Trade and Terror: The Impact of Terrorism on Developing Countries

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Economists Walter Enders and Todd Sandler defined terrorism as the premeditated use of or threat to use violence by individuals or subnational groups to obtain a political or social objective through the intimidation of a large audience beyond that of the immediate victims. Central to this definition is the widespread sense of vulnerability that individuals or businesses in a venue nation—a country where the violence occurs—must feel.

This sense of vulnerability is particularly damaging to trade or foreign direct investment (FDI) because foreign nations always have a choice of conducting business with less-terror-prone nations. The decline in trade and foreign investments compounds the difficulties of developing nations, which suffer a myriad of economic and noneconomic costs associated with the loss of life and property from terror attacks. This article focuses on the economic costs that are imposed by terrorism on developing nations through diminished economic growth, trade and FDI.

Terrorism incidents are classified into two broad categories, “domestic” and “transnational.” Domestic incidents are ones in which the perpetrators, victims and damaged properties belong to the venue nation. In contrast, transnational terrorism involves different nationalities.

The table reports data for total terrorism, domestic terrorism and transnational terrorism incidents and associated fatalities and injuries for the 12 most-terrorism-prone countries in the world and for the world as a whole.[1] These 12 nations account for almost 79 percent of global terrorist incidents. It is also notable that most of these nations are developing countries.

It is understandable that developing nations are more vulnerable to terrorism because they are unlikely to have the resources to adequately fight terrorism. This problem is often compounded by corruption, poor governance, and lack of proper judicial systems or rule of law in these nations. Such institutional shortcomings breed discontent in the population, which in turn can spur terrorism.

Notice that almost 87 percent of global terrorist incidents are domestic (12,899 out of a total of 14,820). Therefore, the vast majority of damages due to terrorism are borne exclusively by the citizens of the venue country. The associated rise in security costs and loss in productivity of the workforce—through damages to labor and capital—are likely to reduce national income.

Transnational incidents, although less numerous, have significant economic implications, especially through loss in trade and FDI. Transnational incidents involve foreign citizens and therefore garner international press attention. Such publicity makes foreign nations less willing to do business with a terrorism-prone nation, leading to less trade and FDI.

Growth Effects

A 2004 study by economists Brock Blomberg, Gregory Hess and Athanasios Orphanides used a sample of 177 nations (developed and developing) over the period of 1968 to 2000 to estimate the effect of terrorism on growth rates of gross domestic product (GDP). They found that transnational terrorism has rather modest effects on the economy, reducing per capita GDP growth by 0.048 percent in a given year.

A 2009 paper by Todd Sandler and his co-author Khusrav Gaibulloev highlighted the differences between developed and developing nations by dividing a sample of 42 Asian nations into seven developed and 35 developing nations. They did not find any significant adverse effect on growth for developed nations. However, an additional transnational terrorist incident (per million people) reduced an affected developing nation’s growth rate by around 1.4 percentage points.

Foreign Direct Investment

Greater terrorism in a developing nation raises the risk for foreign investors of not being able to get the returns to their investments in the future. Such investors will look for safer alternate nations to invest in.

Economists Alberto Abadie and Javier Gardeazabal investigated this issue in a paper published in 2008 and found that there is substantial diversion of FDI from a venue nation of terrorism to alternate terror-free nations. One standard deviation increase in the risk of terrorism in a particular nation can reduce the country’s net FDI position by approximately 5 percent of its GDP.

This is a huge potential loss in capital formation for any nation, but it is especially hard on a developing nation that seeks to use foreign investments to fuel its growth. A 2014 paper by economists Subhayu Bandyopadhyay, Todd Sandler and Javed Younas focused on a sample of 78 developing countries from 1984 to 2008. They found that a one standard deviation increase in domestic terrorist incidents per 100,000 people reduces net FDI by between $323.6 million and $512.9 million for the average sample country, while the comparable reduction in the case of transnational terrorist incidents is between $296.5 million and $735.7 million. They also found that foreign aid can substantially mitigate terrorism-related FDI damages due to greater aid flows.

