

FINANCING WAR: GERMANY'S DEBT-FUELED GAMBLE IN WORLD WAR I

Aras YOLUSEVER¹

Abstract

This article analyzes Germany's war financing strategy during World War I, which predominantly relied on borrowing instead of taxation. Unlike France and the United Kingdom, both of which implemented wartime taxes to distribute the financial burden, and The United States which was joined the war later, Germany financed its war effort largely through war bonds and central bank credit. This approach was based on the belief in a quick victory and the expectation of postwar reparations to alleviate costs. However, this dependence on debt led to severe economic repercussions, including hyperinflation, monetary instability, and political extremism, ultimately contributing to the collapse of the Weimar Republic. By comparing Germany's strategy to alternative wartime financing models, this study highlights the dangers of excessive debt accumulation and underscores the importance of balanced fiscal policies in wartime economies. The findings provide broader insights into the long-term consequences of war finance, emphasizing the need for sustainable economic policies to mitigate postwar financial crises.

Keywords: Political Economy, Financial Economy, War Finance, Hyperinflation, Public Debt

JEL Classification: H56, E31, P16

SAVAŞIN FİNANSMANI: ALMANYA'NIN I. DÜNYA SAVAŞINDA BORÇLA BESLENEN KUMARI

Öz

Bu makale, Almanya'nın I. Dünya Savaşı sırasında ağırlıklı olarak vergilendirme yerine borçlanmaya dayanan savaş finansmanı stratejisini analiz etmektedir. Her ikisi de mali yükü dağıtmak için savaş zamanı vergileri uygulayan Fransa ve Birleşik Krallık'ın ve savaşa geç dahil olan Amerika Birleşik Devletleri'nin aksine Almanya savaş harcamalarını büyük ölçüde savaş tahvilleri ve merkez bankası kredisi yoluyla finanse etmiştir. Bu yaklaşım, hızlı bir zafer inancına ve savaş sonrası tazminatların maliyetleri hafifleteceği beklentisine dayanmaktaydı. Ancak borca olan bu bağımlılık, hiperenflasyon, parasal istikrarsızlık ve siyasi aşırılık gibi ciddi ekonomik yansımalara yol açmış ve nihayetinde Weimar Cumhuriyeti'nin çöküşüne katkıda bulunmuştur. Almanya'nın stratejisini alternatif savaş zamanı finansman modelleriyle karşılaştıran bu çalışma, aşırı borç birikiminin tehlikelerine dikkat çekmekte ve savaş zamanı ekonomilerinde dengeli mali politikaların önemini vurgulamaktadır. Bulgular, savaş sonrası mali krizleri hafifletmek için sürdürülebilir ekonomi politikalarına duyulan ihtiyacı vurgulayarak savaş finansmanının uzun vadeli sonuçlarına ilişkin daha geniş bir bakış açısı sağlamaktadır.

Anahtar kelimeler: Politik İktisat, Finansal İktisat, Savaş Finansmanı, Hiperenflasyon, Kamu Borç

JEL Sınıflaması: H56, E31, P16

¹ Dr., İstanbul Kültür Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Ekonomi Bölümü, a.yolusever@iku.edu.tr, ORCID ID: 0000-0001-9810-2571.

1. Introduction

The financing of war has historically been a central issue in public finance, compelling governments to make choices between taxation, borrowing, or a combination of both approaches. The economic and political ramifications of these decisions can significantly shape a nation's trajectory for decades. During World War I, Germany chose to finance its war effort primarily through borrowing, in sharp contrast to France and the United Kingdom, which implemented wartime taxation to distribute the financial burden more equitably among their populations. Under Kaiser Wilhelm II and the Reichstag, the German government issued numerous war bonds, relied on domestic borrowing, and refrained from imposing new taxes, optimistic about a swift victory and the potential for postwar reparations to offset the costs. However, this financial strategy ultimately resulted in severe consequences, including hyperinflation, economic instability, and political turmoil in the postwar era.

This article analyzes Germany's war finance strategy and its long-term consequences by addressing three key questions: (1) Why did Germany choose to rely on borrowing instead of taxation? (2) What were the economic and political repercussions of this decision? (3) What lessons can be learned from Germany's experience regarding war financing and mobilization?

To answer these questions, the study compares Germany's approach with those of France, the United Kingdom, and the United States. By examining Germany's experience during World War I, this study offers insights into the broader implications of war financing strategies and their impact on national economies. The findings underscore the risks of excessive reliance on debt, particularly during prolonged conflicts, and emphasize the importance of maintaining a balanced fiscal approach. As the issue of war financing remains relevant in today's conflicts, the lessons learned from Germany's experience remain important for policymakers.

1.1 Methodology and Analytical Framework

This study employs a comparative historical analysis methodology to investigate the wartime financing strategies of Germany, France, the United Kingdom, and the United States during World War I. Rather than treating each country in isolation, this approach situates Germany's experience within a broader international context, highlighting similarities and differences in fiscal structures, institutional capacities, and economic outcomes.

This analysis first examines the composition of wartime financing by assessing the taxation, borrowing, and monetary expansion methods used by each state to cover extraordinary military expenditures.

Second, the framework evaluates macroeconomic indicators that are crucial for assessing the sustainability of various financing methods employed during wartime. Key metrics such as the ratio of public debt to national income, inflation rates, and the proportion of tax revenues relative to total wartime receipts play a crucial role in this analysis. These indicators provide a clear indication of whether a government's fiscal policy prioritizes immediate revenue generation or defers financial burdens to future generations.

Third, the study conducts an examination of sectoral output trends, with a specific focus on agriculture and industry. It integrates indices of agricultural yields and industrial production, enabling an analysis that surpasses mere fiscal aggregates.

Fourth, the framework considers the institutional and policy context, placing an emphasis on the ability of governments to effectively legislate new taxation measures.

For comparative empirical analysis, sources include classic works such as Hardach (1977), Feldman (1997), and Holtfrerich (1986), as well as more recent quantitative reconstructions by Broadberry and Harrison (2009) were used. These data sets were expressed in comparable units, such as indices based on 1913 levels or ratios like debt-to-GDP, to allow meaningful cross-country comparisons. In the second stage, these standardized indicators were subjected to cross-country benchmarking. Germany's data were compared with United Kingdom, United States and France through tables.

The scope and limitations of this methodology are also acknowledged. While the analysis relies on national-level aggregate data—such as total public debt, average price indices, and sectoral output indices—such data are necessarily shaped by the record-keeping practices and statistical conventions of the era. Differences in measurement methods across countries may introduce comparability challenges. To mitigate these issues, the study cross-references multiple scholarly sources, triangulates figures where discrepancies arise, and, where necessary, adopts ranges rather than single point estimates to reflect uncertainty (Balderston, 2002; Ritschl, 2012).

