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Economic Development amidst Conflict: Exploring the Dynamics in Developing Nations

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Abstract
This study aims to examine the effects of ongoing conflicts on economic growth in developing countries. The study has employed Quantile Regression technique to examine the influence of conflicts on economic growth at different levels of quantiles by using panel data from 2007 to 2022. The findings of the study indicate that ongoing conflict has a negative impact on GDP growth in developing countries while gross fixed capital formation, labor force growth, and governance show the positive impact on GDP growth in all income groups but population growth and social development index shows mixed results as in some quantiles these variables impact negatively on GDP. The government and policymakers may reduce ongoing conflict by strengthening institutions, conflict prevention initiatives and promoting peace-building programs that will increase economic growth in developing countries.
Keywords: Ongoing Conflict, GGP, Developing Countries, WGI, SDI

1. Introduction

Conflicts affect economic development by influencing the level of production of an economy (Le et al., 2022). Conflict-related death ratio has been increasing continuously since the early 2000s which affects the economic growth of a country (Rodrik, 1999). Economic losses whose effects last for years, human suffering (Novta and Pugacheva, 2021), the desolation of human capital, infrastructure and labor force (Le et al. 2022), Political instability and destruction of institutions are the outcomes of conflict (Fang et al. 2021). By neglecting the destruction of physical and human capital in economic accounting, war can decrease GDP per capita. This is attributed to reduced labor and productivity, along with decreased investment in existing and new capital. Furthermore, the adverse effects extend to diminished gains from both domestic and foreign trade (Thies and Baum, 2020). In the last forty years, civil conflict affected more than one-third countries in the universe. This conflict has resulted in the loss of lives and depletion of human and social capital. The psychological impact, education, health and GDP per capita income after violence required a long period for recovery (Lopez et al. 2004). Economic development in developing nations is significantly caused by conflicts, which damage essential facilities, cause severe destruction, and force population displacement. The economic consequences of war, civil unrest, and political instability include the destruction of capital assets, disruptions to supply and production the chain, and a barrier to both domestic and foreign investment. Important industries like healthcare and education suffer as funding is shifted to military projects and conflict resolution, prolonging cycles of instability and poverty (Ndoricimpa and Ndayikeza, 2023).

Conflicts may cause political, religious, and cultures disputes that restrict a partnership and slow down economic development, thus increasing the social dispersion. Investments in development are made more difficult by institutional breakdown, which is characterized by corruption and the disintegration of governance systems. This is because it promotes inefficiency and impact the investor's decision. Conflict-related socioeconomic disasters, such as rising rates of illness and poverty, worsen economical issues and create the instability and hardship (Kollias and Tzeremes, 2022). Despite these obstacles, there are opportunities for advancement that can be found in resilience and recovery mechanisms. Stakeholders may reduce the negative effects of conflicts and promote social stability and sustainable development by working toward peace, implementing rehabilitation projects, and implementing sustainable growth strategies. Foreign aid is necessary to support these projects because it helps to create chances for long-term sustainable development in places affected by violence and to promote recovery. By removing the primary causes of conflict and establishing the framework for stable economies that perform well during difficult times, economies can fully use their resources and human capital (Groot et al. 2022).

This study uses quantile regression analysis to investigate the effect of conflicts on economic growth in developing countries from 2007 to 2022. It contains aggregated analysis across developing nations as well as disaggregated analyses that concentrate on low-income, lower-middle-income, and upper-middle-income countries. The study is divided into five sections. Section 2 explores the Literature Review, analysing previous studies on various effects of conflicts on economic growth. Section 3 provides an introduction to the Data and Methods used in the study, including the data sources and the analytical approach used. Section 4 is specifically focused on the interpretation and analysis of the results, providing a thorough examination and explanation of the findings. The final section summarizes the main results and provides recommendations for policy implementation.

2. Literature Review

The relationship between conflict and GDP has received significant attention in the fields of economics. Economic indicators like GDP are significantly impacted by war, whether it originates from internal armed conflicts, societal

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unrest, political violence, or global tensions. Several studies have examined this relationship from various viewpoints, some studies show direct economic impacts, such as infrastructure damage, lost productivity, and higher government spending on security and defence. As a result of these direct impacts, GDP growth rates can fall. Further studies investigate the extensive effects of conflict. Conflicts can generate discrepancy in the businesses environment, resulting in decreased investor satisfaction and reduced investment levels. This may increase the negative impact on economic growth and development.

Table 2: Summary of the Literature Review

References	Country	Time Period	Methodology	Results
Jung (2024)	Multiple states globally	1950-2010	Quantitative analysis	Military conflict slowed down the economic growth.
Petrova et al. (2023)	East Asia countries	1960-2016	Fixed effect OLS regression	Education had positive related with economic growth but armed conflict and population growth showed the negative impact on GDP.
Ndoricimpa and Ndayikeza (2023)	Burundi	1993 – 2003	Synthetic control method VAR model	civil conflict shocks reduce the economic growth but investment, education and government spending impact positively on economic growth.
Edokat et al. (2023)	16 Sub-Saharan African countries	1984-2016	Double least squares (DLS)	Conflict indicators, Corruption, Inequality, Military expenditure and Investment possessed negative impact on GDP but Oil resources and human capital showed positive impact on GDP growth.
Le et al. (2022)	109 Countries	1996-2019	Dynamic fixed effect estimator DFE–ARDL estimation	The study pointed out the negative impact of conflict on economic growth, life expectancy, expected years of schooling, health and education.
Kollias and Tzeremes (2022)	29 Middle East and Central Asia countries	2000-2018	Panel causality tests	Economic downturns led to dissatisfaction and unrest, while civil disturbance had a negative impact on economic performance.
Groot et al. (2022)	190 countries	1970-2014	Fixed effect estimation Pooled OLS	International and civil conflict negative correlated with GDP but nonterritorial conflict showed positive impact on domestic growth. Education attainment, investment and population growth showed positive impact on GDP.
Diakonova et al. (2022)	Russia		Time series mixed-frequency forecasting model Structural vector autoregressive (SVAR) model	The study showed the negative impact of conflict on GDP.
Deop et al. (2022)	Africa	1980-2020	Generalized synthetic control	Political conflict and protests pointed out the negative impact on economic growth but positive impact on investment and price level.
Novta and Pugacheva (2021)	188 countries	1989-2018	Fixed effect	The study examined the negative impact of onset conflict on GDP and GDPPC.
Harry (2021)	Six sub-Saharan Africa countries	1980-2008	ARDL models Generalized moments method (GMM)	Conflicts had negatively related to long-term economic growth.
Varoudakis and Rizvi (2019)	Pakistan	1978 - 2016	Autoregressive distributed lag (ARDL) bound testing	GDP per capita had positively related to the increase in conflict.

			co-integration approach	
Wizarat (2014)	DCs and LDCs	1980-2009	GMM Estimators	Conflict and openness showed positive impact on GDP in developed countries but conflict and openness had negatively effected on less developed countries. GFCF showed positive impact on GDP in DCs and LDCs.
Poierier et al. (2012)	43 countries	1950-2010	The fixed-effect regression Ordinary least squares (OLS)	Civil conflict and other conflicts had negative impact on GDP and education but social spending has positive impact on GDP.

In conclusion, the relationship between conflict and GDP has been examined in different countries. Mostly studies use ARDL and fixed effect estimators. There is limited research on the impact of ongoing conflicts on GDP in developing countries that incorporates both aggregate and disaggregate analysis. This study has used advanced second-generation econometric methodologies, which differed from the majority of first-generation methods used in previous studies. Furthermore, most of the studies have use only two or three indicators to compute the world governance index, there is a scarcity of complete analyses that use all six indicators of the World governance index (WGI).

