CARMEN M. REINHART
Harvard University

CHRISTOPH TREBESCH
University of Munich

The Pitfalls of External Dependence: Greece, 1829–2015

ABSTRACT Two centuries of Greek debt crises highlight the pitfalls of relying on external financing. Since its independence in 1829, the Greek government has defaulted four times on its external creditors—with striking historical parallels. Each crisis is preceded by a period of heavy borrowing from foreign private creditors. As repayment difficulties arise, foreign governments step in, help to repay the private creditors, and demand budget cuts and adjustment programs as a condition for the official bailout loans; political interference from abroad mounts, and a prolonged episode of debt overhang and financial autarky follows. We conclude that these cycles of external debt and dependence are a perennial theme of Greek history, as well as in other countries that have been "addicted" to foreign savings. At present, there is considerable evidence to suggest that a substantial haircut on external debt is needed to restore the economic viability of Greece. Even with that, a policy priority for the country should be to reorient, to the extent possible, toward domestic sources of funding.

The history of Greece is a narrative of debt, default, and external dependence. In 1952, the Greek-Canadian historian L. S. Stavrianos noted that since their independence, "the Greek people have had to bear a crushing foreign debt that has literally sucked their lifeblood" (Stavrianos 1952, p. 25). This graphic statement could well have been written 60 years later, in 2012, when Greece was in the midst of its fourth sovereign debt crisis. Or it could have been written 60 years earlier, on the eve of the second sovereign default. This paper documents the recurring patterns of sovereign default in Greece with the aim of gaining insights into possible solutions to the current crisis.

Our main conclusion is that the composition of Greek sovereign debt (external versus internal), and not just its levels, played a central role in explaining the country's historical default episodes, as well as its current predicament. Over the past 200 years, the tilt toward foreign borrowing in Greece (by the public and private sector) has resulted in repeated crises and sudden reversals (stops) of capital flows. We highlight that the consequences of the boom-bust cycles in external borrowing were not only economic, but political as well. The defaults resulted in prolonged bouts of heavy political interference from abroad, mainly aimed at assuring the repayment of bailout loans. The events since 2010 are neither new nor unique in Greek history.

There are relatively few papers on the unfolding Greek crisis that take a longer historical perspective. In this paper, we focus on Greece in the long-run, though our data and archival work is part of a much broader research agenda on the history of sovereign lending, default, and haircuts, which covers all debtor countries over the past 200 years (see Meyer, Reinhart, and Trebesch [ongoing work]).

The evidence we present reveals striking historical parallels between the past and the present. Most surprising are the close similarities in the crisis resolution process. For example, we find that Greece has been bailed out many times before, coupled with heavy conditionality and externally imposed adjustment programs. We also find that earlier Greek defaults have been similarly protracted, and that much of the bailout money was used to service old privately held debt. In each crisis, the country's external creditors (both official and private) initially refused to accept haircuts, but agreed to them eventually, sometimes after decades of fruitless negotiations and failed interim agreements. These insights speak to the current debate on how to address Greece's current debt overhang.

More generally, the role of external versus domestic borrowing remains comparatively understudied in connection to economic crises. Carmen Reinhart and Kenneth Rogoff (2009) take up this theme when discussing the literature at large. In the case of Greece, the debate has focused on other issues, such as debt sustainability, contagion effects, the need for reform, and the associated political economy problems. The fact that the ongoing crisis is very much an *external* debt crisis has been largely overlooked.[1]

1. We concur with Gros (2013) and Sinn (2014), that the crisis in periphery Europe is not so much a crisis of public debt, but rather a crisis of external debt, involving all the problems that come with an external crisis (in particular sudden stops, balance sheet effects, and cross-border disputes between creditors and debtors). In this regard, the analysis by Eichengreen and others (2014), which compares the eurozone crisis to Latin America's lost decade in the 1980s, is exactly on point.

The financial history of Greece also serves as a broader precautionary note for other countries that are "addicted" to foreign savings. Periods with external dependence and financial openness were often periods of volatility and crises, such as Latin America from the 19th century, but also in places like China, Portugal, or Spain, until these turned inward in the second half of the 20th century. Beyond much of Latin America, large emerging markets, such as Indonesia, Turkey, and parts of eastern Europe rely heavily on foreign saving.[2] We realize that our message that external debt implies important risks stands in contrast to recent calls to unravel the "deadly embrace" between governments and domestic banks, mainly by reducing the home bias in sovereign debt holdings (Corsetti and others 2015). Yet bank portfolios were almost entirely domestic from 1945 to 1980, the period in history with the fewest banking and debt crises (Reinhart and Rogoff 2009). Also, the most prosperous and financially stable period in Greek history, between the 1950s and 2000, was a period with a greater degree of home bias and a comparatively low share of external debt.[3]

In the remainder of this paper, we summarize the main insights gained from our historical Greek expedition. Section I presents a brief conceptual discussion on the pitfalls of external financial dependence. In section II, we document that Greece's reliance on foreign savings has been both significant and persistent over the past 200 years; this is evident in the structure of its borrowing, in the country's external position (current account), and in its history of being a large net recipient of foreign grants. In section III, we summarize some dire consequences of Greece's external dependence; we focus on the four episodes of external default (and sudden stops), the protracted crisis resolution in three of these cases, and the heavy political interference from the creditor countries and externally imposed adjustment programs in every case. Section IV addresses the issue of external validity and briefly discusses the relevance of our findings for other countries. In the concluding section, we focus on the current situation and suggest that a significant haircut on the debt stock is needed (that is, on the *external* debt, as sovereign debt is almost entirely in the hands of foreign official creditors).

2. In low-income sub-Saharan Africa, dependence on foreign official financing and aid remains an important challenge.

3. It is an overstatement to conclude that external dependence was not an issue during this period. As we document here, Greece was a major recipient of external aid and grants starting at the end of World War II.

