

Institutions, Growth and Peace Nexus

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Article Info

Volume 82

Page Number: 12284 -12291

Publication Issue:

January-February 2020

Article History

Article Received: 18 May 2019

Revised: 14 July 2019

Accepted: 22 December 2019

Publication: 23 February 2020

Abstract

This world is divided into different names as religion, economic, political and geographic. This division is still emerging on the map of the world. However, Peace is an innate capability of human being. Since the creation of Man, peace is essential constituent for blissful life. Peace is precondition for any kind of economic activity. In the preceding 70 years, the growth of per capita GDP remains three fold greater in remarkably peace-loving nations as associated to the those where the peace is at low levels. Positive and progressive Peace is known as approaches, institutions, and arrangements which generate and endure peaceful world (GPI, 2018). This study covers the time period of 2007 to 2017. Panel Ordinary Least Square (OLS) Two Stage Least Square (2SLS) techniques are applied. It significantly depicts that institutions and growth has robust level of performance in the presence of peace.

Keywords: Global Peace Index, Institutions, Negative Peace, Positive Peace.

1. INTRODUCTION

Classical liberalism is the terminology used to entitle the philosophy sponsoring private property, an unrestricted market economy, the rule of law, statutory assurances of liberty of religion and of the press, and intercontinental peace based on free trade” (American Conservatism: An Encyclopedia , 2006). Peace is an irrefutable fact for the world of differences, controversies and disputes.

Peoples are presently facing a number of the paramount contests in its antiquity: economic, ecological, societal and financial. Nevertheless such boisterous variation offers an exclusive chance for us to reassess and elaborate the matters which are vital for our existence, utmost distinguished amid them is peace.

The phrase “peace” is renowned as either negative peace or positive peace. Negative peace states to the absenteeism of ferocity or conflict. The nonappearance of war and conflict is also an

important condition for creating positive peace. Positive peace states to evolve the excellence of life in a country by encouraging economic growth, a more impartial society, and ecological balance, thus enlightening life in a universal way. However, Martin Luther analyzed the concept of peace in a unique way. In a letter to King Jr, when he was arrested in Birmingham Jail, he elaborated that negative peace is the absenteeism of tension. In his views positive peace is the occurrence of justice (Bayar1 and Gavriletea, 2017). Peace and development is as old as human being.

Peace is fundamental constituent to development and growth of an economy. Apprehensions over peace are restrained to marginal and fundamental methodologies to development in the 1960s, 1970s and 1980s, but more lately converted central to equally the conceptualization and the exercise of growth and development.

There is an obvious connection between economic development and peace. If we look at the incidence of

violent conflict in the world, we see that of the more than 300 wars that have occurred in the world since 1945, virtually 99% have been fought in the lesser developed countries (Yogi, 1975). The global economic influence of violence is increased by two per cent throughout 2017. The economic effect of violence and ferocity to the global economy was \$14.76 trillion in 2017 which is equivalent to 12.4 per cent of global GDP. The price of armed conflict amounted to \$1.02 trillion in 2017, which has enlarged by 106 per cent over the last 11 years (The Economic Value of Peace, 2018).

Greatest valued things in lifespan have very slight to do with international affairs. But there is one necessary condition for everything good: peace (Keynes, 1922). Keynes discussed that impediments to trade as currency ailment and inflation central to poverty, particularly as trade sustain the population; that hardship leads to domestic sickness and radicalism; which lead to international aggression, possibly war. Besides this, institutions have robust role in peace and prosperity of a country. Political institutions' role is substantial in promoting peace among countries especially in developing economies.

Ludovic (2003) elaborated that medium type of democracy is healthier to preserve the peace and sociopolitical steadiness leads in future economic growth. Well-functioning institutions are essential for peace building in a country. Institutions performing in a fair way and transparently, ultimately the pace of peace accelerates in the economy and this process leads to economic growth. Institution building and peace building are inter-related. Without institution building, the concept of peace building remains incomplete (Paris, 2004). As the capacity of institutions accelerates, state will be capable to provide peace to their citizens. Countries having the feeblest institutional legality and governance are the most helpless to ferocity and uncertainty and the tiniest capable to reply to interior and outward strains. (World Bank, 2011).