3. Model Specification, Data and Methodology

The aim of the study is to explore how ongoing conflicts impact economic growth by analyzing their different effects in developing countries. The study consists of both aggregated (developing countries) and disaggregated (low-income countries, lower middle-income countries, upper-middle-income countries) analyses. The functional form of the model is given as:

$$GDP = f(CONF, GFCF, LFG, LNSDI, PG, WGI) \quad (1)$$

The econometric form of the model is given as:

$$GDP_{it} = \lambda_0 + \lambda_1 CONF_{it} + \lambda_2 GFCF_{it} + \lambda_3 LFG_{it} + \lambda_4 LNSDI_{it} + \lambda_5 PG_{it} + \lambda_6 WGI_{it} + \varepsilon_{it} \quad (2)$$

Quantile regression was developed by Koenker and Bassett (1978). Quantile regression is a statistical technique used to estimate the relationship between one or more predictor variables and a response variable at different quantiles of the conditional distribution of the response variable. Unlike ordinary least squares (OLS) regression, which focuses on estimating the conditional mean of the response variable, quantile regression allows for the examination of how the relationship between variables varies across different points of the distribution, providing insights into heterogeneity and tail behavior. It is particularly useful when the relationship between variables is not constant across the distribution. The general quantile conditional function for quantile τ is given as:

$$Q_{GDP_{it}} = \varsigma_0 + \vartheta_{1,\tau} CONF_{i,t} + \vartheta_{2,\tau} GFCF_{i,t} + \vartheta_{3,\tau} LFG_{i,t} + \vartheta_{4,\tau} LNSDI_{i,t} + \vartheta_{5,\tau} PG_{i,t} + \vartheta_{6,\tau} WGI_{i,t} + \varepsilon_{\tau,i,t} \quad (3)$$

where τ shows quantiles such as 10th, 20th, 30th, 40th, 50th, 60th, 70th,80 and 90th $i = 1, \ldots \ldots N$ is for cross-sections and t for the time-period starting from $t = 1, \ldots \ldots T$, GDP_{it} is the dependent variable.

The description of the variables, their unit of measurement and source of data collection is mentioned in Table 1.

Table 2: Variables: Description and Measurement

Abbreviation	Variable	Description	Unit of Measurement	Source
CONF	Ongoing Conflict	It shows the number of ongoing conflicts.	In numbers	QoG
GDPG	GDP growth	It measures the percentage change in gross domestic product (GDP) of a country over a year.	Annual %	WDI
GFCF	Gross Fixed Capital Formation	It represents the proportion of gross domestic product invested in fixed assets.	% of GDP	
LFG	Labor Force Growth	It shows the annual percentage change in number of individuals actively participating in the workforce.	Annual	
LNSDI	Log of Social Development Index	This index is constructed through Principal Component Analysis (PCA) by using two indicators namely Life expectancy at birth, total in years and School enrollment, secondary % gross	Index	

PG	Population Growth	It shows the percentage change in population size over one year.	Annual %
WGI	World Governance Index	This index is constructed through Principle Component Analysis (PCA) by using six indicators namely Government Effectiveness, Control of Corruption, Political Stability and Absence of Violence/Terrorism, Regulatory Quality, Rule of Law and Voice and Accountability.	Index

The study is utilized panel data from 96 developing countries, comprising 19 low-income countries, 41 lower-middle-income countries, and 36 upper-middle-income countries over the period 2007 to 2022, with data for all variables except conflict collected from the World Development Indicators (WDI). The data of on-going conflict is taken from QoG. We excluded the remaining 38 developing countries due to the unavailability of conflict data. We selected data from 2007 onwards because conflict data prior to 2007 was unavailable. Figure 1 shows the construction of SD and WG indexes.

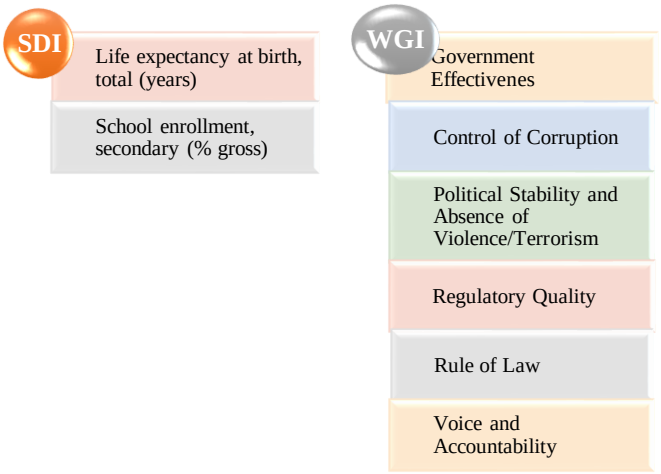

Figure 1: Construction of SDI and WGI

4. Results and Discussion

This section explains the results and discussion.

4.1. Summary Statistics and Correlation Analysis

Table 2 presents the summary statistics of the key variables for each income group and for aggregated developing countries. The mean GDP growth rate tends to increase as the income group rises, with low-income countries having the lowest mean GDP growth and upper-middle-income countries having the highest. The spread of GDP growth rates, as indicated by the standard deviation, also tends to increase with the income group. There are significant variations in GDP growth rates, as shown by the high kurtosis and Jarque-Bera statistics across all income groups.

Table 3: Summary Statistics of the Key Variables

	GDP	CONF	LFG	GFCF	LNSDI	PG	WGI
Low-Income Countries							
Mean	4.447	2.119	13.608	19.363	3.883	2.665	-0.965
Median	4.609	1.875	2.940	20.307	3.909	2.766	-0.871
Maximum	35.706	4.022	1977.036	41.684	4.482	6.336	0.106
Minimum	-36.391	1.149	-99.066	-14.024	3.404	-6.852	-1.983
Std. Dev.	6.608	0.642	137.463	8.783	0.183	1.110	0.467
Skewness	-0.628	0.919	12.201	-0.454	-0.297	-4.256	-0.091
Kurtosis	14.377	3.044	160.970	4.295	2.966	32.895	2.192
Jarque-Bera	1659.783	42.794	323632.100	31.700	4.494	12238.130	8.688
Probability	0.000	0.000	0.000	0.000	0.105	0.000	0.012
Lower Middle Income Countries							
Mean	4.246	1.944	42.698	25.601	4.173	1.796	-0.657
Median	4.600	1.805	1.921	24.621	4.204	1.744	-0.700

Maximum	31.962	3.732	10550.80	81.021	4.668	11.794	0.720
Minimum	-29.100	1.000	-98.920	3.286	3.598	-14.188	-1.763
Std. Dev.	4.623	0.566	567.873	9.689	0.212	1.175	0.413
Skewness	-1.066	0.968	16.826	1.538	-0.342	-2.368	0.270
Kurtosis	12.197	3.180	295.743	8.112	2.185	64.360	2.978
Jarque-Bera	2432.246	103.202	2369762	971.248	30.934	103366.700	7.970
Probability	0.000	0.000	0.000	0.000	0.000	0.000	0.019
Upper-Middle-Income Countries							
Mean	3.170	1.707	23.889	77.061	4.401	0.706	-0.537
Median	3.384	1.604	22.131	1.111	4.425	0.840	-0.532
Maximum	25.000	3.551	115.953	24690.89	4.746	4.665	2.131
Minimum	-16.604	0.999	6.756	-98.211	4.037	-6.187	-3.965
Std. Dev.	4.539	0.532	11.257	1126.217	0.116	0.940	1.175
Skewness	-0.655	0.996	4.231	19.289	-0.828	-0.479	-0.251
Kurtosis	6.151	3.828	28.672	405.938	4.004	7.98	3.412
Jarque-Bera	278.626	111.493	17475.18	3918699	89.825	616.747	10.115
Probability	0.000	0.000	0.000	0.000	0.000	0.000	0.006
Developing Countries							
Mean	3.883	1.890	23.723	49.796	4.201	1.560	-0.673
Median	4.195	1.805	22.385	1.932	4.277	1.532	-0.714
Maximum	35.706	4.022	115.953	24690.89	4.746	11.794	2.131
Minimum	-36.391	0.999	-14.023	-99.065	3.403	-14.188	-3.965
Std. Dev.	5.077	0.590	10.393	785.084	0.257	1.305	0.810
Skewness	-0.731	0.968	2.519	24.089	-0.615	-1.134	0.049
Kurtosis	13.134	3.504	18.622	679.676	2.498	21.494	5.779
Jarque-Bera	6696.517	256.107	17210.68	29396046	112.715	22176.92	494.066
Probability	0.000	0.000	0.000	0.000	0.000	0.000	0.000