I. External Dependence: Benefits, Costs, and Measurement

Access to external capital markets can deliver many benefits for capital-scarce countries, in particular the possibility to smooth consumption and to use foreign funding for productive investments at home. External debt often carries low interest rates and is readily available, especially in times of high global liquidity. It can therefore be an important complement for more expensive sources of domestic finance.

But these potential advantages of external borrowing may come at a high cost, given the fickle nature of foreign saving.[4] The following risks usually become most apparent during economic crises:

EXTERNAL DEFAULT An obvious first-order risk associated with external debt is that of *external default,* a payment suspension or the restructuring of old debt at terms less favorable to the creditors. Moreover defaults often go hand in hand with (or are the consequence of) a sudden stop in capital flows.

CURRENCY MISMATCH A second peril of external borrowing is rooted in the *currency mismatch* between tax revenues, which are typically in domestic currency, and debt servicing in foreign currency. Since debt crises are intimately connected with currency crises, self-reinforcing vicious spirals are commonplace. This balance-sheet effect can take extreme forms, simultaneously setting the stage for deepening sovereign solvency crises and banking crises.

INABILITY TO TAX FOREIGN CURRENCY DEBT A third pitfall is the *inability to "tax" foreign currency debt* and private foreign investors, be it by spurring inflation or via legislation that reduces the de facto debt servicing costs. Typically, the only mechanism to impose burden sharing and extract relief from external creditors is an outright default and subsequent "haircuts" via negotiated restructurings. It is well known that external creditors (including official ones) typically resist this outcome for as long as possible. In contrast, the government has more options to extract relief when the debt stock is domestic (Reinhart and Sbrancia 2015).

ASYMMETRIC CRISIS SHOCKS A fourth, more subtle, risk of external dependence is the fact that the *"crisis shocks" are asymmetric* if debtors and creditors are not from the same country. Domestic creditors have a strong interest in quick crisis resolution, since they also bear the consequences of a protracted economic downturn that may erode both their income and their wealth. This is not the case for foreign creditors who have less "skin

4. The term "foreign saving" is used interchangeably with "capital inflows."

in the game" when a country enters a severe crisis. Governments also have a much harder time applying regulatory pressure and moral suasion on foreign creditors. This may be one reason why external defaults have tended to last longer than domestic ones, as documented by Reinhart and Rogoff (2009).

EXTERNAL POLITICAL INTERFERENCE Fifth, external borrowing during a boom often ends with heavy *external political interference* during and after the debt crisis. The most drastic examples are military interventions by creditor governments, as in the case of Venezuela in 1902. Less martial but nonetheless powerful forms of foreign interference include the conditionality attached to the granting of rescue loans, as well as conditional aid flows. Political demands in exchange for debt relief have been another vehicle. History is filled with countless examples of creditor governments taking advantage of foreign debt overhang situations as a vehicle to pursue their strategic and economic interests abroad. Arguably, the recent developments in the eurozone crisis are a modern manifestation of foreign interventionism.

To provide a broad picture on external dependence we study indicators of external financial liabilities, sources of government revenue, and proxies for macroeconomic imbalances. In particular, we focus on the level and composition of debt (internal and external, public and private), the current account, transfers and grants from abroad, the "inflation tax," and the scope of domestic savings. We also look at external political pressures and zoom in on changes in external dependence before and after crisis episodes.

On measurement, it is important to note that the lines between what is considered domestic and external debt have become more fluid in the recent wave of financial globalization, largely post-1980s or 1990s. Historically, external debt was issued under foreign law, denominated in a foreign currency (usually the creditor's), and held by nonresidents. Conversely, domestic debt was an entirely domestic affair. In the modern context, as we shall see in the case of Greece, what is domestic in terms of currency or governing law need not be domestic if we look at who actually holds the debt.

II. Greece's Dependence on External Savings: A 200-Year Overview

In this section, we examine Greece's past and present experience with economic crisis, debt, and default, in light of the previous discussion on external dependence.

II.A. Data Preliminaries

Expanding on earlier work by Reinhart and Rogoff (2009) and Reinhart (2010), we begin by constructing a long time series of Greek government debt, breaking it down into its domestic and external components, and dating all external credit events (defaults and restructurings) since Greece's independence. Second, we collected bond-by-bond issuance data using historical investment reports such as Moody's yearbooks, Fenn's compendiums, Kimber's records, the World Bank (Huang and deBeaufort 1954), and the reports by creditor organizations of the time, in particular, the London-based Corporation of Foreign Bondholders (CFB) and the U.S.-based Foreign Bondholder Protective Council (FBPC). The data coverage on Greek bonds is both extensive and well documented, with considerable overlap across sources, resulting in a fairly complete picture of gross borrowing from the rest of the world for the period 1824–1940. In a third step, we gathered data on Greece's current account (from the 1920s onward), private external debt, domestic saving, and post–World War II foreign aid flows, as well as the details of Greece's recent sovereign borrowing. Data on the sources and composition of government revenues and expenditures, inflation, exchange rates, output, and the monetary aggregates (to estimate revenues from the inflation tax) span the 1830s to the present.

