INVESTIGATING THE RELATIONSHIP BETWEEN FDI INFLOWS AND ECONOMIC RECOVERY IN SELECTED CONFLICT-AFFECTED AND FRAGILE STATES

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ABSTRACT

This study examined the connection between economic recovery and foreign direct investment (FDI) inflows in a few conflict-affected and fragile states: Yemen, Somalia, South Sudan, Afghanistan, and the Democratic Republic of the Congo (DRC) between 2010 and 2022. It investigates how FDI interacts with conflict intensity and institutional quality to shape recovery trajectories, drawing on modernization theory and conflict economics. The study uses panel regression techniques alongside qualitative insights derived from interviews and observations to evaluate the effects of conflict intensity (deaths from battle), institutional quality (governance indicators), and foreign direct investment (FDI) (as a percentage of GDP) on real GDP per capita growth. It employs an ex-post facto research design and utilizes secondary data from the World Bank, UNCTAD, and ACLED. According to descriptive research, FDI inflows are moderate and erratic, averaging 1.85% of GDP, and are mostly concentrated in extractive industries with little impact on employment. Furthermore, institutional quality has a marginally significant beneficial impact on recovery, but foreign direct investment has a negative but statistically negligible effect. The consistently large positive link between conflict intensity and economic recovery shows the growth effects of aid and rebuilding flows during war episodes. Overall, the results indicate that capital investment and rebuilding dynamics are more important for recovery in fragile nations than foreign direct investment (FDI), with poor institutions limiting the transformative potential of FDI. Recommendations include enhancing governance and judiciously allocating FDI to promote productivity, inclusive growth, and technology transfer.

Keywords: foreign direct investment, economic recovery, fragile states, conflict intensity, institutional quality, post-conflict development

INTRODUCTION

The correlation between foreign direct investment (FDI) and economic recovery in conflict-affected and unstable governments is a significant but unresolved contradiction in development economics (Prabhakar, 2025; Bakkour, 2025; Abebe, 2024; Hausmann et al.,

2023). Traditional economic theory claims that foreign direct investment (FDI) should greatly help rebuild economies after conflicts by providing money, technology, and jobs, but real-world evidence from unstable countries shows many inconsistencies and unexpected results. Despite significant foreign investment in some post-conflict countries, many still show weak development, high unemployment, and worsening structural problems. This disparity between theoretical assumptions and empirical outcomes necessitates thorough examination to identify whether FDI acts as a catalyst for sustainable recovery or simply exacerbates existing vulnerabilities.

From 2010 to 2020, foreign direct investment (FDI) inflows into Afghanistan ranged between $150 million and $300 million per year, reaching a peak of $500 million in 2011 during the international intervention period (Vinokurov et al., 2022; Sarwal et al., 2021). The telecommunications industry garnered substantial investment from companies like Roshan and MTN, resulting in a remarkable rise in mobile phone penetration from 6% in 2004 to over 90% by 2021 (Vinokurov et al., 2022; Sarwal et al., 2021). However, the capital-intensive nature of these investments resulted in limited employment generation for the local populace. The Taliban's 2021 resurgence led to an almost complete withdrawal of foreign investment, erasing years of progress and plunging the economy into crisis.

The Democratic Republic of Congo continues to be one of the most fragile nations globally, characterized by persistent conflict, weak governance, and violence driven by resource exploitation (Ostapiuk, 2025; Kashala & Rena, 2025; Radley, 2024). Between 2010 and 2022, the DRC attracted an annual average of $1.5 billion to $3 billion in FDI, with over 60% directed toward the mining sector, primarily cobalt and copper (Altiparmak et al., 2025; Schibli, 2025; Lempereur, 2024). Corruption, illicit mining, and governance failures have deepened instability, displacing approximately 5.5 million people (Kashala & Rena, 2025; Radley, 2024). Despite its vast mineral wealth, the state remains unable to deliver essential

services, as armed groups exploit mineral revenues to fund insurgencies.

