i>Exclusive right of note issue</i>	<i>Today's name</i>
Austria-Hungary	1817 /1878 ¹	Austro-Hungarian Bank	yes	Oesterreichische Nationalbank
Bulgaria	1879	Balgarska Narodna Banka	yes	Balgarska Narodna Banka
Greece		National Bank of Greece	no ²	Bank of Greece (new bank)
Romania	1880	Banca Națională a României	yes	Banca Națională a României
Serbia	1884	Privileged National Bank of the Kingdom of Serbia	yes	National Bank of Serbia

Notes: ¹ Austria-Hungary: The Privileged Austrian National Bank (Privilegierte österreichische Nationalbank), founded in 1817, changed its name in 1878 to reflect the nature of the dual monarchy after the Ausgleich of 1866.

² Greece: Initially, the National Bank of Greece was the sole issuer of bank notes, but the later accessions of the Ionian Islands (1864), Thessaly (1881) and Crete (1897/1913) meant that the note-issuing banks established prior in these territories – the Ionian Bank, the Bank of Epirus and Thessaly and the Bank of Crete, respectively – maintained their note issuing rights. When the Bank of Greece became the successor of the National Bank of Greece in 1928, the other three banks lost their right of note issue and became pure commercial banks

Sources: Avramov (1999), Lazaretou (2006), Morys (2006), Radovanovic (1999).

Turning to the second of Capie's criteria, it appears as though none of the five banks we study had – at least not initially – any kind of supervisory role towards other banks. Most likely, the opposite was true in most cases. The bank of note issue and other commercial banks were competing with each other. But, as Charles Goodhart, another economist interested in the historical origins of central banking, put it: "It was the metamorphosis from their involvement [the central banks' involvement] in commercial banking, as a competitive, profit-maximising bank among many, to a non-competitive non-profit-maximising role that marked the true emergence, and development of proper central banking."²⁰ When did this transformation take place in the Balkan countries?

¹⁹ The only exception was Greece. Cf. Table 2.

²⁰ Goodhart, *The Evolution of Central Banks*, p. 9.

Some clues to this question are already available at this stage. As the development of the Nationale Bank van België/Banque Nationale de Belgique has demonstrated (cf. the paper of Erik Buyst and Ivo Maes in these conference proceedings), a key issue in the emergence of a genuine central bank was to limit the bank's activities to short-term lending. Here, in fact, we see substantial differences among the Southeastern European banks of note issue. The Balgarska Narodna Banka, for instance, was heavily involved in long-term lending, with Avramov observing a "general bias towards the long-term end" in its activities.²¹ By contrast, the Privileged National Bank of the Kingdom of Serbia excluded long-term lending from very early on.²² Future research will need to show whether words (i.e., the bank charter) were followed by deeds. If this had been the case, it seems likely that proper central banking emerged earlier in Serbia than in Bulgaria. It is interesting to note in this context that the Serbian Bank was actually modelled partly along the lines of the Belgian Bank.²³

Who owned and controlled the banks of note issue? The standard 19th century solution was that the bank of note issue was privately owned – often as a joint-stock company – but the government retained a substantial amount of control. One of the channels to retain control was the governments' right to appoint the governor of the bank, as was the case with the Reichsbank. But even if formal control of the bank of note issue was relatively weak, there normally was the need to renegotiate the bank charter after a number of years which gave the government some leeway.

The only bank to be directly state-owned in our sample was the Balgarska Narodna Banka (BNB). Several proposals to privatise the BNB were systematically rejected.²⁴ In all other cases, the banks of note issue were privately owned, even if – as was the case for Romania – one third of the share capital was subscribed immediately by the government. In the cases of Austria-Hungary, Greece, and Serbia,

²¹ Avramov, *The Bulgarian National Bank in a Historical Perspective: Shaping an Institution, Searching for a Monetary Standard*, in: *Monetary and Fiscal Policies in South-Eastern Europe: Historical and Comparative Perspectives (Conference proceedings of the 1st meeting of the South-Eastern European Monetary History Network)*, eds. R. Avramov and S. Pamuk (Sofia: Balgarska Narodna Banka, 2006), p. 73.

²² Radovanovic, *110 Years of the National Bank, 1884–1994. Establishment and Beginning of Operation of the Privileged National Bank of the Kingdom of Serbia* (Belgrade: National Bank of Yugoslavia, 1998), p. 38.

²³ *Ibid.*, p. 43.

²⁴ Avramov, *The Bulgarian National Bank in a Historical Perspective: Shaping an Institution, Searching for a Monetary Standard*, p. 61.

all stocks were in private hands (from what we know), but the government found other ways to make its influence felt if needed. For Austria-Hungary, for instance, we know that renegotiating the charter always involved lengthy and complicated negotiations.²⁵ What seems to be special about Southeastern Europe is that ownership could also be exclusively in foreign hands. In Serbia, such proposals were discussed at length. In fact, a French bank offered to issue bank notes before even proper discussions had started in Serbia itself.²⁶ Even if the French proposals were finally rejected, similar plans succeeded in the Ottoman Empire after the Crimean War. The Imperial Ottoman Bank, founded in 1856 following the Crimean War, only had English and French shareholders.²⁷

5. Exchange rate regimes before 1914

5.1 What kind of exchange rate Is reported?

While this section is devoted to a description of the exchange-rate experience of the Southeastern European countries before the First World War in a European perspective, it seems appropriate to begin with some more technical comments on the exact kind of exchange-rates collected by the individual central banks. In the period from the 1870s to 1914, foreign currency could be obtained in three different ways: (1) bills of exchange drawn on foreign places, (2) foreign bank notes, and (3) foreign coins and trade coins. There is abundant historical evidence that settling cross-border payments was usually achieved through bills of exchange drawn on foreign places rather than any of the other two options.²⁸ Exceptions to this rule can be found, and if contemporary records show first and foremost prices for foreign coins, then this is strong evidence that settling cross-border payments was usually carried out this way. In our sample, Serbia is the only country reporting the price for coins – in this case the price for the 20-dinar gold coin (expressed in domestic paper currency), the Serbian equivalent of the 20-French franc gold coin. The 20-French franc gold coin, better

²⁵ G. Kövér and A. Pogány, *Die binationale Bank einer multinationalen Monarchie* (Stuttgart: 2002).

²⁶ Radovanovic, *110 Years of the National Bank, 1884–1994. Establishment and Beginning of Operation of the Privileged National Bank of the Kingdom of Serbia*

²⁷ S. Pamuk, *A Monetary History of the Ottoman Empire* (Cambridge: Cambridge University Press, 2000), p. 212.

²⁸ While the English word „exchange rate“ is rather neutral, the German word for exchange rate – “Wechselkurs” – captures well that international transactions were settled by bills of exchange rather than banknotes and coins. Literally, “Wechselkurs” means the price of the bill of exchange.

known as the Napoleon d'Or, was by far the most widely used trade coin in 19th century Europe, and the widespread use of this coin partly explains the Europe-wide appeal of the French coinage system. All other countries report the domestic price for bills of exchange drawn on foreign places.

As with most other assets, a distinction needs to be made between the “selling price” and the “buying price”. The “selling price” reports the price for which a potential seller of the asset in question can be found. The “buying price”, by contrast, reports the price for which someone buying the asset can be found with certainty. It follows from this that the “selling price” is necessarily higher than the “buying price”. For instance, the Vienna stock exchange reports on 30th September 1907 a “selling price” of 117.55 crowns for 100 marks and a “buying price” of 117.35.²⁹ This means that someone interested in buying a bill of exchange over 100 marks would certainly find a seller for the price of 117.55 crowns. Conversely, someone in possession of a bill of exchange over 100 marks would find a purchaser who would, at least, pay 117.35 crowns to buy the bill. While 19th century terminology for “selling price” and “buying price” often differed slightly from one stock exchange to the next, reference to some contemporary book similar to today’s “The Financial Times Guide to Using the Financial Pages” usually eliminates any doubt.³⁰

5.2 The exchange rate experience of Southeastern European countries before world war I

One of the main goals of 19th century economic policy was stabilising the exchange-rate to its main trading partners. In a world dominated by commodity standards – i.e. (full-bodied) coins were made of either gold or silver and bank notes could be readily converted in either one or both of these metals –, stabilising the exchange-rate usually implied choosing the same metallic standard as the main trading partners. In order to put the Southeastern European experience in historical perspective, it is necessary to briefly sketch the European and global regime shift towards gold monometallism occurring in the early 1870s.

²⁹ The Vienna stock exchange equivalents are “Warencurs” (“selling price”) and “Geldkurs” (“buying price”), cf. Kautsch, *Allgemeines Börsenbuch nebst Usancen der Berliner, Frankfurter und Wiener Börse* (Stuttgart: 1874), p. 52.

³⁰ For Austria-Hungary reliable information is provided by *ibid.*

Table 3: Exchange Rates in Southeastern Europe, 1877–1914

	<i>Monthly data available</i>	<i>Type of exchange rate reported</i>	<i>Selling or buying</i>	<i>Periods of exchange rate stabilisation</i>			
					Deviation from mint parity		
					Standard	Max.	Average
Austria-Hungary	1/78-6/14	bill of ex.	selling	1/96 - 6/14	0.28%	0.97%	- 0.01%
Bulgaria ¹	1/91-6/14	bill of ex.	selling	1/06 - 9/12	0.36%	1.28%	+ 0.18%
Greece	1/77-6/14	bill of ex.	fixing	1/10 - 6/14	0.16%	0.25%	- 0.05%
Serbia	11/91-2/13	agio data	unclear	7/05 - 9/12	0.91%	3.90%	+ 0.72%
Romania	1/92-6/14	bill of ex.	unclear	1/92 - 5/99	0.32%	0.98%	+ 0.38%
				2/00 - 6/14	0.66%	2.75%	+ 0.78%

Notes: ¹ The data reported in the Bulgarian country report suggests quasi-fixed exchange-rates going back to 1891. This finding is in contradiction with substantial qualitative research, which suggests that Bulgaria enjoyed quasi-fixed exchange rates starting only in 1906 (cf. Avramov (1999) and Avramov (2006)). Following Avramov, our calculations are therefore based only on the data provided for the period starting in 1906.

Sources: Exchange rate data as collected by the central banks, cf. the individual country reports.

The 1850s and 1860s European monetary system can be seen as a tripolar. Some countries – namely the German states, the Netherlands and the Scandinavian countries – followed the silver standard; others – the UK (since 1717/1821) and Portugal (since 1854) – followed the gold standard, while a third group of countries, comprising of France, Italy, Belgium and Switzerland, had adopted a bimetallic standard. The beauty of such a setup was that silver standard countries enjoyed exchange-rate stability not only to other silver standard countries, but also to gold standard countries, as the bimetallic countries kept the value of gold to silver close to the bimetallic gold-silver parity of 15.5: 1. This system broke down in the early 1870s, when an ever-increasing number of countries switched to gold monometallism. By late 1873, both Germany

and France had switched to the gold standard, which had been pioneered by England since the early 18th century. This meant that the three politically and economically most powerful European countries followed henceforth the same monetary standard. For all other European countries this could only mean that the goal of economic policy was the adoption of the gold standard sooner rather than later.³¹

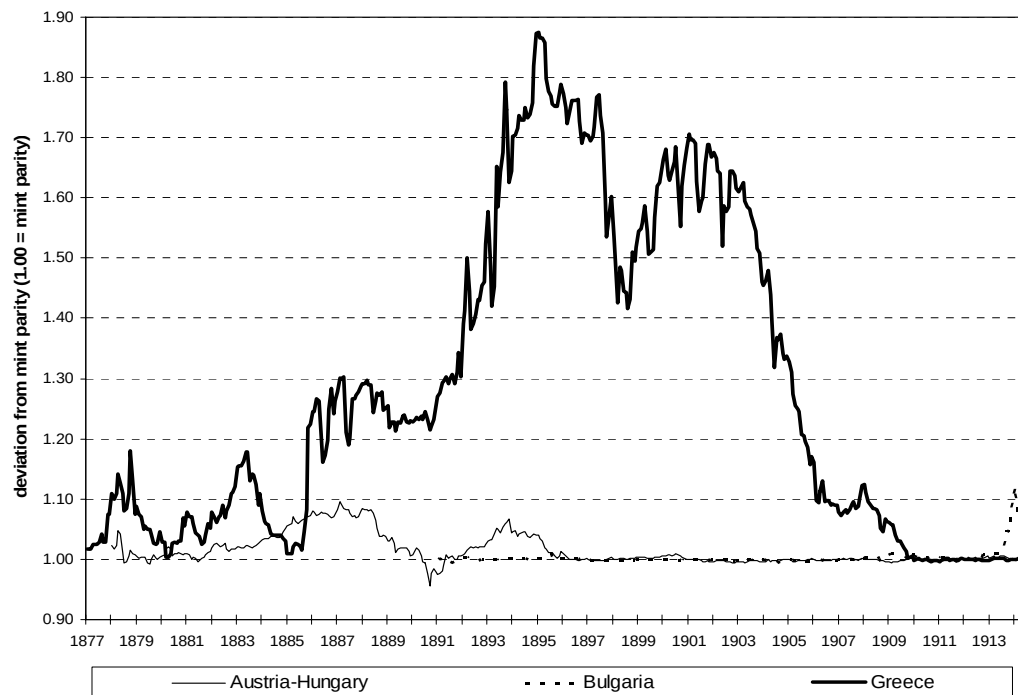
While the goal was then clear for European countries, such a switch to gold was never an easy operation. This was especially true when a country did not follow any metallic standard at all, i.e. when bank note convertibility had to be suspended following periods of lax fiscal and monetary policies. The Southeastern European countries clearly demonstrate this gap between what European countries wanted to achieve in the late 19th century and what they were actually able to achieve. As we have seen in Table 1, all countries passed either gold or bimetallic legislation between 1867 and 1880. But in reality, few of the countries were able to live up to this challenge. Figures 1 and 2 show the exchange-rates of all five countries compared to their mint parity. The exchange-rate development of the Greek drachma exhibits the most extreme case of devaluation. By the mid-1890s, Greek paper money had depreciated almost 100% with respect to the gold drachma envisaged in the 1867/1868 legislation. Serbia is another extreme case where the depreciation lingered between 10% and 20% throughout the 1890s. But even Austria-Hungary had a substantially depreciated exchange-rate throughout the 1870s and 1880s, something which contemporary observers always saw as incompatible with the dual monarchy's claim to be one of Europe's five leading powers.³² On the upside, Romania was apparently able to maintain relatively fixed exchange-rates since the foundation of the Banca Națională a României in 1880.³³

³¹ For the cases of Austria-Hungary and Italy cf. Morys, *The Classical Gold Standard in the European Periphery: A Case Study of Austria-Hungary and Italy, 1870–1913*, p. 90–113.

³² *Stenographische Protokolle über die vom 8. bis 17. März abgehaltenen Sitzungen der nach Wien einberufenen Währungs-Enquête-Commission*, (Vienna: Kaiserlich-königliche Hof- und Staatsdruckerei, 1892).

³³ For the Bulgarian case cf. footnote to Table 3.

Figure 1: Exchange Rates of Austria-Hungary, Bulgaria and Greece, 1877–1914



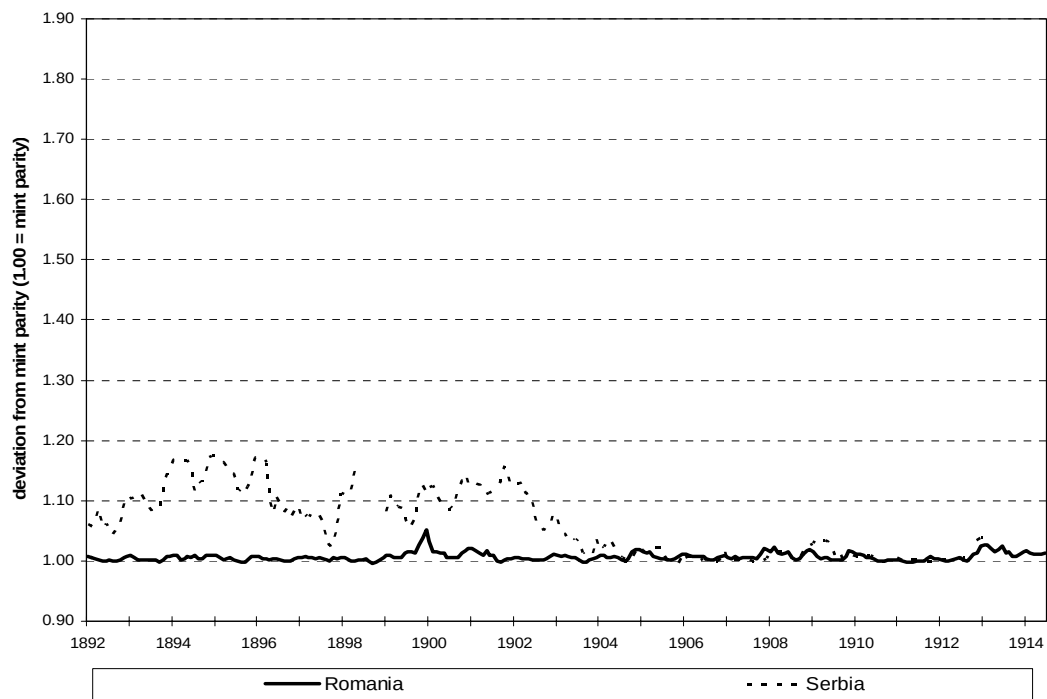
Source: Exchange rate data as collected by the central banks, cf. the individual country reports.

It is certainly beyond the scope of this introduction to fully explain the differences in exchange-rate performance among the Southeastern European countries, but two crucial factors should be kept in mind. First, unbalanced budgets that need to be accommodated by lax monetary policy cannot only be the result of genuine overspending, but also of poor tax collection. Tax collection agencies in Bulgaria, Greece, Serbia and Romania were not only new and hence relatively inexperienced following independence. The Balkan countries inherited a long tradition of tax evasion which had once been meant to “snub” the Ottoman authorities. This tradition then hit the newly established countries with equal force.³⁴ Last but not least, it is most interesting to note that Greece experienced the most dramatic depreciation of all Southeastern European countries in the late 19th century. This might well reflect, more than anything else, the fact that Greece was the Balkan country more often than others

³⁴ Mazower, *The Balkans*.

belligerently involved in the creeping dissolution of the Ottoman Empire due its geographic position.³⁵

Figure 2: Exchange Rates of Romania and Serbia, 1892–1914



Source: Exchange rate data as collected by the central banks, cf. the individual country reports.

While the late 19th century was thus a period of exchange-rate instability for most Southeastern European countries, things improved substantially at around the turn of the century. Austria-Hungary was the first country to follow Romania on the path of exchange-rate stabilisation in 1896. Especially after some trouble in late 1899 and 1900 – which also affected Romania –, the dual monarchy developed an impeccable record with a standard deviation of mint parity from only 0.20% and a maximum deviation of 0.39% (cf. Table 4). Equally, Serbia and Greece were able to stabilise their exchange rates in 1905 and 1910, respectively.

In international comparison, such a stabilisation of the exchange rate at around the turn of the century is by no means unusual and is conventionally attributed to an

³⁵ Clearly reflected in Figure 1 is the Greek attempt in 1885/86 to take advantage of Serb-Bulgarian hostilities and the 1897 Greek-Turkish war arising from revolt in Crete. The latter event, combined with an earlier default on external loans only four years earlier, lead to the establishment of an international financial commission to oversee the Greek state finances.

upswing in global macroeconomic conditions. In fact, it has been argued that the 1870–1913 period is better divided into two separate sub-periods, an earlier, more cumbersome one until the 1890s, and a later, more benign one from the mid-1890s to the onset of World War I.³⁶ The exchange-rate experience of the Southeastern European countries appears to bear out a similar story, perhaps with one notable exception. The end to the *Belle Époque* came two years earlier with the outbreak of the Balkan Wars in October 1912. As we can see from Table 4, a very high degree of exchange-rate stability is limited in all cases to the period until 1912. With the exception of Bulgaria, all countries regained exchange-rate stability after the Balkan Wars, albeit with a slightly lower degree.

5.3 Did the Southeastern European countries follow the classical gold standard?

To what extent did the Southeastern European countries follow the gold standard before World War I? We have so far carefully avoided this question, as there is not one, but (at least) two competing definitions of what it means to be on gold. The 19th century gold standard was characterised by two features: (1) the free coinage of gold on private account at the national mint, and (2) specie payment, i.e. the unconditional redemption of bank notes by the issuing bank against gold coins or gold bullion (i.e., convertibility). Both measures combined guarantee the approximate identity of face value (nominal value) and metallic value (intrinsic value) of the gold coins in circulation. If both conditions are fulfilled, a country is considered to be *de jure* on gold. This was true for the core countries of the Classical Gold Standard such as England, France, and Germany.³⁷

Most of the peripheral countries, however, did not introduce specie convertibility. Provided the exchange rate of countries follows mint parity closely enough, countries are often considered to be *de facto* on gold. The terminology “to shadow gold” is used interchangeably. This terminology seems justified on the following grounds. In the case of an exchange rate closely following mint parity, one might argue that specie payment *did* exist after all. Specie payment did not exist *domestically* in the sense that the issuing bank would redeem bank notes against gold coins or gold bullion. Economic agents, however, could buy bills of exchange drawn on gold standard

³⁶ M. Flandreau, J. Le Cacheux, and F. Zumer, *Stability without a Pact? Lessons from the European Gold Standard, 1880–1914*, CEPR Discussion Paper 1872 (1998).

³⁷ M. D. Bordo and F. E. Kydland, The Gold Standard as a Rule: An Essay in Exploration, *Explorations in Economic History* 32 (1995).

countries, thereby getting hold of gold currency. Thus, it could be argued that specie payment did exist *externally*. The case of an exchange rate closely following mint parity is equivalent to specie payment abroad. For many economic considerations it is of prime importance that there are fixed or, at least, quasi fixed exchange rates, while it is of secondary importance whether specie payment takes place at home or abroad.

Let us ask the same question again, now in a more precise form: Did the Southeastern European economies follow the gold standard? If they did, for what periods and did they follow the gold standard *de jure* or *de facto*? For Austria-Hungary, we know for certain that the country never followed the gold standard *de jure*.³⁸ Following the exchange-rate stabilisation of 1896, Austria-Hungary had a long-lasting discussion on whether convertibility should be introduced or not and eventually decided against specie payment.³⁹ For the other four countries, the central banks report in their individual country reports that convertibility existed for most of the time. While such convertibility might have existed into silver, we take a more cautious approach. In the 19th century, words of a central bank (i.e., proclamation of convertibility) were often not followed by deeds, and until further research has established for sure that convertibility of bank notes into gold coin and bullion existed in a meaningful way in Southeastern Europe, it seems premature to classify the countries under consideration as following the gold standard *de jure*.

³⁸ Morys, *The Classical Gold Standard in the European Periphery: A Case Study of Austria-Hungary and Italy, 1870–1913*, pp. 23–27.

³⁹ H. Hemetsberger-Koller, *Die suspendierte Goldkonvertibilität. Barzahlungskrise in Österreich-Ungarn zu Beginn des 20. Jahrhunderts*, in: *Auf Heller und Cent. Beiträge zur Finanz- und Währungsgeschichte*, eds. K. Bachinger and D. Stiefel (Frankfurt, Vienna: Überreuter, 2001).

Table 4: Periods of Increased Exchange-rate Stabilisation in Southeastern Europe

	<i>Periods of increased exchange rate stabilisation</i>			
		Deviation from mint parity		
		Standard	Max.	Average
Austria-Hungary	3/96-10/99	0.19%	0.39%	+ 0.07%
	11/00-11/12	0.20%	0.39%	- 0.13%
Bulgaria ¹	01/06-9/12	0.36%	1.28%	+ 0.18%
Greece	1/10-6/14	0.16%	0.25%	- 0.05%
Serbia	9/09-9/12	0.36%	1.40%	+ 0.43%
Romania	1/92-5/99	0.32%	0.98%	+ 0.38%
	2/00-11/12	0.58%	2.20%	+ 0.68%

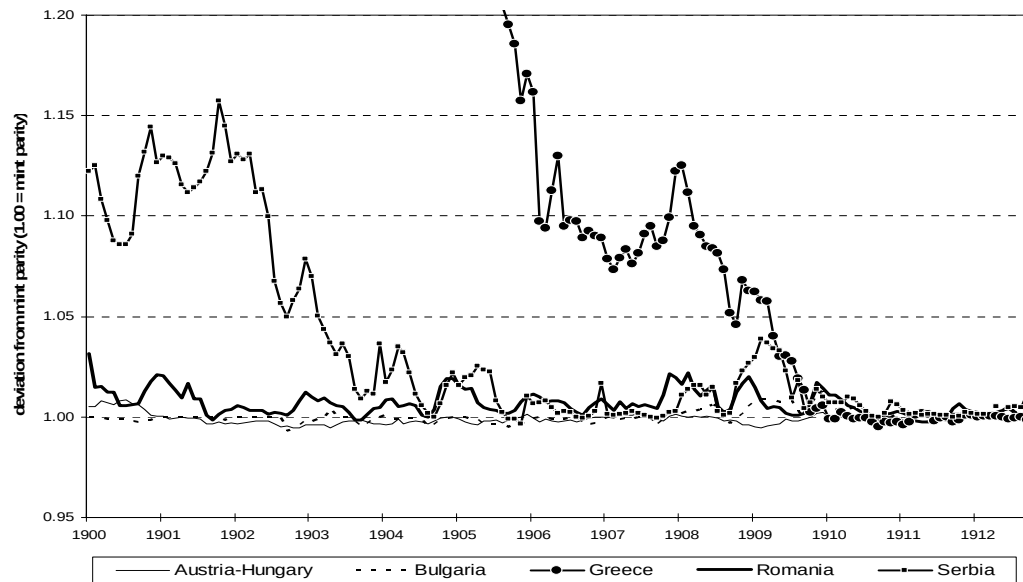
Notes: ¹ The data reported in the Bulgarian country report suggests quasi-fixed exchange-rates going back to 1891. This finding is in contradiction with substantial qualitative research, which suggests that Bulgaria enjoyed quasi-fixed exchange rates starting only in 1906 (cf. Avramov (1999) and Avramov (2006)). Following Avramov, our calculations are therefore based only on the data provided for the period starting in 1906.

Source: Exchange rate data as collected by the central banks, cf. the individual country reports.

By contrast, from the exchange rates reported we do think that all five countries shadowed the gold standard for some period of time. In order to show different degrees of exchange-rate stabilisation, we have distinguished in Tables 3 and 4 between periods of “normal” exchange-rate stabilisation and periods of “increased” exchange-rate stabilisation. While this distinction is only one of degree, it might still be a useful one for our purposes. As the deviations from mint parity in Table 4 show, certainly the periods of “increased” exchange-rate stabilisation can be viewed as shadowing the gold standard, with standard deviations in all cases below 0.40% (only Romania enjoyed a higher standard deviation of 0.58%). While the time periods naturally differ from country to country, there was a relatively short period – from 1910 to the outbreak of the Balkan Wars in late 1912 – in which all Southeastern European countries had stabilised their exchange-rates with respect to other gold

standard countries. Therefore, the years from 1910 to 1912 might be seen as the “heyday” of the gold standard in Southeastern Europe.⁴⁰

Figure 3: Exchange Rates in Southeastern Europe, January 1900 to September 1912



Source: Exchange rate data as collected by the central banks, cf. the individual country reports.

⁴⁰ Avramov, eds., *120 Years Bulgarian National Bank* (Sofia: Balgarska Narodna Banka, 1999). S. Lazaretou, Greek Monetary Economics in Retrospect: History and Data, in: *Monetary and Fiscal Policies in South-Eastern Europe: Historical and Comparative Perspectives (Conference proceedings of the 1st meeting of the South-Eastern European Monetary History Network)*, eds. R. Avramov and S. Pamuk (Sofia: Balgarska Narodna Banka, 2006). Radovanovic, *110 Years of the National Bank, 1884 – 1994. Establishment and Beginning of Operation of the Privileged National Bank of the Kingdom of Serbia*.

References

- Avramov, R., ed. (1999), *120 Years Bulgarian National Bank*. Sofia: Bulgarian National Bank.
- Avramov, R. (2006), The Bulgarian National Bank in a Historical Perspective: Shaping an Institution, Searching for a Monetary Standard. In: *Monetary and Fiscal Policies in South-Eastern Europe: Historical and Comparative Perspectives (Conference proceedings of the 1st meeting of the South-Eastern European Monetary History Network)*, edited by R. Avramov and S. Pamuk, 59-76. Sofia: Balgarska Banka Narodna.
- Bordo, M. D., and F. E. Kydland (1995), The Gold Standard as a Rule: An Essay in Exploration. *Explorations in Economic History* 32, 423–464.
- Capie, F. (1999), Banking in Europe in the Nineteenth and Twentieth Centuries: The Role of the Central Bank. In: *The State, the Financial System and Economic Modernization*, edited by R. Sylla, R. Tilly and G. Tortella, 118–133. Cambridge: Cambridge University Press.
- Einaudi, L. L. (2000), *European Monetary Unification and the International Gold Standard*. Oxford: Oxford University Press.
- Feiertag, O., and M. Margairaz, eds. (2003), *Politiques et pratiques des banques d'émission en Europe (XVII^e – XX^e siècle). Le bicentenaire de la Banque de France dans la perspective de l'identité monétaire européenne*. Paris: Albin Michel.
- Flandreau, M., J. Le Cacheux, and F. Zumer (1998), *Stability without a Pact? Lessons from the European Gold Standard, 1880 – 1914*, CEPR Discussion Paper no 1872.
- Gnjatovic, D. (2006), The Introduction of the Limping Gold Standard in the Principality of Serbia. In: *Monetary and Fiscal Policies in South-Eastern Europe: Historical and Comparative Perspectives (Conference proceedings of the 1st meeting of the South-Eastern European Monetary History Network)*, edited by R. Avramov and S. Pamuk, 46–58. Sofia: Balgarska Banka Narodna.
- Goodhart, C. (1988), *The Evolution of Central Banks*. 2nd ed. Cambridge, Mass.: MIT Press.
- Hemetsberger-Koller, H. (2001), Die suspendierte Goldkonvertibilität. Barzahlungskrise in Österreich-Ungarn zu Beginn des 20. Jahrhunderts. In: *Auf Heller und Cent. Beiträge zur Finanz- und Währungsgeschichte*, edited by K. Bachinger and D. Stiefel, 185–219. Frankfurt, Vienna: Überreuter.
- Kautsch (1874), *Allgemeines Börsenbuch nebst Usancen der Berliner, Frankfurter und Wiener Börse*. Stuttgart.
- Kövér, G., and A. Pogány (2002), *Die binationale Bank einer multinationalen Monarchie*. Stuttgart, 2002.
- Lazaretou, S. (2006), Greek Monetary Economics in Retrospect: History and Data. In: *Monetary and Fiscal Policies in South-Eastern Europe: Historical and Comparative Perspectives (Conference proceedings of the 1st meeting of the South-Eastern European Monetary History Network)*, edited by R. Avramov and S. Pamuk, 77–97. Sofia: Balgarska Narodna Banka.
- Maddison, A. (2003), *The World Economy. Historical Statistics*. Paris: OECD Development Centre Studies.

- Mazower, M. (2001), *The Balkans*. New York: Phoenix Press.
- Ministère des Finances (1869), *Procès-verbaux et rapport de la commission monétaire, suivis d'annexes relatifs à la question monétaire*. Paris: Imprimerie impériale.
- Morys, M. (2006), *The Classical Gold Standard in the European Periphery: A Case Study of Austria-Hungary and Italy, 1870–1913*. Ph.D. thesis London School of Economics and Political Science.
- Morys, M. (2006), *South-Eastern European Growth Experience in European Perspective, 19th and 20th Centuries*. In: *Monetary and Fiscal Policies in South-Eastern Europe: Historical and Comparative Perspectives (Conference proceedings of the 1st meeting of the South-Eastern European Monetary History Network)*, edited by R. Avramov and S. Pamuk, 23–44. Sofia: Bulgarian National Bank.
- Pamuk, S. (2000), *A Monetary History of the Ottoman Empire*. Cambridge: Cambridge University Press.
- Radovanovic, B (1998), *110 Years of the National Bank, 1884–1994. Establishment and Beginning of Operation of the Privileged National Bank of the Kingdom of Serbia* Belgrade: National Bank of Yugoslavia.
- Reti, S. P. (1998), *Silver and Gold: The Political Economy of International Monetary Conferences. 1867–1892*. Westport (CT), London: Greenwood.
- Stenographische Protokolle über die vom 8. bis 17 (1892) März abgehaltenen Sitzungen der nach Wien einberufenen Währungs-Enquête-Commission*. Vienna: Kaiserlich-königliche Hof- und Staatsdruckerei.

Albania

*Kliti Ceca**

Kelmend Rexha

Elsida Orhan

Banka e Shqipërisë

Pre-1914

Due to the historical and political developments in the country, pre-1914 Albania lacks significant data. This stems primarily from the fact that Albania had not yet gained its independence and the notion of its territory was therefore very hazy and without clearly defined frontiers. Its independence dates back to 1912. Second, the needs for arranging the banking system in Albania were reflected in the efforts of the first Albanian government after the Declaration of Independence, in 1912. Despite all the attempts made, the national systems of currency and lending were not established during this period (1912–1913). These were the two main reasons that caused the lack of data before 1914.

1914–1946

The most important monetary event was the establishment of the Bank of Albania in 1925. The Albanian gold franc was approved as the monetary official unit. The gold content of the Albanian currency was set at 0.290322 grams to the franc, which was the gold content used by the former Latin Monetary Union. Albania adopted a currency with the same gold content as the Union because the country did not possess a currency regime of its own before the First World War.

* Email to Kceca@bankofalbania.org

The Bank of Albania remained the sole institution vested with the right to issue banknotes (monopoly of note issue). It implemented the policy of maintaining the currency in circulation under the level of the real needs of the economy (restrictive monetary policy). The little circulation which did exist in the country was for the most part made up of coins (gold coins- napoleons and silver coins) from countries belonging to the Latin Monetary Union. The Bank of Albania's paper circulation had to be composed of reserves equal to at least 1/3 of the banknotes in circulation. The reserves, in turn were to consist of gold and foreign financial assets, which could not exceed 2/3 of the total reserves.

Albania experienced the bimetallic standard during 1928/1929. The debate for establishing this regime took place between the Albanian government and the Italian government. In Albania, however, the bimetallic standard could not survive as bimetalism can only survive when the mint ratio is close to the market ratio and in Albania the monetary authority lost out, as it was forced by law to accept the overvalued silver against gold.

Until 1930, the Albanian system complied fully with the gold exchange standard, with the greater part of its reserve being made up of foreign currency.

A main characteristic of the currency is that it was never devaluated, in spite of the 1931 devaluation of the sterling, the dollar's devaluation in 1933 and the Swiss franc's depreciation in 1936.

Austro-Hungarian Empire⁴¹

Thomas Scheiber

Oesterreichische Nationalbank (OeNB)

1. The monetary history of the Austro-Hungarian empire (1867-1914)

After Prussia had defeated the Austrian Empire at the battle of Königgrätz in 1866, Austria ceased to adjust its currency to the German Customs Union (*Zollverein*) and pulled out of the Vienna Coinage Treaty of 1857 (*Wiener Münzvertrag*) and in 1867 oriented its coinage on the bimetallic standard of the Latin Monetary Union (LMU) founded by France, Belgium, Switzerland and Italy in 1865. Although Austria minted gold coins⁴² and had planned to join the LMU in 1870, the Empire never actually did as financial difficulties soon ended specie convertibility and as its monetary system remained in disarray. Yet the question of the monetary standard remained on the agenda until the 1890s.

The provisions of these coinage agreements did not apply to paper money, even though paper money had been legal tender since the suspension of convertibility in 1848. Next to the silver *gulden*, Austria had the paper *gulden*, which was exchangeable for silver coins at a discount. All efforts to eliminate the silver *agio*, which would have necessitated a devaluation of the paper currency, were unsuccessful because the state's financing needs remained so high. At the beginning of the 1860s the premium of silver coins versus paper currency had augmented to more than 40%, prompting the government to issue a new central bank act, the Plener Act, named after the then minister of finance. Its purpose was to bind the issue of paper money to the

⁴¹ I would like to thank Walter Antonowicz and Bernhard Mussak from the Bank History Archives of the OeNB for their valuable comments and excellent support. *Email to Thomas.Scheiber@oenb.at*

⁴² Austria minted gold coins of a value of 8 and 4 *gulden*, which was the equivalent of 20 and 10 French francs.

size of the currency reserves.⁴³ The direct quota for banknotes in circulation was fixed at 200 million *gulden* and while this amount had to be covered by domestic income-generating assets of the bank, the amount of banknotes surpassing the quota had to be completely covered by the central bank's gold and silver reserves. Although this measure succeeded in reducing the silver *agio*, the contraction of the money supply also acted as a damper on the economy. Yet as this quota proved to be too tight, an indirect quota was introduced in 1887 which emulated the rules of the German Reichsbank. According to article 84 of the statutes of the Austro-Hungarian Bank of 1887 and 1899, the metal reserves had to cover at least 40% of the banknotes in circulation. The remaining amount of banknotes in circulation (i.e. the banknotes not covered by precious metal) together with the overnight liabilities had to be covered by other domestic income-generating assets (e.g. Escompte and Lombard credit), foreign currency denominated bills of exchange and foreign banknotes. Once the amount of banknotes in circulation had surpassed the threshold of 400 million *kronen* (or 600 million *kronen* as of 1911), the excess amount was taxed at a rate of 5%.

In 1867, Hungary was recognized as an autonomous part of the so-called Austro-Hungarian Empire, which was reflected by the institutional transformation of the *privilegierte Oesterreichische National-Bank* into the Austro-Hungarian Bank in 1878. According to the principle of duality there was a head office in Vienna and one in Budapest both of which managed the 38 branches of the bank separately. The emperor conferred the sole privilege of note issue to the Austro-Hungarian Bank.

The collapse of bimetallism due to a sharp contraction of the value of silver against gold had a significant impact on the development of Austrian coinage and the monetary system in the last third of the 19th century. By the end of the 1870s nearly all European countries and the U.S.A. had adopted a gold standard. Austria remained on a silver standard, which entailed steadily growing losses. Thus, silver coins were no longer suitable as a standard. Paper currency became the standard, and silver only served as the precious metal cover for the banknotes. The importance of coins diminished as the volume of cashless payment transactions surged. Finally, Austria adopted a gold standard with the introduction of the *krone* in 1892, satisfying an

⁴³ The statutes of the *privilegierte oesterreichische National-Bank* of 1817 and 1841 did not contain any rules concerning a precious metal cover of the banknotes in circulation. In 1858, a precious metal cover quota of one third was introduced. 1862 it was substituted for a direct quota on the circulation of notes similar to the British system of the Peel's Bank Act (cf. Compass, 1914, p. 137).

urgent need for monetary reform. The Austrian *gulden* was valued at 2 *kronen*, with 1 *krone* subdivided into 100 *heller*. According to the currency laws of 1892 one *krone* was equivalent to 0.3049 grams of fine gold with a fineness of 900‰. The *gulden* banknotes entitled *Österreichische Währung* (Austrian currency) remained legal tender until 1900, when the *krone* was declared sole legal tender.

The exchange rate, however, soon deviated considerably from mint parity, the gold *agio* peaked at +6.5% in November 1893 and declined to +3.8% at end of the year. It was only in late 1895 that the deviation from mint parity dropped below +1.0% again.⁴⁴ Mint parity was eventually achieved in 1896 and was maintained until the outbreak of World War I. As the convertibility of bank notes into specie had never been introduced, Austria-Hungary shadowed the Classical Gold Standard from 1896 to 1914.⁴⁵

In order to keep mint parity it seemed necessary to concentrate the whole *staatlicher Golddienst*⁴⁶ at the central bank. In 1901, the gold reserves of the government were transferred to the Austro-Hungarian Bank. The changing of the discount rate was the main policy tool to adjust the economy to balance of payments deficits by attracting short-term foreign capital. Yet this tool was not used very intensively. Matthias Morys provides two main reasons for shadowing the gold standard rather than introducing full-fledged convertibility of banknotes into gold: First, the strategy allowed Austria-Hungary to benefit from a quasi-fixed exchange rate regime. Second, it granted the peripheral economy more flexibility in times of crises.⁴⁷

⁴⁴ Pressburger, *Die Oesterreichisch-ungarische Bank 1878 – 1923, Zweiter Teil, Band 2*, p. 700.

⁴⁵ Provided that the exchange rate follows mint parity closely enough, countries are often considered to be de facto on gold if they shadow the gold standard. At the time, specie payment did not exist domestically, i.e. within the Austro-Hungarian Empire, in the sense that the issuing bank would redeem banknotes against gold coins or gold bullion, but it existed abroad (cf. Morys, p. 23f).

⁴⁶ i.e. a governmental body managing the payments and foreign currency holdings of the government abroad

⁴⁷ It is interesting to note that Matthias Morys found out that Austria-Hungary exhibited a lower standard deviation from mint parity than some other countries, which operated under a system of de jure adherence to gold (cf. Morys, p.25).

2. Introduction to the historical time series (1896-1914)

The monthly data presented in this time series cover the period from January 1896 to July 1914 when Austria-Hungary shadowed the Classical Gold Standard.⁴⁸ The analyzed currency area is the Austro-Hungarian Empire and its monetary policy institution, the Austro-Hungarian Bank.

2.1 Exchange rates

Exchange rate data include monthly averages of the ratio between the *krone* (K) and the currencies of the three major core countries, i.e. German mark, French franc, and pound sterling (see Table 1, columns 1-3). The mint parity for 100 German marks was equal to 117.5727 K, for 100 French francs 95.2258 K, and for one pound sterling 24.0174 K. The great stability of the exchange rate, which continued to stay close to mint parity, underpins the conclusion that Austria-Hungary was *de facto* on gold. For the period 1896-1913, the monthly averages were calculated based on the daily exchange rates of the Vienna stock exchange. The entries for 1914 refer to end-of-month figures.

2.2 Monetary base

Table 2 (columns 1 to 3) shows data on the monetary base of the economy. It essentially contains all liquid liabilities of the monetary authority, i.e. banknotes in circulation, deposits at the central bank, and other liabilities payable on demand. Data for the period 1896-1913 refer to monthly averages calculated from weekly reports. The entries for 1914 refer to figures of the last weekly report per month. The official metal reserves had to cover at least 40% of the banknotes in circulation.

2.3 Currency reserves

Table 3 (columns 1 to 3) displays the currency reserves of the Austro-Hungarian Bank which consisted of two components. The first component included the official precious metal reserves (*Barschatz*) according to Articles 84 and 111 of the central bank statute. Until 1887, the *Barschatz* contained only coins and bullions of gold and silver. As of 1888, the central bank was allowed to include bills of exchange drawn on gold standard countries up to an amount of 60 million *kronen* in the *Barschatz*. From 1900 onwards, the *Barschatz* comprised all domestic coins, foreign gold coins, gold

⁴⁸ On 14 August 1914, the Austrian emperor suspended the central bank statute and interdicted to publish the weekly reports on strategic grounds.

bullion coins, and foreign exchange reserves (foreign banknotes and commercial bills of exchange drawn on gold standard countries with a three-month maturity) up to an amount of 60 million *kronen*, which was reached for the first time in 1901. Yet the convertibility of banknotes into specie remained suspended.

The second component of the Austro-Hungarian currency reserves contained deposits on foreign bank accounts and all foreign exchange reserves excluded from the official metal reserves. While the official metal reserves were published on a weekly basis to increase the confidence in the monetary authority, the amount of the second component was kept secret to leave more room for interventions. Since 1900, these assets were part of the central bank's total cover, and served as collateral for banknote issue until their respective maturity date. Entries for the period between 1896 and 1900 are set to zero due to the limited availability and insignificance of data.

