



**“WE CAN’T PAY”:
HOW ITALY CANCELLED WAR DEBTS AFTER
LAUSANNE**

Marianna Astore Michele Fratianni

Working paper no. 129

November 2016

“We can’t pay”: How Italy cancelled war debts after Lausanne

Marianna Astore* and Michele Fratianni**

Abstract

The paper deals with Italian inter-war debts, against the background of the very contentious international issue of war reparations that many Allied nations wanted to link to war debt repayments. While the bulk of the literature looks at the Lausanne conference of 1932 as an act of forgiveness of war debts, we show that Italy, having first achieved an extremely large haircut by restructuring US and UK debts in 1925-26, defaulted after Lausanne. We also present a new times series on Italian foreign debt from 1925 to 1934, a series that is consistent with the unfolding of relevant historical events.

Key words: Italy, foreign debt, debt restructuring, default.

JEL Classification: H63, N44, N94

* Università Politecnica delle Marche, email: m.astore@univpm.it;

** Indiana University, Università Politecnica delle Marche and MoFiR, email:fratiann@indiana.edu. We thank Angelo Pace for the time series of his and Maura Francese’s foreign debt series and his willingness to discuss the issue and difficulties of constructing the series; Giuseppe Della Torre for suggestions on the likely sources of foreign debt; Paolo Evangelisti, archivist with the *Camera dei Deputati*, for directing us to relevant documents on the *Cassa Autonoma di Ammortamento dei Debiti di Guerra*; and Francesco Chiapparino for raising relevant questions on our work.

I.INTRODUCTION

This paper revisits the history and the accounting of Italian war debts in the inter-war period against the rancorous international context that made it difficult to resolve simultaneously reparations imposed on Germany at Versailles and inter-Allied war debts. Italy, part of the Alliance, was burdened by a large foreign debt, an experience shared by other European countries such as France, Germany, and the United Kingdom. A reduction of Italian public debt came in the mid-twenties as a result of two restructuring agreements, one with the United States in November of 1925 and the other with the United Kingdom in January of 1926. These two agreements wiped more than 80 per cent of Italian war debts (Toniolo 1980:105-107; Salvemini and Zamagni S&Z for short, 1993:153). According to S&Z (p. 152) and Francese and Pace, (F&P for short, 2008:17), the remaining portion of war debts was eliminated at the Lausanne Agreement of 1932. The majority of authors, with the significant exception of Migone (1980:272), appears to agree that Lausanne represents the final act of both war reparations and war debts.

The Italian literature on war debts can be divided in two groups. The first consists of works whose objective is to reconstruct total public debt and, in the process, they deal also with its foreign component, mostly war debts. In this group, we mention: Ministero del Tesoro (1988:89) that presents data on foreign debt as a ratio of GDP and concludes that this debt was eliminated in 1925; Spinelli (1989) who, in his treatment of domestic debt for the years 1861-1985, has an appendix on foreign debt for the years 1917-1960; and S&Z (1993) and F&P (2008) who offer an extensive discussion on foreign debt; on the last two papers we will return below.¹ The second group includes authors whose main objective is to discuss Fascist economics and, in the process, touch upon the issue of war debts. For example, De Felice (1968:225-226), in his massive historical work on Mussolini, dedicates two pages on Italian foreign debt restructuring; Romano, in his biography of Volpi, has an entire chapter on war debts (1997: 131-141); Migone (1980: 99-151) writes a long

¹ S&Z present a time series on foreign debt, whereas F&P do not publish separate series on domestic and foreign debt. We thank for giving us the series on foreign debt.

chapter on foreign debt as part of his treatise on diplomatic and economic relationships between the United States and Italy during the fascist period; and Asso (1993) reconstructs the history of Italian foreign borrowing and lending from 1919 to 1931.

Two main conclusions emerge from our work. The first is that the bulk of the literature overplays the success assigned to the Lausanne conference. This conference was more a forum where participating countries argued the case for debt cancellation than an act of forgiveness of war debts by creditor countries. The United States, the major creditor country, was not present at Lausanne, reflecting in part the American public's mood of opposing any form of international cooperation. An isolationist climate permeated the country; and, even if after Lausanne several unsuccessful attempts were made by the debtor countries to renegotiate the terms of their debts. The Johnson Act of April 1934, which prohibited access to US financial markets to all foreign governments that had defaulted on debts owed to the US government, made it patently clear that the United States did not consider debt forgiveness as an option. As a result, the United Kingdom decided not to make a token payment on its June 1934 deadline; and all European debtors, including Italy, followed suit.²

The second conclusion concerns the revision of the foreign debt series and the timing of Italian debt cancellation. We compare our foreign debt series with two others, one by S&Z and the other by F&P. S&Z adopt a narrow definition of the public sector, which excludes war debts that were transferred to *Cassa autonoma di ammortamento per i debiti di guerra* (briefly, *Cassa*) in 1926. The *Cassa* was a sinking fund created by Minister Volpi with the purpose to use the proceeds from war reparations to repay war debts. F&P, instead, employ an expansive definition of the public sector that instead includes the value of war debts transferred to *Cassa*. Our definition of the public sector is consistent with that of F&P, except that we exclude the liabilities of lower-level governments. Our foreign debt series, however, differs significantly from F&P's in two ways. First,

² Finland, which successfully renegotiated the terms of the war debts and met payments in full, was the only country that honored its war debt obligations to the United States.

our values are much lower than F&P's starting in 1926; the two series begin to converge only in 1932. According to F&P, Lausanne resents the cancellation date of US and UK war debts. For us, instead, US debt cancellation occurs in June of 1934, the date of the formal default by Italy. For the UK debt, the story is more complex because there was no formal default but rather a *de facto* debt suspension. The UK government, for political reasons, did not agree on "debt forgiveness" at Lausanne, but at the same time it never pushed for the resumption of full payments with its own debtors. The reason is that a resumption request by the United Kingdom would have strengthened a corresponding demand by the United States to the United Kingdom. Therefore, the Lausanne conference can be considered as the terminal date of the Italia debt vis-a-vis the United Kingdom.

The structure of the paper is as follows. Sections II discusses war reparations and war debts, the dominant issues at the Lausanne conference, and the different attitudes of the United States and the United Kingdom with respect to debt forgiveness. Section III deals with the specific treatment of Italian war debts. Section IV looks at the data and compares our reconstruction of the foreign debt time series with those by S&Z and F&P. Section V, in addition to summarizing the main results of the paper, advances a different interpretation from the literature on war debt cancellation and offers an assessment on the transparency of the official data on Italian foreign debt between the two world wars. We have also added an annotated Appendix.

II. THE ACRIMONIOUS CLIMATE OF WAR REPARATIONS AND WAR DEBTS

A distinctive difference between the two world wars is the way the victor dealt with the vanquished. After World War II, the United States launched the European Recovery Program (the Marshall Plan) aimed at rebuilding war-ravaged European countries, allies and foes alike. In contrast, the winning coalition of World War I was keen in transferring the maximum amount of resources from the vanquished to the victors. One important question in the reparation issue was how could Germany effect such payments. The academic discussion of the time distinguished between the German capacity to raise the funds to meet war reparations (the budget problem) and its ability to

