

RESEARCH ARTICLE

Political Fallouts under COVID-19 Crises and Financial Inclusion: Presenting Implications for Green Financial Development

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Abstract: The financial industry is being transformed by technology, which is enabling for unprecedented access to financial services. These changes have been in the works for a long time and are affecting almost every country on the planet. Despite social distance and containment efforts, technology has opened up new avenues for digital financial services to speed up and promote financial inclusion during the COVID-19 outbreak. Taking into account the threats that have surfaced in the run-up to COVID-19, this research examines the economic and political repercussions of terrorism in developing and developed countries from 1970 to 2016. The study's main conclusion is that terrorism has negative economic, political, and social consequences for both groups of nations. However, in poor nations, the severity of the terrorist consequences is considerably greater than in affluent ones.

Keywords: Terrorism; Political Stability; Secondary School Enrolment; Per Capita Income; GMM
JEL Classification Codes: E23, E44, E69

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1 Introduction

Financial development is critical to economic progress (Z. A. Baloch et al., 2020b), since it encourages savings, increases physical capital in both quantity and quality, and ultimately boosts investment (Sadiq et al., 2022a). Despite financial development's important economic significance, its negative environmental effect cannot be overlooked. Several research (Abdul et al., 2020; Tepper & Yourstone, 2018; Wright et al., 1995) have looked at the environmental effect of financial development, but no agreement has yet been reached. Financial growth may have either a good or bad effect on the environment. Financial development, according to (Saleem et al., 2022) degrades environmental quality by causing economic expansion, which leads to greater levels of production and consumption, which increases energy consumption. On the other hand (Hesketh et al., 2015; Lepitzki & Axsen, 2018; Spash, 2020) highlighted how financial growth enhances environmental quality by allowing businesses to invest in research and development and adopt cleaner and greener technology.

Despite the existence of many studies exploring the effect of urbanization on the environment, no agreement has yet been reached (Q. B. Baloch et al., 2023b). Previous studies contradictory results, further complicating the urban-environment link. Urbanization may have a positive or negative impact on the environment. Urbanization harms the environment through increasing demand for fossil fuels as a result of increased demand for housing, public infrastructure, and transportation (Rief & Clinkinbeard, 2021; Samani & Alavi, 2020). According to (Zeng et al., 2020) urbanization increases energy consumption, which may harm the environment. Contrary to popular belief, urbanization may help to minimize environmental harm by encouraging effective use of public infrastructure, urban agglomerations, land use efficiency, and decreasing distance traveled and the use of private (Zahid et al., 2023).

Whereas improved political institutional quality is unavoidable for unremitting and sustained financial and economic development (Q. B. Baloch et al., 2023a) for reducing environmental degradation cannot be overlooked found that financial growth is only good for the environment if strong institutions accompany it. The quality of institutions, according to (Aly et al., 2017; S. N. Khan et al., 2019; Richard et al., 2009) is one of the main drivers of environmental quality. As a result, environmental quality improves not only as income rises, but also as governance and institutional quality improves, as better institutional quality is linked to higher environmental quality (Sadiq et al., 2022b), the role of improved political institutions in determining environmental quality is unavoidable.

Where international commerce is important in sparking economic development (Anderson, 1978), its environmental effect must be considered. (Ilzetzi et al., 2020) divided the environmental impact of trade into size, composition, and method impacts. The scale effect refers to greater economic activity as a result of increasing trade intensity (Zeng et al., 2020) which leads to higher increased energy use and economic activity, which increases pollution. Trade can have positive or negative effects on a country's output composition depending on the situation. For instance, trade may enable a labor-intensive nation to produce environmentally friendly goods. The technology impact, a phenomenon where commerce promotes economic growth and growing income levels fuel demand for a cleaner environment, lowers emission intensity per unit of output. Therefore, the amount, substance, and manner of distribution of commerce are added together to determine its overall impact on the environment. As a result, depending on the total effect of size, method, and composition impacts, trade may have a good or negative impact on environmental quality (H. Liu et al., 2022a).

The global economy is facing significant economic and non-economic difficulties. Several nations are experiencing depression or severe recession, and many economies are doing much worse than they were a few decades ago (Ko, 2019). Poor strategic planning and implementation of stabilization measures, resource drag, financial crises, domestic and foreign indebtedness, ineffective military expenditure, and inflation are among the economic problems that stifle economic development, decrease living standards, and undermine political structures. Non-economic problems, on the other hand, such as uncertainty, worsening law and order, and bloodshed, mostly caused by terrorism,

pose significant risks to a country's socioeconomic and political stability (Adeola, 2016). Terrorism is now defined as an act of violence committed against individuals and governments with the intent of achieving ideological or political objectives via extortion and intimidation (Meltzer et al., 1999). Terrorist groups collaborate to achieve common objectives, which include fundamental changes in a country's social, economic, and political structure via government acts, laws, and choices and the use of force and threats (Ahmed et al., 2021).

Terrorist operations have increased dramatically throughout the world in the last decade, especially in the aftermath of 9/11. These actions are mainly intended to cause instability in a nation and, without a doubt, have negative economic and political consequences for the victims. The effects, however, have been described as "devastating," especially for poor nations (Aly et al., 2017). It is widely recognized that developing nations have inadequate economic and political structures and weak governance and limited shock absorption ability. As a result, many countries are unable to take effective measures for not just combating terrorism but also dealing with its consequences (Hair et al., 2014). On the other hand, developed countries have a solid economic structure, superior institutional setup, and governance indices, allowing them to address terrorist actions' repercussions successfully (Poon, 2003).

Terrorism stifles economic activity by causing uncertainty and eroding investor confidence, resulting in a drop in investment and employment. The idea of the irreversible investment may theoretically explain the economic consequences of terrorism. The uncertain environment produced by terrorism in the nation hampers investment by postponing investment expenditures, resulting in a decrease in total economic activity. (G. PAULRAJ, 2020; NGUYEN, 2020) explain that it can impose costs on a targeted state in a variety of ways, including by destroying infrastructure, diverting Foreign Direct Investment, redirecting public expenditures toward security purposes (Gottardi & Scarso, 1994). Furthermore, higher risk of casualties results in lower savings, lower capital creation, and worse economic growth (Sadiq et al., 2022a).

