

# FINANCIAL INEQUALITY AND TERRORISM: A BRIEF OVERVIEW WITH META-ANALYSIS

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## ABSTRACT

*The current research was aimed to address the question of whether economic inequality might bear an impact on terrorist activity. For this purpose, a meta-analysis of relevant independent studies on the topic was carried out. Overall, the analysis included four studies comprising 6,567 observations. In spite of the fact that the combined effect size expressed as Pearson's correlation coefficient turned out to be significant, this effect size was almost equal to zero ( $r = -0.02$ ; 95% CI:  $-0.02$  to  $-0.01$ ;  $P < 0.001$ ), and therefore no actual relationship between financial inequality level and terrorist activity could be concluded. Given a low quantity of the included studies, these results should be treated carefully. The issue of financial inequality as a factor in the development of terrorism requires further research into the causes of this phenomenon. Some aspects of this subject have been described and explained, while others remain a matter of further investigation.*

**Keywords:** Economic Inequality, Income, Poverty, Society, Terrorist Incident.

## INTRODUCTION

Terrorism can be described as a phenomenon of intimidating people and/or governments under the effect of a series of acts or threats of violence and forcing them to act or not to act in a certain direction for political, religious, or social ends. When the targets, institutions, or victims of a terrorist incident in one country are citizens of another country, terrorism takes on a transnational character (Sandler, 2015). Moreover, terrorism can be broadly understood as movements directed towards eliminating political rivals in order to spread dread. According to estimates by Bardwell and Iqbal (2020), terrorism has cost the world economy 855 billion American dollars for the period from 2000 to 2018.

A review undertaken by Aslam et al. (2020) demonstrates that the COVID-19 pandemic is likely to escalate the vulnerability of governments all around the world to various terrorist acts. Particularly, Ackerman and Peterson (2020) speculate that the coronavirus-driven diminution in the quality of life may fuel people's anti-government attitudes and increase their susceptibility to radicalizing narratives with subsequent involvement in violent extremism.

There is a sort of consensus among scholars that evaluating underlying causes of terrorism is an important issue (Newman, 2006; Korotayev et al., 2019). At the same time, critical questions remain about the factors that stimulate individuals to participate in acts of terrorist nature. The present investigation aims to address the issue of the potential correlation between economic inequality level and terrorism activity.

### **Social Standing as a Determinant of Terrorism**

Despite a broad agreement on the importance of defending universal values such as democracy, human rights, freedom, and justice in national and international scientific literature, today there is a process in which terrorist incidents have increased in conflict with these values and, accordingly, social peace and order are disrupted throughout the world. Nowadays, terrorist acts are becoming more frequent and visible than in the past, and the damage they cause to military targets, as well as increasing civilian casualties, expand their area of influence.

The process, which brings about radical transformations in the economic and social structure, which is called globalization, increases the inequalities in both the economic and political structure, and also causes the poverty problem to deepen and to become difficult to solve. Increasing inequalities and the problem of poverty bring negativities such as an increase in violence and terrorism. For this reason, the solution to the poverty problem appears to be an important development for the solution to the terrorism problem. In a research by Özdemir et al. (2018), the concept of terrorism, the elements and effects of terrorism were analyzed, and 50 countries included in the Global Terrorism Index were evaluated in terms of the relationship between terrorism and poverty.

There have been lots of factors that had shaped the phenomenon of terrorism in the various periods of human history, from ancient times to the present. The use of violence against others has many different grounds, such as political, cultural, religious, and so forth. The phenomenon of terrorism, however, cannot be reduced to a political or religious struggle, but there also take place issues related to social and economic inequality, which encourages individuals to choose this method of asserting their rights or achieving a more prosperous life. Unfortunately, poverty often leads people to acts of unlawful use of force, all the more so as economically deprived social groups are much more inclined to believe in various extreme ideologies, including those referring to the use of terror as a method of improving their lives.

The popular view is that terrorism is a weapon of the dispossessed and powerless in the face of an all-powerful state that does not care about the fair distribution of material goods. Nonetheless, a large proportion of terrorists are not from poor classes or families. In the case of Islamic terrorism, the leaders of militant jihad are people of high material status. An example of this is the former head of al-Qaeda Osama Bin Laden who was a Saudi millionaire. On the other hand, a plethora of ordinary soldiers of Islamic terrorist organizations found themselves there because of the poverty they experienced and the lack of prospects for a decent life. For instance, a mujahideen Wadih el-Hage who returned to the United States after he finished fighting as part of the jihad against the Soviets in Afghanistan. There he managed to find only positions of a fast food restaurant worker and a janitor. When he joined the international jihad, he became Osama Bin Laden's personal secretary, which was the equivalent of being a vice president in a large corporation. His duties included running a large office and controlling access to his boss, while traveling extensively and having a wide range of responsibilities (Krzyżak, 2017).