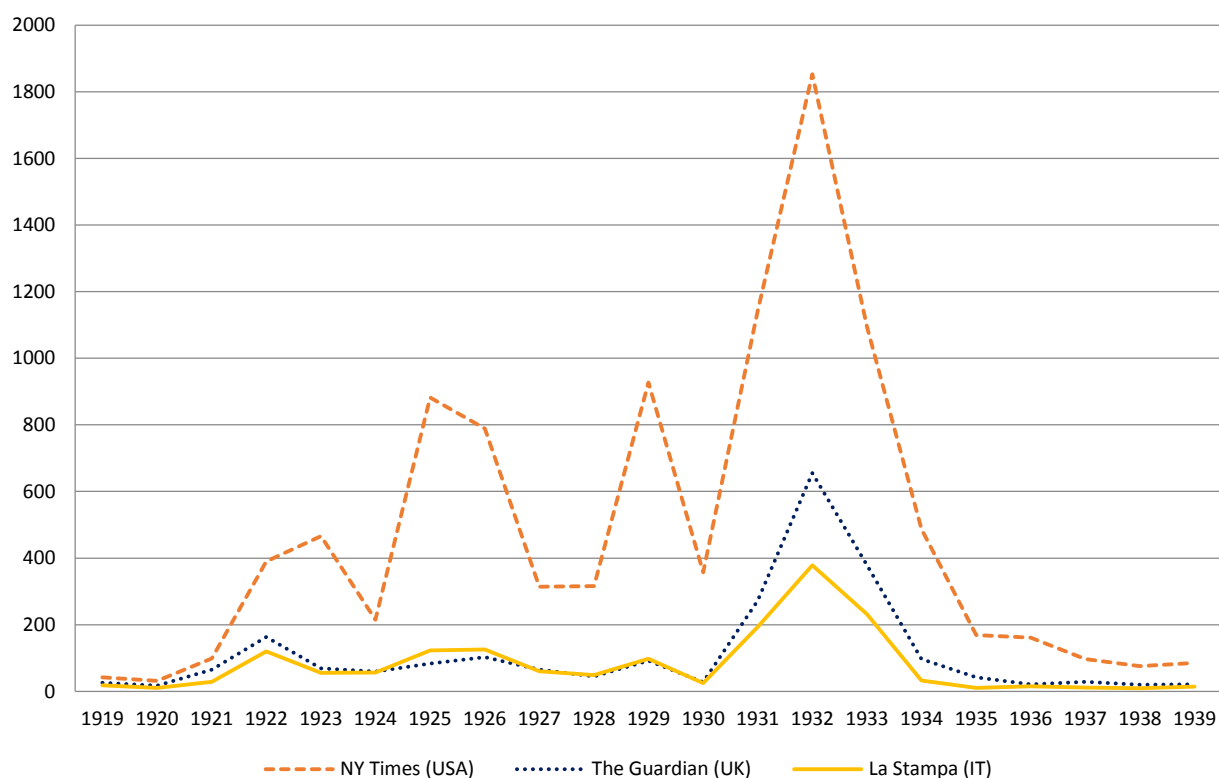
transfer such funds to the Allied powers (the transfer problem). Prominent in this debate were John Maynard Keynes and Bertil Ohlin whose positions were summarized on the pages of the *Economic Journal* (1929). Both economists agreed on Germany's capacity to raise the required funds, but differed on the transfer problem. Keynes was pessimistic on the latter: his arguments rested on the sharp deterioration of the German terms of trade to generate the necessary export surplus to fulfil the demands of war reparations, aggravated by the resistance of the Allied powers to see a flood of sensitive German goods in their domestic markets. Ohlin emphasize that a spending rise abroad and a decline in Germany might actually increase the German terms of trade (Eichengreen 1992:132-4). Ohlin's optimism was reinforced by the large capital inflows into Germany that actually exceeded the amounts of war reparation payments. According to the German balance of payments statistics, from 1924, the starting year of the Dawes plan, to 1931, the year of the Hoover moratorium, Germany received net capital inflows of 14,677 million marks against 11,134 million marks of payments on war reparations (Kent 1989:263). The bulk of these inflows came from the United States.

Beyond the sheer ability of Germany to pay, the Versailles outcome, while satisfying the justifiable sentiment of punishing the vanquished for having imposed so much suffering and damages on the victor, set the stage for a bitter and self-defeating economic climate that debilitated international cooperation and slowed economic growth; see the prescient Keynes's analysis (1919). The issue of war reparations and inter-Allied debts moved to center stage immediately after the end of hostilities and remained there for almost a decade and half. A measure of how "hot" this topic was, both in Europe and the United States, is illustrated in Figure 1, which shows the number of articles containing the phrase "war debts" published in the US *New York Times*, the UK *Guardian*, and the Italian *La Stampa* from 1919 to 1939. While the three series differ in the quantity of articles, the trend and movements are relatively similar. There is an upward trend from the early 1920s to 1932, the year of the Lausanne conference which is considered a turning point on the settlement of war reparations and war debts. In that year, the *New York Times* published over 1800 articles, the

Guardian over 600, and *La Stampa* approximately 400. After 1932, the intensity of the issue diminished but remained significant until 1935 when it started to peter out.

Numerous international conferences and meetings were organized on war reparations: first to hear exaggerated claims of what Germany should pay; then to determine what Germany could pay that led to the creation of the Dawes Plan of 1924 and the Young Plan of 1928; and finally to a settlement, albeit ambiguous and incomplete, with the Lausanne conference of 1932 (Moulton and Pasvolsky 1932; Kent 1989).³ The ambiguity and the incompleteness of the settlement, as we will see later, stem from the explicit or implicit position of all Allied powers, but not of the major creditor country, the United States, that war reparations were linked to the settlement of war debts.

Figure 1: The war debt issue in the press: number articles on “war debts”



Sources: The *New York Times Article Archive* for the United States, the *Guardian Digital Archive* for the United Kingdom, and the *Archivio storico La Stampa* for Italy. The search was conducted using the key words “war debts.”

³ The first assessment, in 1921, set German reparations at \$53.8 billion, an amount that was reduced to \$31.4 billion a few months later and even further by the Dawes and Young Plans.

According to the Dawes Plan, Germany would have had to pay approximately 12.5 billion marks, an amount later reduced by the Young Plan. In fact, from September 1, 1924 (the start of the Dawes plan) to June 30, 1931 (the start of the Hoover moratorium), German creditors received war reparations valued at 11,159 million marks.⁴

In the bitter history of war debts and war reparations, a central point is the Hoover Moratorium, a one-year interruption on payments, officially proposed by US President Herbert Hoover on June 20, 1931. Initially, the moratorium was well received by the US public and financial markets, based on an expectation that it could boost a languishing American trade (Lippmann 1933:5). But, a few months later, in the very midst of the Great Depression, the public's mood turned sour and opposed any form of international cooperation. Symptomatic of the rising isolationist mood in the country, Representative Cross of Texas declared: "Let Europe run her own affairs" (Lippmann 1933:9). The moratorium was eventually ratified by the Congress (December 1931), but a joint Congressional resolution clearly expressed the American position against the cancellation of war debts.⁵

At the end of the moratorium, a conference was held in Lausanne from June 16 to July 9, 1932, with the goal of providing a definitive settlement on war reparations, despite widespread sentiment across governments that the critical issues were broader than reparations and consisted of inter-Allied war debts and the balance of powers between European States and the United States.

The three essential points of the final Lausanne agreement were (Carnegie Endowment for International Peace 1932:334-350): (a) a final payment by Germany of 3,000 million reichsmarks (\$714 million), to be placed in a general fund for European reconstruction; (b) the floating of 5 per cent bonds, guaranteed by the Reich, to cover this amount; and (c) the deposit of these bonds with

⁴ The data come from Molton and Pasvolsky (1932:267). Of the 11,159 million marks over the seven-year period, 7,449 were paid under the Dawes plan, 2,864 under the Young plan and 846 under the Mobilization loans.

⁵ The joint resolution reads as follows: "It is hereby expressly declared to be against the policy of Congress that any of the indebtedness of foreign countries to the United States should be in any manner canceled or reduced and nothing in this joint resolution shall be construed as indicating a contrary policy, or as implying that favorable consideration will be given at any time to a change in the policy hereby declared".

the Bank for International Settlements and their eventual sale only when Germany's economic situation made it practicable.

On the surface, the Lausanne agreement seemed to have put an end to German war reparations and inter-Allied war debts; actually it did not for three fundamental reasons. The first is that the agreement was actually never ratified (Toniolo 2005:131), leaving war reparations and war debts in a state of limbo. The second is that a side agreement among the representatives of Belgium, France, Italy, and the United Kingdom made the ratification of the Lausanne agreement conditional on a satisfactory settlement of war debts between these four countries and their creditors, essentially the United States (Carnegie Endowment for International Peace 1932:347).⁶ The third is that the United States, the major creditor country, was not present in Lausanne. In sum, the conference should be seen as a forum for debt cancellation rather than as an explicit or implicit act of forgiveness of war debts by creditor countries.

It should also be mentioned that the publication of the four-country side agreement prompted a public outcry in the United States, where it was widely interpreted as an attempt by the European debtors to create a "united front" against the American creditor. The climate of suspicion underlying Lausanne was so strong to induce President Hoover to make public a private letter in which he had said that "...the United States has not been consulted regarding any of the agreements reported by the press to have been concluded recently at Lausanne and that of course it is not a party to, nor in any way committed to, any such agreements" (Lippman 1933:145-146). While the agitation in the United States did not last long, the issue of war debts kept festering among the public and the politicians.

