



From Shadows to Structures: Unveiling the Terrorism-Corruption Nexus in Developing Countries through Structural Equations Modeling (SEMs)

Muhammad Farhan Riaz ¹ Saima Liaquat ², Furrukh Bashir ³, Fariha Rubab⁴

¹ Assistant Professor, Government Shalimar Graduate College, Lahore, Pakistan. Email: m.farhan.scholar@gmail.com

² Assistant Professor, Department of Economics, Lahore College for Women University, Lahore, Pakistan.

³ Assistant Professor, School of Economics, Bahauddin Zakariya University, Multan, Pakistan. Email: furrukh@bzu.edu.pk

⁴ Research Scholar, School of Economics, Bahauddin Zakariya University, Multan, Pakistan.

Email: fariharubab03@gmail.com

ARTICLE INFO

Article History:

Received: April 28, 2024

Revised: May 31, 2024

Accepted: June 02, 2024

Available Online: June 03, 2024

Keywords:

Political Economy

Terrorism

Corruption

Confirmatory Factor Analysis

Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

We utilized Confirmatory Factor Analysis (CFA) to investigate the correlational and bidirectional relationship between corruption control and terrorism control in 65 developing countries panel data from year 2000 to 2019. Significance of various parameters of observed indicators has also been empirically assessed in this research that redefine the latent variables of corruption control and terrorism control. Our empirical findings support the idea that unchecked corrupt activities sustain and spread terrorism, especially in areas where formal economic and political frameworks are weak or nonexistent. The findings clearly indicate that ineffective corruption control in developing countries lead to reduced control over terrorism. Furthermore, our study empirically shows that terrorist acts are predominantly concentrated in regions plagued by internal and external conflicts. Countries with significant military involvement in politics face a higher threat of terrorist activities. Additionally, an efficient, active, and impartial judiciary is crucial for combating corruption at all levels. The findings of this research underscore the critical need for governments in every developing country to implement economic reforms anchored in incentives to stabilize and regulate the political economy. Effectively controlling corrupt activities and terrorism offers the potential to facilitate the efficient allocation of resources and promote sustained economic growth in these nations.

© 2024 The Authors, Published by IRASD. This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License

Corresponding Author's Email: furrukh@bzu.edu.pk

1. Introduction

Many developing countries struggle with poor resource management which slow down their process of economic growth. The main reasons behind of these sluggish growth rates are corruption and terrorism. It is difficult to completely understand and measure these illegal activities in the political economy. Many developing nations are trapped into these illicit activities. An unstable political economy with poor governance contribute to corruption and terrorism. This complex relationship challenges economic development and growth by increasing instability and damage good governance efforts. This study has employed Structural Equations Modeling (SEMs) to investigate the interaction and support between corruption and terrorism for suggesting possible policy solutions. In developing countries, weak institutions and poor governance create an environment where both unlawful activities thrive. Terrorism exploits corruption by using corrupt networks for illegal activities, while corruption grows in the disorder and fear caused by terrorism (Boussiga & Ghdamsi, 2016). Therefore, series of terroristic actions and corrupt practices hinders economic growth and erodes public trust in institutions. Many terrorist groups worldwide secure their funding through substantial hidden cash flows generated by corrupt activities. Established organized crime groups in Asia, Latin America, and Africa have successfully created new factions and expanded their operations due to support from corruption and its illicit finances (Nusrat & Yasmin, 2022). Defining terrorism is challenging because the term

encompasses a wide range of activities, and scholars have not reached a consensus on its various aspects. There are unresolved issues, such as whether terrorism includes only attacks on civilians or also military targets in non-conflict situations. The phrase "one man's terrorist is another man's freedom fighter" exemplifies the complexities of defining terrorism in contemporary contexts (Ganor, 2002).

