

Introduction

In many ways, 1907 was a watershed year for the worlds of sovereign debt and war reparations. It was the year the Hague Convention agreed to a set of treaties that govern how we think about sovereign debt and war reparations in international law. In Article 2, the Drago Doctrine was introduced, which established the idea that countries should not use the military to enforce sovereign debt repayment. In Article 3, countries were given the right to claim war reparations for damages from an unjust war. The themes of this book are, in some ways, found within those pages and articles. In other ways, the treaties changed nothing. Just because something is written down in a treaty does not make it so when it is a matter of international politics. There were legal and illegal war reparations and sovereign debt enforcements before and after 1907.

The core thesis of this book is that nations cannot really default on war reparations, no matter what international law says. That is what makes reparations a special kind of sovereign debt. War reparations are enforced by military power and only when the geopolitical situation changes is it possible to renegotiate the debt. States do not default on war reparations, because doing so would put the survival of the state in question. War reparations are paid under duress, at risk of crippling sanctions or an invasion, and the debtor is always in a position of having just lost a war. How do you manage an economy coming out of a war if you then have to pay reparations? Is it possible? The answers can teach us a lot about the effects of debt repayment in an economy and the functioning of a state. They can tell us how devastating debt spirals can be if there is no choice to default. They can tell us what happens in other cases

where governments continue to repay their debt to the detriment of the economy, just to maintain a reputation of good credit.

Sovereign debt management is at the core of almost all nation states and has been for hundreds of years. The choice on how to finance government expenditures is a political decision but sovereign assets and liabilities do not change because the government does. The choice is always either taxes, printing money, or borrowing. After a war there is usually not much of a choice. Fighting a war is expensive and the economy is typically not in a good state afterwards. Infrastructure investments are needed, money is lacking, war debts have historically been high, and assets have been sold to finance a war. States do not have the resources to come up with 5 or 10 per cent of the economy every year in reparations transfers, especially not historically, when the government was a smaller part of the economy. That leaves borrowing to come up with the money.

No sovereign debt is more political than war reparations. That is why the topic is interesting. Reparations played a significant part in stoking political unrest in Germany in the interwar years, which ultimately led to World War II. The subject warrants a book, not only because of reparations' economic effects but because of their political effects. Reparations can stoke anger and resentment. How a country reacts to reparations can teach us about the political economy.

In this book, I use a range of different methods to analyse reparations. Common to them all is that they have sovereign debt at their core. In the following chapters, I will give an overview of a framework for reparations and sovereign debt. Almost all the parts can be read by non-specialists. The two sections that specify models can be skipped without losing the context of the book, as they are described in words. Following Chapters 2 and 3, I lay out the episodes of war reparations since 1800 that form the core of the book. It is not enough to simply look at economics, because each case is complex and interesting. I have had to make choices on what to include and what to leave out. I am sure that somewhere, there will be a case study that would have been worthwhile, but I had to draw a line somewhere. What you will read are stories about how countries were forced to pay damages for war, how those transfers were financed, and what consequences they had. Those consequences have broader implications for sovereign debt as we know it.

I.1 DEFINING WAR REPARATIONS AND INDEMNITIES

The legal basis for demanding war reparations lies in the articles governing war that were agreed at the Hague Convention in 1907. Article 3 of

the Hague Convention of 1907 stipulates that '[a] belligerent party which violates the provisions of the said Regulations shall, if the case demands, be liable to pay compensation'. If the war is unjust, countries can ask for compensation and know that it is based in international humanitarian law. That is the current legal basis for reparations, but it is not as if reparations did not occur before 1907. It is just that they did not have a basis in international law. Now, as before, reparations are negotiated on an ad hoc basis as part of peace settlements.

This is usually a complex process where countries and their citizens can claim to be compensated for war damages. The debt can take many forms, such as commercial or bilateral loans, war bonds, or fiscal arrears, and damages can be everything from farmland to factories. Wars represent large fiscal outlays and often result in large war debts and much destroyed property (Shea and Poast 2018). Victors have historically asked for restitution based on an account of actual damages, either in the form of reparations or indemnities. Stevenson (2010, p. 1505) defines reparations as '[t]he compensation for war damage paid by a defeated state', and indemnities as '[a] sum of money paid as compensation, especially one paid by a country defeated in war as a condition of peace' (p. 888). Reparations and indemnities are much alike, in that the outcome for states is the same, but the difference lies in what sort of compensation they are. It is the study of reparations and indemnities, and how they relate to sovereign debt and defaults, that is the driving topic of the book.

