

Securing Ukraine with Proper Financing

Written by Theodore MacDonald

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THEODORE MACDONALD, OCT 4 2025

In the preface of their 2013 book *Why Nations Fail*, now Nobel Laureates Daron Acemoglu and James A. Robinson state their thesis regarding national economic outcomes. Surprisingly, these economists do not present macroeconomic, national accounting or business data but instead examine the design and exercise of political institutions as the key determinant. Likewise, to secure Ukraine's sovereignty long term, do not look to the trenches of today but instead examine its national balance sheet and structure the repayment of liabilities to enable economic growth and internal defense funding. Financing Ukraine until hostilities cease must be politically feasible, provide upside to investors and avoid a long-term debt-death cycle that in the long run will threaten Ukraine's very national security the West seeks to ensure.

Hostilities Cease, Interest Compounds[1]

Victory in wars can be pyrrhic if the victor cannot ensure a lasting peace – and finance it. After the Union decisively won the American Civil War in 1865, the national debt reached new highs both in nominal terms (\$2.76bn, over \$54bn today) and as a percent of GDP (39.5%). That year, interest alone on debt was nearly a quarter of all government receipts and six percent of all government outlays excluding debt retirement. The Union ran a gross deficit of nearly a billion dollars (nearly \$20bn today) including debt retirement. The economy did stabilize over the following decades; the tax base grew as the population doubled (with burgeoning immigration) and with industrialization GDP grew at an average real annual rate of 4.15%. Even with banking crises before the Federal Reserve average net capital formations (including depreciation of assets) reached over \$1.5bn annually (nearly a quarter of GDP), and the Federal Government prudently ran a fiscal surplus for 28 consecutive years following the war.

Similarly, in 1946 after World War II U.S. national debt again reached an all-time high (\$271bn, \$4.5tr today) with debt to GDP of 119%. Interest expenses comprised a tenth of government receipts and over 5% of expenditures even with treasury coupon rate caps through 1951 and the Federal Reserve purchasing securities. The federal government ran a deficit of \$78bn in 1945 (\$1.4tr today), 20% of the nation's GDP. The U.S. approached its debt entirely differently after the war from an attitude of avoidance to one of leverage. Amongst the many benefits of Bretton Woods, the U.S. Dollar (USD) became the world's reserve currency, the basis of trade, and the peg for 40-60+ countries over time. Over the next 30 years the federal budget oscillated between surpluses and deficits, average net capital formation was a fifth of GDP, real GDP nearly tripled and debt to GDP shrank to 32%.

In these domestic examples the American public held the overwhelming majority of federal debt: around nine-tenths during the Civil War with compulsory institutional purchases; and nearly three-quarters of all national debt during WWII. In both cases the U.S. faced post-war security dilemmas (Reconstruction, the Cold War) yet still stabilized and grew the economy. A unique aspect of WWII was that as sales of War Bonds to the American public financed half of all war expenses (private citizens with \$50bn, financial institutions with \$150bn), the U.S. government also lent to Europe.

The UK began the Second World War with WWI debt, lagging investment, productivity gains and capital formation following a global depression, lend-lease liabilities accumulating and sterling as the world's reserve currency. Peacetime brought the Marshall Plan (of which the UK received over ¼ of the total funds) minus the world's reserve.

Securing Ukraine with Proper Financing

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The Blitz began with the UK at a debt to GDP of 128%, which spiked to 250% by 1947. The U.S. either forgave or rolled remaining lend-lease liabilities into a nearly \$4bn loan after the war – approximately a sixth of the UK's total national wealth *prior* to the war – without accounting for loss of life, destruction and decolonization. With a more challenging situation than the American examples, the UK instituted capital controls, doubled gross capital formation compared to pre-war levels (as a percent of GNP) and ran a “cumulative primary (i.e. non-interest) surplus... averaging 1.6% of GDP a year” even with debt repayments. It took 30 years for debt to GDP to fall below 50%.