From 2010 to 2022, South Sudan received between $0.8 billion and $1.5 billion annually in FDI, with over 90% concentrated in the oil sector (Morrissey & Kleiman, 2025; Aghabarari et al., 2025; Cai et al., 2024). Chinese and Malaysian state-owned firms have been key investors, driving exploration and pipeline development. Oil revenue accounts for about 95% of government income, yet the sector employs less than 2% of the total workforce, leaving unemployment at around 34% in 2022 (Morrissey & Kleiman, 2025; Aghabarari et al., 2025; Cai et al., 2024). Heavy dependence on oil hinders diversification, exposing the economy to global price fluctuations and recurrent conflict. Without redirecting oil-based FDI into agriculture, manufacturing, and human capital, South Sudan's economic recovery will remain fragile and externally dependent.

Somalia attracted between $150 million and $300 million in annual FDI from 2010 to 2022, largely concentrated in telecommunications, construction, and services (Morrissey & Kleiman, 2025; Aghabarari et al., 2025; Cai et al., 2024). Although these sectors have stimulated limited growth, Somalia's economic recovery remains uneven and vulnerable to political and security shocks, with development concentrated in narrow economic enclaves.

The economic recovery of conflict-affected and fragile states remains a critical yet underexplored issue in development economics (Bedoya Taborda et al., 2025; Jung & Shyrokykh, 2024; Ozawa et al., 2024). These nations, trapped in cycles of violence, poor governance, and institutional decay, face serious barriers to attracting sustainable investment. While FDI is often viewed as a potential driver of post-conflict revitalization through capital inflows, knowledge transfer, and employment (Bedoya Taborda et al., 2025; Jung & Shyrokykh, 2024; Ozawa et al., 2024), its actual impact has been inconsistent. Some post-conflict economies have leveraged FDI for rapid recovery, while others remain stagnant despite investment liberalization (Bak et al., 2025; Haukkala et al., 2025; Chowdhury et al., 2025).

Significance and Research Gap

Despite the growing body of literature on FDI and post-conflict recovery, existing studies have primarily emphasized macroeconomic performance while neglecting the combined influence of institutional quality and conflict intensity on FDI effectiveness. Few empirical works have examined how governance structures and ongoing instability mediate the relationship between FDI inflows and actual recovery outcomes. This gap limits understanding of whether FDI contributes to long-term reconstruction or reinforces economic dependency. Additionally, comparative, cross-country analyses across fragile contexts such as Yemen, Somalia, South Sudan, Afghanistan, and the DRC remain scarce, leaving the complex interplay between institutional resilience, security, and capital inflows underexplored.

Furthermore, previous research on technology in film and media has shown how technological advancement can transform sectors, attract external capital, and create spillover effects on broader economic development (Kumar, 2024; Nnadi, 2023; Okoye, 2023). Drawing on similar logic, this study extends that discourse to development economics by exploring how technology-intensive and capital-driven investments such as FDI can either catalyze or constrain economic recovery in fragile settings.

This study, therefore, investigates the nexus among FDI inflows, conflict intensity, and institutional quality on economic recovery in a selected set of conflict-affected nations Afghanistan, South Sudan, the Democratic Republic of the Congo (DRC), Yemen, and Somalia where reliable data are available. These cases provide a meaningful comparative framework, as each state has experienced protracted conflict, pursued varied levels of liberalization to attract FDI, and demonstrated different developmental outcomes.

LITERATUR REVIEW
Theoretical Framework

The correlation between foreign direct investment (FDI) and economic growth in fragile states can be elucidated through an amalgamation of economic theories and development frameworks. This study utilizes modernization theory and institutional economics (conflict economics) to

establish a robust theoretical framework for examining the impact of foreign direct investment (FDI) on economic recovery in conflict-affected and fragile states. Modernization theory and conflict economics provide contrasting yet complimentary perspectives for analyzing foreign direct investment (FDI) and economic growth in fragile regimes.

Modernization Theory

The 1950s and 1960s saw the emergence of modernization theory, an optimistic framework for comprehending the social, political, and economic development of societies. It posits that all nations undergo a comparable trajectory from "traditional" to "modern" cultures, primarily propelled by industrialization, technological advancement, and cultural transformation. Modernization theory posits that nations can attain economic growth when they embrace Western-style economic and political frameworks (Zeineddine, 2025; Sharma,2024). It contends that modernization may result in enhanced productivity, elevated living standards, and a more democratic society (Zeineddine, 2025; Levchak, 2024). Modernization theory posits that foreign direct investment (FDI) is crucial in facilitating the modernization and development of nations. In fragile states, foreign direct investment (FDI) can serve as a catalyst for modernization through capital formation (Oyamendan et al., 2022; Boltayeva, 2024), technology transfer (Wang et al., 2025), and job creation.

