

On the Economic Unprofitability of War: Russia, Historical Comparisons, and Implications for Investors

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Abstract

This paper examines the question of whether wars pay economically under modern conditions. It combines the theoretical literature — from Bastiat to Norman Angell to the recent research on the costs of war — with an in-depth case study of Russia over the years 2022 to 2026 and with historical comparisons ranging from the First World War to the American intervention wars. A capital-market perspective complements the analysis, evaluating the equity and bond markets of belligerent states, the behavior of interest rates and inflation, and state interference with property rights.

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The results are unambiguous. Wars fought on a country's own territory reduce gross domestic product by roughly 30 percent within five years on average and raise inflation by about 15 percentage points; neighboring countries suffer substantial losses as well. For Russia, war costs of roughly \$550 billion exceed the economic value of the territory captured by a factor of three to more than thirty, depending on the valuation approach; added to this are the permanent loss of 1.5 to 1.8 million workers and an economic setback of ten to fifteen years. Four and a half years into the war, the Russian equity market trades more than one third below its pre-war level in US dollar terms — with foreign investors effectively locked out.

A “war dividend” does not exist: the supposed stimulus of armaments spending is redistribution, not wealth creation. For investors, war periods are marked by price losses, illiquidity, financial repression, and expropriation risk; historically, re-entry has paid only once a credible order of peace and property becomes discernible — not infrequently at the very point of maximum uncertainty resolution, long before the formal conclusion of peace.

Keywords: War economics · Opportunity costs · Sanctions · Russia · Equity markets · Financial repression · Expropriation.

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Non-Technical Summary

Wars are still considered economically advantageous in parts of the public debate: they are said to create orders, keep industry busy, and deliver territory along with natural resources. This paper tests that notion against the economic research, against the experience of the great wars of the past 150 years, and against a case study of Russia's war of aggression on Ukraine. The result can be stated in a single sentence: under modern conditions, war is a loss-making venture — for the economy of the aggressor, for that of the attacked, and, in attenuated form, for uninvolved neighbors as well.²

The reason is simpler than it appears. What is produced in war — ammunition, tanks, fortifications — is consumed, destroyed, or rendered obsolete without raising living standards. At the same time, factories, homes, roads, and above all people are annihilated who could have created future prosperity. The apparent stimulus provided by armaments orders is the old deception of the broken window: what is seen is the glazier's revenue; what remains unseen is everything that the same money would otherwise have brought into being.

The numbers bear this out. According to the Kiel evaluation of 176 war sites since 1870, the economic output of a country at war lies roughly 30 percent below its pre-war path after five years, with inflation about 15 percentage points above it. Russia supplies the most recent illustration: war costs of roughly \$550 billion stand against territory whose land value is estimated at only about \$16 billion; even the most generous full-value estimates do not come close to covering the costs. Added to this are hundreds of thousands of dead and invalided soldiers, a massive emigration of skilled professionals, interest rates of at times 21 percent, and depleted state reserves.

For investors, the paper contains a chapter of its own. It shows how the stock exchanges of belligerent states typically behave: a sharp fall at the outbreak of war, closures and trading restrictions, then — depending on the course of the war — a recovery that often begins at the point of greatest uncertainty. It also shows the dark side: frozen securities accounts, suspended dividends, capital controls, forced sales at deep discounts, and the expropriation of foreign owners, for which Russia since 2022 provides the leading example.

The practical conclusion: armaments spending may be necessary as an insurance premium against still greater losses — a prosperity program it is not. Investors, for their part, should distrust prices that rise only in a debased local currency, never confuse liquidity with availability, and make re-entry conditional on credible property rights rather than on the rhetoric of peace.

² The study follows a strictly economic methodology; the human suffering that every war causes cannot be adequately captured in any statistic.

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1 Introduction

In August 2026, Russia’s war of aggression on Ukraine stands in its fifth year. Ceasefires — most recently a truce of a mere 32 hours over the Orthodox Easter holiday in April 2026 — have not held, the negotiating position is deadlocked, and the fighting has scarcely lost intensity. At the same time, this war has produced a body of data and experience that allows an old question of political economy to be answered with unusual precision: does war pay economically? The present paper answers this question in the negative — not as a moral judgment, but as the result of a sober cost-benefit calculation of the kind that would be performed for any major investment decision.³

The question is older than modern economics. Its classic answer was given by Norman Angell, who argued as early as 1909/1910 — before the First World War — that the trade and financial integration of the modern world renders the conquest of foreign territory economically pointless: the victor destroys, together with his trading partner, the foundations of his own prosperity and is ruined by the costs of war scarcely less than the vanquished. Angell was widely misunderstood as having declared wars impossible; in fact he declared them unprofitable — a thesis that the First World War confirmed in terrible fashion, and for which John Maynard Keynes (1919) supplied the economic-policy complement with his critique of the Versailles settlement.

Modern empirical research has quantified this insight. Federle, Meier, Müller, Mutschler, and Schularick (2024), at the Kiel Institute for the World Economy, evaluate 176 war sites since 1870 and put the average damage of an interstate war fought on home territory at roughly 30 percent of gross domestic product within five years, accompanied by a rise in inflation of about 15 percentage points; even uninvolved neighboring countries lose around ten percent of their output on average. War is thus the largest single macroeconomic loss event known to the data series of the past century and a half — more severe than financial crises, pandemics, or natural disasters.⁴

And yet the notion of a benign “war boom” persists — nourished by the full order books of the defense industry, by falling unemployment figures in war economies, and by the memory of the American production boom of the 1940s. This paper sets against that notion the parable of the broken window formulated by Frédéric Bastiat in 1850: what is seen is always the glazier’s revenue; what remains unseen is what would otherwise have been created with the same means. Applied to national economies this means: armaments spending shifts demand, it does not create additional wealth; the diversion of capital and labor into goods that are consumed, destroyed, or stockpiled is a burden on future growth.

³ On the military situation, see the running assessments of the Institute for the Study of War (as of August 2026); Moscow explicitly rejects any freezing of the current front line.

⁴ Federle et al. (2024), Kiel Working Paper No. 2262; a German summary appeared in *Wirtschaftsdienst* 104(4), pp. 283–284.

A delimitation is in order. This paper addresses the question of whether war pays for the belligerent state and its economy, together with the consequences for investors. It does not address the question of whether defensive capability is warranted: deterrence is, economically, an insurance premium against still greater losses — the Kiel results themselves supply the strongest argument why preventing a war justifies almost any insurance contribution. A promise of returns it is not, and it should not be sold as one in economic policy.⁵

The contribution of the present paper comprises three principal aspects. First, it joins the theoretical arguments (Section 2) with the more recent empirical evidence (Section 3) into a unified account. Second, it deepens this firm’s own case study “The Negative Return on Investment of a War — Case Study Russia” (R&B Wealth Management, 2026) into a complete war balance sheet for Russia after four and a half years, updated with data through August 2026 (Section 4), and sets the great historical cases beside it (Section 5). Third, it develops an investor perspective that the literature has rarely treated systematically: how do the stock exchanges of belligerent states behave, what happens to interest rates and inflation, how does illiquidity arise in equity and bond markets, which state interventions strike foreign investors in particular, and when does re-entry pay (Section 6)?

All statements about an ongoing war are subject to a data caveat. Casualty figures, war costs, and territorial valuations are estimates with substantial ranges; wherever possible, several independent sources are cited and conservative midpoints used. The orders of magnitude of the results — and only these matter for the research question — are unaffected by the uncertainties.⁶

The paper is structured as follows. Section 1 — the present one — introduces the research question and surveys the literature. Section 2 develops the theoretical foundations: the parable of the broken window and the opportunity costs of war, Angell’s great illusion, the fallacy of the armaments boom, and the conditions of the modern knowledge economy. Section 3 summarizes the empirical evidence on the macroeconomic costs of wars. Section 4 contains the case study of Russia, Section 5 the historical comparisons. Section 6 applies the results to capital investment, and Section 7 concludes with a summary and outlook.

⁵ On the “peace dividend” after 1990 — falling military-spending ratios as a growth reserve — see the overview in SIPRI (2025); the converse applies to European rearmament since 2022.

⁶ The estimate of roughly 1.2 million Russian military casualties (killed, wounded, missing) rests on CSIS (January 2026), the Dutch military intelligence service MIVD (April 2026), and The Economist (May 2026).