Despite over 200 definitions developed by scholars to describe terrorism, there is still no agreement on a basic definition (Bjørge, 2004). Reaching a consensus on an objective definition of terrorism is nearly impossible due to the subjective nature of defining such a term. On the other hand, corruption is traditionally defined as the abuse of entrusted power for personal gain (Shleifer & Vishny, 1993). This involves illegal activities stemming from inconsistencies in the rule of law and poor governance. Corruption, a longstanding global issue, is difficult to define because different cultures, legal systems, histories, traditions, and moral values influence perceptions of what constitutes corruption. It is more prevalent in developing countries and affects everyone, whether as perpetrators or victims. Most researchers have treated terrorism and corruption as separate issues. While some studies have attempted to explore the relationship between these phenomena, they often focus on global samples or specific countries, overlooking developing nations. Developing countries have long faced these illicit activities as significant barriers to their development. There are considerable differences in resources, institutional structures, and socio-political and economic conditions between developed and developing countries. Additionally, ambiguities persist in understanding the true relationship between terrorism and corruption due to the lack of universally accepted empirical definitions for these covert activities. Many studies rely on descriptive analysis and fail to use advanced statistical techniques to empirically investigate the link between corruption and terrorism. In our research, we have empirically examining the relationship between terrorism and corruption. We define two new latent variables, terrorism control and corruption control, to specify their controlling mechanisms. This implies that poor control over corruption leads to feebler control over terrorism.

To enhance the accuracy of our investigation into the relationship between corruption and terrorism, we have introduced new indicators for defining corruption control and terrorism control. The primary objective of this study is to empirically examine the bidirectional relationship between terrorism and corruption in developing countries using Structural Equations Modeling (SEMs). Additionally, we aim to identify the underlying mechanisms and pathways through which terrorism control and corruption control mutually reinforce each other. A key aspect of this research is the inclusion of judicial performance factors in assessing corruption control. Similarly, the study highlights the empirical significance of military political involvement in evaluating terrorism control. Understanding the nexus between terrorism and corruption is crucial for both academic and policy-making circles. Academically, this research contributes to the literature on the political economy of terrorism and corruption by providing a detailed analysis of their interdependence using SEMs. From a policy perspective, our findings can guide the development and implementation of targeted interventions to mitigate the negative impacts of terrorism and corruption, ultimately leading to more politically stable and developed economy.

2. Literature Review

Over the past two decades, the literature examining the intersection of corruption and terrorism has expanded considerably, highlighting the intricate and multifaceted relationship between these two phenomena. This section reviews the existing body of work by first addressing the definitional issues of both corruption and terrorism. It then evaluates previous research on their relationship and identifies the research gaps that this study aims to fill. Bjørge (2004) posits that the objective of terrorism is to generate a psychological impact on people beyond the direct victims of attacks. Terrorism is not primarily targeted at the individuals who are directly harmed, but at those who witness these acts. Conversely, Kegley (2003) characterizes terrorism as a form of theatrical performance, where the attacks are designed to create conflict within entire populations. Consequently, the psychological impact of terrorism on the public is often more significant than the actual number of casualties. Defining terrorism is challenging, as its political motives can be ideological, religious, or otherwise, leading to a lack of consensus on a single definition. The literature on terrorism is thus replete with varied and competing definitions and classification methods. To address this, our study introduces and empirically estimates a new term, "terrorism control," as a latent variable within structural equation models to better understand and investigate this phenomenon.

Several studies have found that third-world nations are notorious for their high levels of corruption. Shah and Schacter (2004) categorizes corruption into two types: administrative and operational. Administrative corruption occurs in higher positions within the judicial system and includes politically motivated court judgments, selling or buying judgments, simple extortion, and unwarranted venue changes when judges benefit financially and professionally from their corrupt actions. This type also involves the deliberate manipulation of judicial decisions. Rose-Ackerman (2008) argues that numerous laws, their ambiguities, and inconsistencies can foster operational corruption because judges may be unsure which law to apply, leading to the abuse of judicial discretion, both substantive and procedural. One of the most significant obstacles to effective policymaking is corruption. Afolabi (2010) identifies various forms of corrupt practices, including fee fraud, money laundering, unorthodox and fraudulent policies, theft or misuse of funds, kickbacks, under- and over-billing, bribery, false statements, abuse of office, and the collection of illegal charges. He also elaborates on corruption in terms of integrity loss, lack of virtue or moral standards, and the misuse of public funds for personal gain. In recent years, various measures related to corruption have emerged, including the Corruption Perception Index by Transparency International, the Control of Corruption Index Kaufmann, Kraay, and Mastruzzi (2004), indices from the World Business Environment Survey (WBES), and the International Country Risk Guide. According to Bălan-Liseanu (2023), corruption facilitates illegal financial flows to the terrorist. He argued that corruption induced environment provides safe haven to the terroristic activities. On the contrary, he also has concluded that terrorism also nurture corrupt practices through huge bribe money transfers. Dreher, Kotsogiannis, and McCorriston (2007) has concluded that corruption perception indices are not reflecting any interdependences with other illegal activities. They have used Multiple Indicator and Multiple Causes Model (MIMIC) for estimating corruption as latent variable.

