

ECONOMIC DECLINE AND FRAGILITY OF THE NIGERIAN STATE, 2005 – 2022: EMPIRICAL INVESTIGATION*

Epiphania Uche EZIOCHA & Mary Chinyere ATTAH

eziochaepiphania@gmail .com & Social Sciences

Akanu Ibiam Federal Polytechnic, Unwana, Ebonyi State.

Abstract

This study examined the nexus between economic decline indicators for Nigeria and the fragility of the nation. The extent to which economic decline index of a country affects a nation is measured by its Fragile State Index points. In this study, Nigeria's fragile state index formed the dependent variable. The explanatory variables are some of the economic decline indicators: human flight rate, human right and rule of law index, and rate of security threats in the country. Time series data for the period 2005 - 2022 extracted from Fund for Peace International were used in the study. The data was subjected to Augmented Dickey Fuller Unit Root test to ascertain their stationarity so as to avoid making erroneous inferences from a spurious regression results. The test results showed a mixed order of integration at level and first differencing. Consequently, Autoregressive Distributive Lag (ARDL) Bounds test of co-integration was estimated to establish the existence of long run relationship between the explained and explanatory variables. The result showed a highly significant association between the variables as revealed by the ARDL Bounds Test F-Statistic value (5.938383) which is above the 5 percent critical value bounds. The short and long run coefficients established significant relationships between human right and rule of law index of the country and fragile State index of Nigeria. Given the results, the study recommends among others that human rights and rule of law be accorded their proper place for the development of the Nigerian State.

Key Words: Economic Decline Index, Fragile State Index, Human Flight Index, Human Rights and Rule of Law Index, Security Threat Index

Introduction

Fragile nations have features that impair economic and social performance. They are at the risk of being collapsed. According to the World Bank (2009), out of the world's billion people, about 26 percent live in fragile states and about one third of the people in such states survive on less than US\$1.25 per day, half of the world's infant mortality occur in fragile nations, they

Paper was first presented at the 1st National Conference of the Department of Social Sciences, School of General and Basic Studies, Akanu Ibiam Federal Polytechnic, Unwana at the New Lecture Theatre B, 5th – 7th September, 2023.

record high rate of maternal mortality and the gap with other developing countries widens. Furthering the report, it states that fragile states will constitute a larger share of low income countries in the future indicating that there is a nexus between state fragility and low income status. When a fragile state gets to its brink of collapse, it becomes a failed state. States go fragile with constant decrease in economic activities that reduce national output. The decline in economic activities and state vulnerability are captured by indices and ranks(Fund for Peace2022). A zero (0) economic decline index point reveal a stronger or stable economy while a high (10) index point establishes an unstable (fragile) or state nearing collapse (Fund for Peace, 2023).Like it, a country can be in fragile alert zone (90 – 99 index points), high fragile alert zone (100 – 110 index points) or very high alert zone (111-120 index points). According to Fund for Peace (2023), in spite the fact that the global average of fragility is 65.51 index points, the score for Nigeria in 2005 was 97.2 index points positioning the country in alert zone. By 2010, Nigeria was already in high alert zone with fragile index point of 100.2. These are within democratic dispensation. This ugly trend continued till 2016 when it assumed its highest score of 103.5 index point. Nigeria only marginally escaped from the high alert zone to alert zone from 2018 when it scored 99 points and 97.2 in 2022. During those years, the indicators of economic decline in Nigeria assumed higher index scores than the global average. For instance, human flight score in 2005 was 8.7 and above global average of 5.21. The high score is a sign of more deplorable economic condition than is globally acceptable. It increased to 8.8 in 2010, attained its highest point in 2016 when it was 9.1 and insignificantly decreased to 8.4 in 2022. The scenario is same for security threats indicator the index score of which has exceeded the global average (5.09) in Nigeria from 9.0 points in 2005 to 9.3 in 2010. Security threats in the country assumed its highest score in 2015 (9.9) and only reduced to 8.9 in 2022. The result for human rights and rule of law index did not differ from others. Exceeding global average of 5.37 index point, that of Nigeria was 6.7 in 2005 and maintained an upward thrust to 8.8 in 2010. It assumed its highest point in 2016 (9.1) after which it slowly reduced to 8.4 in 2022 all within the democratic period. The rise in human rights and rule of law index is an indication of increase in human rights violation and abuse of rule of law in Nigeria. What effects do these portend for Nigeria?