2 Theoretical Foundations: Why War Does Not Pay

2.1 The Parable of the Broken Window and the Opportunity Costs of War

In his essay “Ce qu’on voit et ce qu’on ne voit pas” (1850), Frédéric Bastiat tells the story of a shopkeeper whose son shatters a windowpane. The bystanders console him: the mishap has its good side, for the glazier now receives an order. Bastiat’s objection founded an entire school of thought: what is seen is the glazier’s revenue; what remains unseen is that the shopkeeper could have bought a pair of shoes with the same money — in which case the economy would possess a window and a pair of shoes, whereas now it has only a window. Destruction creates no wealth; it merely compels replacement that is lacking elsewhere. Henry Hazlitt (1946) made the parable the centerpiece of his “Economics in One Lesson” and turned it expressly against the then-widespread thesis that the Second World War had restored the American economy to health.⁷

Applied to war, the parable operates twice over. First, on the destruction side: every ruined factory, every blown bridge, every destroyed dwelling triggers post-war replacement investment that appears in the statistics as economic output, even though it merely returns the economy to where it stood before. Gross domestic product is a flow variable; it measures production, not wealth. A country that rebuilds a city produces a great deal and in the end owns no more than it had before the war — while the forgone alternative uses of the resources are recorded nowhere. Second, on the production side: armaments, unlike machines, roads, or schools, yield no continuing benefit. An artillery shell is fired, a tank destroyed or scrapped, a bunker left to decay. Their production binds steel, chemicals, electronics, and highly skilled labor — their return in terms of living standards is zero.⁸

This brings us to opportunity costs, the second half of the argument. Every ruble, dollar, or euro that flows into ammunition is missing from education, health, infrastructure, research, or simply private consumption. These costs are not hypothetical but measurable: war economies systematically crowd out civilian investment, shift workers into unproductive uses, and finance themselves through taxes, debt, or currency debasement — the last a path that burdens future purchasing power in every case. War consumes the future in order to destroy the present: that, in one sentence, is the economic balance of all war finance.

⁷ Bastiat, F. (1850), *Ce qu’on voit et ce qu’on ne voit pas*; the parable forms the first chapter. Hazlitt devotes to it the chapter “The Broken Window” and its application “The Blessings of Destruction.”

⁸ On the distinction between flows and stocks in the context of war, see Broadberry and Harrison (2005), who juxtapose production and wealth accounts for the First World War.

2.2 Norman Angell and the Great Illusion

Norman Angell's "The Great Illusion" (1910) rightly counts as a classic of the economics of war. The "illusion" of the title is the belief that a state can enrich itself through military conquest. Angell's counter-argument rests on the integration of the modern economy: prosperity no longer rests on land and booty but on trade, credit, and the division of labor. Whoever conquers his neighbor destroys that neighbor's purchasing power and with it his own export market; whoever tears the international web of credit strikes his own banks; whoever occupies factories cannot cart their value away like a war chest of the seventeenth century. The victor gains administrative burdens and loses trading partners — conquest "does not pay," regardless of who wins on the battlefield.⁹

The First World War did not refute Angell — it confirmed him. None of the principal European belligerents stood better economically in 1919 than in 1913; the "victors" Britain and France turned from the world's greatest creditors into debtors of the United States, the defeated sank into hyperinflation and political disintegration, and world trade needed decades to restore its severed connections. Glick and Taylor (2010) put the trade losses of the world wars alone at magnitudes that exceed the direct costs of war and that persisted for decades after the fighting ended. That Angell is nonetheless reputed to have been refuted rests on the misunderstanding noted above: he had not claimed that the unprofitability of war would prevent wars — states can err, and they do. His thesis concerned the balance sheet, not the probability of the error.

John Maynard Keynes carried the reckoning to its conclusion in 1919. His polemic on the economic consequences of the peace showed that not even total military victory can settle the bill of war: Europe, he argued, is an economic unit, and the attempt to recover the costs of war from the defeated through reparations must destroy the very order of trade and credit on which the victors themselves lived — and prepare the next conflict. The history of the interwar years followed this script with depressing fidelity. For the profitability question of this paper, that is the second part of the classical answer: if even victory with a dictated peace cannot recoup the costs, war as such certainly cannot.¹⁰

For the present day, Angell's argument is stronger than ever. The world economy of 2026 is incomparably more interwoven than that of 1913: value is created in cross-border supply relationships, capital is mobile, and the most valuable assets — knowledge, software, networks, brands, skilled people — cannot be conquered, though they can be driven away. Russia has been experiencing this since 2022: the country gained farmland and ruins, and lost its largest energy customer, its access to Western technology, and hundreds of thousands of its most productive minds.

⁹ The first version appeared in 1909 as the pamphlet "Europe's Optical Illusion"; the expanded book of 1910 was translated into more than twenty languages. Angell received the Nobel Peace Prize in 1933.

¹⁰ Keynes put Germany's realistic capacity to pay at a fraction of the Allied demands; the reparations actually rendered ultimately remained far below both figures.

2.3 The Fallacy of the Armaments Boom

The most popular counter-argument holds that armaments spending stimulates the economy: the state places orders, factories hire, unemployment falls. In the short run the demand effect is real — it is the same effect that any government expenditure produces. The decisive questions, however, are how large it is compared with alternative uses and what remains of it. The empirical literature on fiscal multipliers gives a sobering answer: Barro and Redlick (2011) estimate the multiplier of military spending at 0.6 to 0.7, Ramey (2011) at values around or below one — a dollar of armaments thus raises output by less than a dollar, because private demand is crowded out. Investment in infrastructure, education, or research, by contrast, shows markedly higher long-run returns, because it permanently enlarges productive capacity instead of creating stocks that are consumed or become obsolete.¹¹

The historical crown witness for the armaments boom — the American expansion of 1941 to 1945 — does not withstand scrutiny. Robert Higgs (1992) dismantled the supposed “wartime prosperity” of the United States: unemployment disappeared essentially through the conscription of twelve million men; the reported increases in gross domestic product rested on administered prices that overstated the value of armaments production; private consumption per head stagnated under the rationing of gasoline, meat, shoes, and housing, while the quality of goods declined. The true upswing — rising living standards, private investment, a consumption boom — began only in 1946, after demobilization, when capital and labor returned to civilian uses. Precisely the post-war recession expected by many Keynesians failed to appear: the end of armaments production was not a demand gap but a liberation of resources.¹²

For war economies in the narrow sense, a further point applies: they operate at the capacity limit. Where labor is scarce, the armaments sector outbids the civilian economy with state-financed wages; the result is not additional production but a diversion of production at rising prices. Russia since 2023 is a textbook case: the armaments plants ran extra shifts while civilian machine-building and vehicle production shrank, inflation reached double digits despite a policy rate of 21 percent, and growth fell toward zero once the fiscal impulse faded. A “boom” that exists only as long as the state orders the consumables of death is not a boom — it is an invoice with a due date.

¹¹ Barro and Redlick (2011), based on the US war episodes; Ramey (2011) for a survey. Multipliers above one are found almost exclusively under pronounced slack — not at the full employment at which war economies operate.

¹² Higgs, R. (1992), *Journal of Economic History* 52(1), pp. 41–60. By Higgs’s recalculation, real private consumption per head actually declined slightly in 1943/44.

2.4 Modern Conditions: Integration, Knowledge Capital, and the Costs of Conquest

Against the unprofitability thesis it has been objected that conquest can pay handsomely for sufficiently ruthless aggressors: Peter Liberman (1996) showed, on the evidence of the German occupation of France and Belgium, that repressive regimes can extract substantial resources from occupied industrial societies in the short run. The objection deserves a serious answer, for it names the conditions under which conquest “works” in theory: an intact capital stock, an administration willing to cooperate, no external counter-power, and value creation that resides in physical plant rather than in people and knowledge.¹³

It is precisely these conditions that no longer obtain. First, value creation is knowledge-based: the market value of modern firms consists predominantly of intangibles — software, patents, data, practiced teams — which emigrate with the people or evaporate with trust. Conquered server halls are sheet metal without the engineers who run them. Second, the world economy answers conquest with exclusion: sanctions, export controls, and the freezing of reserves turn the hoped-for booty into a liability; Russia’s central-bank reserves of roughly \$300 billion frozen in the West are the largest example in history. Third, the modern war of attrition destroys the booty itself: cities such as Mariupol or Bakhmut were devalued in the very course of their “capture” — what was conquered is rubble whose reconstruction the conqueror must finance. Fourth, and finally, the scarcest good — skilled labor — migrates in both directions: out of the attacked country as flight, out of the aggressor country as exile from mobilization and repression.

In sum: classical theory explains why destruction never creates wealth; Angell explains why, under conditions of integration, conquest does not profit even the conqueror; the multiplier research explains why the detour through armaments demand offers no escape; and the structure of the modern knowledge economy closes the last remaining hope of profitability. What remains is the empirical test — to which the next section turns.

3 Empirical Evidence: The Macroeconomic Costs of Wars

3.1 Effects in the Belligerent State

The most comprehensive quantitative assessment of the costs of war comes from the Kiel Institute for the World Economy. Federle, Meier, Müller, Mutschler, and Schularick (2024) identify 176 war sites between 1870 and 2022 and trace the economic development of the affected countries relative to their pre-war trend. The central result: when the war takes place on a country’s own territory, gross domestic product lies on average roughly 30

¹³ Liberman, P. (1996), *Does Conquest Pay?* Princeton University Press. Brooks (2005) replies that globalized production has structurally consumed the returns to conquest.

percent below the pre-war path after five years, while inflation rises by about 15 percentage points cumulatively. War thus acts like an exceptionally severe negative supply shock: the capital stock is destroyed, workers drop out, trade relations are severed, and financing through the printing press debases the currency. Table 1 summarizes the orders of magnitude.¹⁴

Table 1: Average macroeconomic effects of interstate wars

Effect	War site	Neighboring countries
GDP level after five years	−30%	−10%
Inflation (cumulative, five years)	+15 percentage points	+5 percentage points
Capital stock	substantial destruction	slight losses
Risk premia and funding costs	sharply elevated	elevated

Notes: Deviations from the pre-war trend; average across 176 war sites since 1870.

