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# MEASURING THE ECONOMIC IMPACT OF VIOLENT EXTREMISM LEADING TO TERRORISM IN AFRICA



REPORT 2019



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# SECTION I – THE ECONOMIC COST OF TERRORISM

## Key Findings

- The global economic impact of terrorism reached US\$52 billion in 2017, increasing by two thirds in the ten years from 2008
- The total economic cost of terrorism in Africa from 2007 to 2016 is at a minimum US\$119 billion. In reality, this figure is much higher once estimates for GDP losses, lost informal economic activity, extra security spending, and refugee/IDP costs are accounted for.
- The total economic cost to the 18 focus countries was US\$109 billion since 2007.
- The economic impact of terrorism in the 18 focus countries increased by over 1700 per cent between 2007 and 2016, from an estimated US\$753 million in 2007 to US\$14 billion in 2016.<sup>1</sup>
- There is huge variation in the cost among the focus countries: Nigeria's cost, at US\$97 billion, was over 22,000 times greater than that for Burkina Faso, which has suffered the lowest total absolute economic impact of the 18 focus countries. Nigeria's impact is also almost 19 times greater than that for Libya, which has had the second highest cost of terrorism over the ten-year period.
- The African continent spends almost US\$84 billion per year on securitization, or the equivalent of immunizing the 117 low and lower-middle income countries for approximately ten years<sup>2</sup>
- The 18 focus countries have spent at least US\$259 billion on securitization between 2007 and 2018, 30 per cent of the African total
- The total economic impact of refugees and internally displaced people to the origin focus countries, between 2007 and 2016 was US\$312.7 billion

According to The Institute for Economics & Peace (IEP) research, the global economic impact of terrorism reached US\$52 billion (constant 2017 USD)<sup>3</sup> in 2017, with the economic and opportunity costs arising from terrorism having increased by about two thirds in the ten years from 2008.<sup>4</sup> Nonetheless, the three years since 2014 have seen consecutive declines in the economic impact of terrorism which peaked at US\$108 billion in 2014.

In terms of GDP, globally, the economic impact of terrorism and violent extremism rose from 0.16 per cent of global GDP in 2007 to 0.5 per cent of global GDP in 2016. These estimates of the cost of terrorism are conservative as they do not include costs associated with countering terrorism and countering and preventing violent extremism nor the indirect costs on business.

Since 2001, the global economic impact of terrorism has exhibited three peaks corresponding to three major waves of terrorism. The terrorist attacks on September 11, 2001 in New York and Washington D.C. had large economic impacts, with the losses from deaths, injuries and property destruction amounting to US\$73 billion. This excludes the indirect costs to the US economy in general, which has been estimated at between 0.7 and one per cent of US GDP, or up US\$190 billion.<sup>5</sup>

The second peak in the economic impact of terrorism in 2008 was driven by increases in terrorism related violence in Iraq. This increase is attributed to the activities of al-Qa'ida affiliated terrorist groups and coincided with a coalition troop surge in the country.

Since 2013, the increased levels of violence in Syria, Iraq and Afghanistan have led to a third surge in the economic impact of terrorism which has continued for the last four years. The

economic impact of terrorism reached US\$94 billion in 2016. The pattern over the last four years follows the rise and decline of ISIL and the spread of terrorism to highly peaceful countries, including OECD member countries.

## THE ECONOMIC COST OF TERRORISM IN AFRICA

In 2016, the economic cost of terrorism in Africa was US\$15.5 billion. This represents an increase of more than ten-fold since 2007, when the economic cost was estimated at US\$1.54 billion. In relative terms, Africa's share of the global economic cost of terrorism increased from 4.2 per cent in 2007, to 20.3 per cent in 2016.

The ten years between 2007 and 2016 saw terrorism cost the African continent at a minimum US\$119 billion. In reality, this figure is much higher once estimates for GDP losses, lost informal economic activity, extra security spending, and refugee/IDP costs are accounted for.

The UNDP's project on "Preventing and Responding to Violent Extremism in Africa: A Development Approach", has identified 18 focus countries in which terrorism and its consequences, including economic consequences, are most salient. Figure 1.1 shows the total number of terrorist attacks and fatalities from terrorist attacks in Africa between 2007 and 2016, broken down by group, and emphasizes the intensity of terrorist activity in the epicentre countries, which have suffered 60 per cent of the total attacks, and 66 per cent of the total fatalities in Africa.

<sup>1</sup> For a comprehensive discussion of the methodology underpinning the economic cost estimates, please refer to Annex A.

<sup>2</sup> [http://www.who.int/choice/publications/p\\_2007\\_Scaling-up\\_Immunisation.pdf](http://www.who.int/choice/publications/p_2007_Scaling-up_Immunisation.pdf)

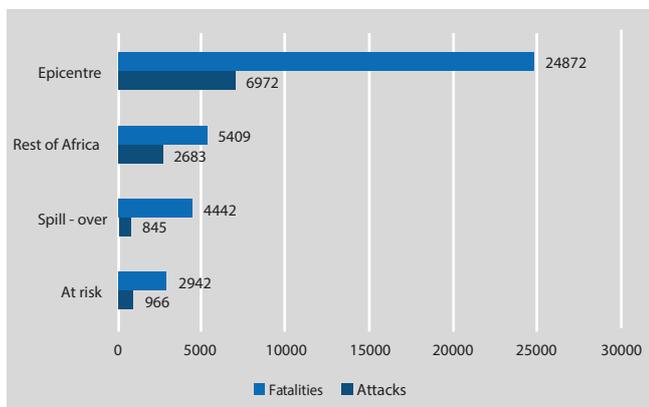
<sup>3</sup> All dollar amounts in this report are constant 2017 USD unless otherwise explicitly stated

<sup>4</sup> *Global Peace Index 2017, Institute for Economics and Peace*

<sup>5</sup> Stewart, Mark G., and John Mueller. 2013. "Terrorism Risks and Cost-Benefit Analysis of Aviation Security." *Risk Analysis* 33 (5): 893–908. doi:10.1111/j.1539-6924.2012.01905.x.