War reparations can take many forms. Most common are monetary transfers in hard currency, where hard currency is either the global dominant currency or the creditors' currencies. But reparations have included precious metals such as gold and silver, natural resources such as oil, the transfer of industrial assets, intellectual properties, or compensation for specific damages. These sorts of transfers are often governed by treaties, which are negotiated as part of a peace settlement. The repayment of reparations is often a condition for the removal of occupying troops, or they are paid under the threat of reoccupation. Military or political force incentivises the debtor to pay because they are paid for a reason – a lost war.¹ The agreement of monetary reparations is easy to track historically because they are written down in treaties or agreements. It is harder to understand illicit money flows, theft, or confiscations. It is also often difficult to track actual payments made because they span a much larger time frame. An example is the transfer of intellectual property and scientific know-how, which might be seized as a spoil of war but without

¹ An exception is Haitian reparations to France, which are discussed in Chapter 5.

direct attribution. The transfer of intellectual property does not require borrowing, as the patents are owned already, but can affect trade flows and future income streams. Another thing that can have both economic and political consequences is the loss of territory. This is common in post-war settlements but has not been thought of as reparations. It only features in the analysis as it relates to loss of economic output or changes to trade patterns.

War reparations go back thousands of years, and it would not be possible to cover all episodes in one book. At least as far back as 241 BC, Rome imposed an indemnity of 3,200 talents of silver on Carthage following the First Punic War, to be paid over ten years (Treaty of Lutatius, 241 BC). The monetary indemnity was later accompanied by Rome's seizure of Corsica and Sardinia (237 BC). The number of armed conflicts since the first Punic War is high and unknown, and a full history of war reparations since, and how sovereign debt has been used to pay reparations, would likely miss some important episodes. Cirillo and Taleb (2016) find at least 565 armed conflicts involving governments since 1 AD, using a threshold of 3,000 deaths to qualify. Even assuming the dataset is complete, there would be too many episodes to investigate. The focus of the book is instead on recent reparations where it is known that sovereign debt played a role. This book investigates fifteen war reparations since 1800. The episodes are listed in [Table 1.1](#).² The episodes have been chosen because they represent monetary reparations for major conflicts, where reliable macroeconomic data and historical accounts are available, and there is a treaty that governs the transfers. Some reparations values have been so small as to be meaningless in national income terms, while others have represented significant transfers of wealth in terms of gross domestic product (GDP).

² Not included are US reparations made in 1988 to Japanese Americans who had been interned during World War II (Civil Liberties Act of 1988); and US reparations to Cuba in exchange for prisoners captured during the Bay of Pigs. The latter is one of only two cases of the United States paying reparations to a country (the other being to Mexico in 1848). Also left out are all non-war reparations, such as reparations awarded by the International Center for Transitional Justice in Tunisia for human rights violations, because they occurred within a country rather than between countries (www.ictj.org/about, accessed 18 February 2020). Reparations currently being negotiated, such as German reparations to Namibia for the colonial-era massacres from 1904 to 1908, are also left out.

TABLE 1.1 *War reparations and indemnities since 1800*

Reparations related to	Per cent of output	Who paid?	Repaid in full?
1815–1819: Napoleonic Wars	22	France	Yes
1825–1947: Haiti independence	300	Haiti	Yes
1848–1881: Mexican–American War	<1	US	Yes
1871–1873: Franco- Prussian War	25	France	Yes
1895–1901: Sino- Japanese War	–	China	Yes
1897–1898: Greco- Turkish War	–	Greece	Yes
1901–1939: Boxer Rebellion	–	China	Yes
1919–1964: WWI (Bulgaria)	>150	Bulgaria	Yes
1923–1933: WWI (Germany)	100	Germany	No
1945–1952: WWII (Finland)	20	Finland	Yes
1947–1965: WWII (Italy)	1	Italy	Yes
1953–1965: WWII (Germany)	3	Germany	No
1955–1965: WWII (Japan)	4	Japan	Yes
1994–2022: Gulf War	>400	Iraq	Yes

Source: Sources are provided in chapters covering each case.