Sources: Federle et al. (2024); own presentation.

The magnitude of minus 30 percent is no abstraction; it matches the observed extreme cases. Ukraine lost roughly 29 percent of its economic output in the first year of the war, 2022 — an almost exact confirmation of the historical rule for the first year of a war of full intensity. The older literature reaches comparable results: in Barro’s study of rare macroeconomic disasters, wars form the most frequent and most severe category, with output collapses of between 15 and more than 60 percent, and Hess (2003) puts the welfare costs of conflict at several percent of current consumption even in peacetime, because the mere possibility of war forces precautionary expenditure.¹⁵

3.2 Spillovers to Neighboring Countries and the World Economy

Wars do not stop at the front line. The Kiel results put the losses of neighboring countries — which themselves do not fight — at an average of roughly ten percent of gross domestic product within five years, accompanied by about five percentage points of additional inflation. The transmission paths are manifold: severed trade and supply relationships, energy price shocks, refugee movements, elevated risk premia, the diversion of public budgets into defense, and the loss of investor confidence that spreads across entire regions. With growing distance the effects fade; remote economies may even benefit marginally through armaments orders — which does not turn the global balance positive, but merely shifts the distribution of the losses.¹⁶

For the current war, the Kiel authors estimate the costs to third, non-belligerent states through 2026 at roughly \$250 billion of forgone output, of which about \$70 billion falls on

¹⁴ Methodologically, the estimates rest on local projections of the deviation from the pre-war trend; the authors document robustness across epochs, regions, and types of war.

¹⁵ Barro, R. J. (2006), *Quarterly Journal of Economics* 121(3); see also Barro and Ursúa on consumption disasters. Ukraine 2022: official estimate −28.8 percent.

¹⁶ For Europe this transmission became directly visible in 2022: the Dutch TTF wholesale gas price peaked in August 2022 at around €340 per megawatt hour — roughly fifteen times its long-run pre-war level.

the European Union; for Ukraine itself they reckon, beside roughly \$120 billion of lost production, the destruction of capital approaching one trillion dollars. This also disposes of the widespread notion that someone else’s war is economically someone else’s problem: the European energy crisis of 2022/23, the inflation surge to at times above ten percent in the euro area, and the fiscal burdens of support and defense programs are war costs — borne by economies that never fired a shot.

Among the transmission paths, finally, is the fiscal one. Neighbors and allies bear the reception and care of millions of displaced persons, provide military and financial assistance, and rearm themselves: European defense spending has risen since 2022 from levels in part well below two percent to above two percent of gross domestic product, NATO in 2025 adopted a spending target of five percent by 2035, and the European Union launched rearmament programs of roughly €800 billion. The “peace dividend” of the 1990s is thus reversing: resources that for decades had been freed for consumption, the welfare state, and debt reduction are being bound again. This premium, too, is — in the sense of Section 2 — part of the opportunity costs of war, borne by third parties; it may be justified as insurance, but a growth program it is not either.¹⁷

3.3 The Destruction of Human and Physical Capital

Behind the output figures stands the destruction of the two sources of all prosperity: people and capital. The physical capital account can be quantified precisely for Ukraine, because the World Bank, the United Nations, and the European Commission survey the damage at regular intervals: through the end of 2025, direct physical damage amounts to more than \$195 billion; the needs for reconstruction and recovery over the coming decade are estimated at \$588 billion — roughly three times Ukraine’s annual economic output. Fourteen percent of the housing stock is damaged or destroyed, affecting more than three million households; the largest single items are transport (\$96 billion), energy (\$91 billion), and housing (\$90 billion).¹⁸

Human capital weighs heavier still, for it is uninsurable and renewable only across generations. Every soldier killed is at once a total loss of future value creation — the economic literature values a statistical life in industrial countries at several million dollars —, every severely disabled veteran a partial loss plus lifelong care costs, every refugee or emigrant skilled worker a transfer of human capital abroad. Added to these are the silent losses: interrupted schooling, trauma, torn families, and the demographic gap of births that

¹⁷ NATO summit at The Hague, June 2025: 3.5 percent of GDP for core defense plus 1.5 percent for defense-related infrastructure by 2035; EU program “Readiness 2030” of up to €800 billion.

¹⁸ World Bank, Government of Ukraine, European Commission, United Nations (2026): Fifth Rapid Damage and Needs Assessment (RDNA5), reporting period February 2022 to December 2025.

never occur. For Russia, the dead, the permanently disabled, and the emigrants add up to 1.5 to 1.8 million workers permanently missing — Section 4 examines this in detail.¹⁹

3.4 Total Fiscal Costs: Historical Orders of Magnitude

Table 2 assembles the total costs of selected wars. The figures are conservative; they capture budgetary costs and immediate damage, but not forgone growth, trade losses, or the interest burden of war debts across decades.

Table 2: Total costs of selected wars

Conflict	Cost magnitude	Assessment
First World War (1914–1918)	direct war expenditure of all powers above \$200 billion (in 1918 prices); follow-on costs a multiple	end of the first globalization; hyperinflations; sovereign defaults
Second World War (1939–1945)	United States alone roughly \$300 billion nominal (over \$4 trillion in today’s prices); UK public debt $\approx 250\%$ of GDP (1945)	the largest destruction of wealth and life in history; currency reforms and capital levies
Vietnam War (1965–1975)	United States roughly \$170 billion nominal ($\approx$ \$1 trillion in today’s prices)	contributed to the “Great Inflation” and the end of Bretton Woods (1971)
Iraq and Afghanistan (2001–2021)	Iraq $\approx$ \$3 trillion (Stiglitz and Bilmes); all post-9/11 wars incl. follow-on costs $\approx$ \$8 trillion (Costs of War)	financed entirely on credit; interest and veterans’ costs run on for decades
Russia–Ukraine (since 2022)	Russia’s war costs $\approx$ \$550 billion through mid-2026; damage in Ukraine \$195 billion, reconstruction needs \$588 billion	largest land war in Europe since 1945; costs still accruing

Sources: Broadberry and Harrison (2005); Higgs (1992); Stiglitz and Bilmes (2008); Crawford (2021); SZR/RAND; World Bank et al. (2026); own compilation.

Several observations deserve emphasis. First, war costs always outgrow the fighting itself: the United States pays veterans’ benefits for its wars more than half a century after they end, and the interest on credit-financed wars runs on for as long as the debt exists. Second, great wars overwhelm any orderly financing: Britain ended the Second World War with public debt of roughly 250 percent of gross domestic product, the United States at roughly 130 percent — levels that were subsequently worked off over decades of financial repression and inflation, that is, at the expense of savers and bondholders. Third, war costs are not a matter of the past: the Institute for Economics and Peace puts the worldwide costs of violence and conflict at roughly \$19 trillion annually, more than 13 percent of world output.²⁰

¹⁹ On the “value of a statistical life” approach, see the survey by Viscusi; for industrial countries the magnitude lies between \$4 million and \$12 million per life.

²⁰ Crawford (2021) for the Costs of War project at Brown University: roughly \$8 trillion in budgetary and follow-on costs of the post-9/11 wars, including future veterans’ care.

The overall empirical picture is thus unambiguous and stable across 150 years: there is no documented case of a great war that lifted the belligerent's economy onto a higher path of prosperity, but there are dozens of cases of severe, in part permanent, impoverishment. Against this background the paper now turns to its centerpiece: the question of how these regularities play out in the Russian case.

4 Case Study Russia: The Balance Sheet of a War Economy

4.1 Territorial Gains and War Costs: The Cost-Benefit Calculation

In the summer of 2026, Russia controls roughly 116,310 square kilometers of Ukrainian territory, about 19.3 percent of the country. Subtracting the areas already controlled before February 2022 — Crimea and parts of the Donbas, together roughly 44,000 square kilometers — leaves a net gain of about 72,000 square kilometers from four and a half years of full-scale war. An economic value can be assigned to this gain: at the pre-war average price of Ukrainian farmland of roughly \$1,400 per hectare, the entire controlled area corresponds to a land market value of about \$16.3 billion. Generously adding all mineral deposits, the black-earth soils, the industrial plant of the Donbas, and access to the Sea of Azov yields estimates of a “full economic value” of \$100 billion to \$200 billion.²¹

Against this stand the costs. Ukraine's foreign intelligence service, whose estimates align with calculations by RAND and independent economists, puts Russia's direct war costs through mid-2026 at roughly \$550 billion — ammunition, equipment losses, pay and bonuses, death gratuities and disability pensions, logistics, recruitment, fortification, and the administration of the occupied territories; in 2025 the running rate was about \$2.7 billion per week. Set against an estimated 1.2 million Russian total casualties — killed, wounded, missing — this yields war costs of roughly \$458,000 per soldier lost, against which stands a land market value of merely some \$13,600 per soldier. Even under the most generous full-value approach of \$200 billion, the war costs incurred so far exceed the territorial countervalue by almost a factor of three; measured against the land market value, by more than a factor of thirty.²²

Even this calculation is flattering, for the “booty” is largely destroyed and permanently in need of subsidy. The cities taken in house-to-house fighting — Mariupol, Sievierodonetsk, Bakhmut, Avdiivka — were devalued in the course of their capture; their reconstruction falls to the conqueror. Russia's federal budget for 2026 earmarks subsidies of more than 133 billion rubles for the Donetsk and Luhansk regions alone, with a rising

²¹ Territorial data: Institute for the Study of War, Russia Matters (January 2026); land price 2021: KyivPost. The US Geological Survey puts the mineral deposits of the occupied areas at \$300–400 billion — inaccessible for the foreseeable future under sanctions and war damage.