## FIGURE 1.1: THE LEVELS OF TERRORIST ACTIVITY IN AFRICA, 2007-2016

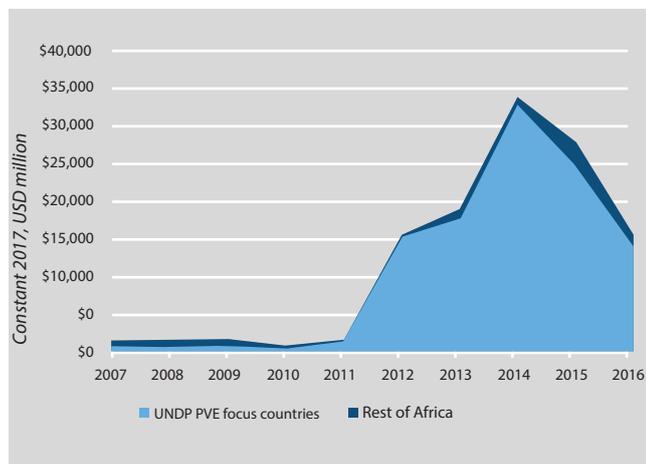
*Epicentre countries have suffered 60 per cent of the total attacks and 66 per cent of the total fatalities from terrorism in Africa*



Given the extreme levels of terrorist activity in the group of focus countries, it is unsurprising that these countries also account for the bulk of the economic cost of terrorism in Africa, as seen in figure 1.2. Focus countries started shouldering the brunt of the economic cost of terrorism from 2009 onwards, and this sharply rose in 2011, in the aftermath of the events set off by the Arab Spring.

## FIGURE 1.2: TREND IN THE ECONOMIC COST OF TERRORISM IN AFRICA, 2007-2016

*The UNDP's 18 focus countries have suffered the majority of the economic cost of terrorism in Africa since 2011*



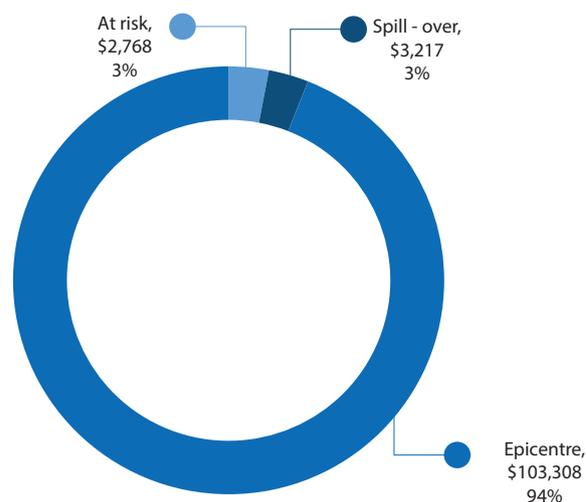
In the eighteen focus countries of the UNDP's project "Preventing and Responding to Violent Extremism in Africa: A Development Approach", the ten years since 2006 has seen an enormous increase in the intensity of violent extremist and terrorist activity, with terrorist attacks increasing seven fold since 2007, and fatalities associated with terrorism increasing by a factor of five.

This rise in the intensity of terrorist activity has seen the economic impact of terrorism in the 18 focus countries increased by over 1700 per cent in the ten-year period between 2007 and 2016, from an estimated US\$753 million in 2007 to US\$14 billion in 2016.<sup>6</sup>

Driven by the large impacts of terrorism in Nigeria, the four countries considered to be the epicentre countries for violent extremism, Nigeria, Mali, Somalia and Libya, have accounted for 94 per cent, or US\$103 billion, of the total economic impact of terrorism since 2007. Spill-over countries have suffered US\$3.2 billion (3 per cent), and at-risk countries US\$2.7 billion (2.8 per cent) of the total economic impact of terrorism over the ten years between 2007 and 2016.

## FIGURE 1.3: THE BREAKDOWN IN THE COST OF TERRORISM, 2007 - 2016, BY FOCUS COUNTRY GROUP

*The Epicentre group of countries have accounted for more than 94 per cent of the total economic cost of terrorism since 2007*



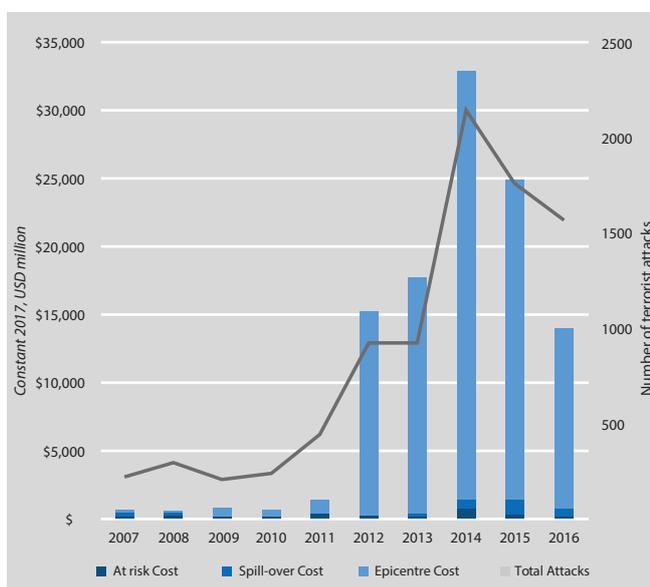
ECONOMIC COST, Constant 2017, USD million

As Figure 1.4 shows, the growth in cost increased dramatically between 2011 and 2012, driven by the epicentre countries. There was a peak in the economic cost of terrorism in the focus countries in 2014, with the cost subsequently falling in 2016 to pre-2012 levels.

<sup>6</sup> For a comprehensive discussion of the methodology underpinning the economic cost estimates, please refer to Annex A.

## FIGURE 1.4: TREND IN THE ECONOMIC COST OF TERRORISM IN THE THREE GROUPS OF FOCUS COUNTRIES, 2007-2016

There was a peak in the economic cost of terrorism in the focus countries in 2014, with the cost subsequently falling in 2016 to pre-2012 levels.



While there have been yearly fluctuations in the economic cost of terrorism across all three groups of countries, on average, between 2007 and 2016 the economic cost has grown by 45 per cent in at risk countries, 66 per cent in spill-over countries, and 197 per cent in epicentre countries.