However, many definitions of corruption are lacking in particularly the role of an effective judicial system. This important indicator has not consistently been considered in the estimation of corruption indices. We have incorporated judicial indicators in the precise empirical estimation of corruption control as a latent variable. Scholars have suggested various frameworks to analyze the relationship between corruption and terrorism. These theoretical frameworks aim to understand the interaction of these two problems and to identify strategies for breaking the cycle of reinforcement between them. Empirical studies have shown mixed results on the relationship between terrorism and corruption. Some researches indicate strong associations while others found a weak relation. Adeniran (2019) has studied corruption effects on terrorism in African countries and found that higher levels of corruption often relate with more terrorist activities. Boussiga and Ghdamsi (2016) have employed a panel data approach to examine the correlation between corruption and terrorism across different regions. They have concluded that there are strong empirical evidences of interrelationship between corruption and terrorism. Sapsford, Tsourapas, Abbott, and Teti (2019) stated that in autocracies, rulers often exploit countries resources through corruption in order to stable their power and regime in the Middle East and North Africa (MENA) region. Thus, political unrest and grievances also provide supporting platforms to terrorists for their operations. Chisadza and Bittencourt (2018) have highlighted that Sub-Saharan Africa has experienced nearly similar trends of corruption and terrorism but their dynamics are distinctly different due to the role of ethnic divisions, weak state capacity, external interventions and other factors. They argued that electoral fraud refers to illegal interference with the process of an election, including bribery, embezzlement, manipulating vote counts, and excessive propaganda. They have concluded that corruption is often in the form of embezzlement of public funds, bribery and investment politics undermine development and governance. Then ultimately, terrorist groups take advantage of this by offering to serve as a better alternative to the corrupt and incompetent governance.

Hence, there are still considerable research gaps in this topic. Literature needs more accurate empirical methodologies for answering the burning question of how terrorism influence corruption and its consequent either way. Many studies examine the consequences of corruption on terrorism but few of them focus on how terrorism can feed corruption. This research is vital to strengthen the definitions of terrorism and corruption which fully explain the relationship between them. This diversity of definitions in the literature currently limits our ability to understand how these interrelationships between corruption and terrorism work. To solve the definitional issues in this study, we have categorically estimate the control over terrorism and corruption in the first instance before we get into the relationships. Furthermore, there's not

enough research using advanced statistical techniques such as Structural Equations Modeling (SEMs). With this empirical methodology one can analyze both the nature of relationships and the significance of observed indicators for estimation of unobserved terrorism and corruption.

3. Methodology

We used Structural Equation Modeling (SEM) to estimate terrorism control and corruption control as latent unknown variables. Structural Equation Modeling (SEM) is considered as a method for estimating simultaneously many interrelated dependency-relationships (Bollen, 1989). In this study, we have employed Confirmatory Factor Analysis (CFA) for estimating the correlation and direct effect of terrorism control and corruption control while both are assumed as latent variables. This analysis also validates that the theorized indicators are consistent with our estimated results. Confirmatory Factor Analysis model is as under:

$$Y = \Gamma\varphi + \varepsilon \quad (1)$$

In equation 1, $Y=(y_1, y_2, \dots, y_p)$ is representing the indicators of the latent variables with p = total number of indicators. Γ is the matrix of standardized coefficients that are showing relationship among indicators and both latent variables terrorism control and corruption control. Φ is representing the vector matrix of the latent variables. Similarly, ε is the vector matrix of the errors of measurement model. According to Brown (2015), CFA model is quite efficient in estimating the Γ standardized coefficients and the errors of the measurement model ε . It is also very useful in evaluating the validation and reliability of the estimated coefficients. Confirmatory Factor analysis is a powerful tool for investigating the hidden relationship between latent variables. This method is also capable to provide deep understanding of the interdependences of the latent variables under investigation (Almenar, Sánchez, & Sapena, 2020; Schneider & Buehn, 2018). To ensure the robustness of the estimated results, we have also used the technique of sensitivity analysis by changing the different combinations of the important indicators. Further for checking the model goodness of fit, we have utilized comparative Fit Index (CFI) and Standardized Root Mean Square Residual (SRMR).