Terrorism not only has financial costs, but it also has political consequences (Wang, 2005). Political stability in a nation is important for strengthening the economic order (Semenda & Semenda, 2018). Terrorism causes political disruption by putting pressure on the government, which may lead to the government's dissolution or collapse. Furthermore, it causes political instability and resource reallocation from productive to non-productive sectors, mostly to military operations.

Furthermore, the societal impact of terrorism cannot be overlooked, since the social sector of an economy includes education, human development, and a trained work force, and therefore is an essential component of economic growth. Terrorism creates uncertainty and instability, which is detrimental to the formation of human capital as well as political stability. Terrorism is a breach of human rights that causes a variety of psychological and physiological problems, ethnic conflicts, and religious disturbance. Furthermore, social consequences, especially in the area of education, have been documented as a result of infrastructure damage, student deaths and injuries, and a drop in overall enrollment rates (Anderson, 1978; Gadit & Mugford, 2007).

Policymakers and academics are consciously analyzing the economic and human costs of terrorism and identifying the possible dangers of future terrorist acts. In this respect, policymakers have implemented a worldwide counter-terrorism strategy that assists in reducing sudden terrorist strikes; nevertheless, there are some budgetary costs associated with it in the form of rising non-productive security expenditures (H. Liu et al., 2022a).

On the other hand, researchers have mainly concentrated on the economic consequences of terrorism. Terrorism has a detrimental and substantial effect on economic development. The United States lost 0.06 percent of its overall productive assets as a result of the 9/11 attacks. In Israel, terrorism decreased yearly per-capita consumption by 5% while overall production fell by 3 to 5%. Despite the significance of the political and social consequences of terrorism, they get little attention. Some studies have used qualitative or descriptive analysis to investigate these aspects. However, only a small amount of study has been done on reverse causality in the social and political dimensions (Yeyouomo et al., 2023).

The current research is an empirical investigation of the socioeconomic and political consequences of terrorism in industrialized and developing countries from 1970 to 2016. This research is unique in a number of ways. To begin with, although there is a wealth of research available for assessing the economic effect of terrorism, there is a paucity of work on the social and political consequences of terrorism. Some reports exist that state/describe the effects of a specific terrorist incident on school enrolments, school buildings, and wounded pupils. However, there is no scientific data explaining the societal consequences of terrorism over a lengthy period of time in many nations. Furthermore, rather than focusing on the political implications, the connection is studied in reverse. To close this gap, we are attempting to objectively assess the social and political implications of terrorism and the economic ramifications. As indicators of chosen economies' economic, social, and political sectors, we utilize per capita income, secondary school enrollment, and the political stability index. Second, the research is largely focused on a sample of poor nations; with little emphasis on include rich countries in such analyses. We conducted a comparative study of 28 industrialized and 86 developing nations to address this void. Third, empirical studies tend to concentrate on a specific terrorism indicator. We utilized the number of terrorist occurrences, wounded individuals, deaths, and a composite terrorism index to compare the relative effect of each terrorism indicator. This will help us identify the type of terrorism that poses the greatest threat to the political and economic stability of a group of countries. Finally, we performed a series of robustness tests to confirm the accuracy of our results and assess their significance. The remainder of the article is structured as follows: section 2 provides a literature review of current empirical research; The technique and data are explained in part 3, and the empirical findings are discussed in section 4. Finally, part 5 brings the by outlining some policy suggestions based on the research's empirical findings.

2 Literature Review

The current literature This research offers a plethora of empirical studies looking at the relationship between economic development and counterterrorism policies. Only a few illustrative examples include Baker, Bloom, & Davis (2016), Semenda & Semenda (2018), and Zeng et al. (2020). Threats of terrorist attacks impede economic expansion. The idea of recurring expenses (Meltzer et al., 1999; Shafiu et al., 2019; Zeng et al., 2020) explains the connection between terrorism and economic performance. According to these studies, the early expenses of investment are sunk costs, and these costs are permanent. Terrorism-induced unrest and upheaval lead local and international investors to postpone investment choices. Similarly, (J. Liu et al., 2021a) claim that investments and terrorism have a negative connection. Terrorism has reduced the Basque country's GDP per capita by 10% over the last two decades. Researchers (Mohsin et al., 2019) has observed the negative effects of terrorism on developing country economic development. However, due of their weak macroeconomic structure and inadequate monetary and fiscal policies, the consequences of terrorism are more severe in low-income nations. On the other hand, advanced economies are more stable and powerful in macroeconomic terms and have a greater ability to absorb the negative effects of terrorism. The research also emphasizes that a country's macroeconomic stability and strong economic development may help to limit the scope of terrorist operations.

Terrorism not only has an economic impact on nations, but it also has societal consequences. For example, the connection between education and terrorism is seen as the deterioration and prevention of educational progress. Terrorist assaults on education have mainly psychological and material effects in the long run, but their persistence over time leads to educational fragility, state weakness, and a barrier to educational progress. Some researchers have conducted a qualitative study of this dimension, while others (Sadiq et al., 2022a) have used descriptive statistics to analyses the data. Terrorism, according to (Ferris et al., 2018) is a significant danger to education. In particular, (Poon, 2003) investigates how the Boko Haram conflict in Nigeria impedes education and generates a substantial drop in school enrolment. The opposing viewpoint is that education has a negative and substantial effect on (Shafiu et al., 2019) Education, according to the theory, lowers support for vi-

olent terrorist acts and suicide bombings because it fosters awareness, tolerance, pluralism, skills, and values (Ko, 2019) The relationship between terrorism and political stability has lately been studied. Terrorism produces political instability, state fragility, increased government vulnerability, and policy disruptions (Poon, 2003) Furthermore, counter-terrorism operations raise non-productive military expenditures, resulting in resource reallocation from the productive sector. In this respect, the first strand of research investigates the effect of democracy on terrorist activities, concluding that democratic characteristics decrease violent terrorist activities. By allowing rebels to express their interests and seek compromises, democracies promote peaceful settlement of political disagreements (Lehner & Döll, 2004). The second strand of research connecting democracy with terrorism, on the other hand, claims that democratic nations have high levels of (Tepper & Yourstone, 2018). Terrorist organizations, on the other hand, accomplish their political objectives by disrupting and destroying a country’s democratic system. (John et al., 2016) presents the theory that suicide attackers choose to target democratic nations for nationalistic reasons. They target democracies because they believe they are the most vulnerable to suffering deaths. Similarly, because of their increased participation in international affairs and the policies that democratic nations follow, democracies suffer high levels of terrorism.