West Germany received slightly over 10% of Marshall Plan funds from the U.S. and provided an even greater return. In the decade following the war “gross investment averaged about 18% of GNP in Britain and about 24% in Germany.” A nation primed for manufacturing-based recovery, productivity per worker surpassed the UK by 1949, lesser costs per output by 1951, and greater GNP per capita by 1956. West Germany's balance of payments turned positive in 1951 and by 1956 their exports were triple that of 1950, whereas the UK's export volume only increased a little over 50% over the same time period. These were amongst the most favorable outcomes of the sixteen countries aided by the Marshall Plan (which comprised 9% of the U.S. federal budget from 1948-51). Many other countries required more severe rationing, austerity and massive economic and currency reform, let alone physical post-war rebuilding.

These conditions paled to what the Weimar Republic of Germany faced after the First World War with \$32bn of reparation liabilities (over \$500bn today) and annual payments amounting to 2.5% of GDP. From 1914, Germany relied nearly exclusively on notes to finance the war, and its money supply quintupled by 1918. By 1923 the currency was worthless (less than one-trillionth of its 1918 value), and even multiple redenominations (instituting a new currency) could not prevent default and subsequent French and Belgian occupation of the industrialized Ruhr. America turned creditor to the Weimar Republic, which was a debtor to its own citizens and the allies, and the allies were debtors to the U.S. Unfortunately the allies apparently had no regard for the counterparty risk they themselves created. The German State had little to no real tax income or productivity growth prospects for repayment. After the 1929 stock market crash and subsequent Great Depression, the circular house of cards fell. While the causes of Hitler's rise to power are beyond the scope of this writing, this demonstrates what can happen when a poorly designed agreement meets a massive exogenous shock.

A Brief Summary of Ukraine's Independent Economy[2]

Events stirring national pride, votes for independence, and the ultimate collapse of the Soviet Union completed Ukraine's international recognition in 1991. Free market capitalists would think liberation from a centrally planned economy would put a country on an economic rocket ship. Unfortunately, the story of Ukraine's economy reads like a Dostoevsky novel. Ukraine's newly autonomous economy faced a web of challenges: principally, establishing a state hampered by corruption (see 2004 Orange Revolution and others); \$0.5bn of reserves in the central bank and no established credit; a fiscal deficit 15% of GDP; hyperinflation from >4,000% eventually down to 22%; Russia's default in 1998 and reoccurring gas disputes; and negative net migration for production, consumption and as a tax base. By 1995, 63% of Ukrainians lived below the poverty level (\$21 per month of income) and by 1999 GDP was nearly half that of 1991.

Fortunately, agreements regarding Russian energy debt cancellation, American aid, leasing the port of Sevastopol, and the transfer of the Black Sea Fleet and nuclear weapons culminating in the 1994 Budapest Memorandum reduced security risks. Redenomination and adoption of the hryvnia (UAH) starting in 1996 slowly began to rein in inflation. Privatization and a functioning credit market brought foreign investment which paired with cheap Russian energy aligned production and export growth for a virtuous cycle to begin. From 2000-2007 GDP grew at a real rate of 7.4% and in 2008 peaked at 31% above where it began in 1991.

Following the Great Financial Crisis, GDP decreased 35% in 2009. The economy slowly started to recover and was well on its way until Russia annexed Crimea in 2014. The effects of the annexation year over year include: national debt +46%, current account balance -28%, total debt service -80%, foreign direct investment -80%, gross fixed capital formation -75%, inflation 102%, balance of payments -72%, and the Crimean population loss of 2.3m. In 2015 GDP was 80% of 2013, debt to GDP increased from 41% to 79%, and the hryvnia lost two-thirds of its value to the

Securing Ukraine with Proper Financing

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U.S. dollar (UAH/USD). Economic headwinds intensified with sustained conflict in the Donbas region. GDP grew only at a rate similar to after the financial crisis through 2021 but also brought a net migration loss of 1.5m people with those remaining continuing to age and become pensioners.

In 2019 the Ukrainian people delivered a decisive victory to Volodymyr Zelenskyy – an outsider, anti-corruption and pro-European candidate for President. On February 24, 2022, Russia initiated an invasion of Ukraine that continues today. This brief history demonstrating structural problems, critical events and the subsequent strain on economic development since Ukraine's independence is salient to show how its economy arrived to where it is today.