Measured as a percentage of GDP, the base estimate for the cost of terrorism in the focus countries ranges between 0.2 per cent of GDP per year for spill-over countries to 1.1 per cent per year for the epicentre group of countries, with at risk countries' costs approximately 0.3 per cent of GDP per year. Epicentre countries saw the biggest increase measured in GDP terms from an average of 0.04 per cent of GDP in 2007 to 2.4 per cent of GDP in 2016.

Of the 18 focus countries, Nigeria has suffered by far the highest economic impacts of terrorism, accounting for 89 per cent of the total US\$109 billion cost over the ten-year period. The economic impact of terrorism for Nigeria, at US\$97 billion, was over 22,000 times greater than that for Burkina Faso, which has suffered the lowest total absolute economic impact of the eighteen focus countries. Nigeria's impact is also almost 19 times greater than that for Libya, which has had the second highest cost of terrorism over the ten-year period.

Table 1.1 shows the total economic cost for each country as well as the levels of terrorism as measured by total attacks and fatalities over the ten-year period between 2007 and 2016.

### TABLE 1.1: TOTAL ECONOMIC COST OF TERRORISM AND INTENSITY OF TERRORIST ACTIVITY IN FOCUS COUNTRIES, 2007-2016

The economic impact of terrorism for Nigeria, at US\$97 billion, was over 22,000 times greater than that for Burkina Faso

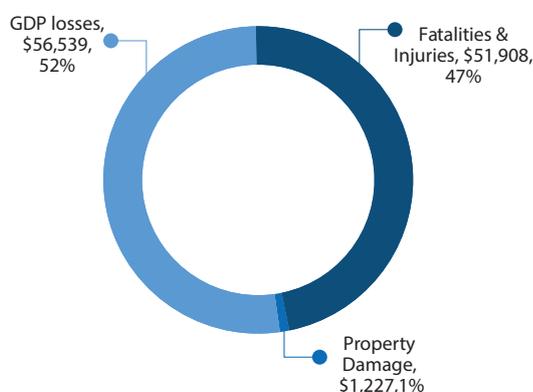
	Number of Fatalities	Number of Terrorist Attacks	Economic Cost of Terrorism (constant 2017, USD Million)
Nigeria	18952	3058	US\$97,966
Libya	1413	1595	US\$5,201
Sudan	2664	717	US\$3,807
Kenya	1426	447	US\$1,268
Cameroon	1326	190	US\$879
Somalia	4472	2152	US\$770
Tunisia	158	44	US\$498
Uganda	1242	184	US\$410
Chad	629	53	US\$342
Ethiopia	505	66	US\$281
Mali	486	271	US\$226
CAR	1136	204	US\$197
Niger	838	78	US\$172
Morocco	75	13	US\$99
Tanzania	61	45	US\$45
Senegal	92	32	US\$27
Mauritania	27	11	US\$23
Burkina Faso	57	15	US\$20

## BREAKING DOWN THE ECONOMIC COST: FATALITIES & INJURIES, PROPERTY DESTRUCTION AND GDP LOSSES

Broken down into component parts, IEP's baseline estimate for the economic cost of terrorism in the 18 focus countries shows that GDP losses associated with lost economic activity accounted for 52 per cent, or US\$56.5 billion, of the total economic cost over the ten-year period to 2016, although according to IEP's very conservative methodology, GDP losses only significantly began to impact total cost from 2012 onwards. As IEP's methodology estimates GDP losses only in cases where more than 1000 fatalities occur due to terrorism in any given year, and thus is an overly conservative estimate in these totals, this estimate is based entirely on the case of Nigeria. GDP losses to Nigeria over the ten-year period was conservatively estimated at US\$565 billion. This breakdown of IEP's estimated total economic cost between 2007 and 2016 is shown in figure 1.5.

## FIGURE 1.5: BREAKDOWN OF IEP'S ECONOMIC COST OF TERRORISM ESTIMATE, TOTAL 2007-2016

Estimated GDP losses in Nigeria accounted for 52 per cent of the total estimated economic cost of terrorism in the focus countries since 2007



ECONOMIC COST, Constant 2017, USD million

Table 1.2 further breaks down these cost components to the level of focus country group, highlighting the enormous economic burden on epicentre countries, whose costs are at least an order of magnitude higher than those of the other two groups. The economic cost estimates for the epicentre group of countries, and therefore for all the focus countries, are driven primarily by the burden that has fallen on Nigeria.

## TABLE 1.2: BREAKDOWN OF THE BASE ESTIMATE OF THE ECONOMIC COST OF TERRORISM BY FOCUS COUNTRY GROUP, 2007-2016, MILLIONS CONSTANT 2017 USD

	Cost of Fatalities & Injuries	Cost of Property Damage	GDP losses
At Risk	US\$2,739	US\$33	Not estimated
Epicentre	US\$46,024	US\$1,066	US\$56,539
Spill-over	US\$3,145	US\$128	Not estimated

Table 1.3 shows the conservative cost breakdown based in IEP's methodology for each country over the ten-year period from 2007 to 2016, in descending order. The cost of property destruction in Nigeria is over 2500 times that in Burkina Faso, and more than double that of Somalia (which ranks second on this metric). Similarly, the cost of fatalities and injuries in Nigeria is over 2000 times that of Burkina Faso, and over eight times that of Libya (which ranks second on this metric).

## TABLE 1.3: COSTS ASSOCIATED WITH TERRORISM BY COUNTRY, TOTAL 2007-2016

	Cost of Property Destruction (Millions, constant 2017 USD)	Cost of Fatalities & Injuries (Millions, constant 2017 USD)	Number of Fatalities	Number of Terrorist Attacks
Nigeria	US\$598.8	US\$40,828.6	18952	3058
Libya	US\$177.4	US\$5,023.9	1413	1595
Sudan	US\$26.3	US\$3,780.8	2664	717
Kenya	US\$63.3	US\$1,204.5	1426	447
Cameroon	US\$4.6	US\$874.0	1326	190
Somalia	US\$276.6	US\$493.7	4472	2152
Tunisia	US\$54.2	US\$443.5	158	44
Uganda	US\$1.5	US\$408.0	1242	184
Chad	US\$0.4	US\$341.3	629	53
Ethiopia	US\$4.1	US\$277.3	505	66
Mali	US\$13.0	US\$213.4	486	271
CAR	US\$2.0	US\$195.2	1136	204
Niger	US\$0.8	US\$170.9	838	78
Morocco	US\$0.4	US\$98.7	75	13
Tanzania	US\$2.0	US\$42.7	61	45
Senegal	US\$0.8	US\$25.8	92	32
Mauritania	US\$0.4	US\$22.8	27	11
Burkina Faso	US\$0.2	US\$19.7	57	15

Constant 2017, USD million

## ECONOMIC COSTS OF SECURITIZATION AND THE FIGHT AGAINST TERRORISM

Terrorism costs include not only the impact of lost lives, injuries, disruptions to economic functions and other directly related factors, but, considering the macro-economy as a whole also includes the spending by governments and the international community on the response to terrorism: securitization and violence containment.