The current literature study reveals that there is a lot of research on the effect of terrorism on economic development, but there isn’t much research on the social and political repercussions of terrorism (H. Liu et al., 2022b). Furthermore, a significant amount of research has concentrated on the effects of terrorism on poor nations, whereas less study has been done on the effects of terrorism on industrialized countries. As a result, not only for developing nations but also for industrialized countries, it is necessary to assess the consequences of terrorism in all key industries.

3 Data Methodology

By following, a detailed framework has been formulated to belief, economic, social, and political fall-outs of terrorism for both developing and developed countries. The basic model takes the following form.

$$Y_{it} = \alpha_0 + \alpha_1 Y_{it} + \alpha_2 Terror_{it} + \alpha_3 CD + \alpha_4 Terror_{it} \times CD + \alpha_5 \sum_{j=1}^n \alpha_j X_{j,it} + \mu_{it} \quad (1)$$

Where I is the ith nation I = 1,2,3,...,86 poor countries and I = 1,2,3,...,28 developed countries), and 't' denotes the time period (t = 1970 to 2016). Y it is the vector of chosen nations’ economic, social, and political dimensions, whereas Y (it-1) is the lag of each dimension’s corresponding metrics. We utilized per capita income (PCI), secondary school enrollment (SSE), and political stability (PS) of chosen nations to represent economic, social, and political aspects is the log of per capita income (constant prices 2010 \$US), secondary school enrolment (percent gross), and the political stability index. This score determines how likely a nation is to be a target of terrorism. It has a range of -2.5 to +2.5, with positive values indicating political stability and negative ones indicating political instability. (Zeng et al., 2020) refer to a terrorist index. We utilized a terrorism index, which is a unified assessment of terrorism. The terrorism index is calculated using total terrorist events and total casualties (by adding the total dead and injured people) for each nation during the time period 't', as described by Dreher et al., (2011).

$$Terror_{it} = \ln \left[e + \frac{Incidents_{it}}{TotalPopulation_{it}} + \frac{Victim_{it}}{TotalPopulation_{it}} \right] \quad (2)$$

The index is adjusted for total population size to assess the possible scope of terrorism in states with lower populations, which is considered extremely dangerous. e, on the other hand, is a constant with a value of 2.71828. Researchers (Valadkhani et al., 2021) specifies a nation dummy, with '1' referring to developing countries and '0' referring to all other countries. refers to the terrorism index’s interaction

term with the nation dummy. When the interaction term has a positive coefficient, emerging nations suffer more economical and political consequences than industrialized countries.

To guarantee validity and prevent omitted variable bias, each dimension is regressed against its basic determinants ($X_{(j,it)}$) in addition to the focal variables. First, we utilized per capita income as the dependent variable to estimate the economic consequences of terrorism. We used the following variables as regressor, following (Anderson, 1978) gross fixed capital formation (percentage of GDP); log of consumer price index; human capital index, based on years of schooling and returns to education; trade openness, measured as the sum of imports and exports (percent of GDP).

Second, we utilized secondary school enrolment as the dependent variable to reflect the societal consequences of terrorism. We utilize the following variables, as recommended by (S. A. R. Khan et al., 2021) log of per capita income (constant prices 2010 \$US); government spending on education (percent of GDP); and the PolityII indicator of democracy, which runs from -10 to +10. Autocracy is represented by a negative value of the variable, while a positive number represents democracy.

Third, we utilize the political stability index as the dependent variable to assess the political consequences of terrorism in both groups of nations. We utilize the following variables as regressors in our model, as suggested by (NGUYEN, 2020) Human capital index based on years of schooling and returns to education; log of consumer price index; control of corruption index (ranges from 0 to 6); per capita income growth (annual percent).

3.1 Data Sources and Data Transformation

The panel data for 86 developing and 26 developed nations from 1970 to 2016 is used to conduct an empirical study of the economic and political consequences of terrorism. The data on democracy comes from the Polity IV study on Political Regime Characteristics and Transitions, conducted by the Integrated Network for Societal Conflict Research Program and the Center for International Development and Conflict Management (1800-2016). The World Governance Indicators provided the data for the political stability index. This project includes metrics such as political stability and the absence of violence/terrorism, voice and accountability, regulatory quality, government effectiveness, corruption control, and rule of law. The data comes from a range of places, including survey organizations, non-governmental organizations, think tanks, private sector businesses, and international organizations. We also used data from the PRS group's International Country Risk Guide for the corruption control index, as well as data from Penn World Table for the human capital index (PWT). Returns on education and years of schooling are used to create the human capital index. In addition, per capita income and the consumer price index are calculated in log form, while capital creation, government spending, and trade openness are calculated as a percentage of GDP. Other variables are utilized in their original form in the estimate.

The data for our targeted variable comes from the National Consortium for the Study of Terrorism and Responses to Terrorism's Global Terrorism Database (START). We employed four terrorist countermeasures. Data is provided for three measures: total dead people, total injured people, and total terrorist attacks, with a fourth measure. Because the data in GTD is accessible on a monthly basis, we converted it to an annual basis by adding the number of incidents/deaths/wounded people for each month of a given year.

