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Social Risk and Regional Financial Integration: A Comparative Analysis Between Nigeria and South Africa

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Abstract

The study explored the relationship between social risk and regional financial integration in Nigeria and South Africa from 2006 to 2022. It examined how religion, ethnic tension, socioeconomic conditions, and law and order influence net capital inflow. The study employed Ordinary Least Squares (OLS) regression and the Autoregressive Distributed Lag (ARDL) modelling approach for econometric estimation and inference. The findings demonstrate that socioeconomic conditions significantly impede net capital inflow in Nigeria and South Africa, representing the primary social risk factor hindering regional financial integration. Religious affiliation showed mixed effects across countries, while ethnic tension and rule of law demonstrated statistically insignificant relationships with capital flows. The findings highlight adverse socioeconomic conditions as the most critical social risk factor constraining financial integration between these two major African countries. Enactment of policies that make the environment suitable for profitable investments and re-evaluate investor-unfriendly rules and order, will enhance trade and capital inflow.

Keywords: Social risk, socioeconomic condition, religion, ethnicity, net capital inflow, law and order.

1. Introduction

Risk is an inherent and widespread aspect of international business activities, prompting multinational enterprises (MNEs) to formulate advanced risk mitigation and management strategies. The modern global investment environment, characterised by unprecedented levels of economic integration and increased geopolitical tensions, has heightened the complexity of cross-border investment choices (UNCTAD, 2025; World Economic Forum, 2025). The recent trend of global foreign direct investment (FDI) flows, which decreased for the second consecutive year in 2024 to $1.5 trillion, highlights the significant influence of uncertainty on international investment behaviour. This decline was especially notable in developing economies, where FDI dropped by 2% in 2024, continuing a sustained downward trend that threatens progress towards sustainable development goals.

The multifaceted nature of international investment risks has prompted the development of comprehensive country risk assessment frameworks. Established rating agencies and analytical services, including the International Country Risk Guide (ICRG), Standard & Poor's, Moody's Investor Services, Fitch Ratings, and specialised institutions such as the Political Risk Services Group, provide systematic evaluation methodologies that combine quantitative and qualitative metrics into composite risk indices (Erb et al., 1996). These assessment frameworks have evolved to encompass a broader spectrum of risk dimensions, reflecting the increasingly complex nature of international business environments.

Contemporary scholarship and industry practice distinguish between two primary categories of country-specific risks: sovereignty risks and transferability/convertibility risks (Standard & Poor's, 2024; Allianz Trade, 2024). Sovereignty risks encompass a comprehensive array of internal factors that can adversely affect foreign investment performance, including exchange rate volatility, political instability, corruption, institutional weakness, regulatory uncertainty, and sociocultural heterogeneity Aydogan & Köksal, 2014. These endogenous risk factors collectively influence the operational environment within which MNEs must navigate their strategic objectives, affecting profitability, operational

continuity, and long-term growth prospects. All these risks impact the profitability, survival, and growth of multinational businesses. This study aims to focus on the sociocultural aspect of this sovereign risk.

The conceptualisation of social risk demonstrates considerable theoretical convergence across multiple disciplinary domains, encompassing economics, sociology, geography, psychology, jurisprudence, and security studies, each contributing distinct yet complementary analytical frameworks to understanding this multifaceted phenomenon. Geographical perspectives characterise social risk as the propensity for catastrophic events to generate losses through the intersection of hazards and societal vulnerabilities, particularly environmental degradation and natural disasters (Li et al., 2024; UNDRR, 2025). Sociological approaches, exemplified by Beck's seminal contribution, conceptualise social risk as the potential for reflexive modernisation processes to generate manufactured uncertainties that may inflict enduring harm upon individual life trajectories (Beck, 1992; Zinn, 2024). Psychological frameworks examine social risk through the lens of subjective well-being and life satisfaction, focusing on encounters with phenomena that compromise individual happiness and mental health outcomes (Thompson & Martinez, 2024). Legal and security paradigms define social risk in terms of adverse socioeconomic outcomes, including income reduction, employment disruption, and broader financial instability that threatens social cohesion (Davies et al., 2025). Economic perspectives frame social risk as the probability of adverse events generating monetary or material losses, with particular emphasis on profit realisation uncertainties and market volatility (Chen & Rodriguez, 2024).