In 2017, the world spent US\$5.5 trillion on military expenditure, US\$3.8 trillion on internal security and US\$810 billion on private security. These basic categories of violence containment expenditure cost the world almost US\$9.4 trillion in just one year, driven largely by the ongoing conflicts in Afghanistan, Iraq and Syria.

Relative to the world as a whole, continental Africa tends, in general, to spend little on securitization: between 2007 and 2016, total security spending in the African continent was conservatively estimated to be US\$838 billion. In absolute terms, this amount is of course hugely significant, at almost US\$84 billion per year, or the equivalent of immunizing the 117 low and lower-middle income countries for approximately ten years<sup>7</sup>. The 18 focus countries accounted for over 30 per cent of this total continental amount, spending at least US\$259 billion on securitization.

It is difficult to accurately estimate how much of this security spending is a direct response to the terrorist threat in the focus countries, given that several have been involved in ongoing armed conflict for lengthy periods of time, and that almost all countries world-wide have some minimum level of military spending.

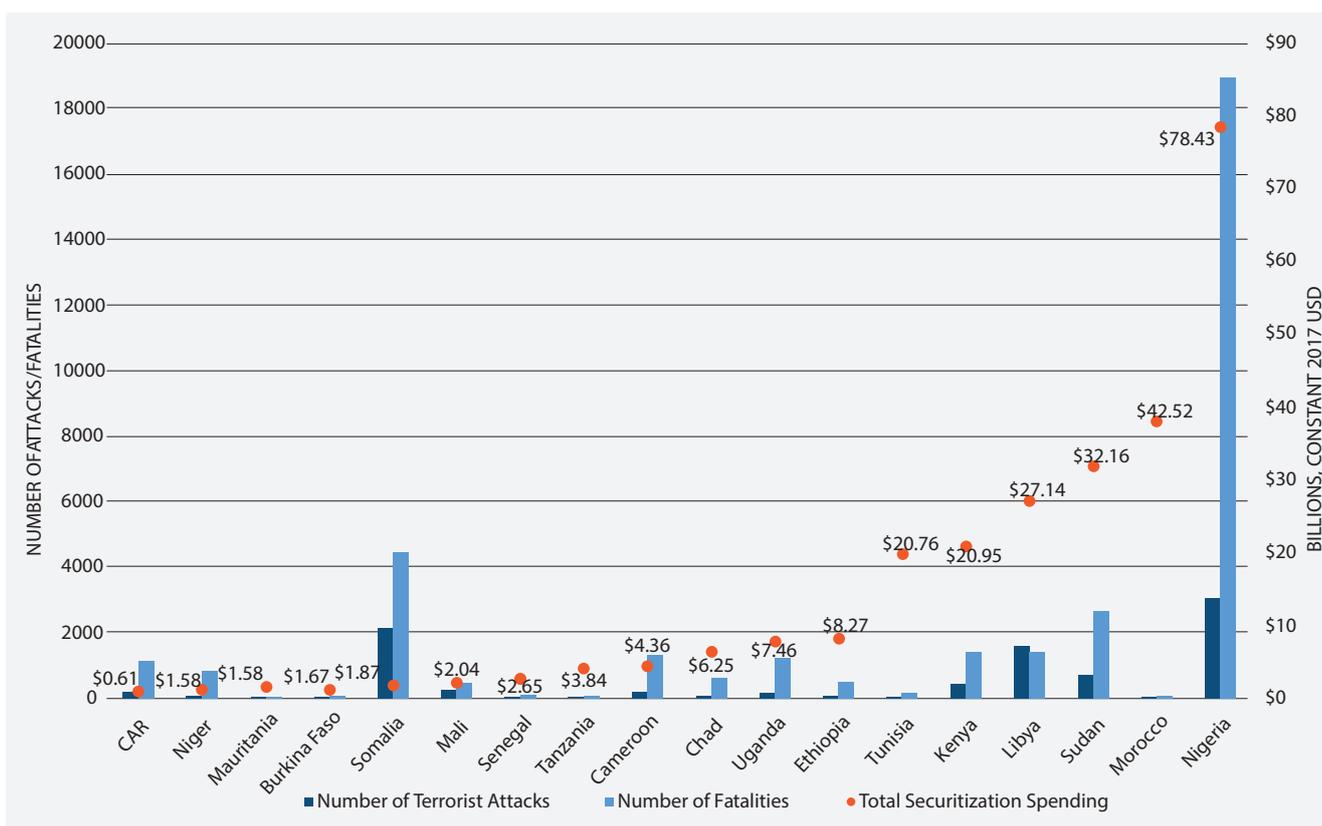
Across the African continent, there has been a slow growth in the amounts being spent on securitization since 2007, in line with global trends, but this growth has been highest in the epicentre group of countries, which averaged a year-on-year

growth in security spending of 3 per cent. Spill-over countries grew their security spending by 2.7 per cent, while at risk countries' security spending (one per cent year-on-year growth), on average grew slower than the rest of Africa which grew at 1.6 per cent.

Given the levels of terrorist activity taking place in Nigeria, it is perhaps unsurprising that the country has spent the most on security in the ten years to 2016, at US\$78.4 billion. Figure 1.6 shows security spending by country and levels of terrorist activity over the ten-year period between 2007 and 2016. The Central African Republic has spent the least in absolute terms over the period, at US\$614 million. Morocco and Sudan, both in the 'at risk' category of focus countries, spent the second and third highest amounts on securitization since 2007, at US\$43 and US\$32 billion respectively.