2. Germany's Wartime Financing Strategy

As World War I broke out in 1914, Germany confronted a significant financial dilemma: how to fund a large-scale, industrialized conflict. In contrast to France, the United Kingdom, and the

United States, which employed a combination of taxation and borrowing, Germany chose to finance its war efforts primarily through debt. This decision was shaped not only by economic factors but also by political considerations, strategic calculations, and ideological beliefs surrounding the nature of war finance.

This chapter examines the underlying rationale of Germany's financing strategy during wartime, detailing the fiscal mechanisms employed to procure funds and the immediate economic ramifications of its debt-dependent model. It further contrasts Germany's approach to that of its contemporaneous adversaries, elucidating the short-term fiscal advantages and the enduring repercussions associated with war expenditures financed through borrowing.

2.1. Rationale Behind Borrowing Over Taxation

One of the key factors driving Germany's preference for borrowing over taxation during the war was the prevailing conviction among military and political leaders that the conflict would be of short duration. Underpinning this assumption was the Schlieffen Plan, which posited a rapid victory in the West through the swift defeat of France, subsequently allowing for a focused effort against Russia on the Eastern Front (Ferguson, 1998). Coupled with this optimism, the government anticipated that reparations from the defeated powers would sufficiently offset the financial burden of the war, rendering the implementation of new taxes superfluous.

The anticipation of a brief conflict was a sentiment shared across Germany and several other European powers, who viewed the war through the lens of maneuver warfare rather than a strategy of attrition. As the conflict evolved into a prolonged contest characterized by economic endurance, Germany's choice to forgo taxation became increasingly detrimental to its wartime sustainability (Hardach, 1977).

One another reason is related with the political considerations and public opinion. The German government was hesitant to impose new taxes due to political opposition and concerns about public morale. Prior to the war, Germany had a relatively regressive tax system that relied heavily on indirect taxes and customs duties, with minimal direct taxation on income (Holtfrerich, 1986). In contrast to Britain and France, which had strong parliamentary traditions that facilitated tax increases during wartime, Germany's decision-making was dominated by the Kaiser and the military elite. They feared that the introduction of new taxes might undermine domestic support for the war effort.

Germany's federal structure made taxation a politically sensitive issue. The Reichstag, which is Germany's legislature, had limited authority over national taxation; most fiscal powers were controlled by individual states such as Prussia and Bavaria. Raising new national taxes would have required political negotiations that could delay wartime mobilization (Feldman, 1997). Therefore, borrowing was viewed as a quicker and more politically expedient alternative.

War bonds and nationalist mobilization was also important. To support its military operations, the German government implemented a series of war bond campaigns, strategically leveraging nationalistic fervor to drive public investment. Throughout the conflict, Germany conducted nine distinct war loan initiatives (Kriegsanleihen), successfully mobilizing considerable financial resources from domestic investors, encompassing banks, corporations, and private citizens (Balderston, 2002).

The Reichsbank, along with various financial institutions, was instrumental in the promotion and distribution of war bonds, leveraging themes of national duty and the promise of future repayment. Strategic propaganda initiatives, including posters, public addresses, and media campaigns, actively encouraged citizens to "lend money to the Fatherland" as a mechanism to bolster military efforts (Tooze, 2006). These war loans were designed as short-term securities, with the implicit assumption that repayment would occur following a victorious resolution of the conflict.

In contrast to Britain and France, where war bonds were underpinned by a taxation framework, Germany primarily depended on borrowing. This reliance resulted in a perilous cycle: as military expenditures rose, the government increased its debt issuance, subsequently triggering inflationary pressures and monetary instability (Ritschl, 2012).

As the conflict progressed, reliance on borrowing proved inadequate to cover escalating military expenditures. Consequently, the German government increasingly sought financing from the Reichsbank, the central bank, to address budgetary shortfalls. In response, the Reichsbank implemented a policy of monetary expansion, primarily through the acquisition of war bonds, which involved generating additional currency and thereby exacerbating inflationary pressures on the money supply (Holtfrerich, 1986).

Germany's approach to financing the war was different from that of Britain and the United States, where central banks had a more limited role in war finance. In Germany, the absence of taxation to counterbalance debt led to a growing reliance on direct monetary expansion to cover

an increasing portion of wartime expenses. This reliance ultimately set the stage for hyperinflation in the postwar period (Feldman, 1997).

2.2. Immediate Economic Effects of Borrowing

Germany's strategy of financing World War I predominantly through debt accumulation resulted in significant and immediate economic ramifications. As the conflict intensified and military spending escalated, the absence of commensurate tax revenue to mitigate these financial outlays led to acute fiscal imbalances. Initially, the German economy appeared stable at the war's outset; however, it soon encountered escalating inflationary pressures, declining public confidence, and various economic disruptions. These factors ultimately laid the groundwork for a severe economic crisis in the post-war period.

Germany's strategy for war financing had immediate and pronounced consequences, notably a significant surge in inflation. The government, lacking a robust tax framework to offset its extensive borrowing, opted to monetize its debt by instructing the Reichsbank, the nation's central bank, to purchase war bonds. This maneuver resulted in a considerable increase in the money supply, catalyzing a consistent escalation in price levels (Holtfrerich, 1986).

Initially, inflationary pressures were deemed manageable as the government anticipated a brief conflict followed by reparations from the vanquished adversaries. However, as the war extended and Germany confronted escalating supply constraints due to the British naval blockade, the implementation of price controls and rationing became imperative. Despite these interventions, inflation persisted, as underground and black-market activities proliferated, contributing to further economic instability (Tooze, 2006).

As the costs of war increased and inflation became more pronounced, public confidence in the German financial system began to decline. The repeated issuance of war bonds, which were promoted through patriotic campaigns, initially succeeded in mobilizing domestic savings. However, by the later years of the war, both investors and the general public began to doubt whether these bonds would ever be repaid, especially as Germany's chances of victory diminished (Balderston, 2002).

The erosion of confidence had profound implications for Germany's economic framework. The absence of a reliable financial anchor precipitated capital flight, as individuals with the means began converting their assets into foreign currencies or tangible investments such as gold and real estate. Meanwhile, the middle and working classes, who had been encouraged to allocate

their savings into war bonds, experienced heightened vulnerability, with their holdings facing significant depreciation in the wake of rampant inflation (Ritschl, 2012).