In 1901, the government transferred the management of the government payments abroad to the Austro-Hungarian Bank. In the course of this delegation, the bank added the gold reserves of the government to its stock and soon the foreign exchange holdings increased substantially.

2.4 The Discount rate

The discount rate was the fundamental bank rate set by the general council of the Austro-Hungarian Bank. Table 4 lists all dates when new discount rates came into force. The discount rate was applied to the early redemption of a commercial bill with a three-month maturity.

3. Data sources

Data concerning exchange rates were taken from the k.k. ministry of finance, *Tabellen zur Währungsstatistik* for the years from 1896 to 1900. For reasons of accessibility, the data from 1901 to 1913 were taken from the annual publication *Compass*. The latter was consulted to get data on discount rates, official metal reserves and the monetary base. Data on assets and liabilities of the bank before 1901 and details on the second component of the currency reserves were retrieved from the reports to the annual shareholders' meeting of the Austro-Hungarian Bank (*Jahressitzung der Generalversammlung der Oesterreichisch-ungarischen Bank*).

Finally, the OeNB's Bank History Archives, which were also used for this short analysis, might be a good starting point for further data collection followed by an in-depth analysis of Austria's monetary history.

References

Compass, *Finanzielles Jahrbuch*, issues 29-48 and 54 (1896-1915 and 1921), vol. 1, respectively, Vienna.

Hemetsberger-Koller, H. (2001), "Die suspendierte Goldkonvertibilität. Barzahlungskrise in Österreich-Ungarn zu Beginn des 20. Jahrhunderts." In *Auf Heller und Cent. Beiträge zur Finanz- und Währungsgeschichte*, edited by Bachinger, K. and Stiefel, D. Frankfurt, Vienna, pp. 185-219.

k.k. Finanzministerium (1906), *Tabellen zur Währungsstatistik*, 3rd ed. Vienna.

Morys, M. (2006), *The Classical Gold Standard in the European Periphery: A case study of Austria-Hungary and Italy, 1870-1913*, PhD-Thesis at the LSE London.

Oesterreichisch-ungarische Bank, *Jahressitzung der Generalversammlung der Oesterreichisch-ungarischen Bank*, vol. 14 (1892) – vol. 36 (1914).

Pressburger, S. (1976), *Das Österreichische Noteninstitut 1816 – 1966. Die Oesterreichisch-ungarische Bank 1878 – 1923*, Part II, vol. 1-3, Vienna.

Table 1: Exchange Rates for Foreign Banknotes, 1896-1914

Austria-Hungary

<i>Year</i>	<i>Month</i>	<i>Kronen / German mark (1)</i>	<i>Kronen/ pound sterling (2)</i>	<i>Kronen/ French franc (3)</i>
1896	Jan.	1.187	24.29	0.962
	Feb.	1.182	24.18	0.958
	Mar.	1.179	24.13	0.957
	Apr.	1.176	24.06	0.956
	May	1.175	24.03	0.954
	Jun.	1.176	23.99	0.953
	Jul.	1.175	23.96	0.952
	Aug.	1.173	23.93	0.951
	Sept.	1.174	23.94	0.951
	Oct.	1.176	23.96	0.951
	Nov.	1.176	23.97	0.950
	Dec.	1.178	23.99	0.950
1897	Jan.	1.175	23.97	0.950
	Feb.	1.174	23.98	0.952
	Mar.	1.174	23.96	0.952
	Apr.	1.173	23.91	0.951
	May	1.173	23.91	0.952
	Jun.	1.173	23.91	0.952
	Jul.	1.173	23.90	0.952
	Aug.	1.174	23.93	0.951
	Sept.	1.174	23.95	0.950
	Oct.	1.176	23.93	0.950
	Nov.	1.177	23.96	0.951
	Dec.	1.180	24.05	0.953
1898	Jan.	1.176	24.00	0.952
	Feb.	1.175	24.02	0.951
	Mar.	1.175	24.06	0.951
	Apr.	1.177	24.15	0.954
	May	1.177	24.14	0.953
	Jun.	1.177	24.01	0.951
	Jul.	1.176	23.98	0.951
	Aug.	1.176	24.00	0.951
	Sept.	1.177	24.02	0.950
	Oct.	1.178	24.07	0.950
	Nov.	1.179	24.10	0.952
	Dec.	1.180	24.12	0.954
1899	Jan.	1.179	24.09	0.956

Table 1: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1900	Feb.	1.179	24.08	0.956
	Mar.	1.180	24.09	0.955
	Apr.	1.180	24.10	0.956
	May	1.178	24.09	0.956
	Jun.	1.179	24.10	0.956
	Jul.	1.178	24.12	0.956
	Aug.	1.178	24.12	0.955
	Sept.	1.179	24.11	0.955
	Oct.	1.180	24.17	0.956
	Nov.	1.180	24.14	0.956
	Dec.	1.181	24.23	0.957
	Jan.	1.181	24.23	0.961
	Feb.	1.182	24.24	0.962
	Mar.	1.185	24.28	0.963
	Apr.	1.184	24.28	0.964
	May	1.183	24.26	0.964
	Jun.	1.185	24.22	0.964
	Jul.	1.186	24.25	0.965
	Aug.	1.184	24.25	0.964
	Sept.	1.183	24.21	0.962
	Oct.	1.180	24.14	0.961
	Nov.	1.177	24.06	0.958
	Dec.	1.176	24.02	0.957
1901	Jan.	1.176	24.05	0.958
	Feb.	1.175	24.06	0.955
	Mar.	1.175	24.03	0.954
	Apr.	1.176	24.02	0.955
	May	1.175	24.04	0.955
	Jun.	1.175	24.00	0.952
	Jul.	1.174	23.96	0.951
	Aug.	1.172	23.95	0.950
	Sept.	1.171	23.92	0.950
	Oct.	1.173	23.90	0.951
	Nov.	1.171	23.93	0.952
	Dec.	1.172	23.93	0.952
1902	Jan.	1.172	23.92	0.952
	Feb.	1.172	23.97	0.954
	Mar.	1.173	24.01	0.955
	Apr.	1.173	24.02	0.954

Table 1: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1903	May	1.173	24.04	0.954
	Jun.	1.173	24.02	0.953
	Jul.	1.171	23.99	0.953
	Aug.	1.170	23.97	0.952
	Sept.	1.170	23.96	0.951
	Oct.	1.169	23.93	0.951
	Nov.	1.169	23.92	0.952
	Dec.	1.171	23.93	0.952
	Jan.	1.171	23.97	0.954
	Feb.	1.171	23.99	0.954
	Mar.	1.171	24.01	0.955
	Apr.	1.170	23.98	0.953
1904	May	1.171	23.97	0.952
	Jun.	1.173	23.95	0.952
	Jul.	1.174	23.93	0.952
	Aug.	1.173	23.92	0.951
	Sept.	1.174	23.92	0.950
	Oct.	1.173	23.93	0.951
	Nov.	1.172	23.95	0.952
	Dec.	1.172	23.95	0.951
	Jan.	1.171	23.96	0.952
	Feb.	1.171	24.01	0.953
	Mar.	1.174	24.01	0.955
	Apr.	1.172	23.96	0.954
1905	May	1.173	23.93	0.953
	Jun.	1.173	23.94	0.951
	Jul.	1.173	23.96	0.950
	Aug.	1.172	23.97	0.949
	Sept.	1.173	23.96	0.950
	Oct.	1.175	23.93	0.952
	Nov.	1.176	23.94	0.953
	Dec.	1.176	23.95	0.952
	Jan.	1.175	24.00	0.955
	Feb.	1.173	24.02	0.954
	Mar.	1.172	23.99	0.952
	Apr.	1.171	23.99	0.954
	May	1.173	24.02	0.954
	Jun.	1.173	24.02	0.955
	Jul.	1.174	24.02	0.956
	Aug.	1.172	24.00	0.954

Table 1: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1906	Sept.	1.174	23.99	0.953
	Oct.	1.175	24.02	0.955
	Nov.	1.175	24.01	0.955
	Dec.	1.177	24.01	0.956
	Jan.	1.175	24.03	0.957
	Feb.	1.173	24.05	0.956
	Mar.	1.174	24.05	0.957
	Apr.	1.173	24.03	0.957
	May	1.173	24.04	0.955
	Jun.	1.173	24.03	0.955
	Jul.	1.174	24.02	0.955
	Aug.	1.173	24.00	0.954
1907	Sept.	1.174	23.99	0.953
	Oct.	1.175	24.05	0.954
	Nov.	1.175	24.11	0.955
	Dec.	1.176	24.09	0.954
	Jan.	1.176	24.09	0.955
	Feb.	1.175	24.11	0.955
	Mar.	1.178	24.16	0.955
	Apr.	1.176	24.10	0.956
	May	1.176	24.06	0.957
	Jun.	1.178	24.10	0.958
	Jul.	1.177	24.07	0.957
	Aug.	1.174	24.06	0.956
1908	Sept.	1.174	24.03	0.956
	Oct.	1.173	24.03	0.956
	Nov.	1.176	24.17	0.958
	Dec.	1.177	24.15	0.959
	Jan.	1.176	24.10	0.958
	Feb.	1.176	24.08	0.956
	Mar.	1.176	24.05	0.956
	Apr.	1.176	24.02	0.956
	May	1.176	24.01	0.956
	Jun.	1.176	23.98	0.954
	Jul.	1.175	23.96	0.953
	Aug.	1.173	23.93	0.952
	Sept.	1.174	23.94	0.953
	Oct.	1.173	23.95	0.954
	Nov.	1.171	23.95	0.954
	Dec.	1.171	23.97	0.954

Table 1: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1909	Jan.	1.170	23.97	0.954
	Feb.	1.169	23.99	0.951
	Mar.	1.171	23.99	0.951
	Apr.	1.171	23.95	0.952
	May	1.172	23.96	0.952
	Jun.	1.174	24.00	0.953
	Jul.	1.173	23.98	0.952
	Aug.	1.173	23.97	0.952
	Sept.	1.174	23.97	0.953
	Oct.	1.176	24.02	0.955
	Nov.	1.178	24.10	0.956
	Dec.	1.178	24.10	0.956
1910	Jan.	1.176	24.05	0.955
	Feb.	1.175	24.04	0.955
	Mar.	1.176	24.06	0.955
	Apr.	1.175	24.07	0.953
	May	1.175	24.09	0.953
	Jun.	1.175	24.06	0.953
	Jul.	1.174	24.01	0.952
	Aug.	1.174	24.02	0.952
	Sept.	1.175	24.02	0.952
	Oct.	1.176	24.06	0.953
	Nov.	1.176	24.08	0.952
	Dec.	1.175	24.02	0.951
1911	Jan.	1.174	24.02	0.950
	Feb.	1.173	24.00	0.949
	Mar.	1.174	24.00	0.949
	Apr.	1.173	23.98	0.948
	May	1.173	23.99	0.948
	Jun.	1.175	24.00	0.949
	Jul.	1.174	24.01	0.950
	Aug.	1.174	24.03	0.951
	Sept.	1.178	24.12	0.957
	Oct.	1.178	24.14	0.959
	Nov.	1.177	24.07	0.955
	Dec.	1.177	24.08	0.955
1912	Jan.	1.176	24.09	0.955
	Feb.	1.176	24.10	0.954
	Mar.	1.179	24.12	0.956
	Apr.	1.178	24.12	0.956

Table 1: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1913	May	1.179	24.12	0.956
	Jun.	1.180	24.13	0.956
	Jul.	1.177	24.11	0.955
	Aug.	1.177	24.10	0.954
	Sept.	1.179	24.11	0.953
	Oct.	1.178	24.16	0.957
	Nov.	1.180	24.21	0.959
	Dec.	1.182	24.18	0.959
	Jan.	1.178	24.13	0.958
	Feb.	1.180	24.17	0.958
	Mar.	1.183	24.19	0.958
	Apr.	1.177	24.10	0.955
1914	May	1.178	24.09	0.955
	Jun.	1.182	24.14	0.957
	Jul.	1.182	24.18	0.958
	Aug.	1.182	24.17	0.957
	Sept.	1.180	24.10	0.954
	Oct.	1.178	24.11	0.953
	Nov.	1.176	24.12	0.953
	Dec.	1.177	24.12	0.953
	Jan.	1.173	24.00	0.953
	Feb.	1.175	24.02	0.953
	Mar.	1.174	24.01	0.954
	Apr.	1.174	24.04	0.956
	May	1.177	24.13	0.958
	Jun.	1.178	24.17	0.960
	Jul.	1.182	24.28	0.976

Notes: entries for the period 1896-1913 refer to monthly averages, entries for 1914 refer to end-of-month figures.

Source: OeNB.

Table 2: Monetary Base and its Main Components, 1896-1914(in millions of kronen), **Austria-Hungary**

Year	Month	Banknotes in circulation	Deposits at the central bank and liabilities payable on demand	Total liquid liabilities
		(1)	(2)	(3)=(1+2)
1896	Jan.	1,132	52	1,184
	Feb.	1,088	47	1,135
	Mar.	1,099	47	1,146
	Apr.	1,124	43	1,167
	May	1,136	32	1,167
	Jun.	1,136	26	1,163
	Jul.	1,141	29	1,170
	Aug.	1,160	26	1,186
	Sept.	1,218	25	1,243
	Oct.	1,291	60	1,351
	Nov.	1,302	62	1,364
	Dec.	1,278	57	1,335
1897	Jan.	1,222	62	1,284
	Feb.	1,175	64	1,238
	Mar.	1,172	58	1,230
	Apr.	1,205	61	1,266
	May	1,212	67	1,279
	Jun.	1,205	60	1,265
	Jul.	1,228	64	1,292
	Aug.	1,265	61	1,326
	Sept.	1,343	58	1,401
	Oct.	1,379	63	1,442
	Nov.	1,377	60	1,438
	Dec.	1,353	59	1,412
1898	Jan.	1,298	59	1,357
	Feb.	1,235	59	1,294
	Mar.	1,240	68	1,307
	Apr.	1,261	63	1,323
	May	1,254	60	1,314
	Jun.	1,247	62	1,309
	Jul.	1,278	64	1,341
	Aug.	1,307	62	1,368
	Sept.	1,365	60	1,424
	Oct.	1,441	63	1,504
	Nov.	1,440	65	1,505

Table 2: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)=(1+2)</i>
1899	Dec.	1,417	62	1,479
	Jan.	1,365	68	1,433
	Feb.	1,302	66	1,368
	Mar.	1,292	67	1,358
	Apr.	1,312	71	1,382
	May	1,315	66	1,381
	Jun.	1,303	72	1,375
	Jul.	1,340	70	1,410
	Aug.	1,350	77	1,427
	Sept.	1,406	73	1,480
	Oct.	1,451	91	1,543
	Nov.	1,416	81	1,497
1900	Dec.	1,383	86	1,469
	Jan.	1,351	67	1,418
	Feb.	1,287	63	1,350
	Mar.	1,268	72	1,340
	Apr.	1,307	98	1,405
	May	1,315	98	1,413
	Jun.	1,309	119	1,428
	Jul.	1,347	115	1,462
	Aug.	1,362	117	1,479
	Sept.	1,417	126	1,543
	Oct.	1,463	134	1,597
	Nov.	1,445	141	1,585
1901	Dec.	1,424	162	1,586
	Jan.	1,380	145	1,526
	Feb.	1,319	140	1,459
	Mar.	1,304	146	1,450
	Apr.	1,333	145	1,478
	May	1,344	142	1,486
	Jun.	1,327	158	1,486
	Jul.	1,371	161	1,531
	Aug.	1,387	163	1,550
	Sept.	1,450	204	1,654
	Oct.	1,531	187	1,717
	Nov.	1,530	168	1,697
1902	Dec.	1,510	173	1,683
	Jan.	1,485	175	1,660
	Feb.	1,420	171	1,592
	Mar.	1,389	171	1,560

Table 2: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)=(1+2)</i>
1903	Apr.	1,406	170	1,576
	May	1,408	150	1,559
	Jun.	1,406	150	1,556
	Jul.	1,450	121	1,572
	Aug.	1,469	131	1,600
	Sept.	1,512	144	1,656
	Oct.	1,573	164	1,736
	Nov.	1,572	188	1,760
	Dec.	1,562	197	1,759
	Jan.	1,529	192	1,721
	Feb.	1,490	169	1,659
	Mar.	1,484	171	1,655
1904	Apr.	1,504	171	1,676
	May	1,498	166	1,664
	Jun.	1,494	155	1,650
	Jul.	1,530	125	1,655
	Aug.	1,558	121	1,679
	Sept.	1,626	131	1,757
	Oct.	1,697	140	1,837
	Nov.	1,688	154	1,842
	Dec.	1,679	147	1,826
	Jan.	1,640	127	1,766
	Feb.	1,573	125	1,698
	Mar.	1,555	133	1,689
1905	Apr.	1,601	145	1,746
	May	1,603	149	1,752
	Jun.	1,577	173	1,749
	Jul.	1,655	145	1,800
	Aug.	1,671	164	1,835
	Sept.	1,697	193	1,890
	Oct.	1,731	216	1,947
	Nov.	1,688	252	1,939
	Dec.	1,661	275	1,936
	Jan.	1,624	253	1,877
	Feb.	1,561	239	1,800
	Mar.	1,540	245	1,784
	Apr.	1,568	219	1,787
	May	1,550	207	1,757
	Jun.	1,548	176	1,724
	Jul.	1,587	151	1,738

Table 2: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)=(1+2)</i>
1906	Aug.	1,612	138	1,749
	Sept.	1,692	144	1,836
	Oct.	1,761	176	1,937
	Nov.	1,741	186	1,927
	Dec.	1,735	202	1,937
	Jan.	1,693	180	1,873
	Feb.	1,646	145	1,790
	Mar.	1,641	153	1,793
	Apr.	1,688	149	1,838
	May	1,694	152	1,845
	Jun.	1,703	166	1,869
	Jul.	1,749	155	1,903
1907	Aug.	1,770	190	1,959
	Sept.	1,831	238	2,069
	Oct.	1,903	238	2,141
	Nov.	1,884	223	2,107
	Dec.	1,871	235	2,106
	Jan.	1,807	219	2,025
	Feb.	1,758	210	1,968
	Mar.	1,748	226	1,974
	Apr.	1,786	243	2,029
	May	1,783	249	2,031
	Jun.	1,780	214	1,994
	Jul.	1,824	187	2,011
1908	Aug.	1,877	218	2,096
	Sept.	1,912	249	2,162
	Oct.	1,980	248	2,228
	Nov.	1,944	247	2,191
	Dec.	1,909	216	2,125
	Jan.	1,831	177	2,009
	Feb.	1,769	177	1,946
	Mar.	1,756	184	1,939
	Apr.	1,794	169	1,963
	May	1,781	178	1,959
	Jun.	1,791	177	1,969
	Jul.	1,832	171	2,003
	Aug.	1,890	170	2,059
	Sept.	1,949	168	2,117
	Oct.	2,009	163	2,172
	Nov.	1,986	191	2,177

Table 2: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)=(1+2)</i>
1909	Dec.	1,984	161	2,145
	Jan.	1,922	185	2,106
	Feb.	1,878	218	2,096
	Mar.	1,924	206	2,129
	Apr.	1,984	195	2,179
	May	1,929	193	2,122
	Jun.	1,900	189	2,089
	Jul.	1,936	157	2,093
	Aug.	1,961	165	2,126
	Sept.	2,025	171	2,197
	Oct.	2,097	162	2,259
	Nov.	2,070	222	2,292
1910	Dec.	2,044	236	2,280
	Jan.	1,989	215	2,204
	Feb.	1,935	206	2,141
	Mar.	1,943	181	2,124
	Apr.	1,984	183	2,167
	May	2,026	188	2,214
	Jun.	2,008	196	2,203
	Jul.	2,068	186	2,254
	Aug.	2,118	189	2,307
	Sept.	2,196	210	2,406
	Oct.	2,273	261	2,534
	Nov.	2,243	270	2,513
1911	Dec.	2,218	252	2,469
	Jan.	2,149	182	2,330
	Feb.	2,098	181	2,279
	Mar.	2,097	183	2,280
	Apr.	2,156	180	2,336
	May	2,145	226	2,371
	Jun.	2,149	257	2,406
	Jul.	2,201	194	2,395
	Aug.	2,247	200	2,446
	Sept.	2,358	248	2,606
	Oct.	2,423	249	2,672
	Nov.	2,378	275	2,652
1912	Dec.	2,366	261	2,627
	Jan.	2,285	218	2,503
	Feb.	2,202	272	2,474
	Mar.	2,196	260	2,457

Table 2: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)=(1+2)</i>
1913	Apr.	2,210	233	2,443
	May	2,182	222	2,405
	Jun.	2,162	215	2,376
	Jul.	2,205	202	2,408
	Aug.	2,255	220	2,475
	Sept.	2,340	226	2,566
	Oct.	2,434	242	2,677
	Nov.	2,463	264	2,726
	Dec.	2,649	275	2,924
	Jan.	2,519	258	2,778
	Feb.	2,415	249	2,664
	Mar.	2,371	220	2,591
	Apr.	2,356	234	2,590
	May	2,335	268	2,603
	Jun.	2,265	265	2,529
	Jul.	2,279	240	2,519
	Aug.	2,283	215	2,498
	Sept.	2,325	206	2,531
	Oct.	2,384	184	2,568
	Nov.	2,341	220	2,561
	Dec.	2,322	239	2,561
1914	Jan.	2,356	157	2,513
	Feb.	2,254	171	2,425
	Mar.	2,295	188	2,483
	Apr.	2,359	207	2,566
	May	2,290	224	2,514
	Jun.	2,325	271	2,596
	Jul.	3,062	367	3,429

Notes: entries for the period 1896-1913 refer to monthly averages, entries for 1914 refer to end-of-month figures.

Source: OeNB.

Table 3: Currency Reserves: metallic and foreign exchange, 1896-1914
(in millions of kronen), **Austria-Hungary**

<i>Year</i>	<i>Month</i>	<i>Barschatz: official precious metal reserves (according to Article 84 central bank statute) (1)</i>	<i>Other foreign exchange reserves excluded from the official metal reserves (2)</i>	<i>Total currency reserves (3)=(1+2)</i>
1896	Jan.	761	0	761
	Feb.	765	0	765
	Mar.	785	0	785
	Apr.	798	0	798
	May	815	0	815
	Jun.	831	0	831
	Jul.	842	0	842
	Aug.	863	0	863
	Sept.	877	0	877
	Oct.	911	0	911
	Nov.	911	0	911
	Dec.	905	0	905
1897	Jan.	894	0	894
	Feb.	904	0	904
	Mar.	918	0	918
	Apr.	940	0	940
	May	975	0	975
	Jun.	1,017	0	1,017
	Jul.	1,037	0	1,037
	Aug.	1,054	0	1,054
	Sept.	1,058	0	1,058
	Oct.	1,066	0	1,066
	Nov.	1,065	0	1,065
	Dec.	1,028	0	1,028
1898	Jan.	1,010	0	1,010
	Feb.	1,012	0	1,012
	Mar.	1,010	0	1,010
	Apr.	993	0	993
	May	961	0	961
	Jun.	956	0	956
	Jul.	969	0	969
	Aug.	989	0	989
	Sept.	989	0	989
	Oct.	980	0	980

Table 3: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)=(1+2)</i>
1899	Nov.	977	0	977
	Dec.	980	0	980
	Jan.	981	0	981
	Feb.	987	0	987
	Mar.	1,002	0	1,002
	Apr.	1,004	0	1,004
	May	1,017	0	1,017
	Jun.	1,029	0	1,029
	Jul.	1,031	0	1,031
	Aug.	1,021	0	1,021
	Sept.	1,015	0	1,015
	Oct.	1,015	0	1,015
1900	Nov.	1,045	0	1,045
	Dec.	1,024	0	1,024
	Jan.	1,140	0	1,140
	Feb.	1,181	0	1,181
	Mar.	1,192	0	1,192
	Apr.	1,185	0	1,185
	May	1,158	0	1,158
	Jun.	1,177	0	1,177
	Jul.	1,188	0	1,188
	Aug.	1,188	0	1,188
	Sept.	1,196	0	1,196
	Oct.	1,204	0	1,204
1901	Nov.	1,213	0	1,213
	Dec.	1,217	0	1,217
	Jan.	1,223	10	1,233
	Feb.	1,237	22	1,259
	Mar.	1,248	30	1,278
	Apr.	1,250	28	1,278
	May	1,255	20	1,275
	Jun.	1,255	17	1,272
	Jul.	1,265	22	1,286
	Aug.	1,291	38	1,329
	Sept.	1,370	47	1,417
	Oct.	1,411	55	1,465
1902	Nov.	1,419	72	1,490
	Dec.	1,445	61	1,506
	Jan.	1,464	46	1,510
	Feb.	1,456	42	1,498

Table 3: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)=(1+2)</i>
1903	Mar.	1,437	48	1,485
	Apr.	1,422	44	1,466
	May	1,422	46	1,468
	Jun.	1,428	43	1,471
	Jul.	1,420	51	1,472
	Aug.	1,440	74	1,514
	Sept.	1,453	99	1,552
	Oct.	1,450	119	1,570
	Nov.	1,465	139	1,604
	Dec.	1,472	136	1,608
	Jan.	1,472	133	1,605
	Feb.	1,477	137	1,614
1904	Mar.	1,477	129	1,606
	Apr.	1,474	126	1,600
	May	1,478	125	1,603
	Jun.	1,470	124	1,594
	Jul.	1,460	136	1,596
	Aug.	1,459	160	1,619
	Sept.	1,462	182	1,644
	Oct.	1,459	179	1,639
	Nov.	1,468	191	1,659
	Dec.	1,470	179	1,650
	Jan.	1,473	167	1,640
	Feb.	1,490	165	1,655
1905	Mar.	1,501	154	1,656
	Apr.	1,506	157	1,663
	May	1,502	161	1,663
	Jun.	1,501	151	1,653
	Jul.	1,520	147	1,667
	Aug.	1,519	157	1,676
	Sept.	1,520	160	1,681
	Oct.	1,510	159	1,669
	Nov.	1,519	158	1,677
	Dec.	1,515	138	1,653
	Jan.	1,520	121	1,641
	Feb.	1,521	131	1,652
1905	Mar.	1,524	133	1,657
	Apr.	1,520	120	1,640
	May	1,523	110	1,633
	Jun.	1,513	91	1,604

Table 3: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)=(1+2)</i>
1906	Jul.	1,498	84	1,582
	Aug.	1,486	98	1,583
	Sept.	1,464	112	1,576
	Oct.	1,439	105	1,544
	Nov.	1,433	105	1,538
	Dec.	1,427	97	1,524
	Jan.	1,441	91	1,532
	Feb.	1,460	104	1,564
	Mar.	1,470	109	1,579
	Apr.	1,476	103	1,579
	May	1,484	116	1,600
	Jun.	1,488	102	1,590
1907	Jul.	1,486	94	1,580
	Aug.	1,482	113	1,594
	Sept.	1,473	126	1,599
	Oct.	1,465	111	1,576
	Nov.	1,467	105	1,572
	Dec.	1,464	88	1,553
	Jan.	1,462	77	1,539
	Feb.	1,466	87	1,552
	Mar.	1,456	97	1,553
	Apr.	1,450	94	1,544
	May	1,457	103	1,560
	Jun.	1,457	81	1,538
1908	Jul.	1,449	70	1,519
	Aug.	1,441	83	1,524
	Sept.	1,438	102	1,540
	Oct.	1,430	112	1,542
	Nov.	1,433	111	1,544
	Dec.	1,440	90	1,530
	Jan.	1,456	70	1,526
	Feb.	1,474	78	1,552
	Mar.	1,485	92	1,577
	Apr.	1,498	89	1,587
	May	1,501	101	1,602
	Jun.	1,504	99	1,603
	Jul.	1,509	109	1,618
	Aug.	1,512	141	1,653
	Sept.	1,534	149	1,683
	Oct.	1,529	135	1,664

Table 3: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)=(1+2)</i>
1909	Nov.	1,530	144	1,674
	Dec.	1,533	146	1,678
	Jan.	1,550	147	1,697
	Feb.	1,593	174	1,767
	Mar.	1,613	180	1,793
	Apr.	1,646	174	1,821
	May	1,699	161	1,859
	Jun.	1,730	132	1,862
	Jul.	1,724	126	1,850
	Aug.	1,725	146	1,871
	Sept.	1,738	162	1,900
	Oct.	1,725	147	1,872
1910	Nov.	1,718	138	1,856
	Dec.	1,717	111	1,828
	Jan.	1,724	90	1,813
	Feb.	1,735	87	1,822
	Mar.	1,732	92	1,825
	Apr.	1,720	103	1,823
	May	1,716	104	1,820
	Jun.	1,713	82	1,795
	Jul.	1,704	77	1,781
	Aug.	1,695	92	1,788
	Sept.	1,690	94	1,785
	Oct.	1,679	81	1,759
1911	Nov.	1,674	90	1,764
	Dec.	1,675	85	1,760
	Jan.	1,678	85	1,763
	Feb.	1,689	99	1,788
	Mar.	1,696	106	1,802
	Apr.	1,698	99	1,797
	May	1,709	193	1,902
	Jun.	1,714	173	1,886
	Jul.	1,707	162	1,868
	Aug.	1,696	174	1,870
	Sept.	1,679	149	1,828
	Oct.	1,643	114	1,757
1912	Nov.	1,629	105	1,734
	Dec.	1,634	86	1,719
	Jan.	1,645	72	1,717
	Feb.	1,657	68	1,724

Table 3: Austria-Hungary, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)=(1+2)</i>
1913	Mar.	1,641	73	1,715
	Apr.	1,629	64	1,692
	May	1,629	59	1,689
	Jun.	1,604	57	1,661
	Jul.	1,592	63	1,655
	Aug.	1,585	90	1,675
	Sept.	1,576	92	1,668
	Oct.	1,571	73	1,644
	Nov.	1,561	69	1,630
	Dec.	1,515	78	1,593
	Jan.	1,514	119	1,633
	Feb.	1,523	148	1,670
	Mar.	1,518	98	1,616
	Apr.	1,519	94	1,612
	May	1,524	112	1,636
	Jun.	1,527	92	1,619
	Jul.	1,530	78	1,608
	Aug.	1,532	99	1,631
	Sept.	1,535	89	1,624
	Oct.	1,534	81	1,615
	Nov.	1,541	86	1,627
	Dec.	1,557	80	1,637
1914	Jan.	1,584	n.a.	n.a.
	Feb.	1,596	n.a.	n.a.
	Mar.	1,606	n.a.	n.a.
	Apr.	1,607	n.a.	n.a.
	May	1,610	n.a.	n.a.
	Jun.	1,609	n.a.	n.a.
	Jul.	1,420	n.a.	n.a.

Notes: n.a.: not available. Entries for the period 1896-1913 refer to monthly averages, entries for 1914 refer to end-of-month figures.

Source: OeNB.

Table 4: The Discount Rate, 1891-1914
Austria-Hungary

<i>Year</i>	<i>Day</i>	<i>Month</i>	<i>%</i>
1891	4	9	5
1892	9	1	4
1893	6	10	5
1894	23	1	4.5
1894	9	2	4
1895	13	9	5
1896	24	1	4.5
1896	14	2	4
1898	14	10	4.5
1898	25	11	5
1899	19	5	4.5
1899	19	9	5
1899	6	10	6
1899	7	12	5.5
1900	22	1	5
1900	6	2	4.5
1901	1	3	4
1902	5	2	3.5
1905	20	10	4.5
1906	28	5	4
1906	28	9	4.5
1907	28	6	5
1907	11	11	6
1908	11	1	5
1908	4	2	4.5
1908	8	5	4
1910	24	10	5
1911	4	2	4.5
1911	23	2	4
1911	22	9	5
1912	26	10	5.5
1912	16	11	6
1913	28	11	5.5
1914	21	1	5
1914	4	2	4.5
1914	13	3	4
1914	27	7	5

Notes: Escompte rate; per cent per annum.

Source: OeNB.

Bulgaria

Kalina Dimitrova⁴⁹

Balgarska Narodna Banka

Martin Ivanov

Bulgarian Academy of Science

1. Major monetary events

The Bulgarian National Bank (Balgarska Narodna Banka - BNB) was established on 25 January 1879. The coinage system in Bulgaria was legislated for the first time in 1880. This law introduced the national currency – the *lev* that was equal to the gold franc, and at the same time, the bimetallic standard was ruling similar to the countries of the Latin Monetary Union (BNB, 1929, p. 55). The first Bulgarian silver coins were minted in 1883, but the BNB stopped minting silver coins as early as 1894.

The BNB was granted the monopoly to issue banknotes in 1885, to be followed quickly by the first issue of gold-backed bank notes. Since 1891, the BNB was also allowed to issue silver-backed banknotes, a right that was exercised for the first time in 1899. Convertibility into gold was suspended by law from 13 November 1899 until 24 November 1902. The BNB stopped to convert Bulgarian banknotes into gold *de facto* on 10 October 1912 and, again, *de jure* on 3 January 1919 (BNB, 1929, p. 65).

⁴⁹ We would like to thank Matthias Morys (Oxford University) for his helpful comments and suggestions and Rumen Avramov (Centre for Liberal Strategies – Sofia) for providing us with interesting details on the major monetary events in the Bulgarian financial history. We are also grateful to Svetla Vladimitova (BNB librarian) and Kiril Kossev (Oxford University, an intern at the BNB Program of Publication and Research on banking and financial history) for their valuable assistance in collecting and double checking the data. *Email to dimitrova.ka@gmail.com*

2. Definition of variables

The pre-defined set of monetary indicators according to the first Southeast Europe Monetary History Network (SEEMHN) Data Collection Task Force meeting, held on 20 of October 2006 at the Bulgarian National Bank, comprises of four key indicators: exchange rates, banknotes in circulation, reserves and the discount rate. The first two historical time series report the nominal exchange rate of the Bulgarian lev against the French franc and the British pound, which we were able to trace back to 1890 (see Table 1, columns 1-3). Relying on the *BNB Anniversary Book* (1929), the *BNB Annual Reports*, and the *State Gazette* as our sources, we report the selling rate of bills of exchange drawn on foreign markets. The reported exchange rates constitute the annual average of the arithmetic average between recorded monthly minimum and maximum values.⁵⁰

The second monetary indicator of interest is ‘banknotes in circulation’ (see Table 2, column 1). The Bulgarian lev was established as national currency in 1880. Five years later, in 1885, the BNB was granted the exclusive privilege to issue banknotes, hence no earlier data are available. Although all banknotes in circulation were covered by gold metallic holdings, the BNB actually faced great difficulties in circulating the money due to the lack of credibility in the banknotes, partly as a result of the still strong memory of the failure of the Ottoman banknotes, partly stemming from widespread preferences for silver coins⁵¹. Banknotes in circulation scored a large increase only in 1899 when the BNB exercised its right to issue silver-backed banknotes granted in 1891 (BNB, 1999). After gaining some credibility, Bulgarian gold-backed and silver-backed banknotes in circulation recorded very volatile growth reflecting the economic development of the country.

According to the BNB Act of 1885, the BNB adopted the continental European monetary system and Bulgarian gold-backed banknotes in circulation were covered by gold metallic holdings at the ratio of 1/3 and the BNB was obliged to convert them

⁵⁰ In addition, to the already published historical data annex by the OeNB, here we provide monthly data on the exchange rate with respect to the German mark. With respect to the British pound, there is no reported data for the years 1913 and 1914 either in the *BNB Annual Reports* or in its *Anniversary Book*.

⁵¹ Ottoman, Romanian, Russian and Serbian silver coins extensively circulated on the Bulgarian territory by 1887 because of the high price one can get for them when brought at the BNB. Therefore, people prefer to keep the gold and to use the undervalued silver coins instead of some credit documents (banknotes).

into gold when they were brought to the bank (see Table 2, column 2). The cover ratio for silver-backed banknotes was initially the same (1891), but it increased to 50% in 1906. The metallic holdings in fact exceeded the legislated cover ratio throughout the whole pre-WWI period because of the limited amount of banknotes in circulation. The time path of reserves was generally determined by the development of the economy and reflects the position of the balance of payments. An amendment of BNB Law in 1911 allowed for gold-backed foreign assets to be included in the legal coverage.⁵²

The last key monetary indicator is the discount rate (Table 3). Since the BNB had mixed functions (those of a commercial bank as well as of a bank of note issue), the reported discount rate is in fact the lending interest rate on short term credit (extended to big commercial enterprises). This interest rate was consistently lower than the rate charged by other credit institutions in the country, hence the BNB as the biggest credit institution determined the interest level (BNB, 1929). Compared to other countries, the BNB discount rate was relatively high in the first few decades after its establishment suggesting liquidity constraints in the Bulgarian financial system. The discount rates tend to converge, however, at the end of the classical gold standard period.

3. Data sources

The exchange rate data were collected from the BNB *Annual Reports*, the BNB *Anniversary Book* (1929) and the exchange rate section of the *State Gazette*. Data for all other indicators for the pre-WWI period could be found in the BNB *Anniversary Book* (1929), which summarizes data from the BNB *Annual Reports*. With respect to the major monetary events, we drew on the BNB *Anniversary Book* (1929) and BNB (1999).

⁵² Banknotes in circulation as well as reserves are reported as end-of-month or closest to end-of-month data (28th or 22nd). However, for the period 1880-85 there is only one reported data in the beginning of each month. Reserves are metallic holdings only.

References

BNB Annual Report, Sofia (various issues).

BNB (1929) *Jubileen sbornik na BNB (1879–1929)*, (*BNB Anniversary Book (1879–1929)*), State Printing House, Sofia.

BNB (1999), *120 Years Bulgarian National Bank*, Avramov, R. (ed.), Sofia.

State Gazette (various issues).