Contemporary scholarship conceptualises social risk as the nexus of hazards emanating from maladaptive human behaviours and sociocultural dynamics that manifest adverse societal outcomes (Thompson & Martinez, 2024). The manifestation of social risk is mediated by complex interactions between internal psychological determinants, including cognitive frameworks, mental health status, emotional regulation, and anxiety responses, and environmental stimuli, thereby shaping individual and collective risk perceptions (Bailey et al., 2015; EU-OSHA, 2023). Individual agents constitute the primary locus of social risk generation through multifaceted factors encompassing socioeconomic stratification, environmental context, and health status, with responses to external stimuli serving as critical determinants of risk materialisation. Social risk exhibits distinctive characteristics of being anthropogenic, dynamic, spatially dispersed, contextually specific, and scalable across multiple governance levels (Theorell et al., 2016). Manifestations include inter-religious conflict, ethnic tensions, law enforcement disputes, and broader socioeconomic instability, collectively impeding social cohesion and constraining capital mobility between geographical regions.

Conversely, regional financial integration constitutes the systematic liberalisation of financial markets to facilitate unrestricted capital flows and cross-border transactions within defined geographical boundaries (Appiah et al., 2024). Developing economies derive disproportionate benefits from regional integration frameworks, particularly when advanced economies participate as anchor states, generating positive spillover effects through technology diffusion and knowledge transfer mechanisms that accelerate economic convergence (Baffour Gyau et al., 2025). Integration addresses market fragmentation challenges prevalent in developing regions by establishing enlarged economic zones characterised by reduced tariff barriers and harmonised trade regulations. Regional integration represents a multifaceted phenomenon wherein geographically proximate states pursue economic and social collaboration through progressive institutional arrangements, evolving from free trade areas through customs unions and common markets to comprehensive economic unions (African Union, 2024). However, successful realisation of integration benefits requires fulfilment of critical preconditions including robust political commitment, comprehensive trade liberalisation, equitable cost-benefit distribution mechanisms, institutional adaptability, and macroeconomic stability (Brookings Institution, 2024). Furthermore, sociocultural risk dimensions within host countries may constitute significant impediments to capital inflow patterns, thereby constraining regional financial integration outcomes. Consequently, this investigation compares the influence of social risk factors on regional financial integration processes in Nigeria and South Africa. The rationale behind choosing South Africa and Nigeria was as a result of exceptional degree of innovation and trade activity that were witnessed over the years in each of the nation. Lastly, there is no actual and statistical study in literature to address social risk and

regional financial integration in Africa which creates a research gap to be filled in literature.

2. Literature Review

The theoretical foundation of this study rests upon Social Risk Management (SRM) Theory. The theory was developed by the World Bank in the 1990s. The thrust of the theory was on risk identification, assessment, mitigation, transfer and development of coping strategies of risk that impact individual life and the entire society. The theory laid emphasis on the strategies to manage social risks like poverty, exclusion from the society, conflict and health related risks. The relevance of this theory to this study is that regional financial integration increases the country interdependence among participating countries thereby making vulnerability to economic shocks more pronounced.

The empirical studies in literature are either on social risk or regional financial integration, with no direct study linking both together. For example, Ajayi et al. (2025) examined how economic risk affects African financial integration. Panel data was used to examine 2006–2022 data. The study found that debt payment, overseas commerce, and the parallel exchange rate increased net capital inflow. Economic risk boosts African regional financial integration, the research found.

Munana, Dial, and Diallo (2023) examined how financial integration affects financial growth in 39 Sub-Saharan African nations between 2000 and 2021. The study analysed data using a panel threshold regression dynamic model and GMM. Financial integration and development were strongly correlated. Financial integration and economic development unpredictability in Nigeria were experimentally examined by Ehiedu, Odita, and Kifordu (2020). Financial integration helped them discover numerous elements causing Nigeria's economic instability. An empirical model was created to examine financial integration from 1987–2019 using economic output as the dependent variable and trade openness, foreign debt, currency rate, and foreign private investment as independent variables. The model has three assumptions. The relevant components were assessed using multiple regression. After checking for stationary variables, the researchers observed long-term correlation. We also addressed concerns regarding the models' short-term vs. long-term relationship bias. Despite not being statistically significant, openness and GDP correlated positively. GDP was significantly affected by FDI.