As the income group increases, the number of ongoing conflicts generally decreases. Low-income countries have the largest average number of conflicts, while upper-middle-income countries have the lowest. The number of ongoing conflicts varies greatly, particularly in low and middle-income countries, as evidenced by high standard deviations and kurtosis. As the income group increases, the mean labor force growth generally decreases. Low-income countries have the highest mean, while upper-middle-income countries have the lowest. The labor force growth values exhibit significant variation, particularly in low and middle-income countries, as evidenced by high standard deviations and kurtosis. Gross fixed capital formation as a percentage of GDP tends to increase with the income group, with upper-middle-income countries having the highest mean and low-income countries having the lowest. There are significant variations in gross fixed capital formation across income groups, especially in lower-middle-income countries, as indicated by high kurtosis and Jarque-Bera statistics. The mean log of social development index generally increases with the income group. There is notable variation in this variable across income groups, especially in lower-middle-income countries, as indicated by high kurtosis and Jarque-Bera statistics. Population growth tends to decrease with income group, with higher-income countries having lower mean population growth rates. There is considerable variability in population growth across income groups, as indicated by high kurtosis and Jarque-Bera statistics. The World Governance Index follow a similar pattern to the Log of Social Development Index. Higher-income groups tend to have higher mean values of WGI. There is variability in WGI across income groups, especially in lower-middle-income countries.

4.2. Correlation Analysis

Table 3 represents the correlation analysis of the key variables. The result shows that the variable ongoing conflict shows a weak negative correlation with GDP in low-income countries, lower middle-income countries and developing countries but a weak positive correlation in upper middle-income countries. The variable WGI points out the weak positive correlation with GDP in low-income countries but a weak negative correlation in lower-middle-income, upper-middle-income and developing countries.

Table 4: Correlation Analysis of Key Variables

Low Income Countries							
	GDP	**CONF**	**LFG**	**GFCF**	**LNSDI**	**PG**	**WGI**
GDP	1						
CONF	-0.288	1					
LFG	0.067	0.022	1				
GFCF	-0.057	-0.032	0.068	1			
LNSDI	-0.001	-0.111	-0.043	-0.246	1		

PG	0.216	-0.249	0.025	0.321	-0.246	1	
WGI	0.131	-0.527	0.038	0.450	-0.084	0.263	1

Low Middle Income Countries

	GDP	**CONF**	**LFG**	**GFCF**	**LNSDI**	**PG**	**WGI**
GDP	1						
CONF	-0.117	1					
LFG	0.041	0.014	1				
GFCF	0.113	-0.156	0.002	1			
LNSDI	-0.129	0.046	-0.019	0.100	1		
PG	0.210	-0.076	0.002	0.067	-0.345	1	
WGI	-0.019	-0.342	0.052	0.157	0.283	-0.068	1

Upper Middle Income Countries

	GDP	**CONF**	**LFG**	**GFCF**	**LNSDI**	**PG**	**WGI**
GDP	1						
CONF	0.066	1					
LFG	0.062	0.005	1				
GFCF	0.152	-0.008	0.037	1			
LNSDI	-0.120	0.039	-0.017	-0.017	1		
PG	0.085	0.090	0.008	0.081	-0.397	1	
WGI	-0.110	-0.602	-0.019	-0.261	0.156	-0.186	1

Developing Countries

	GDP	**CONF**	**LFG**	**GFCF**	**LNSDI**	**PG**	**WGI**
GDP	1						
CONF	-0.077	1					
LFG	0.041	-0.001	1				
GFCF	0.079	-0.095	0.028	1			
LNSDI	-0.131	-0.185	0.012	0.100	1		
PG	0.200	0.097	-0.012	0.033	-0.594	1	
WGI	-0.054	-0.478	-0.001	-0.046	0.218	-0.161	1

The variable GFCF displays weak negative correlation with GDP in low income countries but positive weak correlation in all other countries. The variable LNSDI shows a negative and weak correlation with GDP in all countries. In contrast, the variables LFG and PG show a weak positive correlation with GDP in all countries.

4.3. Unit Root Analysis

Table 5 provides the unit root test. To check the stationarity and non-stationarity of the data in all income groups i-e low low-income countries, lower-middle-income countries, upper-middle-income countries and developing countries the second-generation cross-section dependence based on the LM Pesaran Shin panel unit root test has been used. The findings show the mixed order of integration in all income groups.

Table 5: Unit Root Test

Second Generation Panel Unit Root Test

Low Income Countries

Cross-Section-Dependence based Im-Pesaran-Shin (CSDIPS) Unit Root Test

Variables	**Without Trend**			**With Trend**		
	Lags	**Zt Statistics**	**P-Value**	**Lags**	**Zt Statistics**	**P-Value**
GDP	0	-5.045	0.000	0	-5.061	0.000
CONF	0	-0.927	0.177	0	-0.303	0.381
LFG	0	-8.567	0.000	0	-6.953	0.000
GFCF	0	-1.309	0.095	0	-3.250	0.001
LNSDI	0	-1.934	0.027	0	-0.599	0.274

PG	1	2.391	0.992	1	-4.874	0.000
WGI	1	-1.784	0.037	1	-1.696	0.045
Lower Middle Income Countries						
GDP	0	-5.981	0.000	0	-4.394	0.000
CONF	1	0.344	0.635	1	-2.811	0.002
LFG	0	-10.386	0.000	0	-9.875	0.000
GFCF	0	1.820	0.966	0	1.675	0.953
LNSDI	0	-3.443	0.000	0	-3.806	0.000
PG	0	4.803	0.000	0	7.012	0.000
WGI	1	-4.725	0.000	1	-3.817	0.000
Upper Middle-Income Countries						
GDP	0	-6.622	0.000	0	-6.576	0.000
CONF	1	2.507	0.005	1	2.996	0.003
LFG	0	-13.920	0.000	0	-11.771	0.000
GFCF	0	-3.230	0.001	0	1.761	0.020
LNSDI	1	-1.417	0.038	1	-1.875	0.030
PG	0	2.583	0.995	0	4.887	1.000
WGI	0	-3.347	0.000	0	-1.479	0.070
Developing Countries						
GDP	0	-10.021	0.000	0	-8.071	0.000
CONF	0	1.465	0.929	0	-1.585	0.056
LFG	0	-17.675	0.000	0	-15.300	0.000
GFCF	0	-1.877	0.030	0	-0.931	0.176
LNSDI	0	-3.594	0.000	0	-5.055	0.000
PG	1	-0.700	0.242	1	2.731	0.977
WGI	1	-4.672	0.000	1	-2.987	0.001

4.4. Quantile Regression Analysis

Table 6 shows the results of quantile regression analysis for low-income countries, lower-middle-income countries, upper-middle-income countries and developing countries with GDP as a dependent variable. The analysis is conducted for various quantiles from the 10th to the 90th. The independent variables are ongoing conflict, gross fixed capital formation, labor force growth, log of social development index, population growth and governance indicators.