Statement of the Problem

Human capital flight or brain drain reduces a country's capacity to compete effectively in global market as well as decrease economic growth rate of the emigrating country. The same applies to human rights violation. If the rights to adequate housing, health, education, water, sanitation and employment are denied citizenry, the performance of the people including economic activities will decrease. According to Blume and Voigt (2007), abuse of human rights and rule of law is likely to discourage foreign investors leading to low investment, economic growth rate and per capita income. Same is the result in countries that experience security threats. It hinders economic activities and foreign investment. Consequently, where these three indicators of economic decline index are on the increase, the effect is increase in such country's fragility index.

Objectives of the Study

The main objective of this study is to establish the existence of long run association between economic decline index of Nigeria and the country's fragility index scores. Specific objectives are:



- 1. To unveil the relationship between human flight and the fragile index of Nigeria.
- 2. To ascertain how human rights and rule of law increased index scores have impacted on the fragility index of Nigeria.
- 3. To unravel the nexus between security threats and state fragile index of Nigeria.

Research Questions

The questions raised in this study are:

- 1. To what extent has human flight from Nigeria affected the fragility index of the country?
- 2. How has the rate of human rights and rule of law abuse in Nigeria affected the fragile index of this country?
- 3. What is the association between security threats in Nigeria and the country's fragile index points?

Research Hypotheses

HO₁: There is no long run relationship between human flight and fragile index points of Nigeria.

HO₂: The existence of long run association between human rights and rule of law and Nigeria's fragile index points cannot be established.

HO₃:Rate of security threats in Nigeria does not have long run link with the country's fragile index points.

Significance of the Study

The results of the study will enhance effective policy making as it will offer policy makers of the country the needed insight into the reasons for the high fragility index of the country and how to reduce same. It will form a guide to countries on how to reduce high fragile state index. It is a strategy for sustainable development.

Scope of the Study

The content scope of the study is the nexus between economic decline index and fragile state index of Nigeria. It is for the period 2005 - 2022. This period falls within the democratic period which promised to develop Nigeria and reduce the rate of dependence on other countries.

Literature Review

Fragile states are those at the risk of being collapsed. World Bank (2023) deems a state fragile if it is eligible for assistance (grant) from International Development Association (IDA) and receives a governance score of less than 3.2. Fragile states lack the capacity to discharge their normal functions and propel development. Countries with high fragile index point will be unable to control violence (authority), provide basic public services (capacity) and obtain the consent of the populace to the country's claim to rule (legitimacy). Such a nation cannot keep the country stable. There are those factors that are often associated with fragile states index. Popular among them is economic decline index.

According to World Bank (2023), economic decline index refers to the indicators of general wane in economic activities in a country. It reveals a process of continuous deterioration of a nation as a whole. Among the indicators are human flight (brain drain), human rights and rule of

law, and security threats. Human flight is the emigration of skilled personnel from home country (Baptiste, 2014). Human right on the other hand is defined as norms set to protect people from severe political, legal and social abuses (James, 2019). Rule of Law is a fundamental principle of democratic societies that holds that all persons and institutions are subject to the law and that the law must be applied impartially to all the citizens without exception (Dicey, 2023). Security threats for Martin (2021) can be applied to any circumstance, capability, entity, action or event that could cause harm to lives and property. Consequently, it is the responsibility of those in governance to preserve human rights, maintain rule of law and stay the tide of human capital flight from the home country in an attempt to fasten the belt of development without relying much on external assistance.

The theory of Good Governance according the World Bank (1992) is a comparison of ineffective economies or political entities with viable economies. It stipulates that government has the responsibility to meet the needs of the people because good governance is an important complement to sound economic policies and development.

Irwin-Hunt (2023) study in which ten countries mostly impacted by human flight (brain drain) in 2022 ascertained that five out of the ten countries that were hit highest by human flight were equally negatively affected by development prospects. In recognition of this, the study further emphasized that human flight is bound to lead to gap in human capital and capacity in the emigrating country as well as make it more difficult to manage an economy, spur innovation, and govern effectively. These findings are in tandem with that of Seyoum and Camargo (2020) in the study of State Fragility and Foreign Development Investment in which economic decline indicators generally were viewed as important path linking state fragility and foreign development investment stating that economic decline index of a country is a guide to foreign investors. Contrary to the already stated observations, Muhammad and Ghazala (2020) in examining the impacts of human capital flight on economic growth in Pakistan using ARDL approach and time series data for the period 1975 – 2017, unveiled international migration as increasing economic growth and human development through personal remittances inflow but negatively impacts poverty in Pakistan.