3.1. Corruption Control Indicators

3.1.1. Judicial Corruption Decisions

This index gauges the frequency of undocumented individuals or businesses providing bribes to expedite or delay procedures or to sway court decisions in their favor. Ratings on this index span from 0 (always) to 4 (never). Corruption control typically enhances as the rating for judicial corrupt decisions increases, and conversely, weakens when the rating decreases (Riaz & Hayat, 2022).

3.1.2. Rule of Law

The rule of law mirrors a nation's democratic, institutional, and political attributes. Scores vary from 0 to 1, with 1 denoting the most robust adherence to the rule of law. In this context, elevated values signify more efficient corruption control, whereas lower scores imply inadequate corruption control (Buehn & Schneider, 2009). Hence, it serves as a reliable indicator of effective corruption control (Dreher & Schneider, 2010).

3.1.3. Judicial Accountability

This indicator depicts the frequency with which judges encounter dismissal from their positions or other forms of punishment during the accountability process for corruption, especially when they are found guilty of substantial misconduct. Scores may vary from as low as 0 (never) to as high as 4 (always). Hence, a heightened focus on judicial accountability tends to correlate with increased success in combating corruption, whereas a diminished emphasis correlates with reduced success (Makyian & Rostami, 2019). This implies that elevated levels of judicial accountability are linked to more efficient corruption control, whereas lower levels are associated with less effective control.

3.1.4. Law and Order

It refers to two distinct components that are "law" and "order". Each aspect of this indicator ranges from 0 to 3 points respectively. The "law" component considers the effectiveness and impartiality of the judiciary system. The "order" component evaluates public compliance with the existing law. Consequently, a nation with a high score of 3 for its legal system exhibits stronger control over corruption. But on the flipside of coin, a country shows a lower score such

as 1, if it practices a limited resistance to corruption (Chatterjee & Ray, 2014). Thus, it is also a crucial indicators of corruption control.

3.2. Terrorism Control Indicators

In this investigation, we assess terrorism control, which inversely reflects the prevalence of terrorism in developing nations. A high rating on this covert measure signifies enhanced control over terrorist activities, as outlined by the observed factors discussed below. Conversely, a lower rating indicates a heightened likelihood of terrorist acts. Here are the indicators and causes of terrorism control.

3.2.1. Internal Conflict

This index quantifies a country's level of political violence and its impact on governance (Piggott, 2010). The highest rating is assigned to nations experiencing no armed or civil resistance against the government, while a country embroiled in civil war receives the lowest rating. The overall risk rating comprises three sub-dimensions, each rated from 0 to 4 points: Civil War or Coup Threat, Political Violence, and Civil Disorder. A score of 4 points indicates very low risk, whereas a score of 0 points indicates very high risk. Thus, a higher rating on this index indicates a capable administration with robust counterterrorism measures, thereby positively reflecting terrorism control.

3.2.2. Military in Politics

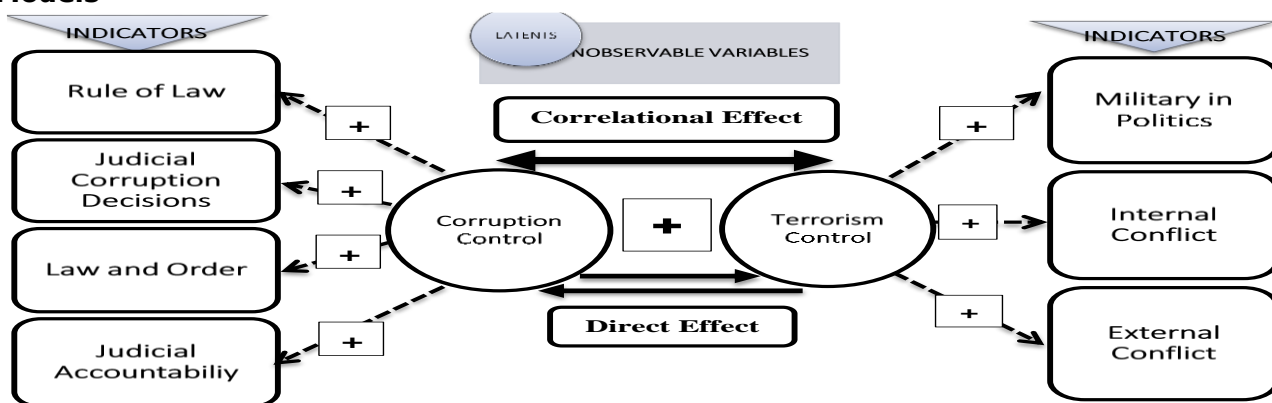
This variable indicates military involvement in government, where lower risk ratings signify greater military participation in politics and higher levels of political violence risk. Military involvement in politics diminishes democratic accountability since the military is not elected by the people. However, it poses significant consequences for the terrorist threat (Bove, Rivera, & Ruffa, 2020). The military may intervene in government affairs due to genuine or fabricated internal or external terrorist threats and prioritize defense spending over other developmental allocations. In some developing countries, military-friendly governments can lead to the emergence of liberation movements and resistance under the guise of terrorism. The primary threat is a full-fledged military regime, which may initially bring stability but ultimately increases long-term risks due to corruption and the likelihood of armed opposition.