Chiwira and Tadu (2012) evaluated studies to assess whether financial integration and financial contagion in Africa are linked. An empirical content analysis suggests that most of the globe accepts EU policy. Africa needs a comprehensive economic integration and advancement plan to maximise financial integration and minimise contagion. Stankeviciene, Svidersk, and Mieinskien (2014) also polled 400 global business and risk professionals to estimate investment risks in 186 countries. Fifteen models or variables identified 70% of bond default, investment, and international business relations risk factors. Later, traditional emotional assessments were merged with ECR's three primary advantages (30%) and rated from 0 to 100. Expert comments on financial performance (30%), political instability (30%), and structural assessment (10%) were qualitatively analysed. Each quantitative factor—debt indicators, credit ratings, and bank financing and capital markets—carries 10% weight. Financial variables account for 43% of subjective judgements, political consequences 43%, and important elements 14%. As credit ratings climb, mean value rises. Combining the 27 EU member states' detailed state records with the Euromoney national risk database and the European financial stability index lets us assess and evaluate each country's primary risk indicators.

Schonfelder and Wagner (2015) examined how European integration affects 33 European states' institutional development. Researchers investigated the idea that nations with EU ambitions build institutions quicker than those with Euro adoption or even regressive growth. This was corroborated by dynamic panel data estimate findings. According to their results, existing EU membership has no impact on institutional development, but prospective EU participation does. The Eurozone's anti-corruption institutions have weakened. Konig used 2015 data from 27 EU member states to determine how EU integration, GDP growth, and nation size connect. The research hypothesised that bigger governments gain from national-scale features, while smaller states may overcome their size disadvantages via global economic cooperation. Data indicated that European economic unification accelerated country convergence due to the significant correlation between nation size and

economic success. A country's development and economic growth generally improve when it enters the EU. The research found that economic integration varies with country size, suggesting that long-term progress has many turning points.

2.1. Conceptual Framework

Figure 1 shows the investigation's conceptual structure. Social risk includes socioeconomic difficulties, religious views, ethnic conflicts, and legal issues. The figure demonstrates how these connect to regional financial integration, which is net capital inflow relative to GDP.

Social Risk (Independent Variables)

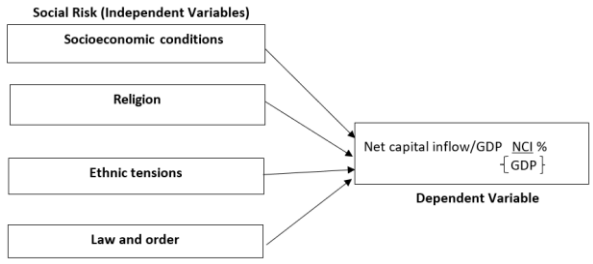

Figure 1: Conceptual framework of social risk and regional financial integration.

Source: Author's Design (2025).

Figure 1 illustrates the relationship between social risk and regional financial integration. The main aim of this study is to evaluate how social risk affects African nations' ability to attract investment.

3. Methods

Data on social risk indicators were obtained from the International Country Risk Guide (ICRG), which provides standardised measures of socio-political conditions across countries. Net capital inflow, expressed as a percentage of GDP, was sourced from the World Bank's World Development Indicators (WDI) database for Nigeria and South Africa.

3.1. Model Specification

The model used in this study was based on the work of Munana, Dial and Diallo (2023) on the impact of financial integration on the development of financial services in Sub-Saharan Africa. However, the model by Munana, Dial and Diallo (2023) has been expanded to develop the proposed model for this research.

Munana, Dial and Diallo (2023) model is stated as:

$$FD = f\ (GDP, TRD, Inf, POP) \qquad (3.1)$$

Where:

FD = Financial Development (Endogenous variable)

GDP= Gross Domestic Product; TRD = Trade Openness; Inf = Inflation; POP = Population Growth (Exogenous variables)

Thus, with modifications to the model, financial development was removed, and a financial integration model was introduced, which will be represented by net capital inflow as a percentage of GDP. Financial integration variables were also replaced with social risk variables, aligning with this study's approach objective.