⁶ The document, titled "Further documents relating to the settlement reached at the Lausanne Conference (Lausanne, June 16-July 9, 1932), was signed by Jules Renkin of Belgium, Neville Chamberlin of the United Kingdom, Edouard Herriot of France, and Antonio Mosconi of Italy. The text of the agreement reads as follows: if "the agreement with Germany will not be ratified...the legal position, as between all the Governments, would revert to that which existed before the Hoover Moratorium", that was the one established by the La Hague Agreement of the 20th January, 1930 (The official text of the Gentlemen Agreement, in fact, states if "the agreement with Germany will not be ratified ...the legal position, as between all the Governments, would revert to that which existed before the Hoover Moratorium", that is the La Hague Agreement of the 20th January, 1930 when the Young Plan was formally approved).

Several attempts were made to renegotiate the terms of the debts. The first occurred in November 1932 when the British requested to suspend the payment due on December 15. The British request was quickly followed by similar actions from France, Belgium, Poland, Czechoslovakia, Latvia, and Lithuania. When the US government denied the requests, the United Kingdom decided to make a timely payment (\$95,550,000 in gold), whereas France deferred payment and thus entered in default (Lippman 1933:170-175).⁷ When the next payment fell due in June, 1933, the governments of the United Kingdom, Czechoslovakia, Italy, Latvia, Lithuania, and Romania made token payments (Reinhart and Trebesch 2014:24). In September of 1933, the United Kingdom started again a resumption of negotiations on war debts with the United States, while making token payments on interest (*Documents on British Foreign Policy*, DBFP for short, Series 2, Vol. V, n. 587:842). The negotiations failed again. According to Self (2006:179), “the British were handicapped in their planning for the forthcoming talks by an astonishing degree of uncertainty about what the Americans actually wanted.” In fact, reading the diplomatic documents on British foreign policy, one has the impression that President Roosevelt was sympathetic to a revision of British war debts, but he was also fully aware that US voters and the majority of Congress were not (DBFP, Series 2, Vol. V, n. 598:853-855). The American electorate and their representatives were much more isolationist than the leadership who privately acknowledged that war debt repayments were an obstacle to the resumption of economic growth in the world (DBFP, Series 2, Vol. V, n. 598:860-863). According to Sir Frederick William Leith-Ross, chief economic adviser to the UK government, who met Roosevelt on November 1, 1933, “[the President] can get anything he likes through Congress, but...he is evidently not disposed to take any risk...while he could get a settlement through Congress he would lose a good number of tail feathers which he can ill afford to do...I do not believe that he cares about the actual money except so far as an increased offer [from the United Kingdom] could facilitate his handling of Congress” (Self 2006:187).

⁷ The United States received payments from the United Kingdom, Czechoslovakia, Italy, Finland, Latvia, and Lithuania. France, Poland, Belgium, Estonia, and Hungary decided to defer payments.

Without a settlement, the United Kingdom made the last partial payment of \$7,500,000 dollars on December 15, 1933.

The isolationist and protectionist temper of the US Congress reached its apex with the Johnson Act, sponsored by Senator Hiram Johnson and signed by President Roosevelt on April 13, 1934 (Dewitt 1974). The Act prohibited the issue of loans or bonds in the United States by those foreign governments that had defaulted on debts owed to the US government. It also prohibited the US President from accepting token payments on war debts in satisfaction of the original claim (Columbia Law Review 1935).

The Johnson Act was the tipping point in the UK decision not to make a token payment on the June 1934 deadline (DBFP, Series 2, Vol. VI, n. 575:910; *Corriere della Sera*, June 15, 1934). The official decision, taken on June 4, 1934, stressed that further payments on war debts were suspended until it became possible to discuss an ultimate settlement with a reasonable prospect of agreement (Shepardson and Scroggs 1935:72). Furthermore, the British position argued that war debts were fundamentally different from self-liquidating commercial debts raised for productive purposes. War debts had been neither productive nor self-liquidating for the debtor (Self 2006:119-120; Shepardson and Scroggs 1935:77-78), whereas they had fostered growth in American industry. Virtually at the same time, the German Reich announced that after June 30 1934 it would discontinue payments under the Dawes and Young loans (Toniolo 2005:154). In the certain knowledge that it would receive no further repayments from its own debtors, the United Kingdom finally agreed to suspend all debt payments (Self 2006:193-194). In the words of Foreign Secretary Sir John Simon (DBFP, Series 2, Vol VI, n. 594:935):

“The resumption of full payments ...would recreate the conditions which existed prior to the world crisis and were in large measure responsible for it. Such a procedure would throw a bombshell into the European arena ...and would postpone indefinitely the chances of world recovery. Accordingly His Majesty’s Government are reluctantly compelled to take the only other course open to them”.

The British default was not an isolated case; indeed, as a result of the Johnson Act, all European debtors except one fell in default (DBFP, Series 2, Vol. VI, n. 582). Table 1, from Reinhart & Trebesch (2014:20), lists 18 countries that, as of 1934, owed debt to the United States and the United Kingdom. Australia, New Zealand and Portugal only owed debt to the United Kingdom. Finland, which successfully renegotiated the terms of war debts and met payments in full, was the only country that honored its war debt obligations to the United States.

Table 1: Unpaid war debts owed to the United States and the United Kingdom in Summer of 1934

	<i>Owed to US</i>	<i>Owed to UK</i>	<i>Total to US and UK</i>
	Debt outstanding	Debt outstanding	Debt outstanding
	in US\$ (w/arrears)	in US\$ (w/arrears)	in US\$ (w/arrears)
United Kinkdom	4,714,345,235	.	4,714,345,235
France	3,980,735,112	3,361,387,861	7,342,122,972
Italy	2,009,555, 036	1,123,494,772	3,133,049,808
Belgium	413,430,000	64,631,010	478,061,010
Poland	226,248,308	17,107,860	243,356,167
Czechoslovakia	165,409,455	0	165,409,455
Yugoslavia	61,625,000	146,572,822	208,197,822
Romania	63,883,007	140,836,167	140,836,167
Greece	32,789,344	99,384,805	99,384,805
Austria	28,822,492	0	0
Estonia	18,079,383	1,432,045	1,432,045
Finland (fully repaid)	8,711,996	0	0
Latvia	7,435,784	6,222,619	6,222,619
Lithuania	6,650,080	0	0
Hungary	2,086,096	0	0
Austrialia	0	337,777,250	337,777,250
New Zealand	0	110,966,579	110,966,579
Portugal	0	99,459,373	99,459,373
Memorandum items:			
	Total owed the US:		US GDP
	11,734,806,327		66,800,000,000
	Total owed the UK:		UK GDP
	5,509,273,162		19,264,825,087

Source: Reinhart & Trebesch (2014: 20). The original source of the first column is US Treasury (1935:391).

III. THE DEFAULT OF ITALIAN WAR DEBTS AFTER LAUSANNE

It is clear from the previous section that the default of Italian war debts was not an isolated event but rather an outcome that was shared with a group of European countries. Yet, despite this common feature, Italian war debts followed a distinctive path of foreign diplomacy and restructuring which is worth revisiting.

Two significant dates of war debt restructuring occurred on November 14, 1925 and on January 27, 1926. In the first, the Italians reached an agreement with the Americans and in the second with the British. Both negotiations were conducted for Italy by Finance Minister Giuseppe Volpi. The US debt restructuring spread payments of the Italian debt over 62 years and reduced the undiscounted value of debt from \$2,148 million to \$2,042 million; see Table A3 in the Appendix. While the nominal values did not change materially, the present value of repayments did in a big way. The present value of the renegotiated debt, using a discount rate of 5%, was \$360 million; see Section IV and Appendix. For the first five years, no interest was charged; then the interest rose gradually up to 2 per cent for the final seven years (Volpi di Misurata, 1929:42-44; De Cecco 1993:613-614). The British restructuring set the undiscounted sum of payments at £ 276.75 million, spread also over 62 years. The present value of repayments, using again a discount rate of 5 per cent, was £ 84 million.⁸

With the two debt agreements Italy obtained an average haircut of 84 per cent. According to Migone (1980:72-73), the country was treated very particularly well in comparison to other countries that also reached foreign debt agreements with the United States. For example, the United Kingdom received an haircut of 30 per cent, Belgium of 50 per cent, and France of 60 per cent. Debt renegotiations occurred at a time when US financial markets were overflowing with funds and the macroeconomic fundamentals justified capital outflows. Europe was a natural outlet for these outflows (Fратиanni and Giri 2015). As to the favorable treatment accorded to Italy, it should be

⁸ The agreement also specified that the gold deposit made in London by the Italian government in 1915 (31.4 tons of gold valued at £ 22.2 million) would be returned to Italy according to a precise schedule starting with 1928.

noted that Mussolini was well regarded abroad as a leader who could ensure social stability, a condition that would have facilitated US economic expansion in Europe (Migone 1980:72-73). Mussolini had also developed a good relationship with the US financial industry and the influential Benjamin Strong, President of the Federal Reserve Bank of New York, who inspired the Italian premier to reestablish a regime of stable exchange rates (Fratanni and Spinelli 2001:293).