Slava Ukraini, All Others Pay Cash[3]

Since the invasion in February 2022, GDP shrank 22% while debt rose 91%, leading debt to GDP to increase by 126%. The interest on this debt shrank from an average of 7.2% to 4.8%, due to benevolent terms on aid debt but even with these decreased rates, interest expenses are relatively greater given the rise in total debt. Outlays rose 187% nominally and 83% compared to GDP (defense expenditures increased 640% nominally and 158% in its share of GDP) while tax revenue only increased 2% nominally and 10% to GDP. This caused the budget deficit to increase 83%. This deficit is financed with debt, and with increased interest expenses this is where the risk of a “death-debt spiral” appears. Barring concentrating tax hikes on a smaller population, higher interest may widen the deficit, require more debt, and again increase interest. S&P's and Moody's credit ratings went from highly speculative to “in default” and “near default,” respectively, even before an “elective nonpayment,” (arguably a default) in June 2025.

Adding to the circular deficit, debt, interest rate risk: compared to 2021 the average weighted yield for new bonds issued by the National Bank of Ukraine (NBU) rose by a quarter to 15.76%. The issuance market also faced challenges during this time but appears to have normalized. Inflation rose by a third to 12.6%, which inherently is not good for the consumer or an economy. The key policy rate increased by over half to 15.5%, which is needed to tame inflation but dampens lending and growth. This may increase pressure on the “death-debt spiral” or, if the market reacts positively to a cease in hostilities and a perceived decrease in risk, rates may come down. Positively, the average maturity of debt increased by 5.4 years (86% longer) enabling debt service over a longer timespan than before. Also, a new tool in redistributing “extraordinary revenues” from frozen Russian owned assets back to Ukraine helps. Last, in September 2024 Ukraine restructured \$24bn of debt and accrued interest into \$15.2bn of new debt which saves \$22.8bn in interest through 2033.

However, the UAH depreciated over 50% against the USD and the Euro tracks this as well. As debt rose, the amount not denominated in UAH rose to 75% (a 15% increase from 2021). A weaker currency makes servicing domestic debt easier, and the impact of inflation on foreign exchange spot rates “depends” on unforeseen inflationary shocks and monetary policy. Servicing non-UAH debt requires sufficient foreign reserves which in the long run become more expensive the more a domestic currency depreciates. Reserves did increase 41% which is good. The NBU's actions and any inflationary surprises over the coming years will have an outside effect on this.

Ukraine's population shrank by 8m, or 20% and savings to GDP are now slightly negative (previously +13.1%). These consumption and savings shocks directly contribute to negative GDP growth. This is not only tragic for people, but it decreases the taxable base and the supply of loanable funds. Those remaining will bear a greater share of the debt burden (~150% increase in total debt per person). Adding to this challenge, 15% of those that remain are unemployed (nearly a two-third increase) and they cannot contribute income tax either. Median age increased over 2.5 years, which will increase future government pension obligations.

Trade is always difficult in conflict, and events in the critical regional energy market are well known. The current account deficit nearly doubled, and as an analog of overall trade, grain exports are a third of what they were before. The capital and finance accounts are very volatile, and aggregately the deficit on the balance of payments nearly tripled. Foreign direct investment fell by half, but capital formation increased by a quarter – although this may be due to temporary government programs or internal shifting west away from the conflict, not any actual new capital expenditure. Again, as a proxy of overall production, metal production is a third of what they were before, but Ukraine's defense manufacturing is at unforeseen levels – almost an entirely new industry. Unfortunately, Russia

Securing Ukraine with Proper Financing

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controls much of the mineral rich eastern territory.

Last, the dominant equities index (PFTS) is down sixty points, or 11% reflecting the market's sentiment on future earnings. This is not just an investor issue – weaker earnings forecasts signal dampened growth and decreases corporate taxable income for the government to add to the “spiral” risk. The cost of corporate debt will remain high as long as sovereign interest rates do, dampening credit markets and ultimately private sector growth.

The length and severity of the conflict will impact all of this. The most recent Rapid Damage and Needs Assessment estimates a “total cost of reconstruction and recovery in Ukraine [of] \$524 billion over the next decade...2.8 times the estimated nominal GDP.” This is critical not just to recover, but to provide infrastructure for businesses to stimulate economic growth. There may however be a way to swap legacy debt for a portion of reparation claims with Russia. Regardless, precluding a new way for Ukraine to finance internally, a longer war will require more aid. Not doing so risks difficult choices for Ukraine to choose “guns vs. butter” where “butter” is needed by a hurting population and “guns” are for real world operations. Yet continuing aid may compound financial risks.