The first part of the paper is introduction, literature review is elaborated in the second part, third segment interpret the theories and related literature. Fourth part elucidates the methodology and fifth and sixth segment elaborate the empirical finding and

conclusion and policy implications.

• Objectives of the Study

- To assess the role of Institutions in Peace building
- To evaluate the role of Growth in Peace
- Hypotheses of the Study
- Institutions have no significant role in peace
- Growth Has no Major role in Peace

2. LITERATURE REVIEW

There are strong evidences that Peace and economic growth has positive relationship. Both go side by side in the development of a country. Bayar and Gavriletea (2017) analyzed the relationship among growth and peace in 18 MENA countries. It is found that peace has significant role in economic growth.

Bilgel and Karahasan (2016) evaluated the economic enactment of the Turk economy by holding an artificial control technique for the time period of 1988–2008. It was found that the Turk economy gained about a 0.62% per year greater economic development. Besides this, egalitarianism, institutional excellence, governmental steadiness, trade, and economic development are chief factors regarding peaceful atmosphere (Ocal and Yildirim 2010; Kodila-Tedika 2012). Boulding (1977) analyzed Galtung explanations of terms negative and positive peace and introduced a new concept—stable peace defined as “a situation in which the probability of war is so small that it does not really enter into the calculations of any of the people involved. Deyshappriya (2015) also examined the impact of peace—proxied by the Global Peace Index (GPI) of the Institute for Economics and Peace (IEP)—on economic growth over the period 2008–2012 with panel regression, and concluded that peace affected the economic growth assertively.

Huang and Throsby (2011) found elements of peace among 100 countries for the time span 2007–2008. It is elaborated that economic features has a noteworthy impact to formation of peaceful atmosphere.

Bayar(2016)and Uddin andMasih(2016) found that political stability has robust role in peace.

Nagle and Clancy (2011) found that there is a positive association among peace building and economic growth. Economics has significant role in clash resolution as it distracts consideration from problems like cause, moan, chronological pros and cons, concentrating upon the issue of economic chances (Portland Trust, 2007).

However, it is also found that economic growth has no significant role in peace building. Parks et al (2010) although national economies of Asia Pacific areas have grown speedily for decades, subnational battles have sustained and become extra strong and inescapable. Easterly and Rebelo (1993), Barro Lee (1994), Alesina et al (1996), Sala-i-Martin (1997), Asteriou and Simon Price (2001) used political instability as proxy for peace and found negative relationship between growth and peace

3. THEORETICAL CONSIDERATION

Peace is not considered as a noteworthy factor of growth in number of growth theories presented earlier like Solow 1956; Swan 1956; Romer 1986; Aghion and Howitt 1998. Theoretical philosophy about the junctures of peace and growth debatably touched its pinnacle in the 1980s (Galtung, 1989 and Sørensen, 1985).

Peace thinking process has the succeeding three belongings:

1. This is merely hardly innovative, commonly this has seemed before, in the philosophy of previous generations, even centuries ago. 2. It is generally ambiguous, jumbled and contrary.

3. This is commonly planned additionally to allow peace to elevate sure means (Galtung, 1967).

There are four types of peace.

Peace with Allah almighty

Peace with corporal world

Peace by way of one self

Peace by way of others (Taheri and Dehghan, 2014).