Each episode in Table 1.1 is described in detail in later chapters. As can be seen from the table, some reparations were big and some were small when compared to one year's national output. This is a crude way of comparing reparations because there are several data issues. First, GDP data is increasingly unreliable the further back one goes and is unavailable for China and Greece in the late twentieth century. The year chosen to estimate the percentage of GDP is, to my best effort, the year of the first payment. However, post-war output sometimes differs significantly from pre-war output. The value of the reparation in terms of GDP is therefore the best datapoint chosen for ease of comparison. The comparison also does not consider over what time frame reparations are paid nor discount rates. The early French reparations were repaid in less than five years, while it took China thirty-eight years to pay for the Boxer Rebellion. Only two reparations are listed as not repaid. Again, this is a bit of an oversimplification. Both Germany's and Russia's reparations were negotiated away, while other episodes saw some leniency on behalf of creditors. Chapters 4–12 dive into each of these cases to understand how and why countries paid large sums to their former belligerents.

I.2 WAR FINANCE AND SOVEREIGN DEBT

The main topics of the book, war reparations and sovereign debt, address major questions of political economy. What is the impact of external debt on a country's economy? At what point should countries stop repaying their debts and default instead? The two questions will be addressed in this book.

Even before Keynes (1919) made his famous case against German war reparations after World War I, indemnities and war reparations had been hotly debated throughout history. One issue has always been the reason for imposing reparations. Is the point to punish a country for an unjust war or to prevent it from regaining military or political power, or are reparations meant to incentivise re-entrance into a future political alliance? The answers are usually found in the structure and size of reparations. Because the other issue is a question of economics. What is the size of reparations transfers that a country can possibly extract without inflicting disastrous economic consequences on the debtor? Sometimes economic ruin might be part of the point the creditor wants to make. Because reparations are paid as part of peace settlements, the incentives of the debtor and creditor are very different. The creditor's incentives and wishes can differ. The debtor's incentives are almost always to repay reparations quickly to regain full sovereignty. Because reparations carry more penalties and limitations than sovereign debt, the debtor often issues sovereign debt to repay reparations. The two might be identical in economic value but, as this book argues, they are different in seniority and enforceability.

Mantoux's (1946) analysis of Keynes suggested studying reparations as a question of willingness to pay, rather than of capacity to pay. He argued that logic would dictate that reparations violate a country's willingness-to-pay constraint by default because they are involuntary. A country's capacity to pay can therefore be much larger than its willingness to pay, especially when it can borrow all the money to smooth the cost of paying. The willingness-to-pay approach to reparations, as first pointed out by Albrecht Ritschl (1996a, 1996b, 2002), is identical to a sovereign debt approach. The capacity to pay is thus less interesting because it is not what constrains a country from paying reparations. Instead, what constrains a country from paying reparations is the possibility of political and economic crisis. It is important to understand if the level of sovereign debt, including reparations, violates a

country's willingness to pay. The sovereign debt literature has recently developed frameworks to analyse this question in a new way. I use one of these off-the-shelf sovereign debt models to analyse whether reparations were paid despite being outside the participants' willingness-to-pay constraint.

Countries can meet budgetary expenditures either through taxes, by printing money, or by borrowing money (domestically or internationally). The reparations studied in this book were financed by a mix of taxes, money printing, and borrowing, but almost all reparations were primarily financed by sovereign debt. Using sovereign debt to pay reparations is practical because it allows states to smooth their consumption and extend the costs over time. Tax revenues were mostly not high enough to cover reparations transfers by themselves, so sovereign debt played an important role, just like it has in fighting recessions and depressions.³ The willingness to pay reparations depends to a large degree on how easy it is to issue and service debts, but successfully repaid debt stocks are often much higher than suggested by Reinhart and Rogoff (2010). This raises the question of whether creditor enforcement for war reparations is fundamentally different from other sovereign debts. I argue that it is. I show that reparations were repaid in several instances in which a sovereign debt analysis would suggest a default. In fact, it is a core theme of this book that countries pay reparations because they need to do so to survive.

These political economy themes are important. They are not limited to a narrow set of technical questions but have important real-world implications for war, peace, and prosperity. This book explores what happens when countries borrow large amounts of money to pay reparations. Sometimes it ends well, sometimes it does not. Understanding the causes of success and failure is paramount.

