CHAPTER 3

THE MACROECONOMICS OF CONFLICTS AND RECOVERY

Wars have long been a feature of the global landscape. Armed conflict can bring profound macroeconomic consequences beyond its devastating human toll, including loss of life and forced displacement. This chapter leverages global data on post–World War II conflicts and draws on empirical analyses, case studies, and model-based simulations to assess the macroeconomic implications of wars. The analysis shows that conflicts generate large and persistent output losses in economies where the fighting occurs and nonnegligible spillovers to other countries. These losses exceed those associated with financial crises or severe natural disasters and give rise to acute macroeconomic tradeoffs across monetary, fiscal, and external sectors, alongside long-lasting scars. Economic recoveries from war are slow and uneven and depend critically on the durability of peace. When peace is sustained, output rebounds but often remains modest relative to wartime losses. By contrast, in fragile postconflict settings in which conflict relapses, recoveries frequently stall. The modest recoveries are led primarily by labor, while capital accumulation and productivity remain subdued. Empirical evidence and case studies highlight the central role of early macroeconomic stabilization, decisive debt restructuring, and international support, including aid and capacity development, in restoring confidence and creating space for postconflict recovery. Efforts toward recovery are most effective when complemented by domestic reforms to rebuild institutions and state capacity, promote inclusion and security, and mitigate human capital losses. Model-based analysis further suggests that comprehensive and well-coordinated policy packages outperform piecemeal approaches. Policies that jointly reduce uncertainty and rebuild capital stock generate positive externalities, reinforcing expectations, thereby encouraging capital inflows and facilitating the return of displaced populations. Overall, the chapter underscores that although postconflict recovery is inherently challenging and context-specific, sustained peace, credible stabilization, and coordinated policy action are essential to achieving stronger and more durable recoveries.

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Introduction

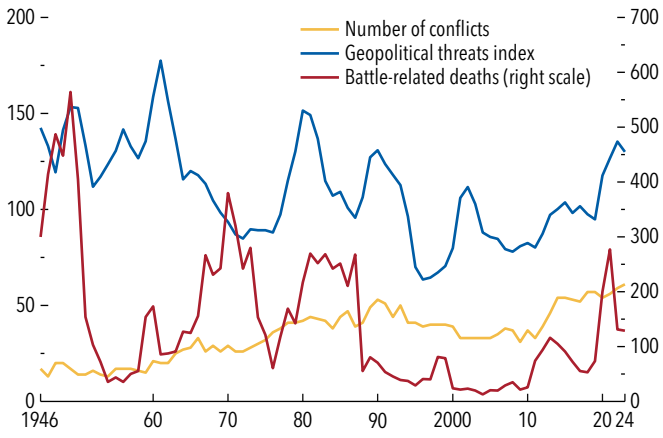
Wars have long been a feature of the global landscape. After decades of relative calm following the end of the Cold War, the number of active wars has surged to levels not seen since the end of World War II (WWII; see Figure 3.1). This is not a distant statistic. In 2024, more than 35 countries, about half classified as fragile and conflict-affected states, experienced conflict in their own territory. That same year, roughly 45 percent of the world's population lived in countries affected by conflict, ranging from localized border skirmishes to major wars. And since 2010 alone, conflicts have claimed more than 1.9 million lives worldwide.[1] The outlook offers little reassurance. Measures of geopolitical threats continue to rise, pointing to heightened risks of conflict, and defense spending is projected to increase sharply (see Chapter 2).

Beyond their immediate human costs, wars can carry profound macroeconomic consequences. During wars, production and trade can be disrupted, institutions weakened, and lasting damage inflicted on economies' productive capacity. When hostilities cease, the recovery period presents both opportunities and challenges. Governments may face the urgent task of stabilizing the economy, rebuilding infrastructure and institutions, and fostering social cohesion—each essential to securing durable peace and sustaining recovery.

A growing literature examines the macroeconomics of wars. Earlier seminal contributions focus on civil wars (Collier 1999; Collier and Hoeffler 2007; Blattman and Miguel 2010). More recent studies, either centered on the post–Cold War period (Chapter 2 of the April 2019 *Regional Economic*

[1]For simplicity, the terms "war" and "conflict" are used interchangeably throughout the chapter. "Conflicts" in this chapter are defined as episodes involving armed force between parties that result in at least 25 battle-related deaths within a single calendar year, as is standard in the conflict literature. Distinctions are made to differentiate conflicts by type, intensity, and duration.

Figure 3.1. Conflicts and Geopolitical Threats
(Number; index, 2019 = 100, left scale; thousands of deaths, right scale)



Sources: Caldara and Iacoviello 2022; PRIO Battle Deaths Dataset version 3.1; UCDP Georeferenced Event Dataset (GED) version 25.1; UCDP/PRIO Armed Conflict Dataset version 25.1; and IMF staff calculations.

Note: The figure shows the number of conflicts involving the government of at least one state, based on the UCDP/PRIO dataset. The geopolitical threats index captures threats related to war, peace, military buildups, nuclear risks, and terror, and is shown as a three-year moving average. Battle-related deaths are drawn from the PRIO dataset for 1946–88 and from the GED for 1989–2024. PRIO = Peace Research Institute Oslo; UCDP = Uppsala Conflict Data Program.

Outlook: Sub-Saharan Africa; Chapter 2 of the April 2024 *Regional Economic Outlook: Middle East and Central Asia*; Chapter 2 of the October 2025 *Regional Economic Outlook: Middle East and Central Asia*) or adopting a global historical perspective (Chupilkin and Kóczán 2022; Benmelech and Monteiro 2025; Federle and others 2026), document the large economic costs of conflicts. However, less attention has been paid to how wartime economies typically function, the distinct macroeconomic dynamics during and after conflict, and the provision of systematic historical evidence on the policies that support postconflict recovery. To fill these gaps, this chapter first leverages large language models to construct comprehensive global coverage of the geographic location of post-WWII conflicts. Second, it adopts a macroeconomic perspective to document how wartime economies typically operate, highlighting the key macroeconomic trade-offs they face and the policy responses used to manage wartime pressures. Third, it provides systematic evidence of postconflict recovery dynamics and the policies associated with stronger recoveries. Specifically, the chapter addresses the following questions:

- *Historical overview of conflicts:* How have different types of conflicts evolved worldwide since the end of WWII? What are their characteristics in terms of intensity, duration, and geographic distribution?
- *Macroeconomic dynamics during wars:* What are the short- to long-term effects of wars on output? Through which channels do these effects operate, and what are the implications for the broader economy in conflict-site countries? What are the scarring effects on production capacity and individuals? What are the output spillovers to other countries?
- *Macroeconomic dynamics after wars end:* How do economies recover after wars? How do they achieve macroeconomic stabilization? To what extent do complementary domestic policies and international support shape postconflict recovery?

The chapter draws on a range of empirical analyses, case studies, and model-based simulations to reach the following conclusions:

- *The number of conflicts worldwide has increased markedly in recent years, reaching historically high levels in the past decade.* This increase is driven primarily by conflicts within states such as civil wars. By contrast, conflicts between states have remained relatively infrequent, although their incidence has edged up in recent years. Most conflicts have been of minor intensity and relatively short duration. They are also unevenly distributed geographically, with the Middle East and sub-Saharan Africa accounting for a substantial share of global conflicts.
- *Conflicts generate large, persistent output losses in conflict-site economies and spillovers to other countries.* For the average conflict-site economy, output falls sharply at the conflict's onset, reaching cumulative losses of about 7 percent over a five-year period. Model-based analysis points to output losses of about the same magnitude. Output losses from conflicts persist even after a decade and typically exceed those associated with financial crises or severe natural disasters. Beyond conflict sites, neighboring countries and trading partners also experience modest but nonnegligible output losses in the short term, which gradually dissipate as economic adjustment and policy responses in their economies mitigate initial disruptions.
- *Conflicts trigger acute macroeconomic trade-offs and long-lasting scarring that extend well beyond immediate wartime shocks.* Output losses reflect sustained contractions in private consumption and investment as household incomes fall and uncertainty increases, alongside a reorientation of government spending toward military uses. Governments' fiscal positions deteriorate as their ability to raise revenue weakens and tax administration capacity erodes. Exports

decline more substantially than imports, leading to a temporary deterioration in the trade balance. At the same time, war-driven uncertainty fuels capital outflows, leading wartime governments to introduce capital controls and rely on countercyclical financing flows to fund trade deficits. War dynamics further contribute to sustained exchange rate depreciation, reserve losses, and inflationary pressures, highlighting the role of external sector dynamics in amplifying wartime macroeconomic challenges. War also leaves long-lasting scars, with declines in capital stock, employment, and productivity persisting for years after conflict onset, alongside the loss of lives, displacements, and adverse long-term health and cognitive outcomes for individuals.

- *Economic recoveries from conflicts are typically slow and uneven, but critically depend on peace.* When conflicts end and the ensuing peace proves to be sustained, output rebounds but remains modest relative to wartime losses and varies widely across countries. Recoveries are driven primarily by labor dynamics, while capital accumulation and productivity remain subdued amid lingering uncertainty and binding financial constraints. By contrast, in many postconflict cases, peace proves fragile, and relapse into conflict undermines recovery prospects. In such cases, output fails to recover. Policies that strengthen state capacity to deliver essential services and increase the opportunity cost of conflict can help reduce the risk of states falling into a conflict trap.
- *Macroeconomic stabilization, debt restructuring, and international support play a central role in postconflict recovery.* Evidence from empirical analyses and case studies indicates that successful recoveries are typically underpinned by early and decisive debt restructuring, which helps restore fiscal sustainability and creates space for macroeconomic stabilization following sustained peace. Countries that reduce uncertainty through macroeconomic stabilization—anchored in low and stable inflation and a stable real effective exchange rate—combined with timely financing and international support, including capacity development and aid, experience stronger recoveries. Case studies show that stabilization is achieved through a combination of rapid restoration of supply, credible nominal anchors, and fiscal adjustment, often backed by IMF-supported programs. In episodes characterized by large aid inflows, risks of exchange rate appreciation or Dutch disease are generally mitigated, and this mitigation is partly the result of effective coordination between fiscal and monetary authorities in managing aid surges.
- *Strong recovery also depends on complementary domestic reform efforts.* Stabilization and international support need to be accompanied by reforms to rebuild institutions and state capacity, promote inclusion, and mitigate persistent human capital losses, while helping consolidate peace. Concrete measures include strengthening anti-corruption frameworks, rebuilding judicial and public investment institutions, creating fiscal space for nonmilitary and social spending, and facilitating the reintegration of former combatants into society.
- *A faster recovery requires a coordinated and comprehensive policy approach, with priority given to reducing uncertainty and rebuilding the capital stock.* Model-based analysis suggests that comprehensive policy packages—centered on lowering uncertainty and rebuilding capital—deliver stronger recoveries than piecemeal approaches, reflecting positive externalities, complementarities across policies, and economic agents' expectations about the future. For example, reducing uncertainty alongside capital rebuilding can trigger reinforcing dynamics through expectations, capital inflows, wages, and return migration.

The chapter's findings and implications for postconflict recovery are subject to three important caveats. First, since conflict environments are inherently heterogeneous—reflecting differences in conflict drivers, economic legacies, and institutional and statistical capacity—effective policy design requires careful country-specific diagnosis. Second, recovery outcomes depend critically on political economy factors, including power-sharing arrangements, security guarantees, and civic rights (Mueller and Rauh 2024; Rohner 2025). These factors, often difficult to quantify, lie beyond the scope of the chapter's analysis but can shape the feasibility and effectiveness of recovery policies. Third, peace may remain fragile in some cases and the risk of relapse can constrain recovery dynamics. In such cases, relapse into conflict may itself be endogenous to economic policies, underscoring the importance of keeping conflict prevention in mind when designing macroeconomic policies (Chami, Espinoza, and Montiel 2021; Mueller and Rauh 2022; Mueller and others 2024). Subject to these caveats, the chapter's broad policy lessons remain informative for countries emerging from conflict, helping to support stronger and more durable recoveries.