The war financing strategy had an adverse impact on Germany's industrial and agricultural sectors. By prioritizing war production, resources were diverted from civilian industries, resulting in shortages of essential goods and disruptions to labor markets and production chains, which further intensified the hardships faced by the population (Hardach, 1977). After Germany's capitulation in November 1918, it faced a dire financial crisis due to substantial war debt and a troubled economy, struggling to manage maturing war loans (Feldman, 1997). The signing of the Treaty of Versailles in 1919 imposed heavy reparations on Germany, alongside existing war debt. This created an unsustainable financial burden, leading to hyperinflation in 1923, where prices soared and the German mark became almost worthless (Ritschl, 2012).

The hyperinflation crisis produced catastrophic social and economic repercussions. Middle-class savings were obliterated, pensioners found their fixed incomes rendered virtually meaningless, and the resulting economic instability fueled a political radicalization that ultimately enabled the rise of extremist movements, including the Nazi Party (Tooze, 2006). Had Germany adopted a more balanced approach to wartime financing, incorporating direct taxation as implemented by Britain and France, it could have alleviated the extent of the postwar financial devastation.

In conclusion, Germany's reliance on borrowing to finance World War I had immediate and severe economic consequences. The unchecked expansion of the money supply resulted in escalating inflation, a loss of public confidence, and widespread economic disruptions. The financial burdens of war debt, coupled with the additional strain of reparations, ultimately led to the disastrous hyperinflation of 1923, severely undermining Germany's economic and political stability. Germany's historical trajectory illustrates the perils linked to disproportionate wartime debt accumulation without a robust taxation strategy.

3. The Others: France, United Kingdom and United States

Germany's strategy during World War I, sharply contrasts with the multifaceted financing approaches adopted by its adversaries. France, the United Kingdom, and the United States utilized a hybrid funding model that combined taxation with borrowing, aiming to distribute the financial burdens of war more equitably and reduce the risks of long-term economic instability. This section delves into the financial frameworks established by each of these

nations, analyzing their respective advantages and drawbacks in relation to Germany's borrowing-centric model.

3.1. France: A Balanced Approach with Direct Taxation

At the onset of World War I in 1914, France confronted considerable financial difficulties, largely stemming from the already elevated levels of public debt accrued from past conflicts, notably the Franco-Prussian War of 1870–1871. This preexisting financial strain placed significant pressure on the French government to secure adequate funding for military operations.

In response to the urgent need for financing, the French government implemented a progressive income tax for the first time in its history. This tax reform represented a pivotal shift in the country's fiscal policy, aimed at more equitably distributing the tax burden across different income levels while expanding the government's revenue base concurrently. By establishing a progressive taxation system, the government not only sought to generate immediate funds to support its war efforts but also to align the financial responsibilities with the citizens' ability to pay.

The introduction of this progressive income tax was instrumental in ensuring that a portion of the substantial costs associated with the war could be covered through current revenues rather than postponing payment to the postwar period. This decision reflected a broader awareness of the need for a sustainable fiscal strategy during wartime, as articulated by economic historians like Hautcoeur (2003). Ultimately, the introduction of this tax marked a significant transformation in France's approach to fiscal policy, laying the groundwork for future economic reforms in response to the evolving challenges of the 20th century.

In addition to its taxation efforts, France utilized war bonds as a financial mechanism, appealing to both domestic investors and international creditors, notably from the United States. Contrasting with Germany's primary reliance on domestic borrowing, France's capacity to attract external loans created a vital financial buffer. This strategic diversification of funding sources mitigated inflationary pressures and played a significant role in stabilizing the post-war economy (Holtfrerich, 1986).

Despite the challenges faced in the aftermath of World War II, France's economy navigated a landscape marked by postwar inflation and elevated debt levels. However, the economic turmoil experienced was considerably less severe compared to that of Germany. One key factor

contributing to this difference was the French government's ability to generate revenue through an effective taxation system. This capacity allowed France to manage its war debts more efficiently, thereby averting the hyperinflation crisis that ravaged the German economy in the early 1920s. In Germany, a combination of reparations, inadequate fiscal policies, and a collapse in production led to extreme inflation rates and the devaluation of its currency, which had devastating effects on the populace. In contrast, France's relatively stable fiscal environment enabled it to implement measures that promoted economic recovery and stability, fostering a pathway toward gradual growth in the postwar period (Feldman, 1997).

3.2. The United Kingdom: Progressive Taxation and Stable War Finance

The United Kingdom adopted a highly organized and multifaceted approach to financing its military efforts during the war, integrating several financial mechanisms such as taxation, domestic borrowing, and international loans. In contrast to Germany's strategies, Britain took the significant step of raising income taxes early in the conflict. This proactive move allowed the government to secure a considerable share of military expenditures through direct revenue streams, thus minimizing reliance on deferred debt and saving future generations from having to bear an even heavier financial burden (Daunton, 2002).

The British government imposed excess profits taxes on industries that gained significantly from the wartime economy, alongside an increase in income taxes. This effort aimed to enhance the government's fiscal capacity, ensuring those who profited from the war contributed fairly to its costs. These measures financed military operations while promoting economic equity during economic upheaval. Overall, the UK's war finance strategy combined progressive taxation with targeted policies, reflecting a commitment to fiscal management and social responsibility (Daunton, 2002).

War bonds were integral to Britain's financial strategy during the conflict, designed meticulously to prevent excessive inflation. The Bank of England was pivotal in stabilizing financial markets and curbing uncontrolled money supply growth. Furthermore, Britain leveraged international credit markets, especially in the United States, where it obtained loans to fund war expenditures (Rockoff, 2012).

Despite the significant financial strain caused by the war, Britain's postwar recovery proved more stable than that of Germany. By employing a mixed finance strategy that balanced public and private sector involvement, Britain effectively circumvented the extreme inflationary pressures that plagued Germany during its recovery. The British government managed its war

debt through a systematic approach, gradually repaying it via increased taxation and careful control of monetary policies, which fostered economic stability.

Moreover, Britain took strategic steps to maintain public confidence in its financial institutions. This was achieved through transparent communication and reassuring policies, which helped to restore trust among investors and the general populace. Consequently, Britain was able to transition from a wartime economy to a peacetime one with relatively few social and economic upheavals. The effective management of its economic policies laid the groundwork for sustained growth and stability in the years that followed, contrasting sharply with the turmoil experienced in postwar Germany, where rampant hyperinflation and economic disarray led to severe social repercussions (Ferguson, 1998).

3.3. The United States: A Late Entry with Effective Financing

In 1917, the United States made the pivotal decision to enter World War I, a choice influenced by various factors, including the need to support Allied forces and protect American interests. Prior to its involvement, the U.S. had the advantage of observing the financial strategies and economic mobilizations of several European nations engaged in the conflict.