There are six steps in the development of the peace exploration :1 . Peace in place of absenteeism of combat 2. Peace through Equilibrium of Armies in the International Scheme 3. Peace like Negative and Positive 4. Feminist Peace: No Operational Ferocity

on Macro or micro Levels regarding the Family 5. Complete Gaia Peace--adding Peace with the Environment 6. Universal Inner and Outer Peace

There are 35 theories of Peace. A few are as under

The IGO World

The Super State World

The World State

The Super INGO World

The Mixed World (Galtung, J. (1967)

4. DATA SOURCES AND METHODOLOGY

This study empirically analyzed the impact of institutions and growth peace in high income and low income countries. There are 37 and 21 high income countries and low income countries of the world respectively. The selection of the countries is based World Bank income wise countries list. The time span of the current study is from 2007 to 2017. The core variable and control variables data is collected from Global Peace Index, World Development Indicator (WDI) and Freedom House. The score value of peace index lies between 1 to 5. The lower value shows higher peace and vice versa. The data regarding political institutions is taken from Polity iv project. The values are between -10 to 10. The higher value shows democracy and lower value dictatorship. For economic institutions, data of property rights are used taken from Freedom house and the values are between 0 to 10. The higher values show more secured property rights and vice versa. The data of all other control variables are taken from WDI. The data is in dollar form and the values are real.

4.1 Methodology

4.1.1 Pooled Ordinary Least Square (OLS)

It is a simple approach to apply. It is common constant method known as Pooled OLS. In this method, a common constant for all cross sections is applied. This method denotes that there are no dissimilarities among appraised cross sections. However, in panel data heterogeneity and autocorrelation exists.

4.1.2 Two Stage Least Square (2SLS)

Two SLS technique was advanced by Theil (1953a and b). Basman (1957) and Sargan (1958) added a lot to the 2SLS. The plain hint behind the 2SLS method was to substitute the random endogenous regressor with one which is non-random and subsequently autonomous of the error term (Asteriou, 2006). 2SLS estimation was carried out by single equation method. The estimation of single equation was unaffected by the other equation of the system in 2SLS (Creel, 2006).

4.2 Models of the Study

The following are the models of the study.

4.2.1 High Income Countries

4.2.1.1 Political Institutions, Growth and Peace

$$\text{LogPECS}_{it} = \alpha_0 + \alpha_1 \text{LogGDPP}_{it} + \alpha_2 \text{LogLAB}_{it} + \alpha_3 \text{LogPTY}_{it} \\ (\text{LogFDI}_{it} = \text{LogPOP}_{it}, \text{LogTRD}_{it})$$

(Eq 1)

4.2.1.2 Economic Institutions, Growth and Peace

$$\text{LogPECS}_{it} = \beta_0 + \beta_1 \text{LogGDPP}_{it} + \beta_2 \text{LogLAB}_{it} + \beta_3 \text{LogEFI}_{it} \\ (\text{LogPOP}_{it} = \text{LogIMP}_{it}, \text{LogGEX}_{it})$$

(Eq 2)

4.2.2 Low Income Countries

4.2.2.1 Political Institutions, Growth and Peace

$$\text{PECS}_{it} = \gamma_0 + \gamma_1 \text{LogGDPC}_{it} + \gamma_2 \text{LogLAB}_{it} + \gamma_3 \text{PTY}_{it} + \gamma_4 \text{LogPER}_{it} \\ (\text{LogTOP}_{it} = \text{LogSER}_{it}, \text{LogFDI}_{it})$$

(Eq 3)

4.2.2.2 Economic Institutions, Growth and Peace

$$\text{PECS}_{it} = \lambda_0 + \lambda_1 \text{LogGDPC}_{it} + \lambda_2 \text{LogLBR}_{it} + \lambda_3 \text{EFI}_{it} \\ (\text{LogTREV}_{it} = \text{LogEXP}_{it}, \text{LogPER}_{it})$$

(Eq 4)

Where

PECS = Peace GDPP = GDP Per Capita

LAB = Labor EFI = Economic Institutions

PTY = Political Institutions FDI=Foreign Direct Investment

POP = Population TRD = Trade Openness

IMP = Imports GEX = Government Consumption Expenditures

GDPC = GDP PER = Primary School Enrolment

TOP = Trade Openness SER= Secondary School Enrolment

TREV = Total Revenue EXP = Exports

5. EMPIRICAL RESULTS

The results of the above mentioned four models are presented in this section of the study. It is elaborated that how institutions and growth affect peace. As the performance of institutions and growth accelerate peace will also increase in the economies of both high income countries and low income countries. For empirical findings State software is used. Both Pooled OLS and 2SLS techniques are applied in the study. The time span of the study is 2007 to 2017.