²² Cost accounting after SZR (2025), RAND, and Euromaidan Press (December 2025); casualty level after CSIS (January 2026), MIVD (April 2026), and The Economist (May 2026).

trend. What the logic of conquest conceived as an asset appears in the budget accounts as a permanent expenditure item.

4.2 Sanctions, Trade Diversion, and Technological Decoupling

The second cost block is the loss of Western economic relations. Immediately after the outbreak of war, the G7 states and the EU froze Russian central-bank reserves of roughly \$300 billion — nearly half the country’s currency reserves and the largest such intervention in economic history. Export controls cut Russia off from semiconductors, aviation parts, machine tools, and industrial software; more than a thousand Western firms withdrew or reduced their business. The G7 oil price cap forced Russia into building a costly shadow fleet and into price discounts toward its remaining customers China and India; the discount of the Urals grade against Brent at times exceeded \$30 per barrel in 2022/23 and has been draining budget revenue ever since.²³

Weightiest of all is the loss of the European gas market. Gazprom, for decades the state’s most reliable earner of foreign exchange, lost with the halt of deliveries to Europe roughly 80 percent of its most important market and in 2023 recorded, at 629 billion rubles, the largest loss in its history; the hope of an equivalent substitute via China remains unfulfilled, because Beijing enforces prices close to its domestic costs and new pipelines take years. The much-noted resilience of the Russian economy in 2023 and 2024 — growth rates around four percent — was against this background no refutation of the sanctions but the product of credit-financed armaments demand that masked civilian weakness. This became visible as soon as the impulse faded.

How costly the technological decoupling is in detail is shown by aviation. After the outbreak of war Russia retained more than 400 leased Western airliners — a billions-scale loss for their owners and a mortgage for their operators: without original parts and maintenance contracts, aircraft are grounded and cannibalized to keep others flying, while the domestic replacement programs run years behind schedule. The same holds for machine tools, semiconductors, and industrial software, which can be procured through third countries only at higher cost, more slowly, and in fluctuating quality. The much-vaunted import substitution thus binds precisely the investment resources and skilled workers that civilian modernization lacks — and produces goods that cannot compete on the world market. Decoupling is not a one-off charge but a running discount on productivity.²⁴

²³ The Urals discount later narrowed to \$10–15 per barrel but, together with higher freight and insurance costs, remained a lasting drag on the oil sector’s earnings.

²⁴ Western leasing companies wrote off roughly \$10 billion on the retained aircraft; later settlement payments from Russian insurance funds covered only part of the losses.

4.3 The Fiscal Position: Military Spending, Deficits, and the Depletion of Reserves

The fiscal record shows the war as a growing crowding-out process. Spending on national defense rose from roughly 3.6 trillion rubles in 2021 to about 13.5 trillion rubles in 2025 — a good six percent of economic output and, together with internal security, roughly 40 percent of total federal spending; the 2026 budget maintains this priority at about 38 percent. This is financed from sources that all burden future prosperity: running deficits (2025: 2.6 percent of GDP), tax increases, and recourse to the National Wealth Fund, whose liquid assets have shrunk from roughly \$113 billion at the start of 2022 to below \$50 billion — barely two percent of GDP. Table 3 summarizes the indicators.²⁵

Table 3: Russia: macroeconomic indicators, 2021 to 2026

Indicator	2021	2022	2023	2024	2025	2026*
Real GDP growth (%)	+5.9	−1.4	+4.1	+4.3	+1.0	+0.6
Inflation (Dec., year on year, %)	8.4	11.9	7.4	9.5	5.6	6.0
Key rate (year-end, %)	8.5	7.5	16.0	21.0	16.0	14.0
Defense and security (% of federal spending)	≈24	≈30	≈33	≈39	≈40	≈38
Federal budget balance (% of GDP)	+0.4	−2.3	−1.9	−1.7	−2.6	−1.6
National Wealth Fund, liquid assets (USD bn)	≈113	≈87	≈56	≈38	≈47	≈48
MOEX index (year-end, points)	3,787	2,154	3,099	2,883	2,767	2,093
Rubles per US dollar (year-end)	74	70	90	101	≈80	≈89

Notes: * 2026: first-half or August values; budget balance and inflation according to plan or central-bank forecast. Figures rounded; NWF holdings fluctuate with gold and exchange-rate valuation.

Sources: Rosstat; Bank of Russia; Russian Ministry of Finance; MOEX; IMF (2026); BOFIT (2026); SIPRI (2026); own compilation.

The tax policy of 2026 is remarkable, for it is an involuntary admission: wars do not pay for themselves. After the profit tax had already been raised from 20 to 25 percent in 2025, the 2026 budget lifts value-added tax from 20 to 22 percent and simultaneously lowers the revenue threshold of tax liability from 60 million to 10 million rubles, capturing roughly 450,000 small businesses for the first time; new levies on gambling and further fees come on top. A value-added tax increase is the most regressive of the major taxes — the bill of the war is thus presented expressly to the population, whose real incomes have already been eaten by the inflation of previous years.²⁶

²⁵ SIPRI (2026); The Moscow Times (October 2025); Ministry of Finance. The fund was conceived as an intergenerational reserve from oil revenues; its liquid component today covers about one annual deficit.

²⁶ Figures from the 2026–2028 budget draft: revenue 40.3 trillion, expenditure 44.1 trillion rubles, planned deficit 3.8 trillion rubles or 1.6 percent of GDP — with deficit plans regularly missed in previous years.

4.4 Inflation, Interest Rates, and the Overheating of the War Economy

Figure 1 traces the monetary chronicle of the war. The attack was followed by an emergency rate of 20 percent and an inflation peak of 17.8 percent in April 2022; after stabilization through capital controls, the central bank was able to cut rates quickly at first. From mid-2023, however, inflation returned — this time not as a shock effect but as the permanent strain of an economy producing armaments at the capacity limit: recruitment bonuses and armaments wages drove nominal pay into double digits while the supply of goods could not follow. The Bank of Russia responded with an unprecedented tightening to 21 percent in October 2024 — the highest policy rate since the early 2000s — and even this pushed inflation sustainably below ten percent only in 2025.²⁷

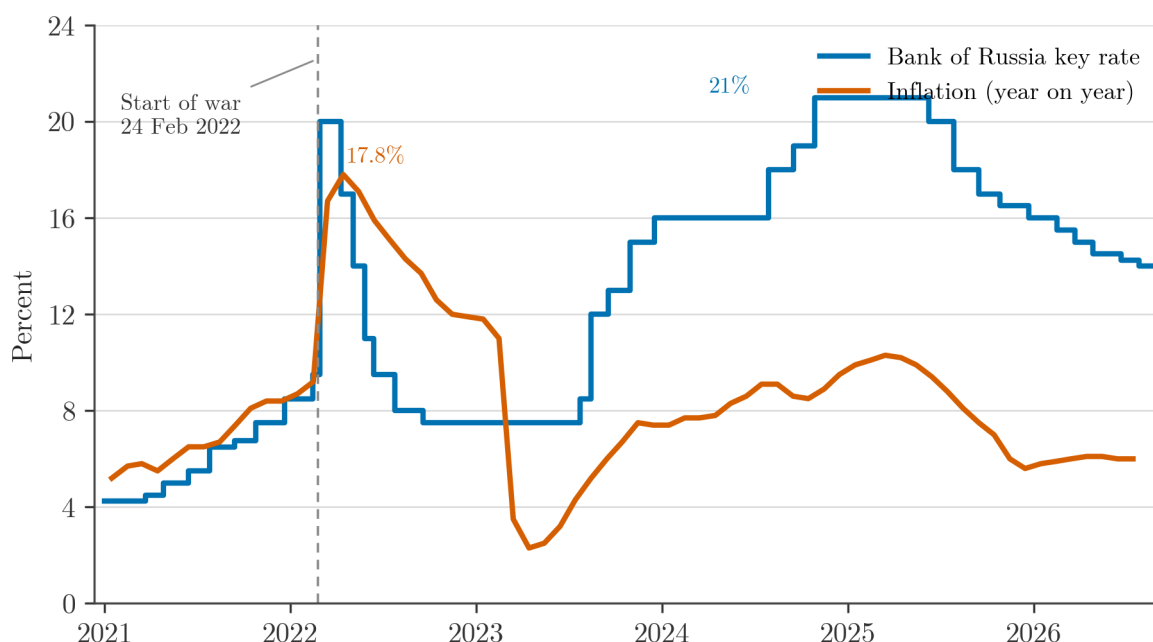


Figure 1: Bank of Russia key rate and consumer price inflation in Russia, January 2021 to August 2026. Monthly values; inflation year on year. Sources: Bank of Russia; Rosstat; own presentation.