Macroeconomics of Conflict and Recovery: A Primer

Wars affect conflict-site economies through multiple, reinforcing channels on both the supply and the demand sides, with far-reaching implications for fiscal, monetary, and external sector outcomes.

On the *supply side*, wars destroy productive capacity through damage to physical capital and reductions in labor supply from casualties and displacement. Part of the remaining scarce productive capacity may also be reallocated from civilian to military uses. This negative supply shock generally puts upward pressure on inflation (Keynes 1940). Wars further reduce the efficiency with which capital and labor are employed. For instance, damage to infrastructure disrupts transportation, energy, and communications networks, increasing production costs, while disruptions to schooling, loss of work experience, and deteriorating health outcomes weaken human capital accumulation and productivity (Gorodnichenko, Kudlyak, and Şahin 2022). On the *demand side*, private consumption and investment typically decline as incomes fall and uncertainty increases. Household income losses, if seen as temporary, may lead to dissaving, with economic effects similar to those from capital stock destruction (Collier 1999). Public expenditure may also be diverted from growth-enhancing uses toward military spending. Together, these dynamics contribute to a contraction in domestic production and generate output losses.

The same forces can also place substantial pressure on public finances as well as on the external and monetary sectors. Governments' ability to raise tax revenue weakens as economic activity contracts and tax administration capacity deteriorates, whereas spending pressures may increase owing to military outlays, humanitarian needs, and essential infrastructure repair. Fiscal financing constraints are often binding, particularly when access to capital markets is limited or nonexistent, and as markets price in conflict-related risk premiums (Rexer, Kapstein, and Rivera 2022). In response to mounting fiscal strains, wartime governments may resort to monetary financing, the accumulation of arrears, or, in extreme cases, debt default—putting further upward pressure on inflation. On the external side, export capacity may be impaired by disruptions to domestic production and trade relocation, as importers shift preferences away from exporters located in conflict zones (Korn and Stemmler 2025). These dynamics can contribute to foreign exchange shortages that—together with weaker domestic demand—constrain imports and, in some cases, lead to import rationing in favor of military and essential goods. In addition, external financing conditions typically tighten amid uncertainty-driven capital outflows, which governments may attempt to contain through capital controls (Gobat and Kostial 2016). As a result, wartime economies often rely on a narrow set of external financing sources, including countercyclical inflows such as remittances and aid. Taken together, fiscal pressures, external imbalances, and supply disruptions can interact in a feedback loop, placing considerable strain on exchange rates—thereby leading to depreciation in flexible regimes or devaluation in fixed regimes, with further upward pressure on inflation—as well as on reserve buffers. Wartime authorities may attempt to contain domestic inflation and pressures on the external sector through policy rate hikes.

Macroeconomic performance in the aftermath of war and in the transition to lasting peace is shaped by the extent of production capacity destruction, institutional erosion, and policy choices made during recovery. On the *supply side*, neoclassical growth models predict a gradual return of the capital stock toward its steady state once hostilities cease, implying that investment is elevated during the early recovery phase. This process can have positive spillovers to wages and employment, encouraging the return of displaced workers, supporting labor supply, and fostering the recovery. In practice, however, economic recovery may be slow (see, for example, Chen, Loayza, and Reynal-Querol 2008; Mueller, Piemontese, and Tapsoba 2017). For instance, persistent political and economic uncertainty despite peace can continue to depress expected returns on investment, sustain capital outflows, and constrain both investment and labor supply. On the *demand side*, consumption typically recovers as incomes stabilize. Government spending, however, may be constrained by postwar fiscal vulnerabilities. Macroeconomic stabilization—aimed at containing inflation and avoiding excessive exchange rate appreciation—is critical to sustaining recovery, alongside debt restructuring to restore fiscal sustainability and complementary reforms to rebuild institutions. External support in the form of aid and capacity development is also vital to alleviate financing constraints and strengthen state capacity.

With these considerations in mind, the rest of the chapter examines how wartime and postwar dynamics play out in the data, drawing on global evidence since the end of WWII. The policy discussions focus on drawing lessons to support postconflict recovery.

Macroeconomic Dynamics during Conflicts

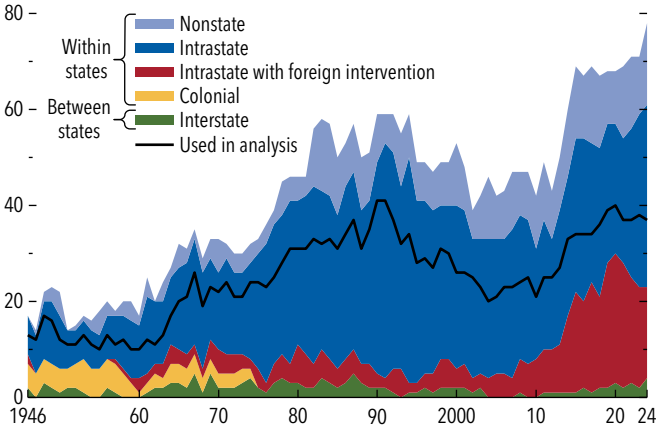
Definitions and Key Facts

This chapter relies on existing datasets together with a newly constructed database to provide comprehensive coverage of the geographic locations of conflicts during 1946–2024. The database is constructed by leveraging large language models to enhance the geographic coding of conflict events and using text analysis of annual reports from the United Nations Security Council.[2] Based on the database, countries' exposure to conflict is further classified into three groups, following Federle and others (2026). *Conflict-site economies* are countries experiencing military action on their own territory. *Belligerent economies* are parties to a conflict, but their territory is not the conflict site. *Third countries* are countries that are not parties to the conflict but are indirectly exposed through a common land border with a conflict site or through trade linkages. Conflicts in conflict-site economies are further categorized along three dimensions. First, the *type of actor* involved can differ: Conflicts can be between states (recent ones include conflicts between Sudan and South Sudan, Ethiopia and Eritrea, India and Pakistan, and Iran and Israel), or they can be within states (including, for instance, civil wars, colonial wars, and nonstate conflicts). Second, their *intensity* can be minor (defined as those involving 25–999 battle-related deaths) or major (those with 1,000 or more battle-related deaths). Third, the *duration* of conflicts can be short (two years or less) or long (more than two years).

A notable observation regarding post-WWII conflicts is that the majority have involved within-state actors (Figure 3.2). By contrast, conflicts between states have been relatively infrequent and broadly stable in incidence over time. Given the chapter's focus on macroeconomic dynamics, the analysis further excludes events unlikely to generate economy-wide effects—such as isolated skirmishes, terrorist attacks, or fragmented violence with low casualty counts—based on a systematic coding of individual events. Accordingly, the rest of the chapter focuses on a subset of conflicts more likely to affect macroeconomic outcomes. These conflicts are illustrated by the black line in Figure 3.2.

Several observations emerge from the refined database. Disaggregating conflict episodes by intensity shows that the sustained rise in conflicts has been driven by an increase in minor conflicts since the early 1960s, a period that broadly coincides with the emergence of many newly independent states (Figure 3.3). By contrast, the incidence of major conflicts has remained broadly stable over time, although the frequency of such conflicts has increased in recent years. Further evidence indicates that within-state conflicts account for the majority of both minor and major episodes, whereas between-state conflicts tend to be predominantly major. Conflict duration also varies with intensity: Historically, minor conflicts are typically shorter lived, whereas major conflicts tend to be more protracted, especially in commodity-exporting countries. Conflicts are unevenly distributed across regions. Asia and the Pacific; the Middle East, North Africa, Afghanistan, and Pakistan; and sub-Saharan Africa have consistently accounted for most conflict episodes, with the latter two regions alone representing a substantial share of global conflicts.

Figure 3.2. Global Post-World War II Conflicts
(Number of conflicts)



Sources: UCDP/PRIO Armed Conflict Dataset version 25.1; and IMF staff calculations.

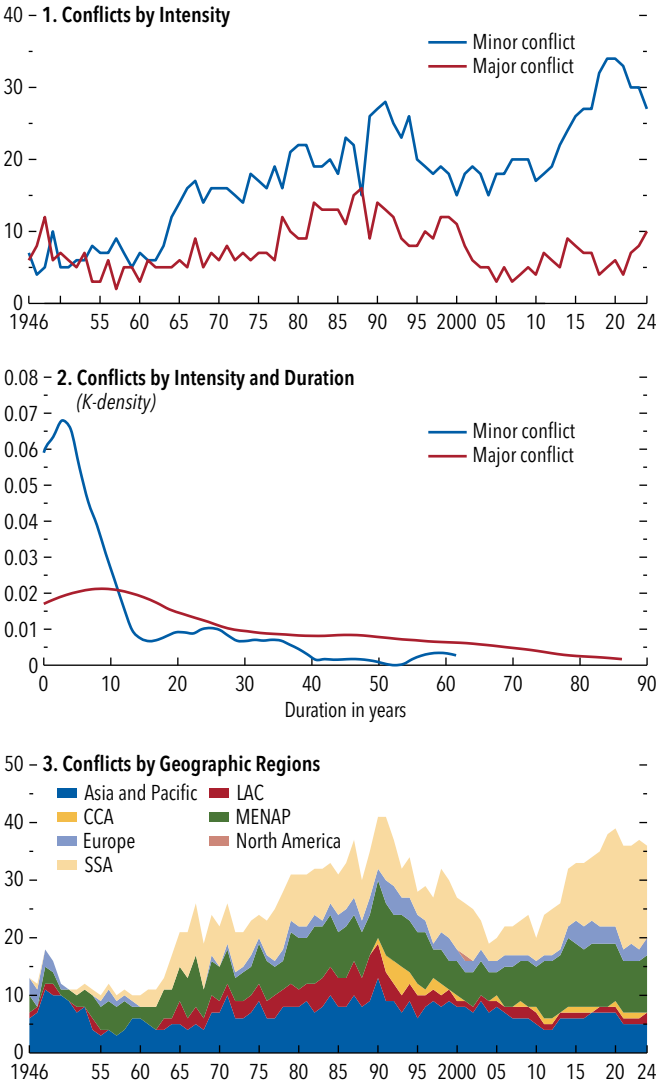
Note: The figure shows the number of active conflicts per year, aggregated by conflict type. Nonstate conflicts involve organized nongovernment actors and are identified based on the IMF staff's construction using text analysis of annual reports from the United Nations Security Council. The black line indicates the subset of conflicts of focus in the chapter's analysis: those deemed more likely to affect macroeconomic outcomes based on a systematic reading and coding of individual events. See Online Annex 3.1 for details on the data construction. PRIO = Peace Research Institute Oslo; UCDP = Uppsala Conflict Data Program.

Macroeconomic Effects

This subsection quantifies the macroeconomic effects of conflicts, focusing on the average effect in an average conflict-site economy, as well as spillovers to

[2]See Online Annex 3.1 for further details on data sources, the large language model–based data construction, and definitions of variables. All online annexes are available at www.imf.org/en/Publications/WEO.

Figure 3.3. Characteristics of Post-World War II Conflicts
(Number of conflicts, unless noted otherwise)



Sources: UCDP/PRIO Armed Conflict Dataset version 25.1; and IMF staff calculations.

Note: The panels show the distribution of conflicts by intensity, duration, and geographic region, based on the subset of conflicts emphasized in the chapter's analysis: those deemed more likely to affect macroeconomic outcomes following a systematic reading and coding of individual events. A conflict is classified as major if in any year battle-related deaths exceed 1,000, and as minor otherwise. In panel 2, the k-density, analogously to a histogram, shows the distribution of major and minor conflict duration in years. See Online Annex 3.1 for details on the data construction. CCA = Caucasus and Central Asia; LAC = Latin America and the Caribbean; MENAP = Middle East, North Africa, Afghanistan, and Pakistan; PRIO = Peace Research Institute Oslo; SSA = Sub-Saharan Africa; UCDP = Uppsala Conflict Data Program.

belligerent and third economies. Two complementary approaches are used. The first is a cross-country empirical analysis that employs local projections difference-in-differences (LP-DiD) methodology (Dube and others 2025). The framework traces the evolution of outcome variables following conflict onset by comparing affected countries with a control group of countries not experiencing conflict.[3] Second, an empirical analysis using data from surveys of individuals aged 50 and older is used to assess the long-term scarring effects of conflict on health outcomes.