Hence, the proposed model is presented in equation 3.2 as:

$$NCI = f\ (Social\ Risk) \qquad 3.2$$

Where:

NCI = Net capital inflow as a % of GDP, Social Risk = SC, RG, ET and LO

Therefore,

$$\mathrm{RFI} = \mathrm{f}\ (\mathrm{SC}, \mathrm{RG}, \mathrm{ET}, \mathrm{LO}) \qquad 3.3$$

RFI = Regional Financial Integration, SC = Socioeconomic Conditions, ET= Ethnic Tensions, LO = Law and Order, RG = Religion and f = functional notation

3.2. Estimation Techniques

The empirical analysis used both Ordinary Least Squares (OLS) and the Autoregressive Distributed Lag (ARDL) modelling approach to examine the short- and long-term relationships among the variables. Before estimation, descriptive statistics were used to assess the distributional properties of the data, while unit root tests were carried out to evaluate the stationarity of the time series and to confirm the suitability of the ARDL methodology.

4. Results and Discussions

The analysis begins with a preliminary examination of all variables using descriptive statistics, including the mean, standard deviation, skewness, kurtosis, and the Jarque-Bera statistic, to assess the distributional characteristics and normality of the data. The summary of these descriptive statistics is presented in Table 1.

Table 1: Result of the Descriptive Analysis of Variables (Nigeria)

	LNNCI	LNSC	LNET	LNRG	LNLO
Mean	-0.682429	3.343385	3.436283	3.485519	3.455180
Median	-0.754597	3.327400	3.580562	3.498016	3.446298
Maximum	0.305203	3.894338	3.897950	3.883459	3.875600
Minimum	-1.602959	2.592303	2.459298	2.999425	2.913529
Std. Dev.	0.600892	0.384421	0.465610	0.318089	0.292919
Skewness	0.286296	-0.387762	-0.821461	-0.215462	-0.308508
Kurtosis	1.878197	2.562590	2.342868	1.618465	2.177552
Jarque-Bera	1.123631	0.561541	2.217803	1.483486	0.748800
Probability	0.570173	0.755202	0.329921	0.476283	0.687702
Sum	-11.60129	56.83755	58.41681	59.25382	58.73806
Sum Sq. Dev.	5.777133	2.364468	3.468684	1.618888	1.372822
Observations	17	17	17	17	17

Source: Authors' Computation (2025)

The descriptive statistics regarding the effect of social risk on regional financial integration (net capital inflow) in Nigeria are reported in Table 1. The table shows that the average values of net capital inflow (NCI), socioeconomic condition (SC), ethnic tension (ET), religion (RG), and law and order (LO) are -0.682429, 3.343385, 3.436283, 3.485519, 3.455180 respectively.

It has minimum values of -1.602959, 2.592303, 2.459298, 2.999425, 2.913529, with maximum values of 0.305203, 3.894338, 3.897950, 3.883459, 3.875600, respectively, for NCI, SC, ET, RG, and LO. The standard deviation revealed that net capital inflow has the highest discrepancy, while the lowest discrepancy is observed in law and order. The extent of deviation for each variable is indicated by skewness; the results showed that all variables exhibit a long left tail because they are negative, except for NCI, which shows a long right tail as it is positive.

The kurtosis value of all the variables is platykurtic because they are less than 3. Jarque-Bera statistics for normal distribution indicated 1.123631, 0.561541, 2.217803, 1.483486, 0.748800 for all the variables, respectively. The probabilities of the Jarque-Bera values for all the variables are greater than 5%, which indicates a normal distribution.

Table 2: Result of the Descriptive Analysis of Variables (South Africa)

	LNNCI	LNSC	LNET	LNRG	LNLO
Mean	0.364969	3.136597	3.410013	3.347458	3.102706
Median	0.551784	3.182212	3.453157	3.610918	3.242592
Maximum	1.332224	3.858622	3.799974	3.869116	3.790985
Minimum	-1.603048	2.322388	2.687847	2.370244	2.351375
Std. Dev.	0.778796	0.592241	0.330191	0.506740	0.566959
Skewness	-0.960322	-0.108734	-1.016770	-0.883376	-0.384995
Kurtosis	3.345160	1.304306	3.225497	2.279748	1.479587
Jarque-Bera	2.697338	2.070226	2.965179	2.578455	2.057384
Probability	0.259586	0.355186	0.227049	0.275483	0.357474
Sum	6.204472	53.32214	57.97022	56.90679	52.74601
Sum Sq. Dev.	9.704370	5.611999	1.744414	4.108569	5.143077
Observations	17	17	17	17	17

Source: Authors' Computation (2025)

The descriptive statistics of the effect of social risk on regional financial integration (net capital inflow) in Nigeria are reported in Table 2. The table shows the average values of net capital inflow (NCI), socioeconomic condition (SC), ethnic tension (ET), religion (RG), and law and order (LO) as 0.364969, 3.136597, 3.410013, 3.347458, 3.102706 respectively.