3.2.3. External Conflict

The external conflict scale evaluates the threat of foreign actions against the established government, spanning from nonviolent to violent external pressures (Butcher, 2016). External conflicts can detrimentally impact foreign businesses through operational limitations, trade and investment penalties, inefficiencies in resource allocation, and violent socio-economic shifts. The overall risk rating consists of three subcomponents, each rated from 0 to 4 points: War, cross-border conflict, and foreign pressures. A score of 4 points indicates minimal threat, while a score of 0 indicates serious risk. A higher value on the external conflict index signifies a safer environment with strong terrorism control, while a lower value indicates weaker control. Therefore, this index also positively reflects terrorism control.

3.3 Structural Equations Model Frameworks

Figure 1: Corruption Control and Terrorism Control Correlational & Direct Effect CFA Models



Source: Own Elaboration

After identifying the causes and indicators, Figure 1 demonstrates the causal direct effect and correlational effect of Confirmatory Factor Analysis (CFA). It is exhibiting the expected relationship between terrorism and corruption controls. In this diagram, squares are displaying the indicators of corruption control and terrorism control from left to right respectively. Each indicator is linked through arrows to its corresponding latent variable, shown in circles. The above figure 1 is also illustrating the expected hypothetical sign of each indicator towards its latent variable.

4. Results

We have utilized a sample panel data of a time period ranges from 2000 to 2019, from 65 developing countries of the world. The variables for this study were sourced from various publicly available data¹ sources. In our different CFA model specifications, we assign a coefficient of +1 to the rule of law regarding corruption control. Likewise, we assign a coefficient of +1 to military involvement in politics, based on our theoretical literature² review in sections 2 and 3.

Table 1: Descriptive Statistics

Indicators	Obs	Mean	Std. dev.	Min	Max
External Conflict	1,196	9.720	1.311	4.99	12
Internal Conflict	1,196	8.488	1.506	0.42	12
Law and Order	1,196	3.147	0.925	1	6
Military in Politics	1,196	3.240	1.538	-0.6	6.02
Judicial Accountability	1,196	0.489	0.156	0.08	0.95
Judicial Corrupt Decision	1,196	0.401	0.150	0.04	0.82
Rule of Law	1,196	-0.505	0.509	-1.79	0.73

To ensure consistency across various measurement scales, all data was standardized for the estimation of standardized coefficients. The results from the correlational CFA are outlined in Table 2, emphasizing a noteworthy positive correlation between terrorism control and corruption control. Furthermore, Table 3 offers insights into the direct effects observed in the CFA estimation, elucidating the causal relationships between these latent variables. Table 2 presents the estimated results of the correlational CFA between terrorism control and corruption control across four model specifications. Each model incorporates different combinations of particular factor loadings for their respective latent variables. All specified indicators for both terrorism control and corruption control are included for estimation in CFA model 1. Subsequently, CFA models 2 through 4 employ unique combinations of indicators for each latent variable. The standardized estimated coefficients presented in Table 2 and subsequent Table 3 are derived from CFA models. As discussed in section 3, an increase in the values of indicators utilized for terrorism control indicates reduced intensities of terrorism. For instance, elevated values of internal conflict and external conflict indicators suggest a decrease in their incidences. Similarly, a high value of military involvement in politics indicates minimal military interference in political affairs (Bove, Rivera, & Ruffa, 2020).