The price of disinflation became visible in 2025/26: growth fell to about one percent in 2025, the economy contracted in the first quarter of 2026 for the first time since 2022 (−0.2 percent year on year), and civilian industrial output in the first half of 2026 ran more than three percent below the prior year while the armaments branches kept expanding. The constellation — high nominal rates, falling inflation, a stagnating civilian economy, a growing state share — bears all the marks of war-induced misallocation: at 14 to 21 percent,

²⁷ The central bank governor spoke publicly of “overheating”; internal forecasts warned as early as summer 2025 of a transition of the civilian sector into recession.

the capital market no longer finances housing, factories, or trading firms, but almost exclusively the state and its suppliers. For the question of this paper, that is the crux: even the much-cited “stability” of the Russian war economy is not a gain in prosperity but a dearly bought renunciation of the future.²⁸

4.5 Human and Physical Capital: Losses, Emigration, Productivity

The most lasting mortgage of the war is demographic. Of the estimated 1.2 million military casualties, concurring estimates attribute roughly 500,000 to the dead and 200,000 to 300,000 to the permanently incapacitated; added to these are 800,000 to one million mostly young, above-average skilled emigrants of the years since 2022. Taken together, the economy is thus permanently short 1.5 to 1.8 million workers — two to two and a half percent of the labor force, concentrated in the most productive age group of 20 to 45. The Russian labor ministry puts the additional labor requirement through 2030 at 10.9 million; the unemployment rate of barely above two percent is not a sign of strength but the mark of a swept-empty labor market.²⁹

The growth effect can be bounded: the loss of labor alone costs 0.3 to 0.6 percentage points of potential growth per year; the technological decoupling — no Western semiconductors, no aviation and energy-technology cooperation, no access to international venture capital — is put by experts at five to ten lost years of innovation. Together these explain why all serious long-term forecasts for Russia converge on growth rates of merely 1.0 to 1.3 percent — against a realistic 2.5 percent in a counterfactual peace scenario with Western economic integration.

The swept-empty labor market, meanwhile, produces statistics that feign strength. Record-low unemployment and double-digit nominal wage growth look like prosperity gains but are scarcity prices: firms hoard staff they can barely utilize because replacements cannot be found; wages rise faster than productivity and thus keep inflation high; and the premiums of the defense sector distort the career choices of an entire cohort. Regionally a divided country emerges: armaments locations along the Volga and the Urals record special booms while consumer-oriented industries and service regions fall behind. This, too, is the signature of the war economy — redistribution between sectors and regions that grow poorer in the aggregate.

4.6 Interim Conclusion: The Balance After Four and a Half Years

Drawing the strands together yields the following account. Direct war costs of roughly \$550 billion correspond to 28 to 30 percent of one year’s Russian economic output — by itself

²⁸ BOFIT Weekly 7/2026; The Moscow Times (2026b): civilian manufacturing in the first half of 2026 down 3.2 percent year on year.

²⁹ Institut Montaigne (2025); Hanson (2025); Russian labor ministry (June 2024). Emigration hit IT, engineering, medicine, and science especially hard.

eight to ten lost years of normal growth. The growth gap against the peace scenario — roughly 1.2 instead of 2.5 percent annually — cumulates by 2035 to about \$480 billion of forgone output, or 17 percent of the attainable level. The permanent loss of labor deprives the country of 0.3 to 0.6 points of growth annually for decades. Conservatively added up, the economic setback amounts to \$1 trillion to \$1.3 trillion and ten to fifteen years of development — to be borne by future generations, however the war ends.³⁰

Measured by any business standard, the campaign is thus what this firm’s case study calls an “economically devastating” undertaking: for every soldier lost, roughly \$458,000 was expended to gain land with a market value of \$13,600; total costs exceed the territorial countervalue by a factor of three to more than thirty, depending on the approach; and the follow-on costs — reserves, people, technology, trust — keep growing with every month of war. Should Moscow one day present the war as a victory, economic history will record it as one of the costliest Pyrrhic victories of the modern age.

5 Historical Comparisons

5.1 The First World War: The Ruin of Victors and Vanquished Alike

The First World War is the great model case of the unprofitability thesis, because it was fought among economically tightly interwoven industrial states — precisely the constellation for which Angell had formulated his prediction. The balance after four years: direct war expenditure of all belligerents above \$200 billion in 1918 prices — a multiple of the world’s annual savings of the time —, some ten million soldiers killed, the collapse of four empires, and the end of the first globalization, whose trade and capital integration was not regained until the 1970s. Glick and Taylor (2010) show that the war-induced trade losses alone exceeded the direct costs of the war and persisted well into the 1920s.³¹

It is instructive that the victors lost as well. Britain entered the war as the world’s largest creditor and left it as a debtor of the United States with public debt above 130 percent of gross domestic product, lost its preponderance in world trade, and in 1925 returned to an overvalued gold parity that ushered in a decade of stagnation. France regained Alsace-Lorraine and lost an eighth of its male working potential as well as the bulk of its foreign investments — among them the savings of roughly 1.6 million French households held in Russian state bonds when the Bolsheviks in 1918 declared all tsarist debts void. For the defeated, the war ended in the destruction of the monetary order itself:

³⁰ Counterfactual calculation after R&B Wealth Management (2026) on the basis of consensus forecasts by the IMF, the World Bank, and BOFIT; in July 2026 the IMF confirmed its growth forecast of 1.1 percent for each of 2026 and 2027.

³¹ Broadberry and Harrison (2005) provide the authoritative overall account; estimates of the direct costs vary between \$180 billion and \$230 billion in 1918 prices, depending on delimitation.

Germany and Austria wrecked their currencies to the point of the hyperinflation of 1922/23, which wiped out the financial wealth of the middle class.³²

5.2 The Second World War and the Myth of Wartime Prosperity

In the popular understanding, the Second World War counts as the war that “saved the economy” — the American one, that is. Section 2.3 has shown why even this reading fails: the United States, geographically spared and the only belligerent without destruction of its home territory, experienced not a gain in prosperity but a vast diversion of production amid stagnant consumption; its real ascent began with the peace. For all other belligerents the balance was devastating. The Soviet Union — nominally a victor — lost 27 million people and, by varying estimates, a quarter to a third of its capital stock. Britain — nominally a victor — ended the war with roughly 250 percent public debt, rationed food until 1954, gave up its empire within two decades, and repaid the American bridging loan of 1946 until the year 2006.³³

For Germany and Japan, the economic defeat became fully visible only after the war, because price regulation and administered quotations had concealed the losses for years. In Germany, dividends were capped at six percent from 1941 and share prices frozen from January 1943; when the currency reform of 1948 tore away the veils, German equity wealth stood in real terms roughly 90 percent below its pre-war level, and the equalization-of-burdens levy of 1952 took half of the remaining tangible assets for the benefit of the war-damaged. In Japan, the exchange remained closed for almost four years from August 1945; hyperinflation and capital levies of 25 to 90 percent destroyed in real terms over 95 percent of equity wealth and almost the entire value of war-bond holdings. The later resurgence of both countries — the “economic miracle” — was not a return on the war but on its opposite: market economy, currency stability, trade integration, and the renunciation of large military budgets.³⁴

5.3 Intervention Wars: Vietnam, Afghanistan, Iraq

The wars of the post-war era seem at first to contradict the pattern: they took place far from home territory and left the intervening power’s capital stock untouched. The economic balance remained negative nonetheless — the costs merely migrated from the capital stock into the public finances and the monetary order. The Vietnam War was waged, in the era of “guns and butter,” deliberately without tax increases; the consequence was a creeping

³² On the repudiation of the tsarist debts and the fate of the French creditors, Oosterlinck (2016); on the Austrian crown: prices multiplied more than ten-thousand-fold between 1914 and 1922.

³³ The final installment of the Anglo-American Loan was remitted in December 2006 — 61 years after the war’s end; a vivid measure of the duration of war burdens.

