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## **Impact of Terrorism on FDI: Insight from literature**

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### **ABSTRACT**

Theoretically, FDI can increase economic growth in developing countries through five channels. These are; first, the transfer of technologies, second, the formation of human capital, third, integration in global markets, fourth, an increase of competition, and fifth, firms' development of reorganisation (OECD, 2002). Existing literature shows the positive and significant relationship between FDI and economic growth in developing countries—countries from Asia, Africa, Latin America and the Caribbean. Whereas, terrorism—the unlawful use of violence and intimidation—has a negative impact on economic growth. The mitigation and counter-terrorism capacity of developed and developing countries determine the post-terror FDI flow in terror-affected countries. Business and manufacturing targeted terror attacks and attacks in tourism, hostels and restaurants in the host country had a large negative impact on FDI inflow. Terror attacks by the host country against foreign business had negative impact on FDI inflow in the host country. If one foreign firm experienced a terror attack by the host country then due to the spillover effect depress in FDI inflow in the host country was very large, as other foreign firms perceived the country as unsafe for foreign investment. The main aim of this paper is to analyse the impact of terrorism on FDI in developed and developing countries.

**Keywords-** Multinational firm, FDI, Economic growth, Terrorism and developing countries.

## 1 Introduction

The key feature of multinational firms is that they are present in all countries and economies. They make investments in host countries, which is known as the Foreign Direct Investment (FDI). FDI is a composite bundle of capital stock, knowledge, and technology transfer and therefore, its impact on economic growth in the host country is expected to be manifold (De Mello, 1997). To sum up, studies have identified five channels through which FDI can increase growth in the host countries; these are, the transfer of technology, formation of human capital, enhancement of competition, integration in the labour market, and development and reorganisation of firms.

Multinational firms make most of the world's spending on Research and Development (R & D) Borensztein et al. 1998, and due to their presence in all countries, they become the leader of technological dispersion across the world (Ford et al. 2008 and Perri and Peruffo, 2016). Thus, Multinational firms through invention and dispersion of technology raise economic growth in the host countries. Human capital (education and training) has a positive and statistically significant impact on economic growth. FDI requires a certain level/ standard of education and training of labour to work with advanced technology and machinery. Thus, the presence of Multinational firms and FDI raises human capital in the host country and thereby fosters economic growth.

Entry of multinational firms in developing countries enhances competition, as local firms compete with multinational firms to increase or at least maintain their market share in the economy. Thus, the productive capacity of local firms increases, which fosters economic growth in the host country.

Integration of developing countries with the world economy through participation in international trade increases economic growth in the host country by way of realisation of the benefit of international trade (IT).

Participation of local firms in international trade enhances the potential of large market size, and therefore the process of development and reorganisation of firms takes place in the local market with the aim to produce and supply more.

The inflow of FDI is negatively correlated with terrorism in the host country. Thus, terrorism and terrorist attacks in the host country depress the inflow of FDI, as through open economy channels foreign investment flies to relatively safer destinations/ countries. Literature provides plenty of evidence on the negative impact of terrorism on FDI. However, some studies also show a statistically insignificant relationship between terrorism and FDI. For example, on one hand, cross country analysis (Abadie and Gardeazabal, 2008, Badyopadhyay, Sandley and Yonas, 2011 and 2015) as well as individual country-specific studies (Muckley, 2011 and Enders and Sandler, 1996) show negative and statistically significant relationship between terrorism and FDI. Whereas, on the other hand, few studies (Li, 2006) found a statistically insignificant relationship between terrorism and FDI. I agree with the argument that *ceteris Paribas*, safety and security in host country matters for foreign direct investment (FDI). To analyse the diverse impact of terrorism on FDI, papers is organised in five sections. Section first analyses the impact of terrorism on FDI in developed and developing economies. Section second shows the impact of transnational and domestic terrorism on FDI in Developed and developing economies. Section third analyses the impact of terrorism on specific sectors of the economy. Section four sheds light on the impact of terrorism in neighbouring countries. Section five concludes the discussion.

## **2 Effects of terrorism on FDI in developed (rich and diversified) and developing (poor, small and specified) economies**

Although, all economies developed or developing suffer from depress in FDI due to terrorist attack. However, developing, small and specified economies have a greater negative impact of terrorism on FDI than its impact on large, rich and diversified economies.