Table 2: CFA Correlation Model of Terrorism Control (TC) & Corruption Control (CC)

Model	Model ³ 1		Model 2		Model 3		Model 4	
	3-2-4		3-2-2		3-2-3		3-2-4	
Latent Variable/ Indicators	TC	CC	TC	CC	TC	CC	TC	CC
Judicial Accountability		0.54*** (22.98)						
Judicial Corrupt Decisions		0.71*** (36.84)		0.71*** (35.08)		0.68*** (34.29)		0.68*** (34.29)
Law and Order		0.37*** (13.36)				0.42*** (15.28)		0.42*** (15.50)
Rule of Law		0.86*** (56.28)		0.84*** (45.19)		0.86*** (47.88)		0.85*** (47.59)

¹ The secondary data for World Bank-listed developing countries from 2000 to 2019 was obtained from various reputable sources, including World Development Indicators (WDI), World Governance Indicators (WGI), Govdata3600, Global State of Democracy Indices (GSoD), International Monetary Fund (IMF), Heritage Foundation, KOF Globalization Indices, and the International Country Risk Guide (ICRG).

² See Bollen (1989).

³ CFA Model 1 (3-2-4) is showing number of indicators of Terrorism Control - the number of latent - number of indicators of Corruption Control, respectively (Riaz & Hayat, 2022).

Internal Conflict	0.60*** (25.90)	0.60*** (25.84)	0.60*** (26.02)	0.53*** (21.07)
External Conflict	0.52*** (19.54)	0.52*** (19.52)	0.51*** (19.13)	
Military in Politics	0.85*** (46.79)	0.84*** (45.93)	0.85*** (48.47)	0.96*** (36.40)
Covariance TC & CC	0.78*** (37.17)	0.79*** (35.29)	0.81*** (35.27)	0.75*** (26.18)
Degree of Freedom	13	4	8	4
CFI	0.843	0.932	0.872	0.936
SRMR	0.07	0.04	0.06	0.05
R ²	0.93	0.91	0.92	0.97

Note: *, **, *** indicate significance levels at 1%, 5%, and 10%, respectively. An R² value close to 1 suggests a perfect fit. High CFI values and low SRMR values indicate a good model fit. (Kline, 2005).

Hence, the results presented in Tables 2 and 3 indicate that all these indicators positively impact terrorism control. Empirical evidence illustrates that an increase in ongoing conflicts can heighten the terrorism threat to potentially uncontrollable levels (Makyian & Rostami, 2019). Furthermore, military involvement in governance and political affairs tends to worsen internal and external conflicts, thereby exacerbating terrorism. Similarly, the findings of corruption control indicators align with those of terrorism control indicators in Tables 2 and 3. Thus, the conclusions drawn from the analysis of both sets of indicators validate the theoretical and empirical research discussed in sections 2 and 3. In Table 2, all estimated covariance coefficients between terrorism control and corruption control are significantly positive. Similarly, in Table 3, all estimated coefficients demonstrate that corruption control has a highly significant positive direct causal influence on terrorism control.

Table 3: CFA Direct Effect of Terrorism Control (TC) & Corruption Control (CC)

Model	Model 1 3-2-4		Model 2 3-2-3		Model 3 2-2-3	
	TC	CC	TC	CC	TC	CC
Judicial Accountability		0.54*** (22.98)				
Judicial Corruption Decisions		0.71*** (36.84)		0.68*** (34.29)		0.68*** (34.29)
Law and Order		0.37*** (13.36)		0.42*** (15.28)		0.42*** (15.50)
Rule of Law		0.86*** (56.28)		0.86*** (47.88)		0.85*** (47.49)
Internal Conflict	0.60*** (25.90)		0.60*** (26.02)		0.53*** (21.07)	
External Conflict	0.52*** (19.54)		0.51*** (19.13)			
Military in Politics	0.85*** (46.79)		0.85*** (48.47)		0.96*** (36.40)	
Corruption Control & Terrorism Control	0.78*** (37.17)		0.81*** (35.27)		0.75*** (26.18)	
CFI	0.843		0.872		0.936	
SRMR	0.07		0.06		0.05	
R ²	0.86		0.85		0.83	
Degree of Freedom	13		8		4	

Note: *, **, *** indicate significance levels at 1%, 5%, and 10%, respectively. An R² value close to 1 suggests a perfect fit. High CFI values and low SRMR values indicate a good model fit. (Kline, 2005).

This implies that countries with high corruption encounter underground support and financial flows towards terrorism, leading to a diminished control over it, and vice versa (Boussiga & Ghdamsi, 2016; Nusrat & Yasmin, 2022). Consequently, all the aforementioned results empirically demonstrate that enhanced control of corruption will result in a decrease in terrorist activities in the developing world.