The cross-country results indicate that conflicts impose large and persistent economic costs on conflict-site economies, with losses that deepen over time (Figure 3.4). On average, output in conflict-site economies declines sharply at conflict onset, by approximately 3 percent, and continues to decline in subsequent years, reaching cumulative losses of about 7 percent within five years. Losses are evident across all sectors and persist even after a decade (see Online Annex 3.2). Estimated output costs from conflicts exceed those typically associated with financial crises—including banking, currency, and debt crises—and those induced by severe natural disasters.[4] Adverse effects are robust across various conflict characteristics, although losses are somewhat greater for major, shorter, and within-state conflicts.[5] That said, even lower-intensity conflicts are associated with statistically significant declines in output at onset that are comparable in magnitude to losses induced by currency crises.

The economic costs of conflicts extend beyond conflict-site economies. Focusing on major conflicts, point estimates for belligerent economies are negative on average but not statistically significant, potentially reflecting relative protection from the most destructive channels of conflicts and offsetting effects from higher military spending (Figure 3.5).[6] Third countries

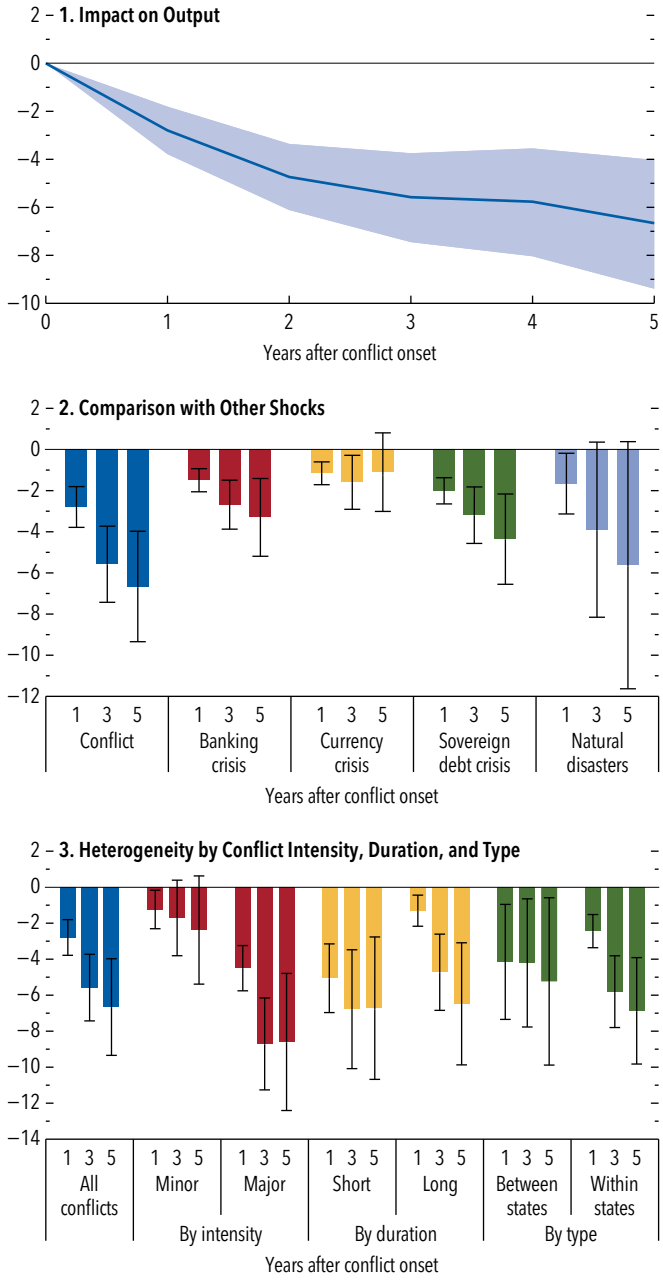
[3]The identification strategy relies on the assumption that conflict onset is exogenous to contemporaneous business cycle conditions. Robustness checks based on a narrative classification of the primary motives underlying each conflict indicate that economic dynamics for conflicts not triggered by economic reasons do not differ systematically from those for other conflicts (see Online Annex 3.2). Online Annex 3.2 also reports robustness checks to alternative sample restrictions, clean control definitions, and conflict measures based on battle-related deaths.

[4]Estimates for financial crises and severe natural disasters based on the chapter's LP-DiD framework may not be directly comparable with those obtained using other methodologies. Nonetheless, the magnitudes reported here are broadly in line with some findings in the literature. See Kuvshinov and Zimmermann (2019) for sovereign defaults; Devereux and Dwyer (2016) for banking crises; Hong and Tornell (2005) for currency crises; Cavallo and others (2013) for natural disasters; and Cerra and Saxena (2008) and Mueller (2012) for comparisons between civil wars and banking and currency crises. Economic costs of conflicts may also depend on war outcomes (see Federle and others 2026).

[5]The greater losses associated with shorter conflicts likely reflect the fact that these conflicts are more destructive at the outset, whereas in longer conflicts, economies may gradually adapt to prolonged conflict conditions.

[6]Additional evidence indeed reveals that government spending tends to increase in belligerent economies following conflict onset. And as shown in Chapter 2, such spending expansions are associated with positive output effects.

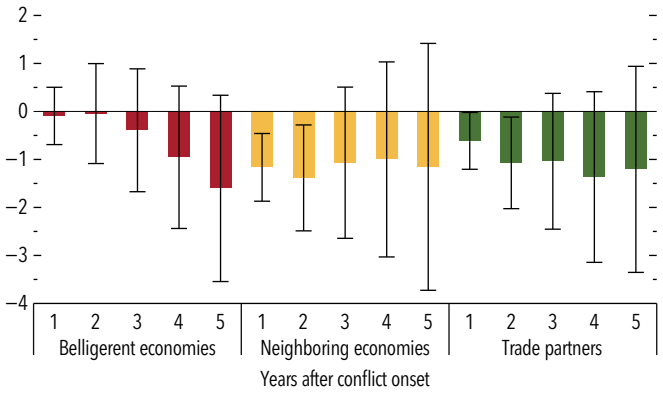
Figure 3.4. Economic Costs of Conflicts
(Percent)



Source: IMF staff calculations.

Note: The panels report local projections difference-in-differences (LP-DiD) estimates of the effects of conflicts (and other shocks, in panel 2) on output cumulatively up to five years (shown on the horizontal axes in each panel) after conflict onset. In panel 1, the line denotes point estimates, and the shaded area denotes 90 percent confidence intervals. In panels 2 and 3, bars denote point estimates, and whiskers indicate 90 percent confidence intervals. See Online Annex 3.2 for details.

Figure 3.5. Output Cost Spillovers from Major Conflicts
(Percent)



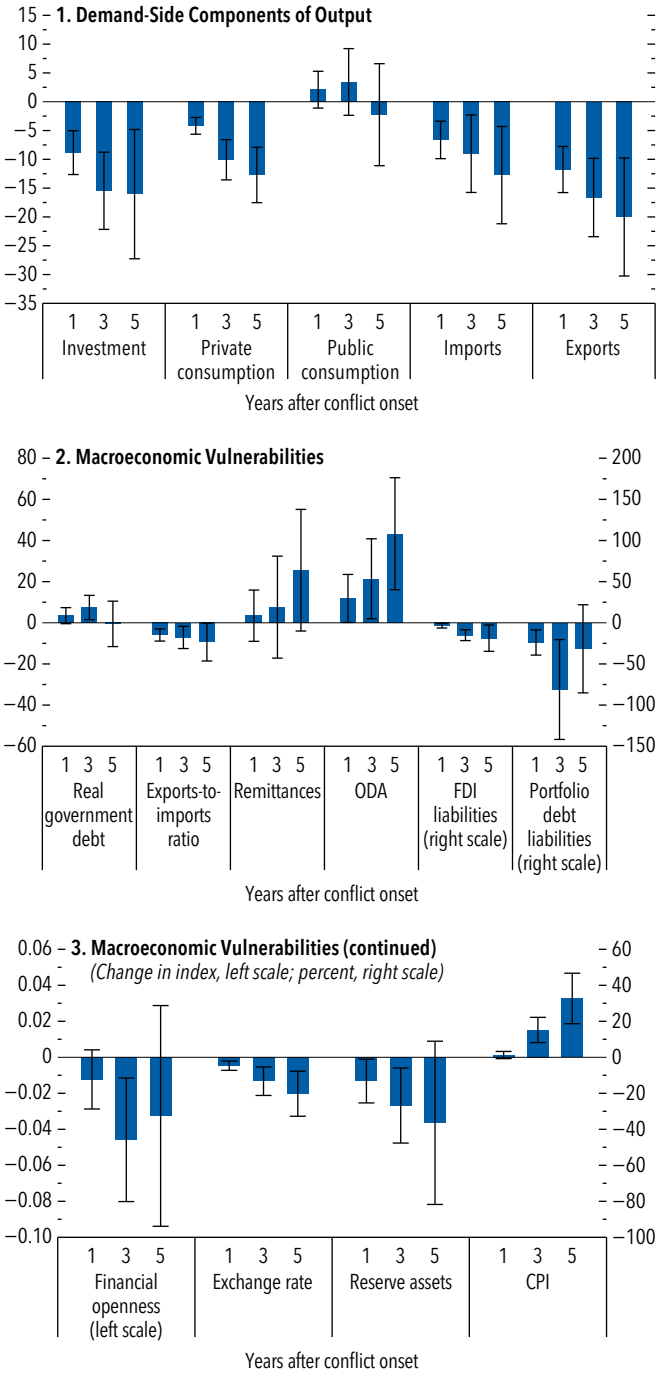
Source: IMF staff calculations.

Note: The figure shows local projections difference-in-differences (LP-DiD) estimates of the spillover effects of major conflicts on output in belligerent economies and third countries (neighbors and trading partners) up to five years (shown on the horizontal axis) after conflict onset. Trade partners are defined as countries whose share of imports from conflict-site economies exceeds the 90th percentile of the distribution. Bars denote point estimates, and whiskers indicate 90 percent confidence intervals. See Online Annex 3.2 for details.

experience negative output effects of about 1 percent or less during the first two years following conflict onset, with losses gradually dissipating thereafter, likely as trade routes adjust, firms reorient supply chains, and policy responses help absorb initial shocks (Qureshi 2013). Although these spillovers are considerably smaller than the large and sustained output losses borne by conflict-site economies, they underscore that major conflicts impose nontrivial economic costs well beyond the countries where hostilities occur.

Estimates also point to significant macroeconomic trade-offs in conflict-site economies, consistent with the transmission channels outlined earlier in the chapter. Output declines reflect sustained contractions in both investment and private consumption, whereas government consumption remains broadly stable (Figure 3.6, panel 1). The muted response of government consumption reflects a compositional shift toward defense spending, consistent with evidence of military outlays rising at the onset of conflict (Online Annex 3.2). Nonetheless, fiscal positions weaken, with public debt increasing in the initial years of conflict (Figure 3.6, panel 2). In the external sector, imports contract sharply, but exports decline even more substantially, resulting in a deterioration of the trade ratio. Consistent with these dynamics, further evidence shows that the trade balance relative to prewar GDP widens, though this widening is confined to the first four years of a conflict, pointing to import compression in subsequent years to accommodate reserve scarcity. Heightened uncertainty also triggers capital outflows, with both foreign direct investment and portfolio flows declining, constraining wartime governments to relying on aid and, in some cases, remittances to finance trade

Figure 3.6. Macroeconomic Trade-Offs of Major Conflicts
(Percent, unless noted otherwise)



Source: IMF staff calculations.