On security threats and state fragility index, Akamavi, Ibrahim and Swaray (2022) unraveled a significant negative impact of security threats on tourist receipts of a country. The effect is reduction in national income and increased dependence on external debt. Similar result was the case in the study by Jelilov, Ozden and Briggs (2018) on the impact of insecurity on investment in Nigeria in which terrorism index and oil prices were regressed on foreign direct investment inflows to the country. Among the findings is that the magnitude of insecurity in Nigeria negatively affects commercial activities and discourages foreign direct investment. It could be concluded from this result that high security threats index score will exacerbate the country's fragility index. Terrorism do not impact the daily lives of the people only but with time, the injuries, loss of lives, property and psychological disbalance lead to significant negative economic effects (Gonzalo & Utz, 2023). In how human rights violations impact on poverty and income distribution in one hundred and twenty five countries using time series data for the period 1990 2014, Apergis and Cooray (2019) unraveled enhanced income equality and decrease in poverty rate as a result of stronger human rights records.



There is scarcity of empirical study in the nexus between economic decline index and fragility of Nigeria. However, most of the literatures reviewed have indirectly alluded to the relationship between indicators of economic decline and other indicators of development. This study therefore is a novel research work. It is geared toward ascertaining how in particular, some of the economic decline indicators: human capital flight (brain drain), human rights and rule of law, and security threats have affected the fragile condition of Nigeria.

Research Methodology

The study made use of exploratory research design to unravel the nexus between economic decline index of Nigeria and its fragile state index. Data for the variables were sourced from Fund for Peace (2023). The study is modeled after that of Jelilov, Ozden and Briggs (2018) on the impact of insecurity on investment in Nigeria. The variation between that study and this research work is that while the former regressed oil prices and terrorism index on investment, this study expanded its horizon by the use of three explanatory variables (human flight index score, human rights and rule of law index, and security threats index) which are some of the features of economic decline indicators and Nigeria's fragility index formed the treated variable. To eliminate spurious regression results emanating from non-stationarity of time series data collected, the data were subjected to Augmented Dickey Fuller unit root test. The test revealed a mixed order of integration of the variables at level and first differencing thereby necessitating the need for Autoregressive Distributed Lag Bounds test to establish the existence of long run relationship between the explained and explanatory variables being studied. The relationship is specified as:

 $fsi = a_0 + a_1hfi + a_2hrrli + a_3sti + u....$ (1)

Where:

Fsi = Fragile State Index points

Hfi = human flight rate

Hrrli = human right and rule of Law index

Sti = security threat index a_0 = intercept (constant) of the model

 a_1 , a_2 , and a_3 = unknown coefficients of the model to be estimated

u = Stochastic error term.

It is a priori expected that the association between the independent variables and fragile index point of Nigeria be positive.

Data Presentation, Analysis and Interpretation of Results

The study used time series data for the period 2005 -2022 sourced from the Fund for Peace (2023)in the analyses. To avoid erroneous inference, the time series data were subjected to stationarity (Unit Root) test. Below are the results of the Augmented Dickey Fuller Unit Root Test:

Table 1:Augmented Dickey Fuller Unit Root Test on D(FSI)

Null Hypothesis: D(FSI) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.906288	0.0103
Test critical values:	1% level	-3.920350	
	5% level	-3.065585	
	10% level	-2.673459	

^{*}MacKinnon (1996) one-sided p-values.

Source: Computation is with Eviews software version 9

Information in table 1 reveals that at first differencing and constant, the time series for fragile state index was stationary thereby negating the null hypothesis of no stationarity and accepting the alternative.

Table 2: Augmented Dickey Fuller Unit Root Test on HFI

Null Hypothesis: HFI has a unit root

Exogenous: None

Lag Length: 0 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.418318	0.0191
Test critical values:	1% level	-2.708094	
	5% level	-1.962813	
	10% level	-1.606129	



*MacKinnon (1996) one-sided p-values.