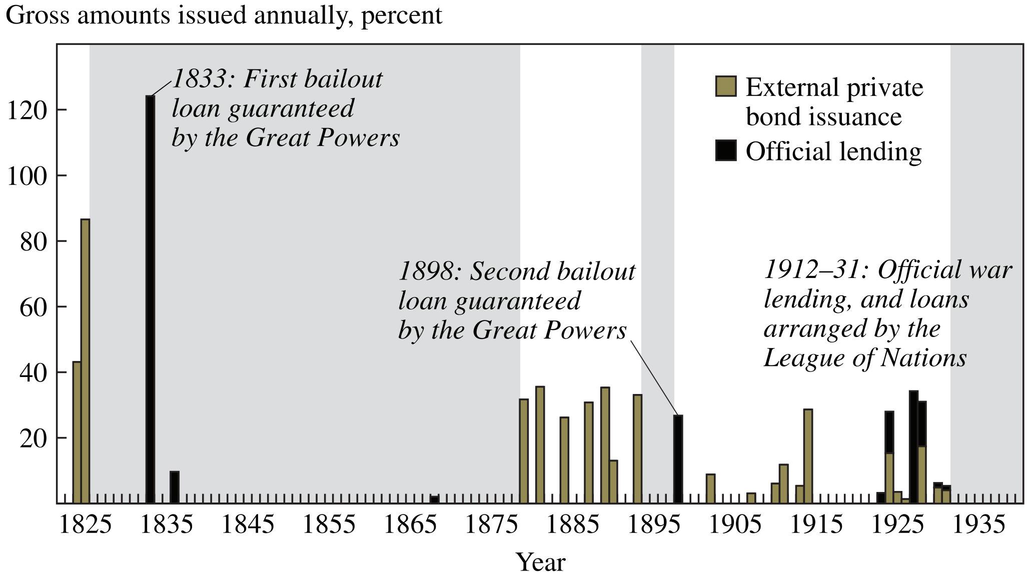
II.B. External Debt

The main insight emerging from this archival work is that Greece has always relied heavily on external borrowing. This can be seen in figure 1, which shows gross external borrowing amounts as a percent of GDP for each year between Greece's War of Independence of the 1820s until World War II. The shaded areas indicate years in default. Lending was mostly from private foreign investors in London and New York (indicated by the bars with light shading). However, during crisis times, the government also became a large-scale borrower from official lenders, in particular, from foreign governments (indicated by the bars with dark shading).

Two main borrowing booms stand out. The first are the very large loans of 1824 and 1825, which were raised in London to finance the independence war against the Ottoman Empire. They imply that Greece started off with an indebtedness above 100 percent of GDP even before gaining independence.[5] The second lending boom occurred after the crisis exit in 1878

5. If the London loans of the 1820s (which were already in default) were combined with the loan of 1833, total indebtedness would have exceeded 200 percent of GDP in that year.

Figure 1. Greek External Borrowing as a Percent of GDP, 1822–1941[a]



Sources: Meyer, Trebesch, and Reinhart (2015) and sources cited therein, in particular, annual reports of the Corporation of Foreign Bondholders, the 1933 Economic Yearbook of Greece, Moody's Manual of Investments, Huang and deBeaufort (1954), and Kimber's records.

a. Shaded areas represent periods of external default.

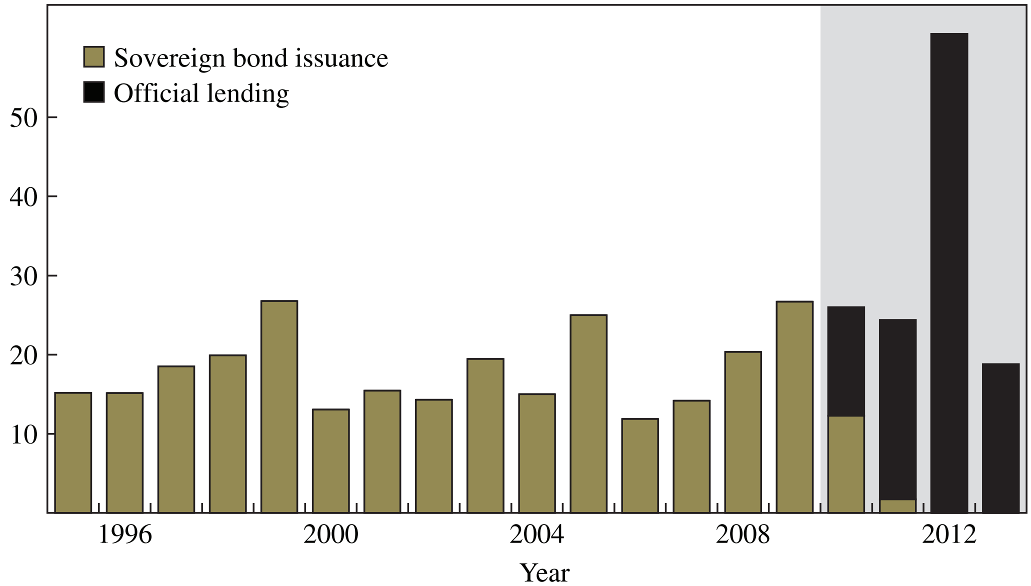
and continued until the renewed default in 1893. Within a decade, Greece borrowed more than 100 percent of its GDP from abroad. Once private markets closed, the country continued to borrow from official sources, thus replacing debt on private balance sheets with government-to-government loans.

In recent decades, the borrowing patterns look strikingly similar to the historical picture. Figure 2 summarizes gross sovereign borrowing between 1995 and 2013, using data from Dealogic, Bloomberg, and the European Commission. Sovereign bond issuance in private markets often exceeded 20 percent of the debt-to-GDP ratio annually between 1995 and 2007, and the debt-to-GDP ratio remained at 100 percent, despite high rates of economic growth. After 2010, Greece lost access to private bond markets and again turned to the official sector, with eurozone rescue loans almost entirely substituting for the bonds held by private creditors.