Table 1: Exchange Rates, 1890-1914
Bulgaria

<i>Year</i>	<i>Month</i>	<i>BG lev/ French franc (1)</i>	<i>BG lev/ British pound (2)</i>	<i>BG lev/ German mark (3)</i>
1890	Jan.	1.002	25.250	1.234
	Feb.	1.002	25.265	1.234
	Mar.	0.997	25.225	1.233
	Apr.	1.000	25.115	1.232
	May	0.998	25.080	1.230
	Jun.	0.999	25.080	1.232
	Jul.	0.998	25.130	1.229
	Aug.	0.997	25.110	1.231
	Sept.	0.996	25.160	1.232
	Oct.	0.998	25.200	1.235
	Nov.	0.997	25.250	1.236
	Dec.	1.001	25.260	1.239
1891	Jan.	1.002	25.250	1.239
	Feb.	0.998	25.140	1.235
	Mar.	1.003	25.110	1.230
	Apr.	1.005	25.130	1.234
	May	1.001	25.290	1.238
	Jun.	0.999	25.210	1.238
	Jul.	0.996	25.090	1.231
	Aug.	0.995	25.000	1.230
	Sept.	0.996	25.160	1.230
	Oct.	0.999	25.170	1.235
	Nov.	1.002	25.250	1.238
	Dec.	1.001	25.220	1.237
1892	Jan.	1.003	25.300	1.240
	Feb.	1.003	25.320	1.241
	Mar.	1.003	25.260	1.235
	Apr.	1.002	25.200	1.233
	May	1.000	25.150	1.233
	Jun.	0.999	25.170	1.234
	Jul.	1.000	25.160	1.234
	Aug.	1.000	25.160	1.235
	Sept.	0.998	25.160	1.234
	Oct.	0.999	25.200	1.231
	Nov.	1.001	25.220	1.237
	Dec.	1.002	25.220	1.236
1893	Jan.	1.002	25.240	1.237

Table 1: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1894	Feb.	1.001	25.210	1.231
	Mar.	1.001	25.160	1.230
	Apr.	1.000	25.150	1.229
	May	1.000	25.190	1.229
	Jun.	0.999	25.130	1.229
	Jul.	0.999	25.250	1.234
	Aug.	0.999	25.330	1.234
	Sept.	1.000	25.220	1.231
	Oct.	1.000	25.200	1.231
	Nov.	1.002	25.400	1.231
	Dec.	1.002	25.260	1.232
	Jan.	1.002	25.260	1.235
1895	Feb.	1.001	25.260	1.231
	Mar.	1.001	25.210	1.230
	Apr.	1.002	25.220	1.230
	May	1.001	25.250	1.231
	Jun.	1.001	25.210	1.230
	Jul.	1.001	25.230	1.231
	Aug.	1.001	25.220	1.231
	Sept.	1.001	25.190	1.231
	Oct.	1.002	25.210	1.231
	Nov.	1.002	25.190	1.231
	Dec.	1.002	25.220	1.231
	Jan.	1.002	25.250	1.231
1896	Feb.	1.002	25.290	1.231
	Mar.	1.001	25.280	1.230
	Apr.	1.001	25.260	1.229
	May	1.001	25.260	1.229
	Jun.	1.001	25.260	1.229
	Jul.	1.010	25.200	1.229
	Aug.	0.999	25.200	1.229
	Sept.	0.999	25.220	1.229
	Oct.	0.999	25.220	1.229
	Nov.	1.002	25.270	1.230
	Dec.	1.002	25.370	1.233
	Jan.	1.002	25.300	1.235
1896	Feb.	1.001	25.300	1.233
	Mar.	1.001	25.300	1.233
	Apr.	1.001	25.230	1.232
	May	1.001	25.240	1.232

Table 1: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1897	Jun.	1.001	25.230	1.233
	Jul.	1.002	25.230	1.233
	Aug.	1.002	25.210	1.233
	Sept.	0.999	25.180	1.233
	Oct.	0.999	25.130	1.229
	Nov.	1.000	25.170	1.232
	Dec.	1.000	25.220	1.234
	Jan.	1.000	25.230	1.232
	Feb.	1.002	25.250	1.233
	Mar.	1.001	25.220	1.233
	Apr.	1.001	25.180	1.232
	May	1.000	25.160	1.232
1898	Jun.	1.001	25.150	1.232
	Jul.	1.001	25.160	1.232
	Aug.	1.002	25.190	1.233
	Sept.	1.001	25.200	1.234
	Oct.	1.001	25.210	1.235
	Nov.	1.001	25.210	1.239
	Dec.	1.001	25.260	1.232
	Jan.	1.002	25.270	1.238
	Feb.	1.002	25.270	1.237
	Mar.	1.001	25.290	1.236
	Apr.	1.001	25.320	1.235
	May	1.001	25.320	1.236
1899	Jun.	1.001	25.290	1.236
	Jul.	1.001	25.280	1.236
	Aug.	1.001	25.270	1.236
	Sept.	1.001	25.260	1.236
	Oct.	1.000	25.300	1.236
	Nov.	1.002	25.310	1.236
	Dec.	1.001	25.310	1.238
	Jan.	1.002	25.270	1.236
	Feb.	1.002	25.270	1.236
	Mar.	1.002	25.290	1.236
	Apr.	1.002	25.320	1.239
	May	1.002	25.320	1.239
	Jun.	1.002	25.290	1.239
	Jul.	1.003	25.280	1.234
	Aug.	1.003	25.270	1.234
	Sept.	1.000	25.260	1.234

Table 1: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1900	Oct.	1.000	25.300	1.235
	Nov.	1.005	25.310	1.238
	Dec.	1.005	25.310	1.239
	Jan.	1.005	25.370	1.239
	Feb.	1.005	25.320	1.239
	Mar.	1.004	25.320	1.238
	Apr.	1.004	25.350	1.237
	May	1.001	25.350	1.237
	Jun.	1.001	25.320	1.237
	Jul.	0.999	25.300	1.235
	Aug.	0.999	25.350	1.234
	Sept.	0.999	25.320	1.234
1901	Oct.	0.999	25.320	1.234
	Nov.	0.999	25.300	1.234
	Dec.	0.999	25.290	1.233
	Jan.	1.006	25.340	1.233
	Feb.	1.006	25.360	1.237
	Mar.	1.006	25.360	1.238
	Apr.	1.006	25.360	1.239
	May	1.007	25.360	1.237
	Jun.	1.007	25.360	1.239
	Jul.	1.007	25.360	1.239
	Aug.	1.007	25.390	1.239
	Sept.	1.007	25.370	1.239
1902	Oct.	1.007	25.340	1.240
	Nov.	1.005	25.310	1.239
	Dec.	1.006	25.340	1.239
	Jan.	1.007	25.350	1.240
	Feb.	1.007	25.370	1.240
	Mar.	1.007	25.370	1.240
	Apr.	1.007	25.360	1.239
	May	1.007	25.360	1.231
	Jun.	1.002	25.360	1.239
	Jul.	1.007	25.350	1.239
	Aug.	1.003	25.340	1.236
	Sept.	0.999	25.170	1.230
1903	Oct.	0.999	25.130	1.229
	Nov.	1.000	25.120	1.228
	Dec.	1.001	25.160	1.230
	Jan.	1.001	25.160	1.231

Table 1: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1904	Feb.	1.001	25.180	1.230
	Mar.	1.001	25.190	1.229
	Apr.	1.001	25.190	1.229
	May	1.002	25.230	1.233
	Jun.	1.003	25.220	1.235
	Jul.	1.002	25.190	1.235
	Aug.	1.000	25.150	1.233
	Sept.	0.999	25.130	1.232
	Oct.	0.999	25.130	1.232
	Nov.	1.000	25.210	1.233
	Dec.	1.003	25.280	1.234
	Jan.	1.003	25.270	1.234
1905	Feb.	1.001	25.240	1.231
	Mar.	1.001	25.200	1.231
	Apr.	1.002	25.185	1.232
	May	1.002	25.185	1.232
	Jun.	1.001	25.190	1.234
	Jul.	1.000	25.200	1.232
	Aug.	0.998	25.170	1.229
	Sept.	0.999	25.170	1.230
	Oct.	1.000	25.140	1.233
	Nov.	1.001	25.170	1.234
	Dec.	1.002	25.190	1.235
	Jan.	1.002	25.210	1.233
1906	Feb.	1.002	25.220	1.232
	Mar.	1.001	25.200	1.231
	Apr.	1.000	25.170	1.228
	May	0.999	25.150	1.228
	Jun.	0.999	25.130	1.227
	Jul.	0.999	25.075	1.228
	Aug.	0.998	25.120	1.227
	Sept.	0.998	25.100	1.228
	Oct.	0.998	25.090	1.228
	Nov.	0.998	25.080	1.228
	Dec.	0.999	25.090	1.230
	Jan.	1.001	25.140	1.231
1906	Feb.	1.002	25.190	1.230
	Mar.	1.001	25.180	1.230
	Apr.	1.001	25.140	1.227
	May	0.999	25.165	1.227

Table 1: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1907	Jun.	1.001	25.170	1.228
	Jul.	1.001	25.190	1.228
	Aug.	1.000	25.180	1.231
	Sept.	0.999	25.150	1.229
	Oct.	0.998	25.130	1.228
	Nov.	0.999	25.170	1.229
	Dec.	1.000	25.220	1.230
	Jan.	1.008	25.250	1.230
	Feb.	1.001	25.290	1.232
	Mar.	1.001	25.310	1.234
	Apr.	1.001	25.200	1.239
	May	1.009	25.170	1.230
1908	Jun.	1.001	25.190	1.231
	Jul.	1.001	25.200	1.232
	Aug.	1.003	25.170	1.227
	Sept.	0.999	25.080	1.226
	Oct.	1.000	25.180	1.226
	Nov.	1.005	25.350	1.233
	Dec.	1.004	25.350	1.236
	Jan.	1.004	25.340	1.237
	Feb.	1.005	25.350	1.240
	Mar.	1.005	25.360	1.240
	Apr.	1.005	25.350	1.239
	May	1.006	25.320	1.239
1909	Jun.	1.008	25.320	1.241
	Jul.	1.007	25.310	1.241
	Aug.	1.002	25.180	1.232
	Sept.	0.999	25.090	1.226
	Oct.	0.999	25.110	1.230
	Nov.	1.003	25.110	1.238
	Dec.	1.006	25.290	1.235
	Jan.	1.010	25.395	1.240
	Feb.	1.012	25.530	1.244
	Mar.	1.013	25.540	1.245
	Apr.	1.013	25.490	1.245
	May	1.011	25.430	1.243
	Jun.	1.011	25.470	1.246
	Jul.	1.011	25.465	1.246
	Aug.	1.007	25.350	1.240
	Sept.	1.004	25.240	1.236

Table 1: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1910	Oct.	1.008	25.400	1.241
	Nov.	1.015	25.580	1.250
	Dec.	1.017	25.630	1.252
	Jan.	1.013	25.480	1.244
	Feb.	1.007	25.370	1.240
	Mar.	1.007	25.410	1.242
	Apr.	1.008	25.440	1.241
	May	1.008	25.470	1.242
	Jun.	1.008	25.430	1.243
	Jul.	1.007	25.380	1.241
	Aug.	1.004	25.350	1.238
	Sept.	1.002	25.250	1.236
1911	Oct.	1.002	25.310	1.236
	Nov.	1.003	25.360	1.238
	Dec.	1.005	25.390	1.242
	Jan.	1.005	25.430	1.242
	Feb.	1.006	25.450	1.243
	Mar.	1.006	25.450	1.245
	Apr.	1.006	25.460	1.245
	May	1.006	25.450	1.244
	Jun.	1.005	25.450	1.244
	Jul.	1.005	25.390	1.241
	Aug.	1.001	25.310	1.236
	Sept.	1.000	25.170	1.228
1912	Oct.	1.002	25.220	1.233
	Nov.	1.003	25.290	1.236
	Dec.	1.004	25.310	1.238
	Jan.	1.004	25.360	1.236
	Feb.	1.005	25.370	1.238
	Mar.	1.004	25.340	1.238
	Apr.	1.003	25.320	1.236
	May	1.003	25.330	1.237
	Jun.	1.004	25.330	1.237
	Jul.	1.003	25.330	1.237
	Aug.	1.003	25.350	1.235
	Sept.	1.004	25.370	1.239
1913	Oct.	1.010	25.480	1.241
	Nov.	1.010	25.490	1.244
	Dec.	1.010	25.440	1.243
	Jan.	1.010	n.r.	1.243

Table 1: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1914	Feb.	1.013	n.r.	1.249
	Mar.	1.015	n.r.	1.253
	Apr.	1.015	n.r.	1.250
	May	1.015	n.r.	1.251
	Jun.	1.015	n.r.	1.252
	Jul.	1.018	n.r.	1.255
	Aug.	1.023	n.r.	1.263
	Sept.	1.045	n.r.	1.305
	Oct.	1.052	n.r.	1.298
	Nov.	1.068	n.r.	1.320
	Dec.	1.133	n.r.	1.412
	Jan.	1.125	n.r.	1.384
	Feb.	1.098	n.r.	1.354
	Mar.	1.079	n.r.	1.330
	Apr.	1.078	n.r.	1.325
	May	1.080	n.r.	1.327
	Jun.	1.080	n.r.	1.327
	Jul.	1.080	n.r.	1.327
	Aug.	1.080	n.r.	1.327
	Sept.	1.103	n.r.	1.357
	Oct.	1.128	n.r.	1.383
	Nov.	1.140	n.r.	1.439
	Dec.	1.140	n.r.	1.480

Notes: Column (1): nominal exchange rate of the Bulgarian lev against the French franc (1890-1914). Exchange rate on bills of exchange, selling rate, average of monthly minimum and maximum values. Column (2): nominal exchange rate of the Bulgarian lev against the British pound (1890-1914). Exchange rate on bills of exchange, selling rate, average of monthly minimum and maximum values. Column (3): nominal exchange rate of the Bulgarian lev against the German mark (1890-1914). Exchange rate on bills of exchange, selling rate, average of monthly minimum and maximum values.

n.r. = not reported

Sources: BNB *Annual Reports*, BNB (1929) *Jubileen Sbornik na BNB 1879-1929* (BNB *Anniversary Book 1879-1929*).

Table 2: Banknote Circulation and Currency Reserves, 1879-1914
(in thous. levs), **Bulgaria**

<i>Year</i>	<i>Month</i>	<i>Banknotes in circulation (1)</i>	<i>Metallic holdings (2)</i>
1879	Dec.		9,425
1880	Jan.		3,067
	Feb.		2,873
	Mar.		4,985
	Apr.		4,668
	May		4,444
	Jun.		3,856
	Jul.		3,190
	Aug.		3,187
	Sept.		3,029
	Oct.		2,442
	Nov.		2,847
	Dec.		2,555
1881	Jan.		3,513
	Feb.		n.a
	Mar.		n.a
	Apr.		6,403
	May		5,637
	Jun.		5,028
	Jul.		4,575
	Aug.		3,552
	Sept.		2,781
	Oct.		2,437
	Nov.		2,218
	Dec.		2,115
1882	Jan.		2,192
	Feb.		1,512
	Mar.		854
	Apr.		1,055
	May		588
	Jun.		939
	Jul.		751
	Aug.		700
	Sept.		397
	Oct.		417
	Nov.		549
	Dec.		1,414

Table 2: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1883	Jan.		1,274
	Feb.		720
	Mar.		431
	Apr.		371
	May		254
	Jun.		236
	Jul.		518
	Aug.		256
	Sept.		91
	Oct.		138
	Nov.		96
	Dec.		817
1884	Jan.		728
	Feb.		1,607
	Mar.		1,605
	Apr.		1,299
	May		1,513
	Jun.		1,616
	Jul.		1,378
	Aug.		1,255
	Sept.		1,725
	Oct.		1,555
	Nov.		1,660
	Dec.		1,553
1885	Jan.		1,335
	Feb.		1,544
	Mar.		1,860
	Apr.		1,445
	May		1,437
	Jun.		1,716
	Jul.		3,995
	Aug.		n.a
	Sept.		n.a
	Oct.	244	3,655
	Nov.	448	3,610
	Dec.	213	3,659
1886	Jan.	217	2,979
	Feb.	113	2,543
	Mar.	250	2,757
	Apr.	256	3,021

Table 2: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1887	May	247	3,064
	Jun.	332	2,920
	Jul.	297	3,015
	Aug.	198	2,376
	Sept.	132	1,647
	Oct.	101	1,977
	Nov.	108	2,187
	Dec.	49	1,498
	Jan.	53	1,909
	Feb.	50	1,868
	Mar.	47	2,229
	Apr.	47	2,220
1888	May	61	2,336
	Jun.	47	2,252
	Jul.	79	1,541
	Aug.	86	908
	Sept.	106	1,547
	Oct.	135	1,383
	Nov.	618	1,326
	Dec.	1,035	2,398
	Jan.	849	2,553
	Feb.	765	1,874
	Mar.	387	979
	Apr.	192	653
1889	May	124	771
	Jun.	86	724
	Jul.	62	718
	Aug.	58	753
	Sept.	112	1,380
	Oct.	115	2,192
	Nov.	126	3,076
	Dec.	183	3,118
	Jan.	417	3,984
	Feb.	905	8,120
	Mar.	1,034	7,861
	Apr.	1,226	7,800
	May	1,029	6,435
	Jun.	595	5,905
	Jul.	489	2,675
	Aug.	561	3,050

Table 2: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1890	Sept.	386	2,864
	Oct.	333	3,426
	Nov.	352	7,886
	Dec.	402	11,505
	Jan.	n.a	n.a
	Feb.	678	16,899
	Mar.	1,524	15,568
	Apr.	1,484	13,369
	May	1,666	12,517
	Jun.	1,472	10,957
	Jul.	1,579	9,613
	Aug.	2,220	4,664
1891	Sept.	2,371	3,569
	Oct.	2,145	4,161
	Nov.	1,994	4,661
	Dec.	1,957	4,598
	Jan.	1,489	5,212
	Feb.	1,498	3,670
	Mar.	1,256	3,532
	Apr.	1,728	4,100
	May	1,420	2,326
	Jun.	1,337	2,912
	Jul.	1,138	2,104
	Aug.	n.a	n.a
1892	Sept.	1,491	4,046
	Oct.	1,390	4,272
	Nov.	1,487	8,824
	Dec.	1,303	7,377
	Jan.	691	6,736
	Feb.	541	4,459
	Mar.	704	3,682
	Apr.	733	2,555
	May	693	2,550
	Jun.	618	3,762
	Jul.	522	5,364
	Aug.	518	4,772
	Sept.	587	3,003
	Oct.	527	2,269
	Nov.	478	2,015
	Dec.	472	2,948

Table 2: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1893	Jan.	762	4,059
	Feb.	952	5,680
	Mar.	1,628	5,375
	Apr.	1,165	6,421
	May	1,474	8,692
	Jun.	982	10,870
	Jul.	988	10,327
	Aug.	990	9,799
	Sept.	1,040	8,192
	Oct.	2,208	5,063
	Nov.	1,545	4,162
	Dec.	1,231	6,201
1894	Jan.	1,133	9,309
	Feb.	1,252	10,908
	Mar.	1,284	6,882
	Apr.	2,032	8,590
	May	1,890	8,260
	Jun.	1,802	10,391
	Jul.	1,590	9,016
	Aug.	1,568	6,921
	Sept.	1,039	5,146
	Oct.	1,104	8,492
	Nov.	974	12,350
	Dec.	824	10,068
1895	Jan.	867	11,987
	Feb.	1,440	11,742
	Mar.	1,439	9,750
	Apr.	1,521	10,330
	May	1,817	7,146
	Jun.	1,789	4,531
	Jul.	2,429	9,960
	Aug.	2,705	5,132
	Sept.	2,336	4,620
	Oct.	2,268	5,306
	Nov.	1,956	6,938
	Dec.	1,680	6,400
1896	Jan.	1,347	7,589
	Feb.	1,744	6,854
	Mar.	2,143	5,269
	Apr.	2,135	4,246

Table 2: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1897	May	2,481	4,300
	Jun.	2,056	6,338
	Jul.	2,355	6,457
	Aug.	2,908	6,828
	Sept.	3,442	7,666
	Oct.	3,043	7,742
	Nov.	2,878	8,524
	Dec.	2,397	7,246
	Jan.	2,243	10,985
	Feb.	1,957	10,693
	Mar.	2,373	10,119
	Apr.	2,825	9,919
1898	May	2,693	10,132
	Jun.	2,454	12,284
	Jul.	2,806	13,664
	Aug.	3,215	9,297
	Sept.	3,115	8,003
	Oct.	3,186	6,662
	Nov.	2,529	8,150
	Dec.	1,957	8,040
	Jan.	2,348	10,446
	Feb.	2,532	9,118
	Mar.	3,804	6,182
	Apr.	3,593	5,344
1899	May	3,261	5,953
	Jun.	3,173	8,461
	Jul.	3,175	8,049
	Aug.	3,810	7,010
	Sept.	4,356	5,176
	Oct.	4,206	6,918
	Nov.	3,652	8,162
	Dec.	3,156	8,506
	Jan.	2,628	12,250
	Feb.	2,760	11,721
	Mar.	2,434	10,460
	Apr.	3,034	8,284
	May	2,968	7,593
	Jun.	1,987	6,171
	Jul.	3,058	5,770
	Aug.	3,097	3,554

Table 2: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1900	Sept.	3,710	3,628
	Oct.	3,693	3,665
	Nov.	5,343	5,891
	Dec.	7,985	7,479
	Jan.	7,502	10,011
	Feb.	8,184	11,077
	Mar.	10,361	11,047
	Apr.	11,012	10,784
	May	12,305	10,745
	Jun.	13,667	10,945
	Jul.	13,687	9,795
	Aug.	15,034	8,652
1901	Sept.	20,468	8,354
	Oct.	22,069	9,526
	Nov.	20,121	12,292
	Dec.	21,827	13,180
	Jan.	20,749	16,698
	Feb.	20,050	17,298
	Mar.	22,082	15,529
	Apr.	23,267	16,275
	May	23,624	15,688
	Jun.	23,886	15,983
	Jul.	23,876	15,938
	Aug.	27,384	14,119
1902	Sept.	28,723	10,960
	Oct.	29,133	9,679
	Nov.	29,483	9,823
	Dec.	26,640	12,028
	Jan.	26,165	14,187
	Feb.	26,787	14,875
	Mar.	27,225	15,156
	Apr.	28,306	14,553
	May	28,517	13,735
	Jun.	28,400	13,414
	Jul.	29,049	13,260
	Aug.	29,855	8,824
	Sept.	28,866	8,225
	Oct.	27,268	10,671
	Nov.	24,603	16,815
	Dec.	24,549	20,132

Table 2: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1903	Jan.	23,509	23,776
	Feb.	25,568	24,031
	Mar.	28,553	24,826
	Apr.	28,595	23,027
	May	28,529	19,830
	Jun.	27,761	16,973
	Jul.	28,881	15,716
	Aug.	34,876	12,895
	Sept.	36,204	12,929
	Oct.	36,555	12,802
	Nov.	35,872	13,097
	Dec.	32,986	12,175
1904	Jan.	35,528	15,380
	Feb.	37,654	16,582
	Mar.	40,323	15,686
	Apr.	40,839	15,121
	May	40,471	14,704
	Jun.	40,025	14,963
	Jul.	42,454	12,123
	Aug.	45,688	15,171
	Sept.	45,691	16,341
	Oct.	45,689	15,682
	Nov.	41,132	17,884
	Dec.	40,218	18,723
1905	Jan.	37,014	23,704
	Feb.	38,129	25,188
	Mar.	39,747	25,768
	Apr.	41,348	25,176
	May	41,644	25,415
	Jun.	41,854	27,684
	Jul.	42,456	26,797
	Aug.	46,012	25,741
	Sept.	44,942	25,488
	Oct.	43,187	25,507
	Nov.	38,908	27,796
	Dec.	37,194	29,515
1906	Jan.	34,229	34,175
	Feb.	36,105	35,049
	Mar.	42,678	35,397
	Apr.	43,426	36,114

Table 2: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1907	May	43,597	37,894
	Jun.	43,071	37,877
	Jul.	42,336	38,239
	Aug.	46,799	36,021
	Sept.	51,604	34,331
	Oct.	50,071	35,043
	Nov.	45,674	37,244
	Dec.	44,622	38,387
	Jan.	44,236	40,667
	Feb.	47,086	40,466
	Mar.	48,555	41,240
	Apr.	53,326	40,286
1908	May	52,225	44,317
	Jun.	50,543	43,917
	Jul.	49,856	43,337
	Aug.	56,898	41,324
	Sept.	61,581	42,115
	Oct.	62,645	42,183
	Nov.	52,606	43,329
	Dec.	49,220	42,331
	Jan.	44,784	43,146
	Feb.	45,568	40,940
	Mar.	46,285	40,681
	Apr.	49,607	39,796
1909	May	50,307	39,783
	Jun.	49,681	39,728
	Jul.	57,701	38,203
	Aug.	72,172	35,333
	Sept.	76,310	39,259
	Oct.	75,240	40,193
	Nov.	72,420	40,013
	Dec.	71,487	39,531
	Jan.	72,051	40,162
	Feb.	72,176	40,637
	Mar.	77,092	38,304
	Apr.	77,919	38,794
	May	72,148	39,929
	Jun.	73,075	38,997
	Jul.	76,176	38,968
	Aug.	85,024	38,374

Table 2: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1910	Sept.	82,952	46,182
	Oct.	81,891	47,838
	Nov.	73,847	48,443
	Dec.	71,770	47,823
	Jan.	65,424	49,158
	Feb.	63,787	48,824
	Mar.	64,695	48,895
	Apr.	67,387	48,958
	May	63,125	53,176
	Jun.	67,016	52,522
	Jul.	69,760	51,270
	Aug.	78,839	51,957
1911	Sept.	84,682	53,321
	Oct.	85,592	53,178
	Nov.	80,302	53,349
	Dec.	81,612	52,801
	Jan.	78,118	56,773
	Feb.	77,931	56,599
	Mar.	84,166	56,473
	Apr.	90,312	56,307
	May	87,320	56,461
	Jun.	88,473	54,517
	Jul.	91,208	55,028
	Aug.	118,989	53,567
1912	Sept.	117,815	55,629
	Oct.	116,265	59,338
	Nov.	111,043	59,934
	Dec.	110,789	59,336
	Jan.	108,469	61,580
	Feb.	112,928	61,193
	Mar.	123,464	60,017
	Apr.	121,099	60,950
	May	113,245	60,555
	Jun.	114,214	59,194
	Jul.	111,262	68,011
	Aug.	132,802	67,655
	Sept.	166,854	63,457
	Oct.	164,987	67,264
	Nov.	161,390	67,745
	Dec.	164,425	68,501

Table 2: Bulgaria, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1913	Jan.	162,034	68,268
	Feb.	164,331	73,920
	Mar.	171,954	76,364
	Apr.	179,264	76,012
	May	187,954	77,715
	Jun.	196,958	72,752
	Jul.	202,277	74,076
	Aug.	209,700	76,322
	Sept.	205,095	77,098
	Oct.	198,560	76,063
	Nov.	185,617	78,077
	Dec.	188,742	78,774
1914	Jan.	180,761	80,113
	Feb.	180,890	80,835
	Mar.	184,076	82,359
	Apr.	172,463	85,162
	May	172,781	86,186
	Jun.	173,324	86,111
	Jul.	205,922	85,457
	Aug.	205,635	85,353
	Sept.	210,589	84,762
	Oct.	213,731	84,072
	Nov.	215,019	83,118
	Dec.	226,615	83,644

Notes: Column (1): total banknotes in circulation (1885-1914), end-of-month data. Column (2): metallic holdings (gold and silver), end-of-month data.

n.a.: non available.

Sources: BNB *Annual Reports* (various issues), BNB (1929) *Jubileen Sbornik na BNB 1879-1929* (BNB *Anniversary Book 1879-1929*), State Gazette.

Table 3: The Discount Rate, 1879-1911

Bulgaria			
<i>Year</i>	<i>Day</i>	<i>Month</i>	<i>%</i>
1879	26	1	9
1884	26	1	8
1885	1	11	7.5
1887	1	5	8
1889	1	3	9
1889	1	11	8
1897	1	7	7
1898	15	4	7.5
1898	20	10	8
1906	1	2	7
1911	15	5	6

Note: The BNB's lending interest rate on short-term credit.

Sources: BNB *Annual Reports* (various issues), BNB (1929), *Anniversary Book*.

Greece

*Sophia Lazaretou*⁵³

Bank of Greece

1. Major monetary events

The story of the Greek drachma is a case rich with defaults, multiple switches on and off metallic standards and political and military events. In the past, Greece had tried many times to end histories of macroeconomic instability through participation in the prevailing international monetary system. Pre-WWII, the country's monetary history had been marked by experiments with silver in the very early years of the Greek state, bimetallism in the middle of the 19th century, the classical gold standard in the last quarter of the century and the gold-exchange standard in the years between the two wars. As an even stronger form of commitment, Greece joined the Latin Monetary Union (LMU) in 1867.⁵⁴

In particular, from 1828, when for the first time, a national monetary system based on silver was introduced, to 1936, when the country entered the 'Sterling Area', the Greek economy experienced eight episodes of suspension of gold or foreign exchange convertibility. Budget deficit difficulties were the reason for the suspension of silver monometallism in 1831. Two years later bimetallism was adopted and the gold-silver drachma replaced the silver phoenix. A short-lived suspension of metallic

⁵³ The presentation concerning the Greek data elaborates on the first release of the SE European historical database edited by the OeNB, *Workshops* no 13, 2008. I would like to thank the participants in the first, second and third meetings of the Data Collection Task Force of the SEEMHN, held in Sofia, Vienna and Athens, respectively, for their valuable comments and exchange discussions. Especially, I am grateful to Roumen Avramov and Matthias Morys for their thoughtful comments and suggestions and to Heather Gibson and Peter Mooslechner for their support and encouragement. I would like also to thank the Historical Archive of the National Bank of Greece and the Library of the Bank of Greece for kindly providing their material. The views expressed in this paper do not necessarily reflect those of the Bank of Greece. *Email to slazaretou@bankofgreece.gr*

⁵⁴ For a detailed discussion on the Greek monetary system and the monetary policy pursued in the context of the international monetary surrounding, see Lazaretou (2004 and 2005a).

convertibility took place in April 1848 as a response to a world-wide financial panic. However, the subsequent episodes of inconvertibility lasted for many years. Fiat money standards were prevailed in 1868, 1877, 1885 and 1914 in the face of wartime emergencies; again in 1932, as the ultimate result of the world-wide economic and monetary crisis of the early 1930s, and in 1936 due to large deficits in the balance of payments. With the exception of the short-lived 1885 episode of adherence to gold, Greece for the first time credibly adopted the gold standard as late as in 1910, and the gold-exchange standard in 1928. Key feature of all episodes was that specie flows were always resumed at the original parity, i.e. the par value of 1:1 against the French franc. The 1928 resumption, however, was an exception to that rule: the drachma, before joining, was devalued against sterling.

Concerning the Greek case, the suspensions of money convertibility were not only due to the emergence of some sudden event, usually unexpected and unpredictable, such as war, threat of war and financial and banking panics (often due to feared suspensions), but also to the government's failure to pursue fiscal and monetary policies compatible with its commitment to ensure fixed rates. However, the periodic abandonment of and the subsequent return to metallic standards revealed the government's strong commitment to the specie rule. Throughout the pre-WWII period, the monetary authorities often regarded the suspension of the drachma's convertibility as a reaction to an emergency, such as war. Once hostilities ceased, they made efforts to return to the "natural state", i.e. convertibility.⁵⁵

Based upon the standard definition provided by the gold standard literature, Greece was labelled as peripheral economy to the international monetary system.⁵⁶ Three were the typical features placing her among the peripheries. First, she had experienced

⁵⁵ Lazaretou (1995) provides narrative and empirical evidence that Greece followed a fixed-rate regime with the accepted 'escape clauses' for war and financial emergencies.

⁵⁶ Participating countries are divided into 'core' and 'peripheral' according to their faithfulness to specie rules. The core countries (the UK, the US, France and Germany) always adhered strictly to the specie rule. They were leading financial centres, capital and commodity exporters, world bankers and their national currencies were used as the 'nominal anchor' for the other countries. By contrast, the peripheral countries only temporarily maintained fixed rates. Peripheries were open economies albeit economically and financially underdeveloped. They were capital and commodity importers, they could not borrow in their own currency and they often suffered by weak public finances. They could not therefore influence the international monetary regime and thus they were subject to obey to the rules set by the core countries. Whenever, they faced pressing financial needs or imbalances in the external sector, they abandoned specie rules. It seems also that the size did not matter in the country's choice of a nominal exchange rate regime. Small-sized countries, like Belgium or Denmark, were among the core countries in the region; whereas large-sized countries, like Russia or Austria-Hungary, were at the system's periphery.

an exceptionally large number of exchange rate regime switches. Second, the frequent alternations between metallic and paper currency standards and the short-lived adoption of the specie rule revealed the government's inability to maintain fixed rates. Thus, the country before joining would have to effect major institutional reforms concerning chiefly the budget finances. Third, the periodic abandonment of and return to metallic standards revealed, however, the government's strong desire for adherence to the specie convertibility rule.

Until the outbreak of WWI, all South-Eastern European countries were trying to strike a balance between separation and convergence regarding the establishment of their national currency systems. To quote Einaudi (2007) '...on one side, the progressive political emancipation from the domination of three empires, the Hapsburg, the Ottoman and the Tsarist, pushed them towards distinct national currencies...On the other side, the desire to belong to the core group of the most advanced European nations pushed towards monetary harmonization ... with the Latin Monetary Union' (p30). However, well until the formal disburdenment of the LMU in 1926, Greece like the other nations in the region, i.e. Serbia, Romania, Bulgaria or Turkey, did not ever succeed the completion of their monetary convergence with Western Europe.

So, a crucial question is addressed: Why did the monetary authorities of the peripheries continually make efforts, sometimes painful and with varying degrees of success, to link their currencies with the currency of the strongest economy in their region? The gold standard literature was heavily dominated by abundant accounts built on narrative and empirical evidence from the core countries of the regime, whose behaviour differed significantly to the peripheries' since they benefited by strong currencies and deeper financial and economic development. However, a number of detailed studies of the experience of the peripheries have recently emerged shedding light to the intentions of their monetary authorities to participate to the international monetary arrangements designed by the core countries (see, for example, Martin-Aceña and Reis 2000, Lazaretou 2005b, Ögren 2006, Esteves *et al.* 2007 and Øksendal 2007). The historical and empirical evidence from the national stories of the peripheral economies or comparisons among them conclude two main arguments supporting a country's choice of a fixed rate monetary regime. The first one deals with the 'nominal' effects of the monetary regime (see Bordo and Kydland 1995,

Meissner 2002). A fixed currency regime is viewed as a ‘rule with escape clauses’ for well-understood contingencies, allowing the monetary authorities to temporarily suspend convertibility and enact discretionary policies in an attempt to cope with these emergencies. In the absence of any emergency, the strict adherence to the specie rule enabled the participating countries to ensure credibility in pursuing anti-inflationary policies.

The second argument concerns the ‘real effects’ of the monetary system (see Bordo *et al.* 1999, Flandreau and Sussman 2004). It reflects the possibility that for a peripheral country adherence to the gold standard rules might act as a ‘seal of approval’ for sovereign debt. Peripheries suffered from ‘original sin’ (Eichengreen and Hausman 1991). As they had poor reputations as borrowers, they were unable to issue debt denominated in their own currency. They issued bonds only in specie or in hard currency and even when they issued bonds payable in domestic paper, there were gold or exchange clauses. Thus, adherence to the specie rule would enable them to enhance market credibility and make foreign borrowing cheaper. This was because a sound fiscal and monetary policy enforced by a convertibility rule could ensure that the public debt would be ultimately paid back and the country would not unilaterally default. As a result, the country would face lower credit risk and enjoy cheaper borrowing both in the domestic and the international money markets. Further, it was shown that peripheries’ motives to join a ‘monetary stability club’ were also dictated by the need to reduce exchange rate fluctuations in commercial transactions among themselves and trade uncertainty, therefore enjoying a higher degree of market integration (Flandreau and Maurel 2001).

2. The Greek historical time series (1842-1914): variables’ definitions

We present four key historical time series, namely, the nominal exchange rate; total banknote circulation; total currency reserves; and the discount rate. All series cover the period prior to the First World War and have a monthly frequency. The analysed currency area covers the ‘old state’ up to 1881 and the ‘new provinces’ thereafter.⁵⁷ The currency unit, i.e. the legal tender, was the drachma. Like the most

⁵⁷ Important territorial enlargements followed by large population increases occurred in 1881, 1913 and again in 1922-23 that formulated in a large part the country’s current borders.

countries in Europe by that time, there was not a monetary institution, while issue banks prevailed over the domestic monetary system.

2.1 Exchange rates

Exchange rate data include the nominal exchange rate of the drachma *vis-à-vis* two international currencies, i.e. the French franc (FRF) and the pound sterling. The FRF was set as the common monetary unit in the LMU countries. Under the Law on Currency (10 April 1867) and the accession declaration (26 September 1868), Greece signed the LMU agreement accepting the principle of bimetallism and the equivalence of the gold drachma with the gold FRF (mint parity 1:1).^{58,59}

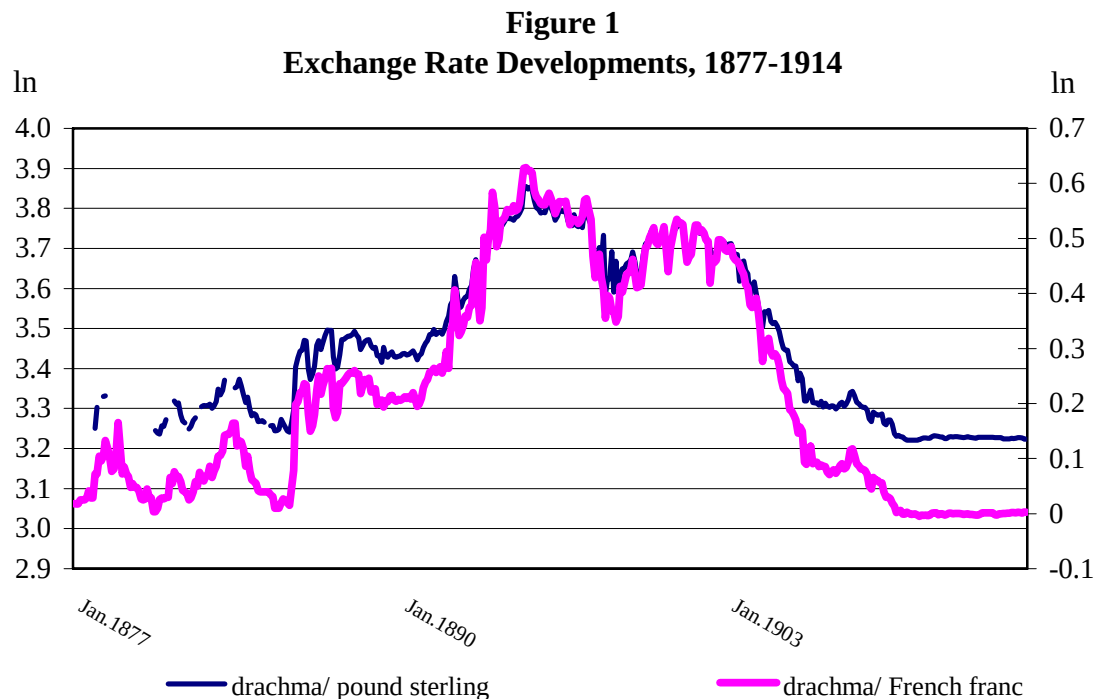
Until the end of the 1890s, the drachma suffered from strong devaluation pressures due to loose fiscal policy, accommodated by monetary policy. As a result, the drachma was heavily devalued reaching in January 1895 the ever-highest price of 1.875 drachmas for one French franc. Accordingly, the bilateral price for one sterling also doubled; it rose to 47.203 drachmas. However, from the turn of the century the devaluation pressures were reversed by a strong revaluation thanks to restrictive fiscal and monetary policies pursued in the context of the international agreement for foreign debt compromise.⁶⁰ The drachma started gradually to revalue. Revaluation pressures were notably enhanced post-1905. From mid-1909, the drachma exhibited a greater stability against the FRF and the pound sterling, and continued to stay close to the mint parity (1 drachma per FRF; 25.25 drachmas per sterling). In March 1910,

⁵⁸ The printing of the new (LMU) drachma was permitted immediately after the publication of the law. The new system was to become effective from the 1st January 1869. However, the country only signed the agreement; she did not participate as a full member. Wartime emergencies in 1868 and again in 1877-78 on the one hand, and the insufficient issuance of new drachmas on the other, prevented the government from introducing the new system and forced it to a more permanent suspension of the drachma's convertibility.

⁵⁹ The silver drachma was fixed as equal to 4.029 grams of pure silver and the gold drachma as equal to 0.25994 ($\times 20 = 5.199$) grams of pure gold. In other words, the silver drachma contained 15.5 times as many grams of silver as of gold. Thus, the legal ratio was 1:15.5. However, according to the LMU agreement, the members' currencies should be equal to one other. The gold FRF (20 FRF) was fixed as equal to 0.2903 ($\times 20 = 5.806$) grams of pure gold while one Greek gold drachma was equal to 5.199 grams of pure gold. Thus, the par exchange rate was 1 FRF = 1.1168 drachmas. To achieve the 1:1 parity, the new (i.e. LMU) drachma was minted in November 1882 and was introduced as the new monetary unit. It was fixed as 0.29 grams of pure gold and the exchange rate of the new drachma to the old one was the equivalence of 0.8954 new drachmas.

⁶⁰ The country's over-indebtedness during the 1880s led to the 1893 debt default. In December 1893, the government unilaterally suspended payments on servicing the external debt. Foreign creditor countries in an effort to re-negotiate the debt demanded the presence of foreign experts for the monitoring of the economic policy pursued. Debt compromise came at last in 1898. An international committee was established by law to enforce the government to achieve monetary discipline and fiscal consolidation (see the law of 26 February 1898).

Greece was *de jure* on gold. Table 1 displays the nominal exchange rate against the pound sterling (column 1) and the French franc (column 2). The entries are monthly averages and have been calculated based on the daily (end-of-the day) or weekly (end-of-the week) fixing⁶¹ rates of the National Bank of Greece. Figure 1 plots the exchange rate developments.



Note: LHS= the natural logarithm of the drachma/pound sterling exchange rate, RHS= the natural logarithm of the drachma/French franc exchange rate (nominal rates).

Source: National Bank of Greece and GNSS.

2.2 Banknotes in circulation

The data for banknotes in circulation refer to the bank notes issued by the National Bank of Greece and held by the non bank public.⁶² Consequently, vault cash, i.e. cash held by the Bank in its notes has been subtracted from the data series. However,

⁶¹ The fixing value is the average of the 'buying' and 'selling' prices.

⁶² Until 1927, the National Bank of Greece, created as a 'universal' bank, enjoyed the issue monopoly for bank notes circulating nationwide. Three other commercial banks were also allowed to issue bank notes, but their notes were permitted to circulate only in an extremely limited geographical area and, as a result, the quantity of their banknotes in circulation was very small.

monthly data for cash in National Bank's notes held by the other issue or commercial banks do not exist. Similarly, monthly data for banknotes of low value money in circulation (namely, 1 and 2 drachmas) do not also exist. The monthly dates (end-of-month, seasonally unadjusted) are displayed in column 1 of Table 2. A complete time series at monthly frequency is available from 1865. Prior to that year, the Bank did not publish monthly data for its note circulation. Monthly data appeared only for the years 1842, 1843, 1844, 1845 and 1848. However, the end-of-June and the end-of-December entries appeared in the Bank's balance sheet, while the year average data appeared in the annual report of the Governor.⁶³

Until 1910, banknote circulation consisted of two main components: the government's floating debt to the Bank (column 2) and the 'uncovered' note circulation outside the banking sector (column 3). Monthly observations for both components are available only from 1897. From September 1910 banknote circulation consisted by 'uncovered' paper money held by the non bank public and the government (columns 2 and 3), and 'covered' bank notes that were fully convertible into gold or foreign exchange at the par value (column 4) according to the new monetary law of 19 March 1910. By the law of 26 February 1898, the use of money creation as a financing instrument was strictly prohibited. By that law, an International Committee for Greek debt management was established and a legal framework was rigorously defined within the country could enjoy fiscal responsible governments. A statutory limit of 66 million drachmas in notes was set (article 30). That meant that the Bank was not allowed to increase 'uncovered' note circulation over and above this limit. It was also defined that, starting from 1900, the government should amortize its floating debt to the Bank by 2 million drachmas annually and the 'uncovered' note circulation should be therefore reduced by the same amount every year.

2.3 Currency reserves

Columns 1 to 4 of Table 3 display total currency reserves of the National Bank of Greece, which consisted of three components. The first component (column 1) included metallic reserves, namely the official reserves in precious metal, gold and/or

⁶³ Missing values have been calculated using the type of linear interpolation, i.e. $x_1 = \{[(t_2 - t_1)/(t_2 - t_0)] * x_0\} + \{[(t_1 - t_0)/(t_2 - t_0)] * x_2\}$, based on the year average values and the end-of-June and the end-of-December data points.

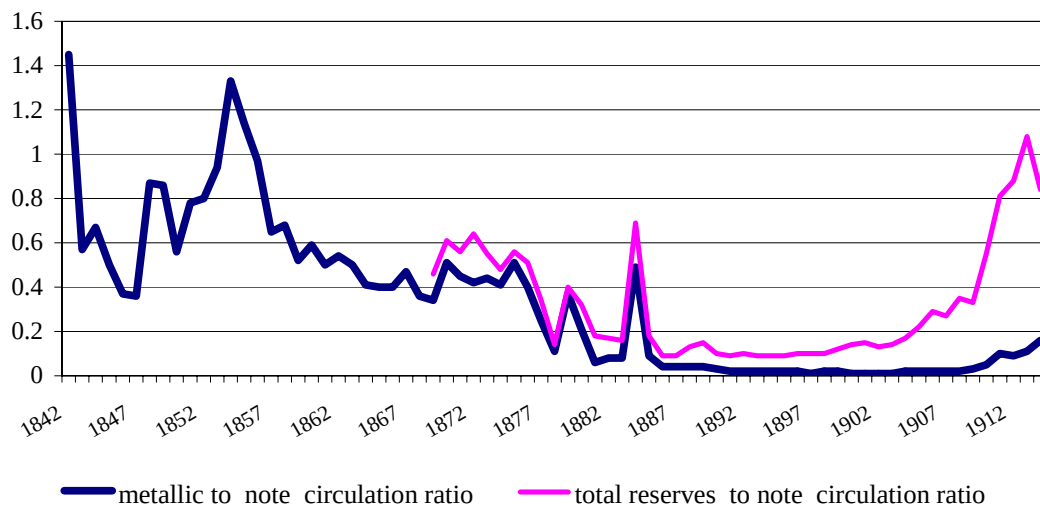
silver, that the Bank used to hold in its Treasury in the form of barren metal. Until 1876, metallic consisted mainly of silver coins or bullions of silver, while from 1877 onwards, the proportion of gold stock increased considerably. Specie came mainly from trade and a small portion came from direct investment in residential and commercial property as well as portfolio investments. The second component (column 2) included reserves in foreign exchange. As of 1869, the Bank started to hold interest-bearing deposits denominated in foreign currencies, chiefly in French francs and British pounds, and readily convertible into gold. The third component (column 3) included the foreign exchange reserves that the Bank was obliged to hold according to the rules set by the 1910 gold-French franc exchange rate based regime. According to the new monetary regime, the National Bank could buy gold at par value and foreign exchange at the price of 1.005 drachmas per FRF, and sell gold at the price of 1.001 drachmas per FRF and foreign exchange at the price of 1.0055 drachmas/FRF. The gold points (i.e. the points of gold inflow-outflow) that determined the fluctuation band of the exchange rate and were defined by the transportation cost of gold from country to country were set to ± 0.005 . It was also stated that the Bank could hold as official reserves interest-bearing deposits denominated in FRF, while only 10% of its reserves could be held as gold stock.⁶⁴ Column 4 is the sum of columns 1 to 3 (end-of-month, seasonally unadjusted data).

Prior to 1865, the Bank did not publish monthly data for its total currency reserves. The only entries concern the years 1843, 1844, 1845 and 1848. As in the case of banknote circulation, however, the end-of-June and the end-of-December entries appeared in the Bank's balance sheet, while the year average data appeared in its annual report. A complete time series for total currency reserves at monthly frequency is available from 1865 onwards, while monthly observations for the components of precious metal and coins, and foreign exchange started to appear only from 1872.⁶⁵

⁶⁴ See, the Law 3642 of 19 March 1910.

⁶⁵ Missing values have been calculated using the type of linear interpolation. See, footnote 11.

Figure 2
Reserve-Banknote Ratio, 1842-1914



Note: end-of-year data.

Source: National Bank of Greece, *Balance Sheets*, (various issues).