Note: The figure reports local projections difference-in-differences (LP-DiD) estimates of the effects of major conflicts in conflict-site economies on a set of macroeconomic variables up to five years (shown on the horizontal axis) after conflict onset. Bars denote point estimates, and whiskers indicate 90 percent confidence intervals. See Online Annex 3.2 for details. CPI = consumer price index; FDI = foreign direct investment; ODA = official development assistance.

deficits.[7] Government further responds by introducing capital controls (Figure 3.6, panel 3). Despite these measures, war dynamics contribute to sustained exchange rate depreciation (or devaluation), reserve losses, and inflationary pressures. Prices, for instance, rise steadily, with the increase reaching approximately 35 percent five years after conflict onset, to which monetary authorities respond by increasing the short-term nominal policy rate.[8]

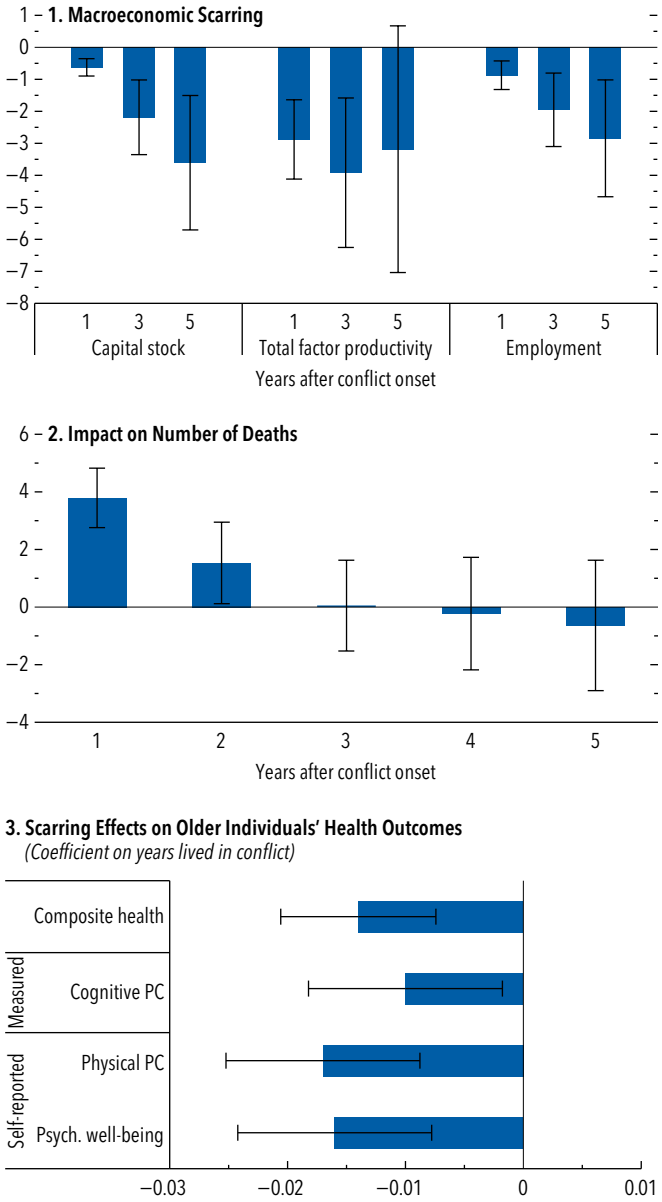
Box 3.1 illustrates how these trade-offs played out in Ukraine following Russia's 2022 invasion. It shows that the war triggered a dramatic collapse of Ukraine's economy. Initial efforts to contain the war shock required extraordinary fiscal, monetary, and financial measures, including budget reprioritization toward defense spending, monetary financing, capital controls, and temporary tax and prudential regulatory adjustments. Developments in Russia also highlight wartime dynamics: Initial resilience, supported by a favorable terms-of-trade shock and a rapid shift to a war footing, gave way to rising inflation, binding labor and capacity constraints, and sharp monetary tightening, with growth slowing markedly by late 2024 (Dabrowski 2025; Hilgenstock and Ribakova 2025).

Major conflicts also generate scarring effects on both the macroeconomy and individuals. At the macroeconomic level, capital stock, employment, and productivity experience significant declines: Conflicts are associated with approximately 4 percent lower capital stock and 3 percent lower employment in conflict-site economies five years after conflict onset (Figure 3.7, panel 1). Total factor productivity also declines in initial years, with wide confidence bands around point estimates in the medium term, indicating substantial cross-country variation. Beyond these macroeconomic scars, conflict is associated with a marked increase in human deaths, especially in the first few years (Figure 3.7, panel 2), as well as sizable forced displacement (Boxes 3.1 and 3.3). Surviving individuals exposed to wartime also experience adverse long-term health consequences. Individual-level data

[7]Concomitantly, gross national savings decline by more than investment, consistent with the accounting identity governing domestic investment and domestic and foreign savings, and uncertainty related to economic and political developments increases (see Online Annex 3.2).

[8]Online Annex Table 3.2.3 documents additional wartime trade-offs, with fiscal authorities cutting social spending to accommodate deteriorating fiscal positions. Not surprisingly, institutional quality deteriorates and informality increases. Existing evidence also shows that wars can have sizable effects on asset prices, sovereign risk premiums, and financial contagion (Chapter 2 of the April 2025 *Global Financial Stability Report*).

Figure 3.7. Scarring Effects of Major Conflicts
(Percent, unless noted otherwise)



Source: IMF staff calculations.

Note: Panel 1 reports local projections difference-in-differences (LP-DiD) estimates of the effect of major conflicts on production factors up to five years (shown on the horizontal axis) after conflict onset. Panel 2 shows the effect of major conflicts on mortality using the same approach. Panel 3 reports coefficients from ordinary least squares regressions of standardized health indicators (mean 0, standard deviation 1) on the number of years an individual lived in conflict. "Cognitive PC" is the principal component of verbal fluency, orientation, memory, and basic numeracy. "Physical PC" is the principal component of activities of daily living (ADLs), instrumental ADLs, pain frequency, and hearing ability. "Psych. well-being" is psychological well-being. "Composite health" averages all health measures. Bars denote point estimates, and whiskers indicate 90 percent confidence intervals. See Online Annexes 3.2 and 3.3 for details.

from a sample of 41 countries indicate that individuals who experience war during their lifetime are likely to age in worse health (Figure 3.7, panel 3). War exposure reduces composite health measures, as well as measured cognitive abilities and self-reported physical abilities and mental health. These results are consistent with generational effects of war documented in previous studies, including adverse impacts on education, fertility, and health outcomes (see Rohner 2025 for a review).

Taken together, these findings show that major conflicts generate large macroeconomic costs and difficult trade-offs for conflict-site economies, while transmitting negative spillovers to other countries. The costs of major conflict extend well beyond short-term macroeconomic disruption, with enduring consequences for both economic potential and human well-being. This raises the broader question of how economies stabilize and recover once conflict ends—a question examined in the next section.

Macroeconomic Dynamics after Conflicts

This section examines the macroeconomic dynamics following conflict termination in conflict-site economies. It adopts three complementary analytical approaches—combining cross-country, micro-level, and model-based analyses—to assess how economies stabilize and recover in the aftermath of war.

First, at the macroeconomic level, the LP-DiD framework is used to estimate the postconflict dynamics of key macroeconomic outcomes, focusing on output, inflation, and the main components of a country's production function: capital, employment, and productivity.[9] This approach characterizes average postconflict trajectories; it does not, however, identify the conditions associated with successful output recovery. To address this question, complementary cross-country analysis and case studies focus on recovery episodes to examine the policy correlates of stronger recoveries.[10] Second, to complement the country-level analysis on the role of policies during recovery, help address

[9]A conflict is defined as "terminated" when battle-related deaths fall below the chapter's baseline threshold of 25 deaths per calendar year and remain below that level for at least five consecutive years. The LP-DiD analysis traces the evolution of macroeconomic outcomes over the first five years of postconflict peace relative to those during the same period in a control group of countries not experiencing conflict, with observations for countries exposed to conflict excluded. The chapter further distinguishes between "nonfragile" postconflict episodes, in which peace lasts at least five years, and "fragile" episodes, in which conflict restarts within five years. Robustness checks using a 10-year window to define "nonfragile" and "fragile" postconflict recoveries yield broadly similar results.

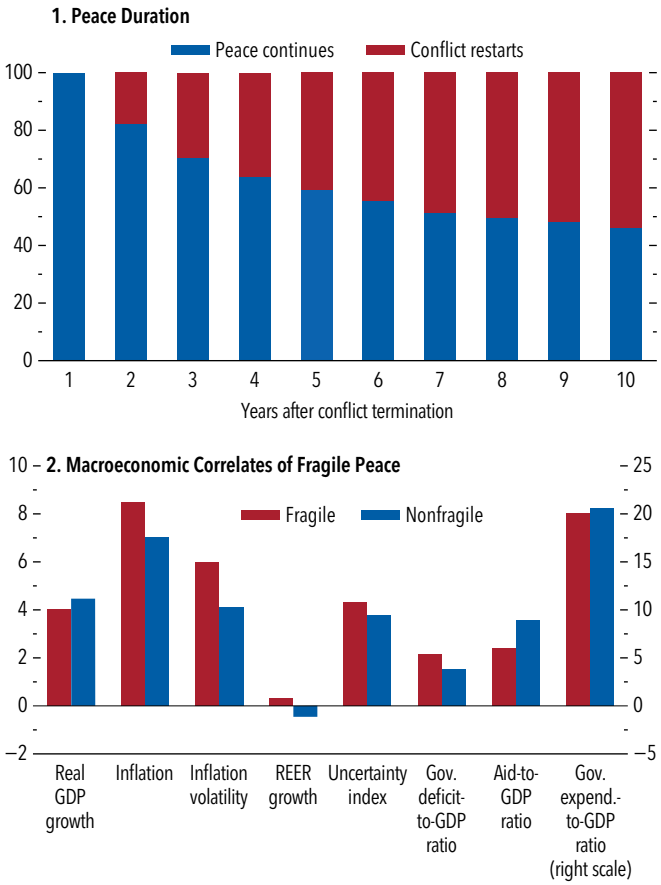
[10]In both sets of analyses, the identification strategy again assumes that conflict termination is exogenous to contemporaneous business cycle conditions; accordingly, the estimates should be interpreted as correlations. In addition, countries' initial conditions or policies undertaken during conflict may also shape subsequent postconflict macroeconomic dynamics.

identification challenges, and better understand transmission mechanisms, micro-level analyses focus on the role of aid and governance reforms, using data at the project and subnational levels, and firm dynamics. At the project level, the analysis uses a global dataset of aid-financed development projects approved between 1956 and 2017 and evaluated through 2019 to examine whether projects implemented during post-conflict peace episodes were more successful than those implemented at other times, and how outcomes vary. At the subnational level, newly constructed geocoded aid data provide spatial evidence on the role of aid and local governance in supporting postconflict recovery at the district level. At the firm level, the analysis assesses how firms' capital, labor, and productivity evolve in the aftermath of conflict, accounting for heterogeneous recovery patterns across sectors and firm characteristics. Finally, the chapter turns to model-based simulations to assess the role of policies in a general equilibrium setting, using an open-economy model with a realistic demographic structure.