Source: Eviews software version 9 computation

From table 2, Human Flight index is shown to be stationary a level and none. Thus, the study rejects the non-stationarity of the null hypothesis accepting the alternative that indicates that the data is stationary and usable.

Table 3: Augmented Dickey Fuller Unit Root Test on D(HRRLI)

Null Hypothesis: D(HRRLI) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 1 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.696954	0.0106
Test critical values:	1% level	-4.728363	
	5% level	-3.759743	
_	10% level	-3.324976	

^{*}MacKinnon (1996) one-sided p-values.

Source: Eviews software version 9

For human rights and Rule of Law, the unit root test as indicated in the table reveals that at first differencing and constant, Linear Trend, the time series as used is stationary thereby rejecting the null hypothesis in favour of the alternative.

Table 3:Augmented Dickey Fuller Unit Root Test on D(STI)

Null Hypothesis: D(STI) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.417393	0.0261
Test critical values:	1% level	-3.920350	
	5% level	-3.065585	
	10% level	-2.673459	

*MacKinnon (1996) one-sided p-values.

Source: Eviews software version 9 computation

Data for security threats index is stationary at first differencing and constant. The study thus rejects none stationarity of the null hypothesis in favour of the alternative.

From the tables above therefore it can be deduced that there is mixed integration of the variables at level and first differencing (1(0) and 1(1)). This nature of the Unit root test results suggests further discovery of the existence of co-integration between the dependent and independent variables of the study in the long run. To ascertain this, Auto-regressive Distributed Lag(ARDL) Bounds Test is used the result of which is given below.

Table 4: Auto-regressive Distributed Lag Bounds Test

ARDL Bounds Test

Date: 08/17/23 Time: 16:29

Sample: 4 18

Included observations: 15

Null Hypothesis: No long-run relationships exist

Test Statistic	Value	K
F-statistic	5.938383	3

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.72	3.77
5%	3.23	4.35
2.5%	3.69	4.89
1%	4.29	5.61

Source: Eviews software version 9

The Auto-regressive Distributed Lag Bounds Test result shows F-Statistic Value of 5.938383 which exceeds both the lower and upper bounds at 5% critical value (3.23 and 4.35) thereby suggesting that co-integration of the variables exists. To further establish this, the study adopted the analysis of ARDL Co-integrating and Long Run Forms. The result are given below.



Table 5: ARDL Co-integrating and Long Run Form

ARDL Cointegrating And Long Run Form

Dependent Variable: FSI

Selected Model: ARDL(3, 2, 2, 2)

Date: 08/07/23 Time: 11:21

Sample: 118

Included observations: 15

Co-integrating Form

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(FSI(-1))	0.197639	0.244970	0.806789	0.5045
D(FSI(-2))	-0.028916	0.136388	-0.212010	0.8517
D(HFI)	1.006985	0.945022	1.065568	0.3982
D(HFI(-1))	1.149855	1.015103	1.132747	0.3748
D(HRRLI)	4.338111	0.681813	6.362611	0.0238
D(HRRLI(-1))	-2.721592	0.861418	-3.159433	0.0873
D(STI)	2.666921	0.586117	4.550154	0.0451
D(STI(-1))	-1.125192	1.380900	-0.814826	0.5008
CointEq(-1)	-1.158072	0.304151	-3.807557	0.0626

 $Co\text{-inteq} = FSI - (1.1298*HFI + 4.8867*HRRLI + 2.4093*STI + 27.7236\)$

Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
HFI	1.129762	0.591057	1.911428	0.1961
HRRLI	4.886707	0.730459	6.689913	0.0216
STI	2.409282	0.898375	2.681823	0.1155
C	27.723563	7.636542	3.630382	0.0682
-	_	_	_	

Source: Eviews software version 9

The long run coefficients reveal positive association between economic decline index and the fragility index of Nigeria. An increase in one of the indicators leads to corresponding rise in the fragility index of Nigeria. Nevertheless, this relationship is significant for human right and rule of law index and fragile index of Nigeria both in the short and long run. High index point of security threats has positive and significant impact on fragile index of Nigeria only in the short run while human flight (brain drain) positively but insignificantly affects fragile states index for Nigeria both in the short and long run of the analyses.