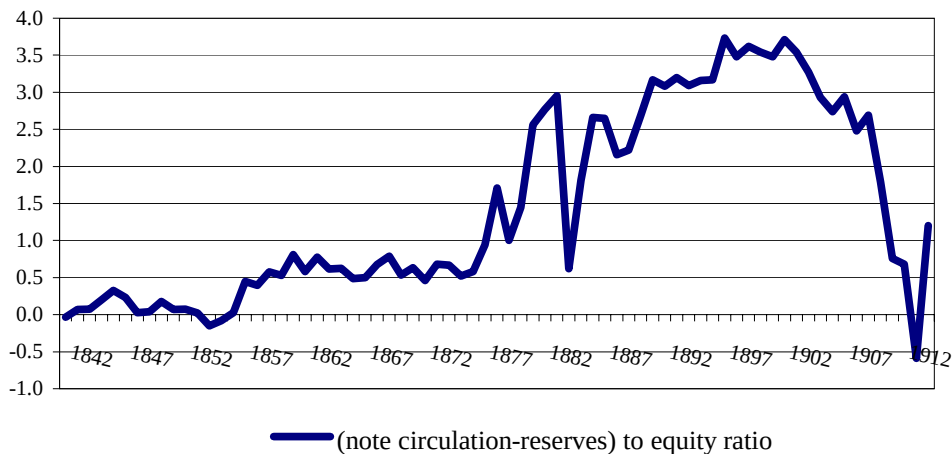
In the periods of fiat money standards (1869–1870, 1877–1884, 1886–1909), upward movements of note circulation were accompanied by downward movements of total reserves, so that the reserve-banknote ratio was reduced to very low levels. Conversely, in the periods that the country credibly adhered to the specie convertibility rule, note circulation varied positively with gold and foreign exchange reserves. Both moved in a way so that the reserve-banknote ratio steadily increased above the statutory limit of 25%⁶⁶ (see Figure 2). As seen in the figure, from the early 1890s the proportion of metallic reserves to the total currency reserves was minimised while foreign exchange holdings rose considerably during the same period.

Figure 3 depicts the trend behaviour of the ‘uncovered’ banknote circulation to the Bank’s equity. According to the Bank’s statute (article 4, Dec. 1861), this ratio should take values less than unity. Positive values and larger than unity reflect that the ‘uncovered’ note circulation exceeded the net worth (booked value) of the Bank. Reversely, values smaller than the unity or even negative denote that the increase in note circulation was smaller than the increase in total reserves. As seen, in the years of

⁶⁶ According to the National Bank’s statute (article 36), no less than 25% of banknotes in circulation should be covered by metallic or/and foreign exchange reserves.

currency inconvertibility the ratio displays a rapid upward movement as the result of paper money expansions.

Figure 3
'Uncovered' Note Circulation to Equity Ratio, 1842-1914



Note: end-of-year data.

Source: National Bank of Greece, *Balance Sheets*, (various issues).

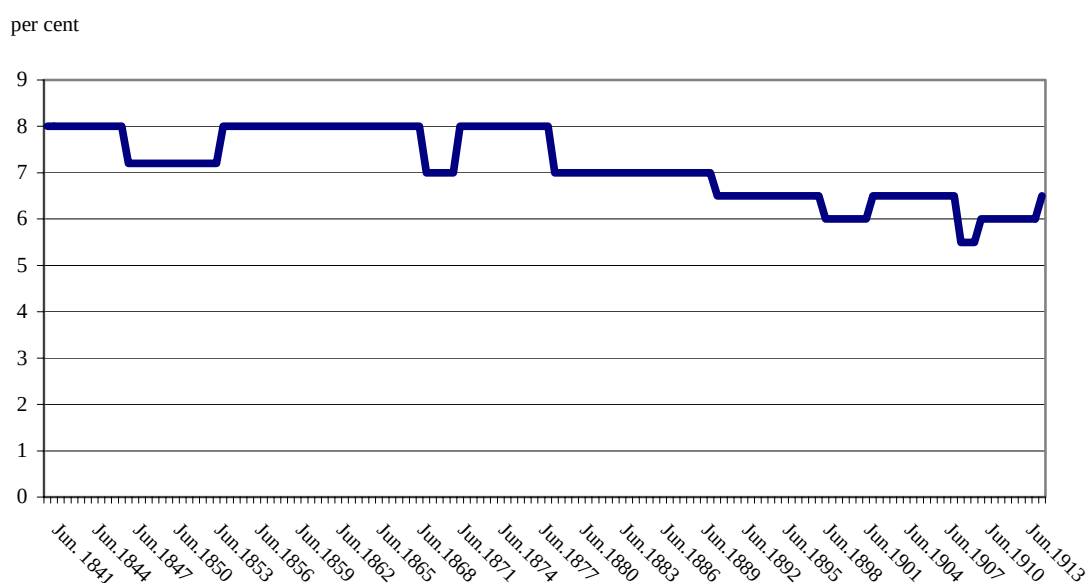
2.4 The discount rate

The discount rate was imposed by the National Bank of Greece on very short-term advances to traders, i.e. bills of exchange with a three-month maturity. It was therefore a short-term lending rate. According to the law of 1836, the lending rate on trade advances could not exceed 12%. However, the market (private non-bank) rate was more than 20% in the cities and even higher in the provinces.⁶⁷ The excessively high cost of lending capital was an obstacle in the development of trade and of the domestic economy in general. Thanks to the beneficial impact of the operation of the National Bank, lending became much cheaper. At the time of the Bank's inception in March 1841, the discount rate was set at a much lower rate (8%). In the 1880s, the borrowing terms in the domestic money market improved further: the interest rate was cut to 7%. That was the time when the drachma made efforts to join the LMU and the country enjoyed long-term foreign borrowing on favourable terms. In 1890, the Bank rate was slightly reduced to 6.5%. Throughout the 1890s, the rate remained stable at

⁶⁷ The law of 1836 never came into effect and was eventually abolished in 1841. Details concerning the lending rate in the first half of the 1830s were scarce. Transactions in the private money market with a maturity less than 30 days were not allowed. Orders to pay wages and retirement benefits in advance at a monthly rate of 3% (36% annually) and 3-month trade advances were the only options.

this level; in the provinces, however, it stood at even higher levels (by 0.5 percentage point). In 1890-97 period, Greece's credit-worthiness tottered, especially after the 1893 debt default. Post-1898, borrowing from abroad became much cheaper (4%) due to the improvement of the country's credit-worthiness thanks to debt compromise and the implementation of a successful stabilisation programme. By contrast, the domestic short-term lending rate continued to stand at high levels. The intense anti-inflationary policy implemented throughout the 1900s in the context of the stabilisation programme, caused an excess money demand and thus kept the interest rate stuck at the high level of 6.5-7%. On the eve of the country's entrance in the gold standard in 1910, the rate was cut by one percentage point but later, with the outbreak of WWI, it sharply increased to 8%. Six months later, in November, it was again reduced at a rate close to 6%.

Figure 4
The Discount Rate of the National Bank of Greece, 1841-1914



Note: yearly rates. End-of-June and end-of-December figures.

Source: National Bank of Greece, *Annual Report of the Governor*, (various issues).

Table 4 lists the dates of change in the discount rate, while Figure 4 depicts its evolution. As seen, the Bank was quite inactive regarding the number of its rate changes. Changes were infrequent despite the long time span of the period under review and the large number of episodes of financial crises that the country

experienced. Profit motives and the priority to safeguard the convertibility of its banknote prohibited the Bank from operating as a ‘banker to banks’ and a ‘lender of last resort’ in times of crisis. The Bank usually appeared reluctant to take part in rescue operations through re-discounts and, therefore, it did not use its rate as an instrument for effective money control.

Further, the Bank also used to lend short-term advances to the government at the same rate that it imposed on the advances to traders. Before 1879, Greece was unable to have access to international capital markets due to her bad reputation as a borrower. The only option for the government to cover pressing finance requirements was short term domestic debt issues at a very high rate. The Bank punished the government by setting very high risk premiums (7-8%, compared with the much lower rates prevailed in the international capital markets of 2.5-4.5%).

3. Data sources

The data for the banknotes in circulation and total currency reserves are from the *Annual Report of the Governor* of the National Bank of Greece (1842–1914, various issues) and the annual and semi-annual *Balance Sheets* of the Bank. In his *Annual Report*, the Governor used to describe in a particular section the year-to-year developments of the Bank’s asset items. In this section, a table was included presenting the monthly figures (end-of-month). The minimum and the maximum values throughout a specific year were also presented, and the annual averages as well. The historical data for the nominal exchange rate of the drachma against the French franc and sterling (spot rates, monthly averages, fixing) are from the *Annual Report of the Governor* and the Greek National Statistical Service (GNSS), *Monthly Bulletin* (1885–1914, various issues). Valaoritis (1902) and Zolotas (1929) are additional sources. The data for the discount rate have been collected (dates of change) from the *Annual Report of the Governor* (various issues). Particularly, see that part in which the Governor discussed the progress of the Bank’s lending activity over the previous year.

References

- Bordo, M. and F. Kydland (1995), The Gold Standard as a Rule: An Essay in Exploration, *Explorations in Economic History*, 32, 423-464.
- Bordo, M., Edelstein, M. and Rockoff, H. (1999), Was adherence to the Gold Standard a 'Good Housekeeping Seal of Approval' during the Interwar Period?, *NBER Working Paper* no 7186.
- Eichengreen, B. and R. Hausman (1991), Exchange Rate and Financial Fragility. Federal Reserve of Kansas City, *New Challenges for Monetary Policy*. A Symposium sponsored by the Federal Reserve of Kansas City, 329-368.
- Einaudi, L. (2007), Monetary Separation and European Convergence in the Balkans in the 19th Century, in *The Experience of Exchange Rate Regimes in Southeastern Europe in a Historical and Comparative Perspective*, OeNB, *Proceedings of Workshops*, no 13, 30-49.
- Esteves, R. P., J. Reis and F. Ferramosca (2007), Market Integration in the Golden Periphery: the Lisbon/London Exchange, 1854-1891, University of Oxford, *Economics Series Working Paper*, no 338.
- Flandreau, M. and M. Maurel (2001), Monetary Union, Trade Integration and Business Fluctuations in 19th Century Europe. Just Do It, *CEPR Discussion Papers* no 3087.
- Flandreau, M. and N. Sussman (2004), Old Sins: Exchange Clauses and European Foreign Lending in the 19th Century, *CEPR Discussion Papers* no 4248.
- Lazaretou, S. (1995), Government Spending, Monetary Policies and Exchange Rate Regime Switches: the Drachma in the Gold Standard Period, *Explorations in Economic History*, 35, 28-50.
- Lazaretou, S. (2004), Monetary System and Macroeconomic Policy in Greece: 1833-2003, *Economic Bulletin*, Bank of Greece, 22, 33-65.
- Lazaretou, S. (2005a), Greek Monetary Economics in Retrospect: the Adventures of the Drachma, *Economic Notes: Review of Banking, Finance and Monetary Economics*, 34, 331-370.
- Lazaretou, S. (2005b), The Drachma, Foreign Creditors and the International Monetary System: Tales of a Currency in the 19th and the Early 20th Centuries, *Explorations in Economic History*, 42, 202-236.
- Lazaretou, S. (2007), Monetary Time Series of Southeastern Europe from the 1870s to 1914: Greece, in *The Experience of Exchange Rate Regimes in Southeastern Europe in a Historical and Comparative Perspective*, OeNB, *Proceedings of Workshops*, no 13, 424-431.
- National Bank of Greece, *Balance Sheets*, 1842-1914, Historical Archives (various issues).
- National Bank of Greece, *Annual Reports of the Governor*, 1842-1914, Historical Archives (various issues).
- Martin-Aceña, P. and J. Reis (2000), *Monetary Standards in the Periphery: Paper, Silver and Gold, 1854-1933 (eds)*, New York, St. Martin Press.

- Meissner, C. M. (2002), A New World Order: Explaining the Emergence of the Classical Gold Standard, *NBER Working Paper* no 9233.
- Ögren, A. (2006), Free or Central Banking: Liquidity and Financial Deepening in Sweden, *Explorations in Economic History*, 43, 64-93.
- Øksendal, L. F. (2006), 1931 and all that: Re-examining Norwegian Monetary Policy in the 1930s, paper presented at the XIV International Economic History Congress, Helsinki, August.
- Valaoritis, J. A. (1902), *The History of the National Bank of Greece, 1842–1902*, Vols. 1 and 2, National Bank of Greece, Cultural Institute (in Greek).
- Zolotas, X. (1929), *Stabilisation Policies in Theory and Practice*, Athens: Greka (in Greek).

Table 1: Exchange Rates, 1877-1914
Greece

<i>Year</i>	<i>Month</i>	<i>drachma/ pound sterling (1)</i>	<i>drachma/ French franc (2)</i>
1877	Jan.	n.a.	1.018
	Feb.	n.a.	1.018
	Mar.	n.a.	1.018
	Apr.	n.a.	1.025
	May	26.011	1.025
	Jun.	n.a.	1.025
	Jul.	n.a.	1.029
	Aug.	n.a.	1.042
	Sept.	n.a.	1.029
	Oct.	n.a.	1.029
	Nov.	25.809	1.075
	Dec.	27.177	1.075
1878	Jan.	n.a.	1.110
	Feb.	n.a.	1.100
	Mar.	27.939	1.110
	Apr.	27.984	1.142
	May	n.a.	1.126
	Jun.	28.163	1.110
	Jul.	n.a.	1.080
	Aug.	n.a.	1.084
	Sept.	n.a.	1.110
	Oct.	n.a.	1.180
	Nov.	n.a.	1.130
	Dec.	28.701	1.075
1879	Jan.	n.a.	1.089
	Feb.	n.a.	1.075
	Mar.	n.a.	1.070
	Apr.	n.a.	1.049
	May	n.a.	1.056
	Jun.	n.a.	1.049
	Jul.	n.a.	1.049
	Aug.	25.831	1.042
	Sept.	n.a.	1.027
	Oct.	25.741	1.025
	Nov.	n.a.	1.027
	Dec.	n.a.	1.046
1880	Jan.	n.a.	1.029
	Feb.	n.a.	1.029

Table 1: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1881	Mar.	n.a.	1.003
	Apr.	25.652	1.003
	May	25.506	1.010
	Jun.	25.428	1.026
	Jul.	25.966	1.029
	Aug.	25.921	1.027
	Sept.	26.369	1.030
	Oct.	n.a.	1.030
	Nov.	n.a.	1.068
	Dec.	n.a.	1.056
	Jan.	27.625	1.079
	Feb.	27.400	1.070
1882	Mar.	27.499	1.070
	Apr.	26.683	1.060
	May	26.280	1.043
	Jun.	26.168	1.040
	Jul.	n.a.	1.038
	Aug.	25.771	1.025
	Sept.	25.921	1.029
	Oct.	26.309	1.040
	Nov.	26.504	1.060
	Dec.	n.a.	1.051
	Jan.	n.a.	1.078
	Feb.	27.221	1.070
1883	Mar.	27.326	1.061
	Apr.	27.296	1.070
	May	27.311	1.073
	Jun.	27.412	1.090
	Jul.	27.121	1.068
	Aug.	27.266	1.080
	Sept.	27.580	1.090
	Oct.	28.471	1.110
	Nov.	28.057	1.111
	Dec.	28.380	1.120
	Jan.	29.100	1.153
	Feb.	n.a.	1.155
1883	Mar.	n.a.	1.155
	Apr.	n.a.	1.162
	May	n.a.	1.179
	Jun.	28.550	1.179

Table 1: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1884	Jul.	28.633	1.131
	Aug.	29.183	1.141
	Sept.	28.717	1.139
	Oct.	28.067	1.125
	Nov.	27.517	1.090
	Dec.	27.900	1.110
	Jan.	27.050	1.080
	Feb.	26.625	1.063
	Mar.	26.783	1.060
	Apr.	26.700	1.057
	May	26.250	1.043
	Jun.	26.275	1.040
1885	Jul.	26.300	1.040
	Aug.	26.200	1.040
	Sept.	n.a.	1.040
	Oct.	n.a.	1.040
	Nov.	25.967	1.035
	Dec.	26.000	1.031
	Jan.	25.642	1.010
	Feb.	25.667	1.010
	Mar.	25.750	1.010
	Apr.	26.383	1.020
	May	26.150	1.027
	Jun.	25.867	1.025
1886	Jul.	25.633	1.020
	Aug.	25.550	1.015
	Sept.	26.117	1.046
	Oct.	27.017	1.082
	Nov.	30.083	1.219
	Dec.	30.767	1.225
	Jan.	31.283	1.246
	Feb.	31.350	1.246
	Mar.	32.150	1.266
	Apr.	32.100	1.264
	May	29.883	1.198
	Jun.	29.153	1.161
	Jul.	29.550	1.173
	Aug.	30.117	1.197
	Sept.	31.750	1.250
	Oct.	32.133	1.284

Table 1: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1887	Nov.	31.417	1.242
	Dec.	31.950	1.262
	Jan.	32.533	1.278
	Feb.	32.983	1.301
	Mar.	32.967	1.299
	Apr.	32.950	1.303
	May	30.850	1.211
	Jun.	29.933	1.190
	Jul.	30.067	1.202
	Aug.	31.000	1.266
	Sept.	32.200	1.266
	Oct.	32.217	1.273
1888	Nov.	32.367	1.279
	Dec.	32.500	1.288
	Jan.	32.490	1.292
	Feb.	32.620	1.291
	Mar.	32.875	1.297
	Apr.	32.581	1.289
	May	32.350	1.289
	Jun.	31.420	1.243
	Jul.	31.737	1.262
	Aug.	32.050	1.276
	Sept.	32.183	1.273
	Oct.	32.194	1.279
1889	Nov.	31.725	1.247
	Dec.	31.513	1.252
	Jan.	31.592	1.255
	Feb.	30.931	1.219
	Mar.	30.913	1.228
	Apr.	30.425	1.229
	May	31.586	1.213
	Jun.	30.908	1.228
	Jul.	30.817	1.225
	Aug.	31.108	1.237
	Sept.	31.233	1.240
	Oct.	30.867	1.229
1890	Nov.	30.813	1.226
	Dec.	30.875	1.230
	Jan.	30.917	1.229
	Feb.	31.094	1.232

Table 1: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1891	Mar.	31.119	1.236
	Apr.	30.983	1.233
	May	31.031	1.237
	Jun.	31.169	1.231
	Jul.	31.319	1.246
	Aug.	31.031	1.233
	Sept.	30.625	1.215
	Oct.	30.942	1.220
	Nov.	31.092	1.232
	Dec.	31.568	1.257
	Jan.	31.915	1.270
	Feb.	32.114	1.276
1892	Mar.	32.609	1.293
	Apr.	32.634	1.294
	May	33.048	1.303
	Jun.	32.620	1.293
	Jul.	32.764	1.299
	Aug.	32.866	1.306
	Sept.	32.633	1.291
	Oct.	33.039	1.310
	Nov.	33.671	1.342
	Dec.	34.145	1.302
	Jan.	35.117	1.391
	Feb.	35.500	1.413
1893	Mar.	37.717	1.502
	Apr.	36.275	1.446
	May	34.838	1.382
	Jun.	34.944	1.391
	Jul.	35.533	1.408
	Aug.	35.800	1.433
	Sept.	35.883	1.429
	Oct.	36.531	1.454
	Nov.	36.879	1.460
	Dec.	38.459	1.525
	Jan.	39.333	1.577
	Feb.	37.083	1.485
1893	Mar.	35.465	1.420
	Apr.	36.347	1.453
	May	41.390	1.653
	Jun.	40.150	1.585

Table 1: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1894	Jul.	41.080	1.644
	Aug.	42.120	1.675
	Sept.	45.588	1.793
	Oct.	43.800	1.746
	Nov.	41.250	1.625
	Dec.	41.680	1.645
	Jan.	42.600	1.702
	Feb.	42.975	1.705
	Mar.	43.330	1.715
	Apr.	43.990	1.737
	May	43.575	1.730
	Jun.	43.580	1.730
1895	Jul.	43.412	1.750
	Aug.	43.713	1.733
	Sept.	43.857	1.738
	Oct.	44.175	1.758
	Nov.	44.700	1.820
	Dec.	47.142	1.873
	Jan.	47.203	1.875
	Feb.	46.933	1.865
	Mar.	47.150	1.866
	Apr.	46.783	1.858
	May	45.550	1.798
	Jun.	44.767	1.778
1896	Jul.	44.617	1.769
	Aug.	44.167	1.755
	Sept.	44.300	1.752
	Oct.	44.217	1.753
	Nov.	44.933	1.774
	Dec.	45.013	1.789
	Jan.	44.750	1.773
	Feb.	44.192	1.749
	Mar.	43.388	1.724
	Apr.	43.817	1.742
	May	44.433	1.763
	Jun.	44.400	1.762
	Jul.	44.333	1.761
	Aug.	44.467	1.764
	Sept.	43.283	1.727
	Oct.	43.033	1.690

Table 1: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1897	Nov.	42.800	1.708
	Dec.	43.992	1.704
	Jan.	42.850	1.705
	Feb.	42.710	1.695
	Mar.	43.000	1.702
	Apr.	42.600	1.717
	May	44.750	1.768
	Jun.	44.250	1.772
	Jul.	43.506	1.737
	Aug.	42.890	1.707
	Sept.	40.017	1.596
	Oct.	38.707	1.536
1898	Nov.	39.417	1.571
	Dec.	40.533	1.602
	Jan.	39.117	1.536
	Feb.	41.791	1.503
	Mar.	36.057	1.426
	Apr.	37.523	1.486
	May	37.483	1.480
	Jun.	40.108	1.444
	Jul.	36.250	1.444
	Aug.	39.158	1.417
	Sept.	36.140	1.431
	Oct.	37.930	1.511
1899	Nov.	38.459	1.495
	Dec.	38.483	1.518
	Jan.	38.908	1.545
	Feb.	39.049	1.548
	Mar.	39.266	1.557
	Apr.	40.074	1.587
	May	39.153	1.545
	Jun.	37.966	1.507
	Jul.	38.083	1.510
	Aug.	38.050	1.515
	Sept.	39.790	1.567
	Oct.	40.892	1.621
1900	Nov.	41.088	1.626
	Dec.	41.694	1.651
	Jan.	42.350	1.664
	Feb.	42.175	1.682

Table 1: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1901	Mar.	41.467	1.638
	Apr.	41.050	1.630
	May	41.650	1.644
	Jun.	41.700	1.660
	Jul.	42.257	1.684
	Aug.	40.717	1.616
	Sept.	39.088	1.553
	Oct.	41.100	1.620
	Nov.	41.715	1.654
	Dec.	42.342	1.683
	Jan.	42.692	1.707
	Feb.	42.920	1.697
1902	Mar.	42.774	1.696
	Apr.	42.758	1.691
	May	40.760	1.627
	Jun.	39.731	1.579
	Jul.	40.229	1.595
	Aug.	40.475	1.601
	Sept.	41.950	1.655
	Oct.	42.333	1.690
	Nov.	42.498	1.689
	Dec.	42.010	1.669
	Jan.	41.986	1.675
	Feb.	41.779	1.665
1903	Mar.	41.486	1.645
	Apr.	41.280	1.640
	May	40.357	1.520
	Jun.	39.840	1.587
	Jul.	39.750	1.577
	Aug.	39.900	1.585
	Sept.	41.250	1.645
	Oct.	41.325	1.645
	Nov.	41.232	1.638
	Dec.	40.995	1.615
	Jan.	40.500	1.610
	Feb.	40.900	1.617
1903	Mar.	40.931	1.625
	Apr.	40.169	1.595
	May	39.838	1.585
	Jun.	39.838	1.582

Table 1: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1904	Jul.	37.275	1.572
	Aug.	39.050	1.558
	Sept.	39.213	1.545
	Oct.	38.300	1.516
	Nov.	37.963	1.508
	Dec.	35.625	1.461
	Jan.	36.850	1.454
	Feb.	37.208	1.462
	Mar.	36.175	1.479
	Apr.	35.053	1.440
	May	33.912	1.394
	Jun.	33.250	1.319
1905	Jul.	34.523	1.367
	Aug.	34.442	1.364
	Sept.	34.642	1.375
	Oct.	33.700	1.341
	Nov.	33.533	1.331
	Dec.	33.642	1.337
	Jan.	33.300	1.329
	Feb.	32.893	1.310
	Mar.	32.061	1.274
	Apr.	31.525	1.256
	May	31.356	1.250
	Jun.	31.355	1.245
1906	Jul.	30.470	1.207
	Aug.	30.350	1.204
	Sept.	30.150	1.195
	Oct.	30.150	1.186
	Nov.	29.050	1.158
	Dec.	29.633	1.171
	Jan.	29.212	1.162
	Feb.	27.625	1.097
	Mar.	27.638	1.094
	Apr.	27.983	1.112
	May	28.400	1.130
	Jun.	27.525	1.095
	Jul.	27.500	1.098
	Aug.	27.500	1.097
	Sept.	27.350	1.089
	Oct.	27.600	1.092

Table 1: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1907	Nov.	27.200	1.090
	Dec.	27.483	1.089
	Jan.	27.283	1.079
	Feb.	27.192	1.073
	Mar.	27.300	1.079
	Apr.	27.283	1.083
	May	27.075	1.076
	Jun.	27.202	1.082
	Jul.	27.456	1.091
	Aug.	27.550	1.095
	Sept.	27.258	1.085
	Oct.	27.400	1.087
1908	Nov.	27.717	1.099
	Dec.	28.215	1.122
	Jan.	28.308	1.125
	Feb.	28.017	1.112
	Mar.	27.533	1.095
	Apr.	27.420	1.091
	May	27.267	1.085
	Jun.	27.188	1.084
	Jul.	27.192	1.082
	Aug.	26.992	1.073
	Sept.	26.425	1.052
	Oct.	26.240	1.046
1909	Nov.	26.862	1.068
	Dec.	26.750	1.063
	Jan.	26.673	1.062
	Feb.	26.688	1.058
	Mar.	26.750	1.058
	Apr.	26.150	1.040
	May	26.033	1.030
	Jun.	26.350	1.031
	Jul.	26.350	1.028
	Aug.	26.083	1.019
	Sept.	25.450	1.013
	Oct.	25.300	1.002
1910	Nov.	25.350	1.004
	Dec.	25.283	1.006
	Jan.	25.250	0.999
	Feb.	25.125	0.999

Table 1: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1911	Mar.	25.050	1.003
	Apr.	25.050	1.000
	May	25.050	0.999
	Jun.	25.050	0.999
	Jul.	25.050	0.999
	Aug.	25.050	0.998
	Sept.	25.100	0.995
	Oct.	25.150	0.998
	Nov.	25.200	0.997
	Dec.	25.185	0.997
	Jan.	25.170	0.996
	Feb.	25.180	0.998
1912	Mar.	25.273	1.001
	Apr.	25.338	1.002
	May	25.318	1.001
	Jun.	25.285	0.998
	Jul.	25.255	0.999
	Aug.	25.257	1.000
	Sept.	25.143	0.998
	Oct.	25.155	0.998
	Nov.	25.253	1.001
	Dec.	25.268	1.001
	Jan.	25.263	1.000
	Feb.	25.270	1.001
1913	Mar.	25.267	1.000
	Apr.	25.257	1.000
	May	25.239	1.000
	Jun.	25.204	0.999
	Jul.	25.228	0.999
	Aug.	25.282	1.000
	Sept.	25.240	0.998
	Oct.	25.210	0.999
	Nov.	25.195	0.998
	Dec.	25.170	0.998
	Jan.	25.235	0.998
	Feb.	25.233	0.999
1913	Mar.	25.230	1.001
	Apr.	25.227	1.001
	May	25.224	1.001
	Jun.	25.223	1.001

Table 1: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1914	Jul.	25.225	1.001
	Aug.	25.225	1.001
	Sept.	25.220	0.998
	Oct.	25.218	0.998
	Nov.	25.219	1.000
	Dec.	25.221	1.000
	Jan.	25.130	1.000
	Feb.	25.130	1.001
	Mar.	25.140	1.001
	Apr.	25.130	1.001
	May	25.170	1.002
	Jun.	25.160	1.002
	Jul.	25.180	1.002
	Aug.	25.220	1.003
	Sept.	25.210	1.002
	Oct.	25.200	1.002
	Nov.	25.140	1.003
	Dec.	25.110	1.003

Note: in LMU drachmas, monthly averages (nominal spot rates, fixing).

Sources: National Bank of Greece, GNSS, Valaoritis (1902) and Zolotas (1929).

Table 2: Banknote Circulation and its Main Components, 1842-1914
(end-of-month values, in thous. LMU drachmas), **Greece**

<i>Year</i>	<i>Month</i>	<i>Banknotes in circulation</i>	<i>'government'</i>	<i>'uncovered'</i>	<i>'covered'</i>
		(1)	(2)	(3)	(4)
1842	Jan.	13.0			
	Feb.	22.1			
	Mar.	204.4			
	Apr.	248.7			
	May	208.2			
	Jun.	254.9			
	Jul.	200.4			
	Aug.	273.5			
	Sept.	308.6			
	Oct.	300.2			
	Nov.	292.2			
	Dec.	274.6			
1843	Jan.	372.5			
	Feb.	387.1			
	Mar.	363.7			
	Apr.	369.6			
	May	374.9			
	Jun.	438.8			
	Jul.	398.8			
	Aug.	426.9			
	Sept.	433.4			
	Oct.	461.7			
	Nov.	452.8			
	Dec.	601.4			
1844	Jan.	561.6			
	Feb.	454.5			
	Mar.	620.6			
	Apr.	531.1			
	May	532.8			
	Jun.	509.1			
	Jul.	596.1			
	Aug.	661.6			
	Sept.	749.2			
	Oct.	670.9			
	Nov.	817.8			
	Dec.	799.0			
1845	Jan.	837.7			
	Feb.	811.7			
	Mar.	1019.4			
	Apr.	906.9			
	May	858.3			
	Jun.	831.5			
	Jul.	1201.4			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1846	Aug.	1359.7			
	Sept.	1594.4			
	Oct.	1531.3			
	Nov.	1599.9			
	Dec.	1511.3			
	Jan.	1522.2			
	Feb.	1524.5			
	Mar.	1527.1			
	Apr.	1529.5			
	May	1532.0			
	Jun.	1526.2			
	Jul.	1651.1			
1847	Aug.	1762.5			
	Sept.	1870.4			
	Oct.	1981.8			
	Nov.	2089.6			
	Dec.	2079.7			
	Jan.	2081.3			
	Feb.	2072.7			
	Mar.	2063.1			
	Apr.	2053.9			
	May	2044.4			
	Jun.	2023.7			
	Jul.	1969.5			
1848	Aug.	1904.2			
	Sept.	1841.1			
	Oct.	1775.8			
	Nov.	1712.6			
	Dec.	1699.5			
	Jan.	1762.5			
	Feb.	1669.6			
	Mar.	1396.4			
	Apr.	1107.1			
	May	1007.1			
	Jun.	818.7			
	Jul.	671.4			
1849	Aug.	369.6			
	Sept.	869.6			
	Oct.	1058.0			
	Nov.	1034.8			
	Dec.	1101.8			
	Jan.	1087.0			
	Feb.	1068.7			
	Mar.	1048.5			
	Apr.	1028.9			
	May	1008.7			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1850	Jun.	983.1			
	Jul.	1075.6			
	Aug.	1159.1			
	Sept.	1239.9			
	Oct.	1323.3			
	Nov.	1404.1			
	Dec.	1397.7			
	Jan.	1387.0			
	Feb.	1371.0			
	Mar.	1353.2			
	Apr.	1336.0			
	May	1318.3			
1851	Jun.	1293.4			
	Jul.	1444.2			
	Aug.	1582.1			
	Sept.	1715.6			
	Oct.	1853.5			
	Nov.	1987.0			
	Dec.	1978.6			
	Jan.	1972.5			
	Feb.	1957.7			
	Mar.	1941.3			
	Apr.	1925.4			
	May	1909.0			
1852	Jun.	1882.3			
	Jul.	1827.8			
	Aug.	1763.1			
	Sept.	1700.6			
	Oct.	1635.9			
	Nov.	1573.3			
	Dec.	1561.1			
	Jan.	1572.0			
	Feb.	1574.1			
	Mar.	1576.3			
	Apr.	1578.5			
	May	1580.8			
1853	Jun.	1574.4			
	Jul.	1639.6			
	Aug.	1692.9			
	Sept.	1744.5			
	Oct.	1797.8			
	Nov.	1849.3			
	Dec.	1839.1			
	Jan.	1886.2			
	Feb.	1918.6			
	Mar.	1954.4			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1854	Apr.	1989.1			
	May	2024.9			
	Jun.	2049.5			
	Jul.	2042.0			
	Aug.	2021.8			
	Sept.	2002.3			
	Oct.	1982.1			
	Nov.	1962.6			
	Dec.	1949.3			
	Jan.	2085.2			
	Feb.	2194.7			
	Mar.	2315.9			
1855	Apr.	2433.2			
	May	2554.5			
	Jun.	2661.1			
	Jul.	2660.6			
	Aug.	2643.4			
	Sept.	2626.7			
	Oct.	2609.5			
	Nov.	2592.8			
	Dec.	2575.5			
	Jan.	2594.6			
	Feb.	2598.9			
	Mar.	2603.8			
1856	Apr.	2608.4			
	May	2613.2			
	Jun.	2603.7			
	Jul.	2780.5			
	Aug.	2935.4			
	Sept.	3085.2			
	Oct.	3240.1			
	Nov.	3390.0			
	Dec.	3373.1			
	Jan.	3442.9			
	Feb.	3489.4			
	Mar.	3539.1			
1857	Apr.	3587.3			
	May	3637.0			
	Jun.	3666.7			
	Jul.	4036.8			
	Aug.	4372.3			
	Sept.	4697.0			
	Oct.	5032.5			
	Nov.	5357.2			
	Dec.	5333.4			
	Jan.	5382.9			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1858	Feb.	5400.5			
	Mar.	5420.1			
	Apr.	5439.0			
	May	5458.5			
	Jun.	5448.1			
	Jul.	5845.6			
	Aug.	6196.4			
	Sept.	6535.9			
	Oct.	6886.8			
	Nov.	7226.3			
	Dec.	7190.9			
	Jan.	7052.8			
1859	Feb.	6897.3			
	Mar.	6725.2			
	Apr.	6558.7			
	May	6386.6			
	Jun.	6180.5			
	Jul.	6387.4			
	Aug.	6549.1			
	Sept.	6705.4			
	Oct.	6867.0			
	Nov.	7023.4			
	Dec.	6983.3			
	Jan.	6727.7			
1860	Feb.	6470.5			
	Mar.	6185.7			
	Apr.	5910.1			
	May	5625.3			
	Jun.	5311.3			
	Jul.	5682.7			
	Aug.	6009.2			
	Sept.	6325.1			
	Oct.	6651.5			
	Nov.	6967.4			
	Dec.	6932.9			
	Jan.	6946.3			
	Feb.	6924.1			
	Mar.	6900.3			
	Apr.	6877.3			
	May	6853.6			
	Jun.	6792.7			
	Jul.	6981.2			
	Aug.	7121.1			
	Sept.	7256.5			
	Oct.	7396.3			
	Nov.	7531.7			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1861	Dec.	7487.6			
	Jan.	7452.2			
	Feb.	7385.1			
	Mar.	7310.9			
	Apr.	7239.1			
	May	7164.9			
	Jun.	7052.0			
	Jul.	7604.8			
	Aug.	8095.9			
	Sept.	8571.2			
	Oct.	9062.3			
	Nov.	9537.6			
1862	Dec.	9491.8			
	Jan.	9468.0			
	Feb.	9401.6			
	Mar.	9328.1			
	Apr.	9256.9			
	May	9183.4			
	Jun.	9060.1			
	Jul.	9595.8			
	Aug.	10057.8			
	Sept.	10504.9			
	Oct.	10966.9			
	Nov.	11414.0			
1863	Dec.	11355.2			
	Jan.	11608.1			
	Feb.	11774.8			
	Mar.	11959.3			
	Apr.	12137.9			
	May	12322.5			
	Jun.	12438.7			
	Jul.	12925.0			
	Aug.	13317.9			
	Sept.	13698.0			
	Oct.	14090.9			
	Nov.	14471.1			
1864	Dec.	14390.3			
	Jan.	14187.4			
	Feb.	13932.3			
	Mar.	13659.6			
	Apr.	13395.7			
	May	13123.0			
	Jun.	12780.5			
	Jul.	13456.4			
	Aug.	14030.7			
	Sept.	14586.6			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1865	Oct.	15161.0			
	Nov.	15716.8			
	Dec.	15633.8			
	Jan.	15970.5			
	Feb.	15950.9			
	Mar.	16371.4			
	Apr.	16210.7			
	May	16375.0			
	Jun.	16433.9			
	Jul.	17142.9			
	Aug.	17059.8			
	Sept.	16949.1			
1866	Oct.	16832.1			
	Nov.	16160.7			
	Dec.	15683.9			
	Jan.	16107.1			
	Feb.	16255.4			
	Mar.	15458.0			
	Apr.	15652.7			
	May	15616.1			
	Jun.	14393.8			
	Jul.	14214.3			
	Aug.	13983.9			
	Sept.	15419.6			
1867	Oct.	15447.3			
	Nov.	15017.0			
	Dec.	14534.8			
	Jan.	14858.9			
	Feb.	15127.7			
	Mar.	15178.6			
	Apr.	14726.8			
	May	14727.7			
	Jun.	15417.9			
	Jul.	15164.3			
	Aug.	15883.0			
	Sept.	18687.5			
1868	Oct.	19056.3			
	Nov.	17642.9			
	Dec.	18019.7			
	Jan.	17691.1			
	Feb.	18175.9			
	Mar.	18839.3			
	Apr.	19130.4			
	May	19233.0			
	Jun.	19475.0			
	Jul.	19958.0			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1869	Aug.	20819.6			
	Sept.	20975.0			
	Oct.	21272.3			
	Nov.	20312.5			
	Dec.	20507.1			
	Jan.	21146.4			
	Feb.	22178.6			
	Mar.	22170.5			
	Apr.	21928.6			
	May	22002.7			
	Jun.	21863.4			
	Jul.	22287.5			
1870	Aug.	23380.4			
	Sept.	23720.5			
	Oct.	23666.1			
	Nov.	23352.7			
	Dec.	23607.1			
	Jan.	24102.7			
	Feb.	23500.9			
	Mar.	23367.9			
	Apr.	23739.3			
	May	22962.5			
	Jun.	22982.1			
	Jul.	23741.1			
1871	Aug.	24892.9			
	Sept.	25708.0			
	Oct.	25045.5			
	Nov.	23918.8			
	Dec.	23613.4			
	Jan.	24368.9			
	Feb.	23951.1			
	Mar.	23528.4			
	Apr.	23261.6			
	May	22275.5			
	Jun.	21915.4			
	Jul.	23058.8			
1872	Aug.	25103.2			
	Sept.	26201.8			
	Oct.	25767.8			
	Nov.	24946.2			
	Dec.	25180.0			
	Jan.	24531.2			
	Feb.	23815.1			
	Mar.	24059.5			
	Apr.	23661.4			
	May	23132.4			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1873	Jun.	23785.0			
	Jul.	25828.5			
	Aug.	28653.7			
	Sept.	31945.9			
	Oct.	31129.9			
	Nov.	30106.1			
	Dec.	28389.3			
	Jan.	29268.2			
	Feb.	29392.8			
	Mar.	32082.4			
	Apr.	28801.3			
	May	28667.7			
1874	Jun.	28394.9			
	Jul.	29157.7			
	Aug.	28644.2			
	Sept.	35283.1			
	Oct.	35774.0			
	Nov.	34282.5			
	Dec.	33381.0			
	Jan.	32579.9			
	Feb.	32606.0			
	Mar.	33565.5			
	Apr.	31621.8			
	May	31444.0			
1875	Jun.	31383.1			
	Jul.	32835.2			
	Aug.	35656.1			
	Sept.	37044.7			
	Oct.	37030.3			
	Nov.	36807.5			
	Dec.	35472.4			
	Jan.	34056.3			
	Feb.	32319.9			
	Mar.	32367.7			
	Apr.	31251.2			
	May	30216.6			
1876	Jun.	29008.9			
	Jul.	31363.3			
	Aug.	35096.0			
	Sept.	35053.9			
	Oct.	33639.0			
	Nov.	32207.0			
	Dec.	32278.7			
	Jan.	31499.8			
	Feb.	31756.4			
	Mar.	31725.1			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1877	Apr.	31961.3			
	May	30593.2			
	Jun.	29892.0			
	Jul.	30441.5			
	Aug.	33952.9			
	Sept.	35482.1			
	Oct.	34796.1			
	Nov.	32240.8			
	Dec.	32173.4			
	Jan.	32587.5			
	Feb.	29801.5			
	Mar.	31725.0			
1878	Apr.	31061.6			
	May	30219.6			
	Jun.	30880.1			
	Jul.	32346.0			
	Aug.	40320.7			
	Sept.	39893.8			
	Oct.	38119.9			
	Nov.	37764.3			
	Dec.	38985.6			
	Jan.	44333.1			
	Feb.	45928.7			
	Mar.	48300.6			
1879	Apr.	49054.3			
	May	49140.0			
	Jun.	50835.3			
	Jul.	52246.3			
	Aug.	54290.2			
	Sept.	54722.6			
	Oct.	53132.5			
	Nov.	52624.9			
	Dec.	54023.4			
	Jan.	55213.2			
	Feb.	55019.0			
	Mar.	55244.2			
1880	Apr.	55845.2			
	May	50882.2			
	Jun.	50195.1			
	Jul.	47119.6			
	Aug.	48215.3			
	Sept.	48052.5			
	Oct.	47238.6			
	Nov.	45362.2			
	Dec.	45991.9			
	Jan.	46665.4			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1881	Feb.	46420.9			
	Mar.	45342.0			
	Apr.	46145.6			
	May	45882.9			
	Jun.	49576.3			
	Jul.	50172.8			
	Aug.	52876.7			
	Sept.	55111.4			
	Oct.	55928.7			
	Nov.	57285.5			
	Dec.	58294.5			
	Jan.	61839.2			
1882	Feb.	63677.5			
	Mar.	67478.4			
	Apr.	72014.3			
	May	73987.1			
	Jun.	75205.8			
	Jul.	77406.3			
	Aug.	85429.4			
	Sept.	87830.0			
	Oct.	86332.3			
	Nov.	86559.0			
	Dec.	84948.3			
	Jan.	85427.1			
1883	Feb.	85242.8			
	Mar.	85756.0			
	Apr.	83891.9			
	May	83636.4			
	Jun.	83947.9			
	Jul.	85346.2			
	Aug.	90234.5			
	Sept.	95637.7			
	Oct.	91514.4			
	Nov.	90942.8			
	Dec.	91807.2			
	Jan.	91714.4			
	Feb.	93400.5			
	Mar.	98373.3			
	Apr.	98567.0			
	May	96810.9			
	Jun.	95331.1			
	Jul.	99916.0			
	Aug.	100574.3			
	Sept.	101702.8			
	Oct.	100267.6			
	Nov.	98169.5			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1884	Dec.	96429.4			
	Jan.	93839.9			
	Feb.	88291.8			
	Mar.	88455.4			
	Apr.	83145.7			
	May	81683.2			
	Jun.	76887.7			
	Jul.	75300.8			
	Aug.	76788.0			
	Sept.	77724.9			
	Oct.	76199.0			
	Nov.	76378.1			
1885	Dec.	69648.7			
	Jan.	68278.8			
	Feb.	65170.0			
	Mar.	64593.9			
	Apr.	61560.9			
	May	58970.7			
	Jun.	56137.1			
	Jul.	57087.6			
	Aug.	57749.6			
	Sept.	58871.5			
	Oct.	63498.4			
	Nov.	71708.3			
1886	Dec.	76968.0			
	Jan.	83021.2			
	Feb.	86027.4			
	Mar.	88167.2			
	Apr.	96300.0			
	May	98481.0			
	Jun.	97555.1			
	Jul.	96755.4			
	Aug.	99031.4			
	Sept.	101657.0			
	Oct.	99906.7			
	Nov.	96337.8			
1887	Dec.	93310.7			
	Jan.	94471.1			
	Feb.	93624.9			
	Mar.	95735.5			
	Apr.	95818.6			
	May	95732.0			
	Jun.	97230.5			
	Jul.	98402.3			
	Aug.	101918.1			
	Sept.	101628.4			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1888	Oct.	99500.6			
	Nov.	96580.6			
	Dec.	96611.5			
	Jan.	94386.5			
	Feb.	95544.0			
	Mar.	94924.6			
	Apr.	90256.5			
	May	90429.0			
	Jun.	83723.1			
	Jul.	84503.8			
	Aug.	90691.6			
	Sept.	89068.9			
1889	Oct.	87743.2			
	Nov.	84493.6			
	Dec.	82416.5			
	Jan.	83443.9			
	Feb.	82679.3			
	Mar.	85134.8			
	Apr.	84648.9			
	May	84732.3			
	Jun.	85836.0			
	Jul.	85040.3			
	Aug.	87914.6			
	Sept.	87313.6			
1890	Oct.	87049.9			
	Nov.	84605.9			
	Dec.	84291.9			
	Jan.	87404.5			
	Feb.	88491.0			
	Mar.	87004.0			
	Apr.	85990.3			
	May	87795.9			
	Jun.	90632.4			
	Jul.	89136.0			
	Aug.	93860.5			
	Sept.	97243.7			
1891	Oct.	98121.2			
	Nov.	97624.3			
	Dec.	98746.1			
	Jan.	101208.9			
	Feb.	100756.3			
	Mar.	101586.9			
	Apr.	101535.1			
	May	103320.1			
	Jun.	100958.7			
	Jul.	107830.6			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1892	Aug.	120905.5			
	Sept.	120723.3			
	Oct.	116510.1			
	Nov.	115301.4			
	Dec.	115454.1			
	Jan.	116785.0			
	Feb.	114527.8			
	Mar.	115454.8			
	Apr.	116498.6			
	May	115461.8			
	Jun.	116794.8			
	Jul.	113908.0			
1893	Aug.	120811.5			
	Sept.	120667.7			
	Oct.	116540.1			
	Nov.	113165.1			
	Dec.	112936.6			
	Jan.	111170.4			
	Feb.	107262.9			
	Mar.	105706.9			
	Apr.	105618.3			
	May	106775.6			
	Jun.	107157.8			
	Jul.	108012.2			
1894	Aug.	108607.3			
	Sept.	108711.0			
	Oct.	104076.3			
	Nov.	106150.2			
	Dec.	106601.0			
	Jan.	105949.8			
	Feb.	103783.4			
	Mar.	101408.3			
	Apr.	102327.3			
	May	100991.2			
	Jun.	100952.4			
	Jul.	101759.7			
1895	Aug.	103813.8			
	Sept.	105807.7			
	Oct.	105979.7			
	Nov.	103489.9			
	Dec.	102452.0			
	Jan.	101684.4			
	Feb.	99160.4			
	Mar.	99828.1			
	Apr.	100252.0			
	May	98326.5			