A difference between figures 1 and 2 is that much of the sovereign borrowing in recent decades has been issued under domestic (Greek) law and in domestic currency. Indeed, data by Reinhart and Rogoff (2009) show that the share of domestic borrowing in total Greek sovereign borrowing sees a strong increase after World War II. The picture changes for the 1990s and

Figure 2. Greek Sovereign Borrowing as a Percent of GDP, 1995–2013[a]

Gross amounts issued annually, percent



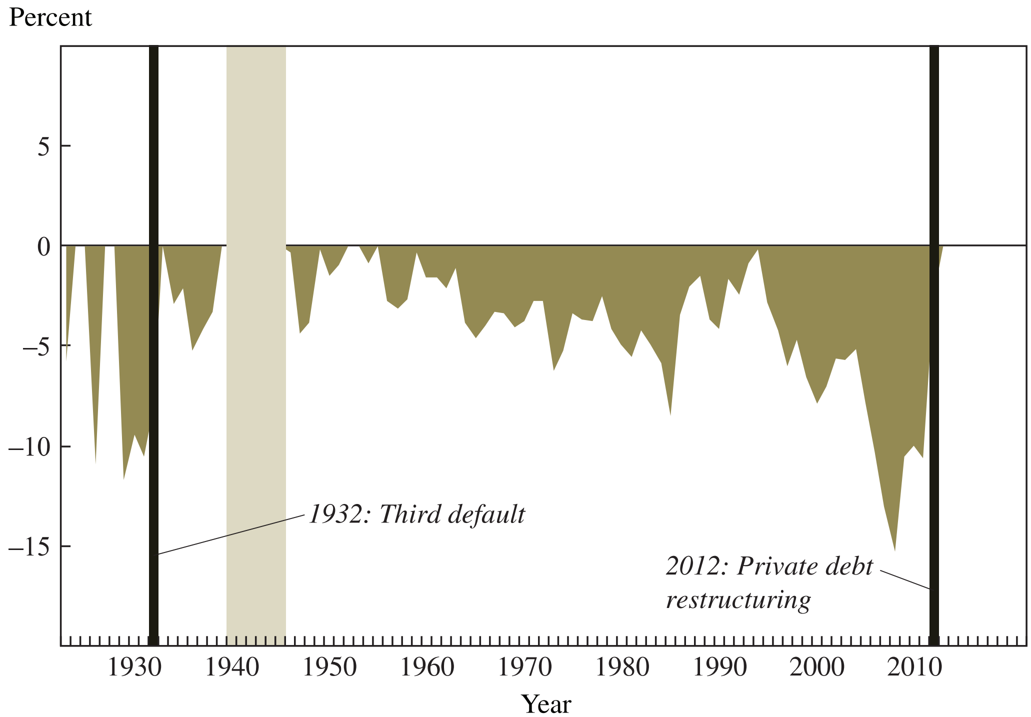
Sources: Bloomberg, Dealogic, and table 9 of European Commission (2014).
a. The shaded area represents the period of debt crisis.

2000s once we measure domestic debt based on who holds the debt—that is, when looking at the creditor base. A significant share of what appears to be domestic debt is actually external by this measure. This can be seen in appendix figure A1,[6] which shows the share of sovereign bonds held by nonresidents. It is remarkable that the share of Greek bonds in the hands of domestic holders has declined from above 70 percent in the late 1990s to about 30 percent prior to the crisis of 2009. Part of this drop can be attributed to a general trend, but Greece shows a much more pronounced decline than other advanced economies and other eurozone periphery countries such as Italy, Portugal, or Spain. This result is corroborated in figure A2 in the online appendix, which shows that since Greece joined the eurozone, the country more than doubled its level of external indebtedness from about 75 percent of GDP in 2001 to 180 percent in 2010.

In sum, the recent boom in borrowing has many features in common with previous Greek surges in borrowing, both in the high levels of debt-to-GDP

6. Online appendixes for papers in this volume may be found at the *Brookings Papers* web page, www.brookings.edu/bpea, under "Past Editions."

Figure 3. Greek Current Account Deficits as a Percent of GDP, 1923–2014[a]



Sources: International Historical Statistics (book series by B. R. Mitchell), Makrydakis (1999), International Monetary Fund (International Financial Statistics and World Economic Outlook), and Reinhart, Reinhart, and Trebesch (2016).

a. No data exist for the World War II period, 1940–45.

that came with it, but also because much of the debt was owed to external creditors. It is striking that each of these *external* debt booms in Greece ended in a painful bust and default, be it in the 1820s, 1880s, 1920s, or 2000s (see appendix figure A3).

II.C. Current Account, Savings, and Grants

Figure 3 takes a different perspective to show that Greece has been, and continues to be, heavily dependent on external savings and highly vulnerable to sudden stops. The country has run current account deficits for almost every year since the 1920s. More precisely, between 1946 and 2014, Greece was in deficit 93 percent of the time, compared to roughly 56 percent of the time for the 19 other advanced economies for which we have data from Reinhart, Vincent Reinhart, and Christoph Trebesch (2016) and sources listed therein. This difference is striking and highly statistically significant.

Moreover, the country has had comparatively low and declining domestic savings, despite the Greek "growth miracle" of the 1960s and 1970s (appendix figure A4). The savings rate has seen a further drastic collapse since 2008. It is well understood in policy circles, but difficult to quantify, that part of the weakness in domestic saving and the reliance on external saving stems from the fact that much of Greek wealth is held abroad. It is a more or less chronic form of capital flight that intensifies in bad times but is usually present.

Another reason for the enduring current account deficits in figure 3 are grants (as opposed to loans). The country was a net recipient of large-scale aid transfers over much of the post–World War II period, first from the United States, which provided Marshall Plan aid in excess of 5 percent of yearly GDP in the 1950s, and later from the European Economic Community, which transferred yearly grants of 5 percent of GDP after Greece's entry in 1981 (see figure 4).

III. Four Costly Defaults

In the preceding section we have documented how Greece has relied heavily on external savings throughout its history. In this section, we document that this external dependence had a costly downside, particularly in times of crisis.