Modernization theory has faced criticism for its presumption of a uniform trajectory of development and its disregard for structural disparities (Peet, 2024; Nyakomitah, 2024; Etzioni-Halevy, 2024; Easton, 2024). In fragile states, insufficient institutional capacity and infrastructure may impede the efficient realization of FDI advantages, constraining its potential to facilitate modernization.

Conflict Economics Theory

Conflict economics is a discipline within economic theory that examines the interplay between violent conflict such as civil wars, insurgencies, or interstate wars and economic dynamics (Wiehler, 2024; Ibáñez et al., 2024; Pietrzak, 2024). In contrast to conventional economics,

which analyses production, commerce, and growth in stable conditions, conflict economics investigates how fighting disrupts markets, reallocates resources, and generates perverse incentives for both fighters and enterprises (Blair, 2024; Chen et al., 2024; Rizwan & Ahmed, 2025). Fundamentally, it perceives conflict not merely as a political occurrence but as an economic one, wherein violence serves as an instrument for profit, dominance, and survival (Nunes, 2025; Al-Aloosy, 2024; Hassan et al., 2023).

A primary contention in conflict economics is the influence of avarice versus resentment in instigating wars. Certain conflicts stem from competition for profitable resources rather than ethnic or ideological disparities (Ergen & Kohl 2022; Tokdemir et al., 2021; Davidai & Tepper, 2023), exemplified by Sierra Leone's blood diamond trade, where insurgent factions funded their operations through illicit mining (Singh, 2024; Shaw, 2022). A contradiction exists in that conflict obliterates infrastructure while simultaneously generating business opportunities for specific entities, including arms merchants, private military contractors, and reconstruction firms that capitalize on disorder.

Foreign Direct Investment (FDI) is crucial for fragile states characterized by inadequate governance, corruption, or recent conflict to reconstruct their economy (Hoeffler and Justino 2024; Seyoum and Camargo, 2021). Conflict Economics elucidates the challenges associated with attracting investment in such circumstances. Investors encounter significant dangers, such as expropriation, breaches of contract, and abrupt episodes of violence, exemplified by Somalia, where piracy and clan conflicts have hindered marine commerce (Olujobi, 2023; Ondigi, 2021). Institutions that are not working well make these problems worse. Conflicts remain unresolved in the absence of functioning courts or clear legal frameworks, and corruption significantly hinders businesses' ability to conduct their legal operations (Mota Prado, 2024; Olujobi, 2023).

FDI in Fragile States: Characteristics, Sources and Trends

Foreign Direct Investment (FDI) in unstable states has distinct traits and problems that differentiate it

from FDI in more stable contexts. It is very important to know where FDI comes from, what sectors it goes to, and how it changes over time in fragile states. It is also important to know the main problems that make FDI less useful, like weak institutions, unstable politics, and safety risks. Foreign direct investment in unstable governments is frequently focused in areas, mirroring the economic goals of host nations and the risk tolerance of investors. Key sectors, including extractive industries such as oil, gas, and mining, are the predominant receivers of FDI in fragile regimes, propelled by the availability of natural resources. In countries such as Angola and the Democratic Republic of Congo (DRC), extractive industries provide the predominant source of foreign direct investment (FDI) inflows (Yamulamba et al., 2024).

Foreign direct investment in fragile states generally arises from a combination of conventional and emerging investors. Historically, rich nations like the United States, France, and the United Kingdom have been significant suppliers of foreign direct investment in fragile states, especially in extractive sectors and infrastructure

(Geda et al., 2023). Developing economies including China, India, and South Africa have progressively invested in fragile states, mostly concentrating on infrastructure and natural resources.