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1896	Jun.	98180.5			
	Jul.	97288.1			
	Aug.	101221.5			
	Sept.	106252.9			
	Oct.	107644.1			
	Nov.	105998.4			
	Dec.	104463.0			
	Jan.	101172.5			
	Feb.	100203.9			
	Mar.	96997.1			
	Apr.	95248.7			
	May	94599.1			
1897	Jun.	94132.4			
	Jul.	95010.7			
	Aug.	99832.6			
	Sept.	104405.1			
	Oct.	104960.1			
	Nov.	105088.6			
	Dec.	106358.4			
	Jan.	105592.4	55921.7	49670.7	
	Feb.	105960.5	55921.7	50038.8	
	Mar.	112538.7	59148.3	53390.4	
	Apr.	114936.8	62648.3	52288.5	
	May	117921.3	65448.3	52473.0	
1898	Jun.	119179.9	67828.5	51351.4	
	Jul.	118699.3	68928.3	49771.0	
	Aug.	126528.5	70378.3	56150.2	
	Sept.	128690.9	70378.3	58312.6	
	Oct.	126964.4	70378.3	56586.1	
	Nov.	124260.6	70378.3	53882.3	
	Dec.	124415.4	70727.9	53687.5	
	Jan.	119914.7	70727.9	49186.6	
	Feb.	117147.8	70727.9	46420.0	
	Mar.	116686.6	70378.3	46308.3	
	Apr.	114293.6	70378.3	43915.3	
	May	111471.6	71000.0	40471.6	
1899	Jun.	115080.3	71353.3	43726.9	
	Jul.	114872.6	71000.0	43872.6	
	Aug.	117549.0	71000.0	46549.0	
	Sept.	117180.4	71000.0	46180.4	
	Oct.	112785.6	71000.0	41785.7	
	Nov.	113365.3	71000.0	42365.3	
	Dec.	116782.1	71355.0	45427.2	
	Jan.	113283.2	71000.0	42283.2	
	Feb.	110236.0	71000.0	39236.0	
	Mar.	107836.9	71000.0	36836.9	

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1900	Apr.	106445.9	71000.0	35445.9	
	May	106490.2	71000.0	35490.2	
	Jun.	106866.4	71355.0	35511.4	
	Jul.	109339.0	71000.0	38339.0	
	Aug.	116873.2	71000.0	45873.2	
	Sept.	119189.1	71000.0	48189.1	
	Oct.	118215.6	71000.0	47215.6	
	Nov.	115709.9	71000.0	44709.9	
	Dec.	115816.5	71000.0	44816.5	
	Jan.	121294.1	71903.7	49390.4	
	Feb.	120653.0	71903.7	48792.3	
	Mar.	122416.1	71903.7	50512.4	
	Apr.	117141.6	71903.7	45238.0	
	May	124225.4	71903.7	52321.2	
	Jun.	125187.0	71903.7	52283.3	
	Jul.	124439.1	71903.7	52535.5	
	Aug.	137018.7	71903.7	65115.0	
	Sept.	130908.8	71903.7	59005.1	
	Oct.	127480.2	71903.7	55576.6	
	Nov.	126986.1	71903.7	55082.4	
1901	Dec.	127545.2	71903.7	55641.5	
	Jan.	128157.1	71903.7	56253.4	
	Feb.	127731.5	71903.7	55827.9	
	Mar.	128499.8	71903.7	56596.1	
	Apr.	127106.8	71903.7	55203.2	
	May	125714.3	71903.7	53810.6	
	Jun.	126629.8	70903.7	55726.1	
	Jul.	127635.9	70903.7	56732.2	
	Aug.	123266.6	70903.7	52362.9	
	Sept.	126963.4	70903.7	56059.7	
	Oct.	126539.8	70903.7	55964.0	
	Nov.	127539.8	70903.7	56636.1	
1902	Dec.	128342.4	70903.7	57438.7	
	Jan.	126131.3	70903.7	52227.6	
	Feb.	124368.5	70903.7	53464.8	
	Mar.	121893.3	70903.7	50989.6	
	Apr.	121694.9	70903.7	50791.2	
	May	120510.6	70903.7	49607.0	
	Jun.	119011.8	70778.6	48233.2	
	Jul.	122543.7	70778.6	51765.1	
	Aug.	128375.5	70778.6	57596.9	
	Sept.	135258.9	70778.6	64480.4	
	Oct.	134131.1	70778.6	63352.5	
	Nov.	132910.8	70778.6	62132.2	
1903	Dec.	134209.5	69778.6	64430.9	
	Jan.	133252.7	69778.6	63474.1	

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1904	Feb.	130252.7	69778.6	60795.7	
	Mar.	130399.4	69778.6	60620.8	
	Apr.	125928.5	69778.6	56149.9	
	May	123850.7	69778.6	54072.1	
	Jun.	124614.5	68778.6	55836.0	
	Jul.	125904.9	68778.6	57126.3	
	Aug.	136347.6	68778.6	67569.0	
	Sept.	136652.8	68778.6	67874.2	
	Oct.	132841.9	68778.6	64063.4	
	Nov.	129288.7	68778.6	60510.1	
	Dec.	127997.8	68778.6	59219.2	
	Jan.	125891.4	68778.6	57112.8	
1905	Feb.	125284.6	68778.6	56506.0	
	Mar.	123550.6	68778.6	54772.1	
	Apr.	121148.3	68778.6	52369.7	
	May	118967.3	68778.6	50188.7	
	Jun.	119351.1	68778.6	50572.5	
	Jul.	119391.5	68778.6	50612.9	
	Aug.	126970.8	68778.6	58192.3	
	Sept.	129174.9	68778.6	60396.4	
	Oct.	124927.0	68778.6	56148.4	
	Nov.	120883.1	68778.6	52104.6	
	Dec.	122498.3	68778.6	53719.7	
	Jan.	120000.6	68778.6	51222.0	
1906	Feb.	118311.7	68778.6	49533.2	
	Mar.	115607.7	68778.6	46829.2	
	Apr.	113894.1	68778.6	45115.5	
	May	110910.3	68778.6	42131.7	
	Jun.	110899.6	68278.6	42621.1	
	Jul.	112429.5	68278.6	44150.9	
	Aug.	118312.3	68278.6	50033.8	
	Sept.	123212.3	68278.6	54933.7	
	Oct.	122571.6	68278.6	54293.1	
	Nov.	116839.1	67778.6	49060.5	
	Dec.	116527.3	67778.6	48748.7	
	Jan.	112949.0	67778.5	45170.4	
1906	Feb.	110448.2	67778.5	42669.7	
	Mar.	110886.4	67778.5	43107.8	
	Apr.	108825.8	67778.5	41047.3	
	May	107044.3	67778.5	39265.7	
	Jun.	105924.5	66778.5	39145.9	
	Jul.	107271.1	66778.5	40492.5	
	Aug.	117139.6	66778.5	50361.0	
	Sept.	123245.9	66778.5	56467.4	
	Oct.	123048.2	66778.5	56269.6	
	Nov.	119016.5	65778.5	53237.9	

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1907	Dec.	120236.4	65778.5	54457.9	
	Jan.	116072.0	65778.6	50293.4	
	Feb.	114374.8	65778.6	48596.2	
	Mar.	111953.4	65778.6	46174.9	
	Apr.	112611.6	65778.6	46833.0	
	May	108746.7	64778.6	43968.1	
	Jun.	110470.2	64778.6	45691.7	
	Jul.	113675.3	64778.6	48896.7	
	Aug.	123434.9	64778.6	58656.3	
	Sept.	128512.4	64778.6	63733.8	
	Oct.	127987.4	64778.6	63208.8	
	Nov.	127497.7	64778.6	63191.1	
1908	Dec.	126994.9	64778.6	63216.3	
	Jan.	124759.5	63778.6	60981.0	
	Feb.	122395.1	63778.6	58616.5	
	Mar.	119154.3	63778.6	55375.8	
	Apr.	116889.4	63778.6	53110.9	
	May	113029.5	62778.6	50250.9	
	Jun.	114430.8	62778.6	51652.2	
	Jul.	114101.0	62778.6	51322.5	
	Aug.	121098.8	62778.6	58320.3	
	Sept.	123380.5	62778.6	60601.9	
	Oct.	119578.5	62778.6	56799.9	
	Nov.	116608.8	61778.6	54830.2	
1909	Dec.	118501.8	61778.6	56723.2	
	Jan.	116605.5	61778.6	54827.0	
	Feb.	114272.0	61778.6	52493.4	
	Mar.	114211.0	61778.6	52432.5	
	Apr.	110648.1	61778.6	48869.6	
	May	108024.8	61778.6	46246.2	
	Jun.	108729.0	61778.6	46950.4	
	Jul.	111598.9	61778.6	49820.3	
	Aug.	121370.4	61778.6	59591.8	
	Sept.	125315.5	61778.6	63536.9	
	Oct.	124291.0	61778.6	62512.4	
	Nov.	122927.1	61778.6	61148.6	
1910	Dec.	125831.1	61778.6	64052.5	
	Jan.	122197.7	61778.6	60419.2	
	Feb.	119647.0	61778.6	57868.5	
	Mar.	119295.3	61778.6	57516.7	
	Apr.	112768.7	61778.6	50990.1	
	May	111643.0	61778.6	49864.4	
	Jun.	111570.6	61778.6	48792.0	
	Jul.	109969.6	61778.6	48191.0	
	Aug.	120014.8	61778.6	58236.3	
	Sept.	128080.0	61778.6	58801.5	7500.0

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1911	Oct.	126177.1	61778.6	50189.6	14209.0
	Nov.	125018.1	61778.6	48255.2	14984.4
	Dec.	125856.2	61778.6	42601.4	21476.3
	Jan.	122160.4	61778.6	37891.2	22490.6
	Feb.	120221.1	61778.6	33442.5	25000.0
	Mar.	115764.8	61778.6	28986.3	25000.0
	Apr.	112159.8	61778.6	25381.2	25000.0
	May	110713.6	61778.6	23935.0	25000.0
	Jun.	111753.9	61778.6	24975.3	25000.0
	Jul.	109106.4	61778.6	22327.8	25000.0
	Aug.	124217.3	61778.6	37438.7	25000.0
	Sept.	136121.0	61778.6	49342.4	25000.0
1912	Oct.	134367.9	61778.6	41589.3	31000.0
	Nov.	132226.6	61778.6	40598.0	29850.0
	Dec.	135347.6	61778.6	42719.0	30850.0
	Jan.	130841.0	61778.0	36062.0	33000.0
	Feb.	130376.0	61778.0	35597.0	33000.0
	Mar.	132252.0	61778.0	36473.0	34000.0
	Apr.	128983.0	61778.0	32204.0	35000.0
	May	127457.0	61778.0	30678.0	35000.0
	Jun.	126372.0	61778.0	29593.0	35000.0
	Jul.	127107.0	61778.0	30328.0	35000.0
	Aug.	140979.0	61778.0	39201.0	40000.0
	Sept.	174547.0	61778.0	56269.0	56500.0
1913	Oct.	184853.0	61778.0	48074.0	75000.0
	Nov.	191103.0	61778.0	39325.0	90000.0
	Dec.	196746.0	61778.0	34967.0	100000.0
	Jan.	197498.0	61778.0	25720.0	110000.0
	Feb.	196972.0	61778.0	26428.0	108766.0
	Mar.	199751.0	61778.0	23973.0	114000.0
	Apr.	202827.0	61778.0	18319.0	122730.0
	May	203041.0	61778.0	13029.0	128234.0
	Jun.	206624.0	61778.0	9165.0	135681.0
	Jul.	211125.0	61778.0	8545.0	140802.0
	Aug.	224084.0	61778.0	19820.0	142486.0
	Sept.	235186.0	61778.0	23604.0	149804.0
1914	Oct.	235648.0	61778.0	17551.0	156319.0
	Nov.	235807.0	61778.0	13434.0	160595.0
	Dec.	234473.0	61778.0	6870.0	165825.0
	Jan.	230318.0	61778.0	n.a.	168540.0
	Feb.	228311.0	61778.0	n.a.	166533.0
	Mar.	219476.0	61778.0	n.a.	157698.0
	Apr.	219146.0	61778.0	n.a.	157368.0
	May	214248.0	61778.0	n.a.	152470.0
	Jun.	212342.0	61778.0	n.a.	150564.0
	Jul.	242788.0	61778.0	13397.0	167613.0

Table 2: Greece, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)
	Aug.	257268.0	61778.0	24877.0	170613.0
	Sept.	260435.0	61778.0	28044.0	170613.0
	Oct.	249112.0	61778.0	16721.0	170613.0
	Nov.	251028.0	61778.0	21637.0	167613.0
	Dec.	252206.0	60951.0	37742.0	153513.0

Notes: column (2): 'government' denotes the government's floating debt to the Bank; column (3): 'uncovered' denotes the uncovered banknote circulation outside the banking sector, i.e. paper money held by the public. It refers to the notes in circulation and not to the upper statutory limit of 66 mil. drachmas; column (4): 'covered' denotes the note circulation that was fully and readily convertible into gold or foreign exchange according to the monetary law of 1910. Prior to 1865, monthly observations for total reserves did not exist. Data are available only for the years 1843, 1844, 1845 and 1848. Missing observations have been computed using the linear interpolation: $x_1 = [(t_2 - t_1) / (t_2 - t_0)] * x_0 + [(t_1 - t_0) / (t_2 - t_0)] * x_2$.

no seasonally adjusted data. (1) = (2) + (3) + (4), n.a. = non available data.

Source: National Bank of Greece, *Annual Report of the Governor*, 1842-1914 (various issues).

Table 3: Currency Reserves: metallic and foreign exchange, 1843-1914
(end-of-month values; in thous. LMU drachmas), Greece

<i>Year</i>	<i>Month</i>	<i>metallic reserves</i>	<i>foreign exchange</i>	<i>foreign exchange (according to the law of 1910)</i>	<i>total reserves</i>
		<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1843	Jan.				397.6
	Feb.				395.8
	Mar.				393.8
	Apr.				391.8
	May				389.8
	Jun.				385.7
	Jul.				379.9
	Aug.				371.9
	Sept.				364.2
	Oct.				356.2
	Nov.				348.4
	Dec.				345.9
1844	Jan.				434.0
	Feb.				430.2
	Mar.				426.1
	Apr.				422.1
	May				418.0
	Jun.				411.6
	Jul.				435.3
	Aug.				456.2
	Sept.				476.3
	Oct.				497.1
	Nov.				517.3
	Dec.				535.9
1845	Jan.				558.7
	Feb.				576.2
	Mar.				595.4
	Apr.				614.1
	May				633.4
	Jun.				649.1
	Jul.				672.2
	Aug.				691.2
	Sept.				709.5
	Oct.				728.5
	Nov.				746.8
	Dec.				762.3
1846	Jan.				806.8
	Feb.				842.1
	Mar.				881.2
	Apr.				919.1
	May				958.2

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1847	Jun.				991.8
	Jul.				959.1
	Aug.				922.2
	Sept.				886.6
	Oct.				849.7
	Nov.				814.0
	Dec.				771.8
	Jan.				783.2
	Feb.				789.6
	Mar.				796.5
	Apr.				803.3
	May				810.3
1848	Jun.				812.8
	Jul.				783.9
	Aug.				751.6
	Sept.				720.3
	Oct.				688.0
	Nov.				656.8
	Dec.				620.1
	Jan.				616.1
	Feb.				550.0
	Mar.				192.0
	Apr.				116.1
	May				133.9
1849	Jun.				118.7
	Jul.				128.6
	Aug.				225.9
	Sept.				429.5
	Oct.				617.9
	Nov.				867.0
	Dec.				964.3
	Jan.				942.4
	Feb.				918.7
	Mar.				892.3
	Apr.				866.9
	May				840.6
1850	Jun.				809.8
	Jul.				882.7
	Aug.				949.0
	Sept.				1013.2
	Oct.				1079.6
	Nov.				1143.8
	Dec.				1205.8
	Jan.				1196.7
	Feb.				1183.0
	Mar.				1167.8

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1851	Apr.				1153.1
	May				1137.9
	Jun.				1116.6
	Jul.				1122.3
	Aug.				1122.0
	Sept.				1121.7
	Oct.				1121.4
	Nov.				1121.1
	Dec.				1114.7
	Jan.				1149.4
	Feb.				1174.4
	Mar.				1202.0
1852	Apr.				1228.8
	May				1256.5
	Jun.				1277.1
	Jul.				1273.8
	Aug.				1263.9
	Sept.				1254.4
	Oct.				1244.5
	Nov.				1235.0
	Dec.				1218.2
	Jan.				1231.4
	Feb.				1237.3
	Mar.				1243.7
1853	Apr.				1249.8
	May				1256.1
	Jun.				1255.6
	Jul.				1300.1
	Aug.				1336.7
	Sept.				1372.1
	Oct.				1408.6
	Nov.				1444.0
	Dec.				1473.8
	Jan.				1548.7
	Feb.				1607.1
	Mar.				1671.8
1854	Apr.				1734.4
	May				1799.1
	Jun.				1853.6
	Jul.				1858.3
	Aug.				1853.1
	Sept.				1848.1
	Oct.				1842.9
	Nov.				1837.9
	Dec.				1822.7
	Jan.				2013.8

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1855	Feb.				2172.3
	Mar.				2347.7
	Apr.				2517.5
	May				2692.9
	Jun.				2852.7
	Jul.				2967.1
	Aug.				3062.9
	Sept.				3155.7
	Oct.				3251.6
	Nov.				3344.4
	Dec.				3424.8
	Jan.				3546.8
1856	Feb.				3637.1
	Mar.				3737.1
	Apr.				3833.9
	May				3933.9
	Jun.				4011.8
	Jul.				4003.0
	Aug.				3973.4
	Sept.				3944.8
	Oct.				3915.2
	Nov.				3886.6
	Dec.				3835.3
	Jan.				3853.8
1857	Feb.				3851.5
	Mar.				3849.1
	Apr.				3846.8
	May				3844.4
	Jun.				3821.1
	Jul.				4078.8
	Aug.				4308.4
	Sept.				4530.6
	Oct.				4760.2
	Nov.				4982.4
	Dec.				5191.4
	Jan.				5241.3
	Feb.				5260.1
	Mar.				5280.8
	Apr.				5300.9
	May				5321.6
	Jun.				5313.2
	Jul.				5228.4
	Aug.				5118.4
	Sept.				5012.0
	Oct.				4902.0
	Nov.				4795.6

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1858	Dec.				4656.9
	Jan.				4651.4
	Feb.				4624.2
	Mar.				4594.1
	Apr.				4564.9
	May				4534.8
	Jun.				4480.1
	Jul.				4545.4
	Aug.				4585.1
	Sept.				4623.6
	Oct.				4663.4
	Nov.				4701.9
1859	Dec.				4717.4
	Jan.				4624.7
	Feb.				4521.0
	Mar.				4406.1
	Apr.				4294.9
	May				4180.0
	Jun.				4042.9
	Jul.				3992.5
	Aug.				3922.5
	Sept.				3854.7
	Oct.				3784.7
	Nov.				3717.0
1860	Dec.				3625.1
	Jan.				3647.2
	Feb.				3649.2
	Mar.				3651.4
	Apr.				3653.6
	May				3655.8
	Jun.				3638.1
	Jul.				3791.5
	Aug.				3921.0
	Sept.				4046.3
	Oct.				4175.8
	Nov.				4301.2
1861	Dec.				4411.0
	Jan.				4335.5
	Feb.				4248.2
	Mar.				4151.6
	Apr.				4058.1
	May				3961.4
	Jun.				3843.7
	Jul.				4021.2
	Aug.				4173.0
	Sept.				4319.9

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1862	Oct.				4471.7
	Nov.				4618.6
	Dec.				4749.6
	Jan.				4871.5
	Feb.				4955.3
	Mar.				5048.0
	Apr.				5137.8
	May				5230.6
	Jun.				5294.3
	Jul.				5463.2
	Aug.				5599.1
	Sept.				5730.7
1863	Oct.				5866.6
	Nov.				5998.1
	Dec.				6105.4
	Jan.				6154.0
	Feb.				6167.2
	Mar.				6181.8
	Apr.				6195.9
	May				6210.5
	Jun.				6191.1
	Jul.				6404.7
	Aug.				6579.3
	Sept.				6748.2
1864	Oct.				6922.7
	Nov.				7091.6
	Dec.				7232.7
	Jan.				7196.7
	Feb.				7128.2
	Mar.				7055.0
	Apr.				6984.2
	May				6911.0
	Jun.				6800.6
	Jul.				6778.7
	Aug.				6721.8
	Sept.				6666.8
1865	Oct.				6610.0
	Nov.				6555.0
	Dec.				6461.4
	Jan.				6433.9
	Feb.				6312.5
	Mar.				6138.4
	Apr.				6079.5
	May				5860.7
	Jun.				5901.8
	Jul.				6093.8

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1866	Aug.				6250.0
	Sept.				6442.0
	Oct.				6587.5
	Nov.				6530.4
	Dec.				6517.9
	Jan.				6455.4
	Feb.				6428.6
	Mar.				6031.3
	Apr.				6254.5
	May				6080.4
	Jun.				5467.0
	Jul.				5401.8
1867	Aug.				5491.1
	Sept.				5920.5
	Oct.				6100.0
	Nov.				6034.8
	Dec.				6117.0
	Jan.				6021.4
	Feb.				6044.6
	Mar.				6017.0
	Apr.				5880.4
	May				6428.6
	Jun.				7753.6
	Jul.				7841.1
1868	Aug.				8051.8
	Sept.				8717.0
	Oct.				8750.0
	Nov.				8543.8
	Dec.				8500.9
	Jan.				8521.4
	Feb.				8450.9
	Mar.				8488.4
	Apr.				8379.5
	May				7965.2
	Jun.				8152.7
	Jul.				8387.5
1869	Aug.				8671.4
	Sept.				9125.0
	Oct.				9188.4
	Nov.				9002.7
	Dec.				7385.7
	Jan.				6080.4
	Feb.				5971.4
	Mar.				6139.3
	Apr.				6233.9
	May				6256.3

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)
1870	Jun.				6487.5
	Jul.				7534.8
	Aug.				7647.3
	Sept.				7795.5
	Oct.				7923.2
	Nov.				8017.0
	Dec.				8066.1
	Jan.				8175.9
	Feb.				8356.3
	Mar.				9325.9
	Apr.				10569.6
	May				11244.6
1871	Jun.				11602.7
	Jul.				11704.5
	Aug.				11968.8
	Sept.				12385.7
	Oct.				12012.5
	Nov.				11941.1
	Dec.				11932.1
	Jan.				11899.9
	Feb.				11865.5
	Mar.				11819.1
	Apr.				11706.6
	May				11595.5
1872	Jun.				11534.2
	Jul.				11513.3
	Aug.				11383.4
	Sept.				11430.6
	Oct.				11145.8
	Nov.				11246.2
	Dec.				11254.0
	Jan.	11170.4	2904.2		14074.6
	Feb.	11175.2	2707.9		13883.1
	Mar.	10696.3	3104.7		13801.0
	Apr.	10643.4	3200.1		13843.5
	May	10556.7	3158.8		13715.5
1873	Jun.	10525.6	2848.1		13373.7
	Jul.	11108.2	3303.7		14412.0
	Aug.	11239.7	4665.8		15905.5
	Sept.	10629.8	7546.0		18175.8
	Oct.	11462.5	6909.1		18371.6
	Nov.	12230.5	6221.8		18452.3
	Dec.	11943.7	6316.2		18259.9
	Jan.	10964.7	5490.7		16455.4
	Feb.	11763.3	5639.2		17402.5
	Mar.	13828.7	4093.9		17922.6

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1874	Apr.	13652.6	1863.6		15516.1
	May	11680.6	1410.9		13091.4
	Jun.	11601.1	1322.2		12923.3
	Jul.	11687.4	1349.9		13037.3
	Aug.	11982.0	3289.4		15271.4
	Sept.	13146.4	5410.6		18557.0
	Oct.	14469.9	5479.6		19949.5
	Nov.	14718.9	4686.1		19405.0
	Dec.	14696.8	3632.7		18359.5
	Jan.	15290.1	1911.0		17201.1
	Feb.	15375.6	1920.9		17296.5
	Mar.	16058.7	1392.6		17451.4
1875	Apr.	15232.9	2765.9		17998.8
	May	15233.3	1945.5		17178.8
	Jun.	15241.4	1304.3		16545.7
	Jul.	16179.2	1288.8		17468.0
	Aug.	15664.8	1796.8		17461.6
	Sept.	13505.0	4415.4		17920.4
	Oct.	13563.6	3794.9		17358.5
	Nov.	13736.9	3431.1		17168.0
	Dec.	14444.5	2598.1		17042.6
	Jan.	16227.7	2909.3		19136.9
	Feb.	16354.5	1792.4		18146.9
	Mar.	16330.1	1287.0		17617.1
1876	Apr.	15723.9	1956.6		17680.4
	May	15872.3	1508.2		17380.5
	Jun.	15852.0	617.5		16469.6
	Jul.	15670.9	n.a.		15670.9
	Aug.	16094.7	1370.9		17465.6
	Sept.	16372.4	1938.9		18311.2
	Oct.	16065.0	3344.0		19409.1
	Nov.	16401.1	2163.5		18564.6
	Dec.	16316.7	1643.1		17959.8
	Jan.	15201.0	1792.8		16993.9
	Feb.	14566.0	2954.7		17520.7
	Mar.	14353.7	2229.8		16583.5
1877	Apr.	14043.3	1470.9		15514.2
	May	14280.6	822.8		15103.5
	Jun.	14151.2	n.a.		14151.2
	Jul.	13643.9	n.a.		13643.9
	Aug.	13406.5	1403.2		14809.7
	Sept.	13211.7	4302.7		17514.4
	Oct.	12842.3	3920.1		16762.4
	Nov.	12737.8	3488.1		16225.9
	Dec.	12797.7	3520.7		16318.3
	Jan.	12302.6	3738.0		16040.6

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1878	Feb.	12231.7	3627.3		15859.0
	Mar.	12065.8	3135.7		15201.5
	Apr.	12266.8	2700.2		14967.0
	May	12232.6	1207.6		13440.3
	Jun.	12028.6	1125.1		13153.7
	Jul.	10593.4	1666.4		12259.8
	Aug.	10242.8	6624.8		16867.6
	Sept.	8441.4	6972.6		15414.0
	Oct.	8611.5	7390.0		16001.5
	Nov.	9042.3	4638.8		13681.1
	Dec.	9659.5	3611.3		13270.8
	Jan.	9656.5	1074.0		10730.5
1879	Feb.	8487.9	2020.4		10508.3
	Mar.	8067.1	779.7		8846.8
	Apr.	7487.0	298.5		7785.4
	May	7358.3	357.8		7716.0
	Jun.	7007.4	541.6		7548.9
	Jul.	7311.4	362.2		7673.6
	Aug.	7357.4	548.3		7905.7
	Sept.	7343.9	286.5		7630.4
	Oct.	6469.2	1134.4		7603.7
	Nov.	6414.0	946.7		7360.7
	Dec.	6121.4	1221.0		7342.5
	Jan.	5974.4	902.3		6876.8
1880	Feb.	6034.9	711.6		6746.5
	Mar.	5453.1	1118.0		6571.1
	Apr.	5512.9	1163.1		6676.0
	May	12341.9	1111.8		13453.7
	Jun.	11204.7	1676.1		12880.7
	Jul.	11162.0	745.4		11907.3
	Aug.	11874.0	695.0		12569.0
	Sept.	11803.3	783.2		12586.5
	Oct.	18279.9	1873.4		20153.3
	Nov.	18285.6	2180.9		20466.5
	Dec.	17074.3	1517.6		18591.8
	Jan.	16567.1	1531.5		18098.7
	Feb.	16499.9	1441.6		17941.5
	Mar.	16400.0	1365.9		17765.9
	Apr.	15964.5	1380.6		17345.2
	May	18793.1	1070.3		19863.3
	Jun.	23157.9	480.4		23638.4
	Jul.	22088.2	324.8		22413.0
	Aug.	21966.8	1684.0		23650.9
	Sept.	21954.9	2143.6		24098.5
	Oct.	21726.1	1692.9		23419.0
	Nov.	21862.5	1595.1		23457.6

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1881	Dec.	12396.7	6309.9		18706.6
	Jan.	9753.2	6297.4		16050.5
	Feb.	9360.6	7131.0		16491.6
	Mar.	9184.5	4302.6		13487.1
	Apr.	5918.1	5062.4		10980.5
	May	5760.0	5178.8		10938.8
	Jun.	6161.4	4977.6		11138.9
	Jul.	4875.7	6954.3		11829.9
	Aug.	4228.5	7572.5		11801.0
	Sept.	3734.3	7770.4		11504.7
	Oct.	2448.9	8126.5		10575.5
	Nov.	3018.7	7739.4		10758.1
1882	Dec.	5453.9	9587.4		15041.3
	Jan.	6110.8	5694.4		11805.2
	Feb.	6657.7	5290.6		11948.3
	Mar.	6335.4	5906.5		12241.9
	Apr.	5816.9	5276.7		11093.6
	May	6377.8	5260.5		11638.3
	Jun.	7408.4	7649.1		15057.5
	Jul.	7495.3	6144.2		13639.4
	Aug.	7547.3	4344.9		11892.2
	Sept.	7417.9	4893.1		12311.0
	Oct.	6699.6	4786.8		11486.4
	Nov.	6726.3	5189.8		11916.1
1883	Dec.	7416.5	8620.4		16036.9
	Jan.	6837.4	7789.3		14626.7
	Feb.	6672.6	8111.9		14784.5
	Mar.	6475.7	8699.6		15175.3
	Apr.	5850.0	8481.2		14331.3
	May	6100.1	7764.6		13864.7
	Jun.	6810.7	9005.9		15816.6
	Jul.	6624.6	8194.3		14818.9
	Aug.	6852.3	5696.3		12548.6
	Sept.	6668.9	6281.3		12950.2
	Oct.	6183.6	6771.4		12955.0
	Nov.	6274.5	6623.0		12897.5
1884	Dec.	7761.8	7950.7		15712.5
	Jan.	6927.8	6585.4		13513.2
	Feb.	6862.5	4135.9		10998.5
	Mar.	6661.5	4588.4		11249.9
	Apr.	5937.7	3574.1		9511.8
	May	6007.5	5022.5		11030.1
	Jun.	8631.0	579.4		9210.4
	Jul.	8274.6	10610.2		18884.8
	Aug.	7198.0	9228.1		16426.0
	Sept.	6946.5	10930.6		17877.0

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)
1885	Oct.	7609.3	12533.7		20143.0
	Nov.	17400.6	11163.2		28563.8
	Dec.	34357.6	13610.6		47968.2
	Jan.	33742.6	10294.7		44037.3
	Feb.	32991.4	7556.8		40548.2
	Mar.	26069.6	4459.9		30529.5
	Apr.	26907.0	2959.3		29866.2
	May	24160.6	2107.0		26267.6
	Jun.	21935.5	990.3		22925.8
	Jul.	21532.1	1996.5		23528.6
	Aug.	22369.2	2538.2		24907.4
	Sept.	21806.9	1160.6		22967.5
1886	Oct.	11399.6	4727.4		16126.9
	Nov.	7248.6	7435.9		14684.5
	Dec.	7058.2	6677.7		13735.9
	Jan.	6987.5	4881.6		11869.1
	Feb.	6318.2	4502.6		10820.8
	Mar.	5797.9	4728.3		10526.2
	Apr.	5760.6	5461.0		11221.6
	May	5778.0	5060.4		10838.4
	Jun.	4720.7	1227.2		5947.9
	Jul.	4818.4	789.5		5607.8
	Aug.	4776.4	1658.0		6434.4
	Sept.	4716.7	906.6		5623.2
1887	Oct.	4596.7	2861.1		7457.8
	Nov.	4051.0	4439.2		8490.2
	Dec.	4347.5	4492.7		8840.3
	Jan.	4082.5	3232.8		7315.3
	Feb.	4065.6	3230.8		7296.4
	Mar.	4009.3	2029.0		6038.3
	Apr.	4122.4	4506.3		8628.7
	May	4105.0	2285.7		6390.7
	Jun.	3843.8	8790.9		12634.7
	Jul.	3823.2	5415.4		9238.6
	Aug.	3808.0	4988.7		8796.7
	Sept.	3755.1	5586.6		9341.7
1888	Oct.	3697.0	6442.3		10139.3
	Nov.	3675.0	5660.7		9335.7
	Dec.	3596.3	5922.7		9519.0
	Jan.	3434.6	6947.2		10381.8
	Feb.	3402.5	4979.7		8382.2
	Mar.	3464.9	4503.4		7968.3
	Apr.	3468.7	5733.9		9202.6
	May	3455.0	4889.7		8344.7
	Jun.	3403.2	2272.9		5676.1
	Jul.	3075.2	4579.1		7654.3

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1889	Aug.	3212.3	7400.1		10612.3
	Sept.	3252.2	10004.9		13257.1
	Oct.	3396.9	11679.1		15076.0
	Nov.	3511.2	12023.3		15534.5
	Dec.	3417.5	8096.5		11514.0
	Jan.	3247.1	8073.1		11320.2
	Feb.	3774.7	7811.0		11585.8
	Mar.	3360.3	7512.1		10872.4
	Apr.	3260.0	7197.9		10457.9
	May	3290.0	9484.3		12774.3
	Jun.	3226.5	8913.3		12139.7
	Jul.	3375.7	5964.4		9340.0
1890	Aug.	3292.3	7670.6		10962.9
	Sept.	3289.5	8000.6		11290.1
	Oct.	3109.2	9126.0		12235.2
	Nov.	2931.1	9272.3		12203.4
	Dec.	3223.4	9900.2		13123.6
	Jan.	3110.9	4880.6		7991.5
	Feb.	3004.8	5264.2		8269.0
	Mar.	2800.0	3796.1		6596.1
	Apr.	2767.2	3780.2		6547.3
	May	2531.4	3456.2		5987.6
	Jun.	2640.5	5836.2		8476.7
	Jul.	2900.6	5416.3		8316.8
1891	Aug.	2996.8	7043.0		10039.7
	Sept.	2707.5	7219.2		9926.7
	Oct.	3151.3	6764.1		9915.4
	Nov.	3078.4	5733.7		8812.1
	Dec.	3197.7	6670.5		9868.1
	Jan.	3628.5	7620.0		11248.5
	Feb.	3622.9	7954.7		11577.6
	Mar.	3616.2	7850.2		11466.5
	Apr.	3680.2	7332.5		11012.8
	May	3573.4	6300.4		9873.8
	Jun.	3627.7	6960.3		10588.0
	Jul.	3523.6	8760.1		12283.7
1892	Aug.	3493.8	10465.2		13959.0
	Sept.	3233.4	9765.2		12998.6
	Oct.	3248.1	9615.9		12864.0
	Nov.	3188.4	7569.6		10758.0
	Dec.	2978.5	7571.4		10549.9
	Jan.	2911.5	7794.1		10705.5
	Feb.	2879.5	7828.0		10707.5
	Mar.	2842.2	7959.3		10801.5
	Apr.	2808.9	7888.0		10696.9
	May	2907.8	4834.7		7742.5

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1893	Jun.	2633.6	6000.2		8633.8
	Jul.	2595.7	3803.3		6399.0
	Aug.	2491.9	5482.8		7974.7
	Sept.	2470.4	7420.8		9891.2
	Oct.	2383.0	9814.3		12197.3
	Nov.	2401.8	9724.1		12126.0
	Dec.	2327.7	9062.4		11390.1
	Jan.	2278.8	8661.3		10940.0
	Feb.	2154.8	8760.8		10915.6
	Mar.	2114.8	7163.9		9278.8
	Apr.	2191.4	7142.5		9333.9
	May	2090.4	6724.3		8814.7
1894	Jun.	2115.5	5236.6		7352.1
	Jul.	2202.3	4992.8		7195.1
	Aug.	2462.2	3574.7		6036.9
	Sept.	2158.9	4776.5		6935.4
	Oct.	2491.1	4292.0		6783.0
	Nov.	2493.8	5513.4		8007.2
	Dec.	2399.8	7729.2		10129.0
	Jan.	2133.8	7989.1		10122.8
	Feb.	2127.2	7604.4		9731.6
	Mar.	1995.8	7754.2		9750.0
	Apr.	1888.7	7354.2		9242.9
	May	2180.6	6727.0		8907.6
1895	Jun.	2002.6	6516.7		8519.3
	Jul.	2123.1	6109.8		8232.9
	Aug.	2112.9	5749.8		7862.7
	Sept.	1996.0	7565.9		9561.9
	Oct.	1838.8	8088.4		9927.2
	Nov.	1919.0	8157.5		10076.5
	Dec.	1975.5	7299.3		9274.9
	Jan.	1880.5	7299.2		9179.7
	Feb.	1935.5	6906.4		8841.9
	Mar.	2052.6	6637.7		8690.3
	Apr.	1933.1	6559.4		8492.5
	May	1882.5	5842.9		7725.4
1896	Jun.	1870.1	4521.1		6391.2
	Jul.	1805.9	4435.7		6241.7
	Aug.	1857.7	6713.5		8571.2
	Sept.	1852.4	8847.5		10699.9
	Oct.	1808.9	8941.9		10750.8
	Nov.	1874.6	8637.8		10512.3
	Dec.	1885.5	7674.3		9559.8
	Jan.	1880.5	7651.6		9532.2
	Feb.	1729.7	7575.8		9305.5
	Mar.	1775.9	6187.2		7963.1

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1897	Apr.	1813.7	5974.5		7788.2
	May	1815.7	5655.6		7471.3
	Jun.	1742.1	4967.2		6709.3
	Jul.	1694.2	5114.7		6808.9
	Aug.	1750.3	4952.1		6702.4
	Sept.	1845.6	7615.0		9460.6
	Oct.	1761.0	9167.2		10928.3
	Nov.	1889.8	8908.3		10798.1
	Dec.	1795.5	9068.1		10863.5
	Jan.	1779.3	12764.2		14543.5
	Feb.	2771.7	11968.4		14740.0
	Mar.	2689.3	9818.1		12507.4
1898	Apr.	2610.9	10162.6		12773.6
	May	2323.7	7961.6		10285.3
	Jun.	2233.6	7588.5		9822.1
	Jul.	2026.8	8051.2		10078.0
	Aug.	1750.5	12650.6		14401.1
	Sept.	2340.7	14121.4		16462.1
	Oct.	2108.0	15431.8		17539.8
	Nov.	2075.4	14664.5		16739.9
	Dec.	2001.4	11144.9		13146.3
	Jan.	1575.8	11218.0		12793.7
	Feb.	1883.0	10498.8		12381.8
	Mar.	1813.3	9722.1		11535.4
1899	Apr.	1853.7	9531.3		11385.0
	May	1863.8	9190.7		11054.5
	Jun.	1736.1	8017.0		9753.1
	Jul.	1605.5	7184.4		8789.9
	Aug.	1769.7	6936.9		8706.6
	Sept.	1873.8	6986.9		8860.8
	Oct.	1615.0	7714.1		9329.1
	Nov.	2022.9	7309.5		9332.3
	Dec.	2479.5	9270.8		11750.3
	Jan.	1204.1	9736.5		10940.6
	Feb.	1927.6	10382.5		12310.1
	Mar.	2338.0	10904.8		13242.8
1900	Apr.	2297.1	12301.4		14598.5
	May	2399.5	13566.7		15966.2
	Jun.	4432.1	13335.1		17767.2
	Jul.	4385.7	12376.3		16761.9
	Aug.	4004.1	12916.8		16920.9
	Sept.	3834.2	12518.1		16352.3
	Oct.	3349.5	13428.3		16777.8
	Nov.	2287.8	13608.8		15896.6
	Dec.	1924.9	13032.0		14956.8
	Jan.	2458.3	12856.2		15314.5

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1901	Feb.	2404.5	14404.9		16809.4
	Mar.	2431.0	13529.4		15960.4
	Apr.	2442.5	14825.7		17268.2
	May	2172.8	15467.1		17639.9
	Jun.	2044.5	13348.9		15393.4
	Jul.	1727.1	11711.7		13438.8
	Aug.	1757.6	15992.1		17749.8
	Sept.	1544.7	14267.3		15812.0
	Oct.	1685.9	13467.6		15153.4
	Nov.	1912.5	15904.3		17816.8
	Dec.	1835.4	17433.0		19268.4
	Jan.	2055.0	17085.2		19140.2
1902	Feb.	2095.8	15206.0		17301.8
	Mar.	2035.3	15081.2		17116.5
	Apr.	2026.5	13657.2		15683.7
	May	1947.7	13282.9		15230.6
	Jun.	1804.5	13554.8		15359.3
	Jul.	1819.2	12139.9		13959.1
	Aug.	1661.5	13956.0		15617.5
	Sept.	1887.2	12831.5		14718.7
	Oct.	1862.1	15227.0		17089.0
	Nov.	1802.0	18631.9		20433.9
	Dec.	1851.2	19267.0		21118.3
	Jan.	2055.2	18641.4		20696.6
1903	Feb.	2124.3	17942.6		20067.0
	Mar.	1865.5	17298.9		19164.4
	Apr.	1917.6	17763.7		19681.3
	May	1844.9	17364.7		19209.6
	Jun.	2121.7	14782.7		16904.4
	Jul.	1942.1	12459.3		14401.4
	Aug.	1908.5	11302.0		13210.4
	Sept.	1905.9	12333.1		14239.0
	Oct.	1758.1	13302.9		15061.1
	Nov.	1788.3	14970.7		16759.1
	Dec.	1551.2	17533.8		19084.9
	Jan.	2094.4	18063.0		20157.4
1903	Feb.	1891.9	20442.0		22333.9
	Mar.	1601.4	21153.8		22755.3
	Apr.	1680.3	21805.0		23485.3
	May	1577.3	21651.3		23228.6
	Jun.	1432.2	21013.9		22446.1
	Jul.	1483.2	20925.8		22409.0
	Aug.	1544.7	19966.4		21511.1
	Sept.	1648.3	20035.1		21683.4
	Oct.	1713.9	16499.1		18213.0
	Nov.	1618.1	16512.1		18130.2