³⁴ Dimson, Marsh, and Staunton (2002) document the real loss rates; the German equity decade from 1949 to 1959 then delivered real returns of roughly 30 percent per year — from a devastated base, and in peacetime.

overstretch of the budget that ushered in the “Great Inflation” of 1965 to 1982 and contributed in 1971 to the collapse of the Bretton Woods system, once the dollar’s gold backing had become untenable. The Soviet war in Afghanistan, in turn, is regarded in the literature as one of the exhaustion factors that contributed to the disintegration of the Soviet economy.³⁵

The pattern is confirmed outside the Western world as well. The war between Iran and Iraq (1980 to 1988), the longest conventional war of the twentieth century, ended without any appreciable shift of the border; estimates of the combined costs of both sides — destruction, armaments, forgone oil revenues — reach the order of one trillion dollars, a multiple of the two countries’ entire oil export earnings over the same period. Iraq emerged from the war with foreign debts of \$80 billion to \$100 billion — a payments distress that two years later contributed to the invasion of Kuwait: war begets war, economically as politically. No case shows more plainly that an attack does not pay even when both sides possess oil wealth.³⁶

The wars that followed September 11, 2001, supply the most modern confirmation. Stiglitz and Bilmes (2008) put the true costs of the Iraq war alone — including veterans’ care, interest, and macroeconomic side effects — at roughly three trillion dollars, a multiple of the official estimates; the Costs of War project at Brown University arrives at about eight trillion dollars for all post-9/11 wars including future obligations. No economic return stood against this: no resource gain, no trade advantage, no security dividend that would survive a cost-benefit test. Since both wars were financed entirely on credit, their interest and care costs run on well into the middle of the century.³⁷

5.4 Common Patterns

Across all epochs and types of war, five regularities repeat. First, economic output collapses at the site of the war — by around 30 percent on average, in extreme cases by more than half. Second, war finance debases the currency: great wars are followed by inflations, not seldom by currency reforms. Third, war leaves mountains of debt that are worked off over decades through taxes, inflation, or financial repression — always at the expense of savers and bondholders. Fourth, even the victors emerge economically weakened; the only documented exception is the geographically spared belligerent, and even that “prosperity” does not withstand scrutiny. Fifth, genuine recovery begins only with peace — and its speed depends on institutions: monetary order, property rights, open markets. These patterns form the yardstick by which the next section measures the position of investors.

³⁵ On the fiscal origins of the Great Inflation, see the literature discussed in Ramey (2011); US inflation rose from 1.6 percent (1965) to above 13 percent (1980).

³⁶ Cost estimates surveyed in Mofid (1990); both countries needed more than a decade to restore their production capacity.

³⁷ Crawford (2021); veterans’ costs typically peak only 30 to 40 years after the war in question.

6 Capital Markets in Wartime: Implications for Investors

For investors, the macroeconomic balance of war translates into four concrete questions. How do the stock exchanges of belligerent states behave? What happens to interest rates and inflation — and hence to bonds? How does illiquidity arise, and which state interventions threaten foreign investors in particular? And finally: when does re-entry pay? This section answers these questions in turn, drawing on the historical cases of Section 5 and on the Russian object lesson since 2022.

6.1 Equity Markets of Belligerent States

Figure 2 shows the Russian case in detail. The Moscow benchmark index MOEX had reached its all-time high of roughly 4,290 points in October 2021; as war preparations became visible, a decline of a good quarter set in before the attack — an indication that markets partly price war risks long before shots are fired. On February 24, 2022, there followed, at minus 33 percent, the largest daily loss in Russian stock-market history, whereupon trading was suspended for a month — the longest interruption since the financial crisis of 1998. The reopening took place under conditions that scarcely deserve the name of a market: a sales ban for foreigners, a short-selling ban, and announced support purchases from the sovereign wealth fund.³⁸

³⁸ The central bank had also doubled the key rate to 20 percent and imposed mandatory foreign-exchange surrender on exporters; the state fund received a mandate of up to one trillion rubles for equity purchases.

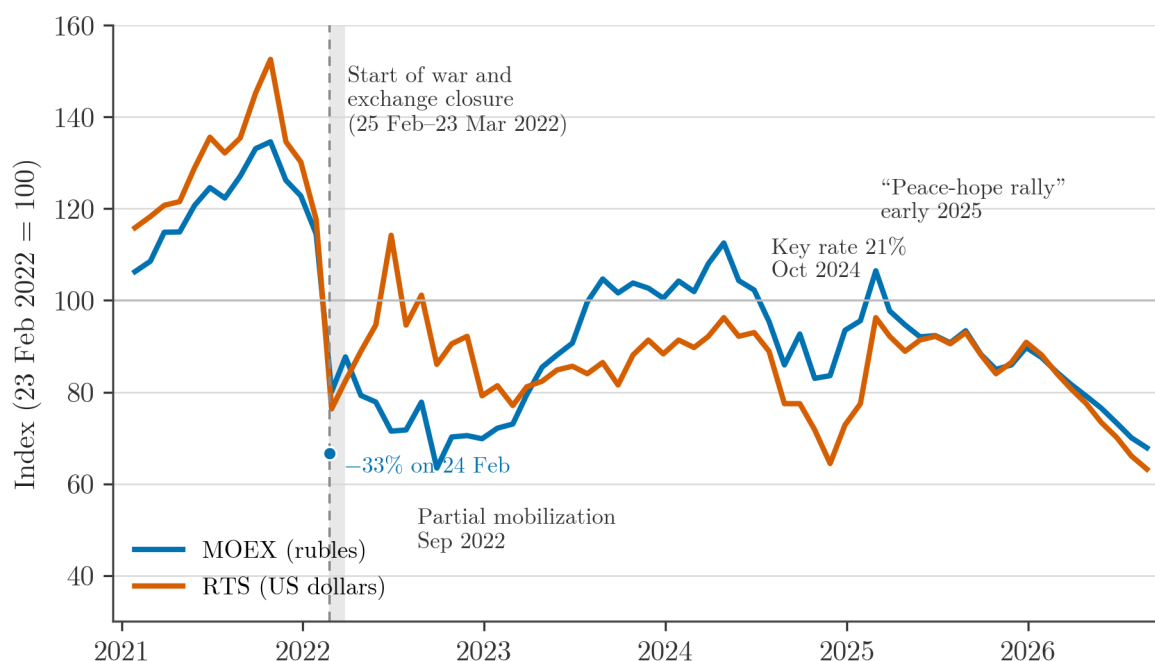


Figure 2: Russian equity indices MOEX (rubles) and RTS (US dollars) from January 2021 to August 2026, indexed to the last trading day before the outbreak of war (23 February 2022 = 100). Month-end values; some 2025/26 observations interpolated. Sources: Moscow Exchange; TASS; own calculations.

The further course illustrates a lesson that runs through all cases of war: nominal prices in a war currency are an optical illusion. In rubles, the MOEX recovered by a good 40 percent in 2023 and at times approached its pre-war level in 2024 — carried by captive domestic liquidity that flowed into the equity market for lack of alternatives, by armaments profits, and by the ruble depreciation that inflated exporters’ nominal earnings. Measured in US dollars (the RTS index), however, the same market stood in August 2026 fully 37 percent below its pre-war level and roughly 60 percent below its 2021 high; in real terms, after cumulative inflation of more than 40 percent since the war began, the ruble calculation looks scarcely better. Valuation adds a further dimension: at price-earnings ratios of four to six and price-to-book ratios below one, the market has traded for years at a discount of 75 to 80 percent to world markets — the price of war, capital controls, and expropriation risk.³⁹

Figure 3 and Table 4 place the Russian record in its historical context. The pattern has been astonishingly stable across eighty years and can be captured in a sequence of phases. First, anticipation: prices weaken before the war begins, provided the war casts its shadow ahead. Second, the shock: the outbreak is followed by a sharp fall — minus 10 to minus 35 percent within days to months, depending on how close the fighting comes to home territory. Third, resolution: what decides everything thereafter is not the peace treaty

³⁹ In 2025 the MOEX lost a further 4 percent, and through August 2026 roughly another 24 percent; the “peace-hope rally” of February 2025 (+11 percent within weeks) evaporated when the talks failed — an object lesson in the difference between the rhetoric of peace and an order of peace.

but the point at which existential uncertainty lifts. The American market turned in April 1942 — weeks before the Battle of Midway, three years before the war ended — once it began to appear that the United States would not lose the war. The Israeli market needed only weeks to recover in 2023 and stood 79 percent above its pre-war level two years later, because institutions, the currency, and capital movements remained intact throughout.⁴⁰

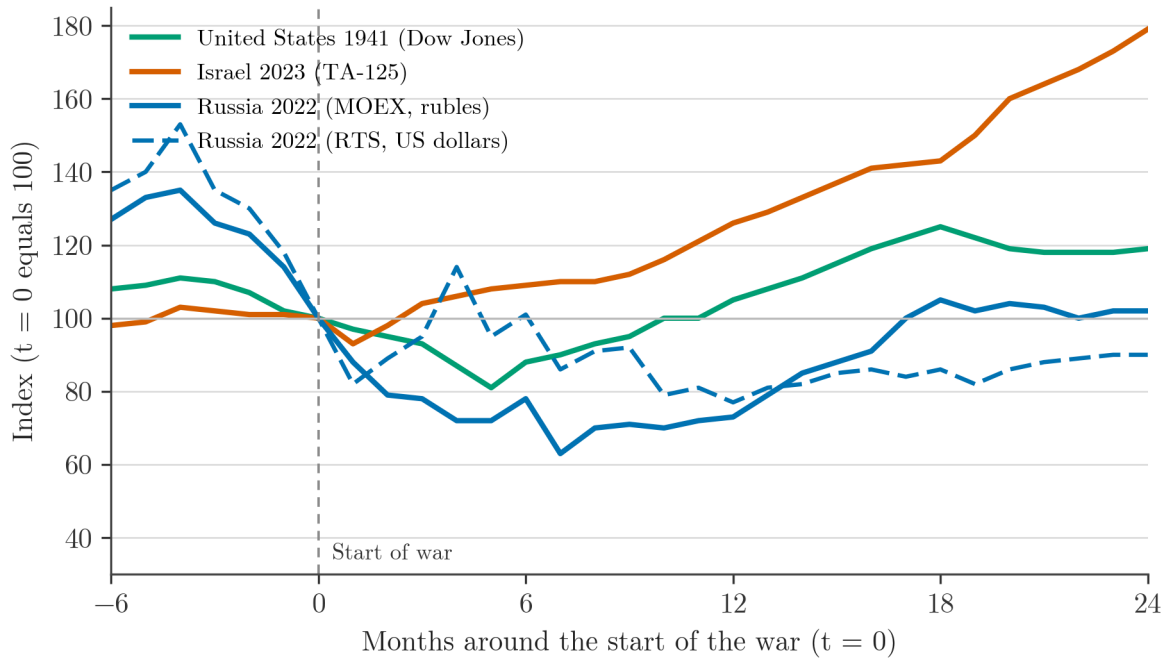


Figure 3: Equity markets of belligerent states around the outbreak of war (last pre-war month = 100): the United States from December 1941 (Dow Jones Industrial Average), Israel from October 2023 (TA-125), Russia from February 2022 (MOEX in rubles, RTS in US dollars). Monthly values, partly rounded. Sources: index providers; own calculations.