Table 6: Results of Quantile Regression

Dependent Variables (GDPG)					
	Low-Income Countries				
	Quantile	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	0.100	-6.035459	10.41734	-0.579367	0.5628
	0.200	7.357467	6.794212	1.082902	0.2797
	0.300	9.154985	5.968322	1.533930	0.1261
	0.400	6.529452	5.003538	1.304967	0.1929
	0.500	8.659489	5.013930	1.727086	0.0852
	0.600	10.27754	4.435637	2.317039	0.0212
	0.700	10.92713	4.043671	2.702279	0.0073
	0.800	11.40965	6.388984	1.785832	0.0751
	0.900	21.33643	28.19432	0.756763	0.4498
CONF	0.100	-2.645933	1.037080	-2.551329	0.0112
	0.200	-1.772395	0.770311	-2.300882	0.0221
	0.300	-1.579640	0.626194	-2.522604	0.0122
	0.400	-0.836594	0.503361	-1.662015	0.0976
	0.500	-1.096342	0.468783	-2.338700	0.0200
	0.600	-1.028563	0.442446	-2.324721	0.0208
	0.700	-1.119481	0.393631	-2.843985	0.0048
	0.800	-1.237537	0.473681	-2.612597	0.0094

	0.900	-0.824871	1.739828	-0.474111	0.6358
	0.100	0.056525	0.082368	0.686254	0.4931
	0.200	0.066592	0.050594	1.316204	0.1891
	0.300	0.049846	0.049745	1.002032	0.3171
	0.400	0.068584	0.042556	1.611602	0.1081
GFC	0.500	0.075355	0.039195	1.922572	0.0555
	0.600	0.074681	0.038254	1.952228	0.0519
	0.700	0.087305	0.036850	2.369172	0.0185
	0.800	0.057431	0.043341	1.325092	0.1862
	0.900	0.001747	0.060545	0.028858	0.9770
	0.100	0.001225	0.001418	0.863427	0.3886
	0.200	0.000440	0.001543	0.285001	0.7758
	0.300	0.004558	0.000808	5.640423	0.0000
	0.400	0.003866	0.000809	4.781505	0.0000
LFG	0.500	0.003543	0.000825	4.293911	0.0000
	0.600	0.003201	0.000773	4.142279	0.0000
	0.700	0.002910	0.000668	4.358894	0.0000
	0.800	0.002586	0.000592	4.368475	0.0000
	0.900	0.001204	0.001086	1.109485	0.2681
	0.100	1.157366	2.278115	0.508037	0.6118
	0.200	-0.990063	1.551221	-0.638247	0.5238
	0.300	-1.438508	1.333721	-1.078567	0.2817
	0.400	-0.788823	1.140207	-0.691824	0.4896
LNSDI	0.500	-1.035685	1.156266	-0.895715	0.3711
	0.600	-1.128364	1.057891	-1.066617	0.2870
	0.700	-1.006164	1.038689	-0.968686	0.3335
	0.800	-0.302043	1.689304	-0.178797	0.8582
	0.900	-1.167654	6.751790	-0.172940	0.8628
	0.100	2.706494	0.252770	10.70736	0.0000
	0.200	0.768349	0.172666	4.449921	0.0000
	0.300	0.912443	0.172009	5.304629	0.0000
	0.400	0.714329	0.230992	3.092438	0.0022
PG	0.500	0.580069	0.264137	2.196089	0.0289
	0.600	0.237426	0.467141	0.508254	0.6117
	0.700	-0.016648	0.429244	-0.038784	0.9691
	0.800	-0.527121	0.647019	-0.814692	0.4159
	0.900	-2.679487	1.488451	-1.800184	0.0728
	0.100	1.676115	1.560341	1.074198	0.2836
	0.200	1.276537	0.900415	1.417720	0.1573
	0.300	0.987266	0.810073	1.218736	0.2239
	0.400	1.396935	0.772153	1.809142	0.0714
WGI	0.500	1.013738	0.750276	1.351154	0.1777
	0.600	0.770113	0.689276	1.117277	0.2648
	0.700	0.652991	0.583590	1.118922	0.2641
	0.800	0.625528	0.608460	1.028051	0.3048
	0.900	-2.158795	1.168265	-1.847864	0.0656
	Lower-Middle-Income Countries				
	0.100	18.64326	11.19438	1.665412	0.0963
	0.200	13.83092	4.387372	3.152439	0.0017
	0.300	9.099344	3.236510	2.811468	0.0051
	0.400	9.682792	3.060239	3.164064	0.0016
C	0.500	8.389704	3.506318	2.392739	0.0170
	0.600	10.51698	4.197782	2.505366	0.0125
	0.700	6.980691	4.540395	1.537464	0.1247
	0.800	9.596430	4.621464	2.076491	0.0382
	0.900	22.14208	7.514988	2.946389	0.0033
	0.100	-1.206538	1.176635	-1.025414	0.3056
	0.200	-0.540733	0.488023	-1.108007	0.2683
	0.300	-0.397212	0.336485	-1.180475	0.2382
CONF	0.400	-0.432829	0.288749	-1.498982	0.1344
	0.500	-0.216903	0.275101	-0.788451	0.4307
	0.600	-0.246424	0.307505	-0.801365	0.4232

	0.700	0.052407	0.365947	0.143209	0.8862
	0.800	0.323226	0.300738	1.074775	0.2829
	0.900	0.025670	0.375003	0.068453	0.9454
	0.100	0.030217	0.053576	0.564005	0.5729
	0.200	0.050177	0.022349	2.245142	0.0251
	0.300	0.051201	0.015772	3.246270	0.0012
	0.400	0.047731	0.016647	2.867271	0.0043
GFC	0.500	0.064531	0.019261	3.350403	0.0009
	0.600	0.074961	0.020961	3.576145	0.0004
	0.700	0.068848	0.025416	2.708852	0.0069
	0.800	0.071927	0.026649	2.699051	0.0071
	0.900	0.066251	0.030703	2.157773	0.0313
	0.100	0.000719	8.73E-05	8.232523	0.0000
	0.200	0.000495	7.03E-05	7.042556	0.0000
	0.300	0.000396	7.67E-05	5.158978	0.0000
	0.400	0.000323	8.51E-05	3.801446	0.0002
LFG	0.500	0.000263	8.10E-05	3.246227	0.0012
	0.600	0.000218	7.82E-05	2.790462	0.0054
	0.700	0.000122	6.86E-05	1.775255	0.0763
	0.800	5.32E-05	5.88E-05	0.903600	0.3665
	0.900	-7.28E-05	5.12E-05	-1.422198	0.1554
	0.100	-4.211574	2.651675	-1.588269	0.1127
	0.200	-2.928623	1.029601	-2.844426	0.0046
	0.300	-1.637517	0.750645	-2.181479	0.0295
	0.400	-1.557980	0.701112	-2.222156	0.0266
LNSDI	0.500	-1.282104	0.788054	-1.626925	0.1042
	0.600	-1.717267	0.922693	-1.861148	0.0632
	0.700	-0.799700	0.969985	-0.824445	0.4100
	0.800	-1.386693	1.010197	-1.372696	0.1703
	0.900	-3.841841	1.608215	-2.388886	0.0172
	0.100	0.492943	0.296857	1.660540	0.0973
	0.200	0.155867	0.111269	1.400803	0.1618
	0.300	0.021517	0.110641	0.194474	0.8459
	0.400	-0.018238	0.111017	-0.164282	0.8696
PG	0.500	-0.051773	0.120328	-0.430268	0.6671
	0.600	0.021212	0.232234	0.091340	0.9273
	0.700	0.050270	0.365448	0.137557	0.8906
	0.800	0.052374	0.370205	0.141472	0.8875
	0.900	-0.078733	0.483537	-0.162826	0.8707
	0.100	2.016614	1.591817	1.266863	0.2057
	0.200	0.289685	0.683382	0.423900	0.6718
	0.300	-0.408700	0.510512	-0.800569	0.4237
	0.400	-0.512454	0.469486	-1.091522	0.2754
WGI	0.500	-0.751797	0.481384	-1.561741	0.1188
	0.600	-0.912237	0.478830	-1.905137	0.0572
	0.700	-1.012485	0.402323	-2.516597	0.0121
	0.800	-1.092606	0.344217	-3.174181	0.0016
	0.900	-0.963321	0.349482	-2.756428	0.0060
	Upper-Middle-Income Countries				
	0.100	18.81665	16.22752	1.159552	0.2467
	0.200	10.82842	17.64748	0.613596	0.5397
	0.300	27.32187	6.958454	3.926429	0.0001
	0.400	22.89619	6.025154	3.800100	0.0002
C	0.500	18.37036	5.894363	3.116598	0.0019
	0.600	16.39278	5.372386	3.051303	0.0024
	0.700	18.34716	5.714302	3.210744	0.0014
	0.800	22.00710	6.912126	3.183840	0.0015
	0.900	31.18878	10.46423	2.980513	0.0030
	0.100	0.066314	0.859432	0.077161	0.9385
	0.200	0.602064	0.536931	1.121307	0.2626
CONF	0.300	0.471731	0.442652	1.065692	0.2870
	0.400	0.303601	0.418736	0.725042	0.4687