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1904	Dec.	1366.9	17211.2		18578.1
	Jan.	1397.3	16575.3		17972.5
	Feb.	1484.2	16723.7		18207.8
	Mar.	2059.2	16125.9		18185.1
	Apr.	2932.9	18782.8		21715.7
	May	3337.8	18948.9		22286.7
	Jun.	2962.1	21409.1		24371.2
	Jul.	2237.1	19981.6		22218.7
	Aug.	1922.3	19818.3		21740.6
	Sept.	2020.4	20996.1		23016.4
	Oct.	2182.2	21938.9		24121.1
	Nov.	2328.2	21958.7		24286.9
1905	Dec.	2149.3	21023.2		23172.5
	Jan.	1968.0	24550.8		26518.8
	Feb.	2046.2	23969.1		26015.3
	Mar.	1971.9	23579.5		25551.5
	Apr.	2062.1	24341.9		26404.0
	May	1966.9	24934.0		26900.8
	Jun.	1912.8	26733.4		28646.2
	Jul.	2966.0	27347.0		30313.0
	Aug.	2941.0	26513.5		29454.5
	Sept.	2770.8	27666.8		30437.6
	Oct.	2901.9	26115.1		29017.0
	Nov.	3109.4	27071.0		30180.5
1906	Dec.	2097.6	25942.7		28040.2
	Jan.	2314.2	28835.2		31149.5
	Feb.	2530.6	27480.8		30011.4
	Mar.	2364.9	28174.5		30539.4
	Apr.	2779.1	29930.8		32709.9
	May	2261.2	33872.2		36133.5
	Jun.	1989.5	33210.4		35199.9
	Jul.	2341.1	33502.4		35843.5
	Aug.	2412.8	36230.0		38642.7
	Sept.	1921.0	36425.4		38346.5
	Oct.	2437.4	35872.5		38309.9
	Nov.	2613.1	36548.8		39161.8
1907	Dec.	3094.4	34492.9		37587.4
	Jan.	2822.1	34740.4		37562.6
	Feb.	2956.6	34245.3		37201.9
	Mar.	3044.3	35139.7		38184.0
	Apr.	3442.1	40652.5		44094.6
	May	3805.1	38335.3		42140.4
	Jun.	3539.5	39083.3		42622.8
	Jul.	3811.0	37430.7		41241.7
	Aug.	3939.3	39285.9		43225.1
	Sept.	4416.9	39551.7		43968.6

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1908	Oct.	4455.9	40085.9		44541.8
	Nov.	4409.6	36527.3		40936.9
	Dec.	3252.2	33925.8		37178.0
	Jan.	3004.2	40614.6		43618.8
	Feb.	3151.3	51580.9		54732.2
	Mar.	3033.5	45099.6		48133.1
	Apr.	3061.4	43647.7		46709.2
	May	3201.3	44000.3		47201.6
	Jun.	2907.3	42995.7		45902.9
	Jul.	2962.2	42496.5		45458.8
	Aug.	3240.9	42307.6		45548.5
	Sept.	3044.0	41603.0		44647.0
1909	Oct.	3422.7	41438.1		44860.8
	Nov.	3127.3	39016.0		42143.3
	Dec.	2979.3	41744.1		44723.4
	Jan.	3035.7	42798.1		45833.8
	Feb.	3125.1	41287.3		44412.5
	Mar.	3530.9	42485.7		46016.6
	Apr.	3597.9	40257.2		43855.1
	May	3914.9	44459.5		48374.4
	Jun.	3767.8	41024.2		44792.0
	Jul.	3353.2	40077.3		43430.5
	Aug.	3601.8	43586.5		47188.2
	Sept.	3524.9	43580.6		47105.5
1910	Oct.	3503.5	40508.4		44011.8
	Nov.	4001.0	37170.6		41171.6
	Dec.	4151.9	40172.0		44324.0
	Jan.	4104.9	41804.5		45909.4
	Feb.	4263.7	40616.7		44880.4
	Mar.	4807.6	38473.8		43281.4
	Apr.	4672.4	39418.8		44091.2
	May	4440.2	42827.5		47267.6
	Jun.	4152.9	44660.7		48813.6
	Jul.	3939.4	44394.7		48334.1
	Aug.	3774.5	50981.6		54756.1
	Sept.	5080.6	48951.9		54032.5
1911	Oct.	6440.7	48026.2		54467.0
	Nov.	7348.3	48517.2		55865.6
	Dec.	4078.9	47385.0		51463.9
	Jan.	7186.2	53241.6	19201.6	79629.3
	Feb.	9058.6	53838.2	20459.1	83355.8
	Mar.	10665.9	53419.5	20459.1	84544.5
	Apr.	10438.3	54687.4	20459.1	85584.9
	May	10525.3	51421.7	20459.1	82406.2
	Jun.	12349.1	49976.0	20459.1	82784.2
	Jul.	12672.9	52009.7	20459.1	85141.8

Table 3: Greece, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1912	Aug.	11773.8	49074.9	20459.1	81307.8
	Sept.	11999.9	75529.1	20459.1	107988.1
	Oct.	11393.5	66582.3	26459.1	104434.9
	Nov.	12760.0	64062.9	25604.1	102427.1
	Dec.	13993.9	69137.9	26604.1	109735.9
	Jan.	14180.6	71600.8	28754.1	114535.5
	Feb.	14762.1	69831.7	28754.1	113347.9
	Mar.	14949.0	72198.9	29754.1	116902.0
	Apr.	14782.1	74385.3	30754.1	119921.5
	May	14974.2	74405.9	30754.1	120134.1
	Jun.	14178.8	76182.5	30754.1	121115.1
	Jul.	13939.2	78396.3	30754.1	123089.7
1913	Aug.	13672.6	73267.3	35754.1	122694.0
	Sept.	12387.5	73391.0	53754.1	139532.5
	Oct.	16629.9	65260.3	73354.1	155244.3
	Nov.	16919.1	62776.7	88354.1	168049.9
	Dec.	17944.1	57695.1	98354.1	173993.3
	Jan.	18198.6	63605.3	108354.1	190158.0
	Feb.	17089.7	70713.6	103104.1	190907.4
	Mar.	19780.6	78968.4	108338.1	207087.1
	Apr.	20715.2	67868.1	117068.1	205651.4
	May	23058.1	62773.3	122572.6	208404.0
	Jun.	23642.4	62249.4	126644.6	212536.4
	Jul.	24429.6	52664.7	130077.9	207172.2
1914	Aug.	24177.2	55593.8	131761.3	211532.3
	Sept.	23496.1	63106.8	139079.3	225682.1
	Oct.	23218.6	56775.2	145594.8	225588.6
	Nov.	24837.9	80321.7	149870.6	255030.2
	Dec.	26819.3	72212.4	155100.6	254132.3
	Jan.	28381.4	68452.4	159268.6	256102.4
	Feb.	28161.0	46237.9	159268.6	233667.5
	Mar.	27842.3	24414.6	159268.6	211525.5
	Apr.	31448.9	51751.2	159268.6	242468.7
	May	29953.2	66644.3	149958.6	246556.1
	Jun.	29773.7	28429.2	142613.1	200816.0
	Jul.	30913.9	44718.3	167613.1	243245.3
1914	Aug.	32231.3	31587.2	170613.1	234431.6
	Sept.	33686.1	21829.5	170613.1	226128.7
	Oct.	35047.4	16774.1	170613.1	222434.6
	Nov.	37004.3	24928.5	167613.1	229545.9
	Dec.	39166.9	19433.0	153513.1	212113.0

Notes: Total reserves include metallic and foreign exchange holdings (from 1869 onwards). Prior to 1865, monthly observations for total reserves did not exist. Data are available only for the years 1843, 1844, 1845 and 1848. Missing observations have been computed using the linear interpolation: $x_1 = [(t_2 - t_1)/(t_2 - t_0)] * x_0 + [(t_1 - t_0)/(t_2 - t_0)] * x_2$, (4)=(1)+(2)+(3); no seasonally adjusted. **Source:** National Bank of Greece, *Annual Report of the Governor*, 1842-1914, (various issues).

**Table 4: The Discount Rate, 1841-1914
Greece**

<i>Year</i>	<i>Day</i>	<i>Month</i>	<i>%</i>
1841	30	3	8
1847	1	4	7.2
1853	22	8	8
1869	1	4	7, 8*
1871	20	10	8
1878	1	11	7
1888	24	2	7*
1890	1	12	6.5, 7*
1898	28	9	6, 6.5*
1901	1	7	6
1902	1	1	6.5, 7*
1908	1	7	5.5, 6.5*
1909	1	1	5.5, 7*
1910	1	1	6, 6.5*
1914	19	7	8
1914	11	11	6.5

Notes: lending rate on advances to traders with a maximum 3-month maturity (68 days on average). (*) The first figure refers to the rate imposed on trade advances at the headquarters of the Bank in Athens as well as at its branches in large commercial centres, such as Piraeus, Syros and Patras, while the second figure refers to the rate imposed on advances to traders at the branches located in the country's provinces. The latter rate was always much higher than the former, by 0.5, 1.0 and even 1.5 percentage points. Yearly rates.

Source: National Bank of Greece, *Annual Report of the Governor*, 1842-1914, (various issues).

Romania

George Virgil Stoenescu (Coordinator)

*Elisabeta Blejan**

Brîndușa Costache

Adriana Aloman

Banca Națională a României

1. Data concerning Romania's monetary history (1867-1914)

For Romania, the latter half of the 19th century was the time span during which the modern state took shape and its institutional structures were put in place. This endeavour bore the hallmark of the models applying in Western Europe, France in particular.

Across the economy, modernisation made itself felt also through the repeated endeavours of the public authorities in Bucharest to organise a monetary and credit system capable of putting Romania on a par with the Latin Monetary Union countries (based on the Law of 14 April 1867). The *leu*, i.e. the national currency, was equivalent to 0.3226 grams of gold with fineness of 900‰ or 5 grams of silver with fineness of 835‰. Upon its establishment in 1880, the National Bank of Romania was required by law to hold a metal stock accounting for 33% of the total amount of banknotes in circulation.

The new monetary law passed in 1890 and enacted in 1892 acknowledged the adoption of the gold standard, the so-called monometallism, with the definition of the *leu* remaining the same. According to the said law, the National Bank of Romania had

* Email to Alina.Blejan@bnro.ro

to provide for a gold cover of the banknotes in circulation of at least 40%, of which bills of exchange denominated either in pound sterling or German mark could account for as much as 30%. Starting with 1901, under exceptional circumstances, the lower bound of the total cover could be diminished to 33% and the bills of exchange included in its composition could be denominated in French francs and Belgian francs as well.

The National Bank of Romania was established in virtue of the law enacted on 17 April 1880. Its capital amounted to *lei* 30 million, subscribed by both private entities and the government. In 1901, the government sold its stake in the National Bank of Romania, which was vested with the sole power to issue banknotes. The notes were convertible into either gold or silver, and from 1892 onwards in gold and gold currencies.

2. Introducing the statistical and historical data series

The database covers the 1880-1914 period, featuring monthly entries. It consists of four historical series, as follows: the exchange rates of the *leu* versus other currencies, the international reserves, the volume of banknotes in circulation, and the discount rate applied by the NBR.

Data concerning exchange rates include the monthly averages of the ratio between the Romanian *leu*, on the one hand, and the French franc, the pound sterling and the German mark, on the other (see Table 1, columns 1-3). These figures were calculated based on the monthly averages between the lowest and the highest exchange rates recorded when trading cheques denominated in the aforementioned currencies on the Bucharest Stock Exchange. For the times¹ during which ‘The Official List of Securities of the Bucharest Stock Exchange’ does not provide information on the exchange rate, the data published by exchange houses in Bucharest were taken into account.

The international reserves of the National Bank of Romania during 1880-1914 depicts the end-of-month data recorded in the central bank’s weekly balance sheets and comprises total cover (Table 2, column 5), mortgage notes and bills of exchange

¹ July through November 1882, June through December 1884 and January through April 1885.

included in the total cover depending on legal provisions (Table 2, columns 2 and 3); for 1881-1892, data also include foreign currency-denominated commercial bills in the NBR portfolio (Table 2, column 4).

During 1881-1891, the metal stock consisted of both gold and silver, and of gold alone starting with 1892 (Table 2, column 1). The total cover and hence the international reserves included mortgage notes 1881 through 1889. They were put into circulation in 1878 by the Romanian government and were backed by its land property. Upon its establishment, the National Bank of Romania withdrew the mortgage notes from circulation and replaced them with its own banknotes. Until they were supposed to be redeemed by the government, the notes were included in the central bank's total cover, as part off the collateral for the banknote issue.

During 1881-1892, the available sources provide further information on foreign currency-denominated commercial bills in the NBR portfolio. They were not part of the total cover, yet they were incorporated into the bank's international reserves as the monetary authority's liquid funds denominated in foreign currencies. After 1892, the NBR's balance sheets provide no information on the value of commercial paper denominated in foreign currencies and not included in the cover stock.

Data concerning money circulation refer to banknotes issued by the National Bank of Romania at the end of each month (Table 1, column 4).

The last of the historical series presented is the discount rate applied by the central bank (see Table 3). The NBR Discount Committee sets the rate on a weekly basis, yet the statistical series shown hereby refer mainly to the movements in the interest rate.

3. Data sources

1. "Reports of the Board of Directors of the NBR to the General Shareholders' Meeting", 1893-1915;
2. Weekly summaries published by the National Bank of Romania in the "Official Gazette", 1880-1914;
3. "The Official List of Securities of the Bucharest Stock Exchange", 1882-1914.

References

- Axenciuc, V. (2000), *Evoluția economică a României Cercetări statistico-istorice 1859-1947*, Vol. III (*Monedă - credit - comerț - finanțe publice*), Academia Română Printing House, Bucharest.
- Băicoianu, C.I. (1932-1939), *Istoria politicii noastre monetare și a Băncii Naționale a României*, Bucharest.
- Kirițescu, C. C. (1997), *Sistemul bănesc al leului și precursorii lui*, Enciclopedica Printing House, Bucharest.
- Marinescu, G. C. (1939), *Banca Națională a României Legi, statute, dispozițiuni monetare, convențiuni financiare etc.*, Cartea Românească Printing House, Bucharest.
- Slăvescu, V. (1925), *Istoricul Băncii Naționale a României, 1880-1924*, Cultura Națională Printing House, Bucharest.
- Stoenescu, G. V. (1997), *Aspecte de doctrină monetară în gândirea economică românească din a doua jumătate a secolului al XIX-lea*, în volumul *130 de ani de la crearea sistemului monetar românesc modern*, Enciclopedica Printing House, Bucharest, p. 402-419.
- Tone, M., Păunescu, C. (2005), *Istoria Băncii Naționale a României în date*, Vol. I, 1880-1914, Oscar Print Printing House, Bucharest.
- Zane, Gh.(1930), *Economia de schimb în Principatele Române*, Casa Școalelor Printing House, Bucharest.

Table 1: Exchange Rates and Banknotes in Circulation, 1881-1914
Romania

<i>Year</i>	<i>Month</i>	<i>Leu/ French franc (1)</i>	<i>Leu/ German mark (2)</i>	<i>Leu/ pound sterling (3)</i>	<i>Banknotes in circulation (in leu) (4)</i>
1881	Jan.	n.a.	n.a.	n.a.	7,443,960
	Feb.	n.a.	n.a.	n.a.	16,253,510
	Mar.	n.a.	n.a.	n.a.	15,990,747
	Apr.	n.a.	n.a.	n.a.	21,469,250
	May	n.a.	n.a.	n.a.	24,232,300
	Jun.	n.a.	n.a.	n.a.	31,630,360
	Jul.	n.a.	n.a.	n.a.	41,567,230
	Aug.	n.a.	n.a.	n.a.	51,802,350
	Sept.	n.a.	n.a.	n.a.	56,145,580
	Oct.	n.a.	n.a.	n.a.	57,248,850
	Nov.	n.a.	n.a.	n.a.	58,793,570
	Dec.	n.a.	n.a.	n.a.	58,536,470
1882	Jan.	n.a.	n.a.	n.a.	58,323,150
	Feb.	n.a.	n.a.	n.a.	61,296,110
	Mar.	n.a.	n.a.	n.a.	61,998,490
	Apr.	n.a.	n.a.	n.a.	64,452,830
	May	n.a.	n.a.	n.a.	67,990,110
	Jun.	n.a.	n.a.	n.a.	71,907,440
	Jul.	100.199	123.278	25.198	73,125,390
	Aug.	100.130	123.189	25.219	80,481,170
	Sept.	99.944	123.292	25.234	83,983,420
	Oct.	99.891	123.391	25.253	87,989,430
	Nov.	99.845	123.391	25.215	88,726,770
	Dec.	100.087	123.801	25.189	84,405,920
1883	Jan.	99.991	123.665	25.146	83,272,710
	Feb.	100.100	123.368	25.250	84,008,310
	Mar.	100.071	123.421	25.253	87,051,270
	Apr.	100.068	123.343	25.214	93,480,760
	May	99.896	122.950	25.243	94,992,610
	Jun.	100.058	122.985	25.217	94,159,630
	Jul.	99.893	123.035	25.268	93,867,260
	Aug.	99.762	123.125	25.211	100,143,000
	Sept.	99.805	123.450	25.250	100,841,970
	Oct.	99.951	123.750	25.233	99,245,425
	Nov.	99.849	123.223	25.201	93,681,750
	Dec.	99.978	123.350	25.242	88,546,170

Table 1: Romania, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1884	Jan.	100.358	123.542	25.313	82,859,700
	Feb.	100.288	123.488	25.100	81,218,700
	Mar.	100.156	123.367	25.285	82,203,560
	Apr.	99.946	123.200	n.a.	84,467,200
	May	99.928	n.a.	25.118	94,992,610
	Jun.	100.189	123.823	25.302	91,652,940
	Jul.	100.145	123.887	25.307	91,148,250
	Aug.	100.240	123.877	25.310	92,183,400
	Sept.	100.237	123.873	25.269	94,940,540
	Oct.	100.203	123.889	n.a.	96,808,090
	Nov.	100.313	123.943	n.a.	91,209,060
	Dec.	100.395	123.947	n.a.	85,961,980
1885	Jan.	100.322	123.683	n.a.	80,871,650
	Feb.	100.158	123.706	n.a.	79,554,020
	Mar.	101.627	125.606	n.a.	83,256,680
	Apr.	102.834	126.199	n.a.	88,882,680
	May	100.098	123.575	25.298	92,249,910
	Jun.	100.104	123.774	25.257	92,803,280
	Jul.	99.978	123.674	25.209	92,717,590
	Aug.	100.168	123.852	25.248	94,107,690
	Sept.	99.713	123.668	25.180	99,290,020
	Oct.	99.811	123.682	25.182	101,304,860
	Nov.	99.721	123.603	25.196	101,812,450
	Dec.	100.005	123.569	25.257	98,318,620
1886	Jan.	100.349	123.896	25.327	95,569,860
	Feb.	100.130	123.579	25.257	96,208,910
	Mar.	100.106	123.331	25.210	96,811,470
	Apr.	100.348	123.554	25.260	95,680,670
	May	100.417	124.165	25.379	94,142,910
	Jun.	100.253	124.343	25.324	95,691,180
	Jul.	100.169	123.893	25.250	99,591,980
	Aug.	100.195	123.800	25.277	103,797,670
	Sept.	99.984	123.862	25.303	108,595,830
	Oct.	99.871	124.040	25.321	109,727,530
	Nov.	99.928	124.176	25.361	105,936,890
	Dec.	100.082	124.533	25.357	104,513,020
1887	Jan.	100.714	125.032	25.527	101,703,290
	Feb.	100.664	124.990	25.551	100,569,990
	Mar.	100.284	124.675	25.429	101,027,090
	Apr.	100.489	124.668	25.422	100,254,270

Table 1: Romania, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1888	May	100.707	124.692	25.427	102,050,990
	Jun.	100.532	124.560	25.362	103,234,620
	Jul.	100.691	124.723	25.384	106,642,480
	Aug.	100.473	124.101	25.347	111,541,320
	Sept.	100.112	124.247	25.408	113,710,380
	Oct.	100.344	124.357	25.356	112,013,010
	Nov.	100.095	124.326	25.353	110,391,040
	Dec.	100.187	124.639	25.393	105,029,620
	Jan.	100.733	124.882	25.453	100,418,425
	Feb.	100.871	124.907	25.473	101,004,925
	Mar.	100.763	125.000	25.462	111,199,330
	Apr.	100.667	124.925	25.435	115,373,150
1889	May	100.724	125.004	25.484	118,023,600
	Jun.	100.285	124.341	25.333	119,920,090
	Jul.	99.985	123.796	25.296	119,221,560
	Aug.	99.519	123.406	25.279	121,063,520
	Sept.	99.535	123.549	25.314	118,063,130
	Oct.	99.650	123.564	25.277	118,177,720
	Nov.	99.777	123.806	25.259	109,412,560
	Dec.	100.048	124.060	25.350	103,850,350
	Jan.	n.a.	n.a.	n.a.	98,283,110
	Feb.	n.a.	n.a.	n.a.	90,822,940
	Mar.	n.a.	n.a.	n.a.	87,119,330
	Apr.	99.932	123.225	25.233	85,628,310
1890	May	100.148	123.256	25.227	83,366,940
	Jun.	100.404	123.211	25.185	84,059,140
	Jul.	100.179	123.244	25.192	90,528,920
	Aug.	99.976	123.206	25.224	97,890,160
	Sept.	99.885	123.195	25.241	101,949,150
	Oct.	99.780	123.273	25.187	104,259,350
	Nov.	99.754	123.544	25.184	101,502,280
	Dec.	100.000	123.721	25.231	97,187,200
	Jan.	100.349	123.768	25.352	92,489,210
	Feb.	101.263	123.762	25.360	90,269,220
	Mar.	100.158	123.757	25.224	92,725,530
	Apr.	100.067	123.633	25.068	93,175,120
	May	99.899	123.480	25.123	92,618,870
	Jun.	99.913	123.605	25.153	110,233,250
	Jul.	99.646	123.206	25.187	108,472,930
	Aug.	99.528	123.206	25.151	125,810,330

Table 1: Romania, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)
1891	Sept.	99.721	123.691	25.226	130,199,750
	Oct.	99.871	123.957	25.266	125,324,210
	Nov.	99.846	124.013	25.307	116,557,170
	Dec.	100.356	124.473	25.339	108,429,300
	Jan.	100.322	121.841	25.300	104,018,740
	Feb.	100.005	123.931	25.250	107,015,040
	Mar.	99.704	122.485	25.169	114,506,900
	Apr.	100.929	123.501	25.229	118,431,580
	May	100.165	123.002	25.356	117,326,960
	Jun.	99.848	123.768	25.228	120,420,440
	Jul.	99.609	123.658	25.160	129,588,260
	Aug.	99.378	123.459	25.121	140,005,280
1892	Sept.	99.776	124.089	25.261	141,152,020
	Oct.	99.900	123.912	25.245	141,545,280
	Nov.	100.447	124.422	25.332	130,761,400
	Dec.	100.580	124.526	25.335	125,872,670
	Jan.	100.660	124.390	25.360	114,989,720
	Feb.	100.480	124.030	25.350	107,137,420
	Mar.	100.400	123.700	25.280	105,382,630
	Apr.	100.255	123.570	25.250	101,249,290
	May	100.020	123.360	25.170	106,062,330
	Jun.	99.960	123.500	25.180	108,149,880
	Jul.	100.140	123.430	25.200	112,391,260
	Aug.	100.060	123.420	25.200	118,645,500
1893	Sept.	99.900	123.520	25.170	128,894,210
	Oct.	100.240	123.840	25.240	127,364,950
	Nov.	100.490	124.110	25.280	123,584,570
	Dec.	100.790	124.400	25.330	114,968,710
	Jan.	10.940	124.340	25.360	110,826,050
	Feb.	100.580	123.750	25.313	110,081,010
	Mar.	100.200	123.350	25.210	118,661,310
	Apr.	100.250	123.310	25.220	129,272,200
	May	100.120	123.450	25.303	134,229,450
	Jun.	100.120	123.500	25.200	143,046,390
	Jul.	100.250	123.740	25.270	140,829,420
	Aug.	100.240	124.130	25.390	141,077,070
	Sept.	99.854	123.812	25.213	143,601,370
	Oct.	100.155	124.030	25.240	146,358,200
	Nov.	100.670	124.520	25.350	139,493,460
	Dec.	100.770	124.670	25.370	128,461,040

Table 1: Romania, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)
1894	Jan.	100.975	124.390	25.413	121,600,390
	Feb.	100.904	124.088	25.409	115,092,900
	Mar.	100.180	123.500	25.240	119,090,540
	Apr.	100.270	123.616	25.263	121,709,360
	May	100.690	124.150	25.350	119,635,320
	Jun.	100.510	123.960	25.280	123,017,720
	Jul.	100.973	124.420	25.396	114,382,080
	Aug.	100.302	123.920	25.286	114,751,400
	Sept.	100.270	123.920	25.240	116,664,660
	Oct.	100.870	124.500	25.350	113,772,700
	Nov.	100.940	124.320	25.360	110,739,450
	Dec.	100.980	124.460	25.380	103,117,220
1895	Jan.	100.940	124.300	25.406	98,244,420
	Feb.	100.640	124.030	25.415	95,313,760
	Mar.	100.217	123.750	25.314	101,610,020
	Apr.	100.270	123.630	25.308	108,297,000
	May	100.570	123.800	25.360	113,356,760
	Jun.	100.220	123.615	25.253	118,105,410
	Jul.	100.076	123.462	25.243	123,825,320
	Aug.	99.853	123.358	25.243	135,305,430
	Sept.	99.802	123.415	25.227	143,261,830
	Oct.	100.090	123.560	25.258	154,085,862
	Nov.	100.820	124.120	25.422	135,309,420
	Dec.	100.794	124.450	25.423	124,348,310*
1896	Jan.	100.725	124.230	25.401	119,232,810
	Feb.	100.403	123.870	25.355	116,105,030
	Mar.	100.380	123.590	25.315	117,814,310
	Apr.	100.136	123.312	25.213	121,065,540
	May	100.443	123.750	25.290	119,848,620
	Jun.	100.450	123.960	25.290	121,542,240
	Jul.	100.240	123.700	25.234	124,711,820
	Aug.	99.910	123.330	25.170	144,967,110
	Sept.	99.940	123.430	25.160	156,515,300
	Oct.	100.030	123.720	25.208	161,796,420
	Nov.	100.360	124.250	25.350	152,427,120
	Dec.	100.520	124.510	25.370	142,617,770
1897	Jan.	100.545	124.300	25.360	131,836,730
	Feb.	100.730	124.260	25.370	129,596,720
	Mar.	100.500	123.970	25.290	133,111,280
	Apr.	100.550	123.800	25.260	130,026,330

Table 1: Romania, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1898	May	100.408	123.720	25.210	133,613,790
	Jun.	100.470	123.860	25.230	137,297,670
	Jul.	100.300	123.800	25.210	135,321,950
	Aug.	100.150	123.690	25.210	140,076,710
	Sept.	100.030	123.680	25.210	146,749,050
	Oct.	100.470	124.400	25.310	152,336,390
	Nov.	100.350	124.260	25.310	151,611,110
	Dec.	100.520	124.460	25.350	145,633,190
	Jan.	100.550	124.250	25.366	137,773,480
	Feb.	100.315	123.970	25.350	140,646,920
	Mar.	99.990	123.490	25.313	152,724,400
	Apr.	100.050	123.420	25.355	157,164,470
1899	May	100.230	123.880	25.375	157,386,710
	Jun.	100.150	123.980	25.280	162,027,630
	Jul.	100.270	124.030	25.304	161,146,080
	Aug.	99.950	123.620	25.250	169,057,740
	Sept.	99.650	123.520	25.210	183,324,350
	Oct.	99.870	123.660	25.310	188,610,520
	Nov.	100.240	124.140	25.380	179,469,010
	Dec.	100.620	124.400	25.430	162,334,020
	Jan.	100.850	124.490	25.380	153,994,420
	Feb.	100.860	124.410	25.410	154,390,320
	Mar.	100.620	124.260	25.375	157,053,000
	Apr.	100.560	123.960	25.360	152,611,700
1900	May	100.650	123.900	25.360	150,005,220
	Jun.	101.390	124.910	25.530	145,595,160
	Jul.	101.610	125.150	25.640	141,775,800
	Aug.	101.540	125.100	25.640	135,478,130
	Sept.	101.350	125.200	25.630	132,283,270
	Oct.	102.630	126.550	26.000	127,943,760
	Nov.	103.900	128.000	26.250	118,771,260
	Dec.	105.120	129.500	26.550	108,718,900
	Jan.	103.150	126.790	25.930	99,379,980
	Feb.	101.460	124.600	25.570	101,685,350
	Mar.	101.510	124.940	25.580	104,526,210
	Apr.	101.230	124.230	25.490	105,086,290
	May	101.260	124.370	25.480	108,151,220
	Jun.	100.560	123.670	25.270	122,575,180
	Jul.	100.590	123.490	25.300	124,583,150
	Aug.	100.610	123.570	25.330	132,876,890

Table 1: Romania, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1901	Sept.	100.640	123.770	25.330	132,735,710
	Oct.	101.280	124.280	25.430	132,554,380
	Nov.	101.750	124.880	25.490	125,926,110
	Dec.	102.110	125.410	25.600	120,622,180*
	Jan.	102.060	125.240	25.620	118,238,790
	Feb.	101.690	125.270	25.650	115,740,710
	Mar.	101.330	124.920	25.520	121,185,920
	Apr.	100.940	124.230	25.300	119,967,500
	May	101.680	125.160	25.590	119,656,640
	Jun.	100.920	124.630	25.430	125,735,240
	Jul.	100.880	124.410	25.390	130,765,480
	Aug.	100.070	123.510	25.230	136,920,660
1902	Sept.	99.830	123.360	25.160	140,674,360
	Oct.	100.130	123.340	25.150	130,765,480
	Nov.	100.310	123.490	25.220	146,776,130
	Dec.	100.360	123.590	25.220	144,965,400
	Jan.	100.560	123.710	25.250	142,044,560
	Feb.	100.490	123.450	25.250	145,948,110
	Mar.	100.350	123.340	25.240	151,280,490
	Apr.	100.350	123.340	25.240	147,762,760
	May	100.330	123.310	25.250	154,766,280
	Jun.	100.130	123.250	25.210	158,526,580
	Jul.	100.220	123.210	25.210	171,274,200
	Aug.	100.170	123.240	25.230	196,073,350
1903	Sept.	100.090	123.250	25.200	196,471,910
	Oct.	100.320	123.290	25.210	189,361,220
	Nov.	100.800	123.750	25.310	175,183,760
	Dec.	101.220	124.420	25.410	167,324,240
	Jan.	100.990	124.020	25.400	159,845,170
	Feb.	100.800	123.760	25.353	154,092,930
	Mar.	100.930	123.920	25.391	160,211,890
	Apr.	100.700	123.675	25.338	156,811,830
	May	100.550	123.800	25.321	160,497,460
	Jun.	100.530	123.916	25.287	158,346,970
	Jul.	100.240	123.605	25.182	175,874,610
	Aug.	99.870	123.352	25.130	203,098,410
	Sept.	99.833	123.354	25.149	204,103,120
	Oct.	100.158	123.356	25.169	205,400,850
	Nov.	100.437	123.657	25.289	184,964,070
	Dec.	100.480	123.810	25.280	177,635,670

Table 1: Romania, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)
1904	Jan.	100.873	123.885	25.368	174,504,000
	Feb.	100.897	123.808	25.364	174,872,760
	Mar.	100.510	123.578	25.252	176,409,190
	Apr.	100.580	123.656	25.274	168,573,170
	May	100.678	123.950	25.286	166,789,010
	Jun.	100.585	124.206	25.330	168,586,730
	Jul.	100.088	123.570	25.265	189,820,080
	Aug.	99.983	123.458	25.253	199,678,060
	Sept.	100.396	123.982	25.270	194,872,800
	Oct.	101.529	125.358	25.515	187,255,260
	Nov.	101.901	125.805	25.636	176,989,160
	Dec.	101.895	125.700	25.587	167,144,770
1905	Jan.	101.566	124.828	25.523	161,420,770
	Feb.	101.366	124.670	25.553	157,546,680
	Mar.	101.435	124.711	25.550	161,008,000
	Apr.	100.692	123.674	25.366	160,714,120
	May	100.488	123.588	25.310	162,478,070
	Jun.	100.395	123.374	25.250	177,226,470
	Jul.	100.322	123.300	25.231	198,353,490
	Aug.	100.192	123.301	25.211	236,641,770
	Sept.	100.189	123.339	25.217	244,289,140
	Oct.	100.323	123.404	25.236	252,564,190
	Nov.	100.761	124.089	25.345	241,472,430
	Dec.	101.052	124.396	25.372	237,614,160
1906	Jan.	101.144	124.130	25.422	231,300,870
	Feb.	101.017	124.040	25.402	226,385,960
	Mar.	100.747	123.642	25.332	223,201,230
	Apr.	100.823	123.699	25.362	220,144,000
	May	100.811	123.896	25.378	214,500,810
	Jun.	100.699	123.707	25.334	218,081,280
	Jul.	100.411	123.410	25.259	226,816,620
	Aug.	100.240	123.346	25.241	254,794,460
	Sept.	100.104	123.325	25.217	268,605,740
	Oct.	100.465	123.628	25.327	271,856,630
	Nov.	100.701	124.047	25.438	263,124,190
	Dec.	100.914	124.318	25.483	249,337,190
1907	Jan.	100.620	123.692	25.397	242,620,860
	Feb.	100.310	123.600	25.352	245,229,850
	Mar.	100.735	124.184	25.483	249,901,290
	Apr.	100.423	123.539	25.274	260,291,580

Table 1: Romania, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)
1908	May	100.652	123.727	25.298	262,849,220
	Jun.	100.535	123.581	25.275	266,504,220
	Jul.	100.604	123.589	25.390	269,732,390
	Aug.	100.537	123.451	25.315	298,801,700
	Sept.	100.427	123.337	25.236	317,845,970
	Oct.	101.082	123.751	25.395	316,783,010
	Nov.	102.131	125.556	25.766	289,996,400
	Dec.	101.975	124.912	25.621	271,005,760
	Jan.	101.600	124.559	25.581	258,613,650
	Feb.	102.196	124.683	25.682	257,201,410
	Mar.	101.403	124.868	25.485	261,813,140
	Apr.	101.061	121.258	25.381	254,728,410
1909	May	101.327	124.622	25.443	253,731,800
	Jun.	101.593	125.133	25.511	242,351,100
	Jul.	100.508	123.841	25.256	251,746,930
	Aug.	100.237	123.467	25.193	273,700,400
	Sept.	100.395	123.662	25.232	283,171,180
	Oct.	101.228	124.370	25.400	280,689,870
	Nov.	101.660	124.682	25.516	274,076,070
	Dec.	101.996	125.156	25.622	259,063,700
	Jan.	101.461	124.500	25.514	246,495,610
	Feb.	100.813	123.969	25.429	247,200,680
	Mar.	100.404	123.654	25.310	250,411,900
	Apr.	100.514	123.619	25.282	247,879,110
1910	May	100.492	123.614	25.293	243,816,180
	Jun.	100.200	123.555	25.243	245,753,710
	Jul.	100.098	123.360	25.207	267,170,240
	Aug.	100.085	123.309	25.197	297,796,400
	Sept.	100.164	123.360	25.183	312,017,000
	Oct.	100.756	124.004	25.371	319,380,290
	Nov.	101.719	125.260	25.634	303,721,200
	Dec.	101.442	124.954	25.546	282,630,150
	Jan.	101.106	124.457	25.457	270,673,970
	Feb.	101.112	124.440	25.460	264,322,600
	Mar.	100.850	124.265	25.437	262,852,520
	Apr.	100.568	123.903	25.385	257,289,530
	May	100.467	123.870	25.380	253,526,770
	Jun.	100.278	123.593	25.272	254,548,750
	Jul.	100.066	123.380	25.222	299,209,260
	Aug.	99.950	123.305	25.219	339,721,160

Table 1: Romania, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1911	Sept.	99.918	123.290	25.205	358,616,180
	Oct.	100.142	123.592	25.307	362,465,920
	Nov.	100.196	123.700	25.331	363,573,320
	Dec.	100.267	124.027	25.348	339,804,300
	Jan.	100.188	123.767	25.327	327,946,300
	Feb.	100.019	123.516	25.281	322,720,000
	Mar.	99.807	123.426	25.235	339,464,550
	Apr.	99.765	123.405	25.246	340,383,160
	May	99.760	124.440	25.238	339,740,020
	Jun.	99.941	123.740	25.283	336,648,050
	Jul.	99.935	123.415	25.240	369,697,810
	Aug.	99.966	123.309	25.240	447,968,680
1912	Sept.	100.433	123.460	25.282	461,775,870
	Oct.	100.669	123.643	25.334	473,864,890
	Nov.	100.369	123.669	25.296	455,315,870
	Dec.	100.290	123.609	25.291	443,357,890
	Jan.	100.220	123.395	25.301	441,020,130
	Feb.	100.045	123.358	25.259	455,053,200
	Mar.	100.017	123.353	25.235	464,322,920
	Apr.	100.241	123.522	25.312	468,387,340
	May	100.347	123.756	25.317	458,168,940
	Jun.	100.516	123.976	25.368	456,885,980
	Jul.	100.233	123.612	25.309	468,001,480
	Aug.	99.926	123.456	25.256	493,378,500
1913	Sept.	100.371	124.087	25.376	493,329,500
	Oct.	101.125	124.440	25.658	480,619,500
	Nov.	101.387	124.730	25.604	445,573,340
	Dec.	102.526	126.365	25.914	425,180,740
	Jan.	102.737	126.550	25.913	397,128,170
	Feb.	102.750	126.550	25.925	393,910,980
	Mar.	102.061	125.982	25.833	406,043,140
	Apr.	101.556	125.248	25.662	391,606,060
	May	101.910	125.487	25.708	385,815,370
	Jun.	102.550	126.240	25.800	434,683,930
	Jul.	101.382	125.780	25.734	450,800,100
	Aug.	101.495	125.375	25.621	435,766,050
	Sept.	100.801	124.637	25.455	465,429,430
	Oct.	100.671	124.461	25.500	452,463,000
	Nov.	101.113	124.838	25.606	457,819,830
	Dec.	101.430	125.255	25.675	437,182,410

Table 1: Romania, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>
1914	Jan.	101.739	125.187	25.623	407,587,380
	Feb.	101.382	124.907	25.543	407,344,780
	Mar.	101.086	124.533	25.424	433,930,880
	Apr.	101.051	124.115	25.405	423,945,570
	May	101.048	124.080	25.430	428,218,520
	Jun.	101.400	124.488	25.520	418,938,320
	Jul.	102.660	126.475	25.920	476,246,520
	Aug.	101.500	125.250	25.610	543,288,015
	Sept.	100.000	123.500	25.220	580,373,683
	Oct.	100.000	123.500	25.220	570,871,230
	Nov.	100.000	123.500	25.220	571,998,095
	Dec.	100.000	123.500	25.200	578,243,648

Notes: Columns (1) to (3) refer to the exchange rate of the leu, mothly averages. Column (4) refers to the banknotes in circulation, end-of-month values in lei. n.a.= non available data.

* correction to data published in the OeNB Workshops No.13 (April 2007).

Sources: columns (1) to (3) for the month entries January to June: *Reports of the Board of Directors of the NBR to the General Shareholders' Meeting*, 1893-1915, the Official List of Securities of the Bucharest Stock Exchange, 1882-1891. For the month entries July to December see *Reports of the Board of Directors of the NBR to the General Shareholders' Meeting*, 1882-1915. Column (4): NBR, *Reports of the Board of Directors to the General Shareholders' Meeting*, 1882-1915.