The debt concessions of the 1920s were “sold” to the US electorate as debt restructuring rather than debt forgiveness. In fact, the US public opinion remained strongly opposed to forgiveness, a sentiment that led the Congress to instruct the US War Debts Commission to renegotiate debt agreements by lengthening the time horizon of the repayment of the capital sums and/or by reducing the rate of interest. The unsophisticated public would have noticed that the nominal value of the debt had remained unchanged, although the discounted present value of the renegotiated payments had been reduced (Kindleberger 1984:308).

The Washington and London agreements constituted undoubtedly a financial and political success for Italy. Volpi was welcomed with great honors and celebrations on his return to Italy (Romano 1997: 141). Reporting on the US and UK agreements to Parliament, Volpi announced the creation of the *Cassa* dedicated to the repayment of war debts; the *Cassa* started operations in March of 1926 as an autonomous administration outside of the State budget.

There is an important aspect of debt restructuring that was never officially recognized by the creditors, namely that debt repayments were based on Italy’s capacity to pay, for which the flow of German reparations to Italy played a critical role. The core principle of the *Cassa* was that reparation receipts, set initially by the Dawes Plan, would fund the flow of payments on war debts. The *Cassa* received a start-up capital of 150 million lire in fiscal year 1924-25. The Dawes Plan lasted five years with relatively trouble-free reparation payments, but was unable to set the new amount of total reparations. These were fixed by the Young Plan and approved at the Hague Conferences of August 1929 and January 1930, according to which Germany would pay an undiscounted sum of 121 billion reichsmarks, spread over 59 annuities; the value of each annuity

was set “to match payments to the United States by Germany’s creditors” (Toniolo 2005:39). Reparation payments and transfer of funds would be handled by a newly created international organization, the Bank for International Settlements (Fratianni and Pattison 2001). Unfortunately, the Young Plan started operations as the world fell into the Great Depression. In the following year, 1931, President Hoover proposed the one-year moratorium.

At the Lausanne Conference of 1932, the Italian delegation, led by Foreign Minister Dino Grandi and by Alberto Beneduce, stressed the principle that war reparations had to be linked to war debt payments (*Beneduce to the President of Lausanne Conference James Ramsay MacDonald, Lausanne, June 25, 1932*, in De Cecco 1993:642-646). The Italian position was that an extension of the Hoover Moratorium would not solve the fundamental problem of excessive war reparations. These had to be cancelled and their cancellation had to be made conditional on the cancellation of war debts owed to the United Kingdom and the United States (*The Foreign Minister, Grandi, and the Finance Minister, Mosconi, to Mussolini, June 24, 1932*, in Documenti diplomatici italiani, DDI for short, Settima serie, vol. XII, n.116:156-158). Italian diplomacy had a two-stage strategy to achieve the twin cancellation. In the first stage, the European States would jointly “forgive” Germany; in the second stage, they would seek debt forgiveness from the United States. During the conference (and even after) there was no awareness by the Italian side that an agreement on reparations in Lausanne would have led to a permanent solution of war debts problem, as transpires from the diplomatic delegation (DDI, Settima serie, vol. XII, n.116, pp. 156-158).

After Lausanne, Italy made a token payment to the United States of \$1.2 million on December 15, 1932; \$1 million (in silver) in June 1933 and \$1 million in December 1933 (*Ministero delle Finanze* 1938:86; *La Stampa*, December 15, 1933). Finally, on June 15, 1934, after having considered a token payment of \$1 million, Italy followed the UK example and paid nothing.

That decision was contained in a letter by the Italian Ambassador, Augusto Rosso, to the Acting Secretary of State; the letter appeared also in the Italian press (*La Stampa*, June 15, 1934)⁹:

... there is practically no hope that Italy may be able again to collect those payments from German reparations which in 1925 have been taken as a basis for determining Italy's ability to put aside and transfer the amounts indicated by the debt agreement of November 14, 1925.

The Italian Government, which has always been and is still willing to acknowledge its obligation in view of a final settlement, would have been prepared to reaffirm its good will by another token payment. It has been informed, however, that, under a law recently enacted, the nations which do not make full payment of the amounts due on the 15th of June will be considered as being in default. In these circumstances and since, for the reasons mentioned above, the payment and transfer of the full amount due on the said date cannot be effected the Italian Government regrets to have to abandon the intention of making a token payment.

Three factors influenced the Italian decision. The first is that the government was worried that another payment would raise excessive expectations of future payments to the United States. The second is the difficulty of "selling" to Italian public opinion a payment on foreign debt when other countries had opted for not paying. The third is that an Italian payment would have created difficulties with the United Kingdom: British inability to pay the United States stemmed from the failure of its own debtors, including Italy, to meet their obligations (DDI, *Settima serie*, vol. XV, n. 388:409-410).

For the same reasons, Italy did not make the installment payment due in December 1934 (DDI, *Settima serie*, vol. XVI, n. 284) and on subsequent deadlines. An attempt to renegotiate a settlement of Italian debt was tried in June of 1936, but it was very feeble. Public opinion and the Congress in the United States, as we have already indicated, remained quite hostile about forgiving or reducing war debts, despite the fact that a few proposals were discussed in the Congress to alleviate the burden on debtor countries (*Corriere della Sera*, June 16, 1936).

As to the British debt, Italy stopped payments after the Hoover Moratorium. Italian Foreign Minister Grandi reported that, in a private talk at the Lausanne conference, Prime Minister

⁹ The original text of the letter is in US Treasury (1935: 233), and also in DDI, *Settima Serie*, vol. XV, n. 397, pp. 419-420.

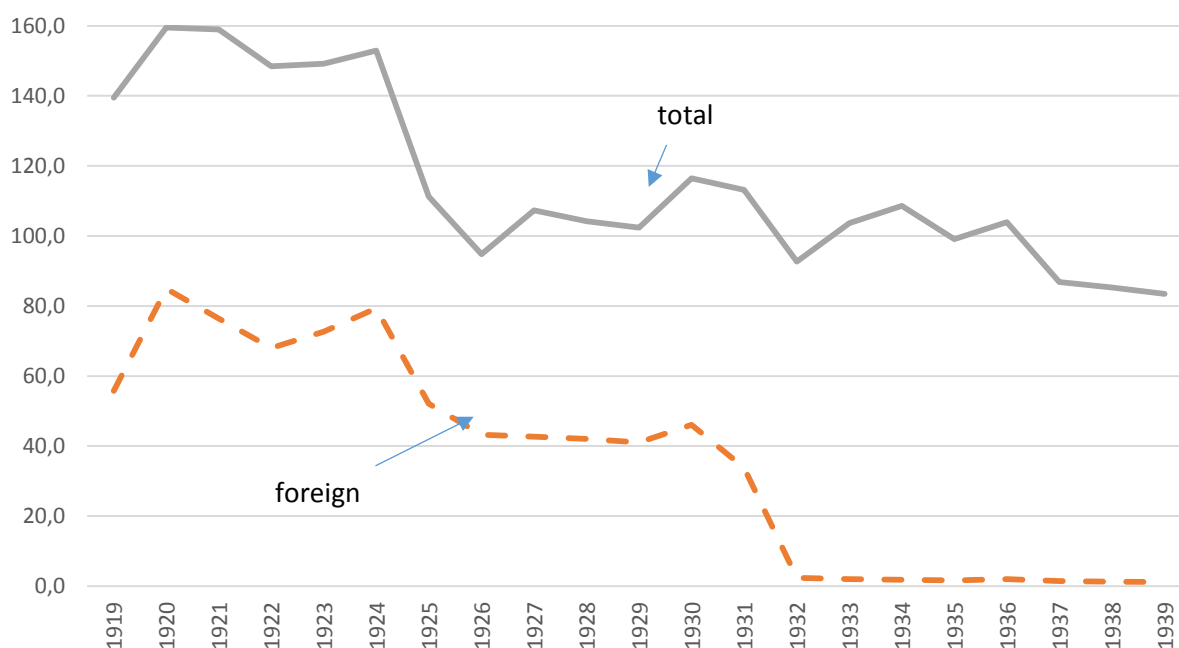
MacDonald gave his word of honor that the United Kingdom would have not required Italian payments on British debt so long as the Lausanne agreement was in force. But for political expediency the British could not make such an explicit statement (*The Foreign Minister Grandi to Mussolini, Lausanne, July 3, 1932*, in DDI, Settima serie, vol. XII, n. 139:190-191). The statement, however, was confirmed by MacDonald in December of 1932, although not publicly (*Aloisi to Mussolini*, in DDI, Settima serie, vol. XII).