	0.500	0.178472	0.452375	0.394522	0.6933
	0.600	0.280631	0.461436	0.608169	0.5433
	0.700	0.510475	0.494912	1.031447	0.3028
	0.800	1.033082	0.446782	2.312271	0.0211
	0.900	1.488222	1.176348	1.265120	0.2063
	0.100	0.031418	0.022759	1.380461	0.1680
	0.200	0.063012	0.027702	2.274658	0.0233
	0.300	0.073146	0.014575	5.018569	0.0000
	0.400	0.066779	0.012882	5.183723	0.0000
GFC	0.500	0.089074	0.039867	2.234315	0.0259
	0.600	0.126633	0.022262	5.688314	0.0000
	0.700	0.115592	0.022090	5.232871	0.0000
	0.800	0.092604	0.024461	3.785737	0.0002
	0.900	0.038813	0.032595	1.190769	0.2342
	0.100	0.000441	3.56E-05	12.38650	0.0000
	0.200	0.000325	4.07E-05	8.001431	0.0000
	0.300	0.000265	4.22E-05	6.271377	0.0000
	0.400	0.000239	4.55E-05	5.257364	0.0000
LFG	0.500	0.000198	5.49E-05	3.598766	0.0003
	0.600	0.000142	4.66E-05	3.044742	0.0024
	0.700	0.000118	4.06E-05	2.914652	0.0037
	0.800	8.74E-05	3.46E-05	2.527534	0.0118
	0.900	2.89E-05	3.36E-05	0.860455	0.3899
	0.100	5.023736	3.472089	1.446891	0.1485
	0.200	2.761107	3.978978	0.693924	0.4880
	0.300	6.234723	1.629543	3.826055	0.0001
	0.400	5.008944	1.402206	3.572188	0.0004
LNSDI	0.500	3.899792	1.322398	2.949030	0.0033
	0.600	3.545636	1.236047	2.868529	0.0043
	0.700	3.876634	1.322793	2.930642	0.0035
	0.800	4.574500	1.579877	2.895478	0.0039
	0.900	6.182676	2.457015	2.516336	0.0121
	0.100	0.448549	0.703851	0.637278	0.5242
	0.200	-0.168669	0.468365	-0.360122	0.7189
	0.300	0.038892	0.263151	0.147794	0.8826
	0.400	0.134977	0.228093	0.591764	0.5542
PG	0.500	0.184010	0.206355	0.891715	0.3729
	0.600	0.132557	0.175141	0.756859	0.4494
	0.700	0.113494	0.148563	0.763950	0.4452
	0.800	0.071685	0.123807	0.579002	0.5628
	0.900	0.027863	0.358065	0.077816	0.9380
	0.100	-0.249701	0.599923	-0.416222	0.6774
	0.200	0.464003	0.515986	0.899255	0.3689
	0.300	0.542981	0.223698	2.427290	0.0155
	0.400	0.371843	0.188143	1.976386	0.0486
WGI	0.500	0.312245	0.215083	1.451743	0.1471
	0.600	0.130670	0.171322	0.762715	0.4460
	0.700	0.073989	0.169497	0.436520	0.6626
	0.800	0.007197	0.185224	0.038857	0.9690
	0.900	-0.393863	0.276654	-1.423665	0.1551
Developing Countries					
	0.100	12.29309	8.309602	1.479384	0.1392
	0.200	8.668861	3.226190	2.687027	0.0073
	0.300	9.096511	3.692847	2.463278	0.0139
	0.400	9.726481	2.716730	3.580217	0.0004
C	0.500	11.08346	2.338598	4.739363	0.0000
	0.600	10.12492	2.581276	3.922448	0.0001
	0.700	12.26924	2.620132	4.682679	0.0000
	0.800	13.46675	2.948105	4.567935	0.0000
	0.900	24.13806	4.534210	5.323541	0.0000
CONF	0.100	-1.921707	0.727747	-2.640627	0.0084
	0.200	-0.826381	0.404735	-2.041785	0.0413

	0.300	-0.657758	0.248651	-2.645302	0.0082
	0.400	-0.411590	0.216624	-1.900019	0.0576
	0.500	-0.454417	0.188186	-2.414721	0.0159
	0.600	-0.235193	0.193498	-1.215478	0.2244
	0.700	-0.123455	0.247988	-0.497827	0.6187
	0.800	0.178693	0.223586	0.799214	0.4243
	0.900	-0.024186	0.328123	-0.073709	0.9413
	0.100	0.039463	0.039778	0.992083	0.3213
	0.200	0.061382	0.021442	2.862735	0.0043
	0.300	0.062094	0.009234	6.724253	0.0000
	0.400	0.063015	0.010494	6.004738	0.0000
GFC	0.500	0.083713	0.015729	5.322016	0.0000
	0.600	0.090005	0.017166	5.243180	0.0000
	0.700	0.091830	0.015929	5.764900	0.0000
	0.800	0.070045	0.017499	4.002832	0.0001
	0.900	0.037281	0.024209	1.539983	0.1238
	0.100	0.000463	4.34E-05	10.66758	0.0000
	0.200	0.000338	3.44E-05	9.825829	0.0000
	0.300	0.000276	3.30E-05	8.360901	0.0000
	0.400	0.000241	3.55E-05	6.790817	0.0000
LFG	0.500	0.000202	3.42E-05	5.891701	0.0000
	0.600	0.000160	3.14E-05	5.117256	0.0000
	0.700	0.000118	2.66E-05	4.426361	0.0000
	0.800	8.32E-05	2.47E-05	3.375557	0.0008
	0.900	2.86E-05	2.80E-05	1.021760	0.3071
	0.100	-2.949784	1.683193	-1.752493	0.0799
	0.200	-1.835535	0.686062	-2.675464	0.0075
	0.300	-1.658543	0.837861	-1.979496	0.0479
	0.400	-1.737251	0.617448	-2.813601	0.0050
LNSDI	0.500	-1.973230	0.509358	-3.873952	0.0001
	0.600	-1.732412	0.556613	-3.112416	0.0019
	0.700	-2.096643	0.595680	-3.519748	0.0004
	0.800	-2.150767	0.647808	-3.320067	0.0009
	0.900	-3.980187	0.974766	-4.083222	0.0000
	0.100	0.738625	0.236986	3.116739	0.0019
	0.200	0.540510	0.169574	3.187467	0.0015
	0.300	0.332505	0.220761	1.506172	0.1322
	0.400	0.268439	0.172613	1.555147	0.1201
PG	0.500	0.237191	0.136199	1.741497	0.0818
	0.600	0.235666	0.131356	1.794105	0.0730
	0.700	0.092828	0.126930	0.731332	0.4647
	0.800	-0.004346	0.185305	-0.023455	0.9813
	0.900	-0.327385	0.125623	-2.606090	0.0092
	0.100	-0.358752	0.688399	-0.521139	0.6023
	0.200	0.361914	0.325069	1.113345	0.2657
	0.300	0.281376	0.181037	1.554247	0.1203
	0.400	0.180263	0.145570	1.238327	0.2158
WGI	0.500	0.075289	0.139433	0.539964	0.5893
	0.600	-0.014661	0.136017	-0.107790	0.9142
	0.700	-0.256151	0.127700	-2.005888	0.0450
	0.800	-0.423730	0.134994	-3.138880	0.0017
	0.900	-0.772014	0.150904	-5.115928	0.0000

The first independent variable is an ongoing conflict that is negatively related to GDP in all income groups. There are several reasons behind this negative relationship. As conflict increases, disturbance is created in economic sectors like agriculture, manufacturing and services due to damaged infrastructure, insecurity and displacement of workers. This disturbance reduces the productivity and output across different sectors and will decrease the overall contribution of these sectors to GDP (Nganou and Kebede, 2012; Novta and Pugacheva, 2021; Harry, 2021; Varoudakis and Rizvi, 2019). Ongoing conflicts negatively impact GDP growth through various interrelated processes when conflicts cause disruptions in important economic sectors such as agriculture, industry, and services, decreasing production and output. This disruption often leads to supply chain disruptions, decreased investments, and increased production expenses, worsening economic activity (Chauvin and Rohner, 2009;

Vothknecht and Sumarto, 2011). As conflicts increase in economy, it creates a state of uncertainty and volatility, which discourages foreign direct investment (FDI) and the establishment of local capital, hence diminishing opportunities for economic growth (Harry, 2021). Another reason is that as the conflict exceeds, it often leads the forced migration of people, which puts a burden on social services and infrastructure, hence limiting the development of human resources and productivity. The interaction of these factors creates a continuous process that leads to a decline in economic activity, a decrease in investments, and restricted development of human capital. Consequently, countries affected by conflicts experience a continuing decrease in their GDP growth rates over a period of time (Brück and De Groot, 2013; Petrova et al. 2023; Ndoricimpa and Ndayikeza 2023; Edokat et al. 2023).