Table 2: Currency Reserves: Gold, Silver and Foreign Exchange, 1881-1914
(end-of-year values in lei), **Romania**

<i>Year</i>	<i>Month</i>	<i>Gold and silver coins*</i>	<i>Mortgage notes</i>	<i>Gold bills of exchange</i>	<i>Commercial bills denominated in foreign currency</i>	<i>Total</i>
		<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>
1881	Jan.	6,115,665			n.a.	6,115,665
	Feb.	5,249,261			n.a.	5,249,261
	Mar.	7,185,058	7,525		4,212,126	11,404,709
	Apr.	16,271,041			n.a.	16,271,041
	May	13,612,493	1,060,900		n.a.	14,673,393
	Jun.	22,066,095			2,663,136	24,729,231
	Jul.	23,587,012	4,568,345		n.a.	28,155,357
	Aug.	20,760,090	6,730,675		8,872,463	36,363,228
	Sept.	27,642,335			9,218,591	36,860,926
	Oct.	19,600,011	10,147,625		5,794,235	35,541,871
	Nov.	33,186,558			2,062,650	35,249,208
	Dec.	21,336,343	14,168,270		2,748,848	38,253,461
1882	Jan.	23,837,106	16,544,625		213,566	40,595,297
	Feb.	22,977,262	18,324,360		102,166	41,403,788
	Mar.	23,861,782	19,382,735		431,428	43,675,946
	Apr.	23,657,879	20,865,105		684,622	45,207,606
	May	23,416,295	21,611,725		782,963	45,810,983
	Jun.	23,863,237	22,343,395		245,036	46,451,668
	Jul.	23,755,514	22,631,755		1,427,067	47,814,336
	Aug.	23,505,952	23,144,390		5,757,383	52,407,725
	Sept.	22,294,205	23,455,060		8,890,070	54,639,335
	Oct.	21,821,306	23,864,105		11,398,786	57,084,197
	Nov.	22,081,594	23,997,765		7,972,107	54,051,466
	Dec.	23,838,164	24,338,875		5,788,308	53,965,346
1883	Jan.	24,704,685	24,600,770		7,943,161	57,248,616
	Feb.	26,022,906	24,743,245		4,714,091	55,480,242
	Mar.	28,141,523	24,862,815		1,174,255	54,178,593
	Apr.	29,782,200	25,006,515		4,931,397	59,720,112
	May	30,240,987	25,063,145		3,255,568	58,559,700
	Jun.	35,896,762	25,191,485		3,356,399	64,444,646
	Jul.	35,569,703	25,243,735		4,384,841	65,198,279
	Aug.	37,563,856	25,309,850		6,159,576	69,033,282
	Sept.	36,477,482	25,377,180		7,590,050	69,444,712
	Oct.	35,772,457	25,451,250		6,760,243	67,983,950

Table 2: Romania, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)	(5)
1884	Nov.	34,804,572	25,484,675		4,526,234	64,815,481
	Dec.	34,519,946	25,531,240		2,754,357	62,805,543
	Jan.	33,443,661	25,562,060		260,869	59,266,590
	Feb.	34,307,600	25,595,700		360,472	60,263,772
	Mar.	34,208,393	25,614,500		201,442	60,045,824
	Apr.	35,365,485	25,656,315		n.a.	61,021,800
	May	36,931,855	25,682,665		n.a.	62,614,520
	Jun.	35,720,762	25,701,815		126,788	61,549,365
	Jul.	35,371,197	25,714,540		n.a.	61,085,737
	Aug.	34,474,539	25,738,160		n.a.	60,212,699
	Sept.	33,862,652	25,763,840		n.a.	59,626,492
	Oct.	33,315,141	25,783,295		n.a.	59,098,436
1885	Nov.	32,378,575	25,803,365		n.a.	58,181,940
	Dec.	33,981,886	25,812,735		2,025	59,796,646
	Jan.	34,537,361	25,826,375		n.a.	60,363,736
	Feb.	35,151,842	25,839,935		n.a.	60,991,777
	Mar.	34,819,514	25,848,295		n.a.	60,667,809
	Apr.	35,236,050	25,856,620		n.a.	61,092,670
	May	35,455,544	25,863,165		n.a.	61,318,709
	Jun.	35,354,774	25,868,215		n.a.	61,222,989
	Jul.	35,174,453	25,872,685		n.a.	61,047,138
	Aug.	34,903,795	25,873,380		n.a.	60,777,175
	Sept.	34,699,183	25,878,735		n.a.	60,577,918
	Oct.	33,801,178	25,883,640		n.a.	59,684,818
1886	Nov.	33,686,096	25,894,220		n.a.	59,580,316
	Dec.	34,120,251	25,902,605		15,038	60,037,893
	Jan.	34,393,302	25,909,455		n.a.	60,302,757
	Feb.	34,465,125	25,912,810		n.a.	60,377,935
	Mar.	35,001,201	25,916,945		n.a.	60,918,146
	Apr.	36,324,445	25,923,175		n.a.	62,247,620
	May	36,266,926	25,929,255		n.a.	62,196,181
	Jun.	35,473,051	25,932,620		632,427	62,038,098
	Jul.	35,342,961	25,936,695		n.a.	61,279,656
	Aug.	34,822,013	25,942,345		n.a.	60,764,358
	Sept.	34,141,356	25,946,635		n.a.	60,087,991
	Oct.	33,273,535	25,951,050		n.a.	59,224,585
1887	Nov.	32,760,194	25,953,950		n.a.	58,714,144
	Dec.	33,180,320	25,956,500		65,780	59,202,599
	Jan.	33,289,949	25,852,740		n.a.	59,142,689
	Feb.	33,682,672	25,853,885		n.a.	59,536,557

Table 2: Romania, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)	(5)
1888	Mar.	37,595,196	25,855,430		n.a.	63,450,626
	Apr.	37,340,934	25,859,845		n.a.	63,200,779
	May	36,690,372	25,861,490		n.a.	62,551,862
	Jun.	36,546,143	25,863,470		43,287	62,452,900
	Jul.	35,363,183	25,866,725		n.a.	61,229,908
	Aug.	34,651,495	25,868,310		n.a.	60,519,805
	Sept.	32,892,509	25,870,730		n.a.	58,763,239
	Oct.	33,699,741	25,873,925		n.a.	59,573,666
	Nov.	32,439,564	25,874,870		n.a.	58,314,434
	Dec.	31,890,566	25,877,420		139,466	57,907,452
	Jan.	32,261,328	25,708,490		n.a.	57,969,818
	Feb.	33,654,370	25,709,840		n.a.	59,364,210
1889	Mar.	35,002,572	25,712,885		n.a.	60,715,457
	Apr.	34,921,839	25,715,400		n.a.	60,637,239
	May	33,786,957	25,717,065		n.a.	59,504,022
	Jun.	33,873,515	25,718,840		101,000	59,693,355
	Jul.	33,820,033	25,728,760		n.a.	59,548,793
	Aug.	32,900,409	25,732,695		n.a.	58,633,104
	Sept.	32,025,256	25,735,055		n.a.	57,760,311
	Oct.	34,337,466	25,737,495		n.a.	60,074,961
	Nov.	32,274,462	25,741,300		n.a.	58,015,762
	Dec.	32,430,926	25,744,280		n.a.	58,175,206
	Jan.	32,308,158	25,748,475		n.a.	58,056,633
	Feb.	33,500,387	17,617,330		n.a.	51,117,717
1890	Mar.	33,990,624	10,421,110		n.a.	44,411,734
	Apr.	34,546,209	7,423,645		n.a.	41,969,854
	May	36,916,516	2,442,050		n.a.	39,358,566
	Jun.	38,585,114	442,930		6,938,659	45,966,703
	Jul.	41,759,472			n.a.	41,759,472
	Aug.	45,227,689			n.a.	45,227,689
	Sept.	47,666,495			n.a.	47,666,495
	Oct.	48,529,007			n.a.	48,529,007
	Nov.	43,295,244			n.a.	43,295,244
	Dec.	39,523,865			23,192,033	62,715,898
	Jan.	37,765,953			n.a.	37,765,953
	Feb.	37,838,993			n.a.	37,838,993
	Mar.	38,620,481			n.a.	38,620,481
	Apr.	38,839,091			n.a.	38,839,091
	May	38,375,343			n.a.	38,375,343
	Jun.	40,275,937			1,914,598	42,190,535

Table 2: Romania, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)	(5)
1891	Jul.	49,339,877			n.a.	49,339,877
	Aug.	62,245,471			n.a.	62,245,471
	Sept.	63,850,842			n.a.	63,850,842
	Oct.	56,351,756			n.a.	56,351,756
	Nov.	51,019,772			n.a.	51,019,772
	Dec.	45,616,336			15,732,694	61,349,030
	Jan.	46,619,388			n.a.	46,619,388
	Feb.	48,577,412			n.a.	48,577,412
	Mar.	55,107,189			n.a.	55,107,189
	Apr.	59,494,501			n.a.	59,494,501
	May	58,536,556			n.a.	58,536,556
	Jun.	58,638,549			12,379,616	71,018,164
1892	Jul.	60,029,475			n.a.	60,029,475
	Aug.	71,028,420			n.a.	71,028,420
	Sept.	70,142,382			n.a.	70,142,382
	Oct.	68,739,641			n.a.	68,739,641
	Nov.	65,795,715			n.a.	65,795,715
	Dec.	60,652,262			14,482,644	75,134,906
	Jan.	54,983,643			n.a.	54,983,643
	Feb.	50,151,935			n.a.	50,151,935
	Mar.	48,255,589			n.a.	48,255,589
	Apr.	46,107,841			n.a.	46,107,841
	May	46,461,878			n.a.	46,461,878
	Jun.	51,359,477			4,913,130	56,272,607
1893	Jul.	52,150,336			n.a.	52,150,336
	Aug.	53,713,282			n.a.	53,713,282
	Sept.	53,452,373		11,612,587	n.a.	65,064,960
	Oct.	54,299,978		12,468,322	n.a.	66,768,300
	Nov.	54,286,666		12,574,332	n.a.	66,860,998
	Dec.	53,160,704		13,954,340	315,584	67,430,628
	Jan.	50,021,175		8,384,248	n.a.	58,405,423
	Feb.	49,997,016		13,859,736	n.a.	63,856,752
	Mar.	54,472,471		21,233,138	n.a.	75,705,609
	Apr.	63,161,990		15,869,328	n.a.	79,031,318
	May	65,111,771		16,275,883	n.a.	81,387,654
	Jun.	65,025,858		26,303,085	4,104,648	95,433,591
	Jul.	64,616,324		25,656,746	n.a.	90,273,070
	Aug.	60,046,681		21,820,206	n.a.	81,866,887
	Sept.	61,977,300		18,888,759	n.a.	80,866,059
	Oct.	60,995,627		14,820,898	n.a.	75,816,525

Table 2: Romania, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)	(5)
1894	Nov.	60,453,010		12,669,590	n.a.	73,122,600
	Dec.	59,614,561		8,185,432	n.a.	67,799,993
	Jan.	56,436,756		5,784,527	n.a.	62,221,283
	Feb.	51,665,306		7,459,876	n.a.	59,125,182
	Mar.	53,392,196		6,854,897	n.a.	60,247,093
	Apr.	54,916,444		8,839,353	n.a.	63,755,797
	May	53,651,009		12,061,315	n.a.	65,712,324
	Jun.	52,908,014		9,131,671	n.a.	62,039,685
	Jul.	46,532,530		8,657,523	n.a.	55,190,053
	Aug.	48,538,569		7,765,557	n.a.	56,304,126
	Sept.	52,899,601		6,975,440	n.a.	59,875,041
	Oct.	50,933,080		6,712,500	n.a.	57,645,580
1895	Nov.	47,253,372		2,027,006	n.a.	49,280,378
	Dec.	44,501,370		1,610,555	n.a.	46,111,925
	Jan.	43,357,448		1,618,291	n.a.	44,975,739
	Feb.	43,776,502		n.a.	n.a.	43,776,502
	Mar.	45,394,027		n.a.	n.a.	45,394,027
	Apr.	52,524,696		3,287,613	n.a.	55,812,309
	May	58,167,942		1,922,993	n.a.	60,090,935
	Jun.	57,360,384		8,062,507	n.a.	65,422,891
	Jul.	57,154,652		11,784,205	n.a.	68,938,857
	Aug.	63,968,049		10,401,924	n.a.	74,369,973
	Sept.	63,358,732		16,592,519	n.a.	79,951,251
	Oct.	66,978,263		20,592,738	n.a.	87,571,001
1896	Nov.	64,436,426		12,672,872	n.a.	77,109,298
	Dec.	60,996,199		3,208,291	n.a.	64,204,491
	Jan.	55,991,682		3,387,184	n.a.	59,378,866
	Feb.	55,028,540		248,000	n.a.	55,276,540
	Mar.	54,562,777		3,117,506	n.a.	57,680,283
	Apr.	60,612,516		5,303,515	n.a.	65,916,031
	May	59,970,391		3,406,811	n.a.	63,377,202
	Jun.	57,402,729		2,403,610	n.a.	59,806,340
	Jul.	56,331,704		6,539,093	n.a.	62,870,797
	Aug.	64,034,399		19,550,604	n.a.	83,585,003
	Sept.	64,976,876		25,084,526	n.a.	90,061,402
	Oct.	65,347,550		27,267,212	n.a.	92,614,762
1897	Nov.	65,105,412		19,156,457	n.a.	84,261,869
	Dec.	62,264,991		14,110,666	n.a.	76,375,658
	Jan.	59,990,372		18,757,599	n.a.	78,747,971
	Feb.	58,662,655		15,463,298	n.a.	74,125,953

Table 2: Romania, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)	(5)
1898	Mar.	59,651,512		11,318,039	n.a.	70,969,551
	Apr.	58,826,473		14,116,978	n.a.	72,943,451
	May	59,077,773		11,772,430	n.a.	70,850,203
	Jun.	59,033,842		10,376,065	n.a.	69,409,907
	Jul.	58,338,039		17,351,684	n.a.	75,689,723
	Aug.	57,869,419		18,220,774	n.a.	76,090,193
	Sept.	57,502,258		17,629,222	n.a.	75,131,480
	Oct.	58,334,466		20,927,080	n.a.	79,261,546
	Nov.	57,984,666		16,804,100	n.a.	74,788,766
	Dec.	57,781,345		15,115,587	n.a.	72,896,932
	Jan.	56,736,538		16,290,394	n.a.	73,026,932
	Feb.	56,268,653		14,897,389	n.a.	71,166,042
1899	Mar.	57,738,917		13,448,345	n.a.	71,187,262
	Apr.	57,508,690		16,970,159	n.a.	74,478,849
	May	56,926,519		18,328,779	n.a.	75,255,298
	Jun.	56,363,566		19,145,102	n.a.	75,508,668
	Jul.	55,816,433		22,371,738	n.a.	78,188,171
	Aug.	56,317,160		22,405,925	n.a.	78,723,085
	Sept.	57,575,432		23,180,484	n.a.	80,755,916
	Oct.	56,981,883		24,033,723	n.a.	81,015,606
	Nov.	61,030,909		22,062,247	n.a.	83,093,156
	Dec.	59,828,144		20,942,534	n.a.	80,770,679
	Jan.	58,965,238		21,681,012	n.a.	80,646,250
	Feb.	57,512,808		27,946,063	n.a.	85,458,871
1900	Mar.	55,649,497		22,235,041	n.a.	77,884,538
	Apr.	54,969,689		21,111,279	n.a.	76,080,968
	May	54,045,219		19,265,179	n.a.	73,310,398
	Jun.	51,001,716		17,263,825	n.a.	68,265,541
	Jul.	47,004,573		16,475,767	n.a.	63,480,340
	Aug.	47,452,356		16,353,340	n.a.	63,805,696
	Sept.	47,043,484		17,686,008	n.a.	64,729,492
	Oct.	43,552,127		12,536,651	n.a.	56,088,778
	Nov.	39,215,972		13,574,605	n.a.	52,790,577
	Dec.	34,737,588		14,587,568	n.a.	49,325,156
	Jan.	30,914,823		13,221,967	n.a.	44,136,790
	Feb.	31,989,951		12,965,066	n.a.	44,955,017
1900	Mar.	31,926,477		12,677,839	n.a.	44,604,316
	Apr.	32,811,838		11,285,691	n.a.	44,097,529
	May	32,294,436		13,049,335	n.a.	45,343,771
	Jun.	36,089,655		15,347,545	n.a.	51,437,200

Table 2: Romania, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>
1901	Jul.	35,823,166		15,263,283	n.a.	51,086,449
	Aug.	38,347,618		15,919,950	n.a.	54,267,568
	Sept.	41,559,289		13,002,767	n.a.	54,562,056
	Oct.	41,101,589		13,278,927	n.a.	54,380,516
	Nov.	39,415,329		12,746,774	n.a.	52,162,103
	Dec.	39,902,735		10,182,880	11,117,120**	61,202,735**
	Jan.	38,665,718		10,790,985	n.a.	49,456,703
	Feb.	36,227,794		11,880,555	n.a.	48,108,349
	Mar.	37,392,122		13,470,927	n.a.	50,863,049
	Apr.	36,557,207		14,123,238	n.a.	50,680,445
	May	36,148,607		13,235,711	n.a.	49,384,318
	Jun.	36,766,908		14,420,967	n.a.	51,187,876
1902	Jul.	39,851,549		14,181,452	n.a.	54,033,001
	Aug.	44,323,463		14,891,035	n.a.	59,214,498
	Sept.	45,346,037		14,527,589	n.a.	59,873,626
	Oct.	48,752,026		11,818,796	n.a.	60,570,822
	Nov.	49,556,560		16,372,563	n.a.	65,929,123
	Dec.	49,107,434		20,275,149	17,924,851**	87,307,434**
	Jan.	48,905,719		20,634,316	n.a.	69,540,035
	Feb.	48,632,927		20,796,243	n.a.	69,429,170
	Mar.	48,433,776		20,703,548	n.a.	69,137,324
	Apr.	48,386,500		20,651,708	n.a.	69,038,208
	May	49,569,482		21,182,751	n.a.	70,752,233
	Jun.	52,228,707		22,231,500	n.a.	74,460,207
1903	Jul.	74,420,215		27,470,000	n.a.	101,890,215
	Aug.	77,404,177		26,167,414	n.a.	103,571,591
	Sept.	77,335,139		28,605,000	n.a.	105,940,139
	Oct.	78,757,933		29,890,000	n.a.	108,647,933
	Nov.	76,118,403		28,919,647	n.a.	105,038,050
	Dec.	72,168,188		28,731,159	36,668,841**	137,568,188**
	Jan.	69,951,854		28,411,000	n.a.	98,362,854
	Feb.	69,265,226		24,371,064	n.a.	93,636,290
	Mar.	67,750,204		26,966,473	n.a.	94,716,677
	Apr.	66,884,624		26,385,000	n.a.	93,269,624
	May	66,287,612		26,370,081	n.a.	92,657,693
	Jun.	64,307,379		26,268,728	n.a.	90,576,107
	Jul.	66,750,745		27,940,500	n.a.	94,691,245
	Aug.	76,482,840		30,140,000	n.a.	106,622,840
	Sept.	77,360,089		30,634,000	n.a.	107,994,089
	Oct.	76,896,437		30,510,500	n.a.	107,406,937

Table 2: Romania, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)	(5)
1904	Nov.	74,722,678		30,634,000	n.a.	105,356,678
	Dec.	73,462,380		30,871,943	55,428,057**	159,762,380**
	Jan.	71,938,304		30,510,500	n.a.	102,448,804
	Feb.	70,805,157		29,893,000	n.a.	100,698,157
	Mar.	70,195,013		29,769,500	n.a.	99,964,513
	Apr.	69,867,320		29,596,000	n.a.	99,463,320
	May	69,158,633		29,102,000	n.a.	98,260,633
	Jun.	67,591,087		28,059,258	n.a.	95,650,345
	Jul.	67,136,052		28,187,500	n.a.	95,323,552
	Aug.	66,902,305		27,817,000	n.a.	94,719,305
	Sept.	66,087,278		27,817,000	n.a.	93,904,278
	Oct.	63,549,205		26,693,066	n.a.	90,242,271
1905	Nov.	59,494,905		25,717,500	n.a.	85,212,405
	Dec.	53,922,747		20,183,412	42,516,588**	116,622,747**
	Jan.	50,082,863		20,110,000	n.a.	70,192,863
	Feb.	46,008,670		19,492,500	n.a.	65,501,170
	Mar.	44,943,808		19,122,000	n.a.	64,065,808
	Apr.	45,300,728		19,260,000	n.a.	64,560,728
	May	44,972,035		19,145,500	n.a.	64,117,535
	Jun.	48,559,216		20,352,050	n.a.	68,911,266
	Jul.	66,189,620		26,185,000	n.a.	92,374,620
	Aug.	77,398,644		32,360,000	n.a.	109,758,644
	Sept.	81,497,854		33,595,000	n.a.	115,092,854
	Oct.	80,762,765		33,595,000	n.a.	114,357,765
1906	Nov.	79,275,236		32,360,000	n.a.	111,635,236
	Dec.	77,780,868		31,407,905	60,892,095**	170,080,868**
	Jan.	76,575,389		31,125,000	n.a.	107,700,389
	Feb.	75,162,769		31,125,000	n.a.	106,287,769
	Mar.	74,336,979		31,125,000	n.a.	105,461,979
	Apr.	73,962,451		30,507,500	n.a.	104,469,951
	May	73,278,834		29,890,000	n.a.	103,168,834
	Jun.	72,670,696		30,464,240	n.a.	103,134,936
	Jul.	72,361,086		29,890,000	n.a.	102,251,086
	Aug.	77,176,750		32,360,000	n.a.	109,536,750
	Sept.	83,273,574		33,595,000	n.a.	116,868,574
	Oct.	85,621,535		36,065,000	n.a.	121,686,535
1907	Nov.	84,195,014		35,447,500	n.a.	119,642,514
	Dec.	82,861,000		34,547,232	54,852,768**	172,261,000**
	Jan.	82,165,869		34,830,000	n.a.	116,995,869
	Feb.	81,857,235		33,595,000	n.a.	115,452,235

Table 2: Romania, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)	(5)
1908	Mar.	80,943,897		33,595,000	n.a.	114,538,897
	Apr.	80,413,771		33,595,000	n.a.	114,008,771
	May	79,815,318		38,595,000	n.a.	118,410,318
	Jun.	79,052,510		33,451,887	n.a.	112,504,398
	Jul.	78,249,300		32,977,500	n.a.	111,226,800
	Aug.	90,071,193		37,300,000	n.a.	127,371,193
	Sept.	98,301,169		39,770,000	n.a.	138,071,169
	Oct.	100,991,880		41,005,000	n.a.	141,996,880
	Nov.	97,727,190		39,770,000	n.a.	137,497,190
	Dec.	96,222,823		39,384,681	60,485,319**	196,092,823**
	Jan.	95,310,559		38,535,000	n.a.	133,845,559
	Feb.	94,364,420		38,535,000	n.a.	132,899,420
1909	Mar.	92,742,053		38,535,000	n.a.	131,277,053
	Apr.	91,834,914		37,854,000	n.a.	129,688,914
	May	90,670,961		37,854,000	n.a.	128,524,961
	Jun.	79,052,510		33,451,887	n.a.	112,504,398
	Jul.	87,905,009		37,300,000	n.a.	125,205,009
	Aug.	89,784,872		37,300,000	n.a.	127,084,872
	Sept.	90,789,471		37,300,000	n.a.	128,089,471
	Oct.	89,550,713		37,300,000	n.a.	126,850,713
	Nov.	91,612,497		37,300,000	n.a.	128,912,497
	Dec.	90,394,496		33,688,704	35,071,296**	159,154,496**
	Jan.	89,190,688		37,881,778	n.a.	127,072,466
	Feb.	88,722,997		38,386,420	n.a.	127,109,417
1910	Mar.	88,391,159		31,626,993	n.a.	120,018,152
	Apr.	87,881,773		34,187,500	n.a.	122,069,273
	May	87,506,525		34,187,500	n.a.	121,694,025
	Jun.	87,055,496		34,393,561	n.a.	121,449,057
	Jul.	86,708,985		34,162,500	n.a.	120,871,485
	Aug.	93,231,395		37,917,500	n.a.	131,148,895
	Sept.	97,328,981		39,770,000	n.a.	137,098,981
	Oct.	98,117,847		39,770,000	n.a.	137,887,847
	Nov.	96,178,624		39,770,000	n.a.	135,948,624
	Dec.	93,841,632		38,046,223	51,483,777**	183,371,632**
	Jan.	92,626,639		37,953,333	n.a.	130,579,972
	Feb.	91,764,691		37,814,400	n.a.	129,579,091
	Mar.	90,899,690		37,875,500	n.a.	128,775,190
	Apr.	89,872,135		37,952,680	n.a.	127,824,815
	May	89,235,287		36,883,534	n.a.	126,118,821
	Jun.	88,338,542		37,356,622	n.a.	125,695,163

Table 2: Romania, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)	(5)
1911	Jul.	96,439,101		40,345,500	n.a.	136,784,601
	Aug.	110,343,283		45,903,000	n.a.	156,246,283
	Sept.	121,159,489		49,608,000	n.a.	170,767,489
	Oct.	121,626,479		50,843,000	n.a.	172,469,479
	Nov.	121,065,195		50,843,000	n.a.	171,908,195
	Dec.	120,023,216		48,889,157	74,810,843**	243,723,216**
	Jan.	119,467,322		49,608,000	n.a.	169,075,322
	Feb.	119,218,658		49,608,000	n.a.	168,826,658
	Mar.	120,990,189		49,608,000	n.a.	170,598,189
	Apr.	122,761,318		50,843,000	n.a.	173,604,318
	May	123,595,219		50,843,000	n.a.	174,438,219
	Jun.	123,031,543		50,678,426	n.a.	173,709,969
1912	Jul.	122,458,832		50,843,000	n.a.	173,301,832
	Aug.	154,221,257		59,488,000	n.a.	213,709,257
	Sept.	160,255,070		61,958,000	n.a.	222,213,070
	Oct.	159,638,577		61,958,000	n.a.	221,596,577
	Nov.	158,888,445		61,958,000	n.a.	220,846,445
	Dec.	157,799,779		61,366,718	113,633,282**	332,799,779**
	Jan.	157,538,058		61,958,000	n.a.	219,496,058
	Feb.	157,159,188		61,958,000	n.a.	219,117,188
	Mar.	156,715,441		61,958,000	n.a.	218,673,441
	Apr.	156,447,883		61,958,000	n.a.	218,405,883
	May	155,633,665		61,958,000	n.a.	217,591,665
	Jun.	154,504,771		62,185,156	n.a.	216,689,927
1913	Jul.	153,645,312		61,958,000	n.a.	215,603,312
	Aug.	153,276,189		61,958,000	n.a.	215,234,189
	Sept.	163,952,428		65,663,000	n.a.	229,615,428
	Oct.	161,231,907		65,688,000	n.a.	226,919,907
	Nov.	158,784,037		65,453,000	n.a.	224,237,037
	Dec.	155,504,866		63,430,278	54,399,722**	273,334,866**
	Jan.	152,416,217		56,674,000	n.a.	209,090,217
	Feb.	150,740,587		56,652,600	n.a.	207,393,187
	Mar.	149,230,995		56,607,000	n.a.	205,837,995
	Apr.	147,843,316		56,623,508	n.a.	204,466,824
	May	145,464,347		56,633,000	n.a.	202,097,347
	Jun.	143,885,180		46,769,414	n.a.	190,654,595
	Jul.	155,771,628		56,668,000	n.a.	212,439,628
	Aug.	155,261,394		56,668,000	n.a.	211,929,394
	Sept.	154,325,452		56,642,000	n.a.	210,967,452
	Oct.	153,464,622		56,642,000	n.a.	210,106,622

Table 2: Romania, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)	(5)
1914	Nov.	152,624,715		56,642,000	n.a.	209,266,715
	Dec.	151,510,764		56,534,181	n.a.	208,044,945
	Jan.	152,069,467		56,642,000	n.a.	208,711,467
	Feb.	154,112,838		56,642,000	n.a.	210,754,838
	Mar.	155,996,828		56,642,000	n.a.	212,638,828
	Apr.	155,647,229		56,642,000	n.a.	212,289,229
	May	155,202,975		56,642,000	n.a.	211,844,975
	Jun.	154,223,016		56,598,389	n.a.	210,821,405
	Jul.	153,215,204		56,646,522	n.a.	209,861,726
	Aug.	153,335,674		56,772,289	n.a.	210,107,963
	Sept.	153,959,695		56,700,000	n.a.	210,659,695
	Oct.	154,011,684		56,700,000	n.a.	210,711,684
	Nov.	154,011,346		56,700,000	n.a.	210,711,346
	Dec.	153,956,720		62,941,120	n.a.	216,897,840

Note: * from 1892 only gold. (5)=(1)+(2)+(3)+(4)

** correction to data published in the OeNB Workshops no 13 (April 2007).

Source: NBR, *Reports of the Board of Directors to the General Shareholders' Meeting*, 1882-1915 (various issues).

**Table 3: The Discount Rate, 1881-1914
Romania**

<i>Year</i>	<i>Day</i>	<i>Month</i>	<i>%</i>
1881	1	1	5.0
1881	6	2	4.0
1884	29	11	5.0
1887	30	9	6.0
1890	1	4	5.0
1892	25	2	6.0
1893	13	3	5.0
1893	20	11	6.0
1894	6	8	7.0
1894	1	10	6.0
1895	15	4	5.0
1898	8	10	5.0
1899	1	1	5.0
1899	25	6	6.0
1899	1	7	7.0
1899	1	10	8.0
1899	10	12	9.0
1900	19	2	8.0
1901	1	4	7.0
1902	1	2	6.0
1902	14	8	5.0
1907	30	8	6.0
1907	19	9	7.0
1907	27	10	8.0
1907	29	12	7.0
1908	10	1	6.0
1908	28	2	5.0
1912	19	10	6.0
1914	1	5	5.5
1914	18	7	6.0
1914	25	7	7.0
1914	25	8	6.0

Source: NBR, *Reports of the Board of Directors to the General Shareholders' Meeting*, 1882-1915 (various issues).

Serbia

*Milan Šojić**

Ljiljana Đurđević

Sanja Borković

Olivera Jovanović

Narodna banka Srbije

1. Introduction

The Law on Minting Silver Coins of 1873 set out the dinar as the Serbian national monetary unit. In conformity with the rules of the Latin Monetary Union, this legislation also established a ratio of 1:1 with the French franc. The dinar should be minted of silver with a fineness of 835/1000 and weigh 10, 5 and 2.5 grams (in the denominations of 2, 1 and 0.50 dinars) respectively. The government had the exclusive right to mint money.

The law on minting Serbian gold coins was passed after Serbia proclaimed its independence in 1878. The law prescribed the minting of 20- and 10-dinar gold coins, a clear indication that Serbia intended to adopt the gold standard. As opposed to the Latin Monetary Union, it was planned that the government alone should have the right to mint not only silver and copper coins, but gold coin as well (see Table 2, columns 1-3 and Table 3, columns 1-5).

Bank notes issued by the Privileged National Bank of the Kingdom of Serbia were backed by either gold or silver (see Table 2, columns 1-3). The first gold-backed 100-dinar banknotes were issued immediately after the establishment of the National Bank in 1884. However, as these banknotes could not be retained in circulation,

* Email to Milan.sojic@nbs.yu

silver-backed 10-dinar banknotes were issued as early as in 1885. The 1885 Law on the National Bank of Serbia stipulated, “the National Bank shall exchange each of its 10-dinar banknotes against silver, and its 50, 100, 500 and 1,000-dinar banknotes against gold, at full nominal value without any deductions, as soon as the banknote is presented for redemption at its main cash vault. The bank shall never place more banknotes into circulation than 2.5 times the amount of gold it holds in its vaults. Not more than one quarter of gold can be replaced with silver”. Parallel circulation of banknotes redeemable in either gold or silver remained the basis of Serbia’s monetary system all the way through to World War I.

The dinar remained a relatively stable currency during the period from 1884 to 1914. Its exchange rate against the French franc, the Austro-Hungarian currency and other Balkan currencies shows little volatility (see Table 1, columns 1-2). The legally prescribed minimum backing for banknotes in circulation of 40% was observed without exception. The obligation to convert paper money into gold or silver was continually complied with, except in two instances – at the outbreak of the Balkan Wars (1912) and on the eve of World War I.¹

¹ Serbia switched to the Gregorian calendar on 23 January 1919. Therefore, all dates are according to the Julian calendar.

Table 1: Exchange Rates, 1891-1913
Serbia
(price in dinar for a 20-dinar Gold Coin and for 100
Austro-Hungarian forints, in Belgrade)

<i>Year</i>	<i>Month</i>	<i>20-dinar gold coins (1)</i>	<i>Austrian forints (100 forints) (2)</i>
1891	Nov.	20.94	n.a.
	Dec.	21.19	n.a.
1892	Jan.	21.22	n.a.
	Feb.	21.16	n.a.
	Mar.	21.37	n.a.
	Apr.	21.72	n.a.
	May	21.11	n.a.
	Jun.	21.24	n.a.
	Jul.	21.02	n.a.
	Aug.	20.89	n.a.
	Sept.	21.05	n.a.
	Oct.	21.29	n.a.
	Nov.	21.93	n.a.
	Dec.	22.16	n.a.
1893	Jan.	22.07	n.a.
	Feb.	22.11	n.a.
	Mar.	22.28	n.a.
	Apr.	22.17	n.a.
	May	21.88	n.a.
	Jun.	21.82	n.a.
	Jul.	21.64	n.a.
	Aug.	21.71	n.a.
	Sept.	21.74	n.a.
	Oct.	22.41	n.a.
	Nov.	22.87	n.a.
	Dec.	23.07	n.a.
1894	Jan.	23.34	n.a.
	Feb.	23.41	n.a.
	Mar.	23.41	n.a.
	Apr.	23.35	n.a.
	May	23.34	n.a.
	Jun.	23.16	n.a.
	Jul.	22.29	n.a.
	Aug.	22.48	n.a.

Table 1: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1895	Sept.	22.63	n.a.
	Oct.	22.94	n.a.
	Nov.	23.41	n.a.
	Dec.	23.50	n.a.
	Jan.	23.48	n.a.
	Feb.	23.41	238.17
	Mar.	23.24	238.75
	Apr.	23.12	238.81
	May	22.96	236.52
	Jun.	22.89	237.38
	Jul.	22.39	231.07
	Aug.	22.26	231.61
	Sept.	22.25	232.45
	Oct.	22.45	234.57
1896	Nov.	22.82	236.81
	Dec.	23.42	243.18
	Jan.	23.48	244.86
	Feb.	23.42	245.24
	Mar.	23.27	243.44
	Apr.	22.26	234.06
	May	21.59	228.39
	Jun.	22.14	231.82
	Jul.	21.80	228.98
	Aug.	21.61	226.28
	Sept.	21.74	227.37
	Oct.	21.46	224.61
	Nov.	21.64	226.12
	Dec.	21.82	228.96
1897	Jan.	21.37	224.27
	Feb.	21.46	225.07
	Mar.	21.55	226.24
	Apr.	21.45	225.34
	May	21.44	225.04
	Jun.	21.53	225.90
	Jul.	21.28	223.36
	Aug.	20.72	217.25
	Sept.	20.48	214.30
	Oct.	20.53	215.56
	Nov.	21.24	222.11
	Dec.	22.28	233.08

Table 1: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1898	Jan.	22.20	232.77
	Feb.	22.22	233.20
	Mar.	22.36	234.69
	Apr.	22.98	240.56
	May	22.18	231.69
	Jun.	21.57	226.38
	Jul.	21.27	223.38
	Aug.	21.12	221.38
	Sept.	21.66	226.45
	Oct.	22.92	239.76
	Nov.	23.18	242.23
	Dec.	22.53	235.77
1899	Jan.	21.66	226.68
	Feb.	22.18	233.22
	Mar.	21.86	228.67
	Apr.	21.80	227.97
	May	21.76	227.50
	Jun.	21.42	223.88
	Jul.	21.14	221.08
	Aug.	21.14	220.94
	Sept.	21.44	223.69
	Oct.	22.34	232.90
	Nov.	22.52	234.71
	Dec.	22.26	233.88
1900	Jan.	22.45	233.62
	Feb.	22.50	233.76
	Mar.	22.17	230.20
	Apr.	21.96	227.99
	May	21.75	225.64
	Jun.	21.72	223.60
	Jul.	21.72	224.89
	Aug.	21.82	225.87
	Sept.	22.40	231.64
	Oct.	22.64	235.49
	Nov.	22.89	238.51
	Dec.	22.53	235.86
1901	Jan.	22.60	236.01
	Feb.	20.58	236.73
	Mar.	22.52	235.97
	Apr.	22.31	233.71

Table 1: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1902	May	22.23	232.69
	Jun.	22.28	233.87
	Jul.	22.34	234.56
	Aug.	22.45	235.82
	Sept.	22.63	237.49
	Oct.	23.15	243.08
	Nov.	22.90	240.01
	Dec.	22.54	238.78
	Jan.	22.62	237.52
	Feb.	22.56	266.80
	Mar.	22.62	236.99
	Apr.	22.23	233.01
1903	May	22.26	232.67
	Jun.	21.99	230.43
	Jul.	21.35	223.87
	Aug.	21.13	219.61
	Sept.	21.00	219.83
	Oct.	21.16	220.81
	Nov.	21.27	222.68
	Dec.	22.57	225.25
	Jan.	21.40	224.28
	Feb.	21.01	220.25
	Mar.	20.87	218.92
	Apr.	20.74	217.73
1904	May	20.62	216.26
	Jun.	20.73	217.33
	Jul.	20.60	215.99
	Aug.	20.28	212.36
	Sept.	20.18	211.46
	Oct.	20.26	211.89
	Nov.	20.23	211.94
	Dec.	22.73	211.63
	Jan.	20.34	212.89
	Feb.	20.47	214.55
	Mar.	20.70	216.92
	Apr.	20.64	216.54
	May	20.44	214.29
	Jun.	20.23	212.67
	Jul.	20.11	211.05
	Aug.	20.04	210.01

Table 1: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1905	Sept.	20.00	209.63
	Oct.	20.13	210.75
	Nov.	20.31	212.66
	Dec.	21.44	213.02
	Jan.	20.31	213.22
	Feb.	20.39	213.96
	Mar.	20.41	214.21
	Apr.	20.51	215.52
	May	20.47	214.67
	Jun.	20.45	213.00
	Jul.	20.16	211.04
	Aug.	20.05	209.63
1906	Sept.	19.98	208.65
	Oct.	19.98	208.23
	Nov.	19.93	208.59
	Dec.	20.21	209.01
	Jan.	20.13	210.57
	Feb.	20.14	211.07
	Mar.	20.16	210.93
	Apr.	20.09	210.01
	May	20.04	209.34
	Jun.	20.06	209.88
	Jul.	20.05	210.09
	Aug.	20.00	209.64
1907	Sept.	19.99	208.92
	Oct.	20.01	209.09
	Nov.	20.06	209.80
	Dec.	20.33	210.05
	Jan.	20.03	209.67
	Feb.	20.02	209.54
	Mar.	20.03	209.24
	Apr.	20.04	209.76
	May	20.06	209.62
	Jun.	20.04	209.06
	Jul.	20.02	210.10
	Aug.	20.00	208.54
	Sept.	19.99	207.99
	Oct.	20.01	208.33
	Nov.	20.05	209.27
	Dec.	20.06	209.77

Table 1: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1908	Jan.	20.22	211.79
	Feb.	20.28	212.49
	Mar.	20.31	213.00
	Apr.	20.31	213.16
	May	20.22	211.61
	Jun.	20.30	212.57
	Jul.	20.06	210.11
	Aug.	20.02	209.32
	Sept.	20.04	209.10
	Oct.	20.33	211.57
	Nov.	20.46	213.04
	Dec.	20.54	215.27
1909	Jan.	20.59	215.68
	Feb.	20.78	218.18
	Mar.	20.74	217.41
	Apr.	20.68	217.42
	May	20.66	217.05
	Jun.	20.46	214.90
	Jul.	20.19	211.27
	Aug.	20.36	209.32
	Sept.	20.08	209.87
	Oct.	20.14	105.28
	Nov.	20.28	105.98
	Dec.	20.20	105.55
1910	Jan.	20.14	105.53
	Feb.	20.14	105.39
	Mar.	20.14	105.43
	Apr.	20.20	105.90
	May	20.18	105.75
	Jun.	20.11	105.43
	Jul.	20.06	105.19
	Aug.	20.01	104.69
	Sept.	20.00	104.58
	Oct.	20.04	104.87
	Nov.	20.15	105.70
	Dec.	20.12	105.75
1911	Jan.	20.07	105.53
	Feb.	20.03	105.22
	Mar.	20.04	105.25
	Apr.	20.02	105.23

Table 1: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>
1912	May	20.03	105.40
	Jun.	20.03	105.40
	Jul.	20.02	105.15
	Aug.	20.02	104.68
	Sept.	20.00	104.01
	Oct.	20.01	103.83
	Nov.	20.05	104.93
	Dec.	20.04	104.73
	Jan.	20.03	104.62
	Feb.	20.03	104.56
	Mar.	n.a.	104.40
	Apr.	20.10	104.99
	May	n.a.	n.a.
	Jun.	20.09	105.03
	Jul.	20.10	105.09
	Aug.	20.09	104.98
1913	Sept.	20.24	105.57
	Oct.	n.a.	n.a.
	Nov.	20.69	108.15
	Dec.	20.78	108.63
	Jan.	20.81	108.56
	Feb.	20.96	109.76
	Mar.	21.23	111.46
	Apr.	21.52	113.60
	May	21.69	113.56
	Jun.	21.57	113.08
	Jul.	21.16	112.13
	Aug.	20.92	110.93
	Sept.	21.00	111.00
	Oct.	21.20	112.54
	Nov.	21.41	112.74
	Dec.	21.43	112.58

Note: n.a.=not available data.

Source: Based on daily data published in "Serbian Newspapers" - for the period before 1899 and after 1908; Statistical Yearbook of the Kingdom of Serbia (1913) - for the period 1899-1908.