Macro-Level Evidence

Several findings emerge from the cross-country analysis. First, in many postconflict cases, peace proves fragile: In about 40 percent of post-WWII postconflict episodes, countries relapse into conflict within five years (Figure 3.8, panel 1).[11] Beyond this horizon, peace becomes somewhat more durable. A simple ex post comparison between macroeconomic outcomes in countries that relapse into conflict within five years and those in countries that do not shows that, in the former, internal stability—proxied by growth and the level and volatility of inflation—tends to be weaker, real exchange rates tend to appreciate, fiscal deficits and uncertainty are higher, and aid is lower, but public expenditure is also typically lower (Figure 3.8, panel 2). These stylized facts point to important complementarities between maintaining peace and sound economic policies. They also suggest that, during postconflict periods, efforts to improve countries' fiscal positions should not come at the expense of cuts to productive expenditure. These patterns are broadly consistent with a large body of literature showing that stronger economic conditions, sounder fiscal positions, and sustained international engagement can bolster state capacity to deliver essential services, increase the opportunity cost of conflict, and reduce the risk of falling into a conflict trap (Rohner and Thoenig 2021; Mueller and others 2024; Moscona 2025; Rohner 2025; Miksjuk and others 2026).[12]

Figure 3.8. Peace Duration and Macroeconomic Correlates of Fragile Peace
(Percent)



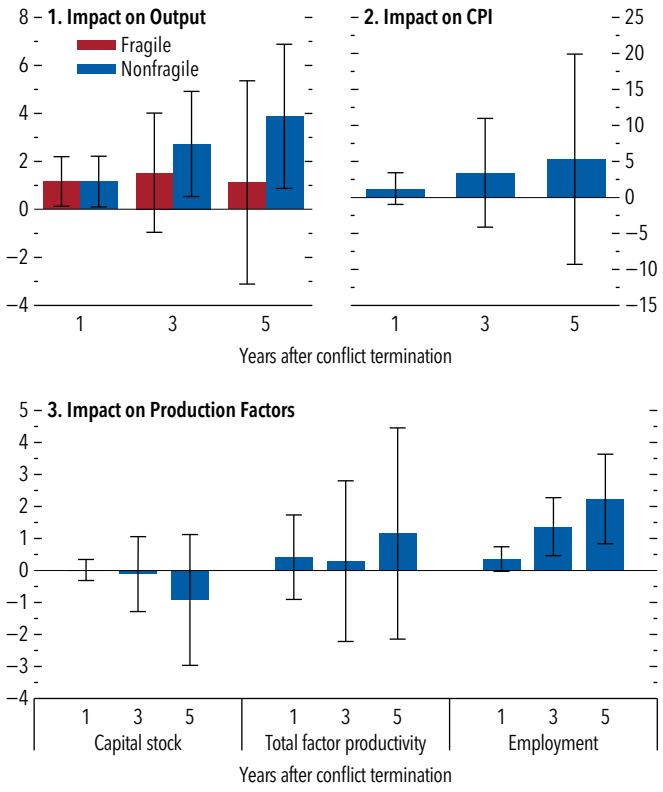
Source: IMF staff calculations.

Note: Panel 1 shows the share of postconflict episodes in which economies remain at peace or relapse into conflict over a 10-year horizon during the period 1946–2015, with the first year of peace normalized to 100 percent. Panel 2 reports the sample average of key macroeconomic variables in fragile and nonfragile episodes. Fragile episodes refer to conflict terminations followed by a relapse into conflict within five years, whereas nonfragile episodes are those in which peace persists for at least five years. Gov. expend. = government expenditure; REER = real effective exchange rate.

[11]Relapse risk is higher for within-state conflicts than for between-state conflicts, likely reflecting differences in the credibility of peace agreements and the strength of enforcement mechanisms.

[12]The literature on aid and conflict, however, has been marked by considerable debate, with two broad perspectives. One view argues that foreign aid expands governments' access to financial resources, potentially increasing rents and incentives for rebel activity (Nunn and Qian 2014). The alternative view posits that aid relaxes governments' budget constraints, fosters their ability to provide public goods, and can therefore reduce the risk of conflict (Grossman 1991; De Ree and Nillesen 2009). Recent evidence exploiting quasi-random variation in the assignment of World Bank project leaders with differing levels of managerial ability finds that stronger project management reduces conflict in aid-receiving subnational regions, highlighting the role of aid effectiveness in lowering the likelihood of violence (Moscona 2025).

Figure 3.9. Macroeconomic Dynamics after Conflicts
(Percent)



Source: IMF staff calculations.

Note: The panels report local projections difference-in-differences (LP-DiD) estimates of the effects of conflict termination on selected macroeconomic outcomes in postconflict-site economies up to five years after termination. Conflict termination is defined as battle-related deaths falling below the chapter's baseline threshold of 25 per calendar year and remaining below that level for at least five consecutive years. Fragile denotes conflict terminations followed by a relapse within five years, whereas nonfragile cases are those in which peace persists for at least five years. Bars denote point estimates, and whiskers indicate 90 percent confidence intervals. See Online Annex 3.4 for details. CPI = consumer price index.

Second, recovery is conditional on peace. When peace is fragile, output does not recover, indicating that conflict relapse sharply undermines recovery prospects (Figure 3.9, panel 1). By contrast, when peace is sustained, output rebounds, but recovery is slow and uneven across countries. Output rises gradually, reaching about 3.9 percent five years after conflict ends, with only about half of the observed output loss recovered five years after conflict onset.[13] Uncertainty around this estimate is substantial, with wide confidence intervals at longer horizons, highlighting pronounced cross-country heterogeneity in recovery paths. The modest output rebound may be accompanied by increasing prices (Figure 3.9, panel 2), suggesting that demand recovers faster than supply, although the effect is not statistically distinguishable from zero.

Third, supply-side dynamics help explain the slow and uneven output recovery following sustained peace (Figure 3.9, panel 3). On average, postconflict recoveries in capital stock and productivity do not differ significantly from those observed in countries that have not experienced conflict. This muted response likely reflects lingering uncertainty, which makes investors more cautious.[14] It may also reflect binding postconflict financing constraints faced by domestic firms, a mechanism that is explored in more detail later in the chapter using firm-level data. By contrast, labor input recovers more rapidly, as workers are reallocated from military to civilian activities and refugees gradually return (Box 3.3 provides further analysis of refugee flows following conflict onset and termination).[15] These patterns suggest that post-WWII postconflict output rebounds typically have been driven by labor dynamics, while persistent shortfalls in capital accumulation and productivity have weighed on the recovery.

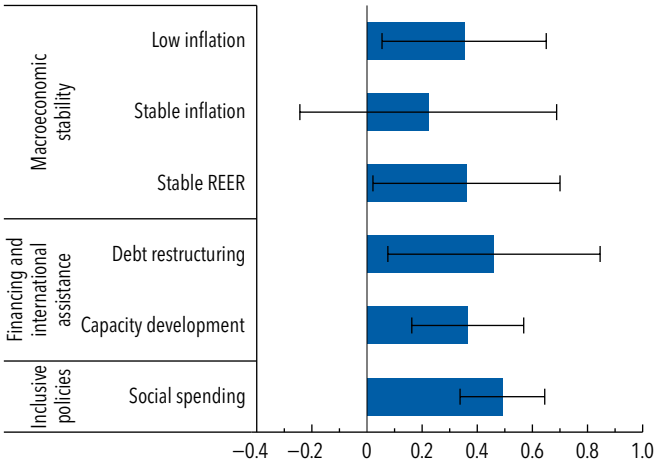
Given the subdued and uneven nature of postconflict recovery, an important question is whether economic policies can foster stronger recoveries. To answer this question, the analysis examines the extent to which policy variables are correlated with the distribution of growth outcomes during each of the first five years of postconflict recovery. Specifically, the analysis considers a set of policy outcome variables—capturing macroeconomic stability, financing and international assistance, and inclusive policies—and relates these variables to the percentile distribution of growth within each time horizon. The results indicate that sound policies are associated with better recovery outcomes (Figure 3.10). Countries that achieve macroeconomic stabilization—that is, low and stable inflation and a stable real effective exchange rate—experience stronger recovery performance. Similarly, financing and international assistance also matter: Postconflict debt restructuring and greater engagement in capacity development are both positively

[13]In level terms, the recovery is more modest because it starts from a substantially lower output base at the onset of recovery. When disaggregated by conflict type, recoveries are more subdued following within-state conflicts than after between-state conflicts. Recoveries also tend to stall in commodity-exporting countries, underscoring the importance of diversifying away from overreliance on resource extraction.

[14]Online Annex Table 3.4.1 shows that uncertainty does not decline significantly during postconflict episodes.

[15]Even though labor starts to recover after conflicts, the process can be protracted, with persistent structural challenges, such as high unemployment and underemployment, continuing well into the postconflict period (Stewart 2015).

Figure 3.10. Correlates of Postconflict Recovery
(Coefficients)



Source: IMF staff calculations.

Note: The figure shows policy correlates of the distribution of growth outcomes over the first five years of postconflict recovery. The dependent variable is the percentile of the growth distribution at each horizon (t = 1–5 years). Regressions control for postconflict episode and horizon fixed effects. "Low inflation," "stable inflation," and "stable REER" are indicator variables equal to 1 if the respective measure falls below the sample mean, based on inflation levels, inflation volatility, and REER volatility. "Debt restructuring" equals 1 if a restructuring occurs. "Capacity development" is measured by the log number of participants in IMF training. Bars denote point estimates, and whiskers indicate 90 percent confidence intervals. See Online Annex 3.5 for details. REER = real effective exchange rate.

correlated with stronger recoveries. Inclusive policies also play a role, as increases in social spending are associated with more robust postconflict growth.[16]

Case studies from selected rapid recoveries further illustrate how stronger recovery has been paired with stabilization efforts and international assistance. The chapter considers six specific conflict cases: Bosnia and Herzegovina (1992–95), Cambodia (1989–98), Côte d'Ivoire (2010–11), Nepal (1996–2006), Rwanda (1990–2001), and Sri Lanka (1983–2009); see Online Annex Table 3.5.2 for more details. Average annual output growth during the first five postconflict years was strong in these countries, varying between 4.5 percent (in Nepal) and 24.5 percent (in Bosnia and Herzegovina). In these cases, macroeconomic stabilization was key: The level and volatility of inflation were brought down significantly—by double digits in Cambodia—and excessive exchange rate appreciation was largely avoided, in many cases despite strong aid flows that would typically generate exchange rate appreciation (known in the literature as "aid-related Dutch disease"), with adverse effects on the competitiveness of the export sector (IMF 2005). It should be noted, however, that maintaining a stable real exchange rate in the postconflict period may not be universally appropriate. In some cases, domestic currencies may be significantly undervalued in real terms relative to levels consistent with longer-term fundamentals, implying that a real appreciation toward equilibrium should be expected. In Côte d'Ivoire and Rwanda, rapid restoration of supply, credible nominal anchors, and fiscal adjustment were key to macroeconomic stabilization (Box 3.2). In most cases, aid-related Dutch disease was mitigated either through absorb-and-spend strategies, in which monetary authorities accommodated higher import demand needed for reconstruction and the government increased its nonaid fiscal deficit, or through absorption without spending, in which foreign exchange inflows were absorbed without a corresponding fiscal expansion.[17] These experiences underscore the importance of coordination between fiscal and monetary authorities in managing aid surges when they arise. In all cases except Nepal, debt restructuring, yielding sizable debt reductions, occurred in the first five years to help restore fiscal sustainability, and IMF-supported programs reinforced authorities' stabilization efforts.[18] International assistance through aid flows, along with remittances in some cases, was particularly sizable to support recovery, especially in Bosnia and Herzegovina and Rwanda, where aid inflows averaged about 20 percent of GDP per year during the first five years of recovery. This role of aid is explored further later in the chapter.

Stabilization efforts and international assistance were also supported by complementary major domestic

[16]Two important policy dimensions are intentionally omitted from this cross-country analysis because of identification challenges: international support through aid, and domestic institutions. The role of these dimensions is examined later in the chapter.

[17]In accounting terms, an absorb-and-spend strategy implies increases in both a country's nonaid current account deficit and its nonaid overall fiscal deficit. This typically reflects situations in which the country's government increases investment in imported goods and aid finances the associated increase in net imports, with the aid supply of foreign currency netted out (Hussain, Berg, and Aiyar 2009). Even when aid is spent on domestically produced goods, higher aggregate demand may still spill over into imports. By contrast, absorption without spending is more common when debt reduction is a priority and unsterilized liquidity injections can pose risks to rebuilding macroeconomic stability.