Gross fixed capital formation, the second determinant, exhibits a positive relationship with GDP across all income levels. When there is an increase in gross fixed capital formation (GFCF), both the government and industries allocate more resources towards investing in fixed assets, including machinery, buildings, infrastructure, and equipment. Investing more in the economy leads to an increase in both production capacity and efficiency. Due to technological and infrastructural improvements, industries are able to increase their production of goods while reducing prices. Consequently, in order to meet the increasing demand for goods and services, these sectors are also employing a greater number of workers. The high level of economic activity, production, and employment has a positive effect on GDP growth (Stupnikova and Sukhadolets, 2019; Lach, 2010). According to Endogenous Growth Theory, as Gross Fixed Capital Formation (GFCF) rises, a series of mechanisms that promote GDP growth are activated. At first, greater levels of Gross Fixed Capital Formation (GFCF) show a rise in investments in physical infrastructure, machinery, and equipment. These investments improve the ability to produce and increase efficiency in different sectors of the economy. Consequently, there is an increase in the overall efficiency and production, that contribute to the expansion of the economy (Aghion et al. 1998). Furthermore, another reason is that when there is higher GFCF in economy, it promotes technical developments and innovation by encouraging businesses to spend on research and development programs to improve their manufacturing processes and products. These innovations promote economic growth by increasing competitiveness and attracting new investment. Moreover, when GFCF level is higher, it indicates economic confidence, which attracts both domestic and foreign investors, resulting in increased capital inflows and employment growth. The investments have a multiplier effect, which means they increase economic activity and lead to a long-term rise in GDP growth rates (Omodero et al. 2019; Kumar and Ahmed, 2014).

The third independent variable is labor force growth (LFG), which positively impact GDP. When labor force increase, it results in the entry of more individuals into the workforce, which in turn leads to higher levels of employment and income. Therefore, this enhances consumer confidence and purchasing capacity, resulting in a rise in the consumption of goods and services. Moreover, an expanding workforce stimulates investment and growth in business as companies struggle to satisfy increasing demand and take advantage of newly developing market opportunities. The process of increased consumption, investment, and output leads to a positive expansion in the economy, as determined by GDP (Young, 2018; Rahman, 2018; Soava, 2020). As the labor force grows, it adds to the stock of human capital and knowledge in an economy. When more workers join the workforce, it results in a larger group of individuals who are acquiring skills, education, and experience. This, in turn, leads to a boost in productivity and innovation. This improved human capital and promotes technological advancements, efficiency gains, and higher levels of economic output. In addition, another reason is that when there is an expanding labor force, economy has the potential to attract investment in infrastructure, research and development, and technological advancements, which can contribute to the overall growth of the economy (Sun, 2020; Hussain et al. 2019).

The fourth independent variable is the social development index that shows mixed results in all quantiles. In some quantiles, the social development index is positively related to GDP because when the Social Development Index (SDI) rises, the workforce becomes healthier and more educated. As a result, there is a rise in productivity, a decrease in unemployment, and an increase in overall human capital. These factors all have a positive effect on economic output and growth. In addition, the enhanced availability of education and healthcare results in a highly skilled labor force, which promotes the development of new ideas, enterprises, and a wider range of economic activities. Moreover, another reason is that when social development level is high, it diminishes social disparities and improve social unity, resulting in more substantial political stability and increased investor trust. These variables combined establish a favorable environment for long-term economic growth, pointing out the vital role of social development in promoting total economic growth (Sihombing et al. 2023; Muckley, 2020). According to Human Capital Theory, investment in various aspects of social development, such as education and healthcare, improves human capital. This improved human capital results in a more skilled, healthier, and more productive workforce, which contributes to higher levels of productivity within the economy. High production levels, in turn, promote higher economic output and economic growth (Reder, 1967). Modernization theory suggests that as a country develops socially or invests in social development, including infrastructure improvements, human capital development, and social stability, it experiences technological advancement and creates a more educated and healthier workforce in a stable society. A stable society leads to higher levels of productivity, efficiency, and innovation, which are drivers of economic growth and contribute to an increase in GDP (Roxborough, 1988).

In some quantiles SDI is negatively related to GDP because when the Social Development Index (SDI) rises, it can have a complex and indirect relationship with GDP, sometimes resulting in lower development. This contradictory circumstance arises as a result of several different situations. Initially, when society progresses, people have higher expectations for their quality of life, which drives up wage demands and manufacturing prices. This impacts GDP growth and economic performance by lowering business profit and efficiency (Rigal, 2022). Secondly, higher levels of social development may result in more government spending on social programs and infrastructure development. While these investments are vital for long-term economic stability and societal well-being, they can temporarily impact public finances and lead to budget deficits, affecting GDP growth negatively in the short term (Rehman et al. 2019). Third reason is that as social development occurs, it results in demographic shifts such as decreased birth rates and a growing population. This demographic transition may lead to changes in consumption habits, labor market dynamics, and healthcare expenditures, which impact overall economic activity and GDP growth rates (Tektas, 2016).

Fifth independent variable is population growth which also shows mixed impact on GDP in different income groups. Population growth has positive impact on all quantiles except in higher quantiles. The reason behind positive impact is that as population grows, the labor force also increases. Effective utilization of the labor force also enhances the production level, which impacts positively on economic output. Secondly, when population growth ehances, the consumer's demand for goods and services also increases, boosting economic activity and causing economic growth (Bala, 2020; Morwat, 2021; Peter and Bakari, 2018). According to the Solow-Swan Growth Model, when population grows, it creates more workers. When the labor force increases, it creates an opportunity for firms to invest in human and physical capital. Through human capital development and technological advancement, the output level expands in an economy that promotes economic growth (Dimand and Spencer, 2009).

As population growth (PG) increases, the labor force expands, which means more individuals are available to work, resulting in higher levels of output and economic activity. By increasing the number of employees, firms can enhance their operational capacity, fulfill the rising demand, and encourage innovation, so promoting overall economic growth. Another reason is that when population expands, it might generate opportunities for investment in infrastructure, healthcare, education, and various other sectors, hence enhancing economic development (Morwat, 2021).

The population has negative impact on GDP in some quantiles. According to the Malthusian theory, as population growth exceeds the rate at which resources are available, it results in decreasing returns and scarcity of resources, which eventually affects the growth of the economy. As the population expands, there is greater demand for land, food, and other resources, leading to a decline in agricultural efficiency, a rise in costs, and a decrease in living standards. Due to reduced production capacities, higher production costs, and difficulties in meeting the demands of an expanding population, this resource pressure can slow down economic improvement. In addition, the rapid increase in population can cause environmental deterioration, which worsens the limitations on resources and restricts the achievement of sustainable economic development. Thus, in accordance with the Malthusian principle, excessive population expansion negatively impact GDP growth by causing a shortage of resources and reducing the returns on economic activities (Hollander, 1997).