Major Findings and Discussion

This research work has discovered from its econometric analyses that actually, there is a long run association between economic decline and fragility index score of Nigeria within the period of the study as established by the ARDL Bounds Test in which the F-Statistic value (5.938383) is greater than the lower (3.23) and upper (4.35) bounds' critical values at 5 percent level of confidence. This presence of co-integration is further revealed by the long run coefficients that show positive association between decline in economic indicators and fragility index score of the country. However, the analyses unveiled insignificant association of human flight and security threats with the fragile Nigerian index while the link between human rights and rule of law and the fragile state of Nigeria is significant both in the short and long run. The implication of these findings is that increase in violation of human rights and abuse of rule of law in Nigeria significantly reduces the capacity of a country to develop. A degraded citizenry is a degraded economy.

Summary and Conclusion

This research work analyzed the effect of decrease in economic activities in Nigeria on the country's capacity for development. The study used some econometric techniques to establish a long run relationship between the treatment and treated variables one of which is human rights and rule of law which have both short and long run positive and significant relationships with the fragile index of Nigeria.

Recommendations

This study recommends for policy implementation that:

- 1. Human rights and rule of law be accorded their due positions in the country as the abuse and violation contributes significantly to the increased fragile index of Nigeria.
- 2. Government to rise against the increased insecurity index of the country.
- 3. Factors aggravating brain drain in this country be eliminated.

References

Akamavi, R. K., Ibrahim, F. & Swaray, R. (2022). Tourism and Troubles: Effects of Security threats on the Global Tourism and Travel Industry Performance. *Journal of Travel Research*. Advance online publication. https://doi.org/10.1177/00472875221138792

Apergis, N. & Cooray, A. (2019). How Human Rights violations affect Poverty and Income Distribution. *International Economics*, *161*. Doi:10.1016/j.inteco.2019.11.003.



- A. V. (2023). UOLLB: AV Dicey and the Rule of Law [First Class Law Notes]. uollb.com
- Baptiste, N. (2014). Brain Drain and the Politics of Immigration. *The Nation Magazine*. *Retrieved on August 6, 2023 from* https://fpif.org/brain-drain-politics-immigration.
- Blume, L. & Voigt, S. (2007). Effects of Human Rights. *Kyklos*, *60*(4), 509-538. Doi:10.1111/j.1467-64-35.2007.00383.x
- Gonzalo, N. & Utz, P. (2023 August 30). Relationship between Poverty and Violence against Citizens: Evidence from Somalia. *World Bank Blogs*. Worldbank.org
- Irwin-Hunt, A. (2023). Brain Drain: Countries with the greatest Human Capital Flight. *FDI intelligence*. www.fdiintelligence.com
- James, N. (2019). Human Rights. *Stanford Encyclopedia of Philosophy*. Stanford University. https://Plato.stanford.edu
- Jelilov, G., Ozden, K. & Briggs, S. O. (2018). Impact of Insecurity on Investment in Nigeria. *Journal of Management, Economics, and Industrial Organization*, 2(3), 41-61.
- Martin, H. (2021). RFC 4949: Defining Security Threat. [blog] Debricked.com blog
- Muhammad, Z. Y. & Ghazala, A. (2020). Impacts of Human Capital Flight on Economic Growth: A case Study of Pakistan. *Conscientia Beam*, 7(1), 1-30.
- Seyoum, B. & Camargo, A. (2020). State Fragility and Foreign Development Investment: The mediating roles of human flight and economic decline. *Thunderbird International Business Review*, 63(2), 159-174. https://doi.org/10.1002/tie.22135.
- The Fund for Peace (2022, August 23). Economic Decline Index Country Rankings. www.theglobaleconomy.com
- The Fund for Peace (2023, August 23). Fragile States Index, 2022. www.fragilestatesindex.org
- World Bank (1992, July 02). Governance and Development. en.m.wikipedia.org.wiki>good
- World Bank (2009, November 2010). Poverty Analysis. www.worldbank.org
- World Bank (2023, June 30). Country Policy Index and Institutional Assessment (CPIA). World Bank Databank.worldbank.org

World Bank (2023, June 30). Global Economy may be in a 'Lost Decade', World Bank warns. www.nytimes.com>businessworld

Yonas, A. A. (2019). State Fragility and Conflict nexus: Contemporary Security Issues in the Horn of Africa. *Accord.* www.accord.org