It has minimum values of -1.603048, 2.322388, 2.687847, 2.370244, 2.351375 with maximum values of 1.332224, 3.858622, 3.799974, 3.869116, 3.790985 respectively for NCI, SC, ET, RG and LO. The standard deviation revealed that net capital inflow has the highest discrepancy value, while the lowest discrepancy value is ethical tension. The extent of deviation for each variable is indicated by skewness; the results showed that all variables had a long-left tail because they were negative.

The kurtosis value of all the variables is platykurtic because they are less than 3, except NCI and ET, which are leptokurtic because they are greater than 3. Jarque-Bera statistics for normal distribution indicated 2.697338, 2.070226, 2.965179, 2.578455, 2.057384 for all the variables, respectively. The probabilities of the Jarque-Bera values for all the variables are greater than 5%, which indicates a normal distribution.

4.1. OLS Results

The long-term result of the model, derived from the OLS output as shown in the table, is summarised below.

Table 3: Result of OLS (Nigeria)

Dependent Variable: LNNCI

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNSC	-0.146299	0.370966	-0.394373	0.7002
LNET	0.128737	0.393663	0.327025	0.7493
LNRG	0.227408	0.584176	0.389281	0.7039
LNLO	-1.305008	0.481169	-2.712162	0.0189
C	3.080729	2.160802	1.425734	0.1794

Source: Authors' Computation (2025)

From Table 3 above, the coefficient of the constant parameter was found to be 3.080729, which indicates that if all variables are held constant, the level of net capital inflow (LNNCI), the explained variable, will increase by 3.080729 units. LNSC was found to be negative and insignificantly related to the level of net capital inflow (LNNCI). Additionally, LNET and LNRG were found to be positive and insignificantly related to LNNCI. Meanwhile, LNLO was found to be negative and significantly related to the level of net capital inflow (LNNCI), with a coefficient of -1.305008, implying that a unit increase in LNLO will decrease the level of net capital inflow (LNNCI) by -1.305008 units.

Table 4: Result of OLS (South Africa)

Dependent Variable: LNNCI

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNSC	-0.804324	0.258158	-3.115622	0.0089
LNET	-0.864395	0.462942	-1.867179	0.0865
LNRG	0.151486	0.304384	0.497680	0.6277
LNLO	-0.533692	0.270193	-1.975222	0.0717
C	6.984206	2.320704	3.009520	0.0109

Source: Authors' Computation (2025)

From Table 4 above, the coefficient of the constant parameter was found to be 6.984206, which indicates that, if all variables are held constant, the level of net capital inflow (LNNCI), the explained variable, will

increase by 6.984206 units. Additionally, LNSC was found to be negative and significantly related to the level of net capital inflow (LNNCI), with a coefficient of -0.804324, meaning that a one-unit increase in LNSC will decrease the LNNCI by -0.804324 units. Furthermore, LNET and LNLO were found to be negative and insignificantly related to LNNCI. Meanwhile, LNRG was found to be positive but insignificantly related to LNNCI.

Table 5: Tabular Presentation of Summary of Findings from OLS

VARIABLES	NIGERIA	SOUTH AFRICA
SC	Negative and Insignificant	Negative and Significant
ET	Positive but Insignificant	Negative but Insignificant
RG	Positive and Insignificant	Positive and Insignificant
LO	Negative and Significant	Negative and Insignificant

Source: Authors' Computation (2025)

4.2. ADF Unit Root Test

Unit root tests, notably the Augmented Dickey-Fuller (ADF) test, established the variables' stationarity. Checking for unit roots in a time series may indicate non-stationarity. Table 6 shows ADF test results.