For young Muslims willing to join a religious terrorist organization, the aspect of poverty is of colossal importance. The lack of a full-time job that would integrate them into the community cause grievances and frustration, especially among those who had left their families and moved to the US and Western European countries in search of a better life. In the case of Palestinian political organizations that used terrorism, such as Hamas and Fatah, joining them improved the militant's social standing and had a material, real-world dimension. The perpetrators of armed attacks were regarded as heroes; their families received huge amounts of material aid, including new houses in lieu of those destroyed by the Israeli authorities as punishment for acts of terrorism. Young Palestinian boys – recruits of those organizations – were treated by the society with greater respect than those who did not belong to the terrorist organizations (Horgan 2008).

Another issue related to the material side of terrorism is its financing. This issue is not about states sponsoring terrorists such as Libya under Muammar al-Qaddafi, or profiting from domestic or international organized crime, which many terrorist groups do. The problem is that there are at least a few organizations in the world that are recognized as terrorist organizations, and, in parallel, provide humanitarian assistance and charity programs for the poorest segments of society. Such organizations as Palestinian Hamas, Lebanese Hezbollah, or some groups in Pakistan allocate part of the funds they raise to humanitarian purposes. It is therefore hardly surprising that a person bringing food, clothes, or cleaning products to a poor house is not treated by the recipients as a terrorist, but as an employee who helps the poor and needy people. For a young Palestinian, Lebanese or Pashtun, joining such an organization means freedom from poverty (Krzyżak, 2017).

### **Meta-Analysis of Correlations between Income Inequality and Terrorist Activity**

Meta-analysis is a commonly acknowledged quantitative technique developed by an American statistician Gene Glass for synthesizing the empirical evidence on a given subject (De-Dominicis et al., 2008).

### **METHODS**

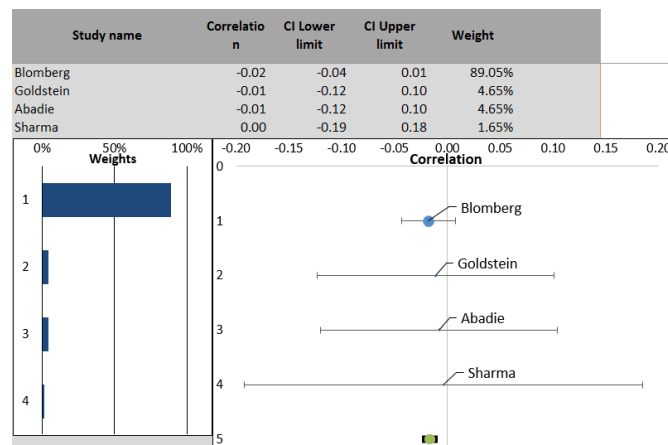
To perform the meta-analysis, a literature search was undertaken using Google Scholar. Studies on the correlation between economic inequality and terrorist activity published in the period between 2000 and 2021 were of interest to the research team. Only original investigations published in English were included in the meta-analysis. The study had to report the zero-order correlation between the Gini Index (measuring income inequality in a country) and the World Market Research Center's Global Terrorism Index or data from International Terrorism: Attributes of Terrorist Events reflecting the intensity of terrorism across the globe. Reported regression coefficients within the interval  $\pm 0.50$  were used as effect size estimates instead of missing correlation values in accordance with the recommendations provided by Peterson and Brown (2005). Ultimately, the analysis included four studies comprising 6,567 observations (Blomberg et al., 2004; Goldstein, 2005; Abadie, 2006; Sharma, 2014).

The meta-analysis was conducted using the Meta-Essentials package based on Microsoft Excel (Suurmond, 2017). The random-effects model was utilized since it allows the results of the analysis to be extrapolated to a wider range of situations (Borenstein, 2010). The T score and Q-

test (assigned to be statistically significant at  $P < 0.05$ ) along with the  $I^2$  score expressed as a percentage were employed to assess homogeneity (that is, how consistent the data extracted from the included researches are). With regard to the  $I^2$  test for heterogeneity, significance was declared at  $>33\%$  (Ratnayake et al., 2018). To assess the presence of publication bias (due to the predominant publication of positive research results), the Begg-Mazumdar and Egger tests were utilized in conjunction with a funnel plot showing Pearson correlation coefficients against their standard errors. In view of the small number of studies included in conformity with the aforementioned eligibility criteria, no subgroup or moderator analyses were performed within the present meta-analysis.