Countries with strong governance indicators, such as effective government institutions, low corruption levels, regulatory transparency, the rule of law, political stability, and high voice and accountability scores, attract more investors. As more foreign and domestic workers invest, the country's output level increases, which positively impacts GDP (Azimi, 2022; Nguyen, 2018). According to institutional theory, as world governance index strengthen in a country, the country's environment becomes stable for business. This business environment attracts foreign and domestic investors. Due to investment, economic activities like infrastructure development and manufacturing rise generate employment levels and increase production. The high level of employment and production leads to higher income for individuals. High-income levels also boost consumer spending, positively impacting the demand for goods and services. Higher demand encourages producers to increase their output for goods and services, which improves the nation's overall output and promotes economic growth (Amenta and Ramsey, 2010). According to Political Economy Theory, strong governance creates political stability and effectiveness, which attracts more investors and reduces investment risk. More investors create more employment and increase production, which impacts individual income and consumer spending. The demand for goods and services increases, creating production expansion and causing economic growth (Zubair and Khan, 2014). Figure 2-5 shows the stability analysis for low income countries, lower middle income countries, upper middle income countries and developing countries respectively. These figures show that model in within the bands it shows the stability of the model in all income groups.

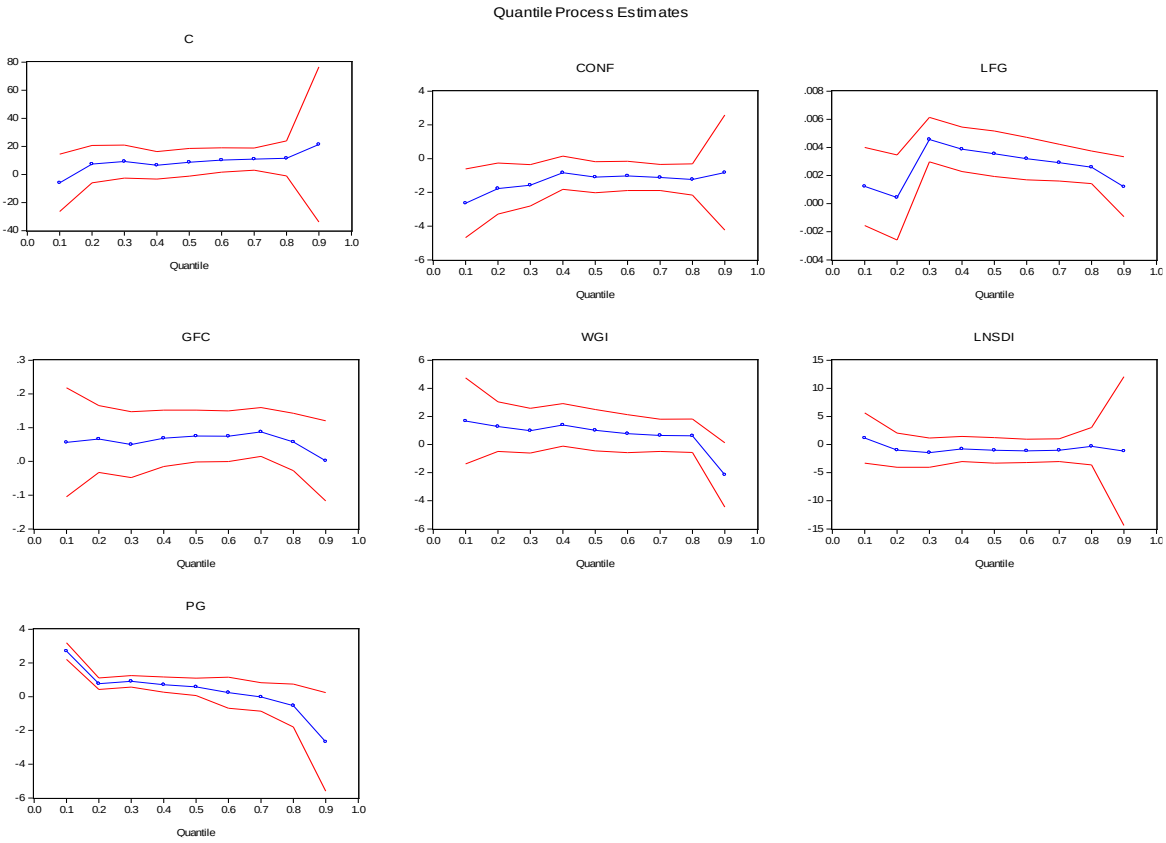

Figure 2: Quantile Coefficients of Low-Income Countries

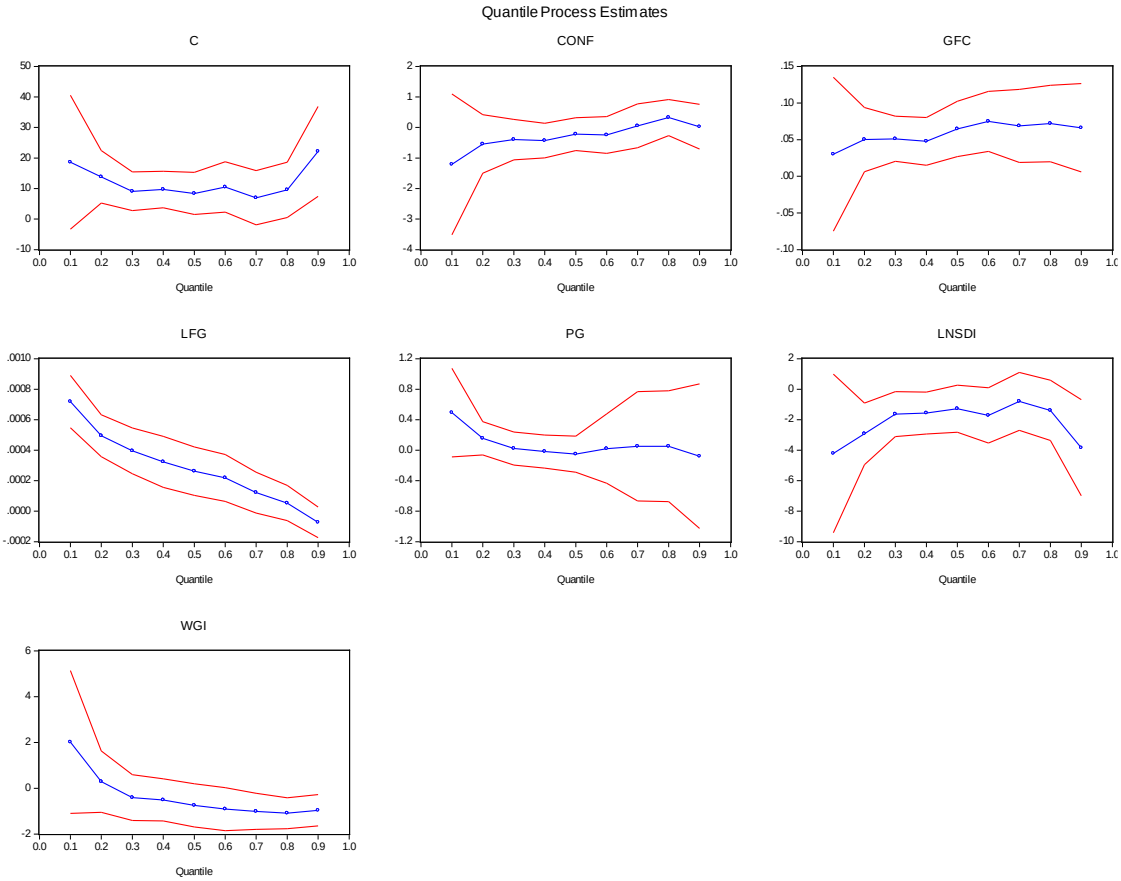

Figure 3: Quantile Coefficients of Lower Middle-Income Countries

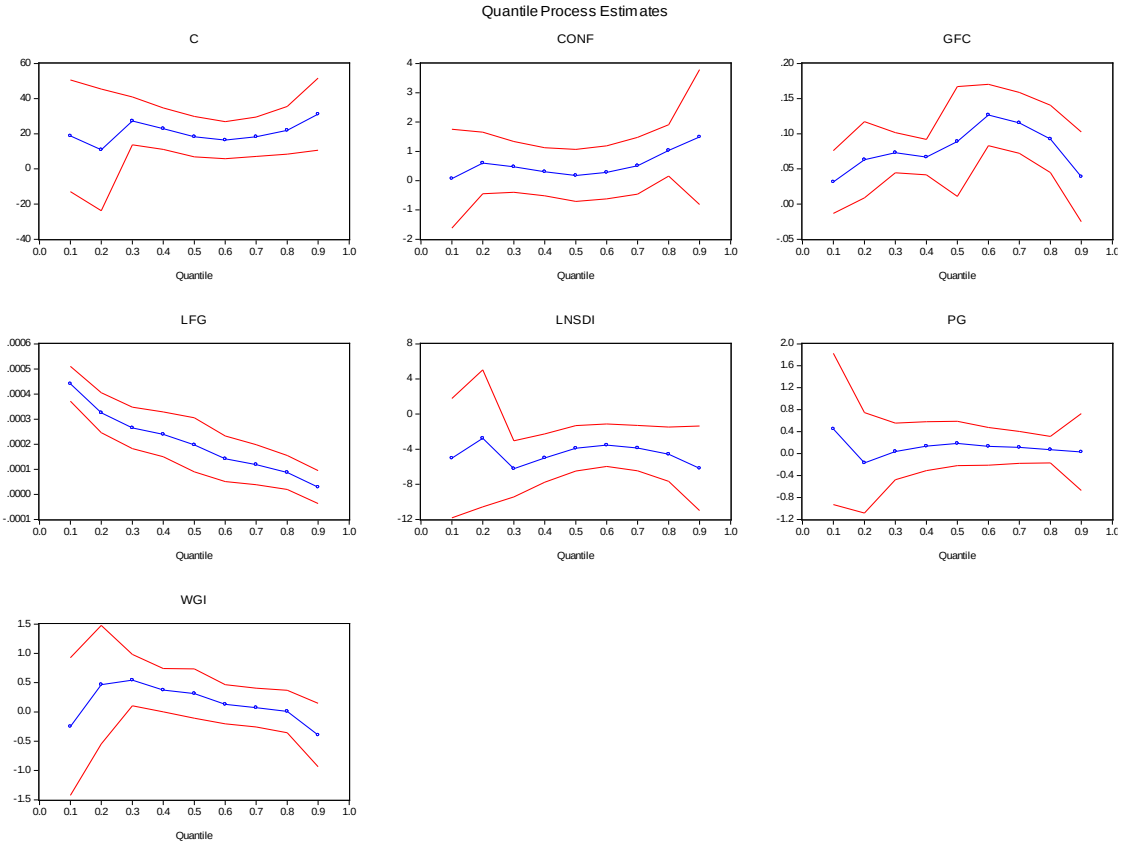

Figure 4: Quantile Coefficients of Upper Middle-Income Countries

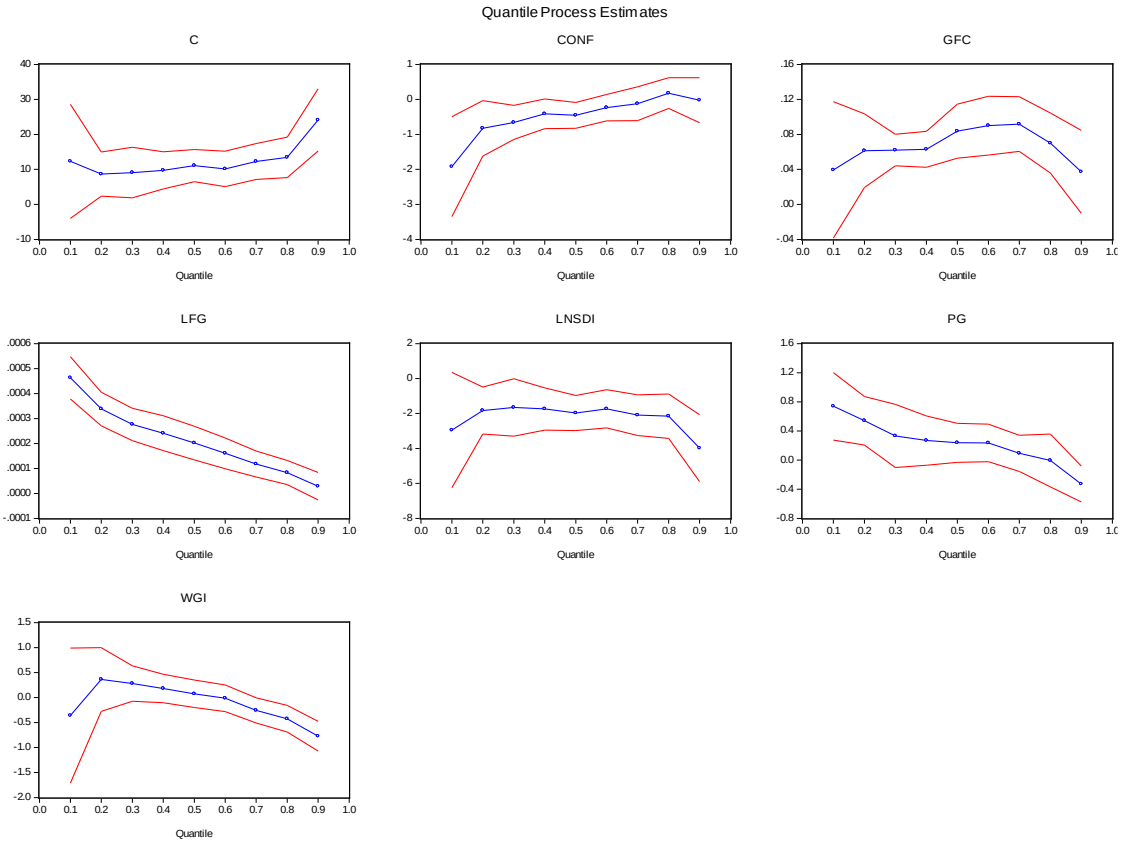

Figure 5: Quantile Coefficients of Developing Countries

4.5. Slope Equality Test

Table 7: Slope Equality Test Results

	Specification: GDP C CONF GFCF LFG LNSDI PG WGI Estimated equation quantile tau = 0.5 Number of test quantiles: 10			
	Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Low-Income Countries	Wald Test	15.829	12	0.099
Lower Middle Income Countries		29.14359	12	0.003
Upper Middle-Income Countries		41.170	12	0.000
Developing Countries		73.530	12	0.000

According to the Wald test, the Chi-square test is statistically significant in all income groups which means the slope equality is different across quantile levels.