The issue of sovereign debt is crucial for the analysis of war reparations because borrowing money is required to repay large reparations. If a country does not have the ability to borrow money on sovereign debt markets, it might be forced to sell valuable assets upfront, or undertake painful tax increases. If a country can borrow at reasonable

³ Fiscal multipliers have been consistently positive during times of crisis because of the lack of demand, both in the 1930s (Gordon and Krenn 2010; Cloyne et al. 2021) and during the financial crisis in 2008 (DeLong and Summers 2012). The effects are multiplied when the buyers of sovereign debt are external investors (Zimic and Priftis 2021).

interest rates, the liability flow can be smoothed over many years. Barro (1979, 1987) showed how public debt can help smooth out changes in tax rates in the face of temporary increases in government spending. War reparations constitute a temporary increase in expenditures. Increases in taxes can introduce inefficiencies that can be overcome by increasing the level of sovereign debt, to smooth out the cost of the reparations over time. Sovereign debt levels have increased in almost all cases of war reparations for this reason. The adjustment to the macroeconomy is spread out over many years, as countries structure the cash flow of their liabilities to make them longer. While war reparations are unavoidable, the adjustment costs therefore crucially depend on how the transfers are financed. Reparations are not voluntary, and unlike most sovereign debt there is an enforcement mechanism to force repayment: often the country is still occupied. Reparations are imposed because the victor demands them, not because there is an economic rationale for the debtor. Reparations can be considered senior claims to other state liabilities.

Sovereign debt enforcement is different from the enforcement of household or corporate debt because there are no legal remedies to make a sovereign pay. Countries can be coerced to pay by military force, but unlike the bankruptcy of people and firms there is no international bankruptcy court to settle claims. Creditors cannot take control of sovereign assets through enforcement of debt contracts because foreign official assets (such as embassies, military bases, or consulates) tend to be immune from creditor attachment (Buchheit 2013). Despite the limited enforcement mechanism, most sovereign debt is still repaid. Two reasons have generally been offered to explain why. The first is that countries want to maintain a good reputation as a borrower. The reputational explanation originating with Eaton and Gersovitz (1981) explains repayment of sovereign debt as an incentive to borrow again. A default causes an exclusion from capital markets for a period, which means the country cannot borrow to smooth consumption. Defaults occur when countries find debt service to be costlier than a default, where most papers specify a time period where the country is excluded from capital markets as a result. The incentive to repay sovereign debt is thus not a legal one. Chapter 3 will provide more details on the various models and theories of sovereign debt. The second reason is that countries want to avoid financial sanctions that follow defaults. In this part of the literature, creditors have certain legal remedies to force economic sanctions on the defaulting countries, as first suggested by Bulow and Rogoff

(1989a, 1989b).⁴ An example of a sovereign asset seizure was when the hedge fund Elliott seized an Argentine navy ship in Ghana in 2012 to collect on defaulted bonds from the 2001 restructuring (Cotterill 2012).

Recent sovereign defaults have carried high costs for the country in default, but countries were nevertheless able to make the decision to default on their sovereign debt (see, e.g., Kuvshinov and Zimmermann 2019). War reparations are different. They are a special case of sovereign debt because the enforcement mechanism is binding, often by military occupation or the threat of occupation. The case of war reparations is thus an extreme version of ‘gunboat diplomacy’. Gunboat diplomacy, or imposed fiscal control, was commonly used to ensure repayment on sovereign loans if the borrower threatened to default. The practice of gunboat diplomacy was common before World War I. In the period between 1870 and 1913, more than 40 per cent of sovereign defaults resulted in some of sanctions (Mitchener and Weidenmier 2010). The enforcement of debt contracts happened either through creditor countries’ legal or military power, or because international banks got involved. International banks were able to set conditions on loans because they had legal and military remedies to monitor and enforce their claims, and the banks thus acted as a lender of reputation to ensure payment (Flandreau and Flores 2012).⁵ The practice of militarily enforcing sovereign debt became much less common after the Drago Doctrine was adopted by the Hague Conference in 1907. The Drago Doctrine states that military force should not be used to enforce sovereign debt payments.

Despite sovereign debt playing such a prominent role in the financing of reparations, the economics literature has mostly studied them as examples of the transfer problem. Even though one reason to enforce reparations might be to increase the stock of sovereign debt, because high debt levels would render the debtor country unable to borrow money to engage in another war. The study of sovereign debt has also been quite uninterested in reparations. Studies of sovereign debt have mainly concerned themselves with more recent defaults in emerging markets, even though reparations are a fascinating area of state liabilities that can shed light on what happens when countries cannot default. This book takes aim at these deficiencies. It links reparations to the study of sovereign

⁴ See, e.g., Aguiar and Amador (2014) for a recent contribution.