### FIGURE 1.6: SECURITIZATION SPENDING AND LEVELS OF TERRORISM, 2007-2016

*There is huge variation in the levels of terrorist activity and spending on security across the focus countries*



Epicentre countries which have been most highly affected by terrorism, have also spent significantly higher amounts on forms of securitization other than military, in particular private security. Figure 1.7 shows the breakdown in spending by securitization type across all three groups of focus countries. While military spending was the largest category of security spending in each group, epicentre countries also spent 27 per cent of their overall US\$109 billion security spending on internal security and 22 per cent on private security.

<sup>7</sup> [http://www.who.int/choice/publications/p\\_2007\\_Scaling-up\\_Immunisation.pdf](http://www.who.int/choice/publications/p_2007_Scaling-up_Immunisation.pdf)

## FIGURE 1.7: BREAKDOWN OF SECURITY SPENDING TYPE ACROSS FOCUS COUNTRIES, 2007-2016

*Epicentre countries have spent a disproportionately higher amount on private security than other focus country groups*

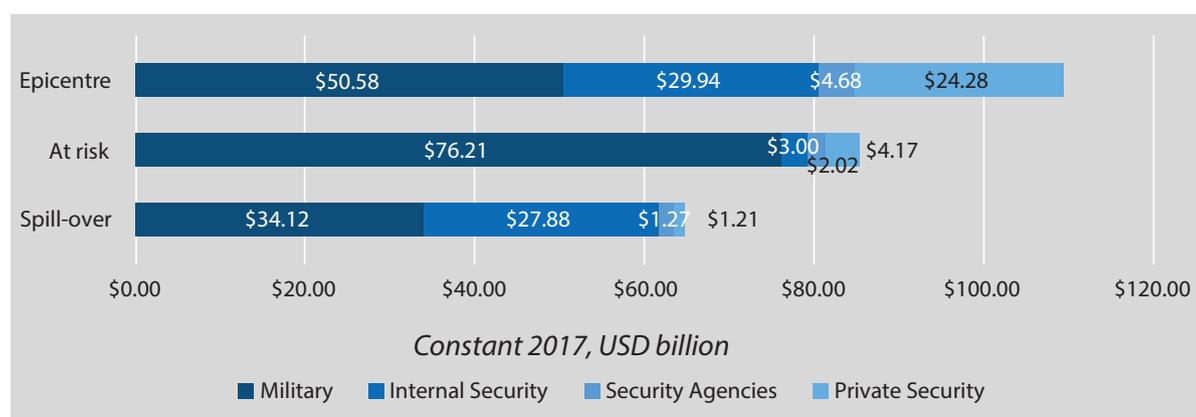


Table 1.4 further summarizes the breakdown of securitization spending by category of security for all 18 focus countries. Of particular note is that existing data suggests that only three of the 18 focus countries have spent substantial amounts on private security, these being Nigeria, Kenya and Morocco.

## TABLE 1.4: SECURITIZATION SPENDING BY CATEGORY, 2007-2016, BILLIONS CONSTANT 2017 USD

	Internal Security	Military Expenditure (constant 2017, USD Million)	Security Agencies	Private Security	Total Securitization
Central African Republic	US\$0.112	US\$0.477	US\$0.025	US\$0.000	US\$0.614
Niger	US\$0.008	US\$1.019	US\$0.068	US\$0.000	US\$1.095
Mauritania	US\$0.085	US\$1.458	US\$0.040	US\$0.000	US\$1.583
Burkina Faso	US\$0.020	US\$1.544	US\$0.102	US\$0.000	US\$1.667
Somalia	US\$0.002	US\$1.833	US\$0.032	US\$0.000	US\$1.867
Mali	US\$0.045	US\$1.886	US\$0.111	US\$0.000	US\$2.043
Senegal	US\$0.020	US\$2.465	US\$0.169	US\$0.000	US\$2.654
Tanzania	US\$0.005	US\$3.577	US\$0.262	US\$0.000	US\$3.843
Cameroon	US\$0.002	US\$4.064	US\$0.293	US\$0.000	US\$4.359
Chad	US\$0.017	US\$6.127	US\$0.106	US\$0.000	US\$6.250
Uganda	US\$2.759	US\$4.694	US\$0.008	US\$0.000	US\$7.460
Ethiopia	US\$3.626	US\$4.325	US\$0.324	US\$0.000	US\$8.274
Tunisia	US\$12.395	US\$7.855	US\$0.509	US\$0.000	US\$20.759
Kenya	US\$11.727	US\$7.730	US\$0.279	US\$1.211	US\$20.946
Libya	US\$0.193	US\$25.687	US\$1.263	US\$0.000	US\$27.143
Sudan	US\$0.078	US\$31.350	US\$0.731	US\$0.000	US\$32.159
Morocco	US\$0.033	US\$37.227	US\$1.090	US\$4.169	US\$42.520
Nigeria	US\$29.699	US\$21.174	US\$3.270	US\$24.283	US\$78.425

The costs of fighting terrorism in the focus countries are not borne solely, or even primarily, by the affected countries themselves, but by the international community also. For example, the UN's intervention into Mali, known as MINUSMA, has a budgetary allocation of US\$1.07 trillion for the 2018-19 fiscal year<sup>8</sup>. This mission was formed in direct response to the terrorist threats from Ansar Dine and the Movement for the Unity and Jihad in West Africa who were being supported by Al-Qaida in the Islamic Maghreb.

The U.S., who initiated and is leading the war on terrorism, was estimated to have spent approximately US\$2.8 trillion on counter-terrorism activities in the years between 2002 and 2017. In FY 2017, the U.S Department of Defense funded counter-terrorism operations focused on the African continent to the tune of US\$450 million, and were focused on three regions; Sahel Maghreb, the Lake Chad Basin, and East Africa.<sup>9</sup>

## ECONOMIC IMPACT OF REFUGEES AND INTERNALLY DISPLACED PERSONS

Although IEP's methodology for calculating the economic impact of terrorism does not explicitly account for the economic impact of refugees and internally displaced people on either the country of origin or the host country, given that over 26 per cent of the world's refugee population is hosted in sub-Saharan Africa, and that Somalia and Central African Republic rank number 3 and 4 in the world in terms of the rate of forcibly displaced population<sup>10</sup>, this economic impact must be considered.