Table 6: Results for Nigeria

Variables	ADF Test @ level	Critical Values @ 5%	ADF Test @ First Diff.	Critical Values @ 5%	Decision
NCI	-1.578539	-3.065585	-4.078998	-3.119910	1(1)
SC	-5.577149	-3.065585	NA	NA	1(0)
ET	-2.052861	-3.081002	-4.028651	-3.081002	1(1)
RG	-3.878165	-3.119910	NA	NA	1(0)
LO	-2.738536	-3.065585	-3.523885	-3.144920	1(1)

Source: Authors' Computation (2025)

Table 7 shows unit root findings. The tested unit root is at the level after transitioning to the first difference. NCI, ET, and LO were non-stationary at the 5% significant threshold because their values were below the Mackinnon critical levels. We can accept H0 for all variables and reject H1 because of this. SC and RG remained unchanged.

As most variables were non-stationary at their levels, first-order integration indicated that NCI, ET, and LO were stationary after initial differencing. We accept H1 as the alternative hypothesis and reject H0 for NCI, ET, and LO. This study's variables had integration orderings of 1(0) and 1(1), according to the tests. For this reason, the research examines immediate and distant interactions using Autoregressive Distributed Lag (ARDL).

We calculated short- and long-term variable dynamics using ARDL models. Choosing the right lag length is crucial to prevent autocorrelation, model misspecification, and accurate and reliable model estimation. Tables 8 and 9 show the selection criteria-determined lag time.

Table 7: Results for South Africa

Variables	ADF Test @ level	Critical Values @ 5%	ADF Test @ First Diff.	Critical Values @ 5%	Decision
NCI	-2.047835	-3.065585	-4.281835	-3.119910	1(1)
SC	-2.527704	-3.065585	-4.599873	-3.081002	1(1)

ET	-5.144848	-3.065585	NA	NA	1(0)
RG	-2.617717	-3.065585	-3.713682	-3.144920	1(1)
LO	-3.539509	-3.119910	NA	NA	1(0)

Source: Authors' Computation (2025)

The unit root results are provided in Tables 6 and 7. They showed the tested unit root at level and after their conversion to first difference. The results indicated that NCI, SC, and RG were not stationary at level since their values are below the Mackinnon critical values at the 5% significance level. This outcome led to the rejection of the alternative hypothesis (H1), while the null hypothesis (H0) is accepted for all these variables. However, ET and LO were stationary at level.

Since most variables were not stationary at the level, the study performed their first-order integration. This revealed that the non-stationary variables (NCI, SC, and RG) became stationary after first differencing. Consequently, the study accepts the alternative hypothesis (H1), while the null hypothesis (H0) is rejected for NCI, SC, and RG. The test results indicate that the variables used in this analysis are integrated of order zero and one, i.e., 1(0) and 1(1). This justifies the use of Autoregressive Distributed Lag (ARDL) in analysing both short- and long-term relationships.

The ARDL modelling technique was employed for the analysis, and careful selection of the optimal lag length was essential to enhance the accuracy and reliability of the model estimates. The selected lag structure, determined using established information criteria, is reported in Tables 8 and 9.

4.3. The Augmented Dickey Fuller Test Equations

Table 8 presents the results of the Augmented Dickey-Fuller (ADF) unit root tests conducted for each variable, detailing their respective levels of stationarity, selected lag lengths, and the associated coefficients of multiple determination (R^2 values). These results provide the basis for determining the order of integration of each variable and assessing the robustness of the stationarity tests.

Table 8: Result of ADF Test Equation on Variables at their Stationary Point (Nigeria)

Variables	Coefficient	Std. Error	T-Statistics	Prob.	R^2
D(LNNCI(-1))	-2.535311	0.621553	-4.078998	0.0028	0.814302
C	-0.271966	0.124470	-2.184982	0.0567	
LNSC(-1)	-1.376269	0.246769	-5.577149	0.0001	0.689610
C	4.608026	0.829791	5.553237	0.0001	
D(LNET(-1))	-0.937626	0.232739	-4.028651	0.0014	0.555252
C	-0.008570	0.101288	-0.084615	0.9339	
LNRG(-1)	-1.360537	0.350820	-3.878165	0.0047	0.708219
C	4.691862	1.227271	3.823004	0.0051	
LNLO(-1)	-0.720039	0.262928	-2.738536	0.0160	0.348824
C	2.500596	0.907122	2.756626	0.0154	

Source: Authors' Computation (2025)

Table 9: Result of ADF Test Equation on Variables at their Stationary Point (South Africa)