⁵ For a list of case studies during the period, see, e.g., Tunçer (2015).

debt more generally, by studying war reparations in the context of a sovereign debt analysis. The next section presents a short summary of the rest of the book.

1.3 SUMMARY

The main argument of this book is that reparations are unlike other sovereign debt because the repayment is enforced by military and political force, making it a senior liability of the state. Non-payment of reparations only occurs when the creditor allows it, either because they are not interested in collecting on the transfer or because they are not able to enforce it because their political or military power no longer allows them to. Because the collection of reparations is enforced, debtor countries end up in suboptimal economic situations that do not occur during normal sovereign debt management. The argument is made by using a sovereign debt analysis on fifteen episodes of war reparations.

I show that if we treat reparations as standard non-contingent sovereign debt instruments, in many instances there should be no willingness to pay. Yet there was. Only when the creditor agrees to a standstill can reparations be restructured or written off. Otherwise, payments of reparations impose large economic and political costs on the debtor nation. Economic and political costs that are much higher than countries are normally willing to pay to stay current on their sovereign debt. The costs can be crippling economic performance or political turmoil.

How did countries manage to pay transfers under stretched capacity to pay? Was it simply that creditors could enforce reparations, or did market access gains outweigh the cost of repaying the total debt including reparations? To answer these questions, it is necessary to understand when countries are normally willing to repay debt. One way is to look at sovereign debt models where the government is in control of both the decision to default and conducts optimal monetary policy. The latter ensures the government can devalue its currency, to lower real wages, while the decision to default is taken when the benefits from continued borrowing no longer outweighs the costs of default. Such a model allows me to characterise a default set, which can be compared to the historical episodes of reparations. The combination of default and devaluation is empirically founded as it has been observed in many emerging markets during defaults (Reinhart 2002). The goal is to figure out if reparations are considered payable in terms of a standard sovereign debt analysis. If the macroeconomic conditions lie outside what

is normal willingness to pay, the reason for repayment is likely to be found in the political economy.

The book shows how episodes of war reparations exhibit many of the same characteristics of sovereign defaults yet were repaid. The literature on sovereign debt defaults has shown that defaults typically occur after a sharp contraction in output, are followed by a devaluation of the currency, and are costly. The devaluation of the currency lowers the relative price level and real wages. Governments choose to default when it is economically beneficial not to pay interest and principal and instead incur the loss associated with a default and financial autarky. The costs of default are both the inability to smooth consumption, by not being able to borrow again, as well as an explicit output loss that occurs because of the default. To account for these stylised facts, I apply a sovereign debt model by Na, Schmitt-Grohé, Uribe, and Yue (2018) to the Franco-Prussian War indemnity, to German interwar reparations, and to Finnish World War II reparations. This narrow set of reparations cases are the largest transfers studied (over 20 per cent of GDP) where there was agreement to pay in a relatively short time span (less than ten years). I collected data for the output, interest rates, debt stocks, wages, and exchange rates (nominal and real) for each episode. Common for them was that reparations were paid because they were enforced by military or political power, even if the country was situation in the default set of the model. The cases are studied in Chapters 6, 8, and 10. In Chapters 4, 5, 7, 9, 11, and 12, I study other war reparations that do not lend themselves to such economic modelling because the payment occurs over decades or is insignificant. Each is discussed because the repayment is closely linked to the enforcement of the treaties. The next paragraphs summarise the rest of the books.

Chapter 2 introduces a framework for how to think about war reparations. It discusses how a reparation transfer can be smoothed out over time by borrowing the money. I then discuss other ways a transfer can be paid, by taxes or printing money, and the effects it has on the balance of payments and the terms of trade. Finally, in a technical appendix that can be skipped, I show how changed terms of trade affect the current account and national income.

Chapter 3 discusses sovereign debt theory and practice. It goes through the history of sovereign debt and how the current theories of borrowing and lending developed in the 1980s. I argue that countries want to be part of global society, and that means they sometimes repay unsustainable debt. The chapter dives into why countries might default, when they

might default, how often countries have defaulted, and what the economic and political costs are. I then describe what happens when countries need to restructure their sovereign debt, both in theory and with a practical guide for the process. Finally, in another technical appendix that can be skipped by the lay reader, I describe a sovereign debt model. The model explains when countries should have no willingness to repay their debt. It allows me to characterise a set of stylised macroeconomic facts that usually accompany sovereign debt defaults. The default set that comes out of the model states when countries should default. These facts and default set (not part of the technical section) is used in Chapters 6, 8, and 10. Chapter 3 is the last overview chapter. The rest of the chapters in the book are case studies.