3.2 Estimation Technique

We used the Dynamic Panel System Generalized Method of Moments (GMM) for developing nations, which fixes the endogeneity problem. When $N > T$ and endogeneity are present in the model, this tactic is effective. As the lag value of the regressor is linked to the error term, panel estimates for dynamic random (RM) and fixed effects (FE) become biased. In GMM, the lag of the instrument should not be correlated with the current time period error term, whereas in RE and FE, the future realization of instrumental variables (IV) and the lag term of the regressor should not be linked with the

current-period random error terms. (Spash, 2020) proposed consistent GMM estimators to address these concerns. Furthermore, system GMM is a two-stage estimate technique. The first phase consists of non-robust results known as Sargan statistics and the second step consists of robust discoveries known as Hansen statistics. Similarly, second order autocorrelation-AR (2) produces complicated results with this method, and the Arellano and bond tests for AR (2) should be negligible. These test data confirm the validity of the instruments used in the estimate.

4 Results and Discussion

This section of the study discusses the summary statistics and empirical results of terrorism’s economic and political consequences for both developing and developed nations. The descriptive statistics are presented in part 4.1, the empirical results are explained in section 4.2, and the robustness analysis is shown in section 4.3.

4.1 Descriptive Statistics: Developing Vs. Developed Countries

Table 1 provides an overview of the data. For developing nations, Panel A of the table describes the total number of observations, mean, standard deviation, minimum and maximum values of the chosen variables, while for rich countries, Panel B explains the same information.

The summary data show that, when compared to industrialized nations, the mean values for all terrorism indicators in developing countries are very high. The data also shows that both groups of nations have the greatest average for total number of injured people with the largest standard deviation, revealing the vast spread of terrorism in these countries. In contrast, developing nations have the lowest mean and standard deviation for total number of terrorist events, whereas developed countries have the lowest average value for total number of dead people. Similarly, the average score for the terrorism index shows that overall terrorism in developing nations is higher than in rich ones.

In terms of the study’s chosen macroeconomic indicators, industrialized nations have a higher average rate of per capita income than developing countries. Meanwhile, the average value of political stability in emerging nations indicates political disruption and instability, while in affluent ones it demonstrates stability. The average rate of secondary school enrolment demonstrates that industrialized nations have more human capital than emerging ones.

Table 1: Descriptive Statistics: Developing Vs. Developed Countries

Var.	No. of obs.	Mean	S.D	Min.	Max.	Skewness	Kurtosis
Panel A: Developing Countries							
NIN	1151	51.62	115.25	0	2816	7.77	111.37
NK	1124	150.45	556.82	0	12071	10.45	142.17
NW	1113	182.88	812.57	0	15700	11.46	156.11
Terror	1102	1.76	1.81	0.88	8.36	0.776	1.712
LPCI	2823	6.47	1.11	3.64	11.53	0.164	1.735
DEM	3101	-0.31	5.74	-10	10	0.114	1.315
PS	1423	-0.575	0.78	-2.2	1.23	-0.211	1.525
GSSE	1570	41.48	18.8	1	118	0.035	1.707
Panel B: Developed Countries							
NIN	743	22.1	52.21	1	452	2.785	12.517
NK	742	12.86	118.51	0	2004	15.4	234.68
NW	736	62.81	463.81	0	13753	11.672	423.45
Terror	736	1.81	1.13	0.88	7	1.44	4
LPCI	1254	8.87	0.65	5.74	11.31	0.164	1.73
DEM	1284	6.28	4.21	-8	10	-1.113	4.84
PS	357	0.535	0.61	-1	1.65	-1.202	3.17
GSSE	1071	83.1	10.15	11.1	155	0.035	1.707

Box whisker plots may also be used to illustrate the occurrence of terrorism. On the basis of quartile distribution, box plots are used to illustrate the general pattern of the data. The incidence of terrorism in emerging vs. developed nations is shown. The box plot for developing nations indicates that developing countries have a higher average incidence of terrorism than developed ones. The average incidence of terrorism in developing nations is much greater than the highest incidence in industrialized ones. The data for both sets of nations shows that once the average incidence of terrorism has increased, it has continued to rise, confirming the positively skewed distribution.

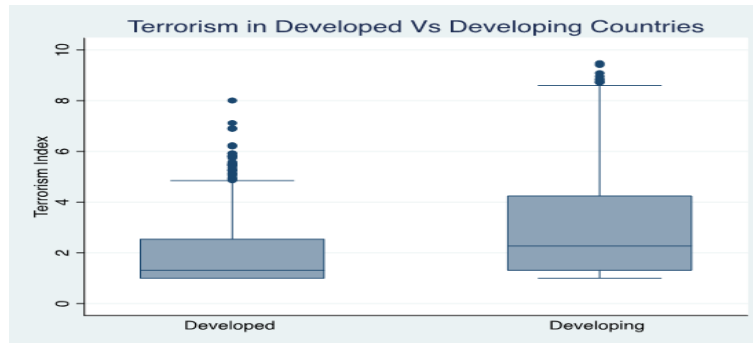


Figure 1: Incidence of Terrorism in Developing Vs. Developed Countries

4.2 Discussion of Empirical Results

For the economic, social, and political consequences of terrorism, empirical results are presented in columns 2, 3, and 4 of Table 2. The table shows the empirical estimates in panel A, while the diagnostics are listed in panel B. In each instance, two diagnostic tests are utilized. The Hansen test is performed first for instrument validity, followed by AR (2) for autocorrelation. All models are properly defined, according to both test statistics.

4.2.1 Economic Fallouts of Terrorism: Developing Vs. Developed Countries

The log of per capita income (PCI) is used to assess economic performance, while the lag of per capita income is used to reflect the changes in per capita income. In column 2 of Table2, the empirical results regarding the economic effect of terrorism are provided. For a chosen sample of nations, the coefficient of delayed PCI is positive and strongly linked to its present value. This demonstrates the per capita income's stability and durability.