⁴⁰ The bon mot “buy to the sound of cannons” is attributed to the house of Rothschild; it describes correctly the risk premia at the point of maximum fear — but omits the cases in which the cannons struck property itself.

Table 4: Equity markets of belligerent states around the outbreak of war

Market / conflict	Onset	Price reaction	Two years later	Distinctive feature
United States, Dow Jones (Second World War)	Dec 1941	–20% by April 1942	+19%	turning point before the Battle of Midway
Germany (Second World War)	Sep 1939	prices frozen from 1943	real $\approx$ –90% by 1948	price and dividend regulation concealed the losses
Japan (Second World War)	Dec 1941	exchange closed from Aug 1945	real $\approx$ –95% by 1947/49	reopening only in May 1949
Russia, MOEX (war on Ukraine)	Feb 2022	–33% in one day; –52% below the Oct 2021 high	+2% in rubles, –10% in USD	one-month closure; foreigners locked out; Aug 2026: –32% (rubles) and –37% (USD) below the pre-war level
Ukraine, PFTS/UX (war on Ukraine)	Feb 2022	trading suspended	no regular trading	equity trading not resumed to this day
Israel, TA-125 (Gaza war)	Oct 2023	–11% within three weeks	+79%	recovery within weeks; all-time highs from 2025
Russia, Petrograd exchange (revolution)	1917	trading ceased	–100%	uncompensated expropriation of domestic and foreign investors

Notes: Price reactions in local currency unless stated otherwise; “two years later” relative to the last pre-war level.
Sources: Dimson, Marsh, and Staunton (2002); Biggs (2008); Jorion and Goetzmann (1999); Moscow Exchange; TASE; own calculations.

The reverse side of the pattern is formed by the cases in which the third phase never came. The Petrograd exchange did not reopen after 1917; domestic and foreign shareholders, and the 1.6 million French subscribers of Russian bonds, lost everything. German and Japanese investors experienced their losses not as a crash but as a years-long illusion of administered prices that discharged itself in currency reform and capital levies. Jorion and Goetzmann (1999) have shown that the celebrated long-run equity return is a product of the surviving markets: whoever includes the extinguished ones — Russia 1917, China 1949 — obtains markedly more modest figures. For investors this means: the fall at the outbreak of war is not automatically a buying opportunity; it is one only in markets whose property order survives the war.⁴¹

6.2 Interest Rates and Inflation: The Silent Expropriation of Creditors

As regards interest rates, the history of war knows two paths, which for bond investors come to the same thing. The first path is financial repression: the state holds nominal rates artificially below inflation in order to finance its war debts cheaply and erode them in real

⁴¹ Jorion and Goetzmann (1999) put the real equity return of the median market from 1921 to 1996 at only 0.8 percent per year — against 4.3 percent for the United States: the familiar long-run figures come from the survivors.

terms. The model case is the United States from 1942 to 1951, when the Federal Reserve capped the yield of long government bonds at 2.5 percent while inflation shot up to 18 percent after the war; Reinhart and Sbrancia (2015) put the silent debt liquidation thus effected at two to four percent of gross domestic product annually, at the expense of savers — for decades. War bonds have been a losing proposition almost everywhere in history: German subscribers lost practically everything twice within thirty years, Japanese subscribers likewise in 1945/47.⁴²

The second path is the high-rate route taken by Russia since 2023 and Ukraine since 2022: the central bank leans against war inflation with policy rates of 21 and 25 percent respectively. For investors this path is no rescue either. First, existing bonds suffer heavy price losses with every rise in yields; Russian federal bonds (OFZ) at times yielded above 17 percent in 2024, implying price losses of a quarter and more on long maturities. Second, after inflation and — for foreigners — after currency depreciation and transfer blocks, little remains in real terms. Third, war finance not seldom ends in default itself: in June 2022 Russia defaulted on foreign-currency debt for the first time since 1918 — not for lack of money, but because the payment routes were blocked; Ukraine had to restructure its external bonds in 2024 with a 37 percent haircut. The recurring pattern: inflation during the war, repression or default after it — the bondholder pays in every scenario.⁴³

6.3 Illiquidity: When the Exit Is Barred

The second wartime lesson for investors concerns not the price but availability: war renders assets unsellable. Table 5 shows that exchange closures are no exotic exception but the regular accompaniment of great wars — from the four and a half months of the New York Stock Exchange in 1914, through the nearly four-year closure of Tokyo, to the Kyiv exchange, which has seen no regular equity trading since February 2022. Even without formal closure, liquidity dries up: bid-ask spreads widen, turnover collapses, individual securities are suspended, and bond markets — as over-the-counter markets especially dependent on trust — cease trading in practice long before any authority orders it.

⁴² Reinhart, C. M., and Sbrancia, M. B. (2015), *Economic Policy* 30(82): “the liquidation of government debt”; the real return on US and UK government debt was negative in roughly half of the years from 1945 to 1980.

⁴³ The Ukrainian restructuring of August 2024 covered a good \$20 billion; holders received new paper with a 37 percent reduction in face value. Russia’s default concerned eurobonds of roughly \$40 billion.

Table 5: Exchange closures and trading suspensions in wartime

Exchange	Closure	Duration	Remark
New York (NYSE)	July to Dec 1914	4.5 months	longest closure in NYSE history
Vienna	from July 1914	about 5 years	regular equity trading resumed only in 1919
Berlin	from July 1914	over 3 years	reopened late 1917, under regulation
St. Petersburg / Petrograd	July 1914 and 1917	permanent	after a brief reopening in 1917 closed for good; nationalization 1918
Tokyo	Aug 1945	almost 4 years	reopening May 1949
Kuwait	Aug 1990	about 2 years	Iraqi invasion
	25 Feb to 23 Mar		longest interruption since 1998; thereafter sales bans for foreigners, short-selling ban, support purchases
Moscow (MOEX)	2022	1 month	support purchases
Kyiv (PFTS/UX)	since 24 Feb 2022	ongoing	regular equity trading not resumed
Tel Aviv (TASE)	no closure	—	trading continuous after 7 Oct 2023

Sources: Silber (2007); Dimson, Marsh, and Staunton (2002); exchange records; own compilation.

The Russian case adds the modern, infrastructural variant to the classical picture. With the mutual blockade of the custody chains — Western sanctions against the Russian central securities depository, Russian blocked accounts for “unfriendly” foreigners — securities worth a three-digit billion sum became not worthless but unreachable: hundreds of thousands of Western investors hold Russian shares and bonds they can neither sell nor transfer, while dividends and coupons accumulate in blocked ruble accounts; mirror-wise, Russian investors sit on frozen Western securities. This form of illiquidity strikes even those who did everything “right” — no diversification within the affected market can avoid it; only limiting one’s exposure to jurisdictions whose guarantee of property fails in the emergency can.⁴⁴

6.4 State Interventions: From Capital Controls to Expropriation

Table 6 orders the state interventions that wartime investors have historically had to reckon with — a ladder of increasing severity that almost every great war climbs anew: first restrictions on capital movements, then interference with income and prices, then special levies, finally forced administration and expropriation.⁴⁵

⁴⁴ At the Brussels depository Euroclear alone, immobilized Russian assets amount to roughly €190 billion; conversely, the Bank of Russia early on put the foreigners’ holdings blocked in type-C accounts and in the custody chain at several trillion rubles.

⁴⁵ The sequence is no legal theory but an empirical regularity; see the compilations in Reinhart and Sbrancia (2015) and KSE Institute (2025).