Chapter 4 studies the Napoleonic War reparations. France lost the Napoleonic Wars in 1815, which ended decades of revolution and counter-revolution. After Napoleon's final defeat at Waterloo, France was forced to pay just under two billion francs in reparations, around a quarter of output in 1815, over the following five years. With French government revenues of around 700 million francs in 1816, the transfer represented almost three times the annual budget. That is a big transfer, even more so as France faced significant credit constraints because earlier defaults prevented it from tapping sovereign debt markets.⁶ Not until 1817 did France manage to borrow large amounts of money, paying back reparations with two years to spare. How did France manage to pay the large reparations transfer? I argue that France benefited economically from a positive shock to its terms of trade as the war wound down. The French peacetime economy was structurally different in terms of its imports and exports, which had been changed during many years of war and blockades. Using the terms of trade framework from Chapter 2, I show how the improved terms of trade created an economic windfall similar in size to the transfer.

Chapter 5 is a brief history of Haitian indemnities to France. The chapter gives an overview of the how France used gunboat diplomacy to 'negotiate' a large indemnity in exchange for recognition of the Haitian state. Even though Haiti won their independence in 1804, they had to pay transfer to France until 1947. Haiti had to borrow from French banks to finance the transfers, which settled them with a crippling stock of sovereign debt for more than a century. I discuss how the debt can be considered odious.

⁶ Bordo and White (1991) show how French war financing was affected by its poor fiscal reputation.

Chapter 6 studies the case of Franco-Prussian War indemnities of 1871. France paid the indemnity of 25 per cent of output in three years to Prussia. The years following the end of the war features several default-like characteristics (output contraction and high debt levels) but sees no devaluation of its currency nor a fall in real wages. France had easy access to loans at reasonable interest rates, with high investor participation from both foreign and domestic sources. The most important factor was that France had accumulated a high stock of foreign assets, meaning its net debt was essentially 0, which incentivised a settlement that did not include sanctions or confiscations. It is a case in which enforcement of sovereign debt played a positive role, in that a default would have been more costly than repayment. It is also likely that military enforcement was not needed, because France was incentivised to repay because of its easy access to debt and stock of foreign assets. The macroeconomic situation was, crucially, one in which the current account was positive, meaning that while France repaid the indemnity it did not do so by indebting itself.

Chapter 7 is a brief overview of Mexican–American War reparations (1848 to 1881), Cretan War reparations (from 1897), and Chinese reparations following the Sino-Japanese War (1895–1901) and the Boxer Rebellion (1901 and 1939). The chapter is a tale of how reparations can be so small as to be meaningless for the economy (in the American case) to be long, painful, and enforced by political and military power (Greek and Chinese cases).

Chapter 8 looks at the famous case of German World War I reparations. When estimating Germany's capacity to pay after World War I, diplomats and politicians looked to what amounts France paid after the Franco-Prussian War. German headline reparations were bigger in terms of GDP, but not in terms of the government's capacity to levy taxes. German real output contracted by over 20 per cent during the hyperinflation of the Weimar Republic (1921–23), as Germany refused to pay reparations in 1922. It was forced to resume negotiations by military force after the Allied occupation of the Ruhr. Reparations were rescheduled in 1924 and were subsequent paid throughout the 1920s with disastrous long-term consequences. Germany had limited access to borrowing until 1925, from which point it managed to escape output losses by borrowing abroad. Economic growth from 1925 to 1929 was built on a debt spiral and real wages that were too high, given Germany's external position.⁷

⁷ For an overview of this debate, see, For example, James (1986), Borchartd (1990), Holtfrerich (1990), or Ritschl (2002).