Research has posited that refugees and IDPs affect the economy in at least seven areas. These are: livelihoods, health, education, housing and infrastructure, environment, security and social and cultural life.<sup>11</sup>

Whilst terrorist activity is not the sole cause of forcible population displacement, IEP has found that terrorism is inextricably linked to armed conflict and political terror<sup>12</sup>, all three of which are key determining factors of population displacement.<sup>13</sup> Between 2007 and 2016, there were more than 78 million people forcibly displaced from the eighteen focus countries – either displaced internally or across borders. Countries in the at risk group accounted for 49 per cent of this total amount, epicentre countries 43 per cent, and spill-over countries eight per cent.

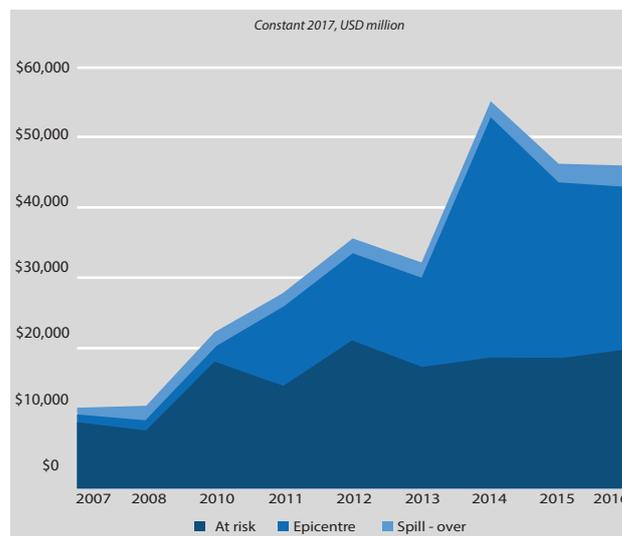
The total economic impact of refugees and internally displaced people to the origin focus countries, between 2007 and 2016 was US\$312.7 billion. IEP estimates the economic impact of refugees and internally displaced people to the country of origin based on a model which accounts for lost production, consumption and investment in the country of

origin. It includes UNHCR annual expenditure as the assumed as the direct cost of refugees and IDPs. The IEP costing model does not capture some of the adverse implications of forced displacement such as asset losses, expenditure by the displaced people or the physical and psychological distress that is inflicted on the displaced population, making it a conservative estimate.

There was over a four-fold increase in the economic impact of refugees and IDPs over the ten year period between 2007 and 2016, increasing from US\$11.5 billion in 2007 to US\$46 billion in 2016. Although at risk countries have incurred 53 per cent of this total impact, the greatest increase in the economic impact of refugees and IDPs over the time period occurred in the group of epicentre countries, where these costs increased by more than 1700 per cent.

### FIGURE 1.8: THE ECONOMIC COST OF REFUGEES AND IDPS, 2007-2016

*The group of at risk countries have incurred 52 per cent of the total economic impact of refugees and IDPs since 2007, but the greatest increase in impact has occurred for the epicentre group of countries*



The absolute economic impact of refugees and IDPs to Sudan was the largest amongst the focus countries, amounting to US\$154 billion over the ten year period. This is 7700 greater than the impact to Burkina Faso, which has incurred the least absolute impact. In GDP terms however, the picture is slightly different: the impact to Somalia has been the greatest, with impact from refugees and IDPs has amounting to, on average, 23 per cent of GDP per year. Table 1.5 summarizes both the absolute costs and the costs relative to GDP for all 18 focus countries, ordered from highest to lowest absolute value

<sup>8</sup> <http://undocs.org/A/c.5/72/25>

<sup>9</sup> [https://csbaonline.org/uploads/documents/CSBA6196-2017-Budget-Analysis\\_PRINT.pdf](https://csbaonline.org/uploads/documents/CSBA6196-2017-Budget-Analysis_PRINT.pdf)

<sup>10</sup> UNHCR, "Global Trends: Forced Displacement in 2016", <http://www.unhcr.org/5943e8a34.pdf>

<sup>11</sup> <http://www.internal-displacement.org/sites/default/files/publications/documents/201902-economic-impact-cost-estimates.pdf>

<sup>12</sup> Institute for Economics and Peace, "Global Peace Index 2017"

<sup>13</sup> A. Schmid, "Links Between Terrorism and Migration: An Exploration", International Centre for Counter-Terrorism Research Paper, May 2016; <https://www.icct.nl/wp-content/uploads/2016/05/Alex-P.-Schmid-Links-between-Terrorism-and-Migration-1.pdf>

**TABLE 1.5: ECONOMIC IMPACT OF REFUGEES AND IDPS TO ORIGIN COUNTRIES, TOTAL, 2007-2016**

	Cost of Refugees and IDPs (constant 2017, USD Million)	Average Cost (% GDP)
Sudan	US\$154,313	9.02
Nigeria	US\$75,660	0.73
Libya	US\$32,904	4.46
Somalia	US\$14,726	23.07
Kenya	US\$9,372	0.75
Uganda	US\$5,477	0.99
Ethiopia	US\$5,195	0.42
Central African Republic	US\$4,250	10.80
Chad	US\$3,525	1.36
Mali	US\$2,547	0.76
Mauritania	US\$1,637	1.10
Cameroon	US\$1,362	0.18
Senegal	US\$1,212	0.36
Tunisia	US\$236	0.02
Morocco	US\$183	0.01
Niger	US\$89	0.12
Tanzania	US\$28	0.00
Burkina Faso	US\$20	0.01