Variables	Coefficient	Std. Error	T-Statistics	Prob.	R^2
D(LNNCI(-1))	-2.728849	0.637308	-4.281835	0.0020	0.729356
C	-0.200165	0.198505	-1.008363	0.3396	
D(LNSC(-1))	-1.244430	0.270536	-4.599873	0.0005	0.619425

C	0.097895	0.168829	0.579846	0.5719	
LNET(-1)	-1.292142	0.251153	-5.144848	0.0001	0.654060
C	4.392634	0.861532	5.098633	0.0002	
D(LNNRG(-1))	-3.234755	0.871037	-3.713682	0.0075	0.780827
C	-0.234419	0.153172	-1.530431	0.1698	
LNLO(-1)	-2.623753	0.741276	-3.539509	0.0076	0.725544
C	7.917391	2.238922	3.536252	0.0077	

Source: Authors' Computation (2025)

4.4. ARDL Bound Test Approach to Co-integration

The bounds testing procedure, developed by Pesaran, Shin, and Smith (2001), was employed within the ARDL framework to examine the existence of a long-run co-integration relationship among the variables. The hypotheses are as follows:

Ho: There is no co-integration among variables

H1: There is co-integration among variables

Decision Rule:

For the presence of a long-run co-integration relationship to be confirmed within the ARDL bounds testing framework, the computed F-statistic must exceed the upper critical value at the 5% significance level. If the F-statistic is greater than the upper bound, the null hypothesis of no co-integration is rejected in favour of the alternative hypothesis, indicating the existence of a long-run equilibrium relationship among the variables. Conversely, if the F-statistics is not greater, the null hypothesis is accepted. The co-integration results are presented in the table below and summarised in Tables 10 and 11. The study employed the Schwarz Information Criterion (SIC) to select the ARDL (1, 0, 0, 0,0) model.

Table 10: Co-Integration Result (Nigeria)

F-Statistics	Lower Bound (5%)	Upper Bound (5%)
1.462938	2.56	3.49

Source: Author's Computation (2025)

The data suggests a long-run equilibrium connection between the variables since the F-Statistic is smaller than the upper limit at the 5% critical value, rejecting the null hypothesis. The following describes the long-term partnership.

Table 11: Co-Integration Result (South Africa)

F-Statistics	Lower Bound (5%)	Upper Bound (5%)
2.182052	2.56	3.49

Source: Authors' Computation (2025)

Therefore, based on the results outlined above, it can be concluded that there is a long-run equilibrium relationship among the variables, as the null hypothesis is rejected because the F-statistic was found to be lower than the upper bound at the 5% critical value. Consequently, the long-run relationship is shown below.

4.5a. ARDL Short Run Results (Nigeria)

The short-run result of the model obtained using the ARDL technique, as presented in the table, is summarised below.

Table 12: Short Run Result of the Model

Dependent Variable: LNCI

Variable	Coefficient	Std. Error	T-Statistics	Prob.
LNSC	-0.303271	0.276386	-1.097272	0.2982
LNET	0.323392	0.301622	1.072176	0.3088

LNRG	-0.336911	0.561293	-0.600240	0.5617
LNLO	-0.547957	0.423923	-1.292585	0.2252
C	2.695059	1.749469	1.540501	0.1545

Source: Author's Computation (2025)

From the table above, the short-run equation illustrating the short-term relationship among the variables can be presented below as:

$NCI = 2.695059 - 0.303271_{SC} + 0.323392_{ET} - 0.336911_{RG} - 0.547957_{LO} + \mu$

(1.749469) (0.276386) (0.301622) (0.561293) (0.423923)

Note: Figures in parentheses represent the standard errors.

From the short-run equation above, socioeconomic conditions were found to be negatively and significantly related to net capital inflow, at a level of -0.303271, indicating that a one-unit increase in socioeconomic condition will reduce net capital inflow by -0.303271 units in the short run. Additionally, ethnic tension was found to be positively related to net capital inflow but insignificantly so in the short run. Meanwhile, religion and law and order were found to be negatively related to net capital inflow, yet insignificantly in the short run.

4.5b. ARDL Short Run Results (South Africa)

The short-run result of the model obtained using the ARDL technique, as shown in the table, is summarised below.