The empirical estimations of the terrorism index show that terrorism has a negative effect on the per capita income of a chosen group of nations. We add an interaction term of terrorism and nation dummy (1= developing, 0 otherwise) to determine the differential effect of terrorism. The positive sign of the interaction term indicates that the growth distorting effect of terrorism in developing nations is 0.028 percent greater than in developed countries. This conclusion is supported by a number of factors. It is generally acknowledged that established nations are stronger and more stable than emerging countries, and as a result, their shock absorption ability is considerably greater than that of their developing counterparts. These findings are in line with those of previous research in the literature, such as (Färe et al., 2007). The idea of irreversible investment may explain the detrimental effect of terrorism on revenue. By generating uncertainty, terrorism shatters investor confidence and lowers the assurance of anticipated profit, reducing investment and production. Terrorism also lowers profitability, increases security spending, destroys infrastructure, and therefore reduces investment and

per capita income. Furthermore, reallocating resources from productive to non-productive sectors, such as defense and military, lowers productivity and lowers per capita income.

Investment and human capital are the most significant sources of economic growth, among other macroeconomic drivers of income. Investment is a key component of economic growth in all growth models, including the Solow Growth Model, Neoclassical Growth Model, and New Growth Model. It not only creates money but also increases the country's economic capability (NGUYEN, 2020). The Keynesian Multiplier hypothesis also confirms the multiplier impact of investment on economic growth. The results show that investment has a positive effect on both sets of counties' per capita income. These empirical results are in line with those of (Z. A. Baloch et al., 2020a) who all found that investment had a favorable effect on income. Furthermore, the results support the Keynesian Multiplier Theory, which says that every change in investment has a multiple impact on income, but the magnitude of the multiplier determines the amount of change in income.

Similarly, the AK and New Growth Models argue for the significance of human capital. Through its high marginal product and increase in total factor productivity through innovative activities, educated labor directly contributes to the production process. Our empirical results support the theoretical predictions, since human capital seems to be substantial and positively affects both sets of nations' per capita GDP. As a result of their superior human capital and trained labor force, developed nations are better able to adapt to advanced technology than developing economies. These nations' higher levels of human capital creation and technical achievement have a larger effect on per capita income.

In terms of inflation's effect on per capita income, there are conflicting opinions in the current research. The first body of evidence shows that a moderate degree of inflation is beneficial to economic development because it stimulates economic activity and provides better returns to savers and investors (Aly et al., 2017). Opponents of this viewpoint argue that a high rate of inflation erodes a country's buying power and raises the expense of living. This has a negative impact on the country's aggregate demand and production (NGUYEN, 2020).

As Adam Smith said, international trade is a development engine but not a magic wand, meaning that the effect of international trade is dependent on a variety of variables in a country. Our results show a small but significant detrimental effect of trade openness. Due to the high number of developing nations in the sample, trade may have a negative effect. The imports of developing nations are technical products, and their export base is limited, resulting in a trade imbalance and reducing the benefits of trade liberalization.

Terrorism's societal consequences are assessed by secondary school enrolment (SSE). Table 3 shows empirical estimates regarding the societal consequences of terrorism. For both groups of nations, the lag of SSE is positively and substantially linked to the present value of SSE. This demonstrates the enrolment rate's consistency.

Terrorism has a negative effect on school enrollment in certain nations, according to empirical estimates of the terrorism index. The effect in developing nations is 0.88 percent greater than in developed countries, as seen by the positive sign of the interaction term. Terrorism has a detrimental effect on SSE because it destroys schools and kills kids. In this respect, the Boko Haram insurgency in Nigeria, which obstructs education by restricting access to school, is the most important example. Due to threats and kidnappings, school attendance in Nigeria has dropped significantly.

Furthermore, according to Amnesty International data, almost 1000 children and 70 instructors have been injured or murdered since 2012. Many children are being pushed out of schools throughout Kaduna, Yobe, Borno, and Adamawa states. (Ahmed et al., 2021) state has seen the greatest number of terrorist assaults on educational institutions. Over 1,110 events involving schools have occurred in Afghanistan, including suicide bombs and explosions. Terrorist attacks against schools, it taken a variety of forms, including hostage takings, bombs, and armed assaults. Since 2003, the frequency of such attacks on educational institutions has increased dramatically. Thailand, Iraq, Nepal, and Afghanistan have had the greatest effect of terrorism on educational institutions since 1998. Colombia, Pakistan, India, Spain, Turkey, and Sweden are among the countries represented.

Per capita income, among other factors, has a favorable and substantial effect on SSE. For example, all are in agreement with these findings. According to this research, per capita income is the most important predictor of school attendance, thus nations with greater per capita income have higher school enrollment. Furthermore, government spending has a little impact on SSE. These findings contradict those of (Poon, 2003). According to them, HK is a major driver of growth, and investing in human capital raises a country's living level.

Furthermore, democracy has a negative and substantial relationship with SSE, meaning that the more democratic the state, the lower the school enrollment would be (Conti et al., 2014). Democratic administrations, according to this research, enhance the chances of HK creation by sustaining higher education spending. Furthermore, in fully democratic societies, participation costs and departure barriers are minimal, the state is the only supplier of all social services, and it offers the greatest amount of public goods at relatively cheaper prices than their autocratic counterparts.

The political stability index is used to assess the political consequences of terrorism. Table 4 summarizes the empirical results. The political stability index's lagged value shows a positive and substantial relationship with its present value. This demonstrates the political structures of both sets of nations' durability.

The empirical results show that terrorism has a negative effect on political stability in a sample of nations. Terrorism has a 0.12 percent greater negative effect on political stability in underdeveloped nations than in rich ones. This result is unsurprising, given that developing nations have many political and economic difficulties, and any rise in conflicts and terrorist activities has a negative impact on their governments and political structures. Conflict and terrorism are used to harm society or governments in order to achieve ideological, religious, or political objectives. If political institutions fail to uphold law, manage the economy, and control terrorists, political discontent undermines government legitimacy and credibility. Governments that do not resolve political problems, on the other hand, result in violence, which leads to terrorism and wars. Any kind of unrest, conflict, or disruption in the nation, whether democratic or autocratic, causes instability in the governing system (J. Liu et al., 2021b).