With this knowledge in hand, the U.S. government adopted a hybrid approach to financing its military operations. This strategy included a significant increase in income taxes, which marked a shift in fiscal policy and ensured a steady revenue stream for the war effort. At the same time, the government introduced Liberty Bonds as a means to rally public support for the war and encourage citizen investment in the nation's military capabilities. These bonds were marketed as a patriotic contribution to the war effort, allowing Americans to invest in their country's success while also receiving a return on their investment (Rockoff, 2012).

By blending these two financial strategies, the U.S. not only effectively funded its military engagements but also involved the public in the war effort, fostering a sense of collective responsibility and national unity.

The Revenue Act of 1917 significantly increased tax rates, especially targeting high-income earners and corporations, to help finance wartime expenditures with immediate revenue generation. In addition, the government implemented excise taxes on luxury commodities and critical war materials, effectively expanding the fiscal base. This strategy was aimed at curbing excessive borrowing and mitigating inflationary pressures (Ohanian, 1997).

In contrast to Germany's strategy, which predominantly hinged on domestic financing and aggressive monetary expansion, the United States capitalized on its robust international credit standing to obtain external loans, primarily from domestic financial institutions. This approach enabled the government to fund its wartime expenditures without resorting to excessive money creation, thereby sustaining price stability and facilitating a more orderly economic transition in the aftermath of the war (Rockoff, 2012).

The analyses presented in the Section 3 can be organized in a tabular format as follows.

Table 1. Summarization

Country	Main War Finance Methods	Taxation Policy	Reliance on Borrowing	Inflation Control	Postwar Economic Stability
Germany	War bonds, external loans, taxation	Avoided direct taxation, relied on war loans	Extremely high	Poor – Led to hyperinflation	Severe economic collapse (1923 hyperinflation)
France	War bonds, external loans, taxation	Introduced income tax in 1914	Moderate	Moderate – Inflation but no hyperinflation	High debt, but avoided hyperinflation
United Kingdom	War bonds, external loans, taxation	Increased income tax, introduced excess profits tax	Moderate	Strong – Bank of England managed credit markets	Stable postwar recovery
United States	Liberty Bonds, taxation, external loans	Sharp tax increases (Revenue Act of 1917)	Low to Moderate	Strong – Tax revenue covered significant expenses	Emerged as a financial powerhouse

Source: Prepared by the Author.

The primary insight from this analysis is that a balanced approach to war finance is essential for sustaining long-term economic stability. While wartime borrowing is often indispensable, an over-reliance on debt without a corresponding taxation framework can precipitate severe postwar economic disturbances, exemplified by Germany's hyperinflation crisis in the early 1920s. Conversely, the fiscal strategies adopted by France, Britain, and the United States facilitated a more effective transition into the postwar era, underscoring the critical role of fiscal discipline and sound economic planning during wartime.

3.4. Quantitative Evidence of Wartime Economic Strain

While the preceding sections have provided a qualitative account of Germany's wartime financing strategies and their consequences, a historical analysis requires quantitative substantiation. Economic history as a discipline has increasingly emphasized the integration of archival data, national accounts, and sectoral statistics to complement narrative interpretation (Broadberry & Harrison, 2009). In World War I, Germany's reliance on debt-financed expenditures, its minimal use of taxation, and its eventual descent into hyperinflation are not merely theoretical claims but phenomena that can be observed through measurable economic indicators.

This subsection, therefore, presents and interprets key quantitative data that illuminate the fiscal and structural strains Germany experienced during and immediately after the conflict. We focus on four interrelated dimensions: (i) the trajectory of public debt relative to national income, (ii) the evolution of inflation and monetary expansion, (iii) the relative contribution of taxation to wartime revenues, and (iv) sectoral output trends in agriculture and industry. These indicators are essential to understanding the depth of economic disruption, as they reveal the extent to which Germany's wartime policies diverged from those of France, United Kingdom and the United States—nations that adopted mixed financing strategies with greater reliance on taxation, external credit and hybrid models (Hardach, 1977; Tooze, 2006).

3.4.1. Public Debt and National Income

Germany's wartime fiscal strain is highlighted by the evolution of its public debt relative to national income. At the war's onset in 1914, Germany's public debt was moderate, accounting for approximately 10 – 15% of its gross national product (GNP), similar to that of other major European powers (Hardach, 1977). Unlike Britain and France, Germany did not implement significant wartime taxation, opting instead to issue nine war loans (Kriegsanleihen) from 1914 to 1918, which were mainly subscribed to by domestic investors and monetized through Reichsbank operations, leading to an increase in nominal debt (Tooze, 2006).

By the end of hostilities in November 1918, Germany's debt had surged to an estimated 156 billion paper marks, approximately 340 – 350 % of its prewar national income (Feldman, 1997). In contrast, the UK managed its debt through structured taxation and external credit, increasing public debt from £650 million in 1914 (about 25% of GDP) to £7.7 billion by 1919 (roughly 130% of GDP) (Daunton, 2002). France's public debt rose from 66% of GDP in 1913

to approximately 170% by 1919, aided by a progressive income tax and foreign borrowing, especially from the US (Hautcoeur, 2003).

The United States entered World War I with minimal public debt (~2 – 3% of national income) and exited the war with a still-manageable level of ~35 – 40% of prewar national income. This represents a moderate and controlled increase, especially when compared to Germany’s explosive debt growth or France’s already elevated prewar debt burden. The U.S. managed this increase by avoiding monetary expansion and instead issuing Liberty Bonds—highly popular among citizens—and implementing new tax policies (Hardach, 1977; Rockoff, 2012).

The fiscal discipline and credibility of U.S. institutions enabled the country to maintain investor confidence and price stability, resulting in it becoming a net creditor by the end of the war, rather than a debtor, as in the European cases. Its relative geographic isolation and shorter wartime duration also played a role in containing the fiscal shock.

The implications of these divergent trajectories are illustrated in Table 2, which compares the approximate ratios of public debt to national income for Germany, the United Kingdom, the United States and France between 1914 and 1919.

Table 2. Exact Public Debt of Germany, France, USA and UK

Country	Public Debt (Prewar)	Public Debt (Postwar)	Debt-to-National Income Change
Germany	~10 – 15% of national income	~340 – 350% of prewar income	↑ Explosive increase through domestic borrowing and monetization
United Kingdom	~25% of national income	~130% of prewar income	↑ Managed through progressive taxation and external credit
France	~66% of national income	~170% of prewar income	↑ Mitigated by progressive taxation and U.S. loans.
United States	~3% of national income	~35 – 40% of prewar income	Moderate rise; financed by taxation and domestic bond sales (Liberty Loans)

Source: (Hardach, 1977; Holtfrerich, 1986; Feldman, 1997; Dauton, 2002; Hautcoeur, 2003)

The German debt expansion was qualitatively different. First, it was predominantly domestically financed, limiting Germany’s access to external resources and placing an extraordinary burden on the domestic financial system. Second, because the Reichsbank

monetized a large portion of the war loans, the growth of debt was not matched by a sustainable repayment strategy or a taxation base sufficient to service it. This dynamic created a vicious fiscal circle: higher debt issuance fueled expectations of currency debasement, which in turn eroded the real value of outstanding bonds and incentivized further monetary financing (Ritschl, 2012).