Developed and diversified economies can minimise the loss of terrorist activity as FDI shifts from terrorist affected sector to safe sector of the economy (Sandler and Enders 2008), whereas small incident of terrorism in developing countries shift large amount of FDI to other countries through “*open economy channel*” (Abadie and Gardeazabal, 2008) as terrorism decreases the expected return of capital in developing and small economies (Bandyopadhyay, Sandler and Younas, 2015).

Large-scale terrorist activity like 9/11 and subsequent loss can shake the confidence of investors even in diversified, developed and large economies like the USA. However, developed economies like the USA are in a better position to restore the confidence of investors through monetary and fiscal measures. For example, US Congress approved a 40-billion-dollar emergency fund for spending at four crash sites and the Federal Reserve lowered the interest rate to make sufficient funds available for investment (Sandler and Enders, 2008). Therefore, such large-scale terror attacks had a very short-run effect on the US economy. Whereas, between 1975 and 1991 terrorist activity in small economies like Spain and Greece reduced on an average annually 13.5 % and 11.9 % FDI respectively (Enders and Sandler, 1996).

Further, not only the real economic loss, but the perceptions of foreign investors about the safety and security in the host country also affect the inflow of FDI.<sup>1</sup> On many dimensions of terrorism, the decision of foreign investors to invest in the host country depends on the counter-terrorism ability of the country to prevent terror attacks further (Mancuso et al., 2010). Developed countries are in a better position to counter terrorism attempts and therefore win the confidence of investors. Whereas, developing countries found themselves weak on this front.

The Global Terrorism Index (GTI) report is published by the Institute for Economics and Peace. Based on four sub-indices—number of terrorist incidents, number of fatalities, number of injured and level of property damage—Global Terrorism Index (GTI) is prepared and countries are ranked based on index value. The higher value shows the high risk and low preventive ability of the country. Based on the Global Terrorism Index (GTI), the World Market Research Center's Global Terrorism Index (WRMC) categorises the USA, UK, and Afghanistan as a high-risk country based on an average value of sub-indices. However, Afghanistan greatly differed in terms of preventive measures<sup>2</sup>, (the prevention score for the USA, UK, and Afghanistan was 2.5, 1.5, and 9.0 respectively) and Afghanistan received 0.06% and 0.097% FDI of the FDI in USA and UK respectively (Mancuso et al., 2010). Even small incidents of terrorism may cause a large-

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<sup>1</sup>Original source unknown, cited in Wagner (2006), Asian development Bank (ADB) in its study on increase in insurance premium due to terrorist attack in Pakistan has found that commercial loss due to terrorist activity was almost zero because in almost every terrorist incident target was either government or military. However, Pakistan received less FDI, as foreign investors perceive Pakistan unsafe country.

<sup>2</sup> Lower value show higher prevention ability of the country.

scaleoutflow of FDI from developing and specified countries through the 'open economy channels' to relatively safer destinations/ countries. Whereas, in developed and diversified economies, FDI shifts from terrorist-affected sectors to relatively safer sectors of the economy, leaving the volume of FDI inflow unchanged. Besides, the perception of foreign investors about law and order and safety and security in the host economy also affects the FDI inflow. Foreign investor perceives that the counter-terrorism capacity of underdeveloped economies is weak. Therefore, even a small incident of a terrorist attack with no economic loss may result in a large-scale FDI outflow due to the preconceived perception of foreign investors about the counter-terrorism capacity of underdeveloped economies. Thus, in general, terrorism negatively affects FDI and economic growth in terrorist-affected economies. However, relatively its negative impact is more in under-developed economies.

### **3 Impact of transnational and domestic terrorism on FDI in developed and developing economies**

Though, all types of terrorism (domestic as well as transnational) had a negative impact on FDI in both developed and developing countries. However, the negative effects of transnational and domestic terrorism were found to be opposite for developed and developing countries.

In developing countries, the negative impact of transnational terrorism on FDI was 2.5 to 3 times higher than that of the impact of domestic terrorism (Badyopadhyay, Sandler and Yonas, 2011). However, relatively the impact of internal war was more severe in developed countries (Blomberg and Mody, 2005 and Enders et al., 2006). For example, during the mid-1990s (a period characterised by internal Israeli peace, and violence due to transnational terrorism) Japan's investment in Israel increased two times (Blomberg and Mody, 2005).