At the start of 1933, there was virtual certainty in Italy, as well as in France, that no further payments would have been made to the United Kingdom (*Grandi to Mussolini, London, January 3, 1933; Grandi to Mussolini, London, February 27, 1933*; in DDI, Settima serie, vol. XIII). The inference was that the United Kingdom, despite the fact that they had not formally agreed on debt forgiveness in Lausanne for political expediency, actually had reached a tacit agreement of forgiveness with its own debtors. It should be recalled that the United Kingdom was simultaneously a creditor and debtor nation, a position that justified the UK insistence to focus its diplomatic efforts on debt relief with the United States. Had the United Kingdom pushed for resumption of full payments with its own debtors it might have strengthened a corresponding demand by the United States. In conclusion, with respect to United Kingdom, Italy benefited from a *de facto* debt suspension.

IV. ACCOUNTING AND MANAGEMENT OF ITALIAN WAR DEBTS

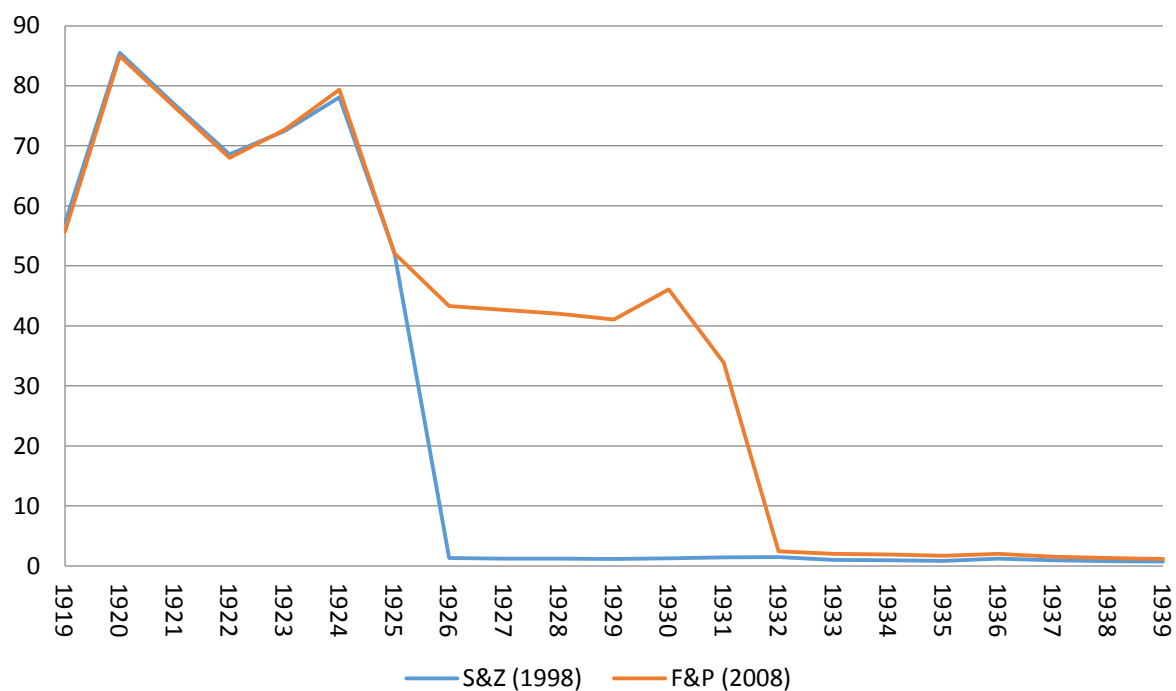
In this section we examine and compare three time series on Italian foreign debt, one by S&Z, the second by F&P and ours. To get an overview of the relevance of foreign debt (war debts being the biggest part of foreign debt), refer to Figure 1 which shows total government debt and its foreign debt component according to F&P (2008). These authors, as we have already mentioned, employ an expansive definition of the public sector. Soon after the war, foreign government debt exceeded 80

Figure 1: Foreign and total government debt as a per cent of GDP, 1919-1939



Sources: Salvemini and Zamagni (1993) for debt and Baffigi (2011) for GDP.

Figure 2: Foreign government debt as a per cent of GDP according to Salvemini and Zamagni and Francese and Pace, 1919-1939.



Sources: for the time series on foreign debt, see Salvemini and Zamagni (1993) and Francese and Pace (2008); for the series on Italian GDP, see Baffigi (2011).

per cent of Italian GDP and was approximately half of total government debt. A significant reduction of foreign debt occurred in 1926, in concomitance with the two debt restructurings we have discussed above. Total debt as a per cent of GDP fell in sympathy. In 1932, according to F&P, the ratio of foreign debt to total debt falls to zero.

Figure 2 compares F&P's time series of foreign debt with the corresponding series by S&Z. Both series draw from the same source, the *Conto riassuntivo del Tesoro* (simply *Conto*). It is important to note that official Italian documents make no distinction between domestic and foreign debt until 1923.¹⁰ The distinction appears for the first time in the *Conto* of 1924, but the information is limited to a recitation of the nominal value of the debt; in addition, it is not clearly stated that values are expressed in gold lire. The *Conto* of 1925 offers more explanations: it reports the accounting for war debts at December 31, 1925 plus the Morgan loan of \$100 million, specifying that values are expressed in gold lire. Since the Washington agreement was concluded on November 24, 1925, the *Conto* of 1925 reports the net present value of debt resulting from the renegotiation.

With the creation of the *Cassa* in March 1926, war debt accounting moved from the *Conto* to this autonomous administration.¹¹ By virtue of the fact that the *Cassa* falls outside the definition of the central government, the *Conto*, from 1926 onwards, reports only the value of the Morgan loan, while the *Cassa* reports the flow of reparation receipts and of war debt payments, without mentioning however the stock value of war debts. This incomplete reporting creates accounting opacity, especially for 1926. In fact, the *Conto*, which regularly reported the accounting of the *Cassa*, makes no reference to the London agreement of January of 1926. This omission is not

¹⁰ To separate the two components of debt F&P use the sources in Repaci (1962), Asso (1993), and Toniolo (1980).

¹¹ The official accounting of the *Cassa* can be found in the Annual Reports of the *Cassa Depositi e Prestiti*. The former fell under the aegis of the latter. The Annual Report of 1926 of the *Cassa Depositi e Prestiti*, incidentally, makes a specific reference to the London Agreement of 1926.

marginal in consideration of the fact that the British restructuring reduced its credit vis-à-vis Italy from £ 583 million to £ 84 million, implying a haircut of 86 per cent; see Appendix.

Returning to Figure 2, the main reason for the difference between the two series in the period 1926-1932 can be attributed to the different definition of the public sector. S&Z adopt a narrow definition, implying the exclusion of foreign debt from the central government books when this debt is moved onto the *Cassa* in 1926. The fact that the foreign debt series drops virtually to zero in 1926 is consistent with the S&Z definition of public sector; see first column of Table 1. In the expansive definition of the public sector by F&P, which includes regional and local government plus autonomous administrations like the *Cassa*, foreign debt remains on the government books until 1932, the year of the Lausanne conference. As we have already mentioned, these authors (but not only them) interpret Lausanne as the final settlement of war reparations and war debts (F&P, 2008, p. 17); see second column of Table 1.