[18]Many of the countries studied benefited from comprehensive debt relief under the Heavily Indebted Poor Countries Initiative. In addition, restructuring with external private creditors in Bosnia and Herzegovina resulted in a cumulative reduction of about 70 percent in the nominal value of the country's outstanding debt.

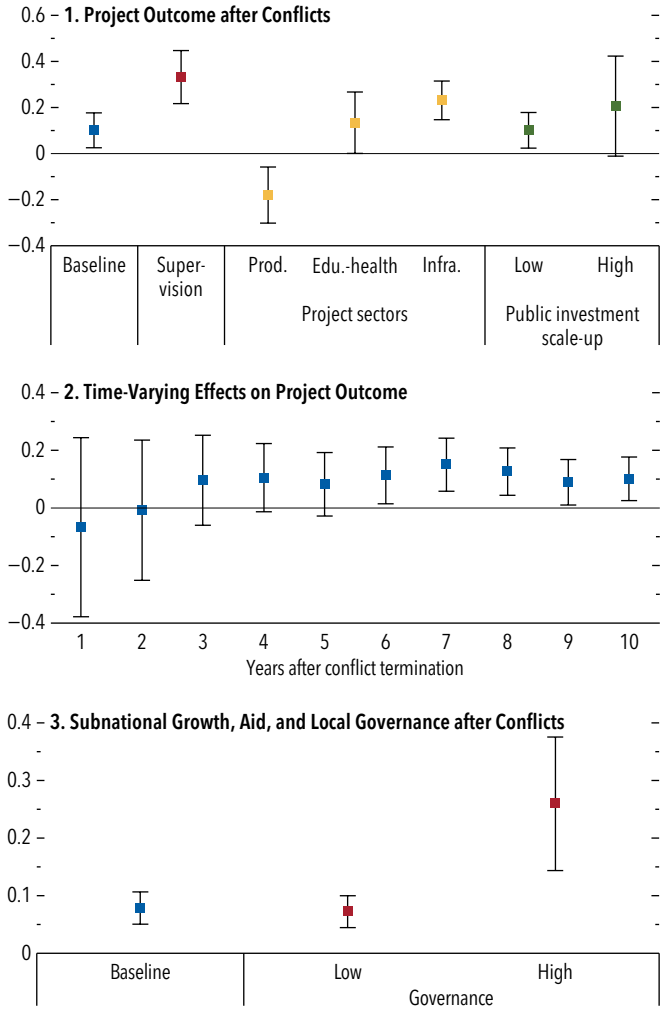
institutional reforms. In Côte d'Ivoire, Rwanda, and Sri Lanka, significant improvements in governance were achieved, with governance scores increasing by 40–60 percent. In Rwanda, commitment to institution building and anti-corruption reforms restored trust and the legitimacy of public institutions: Initiatives included implementing a zero-tolerance policy regarding corruption, establishing an efficient and transparent justice system, and adopting a credible public investment strategy (Box 3.2). Similar efforts were made in other areas by most countries examined, including efforts to reduce the state's direct ownership of productive assets and improve capacity to collect, analyze, and disseminate high-quality data. These two important areas are often disrupted during conflict but are critical to achieving competitive conditions for the private sector and guiding data-driven policies during recovery. Across recovery cases, peace dividends were also evident: Military spending decreased significantly, creating fiscal space for nonmilitary expenditures and the expansion of social spending to foster inclusion. In some cases, peacekeeping missions (Bosnia and Herzegovina, Côte d'Ivoire) and broader peacebuilding efforts, including justice and political provisions, complemented institutional reforms. In Rwanda, for instance, these included the reintegration of former combatants into society and government.

Overall, although no two countries' postconflict paths may be identical, the macro-level evidence points to common lessons: Credible macroeconomic stabilization, debt restructuring, external support, and strong domestic policy efforts are central to successful postconflict recovery. The next subsection complements the analysis by drawing on micro-level data to examine the role of aid and domestic institutions and shed light on firm-level dynamics during recovery.

Micro-Level Evidence

Micro-level evidence from project and subnational analyses indicates that aid-funded development projects can support postconflict recovery, but their effectiveness depends critically on context and implementation quality (Figure 3.11).[19] On average, projects implemented during postconflict peace episodes perform better than those implemented in countries that have not experienced conflict, a result that suggests postconflict situations represent a window of opportunity given the scarcity of resources and rebuilding needs (Chauvet, Collier, and

Figure 3.11. Role of Aid and Local Governance
(Regression estimates, coefficients)



Source: IMF staff calculations.

Note: Panels 1 and 2 show the effect of postconflict peace on project outcomes, measured on a 1–6 Likert scale, using a difference-in-differences approach. Panel 3 shows the marginal postconflict effect, conditional on aid, on nighttime light intensity for administrative regions at the second subnational levels (ADM2). Data on project outcomes are drawn from Honig, Lall, and Parks (2023); subnational project data from Bomprezzi and others (2024); nighttime light intensity data from Li and others (2020); and subnational governance data from Crombach and Smits (2024). Markers denote point estimates; whiskers show 90 percent confidence intervals. See Online Annexes 3.6 and 3.7 for details. Edu.-health = education and health; Infra. = infrastructure; Prod. = productive sectors.

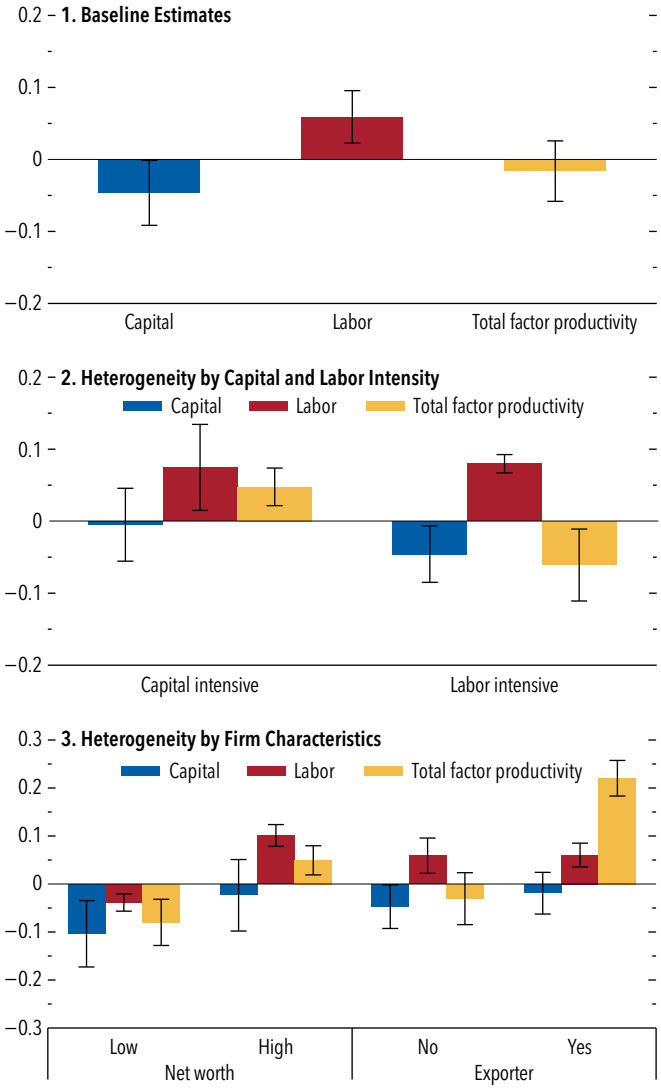
[19]A large literature examines aid effectiveness and offers mixed findings (see, for instance, Doucouliagos and Paldam 2009). The analysis presented here complements this literature by focusing on aid effectiveness in postconflict settings, in which financing constraints are particularly binding, and by exploiting novel project-level and subnational data. See Online Annexes 3.6 and 3.7 for methodological details.

Duponchel 2010).[20] Effectiveness, however, varies. Project success is more likely when supervision quality is high and for projects in education, health, and infrastructure. Projects targeting the private sector on average tend to perform poorly, with the poor performance likely reflecting lingering uncertainty, suggesting such projects may require enhanced supervision and careful sequencing. Project effectiveness is also high when implementation occurs outside periods of rapid public investment scale-up: When projects are implemented during large investment surges, estimated effects remain positive but are less precisely measured, pointing to the role of absorptive capacity constraints in shaping diverse outcomes (Presbitero 2016). The timing of projects with respect to the end of conflicts also matters: Performance improves gradually as peace lasts. The pattern suggests that, during the first few years after a conflict ends, the absorptive capacity of aid projects may not be greater than in normal times, but it then increases significantly (see also Chauvet, Collier, and Duponchel 2010). Subnational evidence further shows that aid in postconflict settings is positively associated with local economic recovery, but the recovery conditional on aid is significantly higher when domestic efforts lead to major improvements in governance (see also Burnside and Dollar 2000). When governance remains weak, both the gains from aid and the pace of the unconditional recovery itself are more muted.

Firm-level evidence provides further insight into the subdued recovery of capital and productivity following conflict termination, with substantial heterogeneity across sectors and firms (Figure 3.12). On average, surviving firms expand employment modestly after conflict ends, but capital stocks remain weak and productivity shows limited improvement. This pattern points to substitution toward labor amid difficulties in rebuilding capital, reflecting persistent uncertainty and likely financial constraints. Adjustment dynamics vary across sectors and firm characteristics. Firms in capital-intensive sectors, those that are exporters, and those with stronger balance sheets record gains in both employment and productivity, consistent with adaptive use of existing capital, high marginal returns to incremental capital, and better access to external markets. By contrast, firms in labor-intensive sectors and nonexporters primarily expand employment, with capital stocks remaining well below preconflict levels. Financially constrained firms face especially persistent capital shortfalls. These results point to a recovery

[20]It is plausible that projects implemented in postconflict settings would have lower expectations to begin with, compared with those for projects implemented in countries at peace. Project outcome data may also suffer from potential subjective rating bias. To mitigate these concerns, the analysis includes a rich set of fixed effects—at the country, year, donor, sector-approval year, and sector-evaluation year levels—to address unobserved confounders related to local conditions. The results are robust to focusing exclusively on investment projects.

Figure 3.12. Firm Dynamics after Conflicts
(Percentage change)



Source: IMF staff calculations.

Note: The panels show ordinary least squares estimates of the effects of postconflict peace on firm dynamics. The dependent variables are firm-level capital, labor, and total factor productivity (TFP, measured as quantity-based TFP, or TFPQ), all in logarithms. The key explanatory variable is a postconflict peace dummy equal to 1 during the five years following a conflict episode within a 20-kilometer radius of a firm's location. Depending on the specification, regressions control for firm age, size, leverage, and export status, and include firm, country-year, and sector-year fixed effects. Firm-level data come from Orbis. Bars denote point estimates, and whiskers show 90 percent confidence intervals. See Online Annex 3.8 for details.

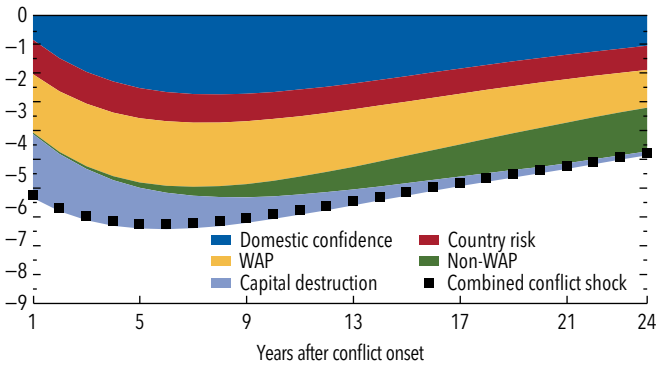
driven by stronger firms through partial factor reallocation, whereas weaker but potentially viable firms can experience persistent capital scarring, highlighting the importance of policies that relax credit constraints and support capital rebuilding in the aftermath of conflict.