Moving on to the second factor of political stability, economic development which is favorably and substantially linked to both emerging and developed nations' political stability. The findings are in line with those of (Edwards & Caglayan, 2001) found that nations with greater growth have more stable political institutions because the same government is more likely to remain in power during times of high development. The level of political turmoil and institutional instability decreases as economic development rises. Poor economic development, according to (Aly et al., 2017), also promotes political unrest and coups.

The inflation rate is rising, and this is supported by statistical evidence. There is agreement between our findings and those of (Cheong & Kim, 2018). According to these analyses, inflation may serve as a simple solution to the government's budget imbalance. By simply generating additional money, even the ineptest governments might theoretically pay off their obligations. A dispute about the seigniorage is acceptable since it is believed to be less expensive to produce government income under a particular tax system. Furthermore; inflation has a time-varying effect on a country's political structure. It has a detrimental influence on political stability at first, but as time passes, the effect improves.

Political stability is influenced by human capital in a favorable and substantial way. Education improves a country's political structure through raising awareness and involvement in political activities such as voting and systematization. Higher education and schooling contribute to a government's long-term viability because educated individuals are more aware of the legal processes for interacting with political authorities and achieving their goals. Corruption control helps to maintain political stability. It denotes financial institution transparency, which in turn contributes to government agency efficiency. Corruption control promotes economic success, political structure, and social peace. On the other hand, corruption has a disruptive effect on economic development, resulting in political instability (Ilzetzki et al., 2020).

Table 2: Socioeconomic and Political Fallouts of Terrorism: Comparison Between Developed and Developing Countries

Panel A: Empirical Estimate					
Model 1		Model 2		Model 3	
Dep. Var. PCI		Dep. Var. SSE		Dep. Var.PS	
Var.	Coeff. (S.E)	Var.	Coeff. (S.E)	Var.	Coeff. (S.E)
C	0.1616 -0.13	C	-3.612 -2.16	C	-1.313*** -0.228
L.LPCI	0.848*** -0.013	L.GSSE	.887*** -0.015	L.PS	0.613*** -0.062
Terror	-0.0217** -0.0146		-0.216775		0.1881** -0.065
D x Terror	0.0171* -0.014		0.766* -0.377		0.1158* -0.05
GFCFG	0.0018** -0.0013	LPCI	0.777* -0.336	PCIG	0.0104* -0.0045
LCPI	-0.0012 -0.0017	GEXPG	-0.124 -0.127	LCPI	0.1812*** -0.053
HK	0.0544* -0.023	DEM	-0.152* -0.081	HK	0.1163*** -0.025
TO	-0.00001 -0.00014			CC	0.1218*** -0.025
Panel B: Diagnostics Tests					
AR(1)	-1.1 -0.121	AR(1)	0.766 -0.14	AR(1)	-0.18 -0.661
Hansen Test	51.77 [0.155]	Hansen Test	68.31 [0.511]	Hansen Test	42.63 [0.601]
F. stat	2328.76*** 0	F. stat	4513.50*** 0	F. stat	1751.14*** 0
Obs.	1081	Obs.	1115	Obs.	2132

Note: this table shows the impact of political fallouts on Terrorism.

4.3 Robustness Analysis

The economic and political consequences of terrorism are examined in this part of the chapter. Multiple robustness tests were performed to ensure that our results were significant. To begin, we divided the sample into developing and developed nations to ensure the validity of our results and to determine which set of countries is more affected by terrorism than developed ones. Table 3, Table 4, and Table 5 show the results of this robustness test in Column 2. The results show that terrorism has a negative effect on per capita income, lowers school enrollment, and weakens political stability in both groups of nations. Furthermore, by carefully examining the terrorism coefficient, we may deduce that the economic and political consequences of terrorism are greater in developing nations than in industrialized ones. With a few exceptions, additional determinants of each dependent variable corroborate the aforementioned results. The effect of trade openness seems to be positive mainly for developed nations in the PCI model. The result backs up the Keynesian foreign trade

multiplier, which states that a country's export profits influence per capita income in the same manner that investment does. These studies show that increased productivity leads to increased trade openness, which leads to economic development. Furthermore, some advanced countries' success is attributable to the dynamic activity of their government bodies in promoting exports in global markets where imports are not fully. Export commodities provide the most income for these nations, and they play a major role in their economic development. On the other hand, developing nations are mostly primary commodity exporters, which do not generate enough foreign currency.

The second level of robustness is achieved by utilizing distinct terrorist measures rather than the terrorism index for each group of nations. In the GTD database, there are three types of terrorist measures. I the overall number of terrorist events, (ii) the total number of people murdered, and (iii) the total number of people injured. Using all of these variables individually, we calculated the economic and political consequences of terrorism. Tables 3, 4, and 5 summaries the results (Column 3-4). All indicators of terrorism have a negative effect on socioeconomic and political elements of chosen countries, according to our results for this empirical study. Furthermore, we find that the size of the effect of all kinds of terrorism is greater in developing nations. This confirms our results in section 5.2, which show that the negative effects of terrorism are greater in poor nations than in rich ones. Other factors of each dimension provide consistent outcomes. Notably, the effect of trade openness on economic growth seems to be favorable in rich nations but negative in emerging ones. In industrialized nations, the effect of government spending on school enrollment is substantial and beneficial. However, it only seems to be relevant in one of the developing country models. Furthermore, the GEXPG coefficient size is larger in developed nations than in developing ones, suggesting that government education spending is more effective in these countries. The larger coefficient also indicates that the efficiency of education spending is dependent on government structure transparency and economic stability.