5.1 High Income Countries

5.1.1 Model 1: Political Institutions, Growth and Peace

The relationship between political institutions, growth and peace is evaluated through Pooled OLS and 2SLS. The results are as under

Table5. 1: Political Institutions, Growth and Peace
(Dep = Peace)

Variables	OLS	2SLS
LogFDI	0.014** (-0.1733)	0.004* (-0.078)
logGDPP	0.000* (-0.1161)	0.543 (-0.0228)
logLab	0.105 (-0.2352)	0.001* -0.0687
logPTY	0.000* (-1.0497)	0.000* (-1.1208)

Cons	0	0	logGDPP	(-0.1281)	(-0.1419)
	-4.3677	-3.9607	logLab	0.047**	0.006*
Hetero	0	Under Identification		(-0.2087)	-0.3738
Auto	0.95	Weak Identification	logEFI	0.000*	0.000*
Ramsey	0	Over Identification		(-0.9516)	(-0.8823)
Endogeniety	0	0	Cons	0	0
				(-0.1896)	-3.4786

The results of both techniques show that political institutions and growth has significant impact on peace. The variable LogPTY is significant and has negative coefficient sign. It shows that with the increase in the performance of Political institutions peace will also increase (As the values of peace depict that lower the values higher the peace). The growth variable is LogGDPP which is insignificant however its coefficient sign is negative. It can be said with the increase of GDPP, peace also accelerate. The control variables also elaborated that peace will increase with increasing performance of LogFDI and LogLAB. The diagnostic tests relating to 2SLS interpret that all the values are upto the required standards of the technique. Hetero and endogeniety exist in the models.

5.1.2 Model 2: Economic Institutions, Growth and Peace

The association among economic institutions, growth and peace is estimated through Pooled OLS and 2SLS. The results are given in the following table.

Table5.2 : Economic Institutions, Growth and Peace
(Dep = Peace)

Variables	OLS	2SLS
LogPOP	0.001*	0.009*
	-0.4166	(-0.3434)
	0.039**	0.000*

Hetero	0	Under Identification	0
Ramsey	0	Weak Identification	206.81
Auto	0.68	Over Identification	0.147

The results of both approaches elaborate that economic institutions and growth has noteworthy effect on peace. The variable LogEFI is significant and has negative coefficient sign. It indicates that with the escalation in the performance of Economic institutions peace will also increase (As the values of peace represent that lower the values higher the peace). The growth variable LogGDPP is significant and has negative coefficient sign. It can be said with the increase of GDPP, peace also accelerate. The control variables also elaborated that peace will increase with increasing performance of LogPOP and LogLAB. The diagnostic tests relating to 2SLS interpret that all the values are up to the required standards of the technique. Hetero and endogeniety exist in the models.

5.2 Low Income Countries

5.2.1 Model 3: Political Institutions, Growth and Peace

The connection among political institutions, growth and peace is appraised through Pooled OLS and 2SLS. The results are given in the following table.

Table5.3: Political Institutions, Growth and Peace
(Dep = Peace)

Variables	OLS	2SLS
LogTOP	0.232	0.000*
	-0.1338	(-0.5059)
logGDPC	0.052***	0.078***
	(-0.1418)	(-0.1237)
logLab	0.017**	0.129
	-0.1667	-0.1066
PTY	0.001*	0.103
	(-0.0253)	(-0.0128)
LogPER	0.118	0.086***
	(-0.1955)	(-0.2045)
Cons	0.001	0
	-3.6586	-6.4699
Hetero	0	Under Identification
Ramsey	0	Weak Identification
Auto	0.73	Over Identification
		0
		Endogeneity