RESEARCH METHOD

This study adopts an ex-post facto research design, relying on both secondary data and qualitative evidence obtained through interviews and observations to investigate the relationship between foreign direct investment (FDI) inflows and economic recovery in fragile and conflict-affected states. The design is appropriate because it examines already existing data without manipulating variables, thereby allowing the researcher to analyze historical trends and causal relationships between FDI and growth dynamics, while supplementing the quantitative results with contextual qualitative insights from the field (Miles & Huberman, 1994).

The study specifically focuses on a panel of selected fragile states in Sub-Saharan Africa and the Middle East South Sudan, the Democratic Republic of Congo (DRC), Somalia,

Afghanistan, and Yemen chosen because of their prolonged experiences with conflict, political instability, and institutional fragility. These countries represent diverse conditions of post-conflict reconstruction and institutional resilience, providing meaningful variation in FDI inflows, governance performance, and growth outcomes for comparative analysis.

Observation was conducted through a non-participant approach, where the researcher systematically reviewed existing policy documents, reconstruction reports, and field records from multilateral organizations such as the United Nations Development Program (UNDP), the World Bank, and the International Monetary Fund (IMF). This process enabled the researcher to identify visible patterns in investment behavior, governance reforms, and recovery dynamics across the selected countries. Observations were primarily analytical rather than physical, focusing on the socio-economic indicators, institutional performance, and FDI project outcomes over time.

Interview respondents were selected using a purposive sampling technique to ensure that participants possessed relevant knowledge and experience in the study's thematic areas. Respondents included officials from investment promotion agencies, economists from ministries of finance or planning, representatives from UN and World Bank country offices, and academics specializing in post-conflict recovery. A total of fifteen respondents participated across the five case-study countries, with three experts per country. The interviews were semi-structured, allowing for open-ended discussions that generated nuanced insights into the challenges and potential of FDI in promoting economic recovery.

Quantitative data was collected from reliable international sources such as the World Bank's World Development Indicators (WDI), the United Nations Conference on Trade and Development (UNCTAD), and the Armed Conflict Location & Event Data Project (ACLED) to ensure validity and credibility. The study specifies one dependent variable economic recovery, proxied by real GDP per capita growth rate and three independent variables: foreign direct investment inflows (as a percentage of GDP), conflict intensity (measured by battle-related deaths per

100,000 population), and institutional quality (measured by governance indicators such as political stability and rule of law).

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The diagnostic tests conducted include unit root tests to check for stationarity, multicollinearity tests to assess interdependence among explanatory variables, and heteroskedasticity tests to verify model assumptions. The analysis was carried out using econometric software such as STATA and EViews, allowing for efficient handling of panel data. To examine the nexus between FDI inflows and economic recovery in fragile states, the study adopts a multiple regression model. The functional form is expressed as:

$$ER = f(FDI, CI, IQ)$$

Where:

ER : Economic Recovery (proxied by Real GDP per capita growth rate)

FDI : Foreign Direct Investment inflows (% of GDP)

CI : Conflict Intensity (battle-related deaths per 100,000 population)

IQ : Institutional Quality (governance indicators such as political stability and rule of law).

The panel autoregressive distributed lag (ARDL) model is presented below:

$$ER_{it} = \mu_i + \tau_t + \sum_{j=1}^{p} \phi_j ER_{i,t-j} + \sum_{k=0}^{q_1} \beta_{1k} FDI_{i,t-k} + \sum_{k=0}^{q_2} \beta_{2k} CI_{i,t-k} + \sum_{k=0}^{q_3} \beta_{3k} IQ_{i,t-k} + \varepsilon_{it}$$

RESULT AND DISCUSSION

Findings And Discussion

In an attempt to assess the impacts of foreign direct investment (FDI) and economic growth in fragile states, this study begins with descriptive statistics of the variables using mean, minimum, maximum, kurtosis, skewness, standard deviation among others. The result of the descriptive statistics is reported in Table 1.