Terrorism Incidents and Casualties Summed over the Period 2001-2012

	Total			Domestic			Transnational		
Country	Terrorism incidents	Terrorism fatalities	Terrorism injuries	Terrorism incidents	Terrorism fatalities	Terrorism injuries	Terrorism incidents	Terrorism fatalities	Terrorism injuries
Pakistan	3,043	7,282	15,066	2,737	6,693	14,075	191	407	843
India	2,438	4,371	9,855	2,229	3,614	7,909	78	621	1,716
Thailand	1,027	820	2,995	985	788	2,786	21	20	186
Nigeria	842	2,164	1,680	712	1,829	1,498	92	305	181
Somalia	810	1,707	2,450	708	1,537	2,307	91	146	126
Russia	722	1,884	3,901	670	1,655	3,654	21	191	214
Philippines	702	862	2,280	621	779	1,960	51	66	239
Colombia	620	1,000	2,171	540	896	1,939	37	47	181
Israel	546	738	3,585	482	551	2,772	42	170	798
Nepal	323	439	713	282	411	607	27	8	69
Turkey	321	292	1,149	264	192	809	32	50	143
Yemen	313	648	685	261	573	627	42	59	52
World (167 countries)	14,820	33,910	62,651	12,899	26,135	52,179	1,296	6,894	9,273

SOURCE: Global Terrorism Database.

NOTES: Afghanistan, Iraq, Syria, and West Bank and Gaza are not included due to warlike/civil conflict situations there. Total terrorism incidents and casualties include incidents and casualties from domestic and transnational terrorism and from those terrorism incidents that cannot be unambiguously categorized into either of the two categories.

International Trade

Terrorism raises the costs of doing business across national borders. For example, shipping costs will rise if shippers have to buy insurance to cover possible damages in the ports of terrorism-prone nations. In turn, such costs are passed on to the consumers in the form of higher prices, which will tend to reduce both exports and imports of terror-affected nations.

Consider a pair of developed nations. Based on the table, which clearly shows that the most terror-prone nations are developing nations, we would not expect terrorism to be a significant deterrent to trade between this developed country pair. On the other extreme, consider a pair of developing nations—and to make the case clear, consider a pair from the top 12 nations in the table. For this pair, a good exported by one nation and imported by the other suffers potential risks in transportation in both nations. This will contribute to higher trade costs and prices and be a significant deterrent to trade. A 2004 paper by economists Volker Nitsch and Dieter Schumacher found that a doubling in the number of terrorist incidents over the period 1960 to 1993 is associated with a decrease in bilateral trade among 200 countries by about 4 percent.

There is evolving literature on this issue, with some papers finding more modest effects of terror on trade. Among other reasons, this may be due to changes in a nation's production patterns in response to terror-related disruptions. For example, if terror disproportionately disrupts an import-competing domestic industry in a developing nation, that nation may be forced to turn to imports for the good in question, thus raising rather than reducing trade.

Conclusion

We have discussed some of the economic costs of terrorism. There are myriads of other costs like destruction of infrastructure, flight of skilled workers (brain drain) and diversion of funds to counterterrorism (compared to funding of health, education, etc.). A comprehensive discussion of these costs is beyond the scope of this article. However, a greater understanding of terrorism-related damages can help governments and multilateral organizations (e.g., United Nations, World Bank) to better direct scarce resources to mitigate terrorism-related costs. Ω

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ENDNOTE

[1] The data are drawn from the Global Terrorism Database (GTD) online, which records domestic, transnational and other terrorist incidents that cannot unambiguously be placed into either of the two categories (National Consortium for the Study of Terrorism and Responses to Terrorism, 2014). For this table, we have summed data over the period 2001-2012.

REFERENCES

Abadie, Alberto; and Gardeazabal, Javier. Terrorism and the World Economy. European Economic Review, January 2008, Vol. 52, No. 1, pp. 1-27.

Bandyopadhyay, Subhayu; Sandler, Todd; and Younas, Javed. Foreign Direct Investment, Aid, and Terrorism. Oxford Economic Papers, January 2014, Vol. 66, No. 1, pp. 25-50.

Blomberg, S. Brock; Hess, Gregory D.; and Orphanides, Athanasios. The Macroeconomic Consequences of Terrorism. Journal of Monetary Economics, July 2004, Vol. 51, No. 5, pp. 1007-32.

Enders, Walter; and Sandler, Todd. The Political Economy of Terrorism, Second Edition. New York: Cambridge University Press, 2012.

Gaibulloev, Khusrav; and Sandler, Todd. The Impact of Terrorism and Conflicts on Growth in Asia. Economics and Politics, November 2009, Vol. 21, No. 3, pp. 359-83.

National Consortium for the Study of Terrorism and Responses to Terrorism (START). Global Terrorism Database. 2014. See www.start.umd.edu/gtd.

Nitsch, Volker; and Schumacher, Dieter. Terrorism and International Trade: An Empirical Investigation. European Journal of Political Economy, June 2004, Vol. 20, No. 2, pp. 423-433.

Sandler, Todd. The Analytical Study of Terrorism: Taking Stock. Journal of Peace Research, March 2014, Vol. 51, No. 2, pp. 257-71.