Model-Based Evidence

The chapter uses an extension of an open-economy overlapping-generations model (Auclert and others 2024) with frictional international capital markets to calibrate the effects of conflict shocks and assess the general equilibrium implications of different postconflict recovery scenarios. The model is calibrated to an average low-income country (see Online Annex 3.9 for details). Consistent with this chapter's empirical findings, conflicts affect the economy through several key propagation channels, and aggregate magnitudes are aligned with the empirical evidence:

- *Human losses.* Shocks from human losses capture the persistent adverse effects of conflict on human capital accumulation and population dynamics, including casualties, forced displacement, long-lasting health impacts, and reduced fertility. Incorporating the channels through which these shocks operate allows the model to assess the macroeconomic implications of reintegrating displaced populations during the recovery phase. Whereas demographic shocks to the working-age population tend to exert pronounced but transitory effects on economic activity, conflict-related disruptions can inflict persistent scarring on younger cohorts, with implications for long-term growth trajectories (Figure 3.13).
- *Physical capital destruction.* Conflict can inflict severe localized losses on physical capital. Model simulations indicate that capital destruction accounts for a sizable share of the early output decline. Yet, without additional shocks to investment, such as heightened uncertainty or financial constraints, as documented in the empirical analysis and discussed later in the chapter, the capital destruction channel alone tends to fade over time, as the higher marginal product of capital stimulates investment.[21]
- *Country risk premiums and uncertainty.* Investment often remains depressed in postconflict economies, particularly in developing economies that rely on foreign capital—including foreign direct investment—to finance investment and face elevated perceptions of economic and political risk (Le and Zak 2006; Rexer, Kapstein, and Rivera 2022). In addition, domestic households grow reluctant to invest amid economic policy uncertainty (Di Maio and Sunde 2025), fears of conflict relapses, or expropriation risk (Collier and Gunning 1995; Brochet, Mueller, and Rauh 2025). Model simulations reveal how the resulting two-pronged confidence channel accounts for capital flight at conflict onset, pushing interest rates higher, followed by a prolonged investment slump.[22] The recovery phase presents its own challenges: Absent stabilization, foreign investors respond inelastically, constraining capital inflows needed to finance reconstruction. This sluggish investor response prolongs the adjustment period and delays the return to precrisis investment levels. Frictions in capital markets play a contrasting role, as more-open economies are more vulnerable to capital flight at conflict onset but tend to rebound faster once confidence is restored.

Figure 3.13. Contribution to Changes in Output after Conflict Shock
(Deviation from baseline scenario, percentage points)



Source: IMF staff calculations.

Note: The figure shows model-based simulations of the effects of conflict on output at different horizons (in years, shown on the horizontal axis). Shaded areas denote deviations from the baseline when an economy is hit by each shock–country risk, human losses, and capital destruction–either in isolation or jointly (as reflected by the combined shock). The representative economy is calibrated to match average output growth, debt-to-GDP, and tax-to-GDP ratios of low-income countries. See Online Annex 3.9 for details. WAP = working-age population.

[21]Examples of countries undergoing rapid reconstruction of physical capital after large destruction include Germany, Japan, and Vietnam (Davis and Weinstein 2002; Brakman, Garretsen, and Schramm 2004).

[22]In the model, higher country risk premiums dampen capital inflows, consistent with Gourinchas and Rey (2014). The degree of financial openness in a country governs the responsiveness of foreign demand for domestic assets. Damaged financial sectors can also play an important role in hindering investments and capital allocation in postconflict settings (Addison and others 2005).

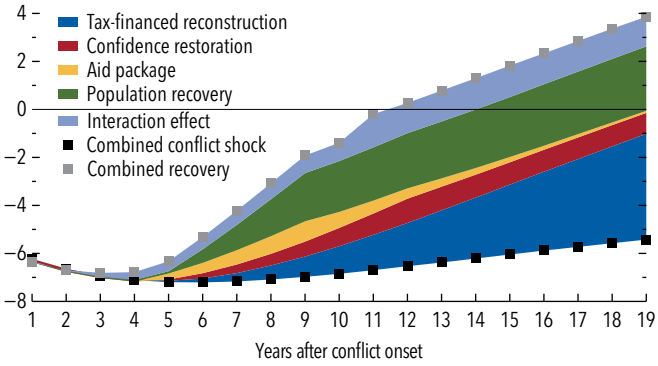
How can policies help restore economic activity and rebuild productive capacity after conflict? Model simulations consider four policy layers: restoring macroeconomic stability, mobilizing financing, rebuilding state capacity through increases in public investment efficiency, and addressing protracted losses to human capital. A set of alternative scenarios is used to assess the general equilibrium effects of such policies.

- *Macroeconomic stabilization.* Well-coordinated domestic economic policies, including those implemented under IMF-supported programs, anchored in credible and sustained peace can be critical for restoring confidence and laying the foundations for recovery, both as a direct outcome of the policies and through a signaling effect. A key obstacle to a rapid rebound is elevated perceived country risk, which lowers the effective rate of return on investment in a country. Empirical evidence suggests that macroeconomic stabilization achieved under IMF-supported programs can help reduce country risk premiums (Gehring and Lang 2020). The first scenario assumes that the wedges generated by the two-pronged confidence shocks associated with conflict gradually converge to their preconflict levels over eight years.
- *Financing.* Financing postconflict reconstruction typically requires a combination of domestic revenue mobilization (that is, efforts to increase government revenues through improved tax policy and administration), borrowing, and expenditure reallocation. Recovery outcomes depend critically on the composition of this financing mix. In practice, many conflict-affected economies are constrained by extremely tight fiscal space, with tax revenues averaging about 15 percent of GDP, and often lack market access, limiting their ability to borrow. In such a context, concessional financing can play a key role in supporting recovery alongside domestic revenue efforts. Motivated by evidence from the case studies, a second alternative scenario assumes domestic efforts to gradually increase the tax-to-GDP ratio by 3 percentage points over 15 years, combined with additional donor aid averaging about 0.5 percent of GDP per year during the first 5 years of postconflict recovery.
- *Increasing public investment efficiency.* Countries differ markedly in their capacity to translate public investment outlays into effective public infrastructure, such as schools and roads. Simulations using a measure proposed in the October 2025 *Fiscal Monitor* show that increasing public investment efficiency to the median level for emerging market and developing economies magnifies the impact of a tax-funded recovery plan. In practice, many fragile and conflict-affected countries have benefited from capacity development efforts that helped strengthen public investment management and increase its efficiency over time (Gores and Suc 2024). In a third alternative scenario, public investment efficiency increases by 10 percentage points relative to the average level reported in the October 2025 *Fiscal Monitor*, boosting the output return of tax-funded recovery by about 1.4 percentage points, consistent with the estimates published in October.
- *Policies to alleviate protracted losses of human capital.* Policies that encourage return migration can support economic recovery, as returning populations bring back human capital and help spur demand for domestic assets. Policy conditions in refugees' countries of origin play an important role in shaping return decisions (Box 3.3). Increased housing availability, enhanced security, better access to basic services—including water, education, and health care—and policies that support labor market reintegration are all positively associated with return intentions. In a fourth alternative scenario, displaced populations are assumed to return gradually over a four-year period.

Model simulations show that combining policies from these four policy layers can support recovery (Figure 3.14). Taken in isolation, however, individual policies are less efficient at fully offsetting conflict-related output losses, indicating that a comprehensive policy approach is preferable to a piecemeal one. The results further illustrate that a coordinated and comprehensive policy package that puts a priority on reductions in uncertainty and rebuilding of capital stock accelerates recovery beyond what would be achieved by the sum of the individual policies in the package, reflecting positive externalities and complementarities across policies, as well as improved expectations.[23] For example, policies that jointly reduce uncertainty and rebuild capital can improve economic agents' expectations about the future, relax borrowing

[23]The presence of positive complementarities across policies is not universal, because policy interactions can exhibit threshold effects: For instance, scaling up public investment reduces sovereign risk when public investment quality is high but increases risk when quality is low (Adarov and Panizza 2026). This suggests that the effectiveness of coordinated policy packages may depend critically on institutional capacity and implementation quality.

Figure 3.14. Output Dividends from Recovery Policies
(Deviation from combined shock, percentage points)



Source: IMF staff calculations.

Note: The figure shows model-based simulations of the effect of recovery policies on output up to 19 years (shown on the horizontal axis) after conflict onset. "Combined recovery" denotes the joint effect of the recovery policies. "Interaction effect" reflects the output gains from policy externalities, complementarities across policies, and improved expectations. "Tax-financed reconstruction" raises public spending by 3 percentage points over 15 years. "Aid package" amounts to 0.5 percent of GDP over five years. "Confidence restoration" fully undoes the confidence shocks. "Population recovery" assumes a gradual return of refugees. See Online Annex 3.9 for details.

constraints, and, as such, facilitate greater capital inflows, raise wages, and further encourage the return of displaced workers and refugees; this virtuous cycle is more powerful the more open an economy is.[24]

Summary and Policy Recommendations

Following a period of relative calm after the Cold War ended, the number of conflicts worldwide has increased in recent years, reaching levels not seen since WWII. Beyond their devastating human toll this chapter shows, wars impose large and persistent economic costs. Output losses in conflict-site economies are deep and long-lasting, exceeding those typically associated with financial crises or severe natural disasters. Wars also generate acute macroeconomic trade-offs—through fiscal strains, external imbalances, and inflationary pressures—and leave durable scars on a country's macroeconomy and individuals. These economic consequences are not confined within borders: Neighboring countries and trading partners of conflict-site economies also bear nonnegligible spillovers, underscoring the international costs of conflict.

[24]Gorodnichenko and Obstfeld (2026) similarly propose a rebuilding strategy that leverages a virtuous cycle involving capital deepening, repatriation of war refugees, and productivity improvement in the case of Ukraine.

When conflict ends and gives way to a durable peace, economic recovery is possible, but it is neither automatic nor rapid. On average, output rebounds, yet the pace of recovery remains modest relative to wartime losses and varies widely across countries. Postwar recoveries since the end of WWII have been driven primarily by labor dynamics, as workers shift back to civilian activities and refugees gradually return. By contrast, capital accumulation and productivity often remain subdued, reflecting lingering uncertainty and persistent financing constraints. However, when peace proves fragile and conflict reemerges, economic activity typically fails to recover, highlighting the central role of sustained peace in restoring growth.

Policy choices play a decisive role in shaping postconflict outcomes. Recoveries tend to be stronger when early and decisive debt restructuring is combined with macroeconomic stabilization, anchored in low and stable inflation and a stable exchange rate—and supported by timely international assistance, including capacity development and aid. In many successful cases, stabilization has been achieved through rapid restoration of supply, credible nominal anchors, and fiscal adjustment, often under IMF-supported programs. In episodes characterized by large aid inflows, effective coordination between fiscal and monetary authorities has proved particularly important for managing aid surges without undermining macroeconomic stability. These stabilization efforts have been most effective when complemented by domestic reforms to rebuild state capacity and improve governance, for instance, to restore administrative capacity to collect taxes or strengthen anti-corruption measures. Successful recoveries have also been accompanied by a peace dividend, in which reductions in military spending created fiscal space for nonmilitary and social expenditures, alongside policies to address human capital losses, including measures to support refugees' return and integration.

Moreover, successful recoveries hinge on a comprehensive policy package, with a primary focus on reducing uncertainty and rebuilding the capital stock during the early period of the recoveries because of policy complementarities and expectations about the future. Taken together, the chapter's findings underscore that macroeconomic stabilization, sizable debt restructuring, international support, and complementary domestic reforms are mutually reinforcing pillars of durable postconflict recovery, but their effectiveness ultimately depends on the durability of peace.