Table 13: Short Run Result of the Model

Dependent Variable: LNCI

Variable	Coefficient	Std. Error	T-Statistics	Prob.
LNSC	-0.938235	0.385539	-2.433569	0.0410
LNET	-0.579928	0.435808	-1.330695	0.2200
LNNRG	-0.235109	0.344627	-0.682212	0.5144
LNLO	-0.660673	0.257816	-2.562578	0.0335
C	4.778135	2.335357	2.045997	0.0750

Source: Author's Computation (2025)

From the table above, the short-run equation representing the relationship among the variables can be shown below as:

$NCI = 4.778135 - -0.938235_{SC} - 0.579928_{ET} + 0.607775_{RG} - 0.660673_{LO} + \mu$

(2335357) (0.385539) (0.435808) (0.344627) (0.257816)

Note: The standard error statistics are those stated in parentheses.

From the short-run equation above, socioeconomic conditions were found to be negatively and significantly related to net capital inflow, with a coefficient of -0.938235, indicating that a one-unit increase in socioeconomic conditions will decrease net capital inflow by -0.938235 units in the short run. Additionally, ethnic tension and law and order were found to be negatively related to net capital inflow but not significantly so in the short run. Furthermore, religion was found to be positively related to net capital inflow; nonetheless, the relationship did not reach statistical significance.

4.6. Discussion of Findings

This article examines social risk and regional financial integration in South Africa and Nigeria from 2006 to 2022 using comparative analysis. Net capital inflow as a percentage of GDP indicates regional financial integration, whereas religious affiliation, ethnic conflict, socioeconomic circumstances, and law and order indicate social risk. We tested variables' stationarity using an Augmented Dickey-Fuller (ADF) unit root test. Religion and socioeconomic class were stable in Nigeria, while all other variables became stationary after differencing. All variables in South Africa were originally non-stationary except racial tension and law and order, which became stationary.

Other variables were stationary at first difference. The combination of integration orders, I(0) and I(1), made Autoregressive Distributed Lag (ARDL) modelling suitable for forecasting short- and long-term variable relationships. Both nations have no statistically significant long-run equilibrium ties using ARDL limits testing for co-integration. Thus, the study presents and interprets the short-run ARDL estimate.

Nigeria's ARDL-based short-run model found that socioeconomic circumstances adversely and significantly affected net capital inflow. Religion, law, and order had negative and small immediate effects on net capital inflow, while ethnic conflicts did.

Additionally, the ARDL-based short-run model for South Africa indicated a considerable negative correlation between near-term socioeconomic circumstances and net capital inflow. In the near run, net capital inflow was negatively correlated with ethnicity, tension, and law and order, although these correlations were not statistically significant. Religion has a minor but beneficial effect on net capital inflow in the near term. All variables matched a priori projections throughout time.

Social risk hinders regional financial integration in South Africa and Nigeria, the research found. Environmental issues like natural catastrophes might deter foreign investors from investing in these nations. Li et al. (2017) said people's worries cause social instability and conflicts. Statistics show that investors are less willing to fund religious, legal, or racial enterprises. Thus, the two governments must prioritise economic and social issues including fostering lucrative investments and other investor-attracting performance criteria. The Nigerian government should reform anti-investor policies and resolve religious disagreements to boost commerce and investment. Every successful country needs social institutions to provide the political and social foundations for economic institutions. Property rights in the constitution encourage entrepreneurs to collaborate for production. All-encompassing expansion requires an impartial court that upholds law and order (Wilson, 1997).

5. Conclusion and Recommendations

The study examined social risks and regional financial integration in Nigeria and South Africa: A comparative analysis from 2006 to 2022. It measures regional financial integration using net capital inflow as a percentage of GDP, and social risk through religion, ethnic conflicts, socioeconomic status, and law and order. The study concluded that socioeconomic conditions reduce net capital inflow in both countries. Additionally, law and order decrease net capital inflow in Nigeria. The findings revealed that socioeconomic conditions have a negative and significant effect on net capital inflow in both nations, while the region exerted a positive but insignificant influence on NCI in South Africa, and a negative influence in Nigeria. Ethnic tension had a positive but insignificant impact on NCI in Nigeria, whereas it was negative in South Africa. Lastly, law and order negatively and insignificantly affected net capital inflow in both countries.

Consequently, the study found that social risk negatively influences regional financial integration in Nigeria and South Africa. Based on this, the study recommended that the governments of both countries prioritise social and economic factors by creating a more favourable environment for profitable investments and re-evaluating investor-unfriendly regulations, to boost trade and capital inflow.

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