Table 6: State interventions against investors in wartime

Intervention	Examples	Effect on investors
Capital controls	United Kingdom 1939–1979; Germany from 1931; Russia and Ukraine since 2022	funds untransferable; forced conversion; capital may leave only with permission
Freezing of assets	United States 1917 and 1941 (Alien Property Custodian); the West 2022: Russian central-bank reserves (roughly \$300 billion); Russia 2022: type-C accounts for foreigners	loss of disposal for an indefinite period; income credited only to blocked accounts
Dividend and price regulation	Germany 1941 (dividends capped at 6%) and 1943 (price freeze); Russia 2022 (dividend suspensions, incl. Gazprom)	current income ceases; price formation suspended
Excess-profits and special taxes, capital levies	United Kingdom 1941 (excess-profits tax 100%); United States 1943–45 (up to 95%); Germany 1952 (equalization-of-burdens levy, 50%); Japan 1946/47 (25–90%)	war profits largely skimmed off; loss of substance also for the uninvolved
Forced administration and expropriation	Soviet Russia 1918; Egypt 1956–61; Cuba 1960; Iran 1979; Russia from 2023: Uniper, Fortum, Danone, Carlsberg/Baltika; nationalizations of roughly 6.5 trillion rubles through mid-2026 (incl. Domodedovo 2025, Rusagro 2026)	partial to total loss; legal protection effectively void
Forced sale at a discount plus “exit levy”	Russia since 2022: approval requirement, minimum discount of 50 to 60% on market value, levy most recently 35%	sale only far below value; cumulative losses of foreign firms above \$170 billion
Sovereign default and debt repudiation	Soviet Russia 1918 (tsarist bonds); Russia June 2022 (foreign-currency default)	bonds worthless or unserviceable; payment routes blocked

Sources: KSE Institute (2025); Reuters (2024); The Moscow Times (2026a); Reinhart and Sbrancia (2015); own compilation.

Russia since 2022 offers the most complete illustrative material since 1945 — precisely in its treatment of foreign investors. By decree, holdings of Western groups were placed under “temporary external administration” and de facto taken over: the power-plant subsidiaries of Uniper (a book loss of roughly €22 billion for the parent) and Fortum in April 2023, the Russian subsidiaries of Danone and Carlsberg (Baltika) in July 2023. Whoever wished to sell “voluntarily” needed a government permit, had to accept a discount of initially at least 50, later 60 percent, and to pay a levy of most recently 35 percent of the transaction value into the budget — expropriation by installments, which the Kyiv School of Economics Institute puts at cumulative losses of foreign companies above \$170 billion. In parallel runs a wave of nationalization at home: by mid-2026, assets of roughly 6.5 trillion rubles — close to \$90 billion — had been transferred to the state by court order, from Moscow’s Domodedovo airport (2025) to the agricultural group Rusagro (2026).⁴⁶

That Austrian investors are directly affected is shown by the case of Raiffeisen Bank International: at the beginning of 2025 a Russian court ordered its Russian subsidiary, in

⁴⁶ KSE Institute (March 2025): 481 complete withdrawals, 1,357 in progress; discounts in forced sales frequently 90 to 100 percent below market value. Nationalization total: The Moscow Times (June 2026).

connection with the frozen Strabag stake, to pay €2.04 billion to a company attributed to the sanctioned oligarch Deripaska; the appeal failed, and further suits followed. The lesson reaches beyond the individual case: in conditions of war and sanctions, the host country's legal system itself becomes an instrument of expropriation, and bilateral investment-protection treaties are in practice unenforceable. And there is the counterpart on the Western side: the immobilization of Russia's central-bank reserves and the debate over their use for Ukraine show that in war, property becomes bargaining mass between states — with the private investor as a bystander.⁴⁷

6.5 When Does Re-Entry Pay?

From the phase pattern of Section 6.1 follows first a rule of timing: the market turns at the point of uncertainty resolution, not on the day of the peace treaty. Whoever bought American equities in 1942 after the Battle of Midway, German equities in 1948 after the currency reform, or Israeli equities at the end of 2023, bought in each case years before the formal end of the war or immediately after the institutional caesura — and earned extraordinary returns; the German equity decade of 1949 to 1959 delivered roughly 30 percent per year in real terms. Conversely, the mere end of hostilities has never been a reliable signal: whoever waited in 1917 for the reopening of the Petrograd exchange is waiting still.⁴⁸

From this follow five tests that a re-entry into the market of a (former) belligerent should pass. First, a credible, verifiable order of peace or armistice — not mere negotiating rhetoric; the Russian “peace-hope rally” of February 2025 and its evaporation show the difference. Second, currency stabilization and a realistic path of interest rates, for without a stable unit of account every price gain remains nominal. Third, the lifting of capital controls, including functioning custody and payment routes — for foreigners the hard condition on which any Russian engagement founders for the foreseeable future, as long as sanctions and type-C accounts remain. Fourth, restored property rights with a reviewable legal process; an exchange on which the state expropriates by court order is not an asset class but a wager on mercy. Fifth, valuations that leave a margin of safety even after the risk discount.⁴⁹

For Western investors a further, legal dimension has been added that earlier post-war periods did not know: sanctions regimes end not with the fighting but by political decisions with their own logic and duration. Whoever acquires Russian assets before their formal repeal risks fines and asset freezes in his own jurisdiction; licensing provisos, legacy holdings

⁴⁷ Raiffeisen Bank International, press releases January to April 2025 (Rasperia proceedings, €2.044 billion) and December 2025 (a further €339 million provision).

⁴⁸ The Dow's trough fell on April 28, 1942; the Battle of Midway followed in June. Markets anticipated the turning point before it became militarily visible.

⁴⁹ On valuation the condition would be met in Russia — price-earnings ratios of 4 to 6 imply substantial upside upon normalization; it fails on conditions one through four.

of blocked securities, and possible reversals of expropriated assets will keep the legal position opaque for years. In practice this means: the “first day” after a peace belongs to domestic investors; for foreigners the clock starts only with sanctions clarity — one more reason not to chase peace rallies but to await the tests.

For the Russian market this means concretely: a credible peace could give the MOEX a valuation expansion of 30 to 60 percent, and Russian domestic investors would harvest it. Western investors should not let this dazzle them — access remains legally barred to them, and even after an easing of sanctions they would face the market of a country that within four years imposed expropriation, forced discounts, and payment blocks on foreign capital. By the standards of this paper, the structurally better post-war opportunity lies on the other side of the front: in Ukrainian reconstruction, with its needs of \$588 billion, the EU accession perspective, and the participation of European — including Austrian — companies, as this firm’s case study develops in detail. The ground rules apply there as everywhere: size positions small, diversify broadly, distrust liquidity, and price political promises only after their institutionalization.

7 Conclusion and Outlook

The research question of this paper can now be answered clearly: under modern conditions, wars do not pay economically — for anyone. Theory explains why it cannot be otherwise: destruction creates no wealth (Bastiat), conquest destroys the foundations of the conqueror’s own riches (Angell), and the detour through armaments demand fails on multipliers below one and on the nature of goods that are consumed rather than yielding service. The empirics confirm it across 176 war sites and a century and a half: a war costs the country that hosts it roughly 30 percent of output and 15 percentage points of price stability, and costs uninvolved neighbors a tenth of their output. And the Russian case study demonstrates it in real time: war costs of \$550 billion for territory whose land value is one thirtieth of that; 1.5 to 1.8 million permanently missing workers; depleted reserves, raised taxes, interest rates of 14 to 21 percent — and an equity market that in hard currency stands one third below its pre-war level.⁵⁰

No economic-policy naivety follows from this result. Defensive capability remains imperative — precisely because wars are so costly, preventing them justifies substantial insurance premiums. But the European rearmament, with its programs of several hundred billion euros and the new NATO spending target, should be declared honestly as what it is economically: a protective expenditure at the expense of other uses, not a stimulus program. Wherever armaments orders are sold as growth policy, the parable of the broken

⁵⁰ Nor does the attacked party profit — Ukraine bears damage of \$195 billion and reconstruction needs of \$588 billion; the difference is that its defensive struggle answers a question of existence, not of profitability.

window makes its entrance — and payment is exacted in the unseen: the schools, networks, and factories that never come into being.

For investors, the results condense into a simple order. During war, four risks dominate: price loss, currency debasement, illiquidity, and state seizure — from dividend stops through special levies to expropriation, which Russia has been practicing since 2022 with a severity that will deter foreign capital for decades. Opportunities arise at two points: at the moment of uncertainty resolution in markets with a property order capable of survival — historically the best entry point of the century — and in reconstruction after a credible peace, for which Ukraine is the coming case in point. The five tests of Section 6.5 — order of peace, currency stability, open capital movement, property rights, valuation reserve — provide the sober yardstick.

The outlook is guarded, yet not without hope. In August 2026 Moscow refuses an armistice, and every further week of war shifts the balance drawn here deeper into the negative — in people, in capital, in future. At the same time, history shows that the costliest wars can be followed by the strongest peace dividends when institutions hold: Europe's post-war decades remain the proof. Research will have to clarify how frozen reserves, reparations, and reconstruction finance are to be ordered, and asset management will have to recognize the moment when a war risk becomes a peace opportunity. Until then, the sentence in which this paper can be summarized stands: war is the most expensive way to become poorer — and peace the cheapest investment an economy can make.⁵¹

⁵¹ See the case study by R&B Wealth Management (2026) on reconstruction opportunities, including the positioning of Austrian and German companies.

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