Figure 1
Exchange Rates in Belgrade, 1891-1913

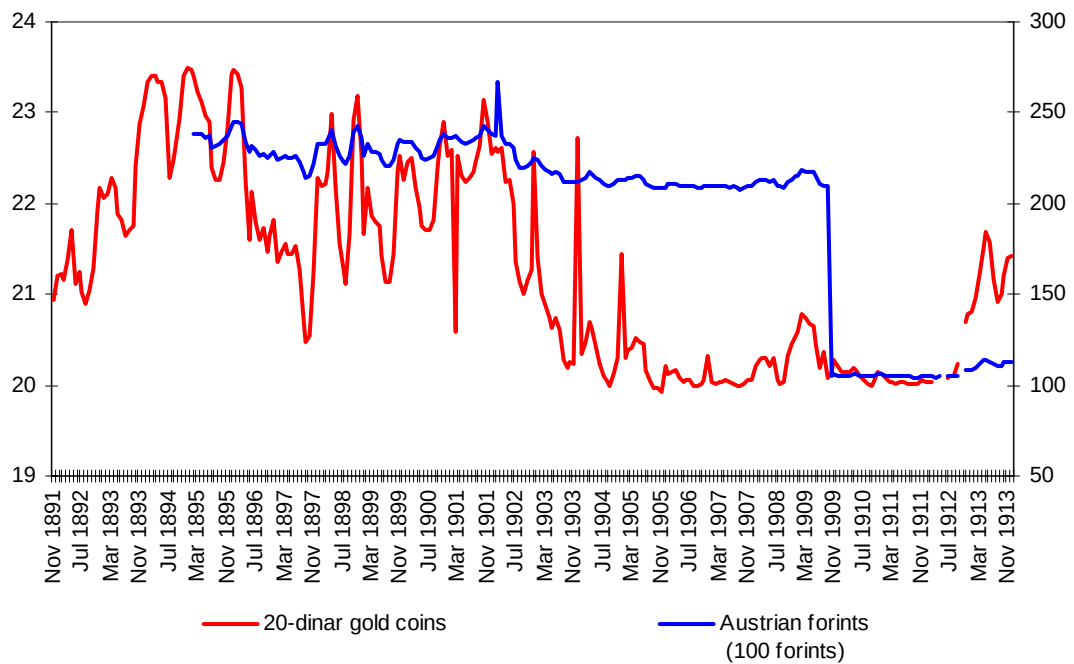


Figure 2
Banknotes in Circulation, 1884-1914

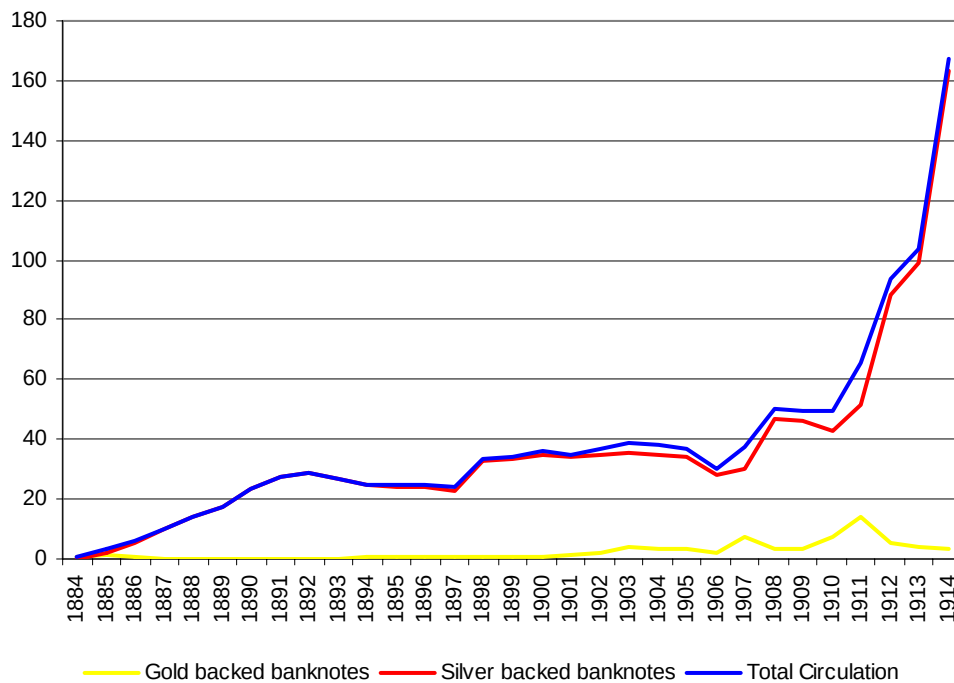


Table 2: Banknote Circulation: gold- and silver-backed notes, 1884-1913
Serbia
(end-of-month values, in million dinar)

<i>Year</i>	<i>Month</i>	<i>Gold- backed banknotes (1)</i>	<i>Silver-backed banknotes (2)</i>	<i>Total circulation (3)</i>
1884	Jan.			
	Feb.			
	Mar.			
	Apr.			
	May			
	Jun.			
	Jul.			
	Aug.			
	Sept.			
	Oct.			
	Nov.			
	Dec.	0.78	0.00	0.78
1885	Jan.	/	/	1.68
	Feb.	/	/	1.08
	Mar.	/	/	1.10
	Apr.	/	/	1.02
	May	/	/	0.90
	Jun.	/	/	0.77
	Jul.	/	/	0.78
	Aug.	/	/	0.99
	Sept.	/	/	1.46
	Oct.	/	/	1.93
	Nov.	/	/	2.54
	Dec.	/	/	3.50
1886	Jan.	1.21	2.39	3.60
	Feb.	0.90	2.62	3.52
	Mar.	0.65	2.94	3.59
	Apr.	0.56	3.38	3.94
	May	0.51	3.71	4.21
	Jun.	0.65	3.97	4.62
	Jul.	0.59	4.06	4.64
	Aug.	0.57	4.08	4.65
	Sept.	0.55	4.77	5.32
	Oct.	0.57	5.12	5.69
	Nov.	0.50	5.30	5.81

Table 2: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1887	Dec.	0.44	5.30	5.74
	Jan.	0.40	5.63	6.03
	Feb.	0.34	5.78	6.12
	Mar.	0.29	5.93	6.23
	Apr.	0.28	6.26	6.54
	May	0.25	6.55	6.81
	Jun.	0.21	6.71	6.91
	Jul.	0.68	2.16	2.84
	Aug.	0.72	2.22	2.94
	Sept.	0.69	2.68	3.37
	Oct.	0.46	2.96	3.42
	Nov.	0.31	3.07	3.38
1888	Dec.	0.25	2.90	3.15
	Jan.	0.18	9.77	9.96
	Feb.	0.17	9.25	9.42
	Mar.	0.17	9.89	10.06
	Apr.	0.16	10.59	10.74
	May	0.15	10.80	10.95
	Jun.	0.15	10.82	10.97
	Jul.	0.15	11.36	11.51
	Aug.	0.19	12.65	12.84
	Sept.	0.16	14.17	14.33
	Oct.	0.16	14.83	14.99
	Nov.	0.15	14.78	14.93
1889	Dec.	0.14	13.94	14.08
	Jan.	0.13	13.24	13.37
	Feb.	0.13	12.77	12.90
	Mar.	0.12	12.89	13.02
	Apr.	0.13	13.53	13.65
	May	0.12	13.69	13.81
	Jun.	0.11	14.38	14.49
	Jul.	0.11	14.56	14.67
	Aug.	0.11	15.63	15.74
	Sept.	0.12	17.17	17.30
	Oct.	0.11	18.03	18.14
	Nov.	0.10	17.73	17.83
1890	Dec.	0.10	17.23	17.34
	Jan.	0.09	16.29	16.39
	Feb.	0.09	15.85	15.95
	Mar.	0.09	15.83	15.91

Table 2: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1891	Apr.	0.09	16.36	16.45
	May	0.09	16.91	17.00
	Jun.	0.08	17.67	17.75
	Jul.	0.08	19.07	19.15
	Aug.	0.08	22.80	22.88
	Sept.	0.08	25.85	25.93
	Oct.	0.09	25.98	26.06
	Nov.	0.08	24.87	24.96
	Dec.	0.08	23.39	23.48
	Jan.	0.08	22.84	22.92
	Feb.	0.07	22.27	22.34
	Mar.	0.07	21.46	21.53
1892	Apr.	0.07	21.42	21.49
	May	0.07	21.15	21.22
	Jun.	0.07	22.42	22.49
	Jul.	0.07	24.01	24.08
	Aug.	0.07	27.81	27.88
	Sept.	0.08	28.97	29.05
	Oct.	0.10	30.02	30.12
	Nov.	0.16	28.86	29.02
	Dec.	0.12	27.15	27.27
	Jan.	0.12	25.92	26.04
	Feb.	0.11	25.66	25.77
	Mar.	0.09	25.80	25.90
1893	Apr.	0.13	24.75	24.88
	May	0.10	24.33	24.43
	Jun.	0.09	25.34	25.43
	Jul.	0.12	25.92	26.04
	Aug.	0.11	27.37	27.48
	Sept.	0.08	29.44	29.53
	Oct.	0.13	30.44	30.56
	Nov.	0.15	29.74	29.89
	Dec.	0.16	28.71	28.87
	Jan.	0.15	27.44	27.59
	Feb.	0.12	26.84	26.96
	Mar.	0.12	26.50	26.62
	Apr.	0.13	26.31	26.44
	May	0.14	26.43	26.56
	Jun.	0.20	26.27	26.47
	Jul.	0.14	25.74	25.88

Table 2: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1894	Aug.	0.12	27.78	27.90
	Sept.	0.15	28.80	28.95
	Oct.	0.17	29.15	29.32
	Nov.	0.24	27.90	28.14
	Dec.	0.20	26.57	26.77
	Jan.	0.27	25.43	25.69
	Feb.	0.29	24.74	25.02
	Mar.	0.24	23.62	23.86
	Apr.	0.20	23.13	23.33
	May	0.26	22.93	23.19
	Jun.	0.20	22.79	22.98
	Jul.	0.25	23.52	23.77
1895	Aug.	0.28	25.14	25.42
	Sept.	0.28	25.97	26.25
	Oct.	0.37	25.26	25.63
	Nov.	0.53	24.73	25.26
	Dec.	0.55	24.52	25.06
	Jan.	0.45	24.10	24.55
	Feb.	0.59	23.67	24.26
	Mar.	0.52	23.72	24.24
	Apr.	0.46	23.37	23.83
	May	0.46	23.41	23.87
	Jun.	0.44	24.12	24.57
	Jul.	0.33	24.71	25.04
1896	Aug.	0.41	25.15	25.56
	Sept.	0.53	26.31	26.84
	Oct.	0.50	26.04	26.54
	Nov.	0.34	25.30	25.64
	Dec.	0.42	24.17	24.59
	Jan.	0.42	23.07	23.49
	Feb.	0.37	22.69	23.05
	Mar.	0.25	21.97	22.22
	Apr.	0.22	22.85	23.07
	May	0.12	21.74	21.86
	Jun.	0.17	20.34	20.51
	Jul.	0.29	19.62	19.92
	Aug.	0.19	22.22	22.41
	Sept.	0.31	23.92	24.23
	Oct.	0.52	24.73	25.25
	Nov.	0.63	24.14	24.77

Table 2: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1897	Dec.	0.66	23.80	24.46
	Jan.	0.64	23.01	23.65
	Feb.	0.67	23.65	24.32
	Mar.	0.84	23.81	24.65
	Apr.	0.57	23.19	23.76
	May	0.61	23.11	23.72
	Jun.	0.59	22.31	22.90
	Jul.	0.89	23.08	23.98
	Aug.	0.85	24.47	25.32
	Sept.	0.89	24.75	25.64
	Oct.	0.85	24.16	25.01
	Nov.	0.86	23.26	24.13
1898	Dec.	0.79	22.87	23.66
	Jan.	0.68	21.86	22.54
	Feb.	0.76	21.34	22.09
	Mar.	0.79	22.68	23.47
	Apr.	0.62	24.96	25.57
	May	0.66	28.11	28.78
	Jun.	0.53	29.03	29.56
	Jul.	0.38	32.79	33.16
	Aug.	0.37	33.24	33.60
	Sept.	0.38	32.98	33.36
	Oct.	0.35	33.51	33.86
	Nov.	0.37	33.02	33.39
1899	Dec.	0.36	32.78	33.14
	Jan.	0.33	32.71	33.04
	Feb.	0.46	31.51	31.98
	Mar.	0.48	32.28	32.76
	Apr.	0.42	32.30	32.72
	May	0.46	31.39	31.86
	Jun.	0.63	32.36	32.99
	Jul.	0.66	34.04	34.71
	Aug.	0.61	36.17	36.79
	Sept.	0.85	37.52	38.37
	Oct.	0.76	37.51	38.27
	Nov.	0.72	34.61	35.33
1900	Dec.	0.84	33.17	34.01
	Jan.	0.69	32.58	33.27
	Feb.	0.58	31.69	32.27
	Mar.	0.84	31.59	32.44

Table 2: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1901	Apr.	0.57	31.63	32.19
	May	0.62	31.48	32.10
	Jun.	0.83	32.73	33.56
	Jul.	0.76	33.89	34.65
	Aug.	0.97	35.88	36.85
	Sept.	1.05	38.10	39.16
	Oct.	0.77	37.27	38.04
	Nov.	0.96	35.77	36.73
	Dec.	0.85	35.03	35.88
	Jan.	0.78	34.14	34.92
	Feb.	0.86	34.06	34.92
	Mar.	1.03	33.29	34.32
1902	Apr.	0.74	33.04	33.78
	May	0.62	33.32	33.94
	Jun.	0.59	35.63	36.22
	Jul.	0.87	36.14	37.02
	Aug.	1.03	36.32	37.35
	Sept.	1.07	35.24	36.32
	Oct.	1.14	34.69	35.83
	Nov.	1.22	34.40	35.62
	Dec.	1.12	33.94	35.06
	Jan.	1.28	33.74	35.02
	Feb.	0.90	32.49	33.40
	Mar.	1.25	33.45	34.70
1903	Apr.	0.81	33.57	34.38
	May	0.91	33.23	34.14
	Jun.	0.88	34.82	35.70
	Jul.	1.00	37.00	37.99
	Aug.	1.22	37.78	38.99
	Sept.	1.57	38.52	40.09
	Oct.	1.81	38.20	40.01
	Nov.	2.13	36.53	38.66
	Dec.	2.12	34.69	36.81
	Jan.	2.52	34.34	36.86
	Feb.	2.61	34.37	36.97
	Mar.	3.13	34.09	37.22
	Apr.	3.06	31.81	34.87
	May	2.98	31.54	34.51
	Jun.	3.30	31.14	34.45
	Jul.	3.04	34.66	37.70

Table 1: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1904	Aug.	3.77	37.04	40.81
	Sept.	3.54	37.07	40.61
	Oct.	3.77	37.21	40.98
	Nov.	3.98	36.57	40.55
	Dec.	3.68	35.17	38.85
	Jan.	3.62	34.49	38.10
	Feb.	3.24	34.03	37.27
	Mar.	2.70	34.25	36.95
	Apr.	2.57	34.33	36.90
	May	2.97	34.53	37.50
	Jun.	3.08	35.01	38.08
	Jul.	3.17	39.04	42.21
1905	Aug.	3.41	39.59	43.00
	Sept.	3.83	39.85	43.69
	Oct.	3.84	38.67	42.51
	Nov.	3.83	36.57	40.40
	Dec.	3.14	34.87	38.02
	Jan.	2.94	33.65	36.59
	Feb.	2.86	32.47	35.33
	Mar.	2.83	31.33	34.17
	Apr.	2.64	30.59	33.23
	May	2.34	30.13	32.47
	Jun.	1.94	30.55	32.49
	Jul.	2.03	32.33	34.37
1906	Aug.	2.81	37.58	40.39
	Sept.	3.42	38.82	42.24
	Oct.	3.36	37.23	40.59
	Nov.	3.17	36.33	39.51
	Dec.	3.10	33.98	37.09
	Jan.	2.90	31.67	34.57
	Feb.	2.68	30.72	33.40
	Mar.	2.57	31.26	33.83
	Apr.	2.73	30.73	33.46
	May	2.93	30.30	33.23
	Jun.	2.82	30.06	32.88
	Jul.	2.90	31.32	34.21
	Aug.	2.95	33.14	36.09
	Sept.	2.91	34.37	37.27
	Oct.	2.81	32.81	35.62
	Nov.	2.68	30.28	32.96

Table 2: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1907	Dec.	2.28	27.95	30.23
	Jan.	3.28	27.40	30.68
	Feb.	3.77	27.69	31.46
	Mar.	4.47	27.98	32.45
	Apr.	4.79	27.81	32.59
	May	4.51	27.66	32.18
	Jun.	4.06	27.58	31.64
	Jul.	5.35	29.09	34.43
	Aug.	8.79	29.60	38.39
	Sept.	11.20	30.44	41.64
	Oct.	11.29	31.22	42.50
	Nov.	9.45	30.42	39.88
1908	Dec.	7.56	29.81	37.36
	Jan.	6.33	28.51	34.84
	Feb.	5.36	28.35	33.72
	Mar.	4.48	28.81	33.29
	Apr.	3.94	28.49	32.43
	May	3.71	29.03	32.75
	Jun.	3.05	30.62	33.67
	Jul.	3.85	34.41	38.26
	Aug.	4.91	38.40	43.32
	Sept.	4.47	44.31	48.78
	Oct.	3.89	47.47	51.36
	Nov.	3.44	48.20	51.64
1909	Dec.	3.37	47.04	50.41
	Jan.	3.73	44.80	48.53
	Feb.	2.87	45.52	48.39
	Mar.	2.82	47.16	49.98
	Apr.	2.22	45.06	47.29
	May	2.15	42.95	45.10
	Jun.	1.85	43.18	45.03
	Jul.	2.69	49.02	51.71
	Aug.	4.95	51.84	56.79
	Sept.	5.35	50.94	56.29
	Oct.	4.64	50.47	55.11
	Nov.	3.76	48.54	52.30
1910	Dec.	6.46	46.38	52.85
	Jan.	2.86	43.57	46.43
	Feb.	2.66	43.97	46.63
	Mar.	3.75	45.00	48.74

Table 2: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
1911	Apr.	3.65	44.53	48.18
	May	4.08	43.35	47.44
	Jun.	4.67	44.74	49.41
	Jul.	5.13	46.05	51.18
	Aug.	6.44	49.75	56.18
	Sept.	8.70	49.51	58.20
	Oct.	7.20	50.77	57.97
	Nov.	6.95	46.45	53.40
	Dec.	7.04	42.62	49.65
	Jan.	6.80	42.40	49.21
	Feb.	8.37	43.01	51.38
	Mar.	8.12	45.56	53.68
1912	Apr.	8.16	43.86	52.02
	May	7.16	44.98	52.14
	Jun.	7.35	46.55	53.91
	Jul.	9.54	51.39	60.93
	Aug.	13.10	57.05	70.15
	Sept.	17.26	58.81	76.07
	Oct.	18.79	58.76	77.55
	Nov.	14.18	54.35	68.53
	Dec.	13.98	51.84	65.82
	Jan.	13.73	52.25	65.98
	Feb.	14.13	52.89	67.01
	Mar.	12.81	52.00	64.81
1913	Apr.	13.58	51.42	65.00
	May	11.69	49.79	61.48
	Jun.	8.47	50.38	58.85
	Jul.	7.17	56.98	64.15
	Aug.	8.31	65.77	74.07
	Sept.	6.98	76.24	83.22
	Oct.	7.10	83.07	90.18
	Nov.	6.24	86.08	92.32
	Dec.	5.34	88.29	93.63
	Jan.	6.05	115.42	121.48
	Feb.	6.85	116.85	123.71
	Mar.	6.50	118.54	125.03
	Apr.	8.30	111.86	120.16
	May	7.05	102.13	109.18
	Jun.	4.29	99.15	103.44
	Jul.	5.24	97.97	103.21

Table 2: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>
	Aug.	5.59	102.09	107.69
	Sept.	5.69	105.26	110.95
	Oct.	5.67	109.09	114.76
	Nov.	5.41	111.75	117.17
	Dec.	6.98	113.99	120.97

Note: the slashes mean not available.

Source: *National Bank 1884-1934*, Institute for Manufacturing Banknotes and Coins Topcider, Belgrade, 1935.

**Table 3: Currency Reserves: gold, silver and foreign exchange,
1884-1913
Serbia**

(monthly average values, in million dinar)

<i>Year</i>	<i>Month</i>	<i>Gold</i>	<i>Silver</i>	<i>Gold plus silver</i>	<i>Foreign exchange reserves</i>	<i>Total</i>
		<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>
1884	Jan.	0.87	0.00	0.88	0.36	1.23
	Feb.	/	/	1.59	0.83	2.42
	Mar.	/	/	1.15	0.68	1.83
	Apr.	/	/	0.78	0.56	1.35
	May	/	/	0.64	0.22	0.86
	Jun.	/	/	0.73	0.19	0.92
	Jul.	/	/	0.71	0.12	0.83
	Aug.	/	/	0.69	0.17	0.86
	Sept.	/	/	0.38	0.17	0.55
	Oct.	/	/	0.95	0.10	1.05
	Nov.	/	/	1.00	0.07	1.08
	Dec.	/	/	1.59	0.23	1.82
1885	Jan.	/	/	1.60	0.20	1.80
	Feb.	1.19	0.48	1.68	0.54	2.22
	Mar.	1.06	0.44	1.50	0.48	1.98
	Apr.	0.81	0.61	1.42	0.45	1.87
	May	0.94	0.68	1.62	0.33	1.95
	Jun.	1.13	0.71	1.84	0.24	2.08
	Jul.	1.21	0.75	1.96	0.33	2.29
	Aug.	1.30	0.72	2.02	0.26	2.28
	Sept.	1.30	0.58	1.89	0.21	2.10
	Oct.	1.22	0.68	1.89	0.37	2.26
	Nov.	1.37	0.85	2.22	0.28	2.50
	Dec.	1.53	1.03	2.56	0.23	2.79
1886	Jan.	1.24	1.45	2.69	0.36	3.06
	Feb.	1.20	1.70	2.90	0.32	3.23
	Mar.	1.10	1.81	2.91	0.19	3.10
	Apr.	1.07	1.95	3.02	0.07	3.09
	May	0.94	2.03	2.97	0.11	3.08
	Jun.	0.95	2.17	3.12	0.11	3.24
	Jul.	0.73	2.34	3.07	0.02	3.10
	Aug.	0.70	2.52	3.22	0.02	3.24
	Sept.	0.73	2.60	3.33	0.17	3.49
	Oct.	1.37	2.59	3.97	0.41	4.37

Table 3: Serbia, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)	(5)
1887	Nov.	1.48	2.63	4.11	0.35	4.47
	Dec.	1.78	2.74	4.52	0.19	4.71
	Jan.	1.82	2.78	4.60	0.30	4.90
	Feb.	1.76	2.82	4.57	0.26	4.83
	Mar.	1.40	3.02	4.42	0.17	4.59
	Apr.	1.50	3.22	4.72	0.14	4.87
	May	1.53	3.29	4.83	0.19	5.01
	Jun.	1.40	3.47	4.87	0.15	5.02
	Jul.	1.37	3.55	4.91	0.35	5.26
	Aug.	1.20	3.69	4.90	0.24	5.13
	Sept.	1.61	3.83	5.44	0.33	5.77
	Oct.	2.68	3.85	6.52	0.40	6.92
1888	Nov.	2.98	3.89	6.87	0.57	7.44
	Dec.	3.29	3.94	7.23	0.54	7.77
	Jan.	3.41	4.03	7.44	0.51	7.95
	Feb.	3.16	4.05	7.21	0.41	7.62
	Mar.	2.59	4.11	6.70	0.34	7.05
	Apr.	2.60	4.16	6.76	0.28	7.04
	May	2.47	4.19	6.66	0.21	6.87
	Jun.	2.12	4.27	6.39	0.30	6.69
	Jul.	1.99	4.34	6.33	0.45	6.78
	Aug.	1.85	4.38	6.24	0.44	6.68
	Sept.	2.48	4.40	6.88	0.40	7.28
	Oct.	3.43	4.43	7.85	0.47	8.32
1889	Nov.	4.06	4.42	8.48	0.65	9.13
	Dec.	4.92	4.43	9.35	0.92	10.26
	Jan.	5.80	4.43	10.23	0.78	11.01
	Feb.	5.98	4.44	10.42	0.78	11.20
	Mar.	3.74	4.46	8.20	0.70	8.90
	Apr.	3.71	4.46	8.16	0.22	8.39
	May	3.08	4.53	7.61	0.40	8.01
	Jun.	3.04	4.53	7.56	0.65	8.21
	Jul.	2.75	4.53	7.28	0.54	7.82
	Aug.	2.87	4.55	7.42	0.62	8.04
	Sept.	4.58	4.57	9.14	1.65	10.80
	Oct.	7.39	4.53	11.91	1.38	13.30
1890	Nov.	8.36	4.49	12.85	0.90	13.75
	Dec.	8.29	4.47	12.76	0.56	13.32
	Jan.	7.92	4.45	12.37	0.36	12.72
	Feb.	7.78	4.43	12.21	0.31	12.52

Table 3: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>
1891	Mar.	6.90	4.43	11.33	0.59	11.91
	Apr.	5.61	4.43	10.04	0.51	10.55
	May	5.49	4.45	9.94	0.32	10.26
	Jun.	5.25	4.46	9.70	0.28	9.99
	Jul.	5.22	4.46	9.67	0.31	9.98
	Aug.	5.22	4.45	9.67	0.53	10.20
	Sept.	7.82	4.34	12.16	0.88	13.03
	Oct.	9.03	4.29	13.31	0.78	14.10
	Nov.	9.47	4.21	13.68	0.77	14.45
	Dec.	9.90	4.23	14.13	0.47	14.60
	Jan.	8.69	4.19	12.88	0.22	13.10
	Feb.	8.19	4.18	12.37	0.32	12.69
1892	Mar.	7.85	4.18	12.04	0.32	12.36
	Apr.	6.82	4.20	11.01	0.33	11.34
	May	6.61	4.22	10.84	0.10	10.94
	Jun.	6.26	4.25	10.51	0.23	10.74
	Jul.	6.71	4.26	10.96	0.25	11.22
	Aug.	7.28	4.26	11.54	0.27	11.82
	Sept.	7.76	4.24	12.00	0.13	12.13
	Oct.	8.55	4.19	12.74	0.33	13.07
	Nov.	9.09	4.15	13.24	0.64	13.89
	Dec.	9.42	4.14	13.56	0.38	13.94
	Jan.	9.19	4.11	13.30	0.16	13.46
	Feb.	9.99	4.11	14.09	0.76	14.86
1893	Mar.	9.71	4.09	13.80	0.81	14.61
	Apr.	8.96	4.10	13.06	0.84	13.90
	May	8.56	4.12	12.68	0.77	13.45
	Jun.	8.67	4.13	12.79	0.56	13.35
	Jul.	8.54	4.14	12.68	0.34	13.02
	Aug.	8.10	4.14	12.24	0.41	12.65
	Sept.	8.76	4.11	12.88	0.74	13.62
	Oct.	8.73	4.06	12.79	0.89	13.68
	Nov.	9.09	4.04	13.13	0.53	13.67
	Dec.	9.17	4.02	13.18	0.64	13.83
	Jan.	9.02	4.01	13.03	0.46	13.49
	Feb.	8.55	4.01	12.56	0.51	13.07
	Mar.	7.66	4.02	11.67	0.46	12.13
	Apr.	6.33	4.05	10.38	0.55	10.93
	May	5.92	4.09	10.01	0.62	10.63
	Jun.	5.88	4.14	10.02	0.54	10.56

Table 3: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>
1894	Jul.	5.68	4.18	9.87	0.31	10.18
	Aug.	5.75	4.23	9.98	0.33	10.31
	Sept.	6.01	4.21	10.22	0.72	10.94
	Oct.	6.41	4.23	10.64	0.78	11.42
	Nov.	6.54	4.24	10.79	0.79	11.58
	Dec.	6.51	4.27	10.79	0.87	11.66
	Jan.	6.44	4.29	10.73	0.64	11.37
	Feb.	6.52	4.31	10.83	0.36	11.19
	Mar.	5.93	4.37	10.31	0.65	10.96
	Apr.	5.40	4.44	9.84	0.71	10.55
	May	5.22	4.52	9.74	0.79	10.53
	Jun.	5.38	4.60	9.98	0.51	10.50
1895	Jul.	5.29	4.65	9.94	0.81	10.74
	Aug.	5.56	4.69	10.25	0.69	10.94
	Sept.	5.95	4.68	10.63	0.92	11.55
	Oct.	6.06	4.68	10.74	1.44	12.18
	Nov.	6.15	4.68	10.83	1.28	12.12
	Dec.	6.43	4.67	11.10	0.84	11.94
	Jan.	6.24	4.67	10.91	0.97	11.88
	Feb.	6.00	4.68	10.68	0.85	11.53
	Mar.	5.56	4.71	10.26	0.90	11.17
	Apr.	5.42	4.77	10.19	0.62	10.81
	May	4.96	4.83	9.79	1.07	10.86
	Jun.	5.80	4.90	10.70	0.49	11.19
1896	Jul.	5.48	4.93	10.42	0.64	11.06
	Aug.	5.38	4.98	10.36	0.88	11.24
	Sept.	5.92	4.96	10.88	1.07	11.95
	Oct.	6.02	4.95	10.97	1.16	12.14
	Nov.	6.75	4.95	11.70	0.88	12.58
	Dec.	7.27	4.93	12.20	0.94	13.14
	Jan.	7.16	4.91	12.07	0.74	12.80
	Feb.	7.85	4.91	12.76	0.28	13.04
	Mar.	7.65	4.89	12.54	0.80	13.34
	Apr.	7.05	4.84	11.89	0.78	12.67
	May	6.90	4.89	11.79	0.72	12.51
	Jun.	6.85	4.90	11.75	0.92	12.67
	Jul.	6.77	4.91	11.68	0.74	12.42
	Aug.	6.79	4.90	11.68	1.04	12.73
	Sept.	6.90	4.86	11.76	1.03	12.80
	Oct.	6.41	4.82	11.22	2.19	13.42

Table 3: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>
1897	Nov.	6.81	5.20	12.01	1.59	13.60
	Dec.	5.92	6.72	12.64	1.12	13.76
	Jan.	5.98	7.34	13.32	0.92	14.23
	Feb.	4.95	8.63	13.57	1.42	14.99
	Mar.	4.20	8.65	12.84	1.24	14.09
	Apr.	4.26	8.70	12.97	0.88	13.84
	May	3.98	9.11	13.09	0.75	13.84
	Jun.	3.85	9.32	13.17	0.93	14.09
	Jul.	3.85	9.44	13.29	0.96	14.25
	Aug.	4.27	9.47	13.74	1.24	14.98
	Sept.	4.33	9.41	13.74	1.34	15.08
	Oct.	4.59	9.34	13.93	1.67	15.60
1898	Nov.	5.19	9.32	14.51	1.33	15.84
	Dec.	5.13	9.27	14.40	1.37	15.78
	Jan.	4.68	9.23	13.91	0.85	14.76
	Feb.	6.10	9.22	15.33	1.08	16.40
	Mar.	5.87	9.24	15.10	1.11	16.21
	Apr.	5.23	9.27	14.50	0.77	15.27
	May	5.21	9.29	14.51	0.81	15.31
	Jun.	5.31	9.33	14.64	0.75	15.39
	Jul.	5.46	9.37	14.83	1.00	15.83
	Aug.	5.61	9.32	14.93	1.52	16.45
	Sept.	6.03	9.17	15.20	1.84	17.04
	Oct.	6.75	9.09	15.85	1.84	17.69
1899	Nov.	7.22	9.06	16.28	1.47	17.76
	Dec.	6.84	9.03	15.87	1.62	17.49
	Jan.	7.17	8.98	16.16	1.53	17.68
	Feb.	6.94	8.97	15.91	1.01	16.92
	Mar.	5.50	8.99	14.48	1.17	15.66
	Apr.	4.93	9.00	13.93	1.66	15.60
	May	4.64	9.08	13.72	1.35	15.07
	Jun.	5.37	9.09	14.47	1.07	15.54
	Jul.	5.76	9.14	14.90	1.05	15.95
	Aug.	5.35	9.18	14.53	1.40	15.93
	Sept.	5.32	9.11	14.44	2.72	17.16
	Oct.	6.75	9.04	15.79	1.99	17.78
1900	Nov.	7.03	9.03	16.06	2.27	18.34
	Dec.	7.60	9.00	16.60	1.94	18.54
	Jan.	6.81	8.97	15.77	0.87	16.65
	Feb.	6.55	9.03	15.58	0.86	16.44

Table 3: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>
1901	Mar.	6.62	9.08	15.70	1.09	16.79
	Apr.	5.98	9.15	15.13	0.95	16.08
	May	5.35	9.24	14.58	1.07	15.66
	Jun.	5.31	9.30	14.60	0.86	15.46
	Jul.	5.52	9.33	14.85	2.07	16.92
	Aug.	5.60	9.28	14.88	2.44	17.33
	Sept.	5.46	9.16	14.61	2.24	16.86
	Oct.	6.02	9.11	15.13	1.71	16.84
	Nov.	6.76	9.07	15.83	1.25	17.08
	Dec.	6.51	9.00	15.51	1.69	17.20
	Jan.	6.62	8.97	15.59	1.54	17.13
	Feb.	6.49	9.01	15.50	1.82	17.32
1902	Mar.	5.67	9.03	14.70	1.90	16.60
	Apr.	5.53	9.10	14.63	1.93	16.57
	May	5.41	9.13	14.54	1.86	16.40
	Jun.	5.93	9.20	15.13	1.67	16.80
	Jul.	5.90	9.26	15.16	1.45	16.61
	Aug.	6.25	9.22	15.47	1.70	17.17
	Sept.	6.61	9.04	15.65	1.68	17.33
	Oct.	5.84	8.93	14.77	3.61	18.38
	Nov.	7.60	8.86	16.45	2.23	18.68
	Dec.	10.04	8.82	18.86	3.71	22.56
	Jan.	10.97	8.80	19.77	1.70	21.47
	Feb.	10.36	8.83	19.20	1.58	20.78
1903	Mar.	10.31	8.86	19.16	1.84	21.01
	Apr.	13.53	8.92	22.45	1.96	24.41
	May	13.59	9.01	22.60	1.74	24.34
	Jun.	18.31	9.06	27.37	1.16	28.53
	Jul.	18.41	9.06	27.47	1.51	28.98
	Aug.	16.73	9.01	25.74	1.25	26.99
	Sept.	15.90	8.87	24.77	3.05	27.81
	Oct.	16.53	8.76	25.29	3.19	28.48
	Nov.	16.47	8.72	25.19	1.41	26.60
	Dec.	15.02	8.68	23.70	2.05	25.76
	Jan.	15.85	8.67	24.52	1.79	26.31
	Feb.	16.11	8.69	24.80	1.58	26.37
	Mar.	15.61	8.72	24.33	1.37	25.70
	Apr.	12.92	8.77	21.68	1.18	22.86
	May	12.71	8.81	21.51	1.77	23.28
	Jun.	12.50	8.83	21.33	2.21	23.54

Table 3: Serbia, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)	(5)
1904	Jul.	11.82	6.65	18.47	4.31	22.78
	Aug.	11.22	5.61	16.83	6.13	22.96
	Sept.	11.77	6.44	18.21	5.92	24.13
	Oct.	11.98	7.79	19.77	4.20	23.96
	Nov.	12.24	7.79	20.02	4.04	24.06
	Dec.	12.09	7.31	19.40	4.57	23.97
	Jan.	11.63	6.78	18.41	5.23	23.65
	Feb.	11.76	6.35	18.11	5.05	23.16
	Mar.	11.42	7.69	19.11	3.95	23.05
	Apr.	11.09	8.74	19.83	2.30	22.12
	May	10.55	8.56	19.11	1.99	21.10
	Jun.	10.04	8.70	18.75	1.94	20.69
1905	Jul.	9.59	8.79	18.38	1.99	20.37
	Aug.	9.18	8.85	18.04	2.45	20.49
	Sept.	9.39	8.83	18.22	3.92	22.15
	Oct.	9.88	8.81	18.68	4.35	23.04
	Nov.	11.06	8.68	19.74	4.48	24.22
	Dec.	11.29	8.69	19.98	4.87	24.85
	Jan.	12.41	8.67	21.08	4.88	25.96
	Feb.	12.99	8.67	21.66	4.30	25.96
	Mar.	13.56	8.74	22.29	4.10	26.39
	Apr.	14.11	8.79	22.90	3.63	26.53
	May	13.69	8.86	22.54	3.58	26.13
	Jun.	13.91	8.88	22.79	3.60	26.39
1906	Jul.	13.47	8.91	22.38	3.24	25.63
	Aug.	12.64	8.84	21.48	2.84	24.32
	Sept.	11.74	8.74	20.47	3.85	24.33
	Oct.	10.85	8.20	19.06	4.63	23.69
	Nov.	11.14	8.15	19.29	4.21	23.50
	Dec.	11.11	8.14	19.25	4.33	23.58
	Jan.	11.10	8.25	19.35	3.01	22.36
	Feb.	11.99	8.26	20.26	3.59	23.84
	Mar.	12.77	8.27	21.04	4.20	25.24
	Apr.	13.25	8.31	21.56	3.91	25.46
	May	13.51	8.36	21.87	3.66	25.52
	Jun.	13.11	8.41	21.52	3.46	24.98
	Jul.	13.55	8.53	22.07	3.40	25.48
	Aug.	14.01	8.48	22.49	4.48	26.97
	Sept.	13.98	7.99	21.97	4.78	26.75
	Oct.	14.98	7.44	22.42	5.44	27.86

Table 3: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>
1907	Nov.	15.09	7.35	22.44	5.17	27.61
	Dec.	14.30	7.31	21.61	4.00	25.61
	Jan.	14.10	7.43	21.53	3.38	24.92
	Feb.	12.93	7.45	20.38	2.90	23.28
	Mar.	11.81	7.48	19.29	2.42	21.71
	Apr.	10.27	7.57	17.84	2.42	20.26
	May	9.04	7.65	16.69	2.15	18.84
	Jun.	8.91	7.70	16.61	3.39	20.00
	Jul.	8.54	7.65	16.19	3.68	19.87
	Aug.	9.22	7.55	16.76	5.68	22.45
	Sept.	11.59	7.38	18.97	6.54	25.50
	Oct.	14.61	7.15	21.77	7.59	29.35
1908	Nov.	16.91	7.03	23.94	6.21	30.15
	Dec.	17.80	6.95	24.75	5.57	30.32
	Jan.	18.07	6.92	24.98	4.50	29.48
	Feb.	16.68	6.90	23.58	8.77	32.36
	Mar.	15.83	6.95	22.78	8.21	30.99
	Apr.	15.24	7.03	22.27	7.19	29.46
	May	13.42	7.13	20.56	5.98	26.54
	Jun.	12.53	7.16	19.69	5.33	25.02
	Jul.	12.68	7.12	19.79	5.40	25.20
	Aug.	12.94	6.92	19.87	5.95	25.82
	Sept.	14.18	6.77	20.95	9.43	30.37
	Oct.	14.33	6.68	21.01	8.98	29.98
1909	Nov.	14.37	6.58	20.95	8.15	29.10
	Dec.	13.41	6.65	20.06	12.31	32.36
	Jan.	13.38	6.64	20.01	9.23	29.25
	Feb.	13.82	6.76	20.59	7.94	28.52
	Mar.	19.85	6.85	26.70	5.77	32.47
	Apr.	19.00	6.92	25.92	9.06	34.98
	May	24.12	6.97	31.09	8.53	39.62
	Jun.	23.08	7.11	30.19	7.36	37.55
	Jul.	21.98	7.11	29.09	7.15	36.24
	Aug.	21.65	7.08	28.73	6.38	35.10
	Sept.	22.13	6.93	29.06	7.20	36.25
	Oct.	23.61	6.78	30.39	8.98	39.37
1910	Nov.	26.40	6.72	33.12	8.04	41.16
	Dec.	24.73	6.70	31.43	6.29	37.72
	Jan.	24.39	6.73	31.12	5.84	36.96
	Feb.	24.44	6.92	31.36	5.91	37.27

Table 3: Serbia, continued

<i>Year</i>	<i>Month</i>	<i>(1)</i>	<i>(2)</i>	<i>(3)</i>	<i>(4)</i>	<i>(5)</i>
1911	Mar.	25.17	6.99	32.16	8.32	40.49
	Apr.	26.94	7.14	34.08	7.35	41.43
	May	27.75	7.25	35.01	4.56	39.57
	Jun.	27.59	7.30	34.88	3.27	38.15
	Jul.	28.17	7.24	35.40	3.07	38.47
	Aug.	28.45	7.12	35.57	4.92	40.49
	Sept.	28.81	6.95	35.76	8.84	44.59
	Oct.	29.86	6.81	36.67	11.58	48.26
	Nov.	30.28	6.66	36.94	12.77	49.71
	Dec.	31.74	6.60	38.34	10.72	49.06
	Jan.	33.66	6.52	40.18	10.60	50.78
	Feb.	34.86	6.58	41.44	10.42	51.86
1912	Mar.	39.96	6.69	46.65	9.63	56.28
	Apr.	41.35	6.80	48.15	6.02	54.17
	May	41.32	6.91	48.24	4.87	53.11
	Jun.	41.13	7.01	48.14	3.07	51.21
	Jul.	40.58	6.94	47.51	2.30	49.82
	Aug.	41.65	6.78	48.43	3.65	52.08
	Sept.	42.43	6.54	48.96	6.50	55.46
	Oct.	43.68	4.64	48.32	22.01	70.33
	Nov.	48.88	4.13	53.01	26.74	79.75
	Dec.	49.97	3.72	53.69	26.03	79.72
	Jan.	50.44	3.54	53.97	26.09	80.06
	Feb.	53.88	2.54	56.42	25.86	82.28
1913	Mar.	53.72	1.19	54.91	24.67	79.58
	Apr.	53.27	0.15	53.41	20.38	73.79
	May	54.81	1.15	55.96	22.42	78.38
	Jun.	65.19	0.32	65.51	20.68	86.20
	Jul.	67.69	1.22	68.90	19.06	87.97
	Aug.	68.76	1.90	70.66	16.27	86.93
	Sept.	67.69	1.78	69.47	14.33	83.81
	Oct.	71.23	1.87	73.10	13.05	86.15
	Nov.	72.20	2.95	75.16	6.30	81.46
	Dec.	62.30	3.46	65.77	3.70	69.46
	Jan.	57.84	4.27	62.11	3.64	65.75
	Feb.	53.72	1.19	54.91	24.67	79.58
1913	Mar.	53.27	0.15	53.41	20.38	73.79
	Apr.	54.81	1.15	55.96	22.42	78.38
	May	65.19	0.32	65.51	20.68	86.20
	Jun.	67.69	1.22	68.90	19.06	87.97

Table 3: Serbia, continued

<i>Year</i>	<i>Month</i>	(1)	(2)	(3)	(4)	(5)
	Jul.	68.76	1.90	70.66	16.27	86.93
	Aug.	67.69	1.78	69.47	14.33	83.81
	Sept.	71.23	1.87	73.10	13.05	86.15
	Oct.	72.20	2.95	75.16	6.30	81.46
	Nov.	62.30	3.46	65.77	3.70	69.46
	Dec.	57.84	4.27	62.11	3.64	65.75

Note: the slashes mean not available

Source: *National Bank 1884-1934*, Institute for Manufacturing Banknotes and Coins Topcider, Belgrade, 1935.

Table 4: The Discount Rate, 1884-1914
Serbia (annual level)

Year	Month	Discount (%)*		Discount (%)**	
		Silver	Gold	Silver	Gold
1884	16. 10	5.50	5.50	5.50	5.50
		7.00	7.00	7.00	7.00
		6.00	6.00	6.00	6.00
1885	12. 2	5.00	5.00	5.00	5.00
	18. 4	6.00	6.00	6.00	6.00
	19. 8	7.00	7.00	7.00	7.00
	7. 9	8.00	8.00	8.00	8.00
		8.00		7.50	7.50
1886	24. 2	6.50	8.00	6.00	7.50
	1. 11			5.50	7.00
1887		6.50	8.00	5.50	7.00
1888	1. 4	6.50	8.00	5.50	7.00
		6.00		5.00	
1889	20. 11	6.00	8.00	5.00	7.00
1890		6.00	8.00	5.00	7.00
1891		6. 3	5.50	7.50	4.50
1892	9. 3	5.50	7.50	4.50	6.50
	18. 3				7.50
	31. 8	6.50	8.50	5.50	8.50
1893		6.50	8.50	5.50	8.50
	11. 1	6.00	7.50	5.00	7.50

Table 4: Serbia, continued

1895		6.00	7.50	5.00	7.50
1896		6.00	7.50	5.00	7.50
1897		6.00	7.50	5.00	7.50
1898		6.00	7.50	5.00	7.50
1899		6.00	7.50	5.00	7.50
1900		6.00	7.50	5.00	7.50
1901		6.00	7.50	5.00	7.50
1902		6.00	7.50	5.00	7.50
1903		6.00	7.50	5.00	7.50
1904		6.00	7.50	5.00	7.50
1905	2. 3	6.00	7.50	5.00	7.50
			6.00		5.00
1906		6.00	6.00	5.00	5.00
1907		6.00	6.00	5.00	5.00
1908	24. 9	6.00	6.00	5.00	5.00
			8.00		8.00
1909		6.00	8.00	5.00	8.00
1910	24. 6	6.00	8.00	5.00	8.00
			7.00		6.00
1911	5. 8	6.00	7.00	5.00	6.00
			6.00		5.00
1912	27. 6	6.00	6.00	5.00	5.00
			7.00		6.00
1913		6.00	7.00	5.00	6.00
1914		6.00	7.00	5.00	6.00

Note: (*) general, (**) for financial institutions

Source: *National Bank 1884-1934*, Institute for Manufacturing Banknotes and Coins Topcider, Belgrade, 1935.

BANK OF GREECE WORKING PAPERS

76. Kossev, K. D., “The Banking Sector and the Great Depression in Bulgaria, 1924-1938: Interlocking and Financial Sector Profitability”, June 2008.
77. Buyst, E. and I. Maes, “The Regulation and Supervision of the Belgian Financial System (1830-2005)”, June 2008.
78. Barisitz, S., “Banking Transformation (1989-2006) in Central and Eastern Europe – with Special Reference to Balkans”, June 2008.
79. Lazarević, Ž., “Banking Performance in South-Eastern Europe during the Interwar Period”, July 2008.
80. Apostolides, A., “How Similar to South-Eastern Europe were the Islands of Cyprus and Malta in terms of Agricultural Output and Credit? Evidence during the Interwar Period”, July 2008.
81. Avramov, R. and D. Gnjatović, “Stabilization Policies in Bulgaria and Yugoslavia during Communism’s Terminal Years: 1980s Economic Visions in Retrospect”, July 2008.
82. Nenovsky, N., M. Ivanov and G. Mihaylova, “The Evolution of Bulgarian Banks’ Efficiency during the Twenties: A DEA Approach”, July 2008.
83. Görmez, Y., “Banking in Turkey: History and Evolution ”, July 2008.
84. Ceca, K., K. Rexha and E. Orhan, “Banking and Finance in South-Eastern Europe: The Albanian Case”, July 2008.
85. Bordo, M., “Growing up to Financial Stability”, July 2008.
86. Lazaretou, S., “Banking and Central Banking in Pre-WWII Greece: Money and Currency Developments”, July 2008.
87. Sojic, M. and L. Djurdjevic, “Monetary Policy Objectives and Instruments Used by the Privileged National Bank of the Kingdom of Serbia (1884-1914)”, July 2008.
88. Stoenescu, G.V., E. Blejan, B. Costache and A. I. Aloman, “The National Bank of Romania and its Issue of Banknotes between Necessity and Possibility, 1880-1914”, July 2008.
89. Masciandaro, D. and M. Quintyn, “Institutions Matter: Financial Supervision Architecture, Central Bank and Path Dependence. General Trends and the South Eastern European Countries”, September 2008.
90. Tavlas, G., H. Dellas and A. Stockman, “The Classification and Performance of Alternative Exchange-Rate Systems”, September 2008.

91. Milionis, A. E. and E. Papanagiotou, “A Note on the Use of Moving Average Trading Rules to Test for Weak Form Efficiency in Capital Markets”, October 2008.
92. Athanasoglou, P. P., E. A. Georgiou and C. C. Staikouras, “Assessing Output and Productivity Growth in the Banking Industry”, November 2008.
93. Brissimis, S. N. and M. D. Delis, “Bank-Level Estimates of Market Power”, January 2009.