Foreign aid significantly mitigated the negative impact of domestic terrorism in developing countries. However, foreign aid had a very limited impact to counter transnational terrorism, because these countries lack the ability to address transnational terrorism at the international level (Badyopadhyay, Sandler and Yonas, 2011).

The damages of transnational terrorism are severe in developing countries. Thus, counter-terrorism policies to counter and neutralise the impact of transnational terrorism are needed in developing economies. To sum up, the negative impact of transnational terrorism on FDI was higher in developing countries. However, due to the weak bargaining power of developing economies, they couldn't address this problem effectively in the international platforms. Thus, even small incidents of transnational terrorism leave long-lasting negative impacts on FDI and economic growth. In contrast to this, the negative impact of internal war on FDI was more in developed countries when compared with the impact of transnational terrorism on FDI.

#### **4 Impact of terrorism on FDI in different Sectors of the economy**

Although terrorism has a negative impact on FDI, all sectors of the economy do not suffer from an equal magnitude of depress in FDI. Some of the studies are cited below to analyse the sectoral impact of terrorism.

Powers and Choi (2012) in a cross-sectional analysis of 123 developing countries found that transnational terrorism which damages multinational businesses has negative and statistically significant effects on FDI, however, the effects of non-business terrorism on FDI were statistically insignificant. Agarwal (2011) in a study of 30 developed countries has found a negative and statistically significant effect of terrorism on FDI in manufacturing, trade and repair, and construction. In the 9/11 US attack, insurance, hotels, tourism, car hire, travel agents, restaurants, and civilian aircraft manufacturers were the worst affected sectors (IMF, 2001, Chapter 2). Thus, studies shed light on sectors and economic activities that impact the FDI negatively. For example, terror attack in manufacturing, hotels, tourism, restaurants and civilian aircraft was negatively correlated with FDI inflow. However, the impact of non-business terror on FDI was insignificant.

Therefore, the counter-terrorism policy of the country, which targets business-related terrorism and terrorism in specific sectors which are more sensitive to terror attacks, (like tourism in some countries) may attract more FDI than the general counter-terrorism policy, to prevent terrorism in the country.

## **5 Terrorism and its impact on FDI in neighbouring countries**

The basic intuition regarding the impact of terrorism on FDI in neighbouring countries is that the terrorist activity spreads suspicion and results in increased security measures. Widespread suspicion and enhanced security measures impede international trade and free movement of labour and capital. A few studies are cited below to analyse the impact of terrorism on FDI in neighbouring countries.

De Sousa, Mirza and Verdier (2009) found that the closer a country is to a source of terrorism the higher the spillover effect on trade. Doucouliagos (2017) found that the effects of terrorism in one country spillover to negatively affect the trade in neighbouring countries. The author further estimated that each additional terrorist attack in the neighbouring country was associated with a decrease in 0.013% trade on average and about 6.4 billion US dollars in total trade. De Sousa, Mirza and Verdier (2010 and 2018) reiterated that Neighbours adjacent to terror-source countries experienced trade-reducing effects due to enhanced security measures, even if they do not source terrorism. Whereas, countries far away benefited from the additional security measures.

Thus, the studies cited above shed light on the negative impact of terrorism on the neighbouring country's trade and FDI.

## **6 Conclusion**

Terrorism negatively affects the FDI in terror-affected countries and hampers economic growth. However, developing countries, due to relatively weaker counter-terrorism capacity, and weak bargaining power to address the problem of transnational terrorism in the international level experienced a decline in FDI for a long. As a result, large terror attacks in developed countries (like 9/11) may have short-run effects. Whereas, a small incident of terror attack may have long-lasting effects in developing countries. The impact of transnational terrorism and domestic terrorism are different in developed and developing economies. The impact of transnational terrorism was 2.5 to 3 times higher in developing countries. Whereas, in developed countries, the negative impact of inter-war was higher. Manufacturing, trade and tourism, hostels and restaurants were the most affected sectors due to the terror attack. Thus, policies which address

these sectors may be more effective in countering terrorism and restoring the confidence of investors. Terrorism also impacts the trade and FDI of neighbouring countries negatively, due to enhanced security measures and restrictions on the movement of goods and services, and labour and capital.

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