To date, the Ukraine Support Tracker (UST) at the Kiel Institute for the World Economy estimates 41 countries committed \$471bn of financial, humanitarian, and military aid since 2022, of which \$353bn is complete. Financial commitments include monetary items (loans that increase debt and grants that do not), and non-monetary items (credit guarantees and credit swap lines). While military and humanitarian aid are earmarked specifically for those purposes, the fungibility of financial aid is valuable. It gives Ukraine the ability to allocate it to its highest valued use, defense or otherwise, but it increases liabilities (see “death-debt spiral”). Parsing these figures is difficult. The UST reports \$220bn of financial commitments, \$159 complete. However, even discounting for a significant amount of non-monetary items is difficult to reconcile with the \$112bn that Ukraine's Ministry of Finance that reports of external “received financing” which includes \$18bn from the IMF and World Bank (which command the highest interest rates).

As commitments near completion, there are risks to consider if another round is needed, and questions on the likelihood of another massive restructuring with one so recent. Each donor has idiosyncratic situations with politics, leadership, and public opinion. Money may prove to be zero-sum with domestic economies and fiscal priorities, especially militarily given new NATO spending commitments. Donors have their own “guns vs. butter” dilemmas which take on another dimension when it becomes “guns vs. butter vs. aid and repayment.” Military materiel aid may also be difficult given how initial equipment donations contributed to already low military materiel stocks and the ability for Europe's hollow military industrial base to replenish.

Financial aid may shift from non-monetary items and grants to instruments that require repayment (e.g., the U.S. already at 120% of debt to GDP and a 7% deficit in a peacetime, moderate interest rate, low unemployment, stable growth environment). Increasing Ukraine's liabilities may make a donor consider repayment risk and corresponding interest rates or donating at all. While paramount to western civilization, it is difficult to price the Westphalian principles of national sovereignty and territorial integrity in global financial markets.

Way Forward

Viewing Ukraine as a distressed investment illuminates a way to proceed financially that incentivizes investors with upside without solely adding to debt and increasing counterparty risk. It is unlikely that adding zero liabilities is feasible, but there are unique tools at government disposal. Restructuring again may not be preferable for creditors and risks becoming an overused “easy button” but it reduces risk with little loss. Governments can sell existing claims at a discount to private entities, rewarding the risk they take with an increased yield. Receiving revenue below market rates acts as payment in kind itself, and then additional aid can come from this income. De jure “forgivable loans” may make de facto grants politically palatable but do not fix systemic problems. Leaders should not dismiss coordinating equity ownership in the industries Ukraine excels at – although in a manner less like extortion. The key is to find ways to minimize liability additions, and the risk of the death-debt spiral.

Governments can also offer tax incentives to investors that invest in Ukrainian equity, infrastructure project finance,

Securing Ukraine with Proper Financing
Written by Theodore MacDonald

corporate and sovereign debt or military sales (the last of course requires authorization). Offering tax exemptions for gains and disbursements from non-debt instruments provides mutual benefit and minimal incremental risk. There are many bespoke funds for specific needs and areas of expertise, and an attempt at a private-backed Ukrainian reconstruction fund. Syndications can be reenergized with renewed tax assumptions, and new investment vehicles can securitize loans on the secondary market and share risk.

Only by being creative in the short term, and not significantly adding to Ukraine’s liabilities on its balance sheet, can existing debt remain secure with a high likelihood of repayment. By doing so, whatever course the war takes Ukraine can allocate capital to reconstruction; subsequently stimulate the private sector for economic growth and fund its own security in the long run. While the West remains supportive, there are competing requirements at home, low appetites for “forever wars”, and amidst all this Ukraine must also avoid a death-debt spiral. The consequences of not doing so risk default, repeated mistakes with no real progress, and more instability in the region.

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- [1] Unless otherwise linked all U.S. data is available through the Federal Reserve Bank of St. Louis FRED database.
- [2] Unless otherwise linked all Ukrainian data is available through the World Bank Databank or the International Money Fund Dataset.
- [3] See Table 1.