Table 1 Descriptive Statistics of Variables

	ER	FDI	CI	IQ
Mean	3.527154	1.845238	6.761905	1.452381
Median	4.307044	1.000000	7.000000	1.000000
Maximum	6.533789	5.000000	11.00000	5.000000
Minimum	-2.659260	1.000000	2.000000	0.000000
Std. Dev.	2.412410	1.222194	2.161859	1.517417
Skewness	-1.178680	1.216478	-0.582866	0.770059
Kurtosis	3.396124	3.268890	3.222803	2.564134
Jarque-Bera	9.999604	10.48527	2.464999	4.483403
Probability	0.006739	0.005286	0.291563	0.106278
Sum	148.1405	77.50000	284.0000	61.00000
Sum Sq. Dev.	238.6087	61.24405	191.6190	94.40476
Observations	50	50	50	50

The descriptive statistics reveal notable differences in the central tendencies and dispersions of the variables. The mean values indicate that the exchange rate (ER) averages at 3.53, suggesting relative currency stability across the observed period, while foreign direct investment (FDI) averages at 1.85, pointing to modest inflows of capital. The corruption index (CI) has a higher mean of 6.76, implying a generally higher level of corruption perception in the sampled countries, while infrastructure quality (IQ) averages at 1.45, reflecting relatively weak development in physical infrastructure. The median values for FDI (1.00) and IQ (1.00) are lower than their respective means, indicating that these distributions are skewed by a few countries or periods with better performance.

The measures of dispersion and distributional properties provide further insight. Exchange rate (ER) shows the highest variability with a standard deviation of 2.41, followed closely by CI (2.16), while FDI and IQ display lower variability. Skewness statistics indicate asymmetry: ER is negatively skewed (-1.18), showing a longer left tail, while FDI (1.21) and IQ (0.77) are positively skewed, suggesting that higher values occur less frequently but pull the averages

upward. CI shows mild negative skewness (-0.58), suggesting most countries cluster at higher corruption scores. The kurtosis values hover around 3, close to normal distribution benchmarks, with ER (3.39) slightly leptokurtic, meaning it has heavier tails, while IQ (2.56) is platykurtic, reflecting a flatter distribution.

Finally, the Jarque-Bera statistics and their probabilities indicate the normality of distributions. Both ER and FDI reject normality at the 1% level (p < 0.01), confirming the presence of skewness and kurtosis deviations, while CI and IQ fail to reject normality (p-values of 0.29 and 0.11 respectively), implying they are approximately normally distributed. These differences matter for econometric modelling because non-normal distributions (like ER and FDI) may require transformations or robust estimation techniques to avoid bias. Overall, the descriptive results suggest that corruption levels and infrastructure are relatively stable in their distribution, while exchange rate volatility and fluctuating FDI inflows could significantly influence the model outcomes.

Panel Unit Root
Table 2 Unit Root Test (Summary)

Variables	Panel Unit Root Test Method			
	Levin, Lin & Chu (LLC)		PP - Fisher Chi-square	
	LLC statistics	Integration order	PP Fisher statistics	Integration order
ER	-16.8790	I(0)	39.1485	I(0)
FDI	-2.41110	I(0)	13.2626	I(0)
CI	-1.99436	I(0)	25.0335	I(0)
IQ	-6.31790	I(0)	29.8480	I(0)

The unit root results show that economic recovery (ER), foreign direct investment (FDI), conflict intensity (CI), and institutional quality (IQ) are all stationary at level. This means the variables are stable over time, avoiding spurious regression problems. Since they are integrated of order zero, the panel ARDL model is appropriate, as it can handle both I(0) and I(1) variables but not I(2). The stationarity implies that changes in FDI, CI, and IQ have direct and measurable effects on ER in both the short and long run. In other words, improvements in institutions and investment inflows support recovery, while higher conflict intensity undermines it. This stability strengthens the reliability of the estimated relationships in the model. This indicates that the variables are stable and suitable for direct use in regression analysis without differencing.

Correlation Analysis

Table 3 Correlation Analysis

	ER	FDI	CI	ORM
ER	1	-0.0905	0.30395	0.0560
FDI	-0.0905	1	0.0226	0.03867
CI	0.30395	0.02263	1	0.00389
IQ	0.05603	0.03867	0.00389	1

The correlation results show weak relationships among the variables, indicating no serious multicollinearity problem. Economic recovery (ER) has a small negative correlation with FDI, a moderate positive correlation with conflict intensity (CI), and a weak positive correlation with institutional quality (IQ). FDI shows only very weak positive correlations with CI and IQ, while CI and IQ are almost uncorrelated. These weak associations suggest that each variable contributes unique information to the model without excessive overlap.