## SECTION II - VIOLENT EXTREMISM AND THE FORMAL ECONOMY

### Key Findings

- IEP has estimated that over the last 70 years, GDP growth in highly peaceful countries was three times (about 2.8 per cent per annum), that, of those considered to have low levels of peace, such as the focus countries
- A scenario analysis suggests that lower peace countries would have had US\$ 4,352 higher GDP per capita in 2016 had they grown at the same rate as high peace countries.
- Countries with higher levels of violent extremism have had weaker economic growth than other countries. From 2002 to 2016 on average, at risk countries grew their GDP per capita by 47 per cent and spill-over countries grew by 36 per cent. In contrast, epicentre countries on average had a 17 per cent decline in GDP per capita.
- Some of the economic impacts of violent extremism are the same grievances underlying drivers of recruitment to violent extremist groups. Although violent extremism aggravates these issues, it is likely many of the economic issues existed prior to an increase in violence making it difficult to determine causality.
- IEP has estimated that over the last 40 years, high peace countries have twice the foreign direct investment inflows as low peace countries
- Between 2007 and 2016, Foreign Direct Investment (FDI) into the focus countries fell by 43 per cent from US\$4.84 billion in 2007 to US\$2.74 billion in 2016. Foreign Direct Investment's contribution to GDP fell from an average of 3.2 per cent in 2007 to 2.5 per cent in 2016.
- As the intensity of violent extremism has increased across the focus countries since 2007, there has been a marked change in the composition of sectoral contribution to countries' Gross Domestic Products, away from industry and toward services.

Violent extremism can impose enormous economic costs for individuals, communities and nations and can have significant and wide-ranging economic implications. Interpersonal violence results in medical, policing and judicial costs in the short term and longer term impacts on productivity and economic growth. Social unrest and collective violence destabilise governments and social institutions, as well as reducing business confidence.

In this respect, violent extremism is not distinct from other forms of violence. It has been shown that violence reduces investment in capital intensive sectors, lowering productivity and reducing returns.<sup>14</sup> Businesses tend to shift investment to conflict related goods instead of investing in the production of consumption and exportable goods. Similarly, investors shift from high risk, high return long term investment to low risk, low return and short term projects.<sup>15</sup> Foreign direct investment also declines due to risks associated with violence and the higher cost of crime to businesses. In the cases of high intensity conflict, capital flows out of the country. These adverse effects lead to a vicious circle of economic effects such as lower economic growth, high volatility, uncertainty and high unemployment.

Whilst violent extremism varies in severity and impact across countries, it can have a similar influence on the economy as other forms of violence.

The deterioration in economic growth and development from violent extremism can contribute to a vicious cycle where particular drivers and grievances increase. Lower economic performance combined with social and political fragmentation in a vulnerable context can contribute to the deterioration of peace. For instance, an initial contributor to grievances could be the lack of employment opportunities. If economic stagnation occurs as a result of violent extremism,

there will continue to be limited opportunities, which in turn has the potential to aggravate violence. Government spending allocated to responding to violent extremism may result in decreased spending on other areas such as education and public infrastructure which could similarly further the cycle of violent extremism.

Whilst it is clear what some of the economic implications of violent extremism are, there are difficulties in attributing specific changes in the economy to violent extremism as economies are complex systems, increasingly interconnected globally, where multiple factors influence each other. There is also a lack of reliable data at the appropriate level to fully understand changes in the economy. Nevertheless, this section explores some of the more general macro-economic impacts of violent extremism in the focus countries, given the data available.

### ESTIMATING THE COST TO THE MACRO-ECONOMY

In 2018, IEP estimated that over the last 70 years, GDP growth in highly peaceful countries was three times (about 2.8 per cent per annum), that, of those considered to have low levels of peace, such as the focus countries.<sup>16</sup> Inflation was estimated to be three times higher, and ten times more volatile, in low peace countries compared to high peace countries, while foreign direct investment was estimated to be twice as high in high peace as opposed to low peace countries. This difference in economic growth and performance between high and low peace countries in turn is contributing to a trend of diverging economic prosperity, and exacerbates the potential for a vicious cycle of poverty and conflict.

<sup>14</sup> <http://visionofhumanity.org/app/uploads/2017/02/The-Economic-Value-of-Peace-2016-WEB.pdf>

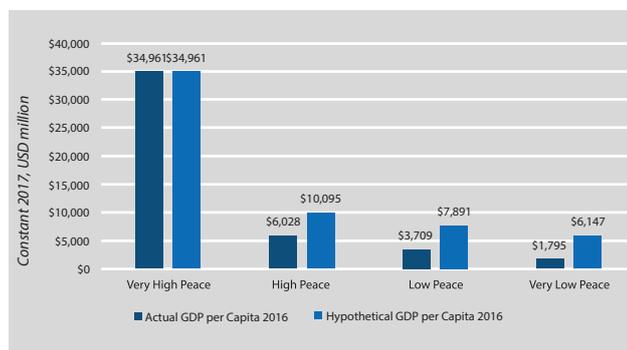
<sup>15</sup> Brück, T., 'An Economic Analysis of Security Policies', *Defence and Peace Economics*, 2005.

<sup>16</sup> GPI, 2018

Long term trend analyses by IEP shows the slow and sustained process of prosperity divergence among countries. Figure 2.1 shows GDP per capita in 2016 and compares it to a scenario in which the least peaceful countries of the world, including the focus countries, have equivalent growth to the most peaceful. The counterfactual scenario assumes that GDP per capita in less peaceful countries, on average, increased at 2.8 per cent – the growth rate of the highly peaceful countries - instead of one per cent. The result suggest that lower peace countries would have had US\$ 4,352 higher GDP per capita in 2016.

### FIGURE 2.1: PROSPERITY GAP BETWEEN HIGH AND LOW PEACE COUNTRY, GDP PER CAPITA

*In counterfactual scenario where low and very low peace countries has achieved an average growth equivalent to high peace countries, their per capita income would have been 3 times higher than what it was in 2016.*



## THE MACRO-ECONOMY AT A GLANCE

Terrorism and a state’s response to terrorist activity can impact the formal macro-economy in multiple and intertwined ways. It can effect economic output and growth by changing the size, nature and composition of economic production and the labour force, as well as the investment calculations of domestic and foreign enterprises. State finances may also be affected in the bid to curb terrorist activity with potential spill-over consequences for social and welfare spending.