5. Conclusion

Using structural equation models, this research is unveiling the terrorism-corruption nexus in developing countries. We gathered a sample panel data of 65 developing countries, covering the period from year 2000 to 2019. We utilized Confirmatory Factor Analysis (CFA) to investigate the correlational and bidirectional relationship between corruption control and terrorism control. This study empirically examined the significance of various parameters of observed indicators, redefining the latent variables of corruption control and terrorism control. Recent empirical studies on the relationship between corruption and terrorism have yielded mixed results, largely due to variations in definitions of both latent variables, descriptive methodologies, and data availability. Our empirical findings align with the notion that unregulated corrupt activities contribute to the sustenance and proliferation of terrorism, especially in regions where formal economic and political structures are weak or absent. The research indicates that ineffective control over corruption in developing countries diminishes control over terrorism. Thus, rising corruption provides a fertile ground with hidden cash flows conducive to the growth of terrorism (Schneider, 2017; Schneider & Caruso, 2011). Moreover, our results conventionally demonstrate that terrorist acts are concentrated in areas marked by both external and internal conflicts. Increased military involvement in politics also heightens the threat of terrorist activities. Additionally, in the absence of the rule of law providing adequate accountability and an effective law enforcement framework, corruption primarily incentivizes individuals to misuse their authority and power for personal gains.

The judiciary and legal system's inefficiency, coupled with low bureaucratic and regulatory quality, significantly contribute to the proliferation of corruption (Ríos-Figueroa, 2012). Notably, a robust, active, and impartial judiciary system plays a pivotal role in combating corruption across all levels. Judicial accountability must be upheld without any external interference or coercion. Corruption cases often languish in courts due to prolonged judicial processes, particularly in underdeveloped nations. These delays are often exacerbated by external political and financial pressures. Therefore, establishing an efficient system of accountability is crucial, ensuring swift resolution of corruption cases and timely penalties for corrupt individuals (Riaz & Hayat, 2022). To mitigate the risk of rent-seeking and deter officials from abusing bureaucratic discretion for personal gain, the government should reduce excessive administrative interference in private business activities, enhance transparency, and strengthen oversight of state spending and public investments. Strengthening law enforcement and improving public workers' compensation can also serve as effective measures to curb corruption. These actions would increase the costs associated with corruption while reducing incentives for engaging in corrupt practices. Governments must prioritize these efforts to control corruption and disrupt clandestine financial transactions that fuel internal and external conflicts. Furthermore, our empirical findings indicate that effective corruption control would prevent public officials from aiding terrorist groups for their own hidden financial gains, thereby reducing terrorism. Thus, it is imperative for governments of every developing country to implement economic reforms incentivizing the stabilization and regulation of the political economy. Successfully curbing corrupt activities and terrorism offers the potential to optimize resource allocation and promote sustainable economic growth in these nations.

References

- Adeniran, A. I. (2019). Qualitative study on patterns, experiences and manifestations of corruption in Nigeria. *United Nations Office on Drugs and Crime (UNODC) Abuja, Nigeria*.
- Afolabi, G. K. (2010). Contextual perceptions of corruption in contemporary Nigeria. *African Research Review*, 4(1). doi:<https://doi.org/10.4314/afrrv.v4i1.58230>
- Almenar, V., Sánchez, J. L., & Sapena, J. (2020). Measuring the shadow economy and its drivers: the case of peripheral EMU countries. *Economic Research-Ekonomska Istraživanja*, 33(1), 2904-2918. doi:<https://doi.org/10.1080/1331677X.2019.1706601>
- Bălan-Liseanu, R.-C. (2023). *Corruption-Global Threat to Human Security*. Paper presented at the International conference KNOWLEDGE-BASED ORGANIZATION.
- Bjørger, T. (2004). *Root causes of terrorism: Myths, reality and ways forward*: Routledge.
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological methods & research*, 17(3), 303-316. doi:<https://doi.org/10.1177/0049124189017003004>
- Boussiga, N., & Ghdamsi, M. (2016). The corruption-terrorism nexus: a panel data approach. *International Journal of Economics and Finance*, 8(11), 111-117. doi:<https://doi.org/10.5539/IJEF.V8N11P111>