## RESULTS

As is evident from the forest plot (Figure 1), there is no positive correlation between terrorist activity and income inequality as for the observations under study ( $r = -0.02$ ; 95% CI:  $-0.02$  to  $-0.01$ ;  $P < 0.001$ ). The abscissa axis forms the effect size scale depicted at the top of the graph. Each horizontal bar, with the exception of the lower one, represents a 95% confidence interval for the effect size of a study, displayed as a centrally located point.

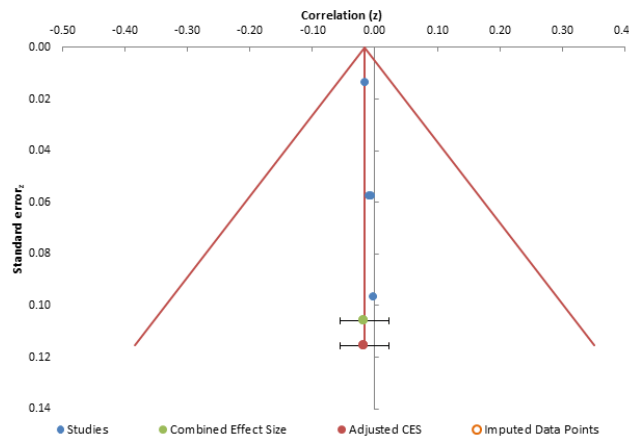


**FIGURE 1**  
**RESULTS OF A META-ANALYSIS OF STUDIES ON THE CORRELATION**  
**BETWEEN TERRORIST ACTIVITY AND INCOME INEQUALITY**

It transpires from the forest plot presented here that all of the confidence intervals intersect the vertical line illustrating the null effect, thus indicating the lack of statistically significant effect. The point in the center of the lower horizontal bar reflects the weighted average effect, the confidence interval of which is represented as black segments on the sides. Since the confidence interval herein coincided with the predictive interval, the latter could not be plotted on the observed graph.

A publication bias analysis yielded mixed results. Despite Egger's regression test detected evidence of publication bias ( $P = 0.01$ ), Begg-Mazumdar test in turn did not (Kendall's Tau  $a = 0.50$ ;  $P = 0.308$ ), and, what is more important, the trim and fill funnel plot (Figure 2)

revealed no imputed data points, so it is therefore safe to state the absence of non-published insignificant effects.



**FIGURE 2**

### **RESULTS OF A PUBLICATION BIAS ANALYSIS THROUGH THE FUNNEL PLOT**

From the current meta-analysis, it can be inferred that the combined effect representing the relationship between terrorist intensity and economic inequality is negative and is significant since its confidence interval does not cross the no-effect line (Figure 1). The effect sizes are homogeneous and there is no between-study variability in the data ( $I^2 = 0\%$ ).

### **DISCUSSION**

To date, both theoretical and empirical findings concerning the interrelatedness of financial inequality level and terrorist risk are conflicting and perplexing as could be judged inter alia from a paper by Okafor and Piesse (2018). A growing subset of the literature argues that inequitable distribution of wealth may be regarded as a determinant for the quantity of terror. Particularly, Enders and Hoover (2012) scrutinized variables pertaining to domestic and transnational types of terrorism and established a distinct relationship between the number of domestic terrorist acts and income inequality level. Having analyzed data from 113 countries for the period from 1984 to 2012 by dint of negative binomial regression, Krieger and Meierrieks (2019) came to the conclusion that higher income inequality is conducive to an increase in incidences of terrorism in a country. Coccia (2018) attributes such a phenomenon to trivial factors like inequality-driven social tensions and the manifestation of crime in society. Meanwhile, speculating about possible reasons for the nexus between radical actions and economic deprivation, Benmelech et al. (2012) mentioned that in the context of the uneven economic development terror organizations can engage more educated and experienced people in their activities, in which case targets that are more considerable might be assaulted.

On the other hand, some evidence indicates there is no firm statistical link between wealth inequality and terrorist incidents in the long run (**Nurunnabi & Sghaier 2018**). For example, Benmelech and Klor (2020) advocate that numerous combatants recruited by the Islamic State in Iraq and Syria are from prosperous countries. Similarly, the statistical evidence synthesized in the present meta-analysis points to a lack of the relationship between financial inequality level and the number of terrorism events.

## CONCLUSION

The current analysis detected a significant correlation between inequality of the distribution of wealth and the incidence of terrorism in the form of the weighted average effect summarizing individual effect sizes extracted from several relevant studies, but this pooled effect size is extremely close to zero, so no actual link between those variables could be concluded. The issue of financial inequality as a factor in the development of terrorism requires further research into the causes of this phenomenon. Some aspects of it have been described and explained, while others are waiting for further investigation. However, the small number of the included studies should be taken into consideration when dealing with these findings.

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