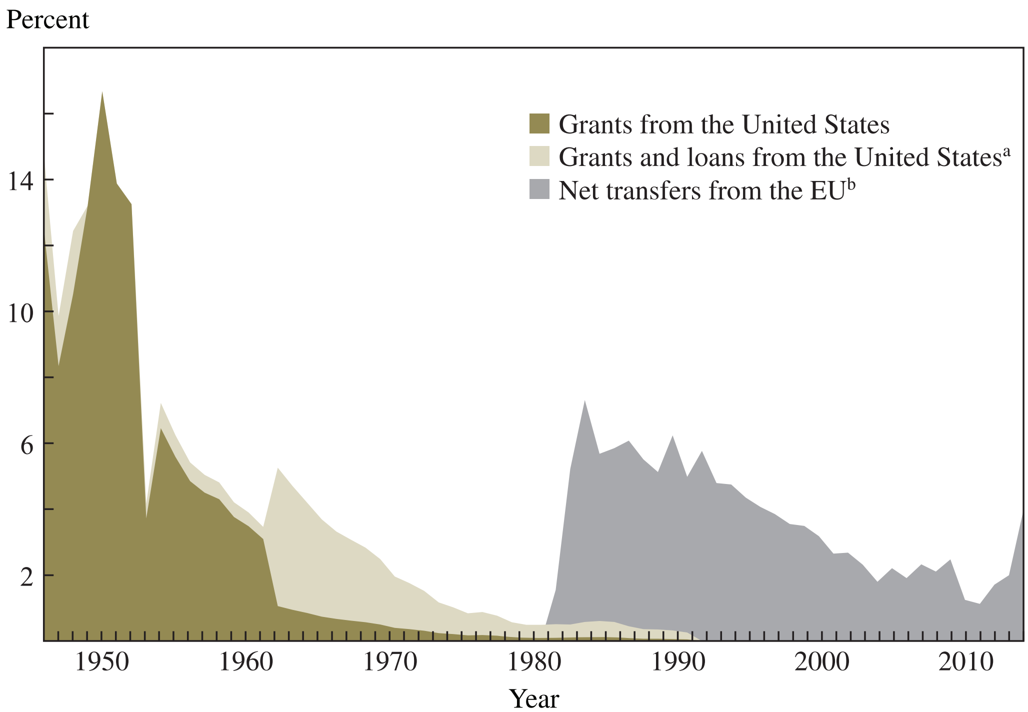
III.A. Repeated Default and Sudden Stops

External debt build-ups in Greece ended in four episodes of external default and sudden stops.[7] In total, the country has been in a state of external default about 50 percent of the years since independence. This can best be seen in table 1, which shows a timeline of main crisis events in the modern history of Greece.

In the run-up to all four debt crisis episodes, Greece lost access to external borrowing and faced increasing interest rates, typical features of a sudden stop. We also find strong balance sheet effects, in particular during the

7. It is five episodes if one treats the default on the guaranteed loan in 1843 as a separate event. It is six episodes if one adds the July 2015 short-lived default on the International Monetary Fund. Other such short-lived defaults are routinely included in the sovereign credit histories documented by the rating agencies (which focus on defaults on private creditors). Moreover, Psalidopoulos and Schönhärl (2012) argue that the first episode of default (from 1826 until 1878) actually includes three separate default events: in 1829, 1836, and 1843, with partial debt servicing occurring between these years. This would increase the default tally to seven. Here, however, we prefer to follow the standard definition of default as periods with missed payments and therefore code the 1826–78 spell as one event. Throughout this period, parts or all of Greece's external debt were not being serviced.

Figure 4. Grants and Loans from the United States and the European Union as a Percent of GDP, 1946–2013



Sources: International Monetary Fund (World Economic Outlook), Maddison Historical GDP Data, Total Economy Database, International Historical Statistics (book series by B. R. Mitchell), USAID (1990), and Bank of Greece.

a. Includes economic and military assistance under various programs, including the postwar relief period (1946–48), the Marshall Plan (1949–51), the Mutual Security Act period (1953–61), and the Foreign Assistance Act period (1962–90).

b. Includes receipts from the European Social Fund (since 1958), the European Agricultural Guidance and Guarantee Fund (since 1962), the European Regional Development Fund (since 1975), and the Cohesion Fund (since 1992).

debt crisis of the early 1930s, in which a drop in the drachma exchange rate and declining central bank reserves resulted in a lack of foreign exchange. The expected exit from the interwar gold standard in 1932 implied that the debt borrowed in dollars and pounds could no longer be serviced out of the state's drachma tax revenues. This contributed to the decision to default in the same months as the gold standard "Grexit" of 1932. Further details on the context of each default episode are provided in appendix C.

III.B. Protracted Crisis Resolution and Limited Debt Relief

Table 1 shows how protracted the resolution of sovereign defaults has been in Greece. The first default of 1826 spanned a remarkable 53 years, while the third default of 1932 was resolved only 30 years later (in 1964).

Table 1. Timeline of Greek Defaults, Bailouts, and External Intervention[a]

Episodes of Default/Debt Crisis — Bailouts and External Interventions

1824/25	Uprising against Ottomans; two loans issued in London to finance war	
1826	Default on the “independence loans” (Debt/GDP > 100%)	
1829	Independence	
1833	King Otto of Bavaria enthroned as King of Greece Guaranteed loan by Great Powers	
1843	Economic crisis and revolt against Otto	Guaranteed loan of 1833 gives **Great Britain, France and Russia** legal control over Greek revenues; high taxes and expense cuts cause public discontent
1862	King Otto overthrown	
1866	Beginning of debt renegotiations	
1878	Debt restructuring and crisis exit	
1879	Market re-access and start of lending boom	
1893	Second default	**1898–1942 International Finance Commission** manages Greek budget and assures debt servicing; financial control imposed by creditor countries as a condition for 1898 guaranteed loan and as part of peace treaty with Turkey
1897	Debt restructuring and peace treaty with Turkey	
1898	Second guaranteed loan by Great Powers	
1912	War lending starts (wars against Turkey and Bulgaria)	
1923	Refugee crisis, loans arranged by League of Nations	
1928	Additional “League Loans”	**1923–32 League of Nations** demands adjustment programs as condition for loans
1932	Third default and exit from gold standard	
1936	Metaxas dictatorship (until 1941)	
1941	Occupation by Nazi Germany and Fascist Italy	
1946	Civil war (until 1949)	
1947	Start of Marshall Plan grants and lending by United States	
1954	Beginning of debt renegotiations	
1964	Debt restructuring and market re-access	
1967	Coup d’état; military junta takes power (until 1974)	
1981	Membership in European Economic Community	**2010–today Troika** of the International Monetary Fund, European Commission, and European Central Bank demands primary surpluses and reforms as condition for bailout loans and eurozone membership
2001	Introduction of euro	
2010	Eurozone bailout; loss of market access	
2012	Private debt restructuring	
2015	Default on the International Monetary Fund (temporary) and third bailout	