Our time series of foreign debt, 1925-1934

We now provide our estimates of Italian war debts. Critical in this reconstruction are the debt restructurings with the United States of November, 1925 and the United Kingdom of January, 1926. In his report to Parliament, Minister Volpi (1929:48) stated that the two agreements reduced Italian foreign debt from 130 to 18 billion lire, the latter figure being the present value of future payments discounted at a discount rate of 5 per cent. The 84 per cent “haircut” on debt amounted to 64 per cent of Italian GDP.¹²

Table 2 and Figure 3 below compare our series with the series on foreign debt by S&Z and F&P. We recall that our series excludes foreign liabilities by lower-level governments, which is a small part of foreign debt. In fact, our data coincides with that by F&P in 1925. Afterwards, the two series could differ by the different treatment of foreign liabilities by municipalities, which are negligible

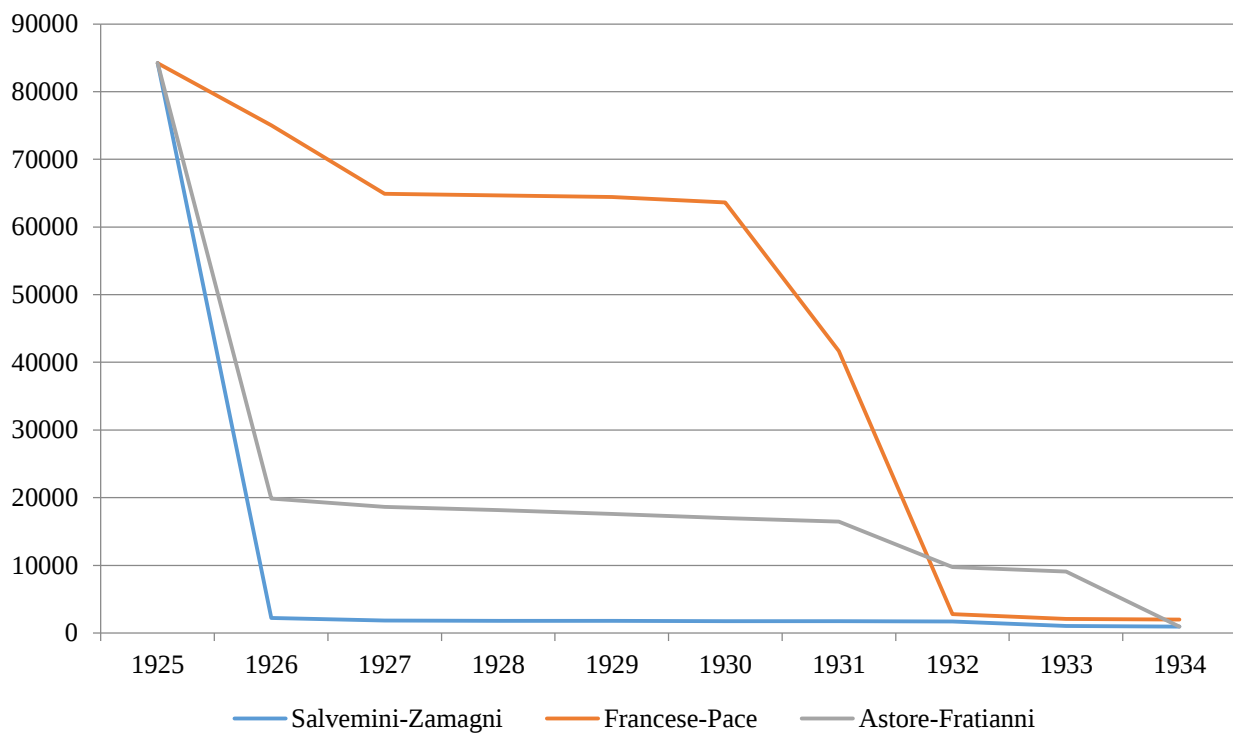
¹² Our GDP series is from Baffigi (2011).

in relation to war debts.¹³ The detailed information in the Appendix is the basis for the construction of our foreign debt series. We start in 1925, the year of the Washington agreement, for which

Table 2: Foreign debt series according to Salvemini and Zamagni (1993), Francese and Pace (2008), vs. our series, 1925-1934, million lire.

Year	Salvemini and Zamagni (1993)	Francese and Pace (2008)	Astore and Fratianni (2016)
1925	84270	84195	84196
1926	2226	75014	19858
1927	1831	64928	18654
1928	1815	64654	18144
1929	1779	64422	17620
1930	1743	63620	16973
1931	1750	41684	16482
1932	1698	2788	9749
1933	1037	2096	9089
1934	962	1987	961

Figure 3: The three series on Italian foreign debt, 1925-1934, million lire



¹³ In 1927, the cities of Milan and Rome contracted foreign loans for \$30 million each (Asso 1993:340).

the *Conto* (1926:14-15) shows the value of the US and UK war debts plus the Morgan loan of \$100 million.¹⁴ The debts are expressed in gold lire and are transformed in 1925 lire by multiplying the gold lire value by the ratio of the December 31, 1925 exchange rates to pre-war exchange rates. This yields a total foreign debt for the year 1925 of lire 84,196 million (Table 2, last column). For 1926, we first compute the foreign debt value at the end of 1925 by taking the present value of the scheduled payments of the restructured debts, reported in Table A3, using the same 5 per cent discount rate referred by Volpi (1929:43). Then, we subtract from this present value the capital payments made in 1926 by Italy to the United States and the United Kingdom. This procedure is consistent with the methodology of the Maastricht Treaty on Government Deficit and Debt. For subsequent years, the value of debt at time t is equal to the value of debt at time $t-1$ minus the payments made at time t .

Except for the end points, significant differences emerge between our series and those by S&Z and F&P (Figure 3). Take 1926, for example: our foreign debt value is Lire 19,858 million against Lire 2,226 million by S&Z and Lire 75,014 million by F&P (Table 2). The S&Z number is very low because these authors have already moved foreign debt from the books of the central government to the books of the *Cassa*. No surprise there. It is instead surprising that F&P have a foreign debt value for 1926 that is about 55 billion lire higher than ours. One possible reason for this great difference is that F&P have not properly taken into account the considerable haircut Minister Volpi extracted with the London accord. The oversight could have occurred by looking at the *Conto* (1926), which reports for December 31, 1925 the US debt value after the Washington agreement (i.e, after the haircut), but for the UK debt reports the value before the London agreement of January, 1926). In 1926, the *Cassa* starts operations and from this time onwards the *Conto* only reports the value of the Morgan loan by virtue of the fact that the *Cassa* falls outside the domain of the central government.

¹⁴ The Morgan loan, also known as the loan “Kingdom of Italy 7%”, was a bond issued in November 1925 by the Morgan Bank. It was one of the most important financial transactions on behalf of a foreign government made in the US market in 1925 (Asso 1993: 240). The loan-bond was issued at the same time of the Washington agreement.

In sum, by following the sources consulted by F&P – the *Conto Riassuntivo del Tesoro* and the accounting of the *Cassa* that only shows debt payments – one may reasonably run the risk of overlooking the very large debt reduction achieved by Italy through the London agreement of 1926.

V. CONCLUSIONS

Several points need to be stressed. The first is that the Lausanne conference of 1932 did not put an end to inter-Allied war debts because the United States refused to forgive its foreign claims. This conclusion stands in contrast with much of the quantitative literature that instead treats Lausanne as an act of forgiveness. Italy officially defaulted on its US debt in June 1934. Concerning the UK debt, matters are less clear-cut because there was no formal default. But, as we have argued in the paper, Italy, together with other debtor countries, benefited from a *de facto* debt suspension, which can be reasonably dated at Lausanne. The strong antagonism to foreign debt forgiveness of US public opinion in the 1930s stands in sharp contrast with the significant concessions obtained by major debtor countries in the 1920s. Italy was treated particularly favorably in her debt agreement, obtaining a haircut of 82 per cent. The concessions of the 1920s were “sold” to the US electorate as debt restructuring and not debt forgiveness, even though one implies the other. Furthermore, the economic climate of the 1920s differed markedly from that of the 1930s: the Great Depression brought protectionism and isolationism.

As to when the Italian government foreign debt series should go to zero, the answer depends on the date of the default and on the definition of public sector. S&Z (1993) opt for a narrow definition of the public sector, which puts the foreign debt series off the books of the central government budget with the creation of the *Cassa*. F&P (2008), who use an expansive definition of public sector, continue their foreign debt series until the year of the Lausanne Conference, considered by these authors as an act of debt forgiveness. But Lausanne, in fact, did not put an end to inter-Allied war debts. Italy officially defaulted on its US debt in June 1934, that is after Lausanne. For the UK debt, there was no formal default, but Italy, like other debtor countries, made

her last payment in June of 1931. Hence, 1932 is the date of the *de facto* default on UK debt. The *Cassa*, the autonomous Sinking Fund, continued to exist until 1940 (its cessation occurred with the Law 293 of March 20 1940) with little activity.

Our last conclusion concerns the opaqueness of the accounting treatment of Italian inter-war foreign debt, which has made our reconstruction of the debt series particularly laborious. Put it simply, had we only relied on the financial statements of the *Conto Riassuntivo del Tesoro*, we would have not succeeded in our effort.