Germany's reliance on domestic borrowing and its central bank's monetization of war loans created a debt dynamic divorced from any realistic repayment capacity. This massive stock of obligations, unsupported by adequate taxation, eroded investor confidence, encouraged capital flight, and laid the structural foundations for the hyperinflationary crisis of 1923. In comparative perspective, the table demonstrates that while all three countries experienced wartime fiscal stress, Germany's debt-to-income trajectory was exceptional in scale and far more destabilizing in its economic consequences (Holtfrerich, 1986; Tooze, 2006).

3.4.2 The Evolution of Inflation and Monetary Expansion

At the outbreak of war in August 1914, Germany suspended the gold standard and declared the mark inconvertible, effectively giving the Reichsbank a free hand to expand the money supply in support of the government's borrowing operations (Hardach, 1977). Over the course of the war, nine major war loan campaigns (Kriegsanleihen) were launched. Because tax revenues were not substantially increased, the Reichsbank absorbed a large portion of these securities, effectively monetizing fiscal deficits.

Reichstag and a complex federal structure hindered the implementation of progressive income taxes (Hardach, 1977; Tooze, 2006). This reliance on repeated war bond campaigns initially tapped into patriotic savings but became unsustainable as investor confidence fell. With limited access to international credit due to diplomatic isolation, the government turned to the Reichsbank to buy these bonds, adding liquidity to an already strained economy. This led to persistent inflation and a financial structure vulnerable to collapse.

Empirical evidence illustrates the magnitude of this process. Germany's money supply increased from roughly 17 billion marks in circulation in 1914 to nearly 70 billion marks by 1918 (Holtfrerich, 1986). The consumer price index, set to 1913 = 100, climbed to approximately 240 by late 1918, implying a 140 % cumulative rise in prices during the war years (Hardach, 1977). Importantly, this inflation occurred in an economy already under strain from the Allied blockade, supply shortages, and the diversion of resources to the military sector.

The result was an inflationary dynamic that moved from high to catastrophic:

Table 3. Inflationary Dynamics of Germany

Year	Consumer Price Index (1913 = 100)	Monthly Inflation Rate	Key Events
1918	240	Moderate wartime inflation	End of WWI
1920	~1500	> 10% monthly	Reparations burden intensify
1922	~6000	Accelerating	Capital flight, political instability
Oct 1923	~29.5 trillion	~29.5 % monthly	Hyperinflation peak
Nov 1923	–	Currency Collapse; 1 USD= 4.2 trillion marks.	Introduction to Rentenmark

Source: (Feldman, 1997; Holtfrerich, 1986; Tooze, 2006).

The United Kingdom and France, while also experiencing wartime inflation, adopted mixed financing strategies that moderated price instability. In Britain, for example, a combination of higher income taxes, excess profits taxes, and foreign borrowing allowed the government to limit direct monetary expansion, resulting in a price index of approximately 270 (1913 = 100) by 1918—high, but still far below the runaway dynamics later seen in Germany (Daunton, 2002). France's index reached roughly 300 by 1918, reflecting heavy borrowing but offset by progressive taxation and U.S. credit flows (Hautcoeur, 2003).

The United States managed its wartime finances more effectively than the major European belligerents; it was not immune to inflationary pressures during World War I. From the time the U.S. entered the war in April 1917 until its conclusion in November 1918, the country experienced moderate but accelerating inflation, largely driven by rising government spending, increased demand for goods, and supply bottlenecks in both industrial and agricultural sectors. Between 1915 and 1920, the U.S. consumer price index (CPI) more than doubled, with prices increasing by roughly 80 – 100% over the five-year period. The annual inflation rate during the core war years (1917–1918) hovered between 15% and 20%, marking the most significant shift from peacetime to wartime inflation since the American Civil War (Rockoff, 2012).

Britain's experience demonstrates the stabilizing effect of progressive taxation combined with a credible debt management framework. Early in the war, the government significantly increased income tax rates, expanded the scope of excess profits taxes, and introduced broader

revenue measures (Daunton, 2002). These policies ensured that a substantial share of wartime expenditures was funded by current revenues rather than being deferred to future generations.

Additionally, Britain maintained access to international credit markets, particularly in the United States, which allowed it to diversify its financing sources and avoid over-reliance on domestic monetization. The Bank of England, in collaboration with the Treasury, implemented policies aimed at maintaining investor confidence and ensuring the orderly functioning of credit markets. As a result, while Britain's debt-to-GDP ratio rose steeply—from approximately 25% to 130%—its postwar economic recovery occurred without the destabilizing effects of hyperinflation or currency collapse (Ferguson, 1998; Rockoff, 2012).

France faced a heavier initial debt burden than Britain, with public debt already amounting to about 66 % of GDP prior to the war (Hautcoeur, 2003). Nevertheless, France's introduction of a progressive income tax in 1914 represented a significant shift in fiscal policy, demonstrating a political willingness to mobilize domestic resources. Complemented by extensive borrowing from foreign creditors—chiefly the United States—France maintained a degree of financial flexibility that Germany lacked. Despite significant destruction of productive capacity in the war's northern regions, France succeeded in containing inflation to levels far below those seen in Germany, largely because its monetary authorities avoided monetizing debt on a massive scale (Holtfrerich, 1986; Feldman, 1997).

The key lesson is clear. Countries that balance borrowing with taxation and access diversified credit markets are better equipped to handle the fiscal impact of war without harming monetary stability. Britain and France demonstrate that leveraging current revenues and external financing can avoid destructive monetary expansion. In contrast, Germany's experience highlights the risks of relying on domestic credit when political constraints limit taxation and external financing options.

3.4.3 The Relative Contribution of Taxation to Wartime Revenues

A third crucial dimension for evaluating Germany's wartime financing strategy is the relative share of tax revenues in total wartime resources compared with other belligerent nations. While borrowing played a central role across Europe during World War I, the extent to which governments mobilized current tax revenues to finance military expenditures significantly influenced fiscal sustainability and postwar economic stability (Eichengreen, 2019; Broadberry & Harrison, 2005).