A continuously negative current account helped keep real wages and the real exchange rate high, but it could only last if debt could be rolled over into new loans. Once capital flows reversed by the 1930s, austerity replaced debt, which translated into output losses and a downward adjustment to real wages. I use the sovereign debt model described in Chapter 3 to analyse when Germany entered the default set and should have no willingness to pay. The model suggests that Germany was in the default set in 1920, in 1924 (using the present value of the Dawes annuity), in 1931 and in 1932. The model suggests Germany should repay in 1929, but we know that it was folly – the debt stock could not be rolled over. Austerity by the Brüning cabinet was implemented to maintain market access, but it relied on two crucial facts. First, that the market would acknowledge debt sustainability and keep lending, and second, that domestically the policies could be implemented without political chaos. Both proved unsustainable. Based on the net foreign asset position, the current account, the high level of real wages and the real exchange rate, only a small shock to output would put Germany into the default set. Two years of costly austerity only yielded further ground for the Nazi takeover, rather than regaining market access as was the goal. Had Germany defaulted already in 1929, it would have saved two years' worth of interest payments and entered autarky at the same time, as market access was by then *de facto* gone. At this point, the European nations did not have the ability to enforce debt contracts and the United States agreed to a *de facto* cancellation of reparations. The German sovereign default in the 1930s was on debt issued to pay reparations, but it also had several effects on other state liabilities, with loans offering different kinds of creditor-protection. Germany in the 1920s had high levels of reparations but was able to borrow, because it offered *de-facto* seniority to new loans. Creditors were willing to lend into a large debt stock because they thought they would rank senior to reparations. The German default on its sovereign debt was special because it was allowed by its politically weak creditors, who were unable to enforce debt contracts in the 1930s.

Chapter 9 is the brief story of the lesser-known World War I reparations of Bulgaria and Russia. Both reparations were large in terms of each country's output but were subsequently negotiated away in political treaties. In the Soviet Union case, it is one of the examples of how you can repudiate debt completely but under the cost of exiting the global trading system.

Chapter 10 is the story of World War II reparations to the Soviet Bloc. While Italy, Romania, Hungary, Bulgaria, and Finland were meant to pay reparations, only Italy and Finland did outright because the other countries fell under the Soviet Bloc and instead paid indirectly. The chapter focuses on Finnish reparations in the 1940s, which were repaid under great economic strain. The economy exhibited all the characteristics normally associated with a sovereign debt default. Unable to default because of geopolitical considerations, it took Finland years to grow its economy following the war because large parts of its domestic resources went to produce reparations. Finland did not have the option of defaulting because of political pressure in the new geopolitical landscape that emerged from World War II. Finland managed to eventually grow its way out of debt trouble. The trajectory was suboptimal, however. It involved three devaluations, a fall in real wages of more than 50 per cent, and large inflationary problems. I argue a sovereign debt default would have allowed foreign exchange to be used for domestic purposes, but because it was not possible the macroeconomic adjustment had to come from elsewhere. Finnish state survival and its geographically location meant that it chose to repay reparations rather than attempt a default.

Chapter 11 look at the much smaller World War II reparations to the Allies. The Allies had learnt from previous reparations disasters and focused on the de-industrialisation of Germany and Japan. Only small reparations were actually paid, and the transfers were offset by US loans from the Marshall Plan. I show how even though reparations were agreed, they were not necessarily paid through a case study of German reparations to Denmark.

Chapter 12 is the story of Iraqi reparations that were imposed after the Gulf War. Because the debt history of Iraq is less documented, I first reconstruct the build-up of debt through the 1980s and 1990s from primary and secondary sources. The rise in Iraqi indebtedness was a consequence of global geopolitical trends in the 1980s where political lending trumped solvency concerns. It allowed Iraq to obtain financing on terms more favourable than the US government, without conditionality of reform. Reparations were a consequence of the end of the Iran–Iraq War when Iraq invaded Kuwait. Reparations were imposed by a United Nations (UN) Resolution with a direct enforcement mechanism to take money from oil revenues. I then use oral history to trace how Iraqi debt was restructured after the US invasion in 2003. The restructuring was permeated by politics to inflict harsh terms on creditors at the Paris Club, at a time when creditor-friendly restructurings were the norm. Despite its

apparent success however, in going for a politically expedient deal at the Paris Club, I argue the restructuring missed an opportunity to enshrine a doctrine of odious debt in international law. All debt was written off, except war reparations, which were paid in full through sanctions and war. They proved to be senior to all other debt and did not enter the sovereign debt restructuring. The restructuring talks are documented in detail, so that readers can understand how the process works both in theory (in Chapter 3) and in practice.

Chapter 13 makes an argument that militarily enforcing sovereign debt is akin to a debtors' prison for states, based on the cases in the book.