a. See appendix C for details.

Moreover, the current debt crisis which started in 2010 is still very far from being resolved.

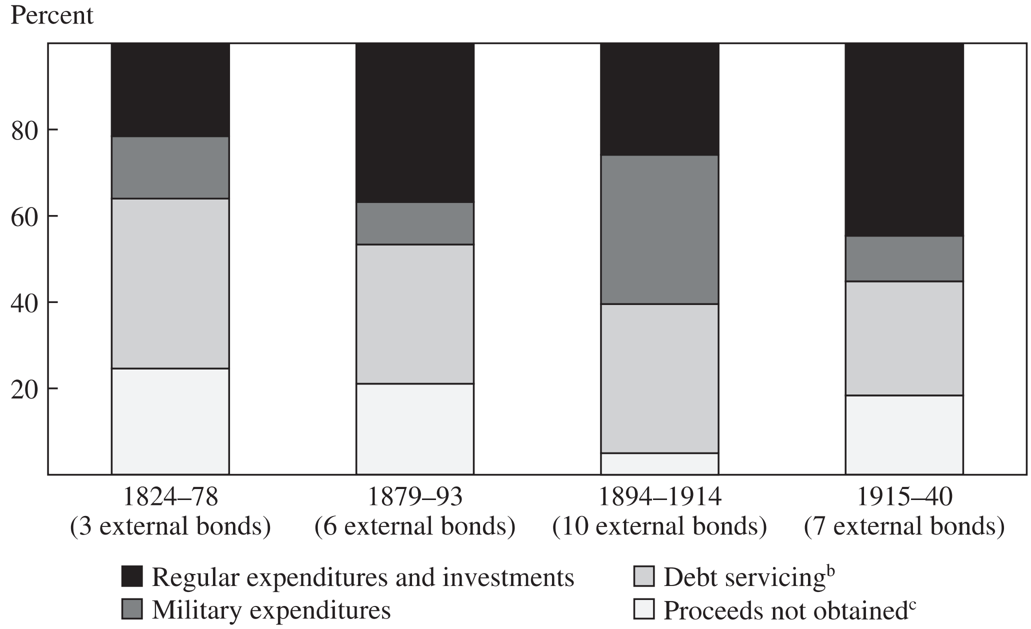
What explains these long delays in crisis resolution in Greece? The reasons are of course manifold, including protracted recessions and the political environments.[8] But part of the delays can be clearly attributed to the creditor side. This is most evident in the largely "excusable" default of 1826 and how it was resolved. We know that the terms of the independence loans of 1824 and 1825 (contracted even before Greece became a sovereign country) were very unfavorable. Of the total nominal value of 2.8 million British pounds borrowed de jure, less than 1.3 million flowed to Greece de facto. The rest were very high commissions and retained amounts due to the issuance price of less than 60 percent of par (see appendix C). In 1829, the government of the newly founded Hellenic Republic approached creditors, offering them to settle the debt so that the repayments would correspond more closely to the actual amounts lent. However, creditors refused to agree to any face-value haircut, and demanded the full repayment of the contractually agreed-upon sums, plus interest payments. With debt above 100 percent of GDP, these demands were difficult to meet in a war-torn and newly founded state.

The refusal to grant debt relief continued after Otto was dethroned and negotiations picked up again. Finally, in 1878, the creditors (or their heirs) agreed to settle the debt at 1.2 million pounds (close to the 1.3 million actually lent) and to forgive the more than 10 million pounds of accrued interest rates and arrears that had accumulated since the 1820s. Ultimately, this restructured debt was then fully repaid upon the pressure of the Great Powers, which exerted a strong influence on Greece in the late 19th century. In other words, the creditor ultimately got back almost the entire nominal amount lent, albeit with a very long delay. The downsides for Greece were 50 years of debt overhang, external interference, and continued exclusion from international markets.

Had the creditors been domestic, the crisis resolution process would most likely have been less protracted, with debt relief granted earlier. The

8. For example, in the reign of King Otto, between 1833 and 1862, Greece refused to even negotiate with creditors, arguing that the war loans of 1824–25 were raised before Greece's independence and therefore not legitimate debt of the Greek state. Moreover, in the early 1950s, Greece underwent a period of heavy political turmoil, with government changing more than once per year. This high turnover rate made it very difficult to engage in long-term negotiations with creditors.

Figure 5. External Bond Proceeds, 1824–1940[a]



Sources: Meyer, Reinhart, and Trebesch (2015) and sources cited therein, in particular the annual reports by the Corporation of Foreign Bondholders and the Foreign Bondholders Protective Council, Levandis (1944), Huang and deBeaufort (1954), and Bikélas (1868).

a. Historically, each sovereign bond prospectus contained a detailed description on how the borrowed amounts would be used. It is therefore possible to categorize the use of proceeds by type.

b. Includes interest and principal on old debt.

c. Includes nominal amounts borrowed that never flowed to the respective country, mostly because the issuance price was often considerably below the par value of the bond.

government would have had more opportunities to pressure domestic holders into an agreement, and domestic creditors might have had more incentives to restructure the debt of their newly independent country. Instead, Greece faced foreign creditors that went out of their way to use their financial and political influence to pressure Greece for repayment, and ultimately largely succeeded in doing so.