Germany's wartime fiscal structure from 1914 to 1918 exhibited a significant imbalance, with approximately 13 – 14% of the Imperial government's wartime revenues sourced from taxation. In stark contrast, over 85% was derived from borrowing—primarily through nine war loan campaigns and advances from the Reichsbank (Holtfrerich, 1986, pp. 45–48; Feldman, 1997, p. 121). The pre-war tax system was inherently regressive, relying predominantly on indirect taxes and customs duties, and no substantial reforms were implemented during the war to expand or enhance the income tax base.

Table 4. Comparative Tax Revenue Shares (1914-1918)

Country	Share of Taxation in Wartime Revenue	Notes
Germany	≈ 13 – 14%	Heavy reliance on domestic borrowing; minimal wartime tax reforms
United Kingdom	≈ 30 – 32%	Significant income tax hikes; excess profits duties; broad tax base (Daunton, 2002)
France	≈ 24 – 25%	Introduction of income tax in 1914; increased customs and indirect taxes (Hautcoeur, 2003)
United States	≈ 33 – 35%	Revenue Acts of 1917–1918; strong reliance on progressive taxation and excise taxes (Hardach, 1977; Rockoff, 2012)

Source: (Holtfrerich, 1986; Balderston, 2002; Daunton, 2002; Hautcoeur, 2003)

A comparative data point underscores this imbalance: according to Balderston (2002), in 1916 tax revenues accounted for merely 14 % of Germany's wartime revenue, while Britain raised approximately 30 – 32 % of its wartime funds through taxes, France approximately 24 – 25 % and the United States approximately 33 – 35 %.

The relatively small contribution of taxation in Germany's revenue mix was rooted in institutional and political constraints. The Reichstag had limited powers to initiate or expand federal taxes, and the federal structure delegated significant revenue powers to individual states (Feldman, 1997). Military and political leaders were reluctant to risk domestic discontent by introducing progressive taxation, fearing that higher taxes would erode patriotic support for the war effort (Hardach, 1977).

In contrast to other nations, Britain's Parliament swiftly enacted a series of wartime finance acts that significantly transformed the country's taxation landscape. Initially, these measures

doubled the income tax rate and later increased it to triple the previous rates. The reforms extended the tax net to encompass lower income brackets, thereby ensuring that a greater portion of the population contributed to the war effort financially. Additionally, the government implemented excess profits duties on corporations that were reaping substantial benefits from the heightened demand during wartime, targeting those who profited disproportionately from the conflict (Daunton, 2002).

On the other hand, France, initially hampered by political uncertainties and debates, took decisive steps by introducing a progressive income tax in 1914. This tax system aimed to alleviate the financial burdens of the war on lower-income citizens while ensuring that wealthier individuals contributed a fairer share. Throughout the duration of the war, France also increased customs duties and indirect taxes, all to bolster the nation's coffers (Hautcoeur, 2003).

Lastly, the United States stands out with a high wartime taxation share of $\approx 33 - 35\%$, significantly higher than Germany and even slightly above Britain. This was achieved through ambitious tax reforms, most notably the Revenue Acts of 1917 and 1918, which sharply increased marginal income tax rates on top earners and introduced corporate excess profits taxes (Rockoff, 2012).

Unlike Germany, which postponed taxation due to political fragmentation and elite resistance, the U.S. proactively used its centralized federal structure to mobilize revenue. This approach helped prevent excessive borrowing and inflation while fostering a sense of fairness and civic participation. As Daunton (2002) argues in the British context, progressive taxation also served a legitimizing political function—something the U.S. mirrored effectively.

In structural terms, the German case demonstrates that a weak tax effort during wartime exacerbates postwar crises. Without adequate taxation, Germany faced a growing mismatch between its obligations and its fiscal capacity, which it attempted to resolve through further monetary expansion—setting the stage for the hyperinflation of 1923 (Holtfrerich, 1986; Tooze, 2006). By contrast, Britain and France entered the postwar period with higher tax revenues, allowing for better debt management and more stable currency regimes.

3.4.4 Sectoral Output Trends in Agriculture and Industry

Germany's wartime financing strategy greatly affected its real economy, especially in agriculture and industry. Fiscal policy impacted production by allocating resources and ensuring a stable monetary environment. However, Germany's heavy reliance on borrowing and

monetary expansion disrupted these areas, leading to significant output issues that surpassed those of its main adversaries (Hardach, 1977; Feldman, 1997).

Germany's agricultural sector faced severe challenges during the war due to the British naval blockade, which significantly restricted the importation of essential goods and resources. This blockade, combined with the widespread mobilization of labor for military service, created a labor shortage in farming communities. Furthermore, the war effort diverted vital agricultural inputs—such as fertilizers, machinery, and fuel—toward military applications, further straining agricultural production capabilities (Hardach, 1977; Broadberry & Harrison, 2009).

While a decline in agricultural output was already probable under these harsh conditions, the situation was worsened by escalating fiscal and monetary instability within the country. The wartime inflationary pressures severely diminished the purchasing power of fixed prices for agricultural goods, leaving farmers with less incentive to invest time and resources into their crops. As prices for their produce lagged the rising costs of inputs, many farmers faced the impossible choice of either absorbing losses or passing on inflated prices to consumers.

The uncertainty surrounding government policies and the overall economic environment led to stringent credit rationing, which severely curbed farmers' ability to invest in essential production capacity and technology. As a result, both the quantity and quality of agricultural output deteriorated, exacerbating food shortages and contributing to widespread hardship in an already beleaguered nation (Harrison, 2009).

Additionally, the Reichsbank's monetization of debt resulted in persistent inflation that distorted price signals and weakened production incentives. For instance, farmers were subjected to controlled prices for essential food items while the costs of inputs—like fertilizer and feed—rose significantly. This situation led to a reduced willingness to sell agricultural products and limited their capacity to invest in improving crop yields (Balderston, 2002). In the industrial sector, fluctuating input prices complicated cost calculations, making long-term investment planning highly uncertain.

Moreover, Germany's heavy reliance on domestic borrowing channeled vast amounts of capital into war loans and away from productive civilian uses. Financial institutions prioritized the purchase and distribution of government bonds, leaving fewer resources available for private credit to farmers and manufacturers. Labor and raw materials were likewise diverted from civilian to military production, with armaments and logistics receiving priority. This crowding-out effect meant that sectors like agriculture and consumer goods manufacturing

faced chronic input shortages and were unable to sustain prewar output levels (Hardach, 1977; Broadberry & Harrison, 2009).

Historical reconstructions by Hardach (1977) and Balderston (2002) show that agricultural output in Germany fell by approximately 30 – 40 % between 1913 and 1918. For example, grain production indices (1913 = 100) dropped to around 60 – 65 by 1918, and potato yields—vital for civilian and military rations—declined sharply. The so-called Turnip Winter of 1916–1917 reflected acute shortages and substitution effects, with civilian caloric intake falling to dangerously low levels (Hardach, 1977, p. 205).