To summaries, the empirical results show that terrorism has a negative effect on both developed and developing countries' socioeconomic and political elements. The negative effects are more severe in underdeveloped nations than in wealthy countries. These countries have a weak and unstable macroeconomic structure, as well as inadequate governance, institutions, and fiscal and monetary policies. As a result, these countries have been struck hard by terrorism and have experienced severe and profound macroeconomic downturns. Developed nations, on the other hand, are more diverse, have strong and transparent institutions, consistent fiscal and monetary policies, and excellent governance. As a result of their strength in macroeconomic indices and overwhelming ability to absorb the negative consequences of terrorism, these nations are relatively unaffected by terrorism.

Table 3a: Economic Fallouts of Terrorism: Developing Countries

Panel A. Empirical Estimates				
Dependent Variable: Per Capita Income				
Var.	Model 1 Coef. (S.E)	Model 2 Coef. (S.E)	Model 3 Coef. (S.E)	Model 4 Coef. (S.E)
C	0.184*	0.185*	0.119	0.118
L.LPCI	-0.101	-0.105	-0.092	-0.072
TERROR	0.966***	0.961***	0.972***	0.971***
LNIN	-0.017	-0.02	-0.016	-0.013
NK	-0.0145**			
	-0.007	-0.0000222	0	

Panel A. Empirical Estimates				
Dependent Variable: Per Capita Income				
NW				-0.000037*
				0
GFCFG	0.0019***	0.0022**	0.00119*	0.00109**
	-0.0007	-0.0008	-0.0006	-0.0005
LCPI	0.0117**	0.0096*	0.0134**	0.0121**
	-0.005	-0.005	-0.005	-0.005
HK	0.0366*	0.0378*	0.03	0.0458*
	-0.02	-0.019	-0.019	-0.025
TO	-0.0002	-0.00006	-0.00017	-0.00043
	-0.0001	-0.00017	0	0
Panel B. Diagnostics Tests: Developing Countries				
AR(2)	-0.61	-0.55	-0.22	-1.34
	-0.54	-0.58	-0.82	-0.18
Hansen Test	53.76	62.77	57.33	54.44
	-0.23	-0.99	-0.25	-0.34
F-stats	3006.24***	19495.18 ***	2619.51***	4760.16***
	0	0	0	0
Obs.	1396	1405	1405	1400

Table 3b: Economic Fallouts of Terrorism: Developing Countries : Developed Countries

Panel A. Empirical Estimates				
Var.	Model 1 Coef. (S.E)	Model 2 Coef. (S.E)	Model 3 Coef. (S.E)	Model 4 Coef. (S.E)
L.LPCI	0.954***	0.955***	0.951***	0.954***
TERROR	-0.01 -0.0042*** -0.001	-0.014	-0.01	-0.01
NIN		-.0020*		
NK		-0.001		
NW			0	-1.00e-06*
				-5.66E-07
GFCFG	0.0028***	0.0030 ***	0.00312***	0.0031***
	-0.001	-0.0008	-0.001	-0.001
LCPI	-0.00063	-(0.0038)**	-0.0014	-0.0015
	-0.001	-0.0015	-0.001	-0.001
HK	0.040*	.0454 **	0.045**	0.051**
	-0.02	(0 .021)	-0.02	-0.02
TO	0.00023**	.00053***	0.00025**	0.00023**
	0	-0.0001	0	0

Panel B. Diagnostics Tests: Developed Countries				
Under ID Test	80.55*** 0	104.6*** 0	77.16*** 0	76.94*** 0
Weak ID Test	38.91	18.92	37.47	37.48
5\% critical Value	16.85	21.18	16.85	16.85
Hansen Test	5 [0.17]	17.92 [0.16]	4.98 [0.17]	3.796 [0.28]
F-stat	8729.84***	8634.46***	8471.78***	8459.41***
P value	0	0	0	0
Obs.	605	588	608	605

Table 4a: Social Fallouts of Terrorism: Developing Countries

Panel A. Empirical Estimate				
Dependent Variable: Secondary School Enrollment				
Var.	Model 1 Coef. (S.E)	Model 2 Coef. (S.E)	Model 3 Coef. (S.E)	Model 4 Coef. (S.E)
C	-5.96 -5.45	-18.18** -7.708	1.609 -1.665	.625*** -3.506
L.GSSE	0.932*** -0.023	0.891 (0 .031)	0.980*** -0.017	.970*** -0.018
Tidx LNIN NK	-0.17763	-0.00001008	-0.00000209	-0.00093* -0.00053
NW				
LPCI	1.532* -0.863	3.29*** -1.14	-0.032 -0.3051	0.155* -0.569
GEXPG	0.0644 -0.121	0.225 -0.22	0.220* -0.122	0.206 -0.116
DEM	.177** -0.082	0.146* -0.081	0.126* -0.068	0.141* -0.053
Panel B. Diagnostics Tests: Developing Countries				
AR(2)	1.34 -0.18	1.35 -0.178	1.22 -0.22	1.2 -0.23
Hansen Test	61.34 [0.98]	62.39 [1.000]	48.59 [0.74]	66.69 [1.00]
F-stat	2712.26*** 0	536.13*** 0	5188.90*** 0	6818.02*** 0
Obs.	608		614	608

Table 4b: Estimates of Instrumental Variable Technique: Developed Countries

Panel A. Empirical Estimates				
	Model 1	Model 2	Model 3	Model 4
Var	Coef.	Coef.	Coef.	Coef.
	(S.E)	(S.E)	(S.E)	(S.E)
L.GSSE	0.904***	0.893	0.902***	0.929***
	-0.024	-0.039	-0.027	-0.025
TERROR	-0.474*			
	-0.28			
LNIN		-1.488*		
		-0.765		
NK			-0.00012264	
NW				-0.0016
				-0.0038
LPCI	3.55**	-0.434	2.831*	2.415*
	-1.702	-1.88	-1.53	-1.33
GEXPG	0.499*	1.413***	.919***	.577**
	-0.254	-0.48	-0.333	-0.28
DEM	0.044	0.352**	0.034	.131*
	-0.06	-0.174	-0.065	-0.074
Panel B. Diagnostics Tests: Developed Countries				
Under ID Test	46.34***	18.07*** (0.003)	19.00*	11.28*
	-0.0003		-0.0082	-0.079
Weak ID Test	4.39	4.83	2.65	1.75
5\% critical Value	21.34	18.37	19.86	19.28
Hansen Test	13.45	1.79 [0.77]	3.96	7.14
	-0.7		[0.68]	[0.21]
F-stat	2712.26***	442.98***	1376.25***	1291.81***
	0	0	0	0
Obs.	384	297	378	351