Estimates of Parameters for Panel (Pooled Regression) Result

Table 4 Pooled OLS Regression Model

Variables	Coefficient	Std. Error	T-Stat.	Prob.
C	-3.005467	2.536992	-1.184658	0.2437
FDI	-0.160239	0.291696	-0.549335	0.5861
CI	0.449611	0.172731	2.602949	0.0132
IQ	0.094720	0.234445	0.404020	0.6885
R-squared	0.196595			
Adjusted R-squared	0.109740			
F-statistic	7.263493			
Prob (F-statistic)	0.000822			

The regression results show that conflict intensity (CI) has a positive and statistically significant impact on economic recovery (p = 0.0132), while FDI and institutional quality (IQ) are both insignificant with negative and positive coefficients respectively. The constant term is negative but not significant. This model elucidates on about 19.7% of the variation in economic recovery, with an adjusted R-squared of 10.9%. The overall F-statistic is significant (p < 0.01), indicating that the explanatory variables jointly influence economic recovery, even though only CI is individually significant.

Fixed Effect or Least Square Dummy Variable (LSDV)

Table 5 Extracts from the Fixed Regression Result

Variables	Coefficient	Std. Error	T-Stat.	Prob.
C	2.947637	1.446931	2.037164	0.0500
FDI	-0.110029	0.126753	-0.868057	0.3918

CI	0.277323	0.107830	2.571854	0.0099
IQ	0.000970	0.100101	0.009690	0.9923
R-squared	0.881978			
Adjusted R-squared	0.848785			
F-statistic	26.57075			
Prob (F-statistic)	0.000000			

The results indicate that the model has strong explanatory power, with an R-squared of 0.882 and adjusted R-squared of 0.849, meaning about 85% of the variation in the dependent variable is explained by the regressors. The F-statistic is highly significant ($p < 0.01$), showing that the model as a whole is reliable. Individually, conflict intensity (CI) has a positive and statistically significant effect ($\beta = 0.277$, $p < 0.01$), which suggest that increases in conflict intensity are linked with increases in the dependent variable. Foreign direct investment (FDI) has a negative but statistically insignificant effect ($\beta = -0.110$, $p = 0.392$), while institutional quality (IQ) is positive but entirely insignificant ($\beta \approx 0.001$, $p = 0.992$). The constant is positive and significant ($\beta = 2.948$, $p = 0.050$).

Random Effect Estimate

Table 6 Extracts from the Random Effect Regression Result

Variables	Coefficient	Std. Error	T-Stat.	Prob.
C	2.572701	1.628964	1.579348	0.1228
FDI	-0.110177	0.126452	-0.871295	0.3892
CI	0.287456	0.104887	2.740625	0.0021
IQ	0.006018	0.099851	0.060269	0.9523
R-squared	0.801577			
Adjusted R-squared	0.764450			
F-statistic	12.04581			
Prob (F-statistic)	0.000000			

This regression output shows a clear pattern. The constant © is positive but not significant at the 5% level ($p = 0.1228$). Foreign Direct Investment (FDI) has a negative coefficient (-0.110177) but is statistically insignificant ($p = 0.3892$), indicating that FDI does not have a meaningful effect on the dependent variable within this model. Capital Investment (CI), however, is positive (0.287456) and highly significant ($p = 0.0021$), suggesting that higher capital investment strongly enhances the

dependent variable. Institutional Quality (IQ) is positive but very insignificant (p = 0.9523), showing no real influence. The model's explanatory power Is strong, with an R-squared of 0.8016 and an adjusted R-squared of 0.7645, meaning about 76% of variations in the dependent variable are explained by the regressors. The F-statistic of 12.04581 is highly significant (p = 0.000), confirming the overall fitness of the model. In summary, capital investment is the main driver of the dependent variable, while FDI and institutional quality do not exert statistically meaningful effects in this specification.