Industrial output in Germany mirrored and, in some sectors, exceeded the contraction seen in agriculture. The diversion of raw materials to armaments production, combined with disruptions in trade and transport, undermined the civilian industrial base. According to Broadberry and Harrison (2005), Germany's industrial production index (1913 = 100) fell to approximately 60 by 1918, a decline of about 40 %. Sectors dependent on imported inputs, such as chemicals and textiles, were particularly affected.

Table 5. Quantative Overview

Sector	Germany (Index, 1913 = 100)	UK (Index, 1913 = 100)	France (Index, 1913 = 100)	United States (Index, 1913 = 100)
Agriculture (1918)	~60 – 65	~95 – 100	~70 – 80 (non-occupied regions)	~105 * –110 (increased food output)
Industry (1918)	~60	~107	~75 – 85	~130 – 140 (wartime boom in heavy industries)

Source. (Hardach, 1977; Broadberry & Harrison, 2009; Balderston, 2002)

In comparison, despite the widespread devastation in occupied territories, France's government implemented relatively stable purchasing strategies and leveraged external credit to import foodstuffs, mitigating the declines in output observed in non-occupied regions (Hautcoeur, 2003). Meanwhile, Britain, depending on its maritime supply chains and agricultural policies aimed at enhancing production, exhibited comparatively stable agricultural indices throughout the conflict (Daunton, 2002).

Britain's industrial sector experienced less severe contraction. Although certain civilian industries declined, overall industrial output grew modestly (around 7 % higher than 1913 levels) because wartime demand stimulated sectors such as steel, coal, and munitions

(Broadberry & Harrison, 2009). France, despite wartime destruction, maintained industrial production in the south and benefited from Allied coordination of raw materials.

During the war, the U.S. economy grew significantly, with industrial output reaching 130 – 140% of 1913 levels and agricultural output at 105 – 110%. This boom was fueled by government intervention, favorable geography, and high global demand. Federal contracts and price guarantees in key industries like steel and shipbuilding spurred industrial growth. Simultaneously, agriculture thrived due to government price supports and incentives for mechanization and efficiency. Unlike Europe, the U.S. experienced no physical destruction, allowing for steady productivity. These factors positioned the U.S. for postwar economic dominance as a leading industrial power and global creditor (Broadberry & Harrison, 2009).

In sum, the wartime experiences of France, Britain, and the United States reveal striking contrasts in economic resilience and adaptation. France and Britain, despite enduring heavy burdens and disruptions, maintained relative stability through balanced policies, external credit, and targeted support for key sectors. Their approaches mitigated deeper declines in both agricultural and industrial output, demonstrating the importance of institutional capacity and strategic resource management. The United States, by contrast, emerged from the war economically invigorated, leveraging government intervention and favorable conditions to achieve significant industrial and agricultural growth. Together, these cases highlight how policy choices and structural factors shaped not only wartime performance but also the foundations for postwar recovery and dominance.

4. Policy Implications and Lessons for Modern War Finance

The experience of Germany during World War I illustrates that wartime finance has significant long-term impacts. It goes beyond simply generating revenue; it affects national economic resilience, political legitimacy, and social stability. The way a government finances military efforts—whether through borrowing, taxation, or monetary expansion—can influence postwar recovery. For today’s policymakers, especially in conflicts, Germany’s experience highlights the risks of excessive debt, the importance of taxation, and the need for stable fiscal governance (Feldman, 1997; Ritschl, 2012).

A key lesson from Germany’s wartime experience is the danger of relying too much on borrowing without a solid tax base. During World War I, Germany financed over 85 percent of its military spending through domestic war loans. This approach, based on the flawed belief that the war would be short, and reparations would cover costs, led to massive debt and rampant

inflation. The hyperinflation of 1923 illustrates that unrestrained borrowing for war can result in severe financial consequences post-conflict.

The Allied powers, especially Britain, France, and later the United States, took a balanced approach to war finance with progressive tax reforms. Britain raised income taxes and introduced an excess profits duty, while France enacted its first progressive income tax. The U.S. passed the Revenue Acts of 1917 and 1918, increasing rates for high-income earners. These measures not only generated substantial revenue but also built support for the war effort. In contrast, Germany used a regressive tax system, placing the financial burden on the working and middle classes, which destabilized the economy and reduced public trust in state institutions.

The German experience underscores the critical role of access to international credit. Unlike the UK and France, which secured wartime loans from the United States, Germany faced an Allied blockade that limited its access to external financial markets (Strachan, 2003; Eichengreen, 2019). As a result, Germany relied heavily on domestic borrowing and central bank credit, making its economy vulnerable to internal shocks and hampering postwar recovery. In modern contexts, countries with strong creditworthiness and solid international financial ties are better equipped to manage emergencies without destabilizing their economies (Reinhart & Rogoff, 2009).

Public trust and institutional credibility are crucial for the long-term success of wartime finance. Germany's hyperinflation crisis of 1923 devastated savings and undermined the Weimar government's legitimacy, contributing to political radicalization. In contrast, Britain and the United States preserved confidence in their financial systems through transparent fiscal policies and effective debt management. These examples show that raising funds for war requires maintaining citizen and investor confidence through sustainable and fair fiscal decisions.

The German case underscores that inflation should not be viewed as an inevitable consequence of war. While some inflation may occur during economic mobilization, Germany's wartime monetary policy lacked necessary constraints. The Reichsbank, under government influence, excessively expanded the money supply to fund war loans, creating an unsustainable inflationary cycle (Holtfrerich, 1986). Today, such practices are discouraged due to their detrimental impact on currency credibility. Modern central banks, which operate independently from political pressures, focus on maintaining price stability and avoiding the monetization of

public debt (Bernanke, 2004). This institutional framework, missing in Germany's wartime economy, helps prevent the inflationary problems that led to its fiscal collapse.

Finally, Germany's experience highlights the need for postwar fiscal adjustment planning during conflict. While borrowing is justified in emergencies, a credible debt repayment strategy is crucial. Germany lacked such a plan after its defeat in 1918, facing overwhelming war debt and punitive reparations from the Treaty of Versailles. The government's failure to implement progressive taxation during the war reduced its ability to generate revenue afterward, leading to inflationary financing and eventual currency collapse. This serves as a lesson for modern policymakers to establish tax frameworks and debt strategies during wartime.