Table 5a: Political Fallouts of Terrorism: Developing Countries

Panel A. Empirical Estimate				
Dependent Variable: Political Stability				
Var.	Model 1 Coef. (S.E)	Model 2 Coef. (S.E)	Model 3 Coef. (S.E)	Model 4 Coef. (S.E)
C	1.112*** -0.386	-1.524*** 0.411	-1.136*** -0.373	-1.254*** -0.338
L.PS	0.750*** (0 .065)	0.790*** -0.076	0.857*** -0.0643	0.811*** (0 .068)
TERROR	-0.0704*** -0.018			
LNIN		-0.0438** -0.02		
NK			-0.000904** -0.00004	
NW				-0.000050** -0.00002
PCIG	0.00641* -0.003	0.0143* -0.007	0.0137* -0.007	.0114* -0.006
LCPI	-0.0704** -0.0189	0.207*** -0.063	0.1579 ** -0.064	(0.1324** -0.057
HK	0.1239** -0.058	0.136*** (0 .045)	0.0819** -0.039	0.154*** -0.0494
CC	0.0814* -0.047	0.062 -0.063	0.0343 -0.071	0.0515 -0.0521
Panel B. Diagnostics Tests: Developing Countries				
AR(2)	1.05 -0.294	0.91 -0.364	1.05 -0.294	1.26 -0.208
Hansen Test	25.27 -0.504	22.17 -0.774	22.47 -0.551	21.89 -0.743
F. stats	396.36*** 0	501.01*** 0	167.04*** 0	176.83*** 0
Obs.	338	334	341	338

Table 5b: Estimates of Instrumental Variable Technique: Developed Countries

Panel A. Empirical Estimates				
Var.	Model 1 Coef. (S.E)	Model 2 Coef. (S.E)	Model 3 Coef. (S.E)	Model 4 Coef. (S.E)
L.PS	0.516*** -0.076	0.472 -0.088	0.554*** -0.075	0.497*** -0.071
Tidx	-0.0391** -0.018			
LNIN		-0.063 -0.022		
NK			-2.046E-07	
NW				-4.64E-09
PCIG	0.027*** -0.009	.0168** -0.008	0.0165** -0.0068	0.0246*** -0.008
LCPI	0.681** -0.314	-0.736*** -0.252	-0.552* -0.293	0.729** -0.312
HK	1.210** -0.584	1.310** -0.508	0.751 -0.575	1.035* -0.597
CC	-0.0323 -0.046	0.025 -0.079	-0.022 -0.042	-0.008 -0.045
Panel B. Diagnostics Test: Developed Countries				
Under ID Test	24.25* -0.06	16.257* (0.09)	15.88* -0.069	26.70* -0.062
Weak ID Test	2.89	1.35	1.28	2.68
5\% critical Value	21.23	20.74	20.53	21.31
Hansen Test	14.48 [0.41]	10.381 [0.32]	8.198 [0.414]	13.57 [0.630]
F-stat	16.80***	14.64***	17.37***	17.28***
Obs.	0 94	0 92	0 92	0 94

5 Conclusion and Policy Recommendations

Terrorism is the use of violence against individuals and governments in order to achieve ideological or political objectives by instilling fear. Terrorism grew more popular following the 9/11 assault, which is widely regarded as the most successful single terrorist strike. Both emerging and developed nations are facing significant threats, but poor countries are bearing the brunt of the repercussions owing to their weak macroeconomic and political circumstances and inability to withstand such shocks. Although there is a wealth of data on the economic costs of terrorism, the literature on the non-economic repercussions of terrorism is still in its early stages. By assessing the economic and political repercussions of terrorism in emerging and developed nations, this research adds to the current literature by encompassing the years 1970 to 2016. In order to get reliable results, we utilized four distinct terrorist metrics. Furthermore, we utilize per capita income, secondary school enrollment (human capital index as an alternative measure), and political stability index to represent economic,

social, and political sectors (democracy index as alternate measure). We calculate the effect of each terrorist measure individually for developed and developing nations, as well as for the combined sample of developed and developing countries. We utilized the system-GMM method for empirical analysis in poor nations, whereas the instrumental variable technique was applied in rich countries.

The research findings showed that terrorism has a negative effect on both economic and non-economic aspects of an economy. Terrorism, in particular, decreases per capita income, school enrollment, and political stability in both developed and developing nations. Notably, our results show that the consequences of terrorism are much more severe in poor nations than in wealthy ones. The reason for this is that emerging nations have weak economic systems and are thus deemed unstable. Developed nations, on the other hand, are stronger, more stable, and more diverse. They have a surplus of ability to absorb negative shocks. As a result, these nations are able to absorb negative shocks without having a larger macroeconomic effect. Furthermore, we discovered that, of all the aspects (social, economic, and political), terrorism had the most detrimental effect on the political dimension in developing nations. Terrorist groups target democracies because they seek to disrupt the political system in order to achieve their objectives, as previously stated. Instability in the political system has a destabilizing effect on these nations' economic and social sectors.

Nations must implement rigorous security measures to restrict terrorist operations, while robust institutional mechanisms are needed in both sets of countries to minimize the negative effect of terrorism. Because the consequences of terrorism are more severe in developing nations, these governments must create a comprehensive strategy to not only decrease terrorist actions but also to mitigate their negative consequences. International political collaboration, economic planning, and broad knowledge are all possible paths to pursue.

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