References

- Asso, P. F. (1993), *L'Italia e prestiti internazionali, 1919-1931*, in *Ricerche per la storia della Banca d'Italia*, vol. III, *Finanza internazionale, vincolo esterno e cambi, 1919-1939*, Laterza: Roma-Bari.
- Baffigi, A. (2011), Italian National Accounts. A project of Banca d'Italia, Istat and University of Rome "Tor Vergata", in "Economic History Working Papers, Banca d'Italia", n. 18.
- Carnegie Endowment for International Peace (1932), *The Lausanne agreement. Text of the final act of the Lausanne conference, July 9, 1932, and texts of further documents related to the settlement reached at Lausanne, June 16-July 9, 1932*, New York.
- Columbia Law Review (1935), The Johnson Act: Extension of Credit to a Government in Default, Vol. 35, No. 1, pp. 102-104.
- Corriere della Sera (1934), La scadenza del 15 giugno, June 15, 1934.
- Corriere della Sera (1936), I debiti di guerra, June, 15, 1936.
- De Cecco M. (1993), *L'Italia e il sistema finanziario internazionale 1919-1936*, Laterza.
- De Felice R. (1968), *Mussolini il fascista, II, L'organizzazione dello Stato fascista 1925-1929*, Einaudi, Torino.
- Dewitt, H. A. (1974), Hiram Johnson and Early New Deal Diplomacy, 1933-1934, *California Historical Quarterly*, 53 (4): 377-386.
- Direzione generale della Cassa Depositi e Prestiti e degli Istituti di previdenza (various issues), *Relazioni e rendiconti consuntivi presentati dal Direttore generale alla Commissione di vigilanza*.

- Documenti diplomatici italiani (DDI) (1987), *Settima serie: 1922-1935. Volume XII*, Roma: Istituto Poligrafico e Zecca dello Stato.
- Documenti diplomatici italiani (DDI) (1989), *Settima serie: 1922-1935. Volume XIII*, Roma: Istituto Poligrafico e Zecca dello Stato.
- Documenti diplomatici italiani (DDI) (1990a), *Settima serie: 1922-1935. Volume XV*, Roma: Istituto Poligrafico e Zecca dello Stato.
- Documenti diplomatici italiani (DDI) (1990b), *Settima serie: 1922-1935. Volume XVI*, Roma: Istituto Poligrafico e Zecca dello Stato.
- Documents on British Foreign Policy (DBFP) (1956), *Second series. Volume V. 1933*, London.
- Documents on British Foreign Policy (DBFP) (1957), *Second series. Volume VI. 1933-1934*, London.
- Eichengreen, B. (1992). *Golden fetters: The gold standard and the great depression 1919-1939*, Oxford University Press.
- Francesco, M. and Pace, A. (2008), Il debito pubblico italiano dall'Unità a oggi. Una ricostruzione della serie storica, Banca d'Italia - Questioni di Economia e Finanza, no 31.
- Fratianni, M. and Spinelli F. (2001), *Storia monetaria d'Italia*, Milano, Etas.
- Fratianni, M. and Pattison J. (2001). The Bank for International Settlements: An assessment of its role in international monetary and financial policy, *Open Economies Review*, 12:197-222.
- Fratianni, M. and Giri, F. (2015), The tale of two great crises, MoFiR Working Paper no. 117.
- Keynes, J. M. (1919). *The economic consequences of the peace*, MacMillan and Company.
- Keynes, J. M. (1929). The German transfer problem, *Economic Journal* 39:1-7.
- Kent, B. (1989). *The spoils of war: The politics, economics, and diplomacy of reparations 1918-1932*, Clarendon Press.
- Kindleberger, C. P. (1984), *A Financial History of Western Europe*, London: George Allen & Unwin.
- La Stampa (1933), I debiti di guerra. I debiti dell'Italia alla Tesoreria americana, December 15-16, 1933.
- La Stampa (1934), L'Italia non eseguirà il versamento del 15 giugno, June 15, 1934.
- Lippmann, W. (1933), *The United States in world affairs. An account of American foreign relations. 1932*, Harper and Brothers.
- Migone, G. G. (1980), *Gli Stati Uniti e il fascismo. Alle origini dell'egemonia americana in Italia*, Milano: Feltrinelli editore.
- Ministero dell'Economia e delle finanze (various issues), *Conto Riassuntivo del Tesoro*, Roma
- Ministero delle Finanze (1938), *Relazione sui servizi affidati alla direzione generale del Tesoro, 1° luglio 1925-30 giugno 1935*, Roma: Istituto Poligrafico dello Stato.
- Ministero del Tesoro (1988), *Relazione del Direttore Generale alla Commissione Parlamentare di Vigilanza. Il Debito Pubblico in Italia 1861-1987*, Vol. I, Roma.

- Moulton, H., and Pasvolsky L. (1932). *War debts and world prosperity*. Washington: Kennikat Press.
- Ohlin, B. (1929), The reparation problem: A discussion, *The Economic Journal* 39: 172-182.
- Reinhart C. M., and Trebesch C. (2014), *A Distant Mirror of Debt, Default, and Relief*, Munich Discussion Paper No. 2014-49.
- Repaci, F. A. (1962), *La Finanza Pubblica Italiana nel Secolo 1861-1960*, Bologna: Zanichelli.
- Romano S. (1997), *Giuseppe Volpi. Industria e finanza tra Giolitti e Mussolini*, Venezia: Marsilio editore.
- Salvemini G., and Zamagni V. (1993), *Finanza pubblica e indebitamento tra le due guerre mondiali: il finanziamento del settore statale*, in Banca d'Italia, *Ricerche per la Storia della Banca d'Italia. Problemi di finanza pubblica tra le due guerre. 1919-1939*, vol. II, Bari: Laterza.
- Self, R. (2006), *Britain, America and the war debt controversy. The economic diplomacy of an unspecial relationship, 1917-1941*, Routledge.
- Shepardson, W. H., and Scroggs W. O. (1935), *The United States in world affairs. An account of American foreign relations. 1934-1935*, Harper and Brothers.
- Spinelli, F. (1989), Dimensione, Composizione, Quotazioni e Costo del Debito Pubblico Interno dal 1861 al 1985. Con una Appendice sul Debito Estero, in Spinelli, F. (1989), *Per la Storia Monetaria dell'Italia*, Torino, Giappichelli Editore, Torino, pp. 301-355.
- Toniolo G. (1980), *L'Economia dell'Italia Fascista*, Bari, Laterza.
- Toniolo G., with the assistance of Clement P. (2005), *Central Bank Cooperation at the Bank for International Settlements, 1930-1973*, New York: Cambridge University Press.
- Volpi di Misurata G. (1929), *Finanza Fascista*, Roma: Libreria del Littorio.
- United States Treasury (1935), *Annual Report of the Secretary of the Treasury on the State of the Finances for the fiscal year ended June 30 1934*, Washington DC.

APPENDIX

We present here the basic quantitative information regarding receipts from war reparations and payments towards war debts and the size of foreign debt restructuring of 1925-26.

Receipts from war reparations and payments for war debts. Details are shown in Table A1 below.

Table A1&A2: Italy's war reparations receipts and war debt payments, 1919-1933

Table A1: War Reparations received by Italy				
Period	Description	Golden Marks	Average exchange rate	Reparation receipts, lire
1919-23	Pre-Dawes Plan reparations	428,652,459	0.1805	77,357,838
1924-29	Dawes Plan Reparations, marks	555,130,021	5.2353	2,906,290,703
1929-30	Transition period Reparations	83,513,207	4.553	380,235,631
1930-31	Young Plan Reparations	228,046,600	4.5485	1,037,269,960
<i>Total</i>		1,295,341,687		4,401,154,132

Table A2: War Debts paid by Italy				
Date	Description	Amount in foreign currency	Monthly Average Exchange Rate	War debt payment, lire
1925	US debt, dollars	199,466		4,986,658
1926	US debt, dollars	5,000,000		125,000,000
1926	UK debt, pounds	4,000,000		523,120,000
1927	US debt, dollars	5,000,000		111,600,000
1927	UK debt, pounds	4,000,000		400,274,000
1928	US debt, dollars	5,000,000		95,000,000
1928	UK debt, pounds	4,125,000		381,897,000
1929	US debt, dollars	5,000,000		95,000,000
1929	UK debt, pounds	4,250,000		393,998,000
1930	US debt, dollars	6,260,625		118,951,875
1930	UK debt, pounds	5,312,500		491,246,875
1931	US debt, dollars	13,360,625		253,851,875
1931	UK debt, pounds	2,125,000		196,498,750
1932.12	US token payment, dollars	1,200,000	19.55	23,460,000
1933.06	US token payment, dollars	2,000,000	15.71	31,420,000
1933.12	US token payment, dollars	1,000,000	12.15	12,150,000
<i>Total</i>				3,258,455,033

Sources: On war reparations see Ministero delle Finanze (1938:75). For war debts, see Ministero delle Finanze (1938:72 and 86). For exchange rates, if shown, see online Bank of Italy's exchange rate archives, otherwise, the lire equivalent is provided directly in the source.