Box 3.1. Wartime Economic Management in Ukraine

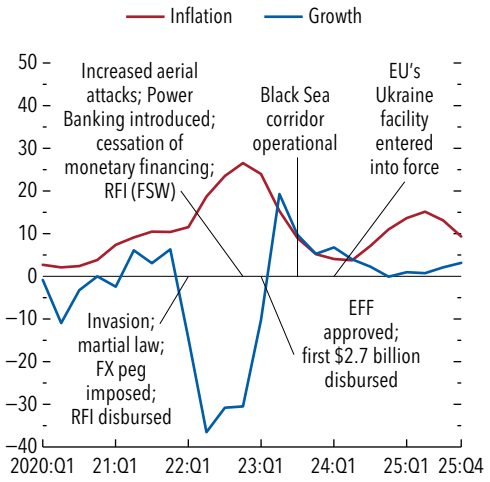
This box focuses on Ukraine's economic crisis management and subsequent stabilization following Russia's invasion on February 24, 2022. The invasion triggered a dramatic collapse of Ukraine's economy, with output plunging by more than one-third in the second quarter of that year (Figure 3.1.1). Widespread combat, infrastructure destruction, trade disruptions, and large-scale emigration created acute demand-supply imbalances, fueling inflation and widening the country's trade deficit. Martial law was introduced upon the invasion, with immediate priorities to mobilize military-age men, maintain public order and core state functions, and reinforce public confidence. Sound prewar fundamentals and policymaking institutions—strengthened over time through reforms, including those under IMF-supported programs—enabled a swift policy response to preserve macroeconomic stability in two phases.

Phase 1 (2022): Economic Crisis Management. In this phase, public spending was rapidly redirected toward defense while social spending was protected. Acute financing needs were bridged with temporary monetary financing, IMF emergency financing, European Union (EU) macrofinancial assistance, and in-kind defense support, alongside debt-service standstills, creating critical fiscal space. To preserve reserves and stabilize expectations, the National Bank of Ukraine (NBU) introduced sweeping foreign exchange controls on outflows and pegged the exchange rate, subsequently devaluing the currency in July following a 1,500-basis-point policy rate hike. Business continuity was preserved through rapid digitalization and blackout-resilient banking solutions (Power Banking). Despite large-scale attacks on energy infrastructure, swift repairs—supported by external aid—and the adoption of backup generators sustained economic activity.

Phase 2 (2023 onward): Stabilization and Growth. With a four-year IMF Extended Fund Facility (EFF) program in place beginning in March 2023 and $130 billion in external financing secured for the program period, policymakers moved in this phase from crisis management to stabilization. Fiscal policy became more orderly, underpinned by nondefense budget discipline and domestic revenue mobilization, including the reversal of some initial wartime tax relief, strengthened tax and customs administration, and selective tax increases. Monetary financing was fully phased out. The NBU transitioned to a managed exchange rate, adopting a conditions-based strategy to phase out foreign exchange controls. In addition to extended standstills, a comprehensive debt-restructuring strategy was developed. As front lines stabilized, growth resumed, with the second quarter of 2023 registering 19.3 percent growth year over year, driven by household and firm wartime adaptation, revived exports, and an improving labor market as net internal forced displacement eased. Inflation also eased amid the cessation of monetary financing, receding supply shocks, and a favorable harvest.

Ukraine's crisis preparedness, shaped by managing wartime conditions after the 2014 annexation of Crimea, and sound initial conditions were critical for crisis management. Stabilization hinged on the authorities' commitment to an ambitious reform framework supported by the EFF and large-scale concessional financing, including the EU's Ukraine Facility, as well as in-kind support. The reform agenda, covering revenue mobilization, public financial management, governance and anti-corruption measures, and financial sector infrastructure, has helped lay the foundation for a postwar economy.

Figure 3.1.1. Real GDP Growth and Inflation
(Percent, year over year)



Source: IMF staff calculations.

Note: EFF = IMF Extended Fund Facility; EU = European Union; FSW = IMF Food Shock Window; FX = foreign exchange; RFI = IMF Rapid Financing Instrument.

The authors of this box are Sidra Rehman and Andrea Manera.

Box 3.2. Dealing with Postconflict Stabilization: Lessons from African Experiences

This box uses the 1994 genocide against the Tutsi in *Rwanda* and the 2010–11 postelectoral crisis in *Côte d'Ivoire* to highlight that early macroeconomic stabilization, international support, credible institutional reforms, and domestic revenue mobilization were key to durable recovery in both of these cases.

Both countries experienced deep initial disruptions but stabilized quickly and returned to strong postconflict growth. *Rwanda* experienced an abrupt and near-total collapse of state capacity. Violence was widespread, forced displacement was massive, and economic activity virtually ceased. *Côte d'Ivoire*'s crisis was shorter and more geographically contained. Nevertheless, it was severe enough to disrupt production, public administration, and investor confidence. At the end of the genocide in 1994, *Rwanda*'s real GDP contracted by 42 percent, inflation surged to 42 percent, and public debt increased to 171 percent of GDP, from 60 percent of GDP in 1993. Five years later, economic growth recovered to about 3 percent and accelerated to between 6 percent and 9 percent annually in the following years, while inflation returned to 2 percent, and public debt declined to 78 percent of GDP. In *Côte d'Ivoire*, output contracted by about 5 percent during the crisis, whereas inflation rose from 1.2 percent in 2010 to 4.9 percent in 2011 before returning to an average of about 1.4 percent three years later. The real effective exchange rate remained stable, and public debt increased from 46 percent in 2009 to about 50 percent of GDP in 2011. Within five years, economic growth accelerated to about 7 percent, and public debt declined to 31 percent of GDP.

In both cases, recovery was anchored by the rapid restoration of supply, credible nominal anchors, and substantial external support. In *Rwanda*, inflation declined as donor-financed imports alleviated shortages and agricultural production recovered. For *Côte d'Ivoire*, membership in the West African Economic and Monetary Union provided a strong and credible nominal anchor, facilitating rapid price stabilization. Fiscal imbalances were initially addressed through emergency grants and strict expenditure controls, followed by comprehensive debt relief, through the Heavily Indebted Poor Countries Initiative program in *Rwanda* and through arrears clearance combined with that program and the Multilateral Debt Relief Initiative in *Côte d'Ivoire*, creating fiscal space for reconstruction and social spending. IMF-supported programs in both countries underpinned macroeconomic stabilization and fiscal adjustment, catalyzing donor confidence and sustained external financing. In *Rwanda*, net inflows of official development assistance surged to about 95 percent of gross national income in 1994 and remained elevated—at 15–20 percent of gross national income—while private capital inflows were modest, with foreign direct investment increasing gradually from near zero to 2–3.5 percent of GDP by 2007. Dutch disease pressures were contained because aid financed a large share of essential imports, and the country's post-1995 flexible exchange rate regime absorbed external shocks.

Domestic resource mobilization was critical. *Rwanda* broadened its tax base, established the Rwanda Revenue Authority, and introduced a value-added tax. *Côte d'Ivoire* increased tax compliance and digitalized revenue collection. Following those reforms, the tax-to-GDP ratio increased from 9 percent to 13 percent in *Rwanda* and from 10 percent to 13 percent in *Côte d'Ivoire*. Political will and credibility were also key. *Rwanda*'s well-aligned group of policymakers and commitment to institution building and anti-corruption measures helped rebuild trust and public sector legitimacy. Key initiatives included a zero-tolerance policy regarding corruption, strengthening the justice system, adopting a credible public investment strategy, and reintegrating former combatants into society and government (Hill, Khadan, and Selcuk 2025; October 2025 *Regional Economic Outlook: Middle East and Central Asia*, Chapter 2). *Côte d'Ivoire*'s rapid normalization and program-backed reforms supported investment and growth.

The authors of this box are Patrick-Nelson Essiane and Maria Gelrud.

Box 3.3. Policies for Refugees' Return and Integration

Armed conflicts generate severe human costs. In addition to casualties and injuries, millions of people are forced to flee their homes during conflicts. In 2024, about 25 million refugees—roughly 80 percent of the global refugee population—originated from active conflict-site economies.[1] But refugee return is not automatic once the conflict ends. As shown in the chapter, policies that foster postconflict return migration can help recovery, as returnees bring back human capital and spur domestic demand. This box examines refugee movements during and after conflicts and draws policy lessons for easing return.

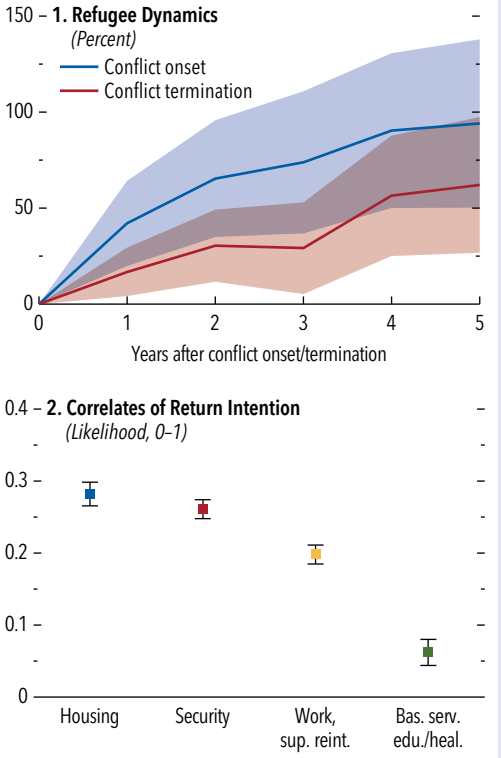
Cross-country data point to sizable and persistent refugee outflows following conflict onset (Figure 3.3.1, panel 1) (see also Mueller, Piemontese, and Tapsoba 2017; Chapter 2 of the April 2024 *Regional Economic Outlook: Middle East and Central Asia*; and Chapter 2 of the October 2025 *Regional Economic Outlook: Middle East and Central Asia*). Five years after the onset of a major conflict, cumulative refugee outflows from the conflict-site economy are about 95 percent higher than in the year preceding the conflict. When conflicts end and sustained peace takes hold, refugee returns to their country of origin gradually increase, reaching about 60 percent five years after conflict termination. A comparison of postconflict inflows with earlier outflows suggests, however, that return is often incomplete even after several years of peace.

Recent intention surveys by the United Nations High Commissioner for Refugees covering about 17,000 refugees from Nigeria, South Sudan, and Ukraine help explain the drivers of return intentions, which, conditional on the end of conflict, vary across socioeconomic characteristics. Older individuals, refugees in host countries neighboring their country of origin, and those with close family members in their country of origin report higher likelihoods of return. By contrast, refugees who are employed in host countries tend to express lower levels of return intentions.

Policy conditions in refugees' country of origin also shape return decisions. Increased housing availability, enhanced security, better access to basic services—including water, education, and health care—and policies supporting labor market reintegration are positively associated with return intentions (Figure 3.3.1, panel 2). A decomposition analysis suggests that policy-related factors explain about 54 percent of refugees' stated intentions to return to their countries of origin, whereas individual socioeconomic characteristics account for about 20 percent.

Thus, policies that promote postconflict security, expand housing availability, facilitate reintegration into labor markets, and rebuild basic services are critical for encouraging return and supporting durable recovery in postconflict economies.

Figure 3.3.1. Refugee Flows during and after Conflict, and Return Intentions



Sources: United Nations High Commissioner for Refugees (UNHCR) Intention Surveys for refugees from Nigeria (September 2021), South Sudan (November 2021), and Ukraine (August 2024); and IMF staff calculations.

Note: Panel 1 shows local projections difference-in-differences estimates of refugee stocks following conflict onset and (with an opposite sign) termination (similar patterns are observed using data on refugee flows and returnees). Panel 2's regression controls for socioeconomic characteristics and fixed effects for country of origin, country (or region) of asylum, and legal status. Lines and markers denote point estimates; shaded areas and whiskers show 90 percent confidence intervals. Bas. serv. edu./heal. = basic services, education, and health; Work, sup. reint. = work and support for reintegration.

The authors of this box are Hippolyte Balima and Evgenia Weaver.

[1]Calculations are based on data on refugees from the United Nations High Commissioner for Refugees and the chapter's conflict data.

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