The findings of both methods elaborate that political institutions and growth has remarkable effect on peace. The variable PTY is insignificant; however it has negative coefficient sign. It indicates that with the escalation in the performance of political institutions peace will also increase (As the values of peace represent that lower the values higher the peace). The growth variable LogGDPC is significant and has negative coefficient sign. It can be said with the

increase of GDPP, peace also accelerate. The variables logTOP and LogPER are significant and keeps correct negative coefficient sign. However, the variable LogLab is insignificant but has correct coefficient sign. The diagnostic tests relating to 2SLS interpret that all the values are up to the required standards of the technique. Hetero and endogeneity exist in the models

5.2.2 Model 4: Economic Institutions, Growth and Peace

The connotation amid economic institutions, growth and peace is assessed through Pooled OLS and 2SLS. The results are given in the following table

Table5.4:Economic Institutions, Growth and Peace
(Dep = Peace)

Variables	OLS	2SLS
LogTREV	0.000*	0.011*
	(-0.3056)	(-0.7180)
logGDPC	0.000*	0.000*
	(-0.2253)	(-0.2532)
logLab	0.008*	0.008*
	-0.1732	-0.1696
logEFI	0.000*	0.000*
	-0.2247	(-0.2433)
Cons	0	0
	-7.3101	-8.6101
Hetero	0	Under Identification
Ramsey	0	Weak Identification
Auto	0.85	Over Identification
		0.3914
		Endogeneity
		0

The outcomes of both methods elaborate that economic institutions and economic growth has remarkable effect on peace. The variable LogEFI is

significant and has negative coefficient sign. It indicates that with the escalation in the performance of Economic institutions peace will also increase (As the values of peace represent that lower the values higher the peace). The growth variable LogGDPC is significant and has negative coefficient sign. It can be said with the increase of GDPP, peace also accelerate. The control variables also elaborated that peace will increase with increasing performance of LogTREV and LogLAB. The analytical tests relating to 2SLS interpret that all the values are up to the required standards of the technique. Hetero and endogeneity exist in the models.

5.3 Panel Granger Causality Tests Findings

The presence of affirmative association among peace and GDP is essential, yet to endorse that peace and GDP both cause each other, this study applied Granger Causality technique.

Dumitrescu & Hurlin (2012) technique is applied to decide the path of causality.

High Income Countries

Ho: loggdp does not Granger-cause logpecs

W-bar	4.03	P. Values
Z-bar	13.02	0
Z-bar tilde	5.71	0

Ho: logpecs does not Granger-cause loggdp

W-bar	1.25	P. Values
Z-bar	1.06	0.2881
Z-bar tilde	0.33	0.7396

Low Income Countries

Ho: loggdp does not Granger-cause logpecs

W-bar	1.06	P. Values
Z-bar	6.84	0
Z-bar tilde	2.8	0

Ho: logpecs does not Granger-cause loggdp

W-bar	1.06	P. Values
Z-bar	0.19	0.8456

Z-bar tilde 0.33 0.578

The P. values in high and low income countries depicts that

Loggdp cause peace.

6. CONCLUSION AND POLICY COMMENDATIONS

The study analyzes the relationship among Institution, Growth and Peace. . There are four models in the study, two for high income countries and two for low income countries.

The time span of this research paper is from 2007-2017. Pooled OLS and 2SLS econometric techniques are used to analyze this relationship. The role of institutions is noteworthy regarding peace especially in case of economic institutions. Peace is also accelerating besides the increase in GDP. The control variables as FDI, Labor, trade and primary school enrollment have significant role in peace. The pace of peace escalates with the increase in the performance of these control variables.

6.1 Policy Commendations

The following are the policy commendations of the study.

Both the governments of high and low income countries, attempt to focus more on the Institutions.

Economic and Political institutions are robust for maintaining peace. Therefore, these countries should back these institutions especially the low income countries.

The low income countries pay more attention to raise the GDP, therefore peace will boost.

Policies to increase trade should be adopted. The low income countries concentrate to attract more FDI.

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