Figure 5 illustrates the long-lived consequences of the first external loans of the 1820s and 1830s. The figure breaks down the use of proceeds of each bond borrowed in the first 150 years of Greece's modern history. We separate the share of proceeds that actually benefited Greece's citizens and those that never arrived in the country, either because the new borrowing was used to service old debt or because the issuance price was much below par. The scale of these "non-flows" is striking. Up to the early 20th century, more than 50 percent of the nominal amounts borrowed never arrived in Greece. Moreover, the remaining chunk was then often largely used for military purposes.

Table A1 in the online appendix shows that the use of proceeds did not look more favorably with regard to the bailout loans. It is striking that less than 30 percent of the 1833 guaranteed loan was transferred to the Greek public treasury; the rest was eaten up by fees, retained interest, a large transfer to the Ottoman Empire, and, most importantly, large expenses to install and protect Otto's regency, including the recruitment of a corps of 3,500 Bavarian soldiers. All of this leads L. S. Stavrianos (1952, p. 26) to conclude that "not until 1924 were foreign loans used for productive purposes."

In sum, it took Greece more than 100 years to recover from the legacy of its first external loans. This can also be seen in appendix figure B1, which shows that Greece was running primary surpluses for much of its first 100 years. At the same time, the country was running budget deficits, since the primary surpluses were largely used to service the external debt.

In line with these aggregate numbers, we and Josefin Meyer (2015) calculate that external creditors fared rather benignly in Greece, despite the many years of default. The real ex-post returns on the defaulted bonds were in the range of 1 to 5 percent, despite the losses due to haircuts and arrears. These returns are partly the result of the high yields that these bonds paid between issuance and default, but also because partial debt service continued even in severe crisis years.[9]

Regarding domestic creditors, appendix figure A5 shows that they were heavily taxed, in particular during the interwar years, which saw double-digit inflation. Such "taxation" was never possible with regard to Greece's external creditors. The situation does not look much different today, as Greece enters the fifth year with debt overhang and ongoing discussions on the need for debt relief.

III.C. Foreign Influence, Bailouts, and Recurring Loss of Sovereignty

This last subsection documents how heavy borrowing abroad often resulted in external political dependence. Indeed, we discovered a recurring pattern of bailout lending and related political interference. In each of the four default episodes in Greece, foreign governments stepped in with "rescue" loans, typically in the form of tranches that were conditional on achieving certain fiscal or reform targets. Foreign governments also

9. For example, in the midst of the Great Depression, in 1930 Greece continued to channel more than a third of its budget revenues to service its debt, corresponding to a transfer of 9.25 percent of its GDP, compared to just 2.98 percent in Bulgaria and 2.32 percent in Romania (Stavrianos 1952, p. 26).

succeeded with their demand to impose fiscal and economic policies that assured primary surpluses and a steady flow of debt servicing to private and official creditors abroad.

Table 1 summarizes the episodes of foreign financial control in Greece, while appendix C provides more detailed background information related to each of the four defaults. The first episode resembling a sovereign bailout goes back to 1833, when Great Britain, France, and Russia offered to guarantee a loan raised on private external markets to the ruling King Otto. As collateral for this guaranteed loan, the creditor countries made Greece sign a contract that subordinated all of Greece's revenues, thus giving creditors de jure veto power over Greece's fiscal policies (Kofas 1981; Waibel 2014). This power was exerted most visibly when Greece faced the first major principal payment on these loans but was suffering from an economic downturn. Against the opposition of King Otto and despite the widespread dissatisfaction and protests among the population, the creditor governments demanded full servicing of the 1833 loan, insisting on further budget cuts.

The influence of creditor governments increased further after the renewed default of 1893 and a near defeat in the war against Turkey in 1897. As a condition for arranging a peace treaty with Turkey and in exchange of a new guaranteed loan (that was to be used to pay the war indemnity), the Great Powers, in particular Germany, insisted on establishing an "International Financial Commission," which de facto governed the revenues and expenditures of Greece. The Greek government protested against this loss of sovereignty, but had no choice if it wanted to avoid military defeat. This Commission governed the fiscal policy of Greece for many decades after, until the occupation of Nazi Germany and Fascist Italy ended its rule (Levandis 1944; Waibel 2014).

The scope of external political influence took another turn in the 1920s, when Greece approached the League of Nations to ask for help to tackle the economic downturn and the increasing burden of the refugee crisis from Asia Minor. The League helped to arrange several loans, acting as a trustee. In return, the League negotiated a series of "adjustment programs" with Greece, which were at least partly implemented, in close coordination with the Bank of England, the British Treasury, and the still-powerful Finance Commission (Minoglou 1993).

Against this backdrop, the most recent round of Greek sovereign bailouts and the associated conditionality by the "troika" of the International Monetary Fund, European Central Bank, and European Commission look familiar in regard to the timing, process, and associated political disputes.

As debt migrated from private sector balance sheets to official sector balance sheets, Greece was pushed to give up parts of its sovereignty and to implement adjustment programs to which it did not fully agree.

The success of these interventions was often limited. While the foreign creditors succeeded in enforcing debt repayments over most of the late 19th and early 20th century, the state of Greek finances remained problematic, and the economic conditions unfavorable. In the words of John Levandis (1944, pp. 103–4): "Instead of considering the debt problem in its broad aspects and of adopting measures to eradicate the endemic disease with which Greek finances were perennially afflicted, they introduced half measures of expediency, inadequate to remedy a really difficult and disturbing situation."