Table 1. Economic Indicators

Indicator	2021	Most Recent	As of	Change	GDP	World Bank, 2015 USD	\$101	\$79	2024	-\$22	-22%	State Debt	Ukraine				
MOF, nominal	\$86.6	\$165.21	Q2025	\$78.6 +91%	Debt to GDP	43%	97%	(1)	1Q2025	+54pp +126%	S&P Rating						
Moody's Rating	B	B3	SD	Ca	Aug 2, 2024	Feb 10, 2023	State Debt	Weighted Average Interest	Rate	7.2%	4.8%	2025E	-2.4pp -33%				
Implied Interest Expense	(2)	6.237.93	+	1.70 27%	State Debt	Weighted Average	Maturity	6.311.72	2025E	+5.4 +86%	Tax Revenue	UAH 1,083	UAH 2,060	2025E	UAH 977 90%		
Tax Revenue to GDP	20%	22%	2025E	+2pp +10%	State Budget	General Fund Expenditures	UAH 1,253	UAH 3,593	2025E	UAH +2,340 +187%	Defense Expenditures	UAH 271	UAH 2,006	2025E	UAH +1,735 +640%		
Defense % of Total Expenditures	21.6%	55.8%	2025E	34.2pp 158%	Expenditures to GDP	23%	42%	2025E	+19pp +83%	Domestic Savings to GDP	13.10%	-0.03%	2024	-13.13pp -100%			
Budget Deficit	3.1%	18.1%	2025E	+15.0pp +484%	Non-UAH Denominated Debt, % of Total	60.0%	75.2%	2025E	+15.2pp +25%	Inflation	9.4%	12.6%	(3)	April 2025	+3.2pp +34%		
Average Weighted Yield for Bond Issuances	(4)	11.34%	15.76%	August 2025	+4.42pp +39%	One-Year Secondary Yields	15.31%	51.02	(5)	Aug 31, 2025	35.71pp 233%	NBU key policy rate	10.0%	15.5%	(6)	May 2025	+5.5pp +55%
NBU reserves including gold, current USD	\$31.0	\$43.8	2024	\$12.8 +41%	Exchange Rate, UAH/USD	27.25	41.32	Sep 1, 2025	UAH +14.07 -52%	(7)	Current Account, current USD	-\$3.9	-\$8.0	2024	-\$4.1 -105%		
Net Capital Account, current USD	\$15m	\$5,116m	(8)	2024	\$5,101m 340x	Net Financial Account, current USD	-\$2.0	-\$8.4	2024	-\$6.4 -320%	Balance of Payments	-5.9	-17.0	2024	-\$11.1 -188%		
Foreign Direct Investment, current USD (inflows only)	\$8.0	\$3.8	2024	-\$4.2 -53%	Gross Capital Formation, current USD	\$28.9	\$35.6	2024	\$6.7 +23%	Grain Exports (tonnes, m)	6.72	1	July 2025	-4.6 -69%			
Metals Production (tonnes, m)	4.8	11.84	June 2025	-2.97 -62%	PFTS (equity) Index	522.77	463.18	Sep 1, 2025	-59.59 -11.4%	Unemployment	9.4%	15.3%	August 2025	+5.9pp +63%			
Population	41m	33m	2025E	-8m -20%	Total Debt Per Person	\$2k	\$5k										

Notes: All figures in billions. Changes for currency figures reported as nominal change and percentage change; changes for percentage figures reported as percentage point change and percent change. (1) Ukraine MOF forecast for EOY 2025; (2) This is an illustrative figure to demonstrate the effect of changes in interest rates and debt; (3) Inflation peaked at 20.2% in 2022; (4) NBU stopped issuing bonds beyond 5 year maturity March, 2021; 3-5 year maturity sales stopped the same month but resumed August 2023; issuances of bills became sporadic starting August 2023 and ceased October 2024; (5) 3 year high was 240.76% in October 2022 (6) NBU key policy rates

Securing Ukraine with Proper Financing

Written by Theodore MacDonald

include credit 1pp above and money 1pp below the key rate, and a large range from 25% to sub-15% for periods of a year; (7) represents a 52% depreciation; (8) The enormous increase demonstrates the volatility of this account. Due to disparate sources, line items vary by currency, inflation adjustment, and time period – the emphasis is on the delta of each individual line item.

About the author:

Theodore MacDonald is a former finance instructor in the Economics Program in the Department of Social Sciences at the US Military Academy at West Point. He now works in finance in New York and researches a variety of geopolitical and defense economics topics.