Over the period 1924 to 1931, and thus excluding pre-Dawes Plan war reparations, Italy received war reparations from Germany for an undiscounted sum of golden marks 1,295,341,687. Unfortunately Ministero delle Finanze (1938) gives neither the yearly flow of reparations nor a discount factor to compute present values. Our next best solution was to use an average exchange rate of the four periods reported by the source listed in table A1 to arrive at a total undiscounted sum of reparation receipts of Lire 4.4 billion for the period 1919-1931. War debt repayments to the United Kingdom and to the United States amounted to an undiscounted sum of lire 3.26 billion. Following this reconstruction, Italy had undiscounted net positive cash flows of more than Lire one billion. A more accurate accounting would have required a higher level of transparency on the part of Ministero delle Finanze (1938).

The size of foreign debt restructuring of 1925-26

This is the yearly schedule of payment of the two renegotiated debts following the Washington and London agreements:

Table A3: Schedule of payments of the US and UK debts following restructuring

Year	USA			UK
	Capital	Interests	Total	
1926	5.000.000,00	0	5.000.000,00	4.000.000,00
1927	5.000.000,00	0	5.000.000,00	4.000.000,00
1928	5.000.000,00	0	5.000.000,00	4.125.000,00
1929	5.000.000,00	0	5.000.000,00	4.250.000,00
1930	5.000.000,00	0	5.000.000,00	4.250.000,00
1931	12.100.000,00	2.521.250,00	14.621.250,00	4.250.000,00
1932	12.200.000,00	2.506.125,00	14.706.125,00	4.375.000,00
1933	12.300.000,00	2.490.875,00	14.790.875,00	4.500.000,00
1934	12.600.000,00	2.475.500,00	15.075.500,00	4.500.000,00
1935	13.000.000,00	2.459.750,00	15.459.750,00	4.500.000,00
1936	13.500.000,00	2.443.500,00	15.943.500,00	4.500.000,00
1937	14.200.000,00	2.426.625,00	16.626.625,00	4.500.000,00
1938	14.600.000,00	2.408.875,00	17.008.875,00	4.500.000,00
1939	15.200.000,00	2.390.625,00	17.590.625,00	4.500.000,00
1940	15.800.000,00	2.371.625,00	18.171.625,00	4.500.000,00
1941	16.400.000,00	4.703.750,00	21.103.750,00	4.500.000,00
1942	17.000.000,00	4.662.750,00	21.662.750,00	4.500.000,00
1943	17.600.000,00	4.620.250,00	22.220.250,00	4.500.000,00
1944	18.300.000,00	4.576.250,00	22.876.250,00	4.500.000,00
1945	19.000.000,00	4.530.500,00	23.530.500,00	4.500.000,00
1946	19.600.000,00	4.483.000,00	24.083.000,00	4.500.000,00
1947	20.000.000,00	4.434.000,00	24.434.000,00	4.500.000,00
1948	20.600.000,00	4.384.000,00	24.984.000,00	4.500.000,00
1949	21.200.000,00	4.332.500,00	25.532.500,00	4.500.000,00
1950	22.000.000,00	4.279.500,00	26.279.500,00	4.500.000,00
1951	23.000.000,00	8.449.000,00	31.449.000,00	4.500.000,00
1952	23.800.000,00	8.334.000,00	32.134.000,00	4.500.000,00
1953	24.600.000,00	8.215.000,00	32.815.000,00	4.500.000,00

1954	25.400.000,00	8.092.000,00	33.492.000,00	4.500.000,00
1955	26.500.000,00	7.965.000,00	34.465.000,00	4.500.000,00
1956	27.500.000,00	7.832.500,00	35.332.500,00	4.500.000,00
1957	28.500.000,00	7.695.000,00	36.195.000,00	4.500.000,00
1958	29.600.000,00	7.552.500,00	37.152.500,00	4.500.000,00
1959	30.500.000,00	7.404.500,00	37.904.500,00	4.500.000,00
1960	31.500.000,00	7.252.000,00	38.752.000,00	4.500.000,00
1961	32.500.000,00	10.641.750,00	43.141.750,00	4.500.000,00
1962	33.500.000,00	10.398.000,00	43.898.000,00	4.500.000,00
1963	34.500.000,00	10.146.750,00	44.646.750,00	4.500.000,00
1964	35.500.000,00	9.888.000,00	45.388.000,00	4.500.000,00
1965	36.500.000,00	9.621.750,00	46.121.750,00	4.500.000,00
1966	38.000.000,00	9.348.000,00	47.348.000,00	4.500.000,00
1967	39.500.000,00	9.063.000,00	48.563.000,00	4.500.000,00
1968	41.500.000,00	8.766.750,00	50.266.750,00	4.500.000,00
1969	43.500.000,00	8.455.500,00	51.955.500,00	4.500.000,00
1970	44.500.000,00	8.129.250,00	52.629.250,00	4.500.000,00
1971	46.000.000,00	10.394.000,00	56.394.000,00	4.500.000,00
1972	47.500.000,00	9.934.000,00	57.434.000,00	4.500.000,00
1973	49.000.000,00	9.459.000,00	58.459.000,00	4.500.000,00
1974	50.500.000,00	8.969.000,00	59.469.000,00	4.500.000,00
1975	52.000.000,00	8.464.000,00	60.464.000,00	4.500.000,00
1976	54.000.000,00	7.944.000,00	61.944.000,00	4.500.000,00
1977	56.000.000,00	7.404.000,00	63.404.000,00	4.500.000,00
1978	59.000.000,00	6.844.000,00	65.844.000,00	4.500.000,00
1979	61.000.000,00	6.254.000,00	67.254.000,00	4.500.000,00
1980	62.000.000,00	5.644.000,00	67.644.000,00	4.500.000,00
1981	64.000.000,00	10.048.000,00	74.048.000,00	4.500.000,00
1982	67.000.000,00	8.768.000,00	75.768.000,00	4.500.000,00
1983	69.000.000,00	7.428.000,00	76.428.000,00	4.500.000,00
1984	72.000.000,00	6.048.000,00	78.048.000,00	4.500.000,00
1985	74.000.000,00	4.608.000,00	78.608.000,00	4.500.000,00
1986	77.000.000,00	3.128.000,00	80.128.000,00	4.500.000,00
1987	79.400.000,00	1.588.000,00	80.988.000,00	4.500.000,00
TOTAL	2.042.000.000,00	365.677.500,00	2.407.677.500,00	276.750.000,00

Sources: Official texts of the Washington and London agreement are reported in *Gazzetta ufficiale del Regno d'Italia*, February 20, 1926, n. 42 and Ministero delle Finanze (1938).

Using this schedule of payment, we calculate the net present value of US and UK debts through the method of discounted cash flows. For US debt, we take into account just capital and we get a net present value at the end of 1925 of \$359.837.006,24. The discount rate used is 5% as in Volpi (1929: 43). For the British debt, we get a net present value at the end of 1926 of £83.889.638,86, using always 5% as discount rate.

For total foreign debt starting from 1925, we use the source *Conto Riassuntivo del Tesoro* (1926: 14-15) In Table A4, we show data at the end of 1925, which is the closest date to the

Washington and the London agreements. Following, the methodology of the Maastricht Treaty on Government Deficit and Debt, we use payments on capital. The total amount of debt in gold lire is then transformed in 1925 lire by multiplying the gold lire value by the ratio of the December 31, 1925 exchange rates to pre-war exchange rates. This yields a total foreign debt of Lire 84,196,290,304 (Lire 81,716,546,269 net of the Morgan loan).

Table A4: Foreign debt in gold lire and current exchange rates at the end of 1925

Debt owed To	Capital	Pre-war exchange rates	December 31, 1925 exchange rates	Debt in 1925 lire
US	US\$ 359,837,003		24.785	8,918,560,119
UK	Golden lire 15,287,607,400	25.22	120.095	72,797,986,150
Morgan	Golden lire 518,260,000	5.18	24.785	2,479,744,035
Total				84,196,290,304
Total net of Morgan				81,716,546,269

Sources: Column 2 comes from *Conto Riassuntivo del Tesoro* (1926: 14-15); column 3 from Salvemini and Zamagni (1993: 214); Column 4 from online Bank of Italy's exchange rate archives.