Moreover, it is ironic that the crisis resolution with the official sector was no less protracted than that with private creditors. Indeed, as summarized in appendix C, Great Britain, France, and Russia long insisted that the guaranteed loans of 1833 and 1898 were ultimately repaid in full, including any arrears and accrued interest. This resulted in a situation in which Greece was still servicing the bailout debt of 1833 a century later, in the 1930s. As one Greek historian puts it dramatically, "The undeniable fact remains, that the two loans, which were contracted to establish the independence of the Greek state, were the basic factors in its enslavement" (Brewer 2011, p. 296).

Thus, arguably, the most costly legacy of external debt is the loss of political control that comes with it during crisis times.

IV. The Greek Experience in an International Context

Do the pitfalls of external dependence also apply to other countries? Answering this question requires a broad and in-depth analysis, which goes beyond the scope of this paper. But the historical record does indeed suggest that the Greek experience is far from unique.

Maybe the most obvious parallel to Greece is the financial history of Latin America, including countries such as Argentina, Brazil, and Mexico, which have all been chronically dependent on foreign savings and went through repeated boom-bust cycles in international capital flows over much of the past 200 years (Kaminsky and Vega-Garcia 2015). At the same time as being "addicted" to external debt, the region holds the global record in sovereign default years (Reinhart and Rogoff 2009). Moreover, the lost decade of the 1980s debt crisis is also a story of external dependence gone wrong, and shows many resemblances to Greece today, including large-scale official bailouts, strict adjustment programs, and refusals to grant debt relief by external creditors.

Other examples include Turkey and Egypt, which saw repeated sudden stops and heavy foreign interference in the wake of defaults, as well as some of today's high-income countries such as Portugal, Spain, and China. This latter group featured several lending booms and defaults in the 19th century, but all three countries turned inward in the course of the 20th century, relying more heavily on domestic saving (until recently). Another largely forgotten case is Newfoundland, which lost its sovereignty after defaulting in 1937 (Reinhart and Rogoff 2009).

On the opposite end of the spectrum are countries that have a long history of domestic borrowing, for example Japan, India, and several other Asian countries that have barely witnessed sudden stops and defaults.[10] Moreover, there are countries that successfully "tolerated" large-scale external borrowing from financial centers, in particular Australia, New Zealand, and Canada, which benefited from stable capital inflows even in difficult times (Stone 1999).

V. Conclusion

Sovereign defaults on external creditors can take painfully long to resolve (see table 2). The Greek experience shows that crises can also be very protracted when foreign governments step in and arrange bailout programs, as was the case in the guaranteed Greek loan of 1833. It started out as a loan from private creditors, which Greece could not repay. The 1833 "troika" (the Great Powers of France, Great Britain, and Russia) repaid the private creditors, and Greece's debts shifted to official hands. After decades in default and financial autarky, Greece still faced repayment of that loan more than 100 years later. Such a crisis resolution approach, which results in decades of debt overhang, perpetuates external dependence and impedes a "fresh start" for the over-indebted country.

We have documented elsewhere that protracted debt crises are typically resolved only after creditors agree to face-value haircuts (Reinhart and Trebesch 2016). Decisive debt relief is associated with higher subsequent growth that softer forms of debt relief, such as maturity extensions, do not usually deliver. Against this backdrop, a key ingredient in the resolution to the ongoing Greek crisis is a deep nominal haircut on the stock of official

10. The only Japanese default was in the wake of World War II, and that was on small amounts only; see Meyer, Reinhart, and Trebesch (ongoing work).

Table 2. Elements of Greek Debt Resolution, 1826–2015

Period	*Delay*	*Bonds restructured*	*Interest arrears*	*Haircut*
Default of 1826–78	53 years	2.8 million pounds	10 million pounds	Between 40 percent (face-value reduction) and 91 percent (including cancelation of interest arrears)
Default of 1893–98	5 years	22.3 million pounds	3 million pounds	Between 37 percent and 53 percent, depending on assumptions; no face-value reduction
Default of 1932–64	32 years	54.7 million pounds	64.5 million pounds	Between 64 percent (excluding interest arrears) and 86 percent; no face-value reduction
Debt restructuring of 2011–12	Less than 1 year	199.2 billion euros	None (preemptive)	Between 59 percent and 65 percent, depending on discount rate and assumptions

Sources: Meyer, Reinhart, and Trebesch (2015), Zettelmeyer, Trebesch, and Gulati (2013), and sources cited therein.

(and possibly private) external debt. Further maturity extensions would be an unfortunate repetition of the Greek history documented in this paper (see table 2) and would only delay the day of reckoning—to the disadvantage of both Greek and eurozone taxpayers. Extending the debt until 2070 (as discussed by the International Monetary Fund [2015]) is likely to add fuel to a never-ending debate on what to do with Greek debt. It is difficult to see how this could foster a renewal of confidence and sustained growth and investment.

Beyond the immediate and towering challenge of coping with the current debt crisis, we believe that Greece (and periphery Europe) can learn from some of the measures taken in many emerging markets in the 1990s after their own financial crises. We are well aware that Asia in the 1990s, in particular, started from a much more favorable position than Greece today. Nonetheless, a long-run policy priority for Greece should be to shift the balance to domestic sources of funding. Since the late 1990s, numerous emerging market governments have, in varying degrees, reduced their reliance on external financing by tilting new debt issuance to the domestic market. Prudential public debt management, however, does not directly address the vulnerabilities posed by surges in private external borrowing. To deal with the macroeconomic risks often connected to the latter, many countries have adopted policies that tax or limit some or all forms of external borrowing or foreign exchange exposure. Whether such policies fall under the broad headings of capital controls or macroprudential regulation has depended on the particulars of each case.

Overall, we have no basis to conclude that greater reliance on domestic savings will be a panacea of economic stability, but we do have 200 years of evidence to support the view that chronic reliance on external capital has repeatedly led to ruin.

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