- Bove, V., Rivera, M., & Ruffa, C. (2020). Beyond coups: terrorism and military involvement in politics. *European Journal of International Relations*, 26(1), 263-288. doi:<https://doi.org/10.1177/1354066119866499>
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research*: Guilford publications.
- Buehn, A., & Schneider, F. (2009). Corruption and the shadow economy: a structural equation model approach.
- Butcher, C. (2016). Terrorism and external audiences: Influencing foreign intervention into civil wars. *Terrorism and political violence*, 28(4), 774-794. doi:<https://doi.org/10.1080/09546553.2014.955572>
- Chatterjee, I., & Ray, R. (2014). Crime, corruption and the role of institutions. *Indian Growth and Development Review*, 7(1), 73-95.
- Chisadza, C., & Bittencourt, M. (2018). Globalisation and conflict: Evidence from sub-Saharan Africa. *International Development Policy| Revue internationale de politique de développement*(10.1).
- Dreher, A., Kotsogiannis, C., & McCorriston, S. (2007). Corruption around the world: Evidence from a structural model. *Journal of comparative economics*, 35(3), 443-466. doi:<https://doi.org/10.1016/j.jce.2007.07.001>
- Dreher, A., & Schneider, F. (2010). Corruption and the shadow economy: an empirical analysis. *Public Choice*, 144, 215-238. doi:<https://doi.org/10.1007/s11127-009-9513-0>
- Ganor, B. (2002). Defining terrorism: Is one man's terrorist another man's freedom fighter? *Police Practice and Research*, 3(4), 287-304. doi:<https://doi.org/10.1080/1561426022000032060>
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2004). Governance matters III: Governance indicators for 1996, 1998, 2000, and 2002. *The World Bank Economic Review*, 18(2), 253-287. doi:<https://doi.org/10.1093/wber/lhh041>
- Kegley, C. W. (2003). The new global terrorism: characteristics, causes, controls. (No Title).
- Makyian, S. N., & Rostami, M. (2019). Political Stability, Corruption, Democracy and Terrorism In the Middle East and North Africa. *International Journal of Business and Development Studies*, 11(1), 59-82. doi:<http://soi.org/10.22111/IJBDS.2019.4838>
- Nusrat, M., & Yasmin, B. (2022). Reinforcing Effect of Terrorism and Corruption Nexus on Net Migration from Developing Countries: An Empirical Analysis. *Zagreb International Review of Economics & Business*, 25(2), 65-83. doi:<https://doi.org/10.2478/zireb-2022-0015>
- Piggott, L. (2010). Chapter 6 Terrorism and violent internal conflict in post-soeharto Indonesia: Beyond the Jihadi prism of analysis. In *Economics of War and Peace: Economic, Legal, and Political Perspectives* (pp. 89-105): Emerald Group Publishing Limited.
- Riaz, M. F., & Hayat, M. A. (2022). Nexus of Shadow Economy and Corruption Control: Evidence from Developing Country's Sample. *Pakistan Journal of Humanities and Social Sciences*, 10(2), 782-796. doi:<https://doi.org/10.52131/pjhss.2022.1002.0243>
- Ríos-Figueroa, J. (2012). Justice system institutions and corruption control: evidence from Latin America. *Justice System Journal*, 33(2), 195-214.
- Rose-Ackerman, S. (2008). Corruption and government. *International peacekeeping*, 15(3), 328-343. doi:<https://doi.org/10.1080/13533310802058802>
- Sapsford, R., Tsourapas, G., Abbott, P., & Teti, A. (2019). Corruption, trust, inclusion and cohesion in North Africa and the Middle East. *Applied Research in Quality of Life*, 14, 1-21. doi:<https://doi.org/10.1007/s11482-017-9578-8>
- Schneider, F. (2017). Restricting or abolishing cash: an effective instrument for fighting the shadow economy, crime and terrorism?
- Schneider, F., & Buehn, A. (2018). Shadow economy: Estimation methods, problems, results and open questions. *Open Economics*, 1(1), 1-29.
- Schneider, F., & Caruso, R. (2011). The (hidden) financial flows of terrorist and transnational crime organizations: a literature review and some preliminary empirical results.
- Shah, A., & Schacter, M. (2004). Combating corruption: look before you leap. *Finance and Development*, 41(4), 40-43.
- Shleifer, A., & Vishny, R. W. (1993). Corruption. *The quarterly journal of economics*, 108(3), 599-617. doi:<https://doi.org/10.2307/2118402>