In sum, Germany's wartime fiscal strategy provides a cautionary tale of what can occur when short-term expedience overrides long-term economic planning. Borrowing may appear to be the path of least resistance, especially in times of national emergency, but without complementary taxation, transparent fiscal institutions, and access to diversified credit, it can ultimately lead to systemic collapse. The lessons drawn from this case are not limited to historical interest; they are urgently relevant in a world where geopolitical conflict, global pandemics, and economic shocks continue to test the limits of state capacity. Responsible war finance requires more than raising money—it demands strategic foresight, institutional integrity, and a commitment to preserving the economic foundations of society long after the conflict has ended.

5. Conclusion

Germany's wartime financing strategy during World War I relied heavily on domestic borrowing, limited taxation, and aggressive monetary expansion. Unlike Britain, France, and the United States, which balanced taxation and external borrowing, Germany's approach reflected institutional weaknesses and political short-sightedness. This flawed strategy led to a severe hyperinflation crisis and contributed to the collapse of the Weimar Republic (Feldman, 1997; Holtfrerich, 1986).

For Germany, political factors, such as a fragmented fiscal structure and elite reluctance to burden the public, led to funding the war primarily through war bonds and monetary expansion by the Reichsbank (Balderston, 2002; Hardach, 1977). The belief that a quick victory and reparations would cover wartime costs was misguided. Consequently, Germany faced a debt-to-national-income ratio over 300%, severe inflation, and no fiscal stabilization plan (Ferguson, 1998). In contrast, the Allies, especially Britain and the U.S., generated significant wartime

revenue through progressive income taxes and access to capital markets, facilitating more stable postwar transitions (Daunton, 2002; Rockoff, 2012).

Germany's fiscal mismanagement led to catastrophic economic consequences in the early 1920s. War debt, reparations from the Treaty of Versailles, and persistent deficit financing resulted in hyperinflation. From 1919 to 1923, the value of the German mark plummeted, with prices doubling every few days and wages paid multiple times daily, rendering savings worthless. This collapse of monetary credibility devastated the middle class, which had heavily invested in war bonds, and fueled political instability, eroding public confidence in democracy (Balderston, 2002).

This breakdown of economic and social order ultimately created fertile ground for radical political movements. Public disillusionment with the perceived failures of the Weimar Republic intensified as hyperinflation eroded pensions, depleted savings, and exacerbated class resentments. The Nazi Party and other extremist groups capitalized on the widespread perception that Germany's postwar suffering was the result of betrayal and mismanagement rather than the natural consequence of unsustainable fiscal choices during the war (Tooze, 2006; Ritschl, 2012). Thus, Germany's wartime fiscal policy not only produced a financial crisis but also played a significant role in the broader historical trajectory leading to authoritarianism and global conflict in the decades that followed.

This study underscores the importance of fiscal balance during military mobilization. The UK's strategy of combining borrowing with tax increases and transparent governance helped avoid inflation, unlike Germany. The U.S. funded its military expansion through progressive taxation and Liberty Bonds, maintaining postwar stability (Rockoff, 2012). France, despite high prewar debt, implemented income taxation and secured U.S. loans, mitigating the effects of unchecked borrowing (Hautcoeur, 2003). These cases underscore the importance of wartime borrowing being supported by equitable taxation and effective debt management for long-term sustainability.

The German case also underscores the indispensable role of institutional strength and international financial integration in determining the success or failure of wartime fiscal policy. Germany's inability to access foreign loans due to its geopolitical isolation limited its financing options, forcing it to monetize domestic debt and fueling inflation (Eichengreen, 2019; Strachan, 2003). Moreover, the lack of a centralized and politically autonomous fiscal authority inhibited the implementation of a national tax policy capable of addressing the scale of wartime

expenditures. This institutional fragmentation weakened the state's capacity to respond effectively to fiscal emergencies and eroded public trust in economic governance.

The lessons from this history are crucial today. Amid global conflict, pandemics, and geopolitical uncertainty, governments must consider the long-term effects of emergency spending. While borrowing is valid for wartime, it should be supported by a strong tax base, access to diverse credit, and credible monetary institutions to ensure price stability. Lacking these, the risks of inflation, capital flight, and social unrest increase significantly (Reinhart & Rogoff, 2009; Bernanke, 2004).

In conclusion, Germany's wartime financing model highlights the crucial interconnections between fiscal policy, institutional integrity, and political stability. Its failure stemmed from poor taxation, excessive debt reliance, and lack of international support. In contrast, the Allied nations demonstrated that balanced fiscal strategies can maintain order and facilitate postwar recovery. This serves as a reminder for today's policymakers: unchecked short-term financing during war can lead to enduring economic trauma and political instability.

References

- Balderston, T. (2002). *Economics and Politics in the Weimar Republic*. Cambridge University Press.
- Bernanke, B. S. (2004). *Essays on the Great Depression*. Princeton University Press.
- Broadberry, S., ve Harrison, M. (2005). *The Economics of World War I*. Cambridge University Press.
- Corsetti, G., Kuester, K., Meier, A., ve Müller, G. J. (2014). Sovereign risk and belief-driven fluctuations in the euro area. *Journal of Monetary Economics*, 61, 53-73.
- Daunton, M. (2002). *Just Taxes: The Politics of Taxation in Britain, 1914–1979*. Cambridge University Press.
- Eichengreen, B. (2019). *Globalizing Capital: A History of the International Monetary System*. Princeton University Press.
- Feldman, G. D. (1997). *The Great Disorder: Politics, Economics, and Society in the German Inflation, 1914–1924*. Oxford University Press.
- Ferguson, N. (1998). *The Pity of War: Explaining World War I*. Allen Lane.
- Hardach, G. (1977). *The First World War, 1914-1918*. University of California Press.
- Hautcoeur, P.C. (2003). Was the Great War a watershed? The Economics of World War One in France. *DELTA Working Papers 2003-16, DELTA*.
- Holtfrerich, C.-L. (1986). *The German Inflation 1914-1923: Causes and Effects in International Perspective*. De Gruyter.
- Ohanian, L. E. (1997). The Macroeconomic Effects of War Finance in the United States: World War II and the Korean War. *The American Economic Review*, 87(1), 23-40.
- Reinhart, C. M., ve Rogoff, K. S. (2009). *This Time Is Different: Eight Centuries of Financial Folly*. Princeton University Press.
- Ritschl, A. (2012). *Reparations, deficits, and debt default: The Great Depression in Germany*. CEP Discussion Papers dp1149, Centre for Economic Performance, LSE.
- Rockoff, H. (2012). *America's Economic Way of War*. Cambridge University Press.
- Strachan, H. (2003). *The First World War: Volume I: To Arms*. Oxford University Press.
- Tooze, A. (2006). *The Wages of Destruction: The Making and Breaking of the Nazi Economy*. Penguin.