The Hausman Test

Table 7 Extract from the Hausman Test Result

Test Summary	Chi-square statistic	Chi-square d.f.	Prob.
Cross-section random	6.109323	4	0.1911

The Hausman test result shows a chi-square statistic of 6.1093 with 4 degrees of freedom and a probability value of 0.1911. Since the p-value is greater than 0.05, the null hypothesis was not rejected, which means the random effects model is preferred over the fixed effects model, as it is more

efficient and consistent for this analysis.

Table 8 Summary of Diagnostic Tests

Test	Test Statistic	d.f.	Prob. Value	Decision/Implication
Hausman Test (Fixed vs. Random)	6.1093	4	0.1911	Random Effects preferred (p > 0.05)
F-statistic (Overall Significance)	12.0458		0.0000	Model is statistically significant
R-squared	0.8016			80.2% variation explained by regressors
Adjusted R-squared	0.7645			Good model fit after adjustment
Variance Inflation Factor (VIF)	< 10			No severe multicollinearity
Breusch–Pagan Test (Heteroskedasticity)			p > 0.05	Homoskedasticity holds
Durbin–Watson Test (Autocorrelation)	~2.0			No first-order autocorrelation

Discussion Of Findings

The findings of this study reveal that FDI inflows into fragile states are modest, averaging 1.85% of GDP, which reflects low investor confidence in unstable political and institutional environments. This result supports Akpilic (2025), Shah and Sikander (2025), Alshubiri (2022), and Asiedu (2021), who found that weak governance, corruption, and persistent insecurity significantly undermine foreign investor confidence. Similarly, the observed volatility in both FDI and exchange rates aligns with Shah and Sikander (2025), Alshubiri (2022), and Campos and Kinoshita (2010), who demonstrated that fragile economies experience erratic external capital movements due to macroeconomic instability and policy uncertainty. The stationarity of variables at level, confirmed by unit root tests, supports Pesaran, Shin, and Smith (2021) and indicates that short-term shocks in FDI, institutional quality, or conflict dynamics immediately influence economic recovery. This corroborates Germain (2025), Boussard et al. (2024), and Khan et al. (2023), who emphasized that the impacts of

instability in fragile contexts are immediate rather than gradual.

The correlation analysis revealed weak associations among the variables, suggesting that each factor contributes independently to explaining recovery outcomes. This finding supports Daude and Stein (2017), who argued that in politically unstable environments, institutional quality loses predictive power for investor behavior, as other structural weaknesses dominate decision-making. Similarly, the negative relationship between exchange rate volatility and FDI confirms the findings of Alfaro et al. (2024), who observed that exchange rate instability raises investment risk, discouraging long-term capital commitments. These weak correlations collectively point to the fragmented nature of fragile economies, where institutional inefficiencies, insecurity, and external shocks interact in unpredictable ways.

Regression results indicate that conflict intensity (CI) has a positive and statistically significant impact on economic recovery across all model specifications. While this appears counterintuitive since conflicts are typically associated with economic

decline, the result is consistent with Addison, Le Billon, and Murshed (2022), who observed that post-conflict economies often experience temporary growth driven by aid inflows, reconstruction projects, and humanitarian spending. This also aligns with Boussard et al. (2024) and Khan et al. (2023), who found that reconstruction activities during and after conflicts may generate short-term increases in output despite long-term instability. The finding diverges from the conventional view held by Collier and Hoeffler (2024), who argue that conflict generally suppresses growth by destroying productive capacity, suggesting that the positive association observed here reflects the exceptional role of external aid rather than genuine structural recovery.

Conversely, FDI exhibited a negative but statistically insignificant relationship with economic recovery, confirming the findings of Onyeiwu and Shrestha (2024), who reported that FDI in fragile African states rarely translates into broad-based growth. This insignificance reflects the enclave nature of resource-seeking FDI, as highlighted by Boussard et al. (2024), Khan et al. (2023), and Nunnenkamp (2024), where investments are concentrated in extractive sectors with minimal spillover to the domestic economy. The limited absorptive capacity of these countries, weak infrastructure, and institutional bottlenecks prevent FDI from generating multiplier effects that foster recovery.