Table 8: Symmetric Quantiles Test

	Specification: GDP C CONF GFCF LFG LNSDI PG WGI Estimated equation quantile tau = 0.5 Number of test quantiles: 10			
	Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Low Income Countries	Wald Test	10.823	7	0.146
Lower Middle Income Countries		2.391	7	0.935
Upper Middle Income Countries		11.289	7	0.126
Developing Countries		6.048	7	0.534

According to Wald test, the Chi square statistic value of symmetric quantiles is not statistically significant in all income groups. It means data does not provide support for distribution being symmetric around quantiles.

5. Conclusions and Policy Implications

Conflict is a serious issue in developing countries, threatening economic and social growth. This study investigates the impact of ongoing conflicts on GDP in developing countries. The study examines 96 countries from 2007 to 2022, including 19 low-income countries, 41 lower-middle-income countries, and 36 upper-middle-income countries. Quantile regression is a statistical technique used to estimate the relationship between one or more predictor variables and a response variable at different quantiles of the conditional distribution of the response variable. The study uses stability analysis. The findings indicate that ongoing conflict has a negative impact on GDP in all income groups due to the disturbance in manufacturing sectors and the damaged of infrastructure. Gross fixed capital formation, labor force growth and governance indicators have a positive impact on GDP growth. But population growth and social development index possess mixed results in all quantiles

- The Government and Policymakers should reduce ongoing conflict that will increase economic growth in developing countries.
- Policymakers should promote capital investment in infrastructure, technology and productive assets that lead to increased productivity and overall economic expansion.
- Policymakers should implement policies that encourage higher labor force participation and develop labor force growth strategies that enhance economic growth in developing countries.
- The government should focus on the improvement of social development indicators like education and healthcare. This will enhance the productive work and the quality of life that will ultimately increase economic growth.
- Policymakers should focus on strengthening governance institutions, improving the rule of law, reducing corruption, and enhancing the overall quality of governance. These efforts can create a more conducive environment for economic growth and development.

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