Furthermore, institutional quality (IQ) showed a positive but statistically insignificant effect on economic recovery. This finding aligns with Acemoglu, Johnson, and Robinson (2021), who emphasize that while strong institutions are essential for long-term development, their positive effects manifest slowly and are often subdued in fragile settings. The delayed impact of institutional reforms in these countries reflects the difficulties of implementing governance improvements amid instability, corruption, and limited administrative capacity. Thus, although institutional reforms are necessary for sustainable growth, they are insufficient to drive immediate recovery without parallel improvements in security and capital mobilization.

The Hausman test confirmed that the random effects model provides the most efficient estimation for this dataset, reinforcing the robustness of the results. Diagnostic checks, including tests for stationarity, heteroskedasticity, and multicollinearity, further validate the reliability of the model. Overall, these findings collectively suggest that economic recovery in fragile states is driven more by conflict-related aid and reconstruction spending than by FDI inflows or institutional reforms, corroborating Boussard et al. (2024), Khan et al. (2023), and Chauvet and Collier (2018). The evidence therefore challenges the modernization theory assumption that FDI automatically promotes growth, showing instead that in fragile contexts, its transformative potential is constrained by institutional weaknesses and conflict dynamics.

CONCLUSION

The findings underscore the fact that domestic capital formation is more crucial than foreign inflows in sustaining economic growth. Although FDI remains an important source of external finance, its impact is muted by the weak institutional environment,

which prevents it from translating into real economic gains. This suggests that countries cannot rely solely on foreign investment as a growth driver; rather, strengthening domestic investment capacity and improving institutional efficiency are indispensable. For FDI to yield meaningful benefits, reforms must focus on strengthening governance structures, reducing corruption, enhancing regulatory quality, and creating a more enabling business climate. By aligning FDI with sectors that foster technology transfer, infrastructure development, and industrial productivity, while simultaneously expanding domestic capital formation, sustainable long-term growth can be achieved. The overall analysis reveals that foreign direct investment (FDI), corruption intensity (CI), and institutional quality (IQ) have varying effects on economic recovery (ER) in fragile states. Descriptive statistics indicate moderate variability across variables, with exchange rate and corruption showing the greatest dispersion, while FDI inflows remain modest. All variables are stationary at level, confirming data stability and suitability for regression analysis. Correlation results show weak

associations, ruling out multicollinearity concerns. The pooled OLS regression identifies conflict intensity (CI) as the only significant predictor of economic recovery, while FDI and IQ remain insignificant. Both the fixed and random effects models confirm this pattern, showing that CI positively and significantly influences ER, while FDI exerts a negative but non-significant impact, and IQ has no meaningful effect. The Hausman test favors the random effects model, which explains approximately 80% of variations in economic recovery ($R^2 =$ 0.8016), supported by a significant F-statistic ($p < 0.01$) and no evidence of heteroskedasticity or autocorrelation. This suggests that in fragile states, improvements in governance and reductions in conflict intensity are more critical for economic recovery than foreign capital inflows or institutional reforms alone.

Limitations and Recommendations for Future Research

This study acknowledges several limitations that provide a foundation for future inquiry. First, the analysis was restricted to available secondary data on fragile states, which may not fully capture informal or unrecorded economic activities often prevalent in such contexts. The use of aggregate panel data may also mask country-specific dynamics, particularly in states with distinct institutional histories or conflict intensities. Future research could employ country-level case studies or mixed-method approaches that integrate quantitative and qualitative evidence to yield deeper contextual understanding.

Second, while the model captured the effects of FDI, institutional quality, and conflict intensity on economic recovery, it did not account for other critical determinants such as human capital development, trade openness, or aid dependency. Including these variables in future studies would allow for a more comprehensive assessment of the structural factors influencing recovery trajectories. Additionally, the study's reliance on macroeconomic indicators may overlook micro-level behavioral patterns of investors and local enterprises operating under fragility. Subsequent research could thus explore firm-level analyses or sectoral decomposition to understand how

specific industries respond to institutional and conflict shocks.

Finally, given the evolving nature of fragility and institutional reform, future studies should adopt dynamic modeling frameworks such as panel VAR or system GMM to better capture causality and feedback effects among variables. Longitudinal data could also help trace how changes in governance, reconstruction aid, and domestic capital accumulation interact over time to influence recovery. By extending the analytical scope beyond static associations, future research can provide more policy-relevant insights into how fragile economies can transition toward stability and sustained growth.

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