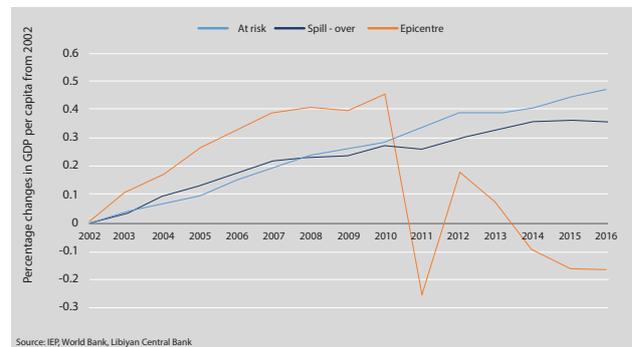
### ECONOMIC GROWTH

Countries with higher levels of violent extremism have had weaker economic growth than other countries. Within the group of focus countries, there is a 64 per cent difference in GDP growth between those with high and low levels of terrorism. From 2002 to 2016 on average, at risk countries countries grew their GDP per capita by 47 per cent and spill-over countries grew by 36 per cent. In contrast, epicentre countries on average had a 17 per cent decline in GDP per capita.

Figure 2.2 shows the yearly GDP growth from 2002 to 2016 across the different groups in the focus countries. There was year on year growth across all groups between 2002 and 2008, but the global economic slowdown in 2008 had some impact across all three groups. Epicentre countries had a decrease in GDP per capita growth in 2011 with the onset of the Libyan conflict and a slowdown in growth in Nigeria. The slow down in growth in the epicentre countries lagged behind the increase in the impact of terrorism, which really took off after 2006.

### FIGURE 2.2: AVERAGE GDP GROWTH BY GROUP, 2002-2016

*On average, countries with higher levels of terrorism have slower economic growth than other countries and are more vulnerable to external shocks.*



IEP’s 2018 estimate suggests that GDP per capita in the lowest peace countries, including the epicentre countries and many of the at risk and spill-over countries, would be US\$527 higher today if these countries could achieve the same levels of average growth as the most peaceful countries. This ‘peace growth’ scenario would constitute a more than doubling of GDP per capita in Central African Republic, Niger and Somalia.

Of course, violent extremism is not solely responsible for the disparity in economic growth between nations. National economies are complex and are influenced by many exogenous factors. Two of the epicentre countries, Nigeria and Libya, for example, rely heavily on oil exports. Fluctuations in the oil price has had a very big impact in these countries, with significant falls in 2009 and 2015.<sup>17</sup> Violent extremism is generally a centralised phenomenon which largely affects the economy through indirect costs and flow-on effects. This can take some time to appear in many macroeconomic measures. Macroeconomic measures are also often incomplete and inaccurate, making a precise estimate of the effect of violent extremism on economic growth difficult. Furthermore, violent extremism does not occur in a vacuum. Some of the grievances and drivers of recruitment of violent extremist groups touch on various macroeconomic factors including the unemployment and the inflation rate as well as uneven development. As such, many of these factors have been in part the catalyst for the rise of violent extremism and instability within various countries. Whilst violent extremism and the flow-on effects can impair economic performance, many of these factors were already moving in a negative direction prior the start of violence. Other areas such as leakages of government finances, limited skilled human capital and undiversified economies, make many economies in Africa more vulnerable to exogenous shocks including those from violent extremism.

### FOREIGN DIRECT INVESTMENT

Since 1980, the most peaceful countries in the world were estimated to receive on average, the equivalent of two per cent of their GDP in FDI inflows, contrasted with just 0.84 per cent in the least peaceful countries.

Violent extremism has an impact on how attractive a country is to outside investment, by affecting political stability and macro-economic volatility. Between 2007 and 2016, Foreign Direct Investment (FDI) into the focus countries fell by 43 per

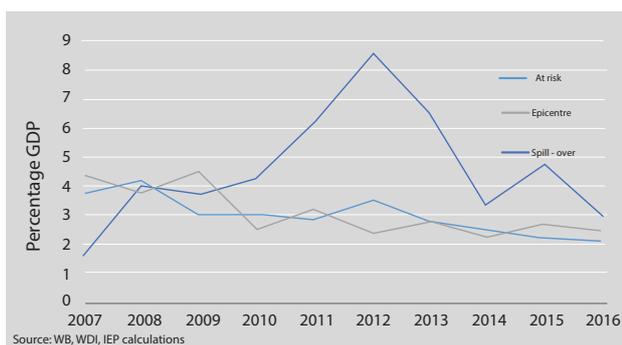
<sup>17</sup> Note there is insufficient data for Somalia to be included in this analysis.

cent from US\$4.84 billion in 2007 to US\$2.74 billion in 2016. Foreign Direct Investment's contribution to GDP fell from an average of 3.2 per cent in 2007 to 2.5 per cent in 2016.

However, not all groups were affected equally: while FDI inflows declined in absolute terms for all three groups of countries, FDI's contribution to GDP actually increased in the spill-over group of countries, as seen in figure 2.3.

### FIGURE 2.3: FDI CONTRIBUTION TO GDP BY GROUP, 2007-2016

*While FDI inflows declined in absolute terms for all three groups of countries, FDI's contribution to GDP actually increased in the spill-over group of countries*



Mauritania has on average had the highest levels of FDI contribution to GDP, at 9.8 per cent since 2007, and approximately seven times higher than FDI's contribution to Kenya's GDP. Chad has seen the highest increase in terms of FDI contribution to GDP over the ten year period; while 2007 saw FDI outflows from Chad equivalent to 3.7 per cent of GDP, in 2016 FDI inflows were 5.8 per cent of GDP.

A number of factors affect an international company's decision to either enter or expand investments and business in an overseas

market, including conflict and violence, economic and political stability. In 2016, A.T. Kearney's Foreign Direct Investment Confidence Index found that general security concerns ranked second in terms of the most important factors that affect overall investment decisions, with 14 per cent of respondents ranking that as most important.<sup>18</sup>

The degree to which violent extremism affects these decisions depends not only on the intensity of violent extremism, but also the potential market opportunities and the geographic dispersion of the conflict relative to market opportunities. In Nigeria for example, stakeholders emphasized the fact that the FDI inflows were not really affected by the conflict situation there, because most FDI is located in geographic regions relatively unaffected by violence. Others however claimed that the violent extremism environment plays a major role in investment decisions, particularly around the oil and mining sectors where kidnappings and ransoms have been all too frequent.

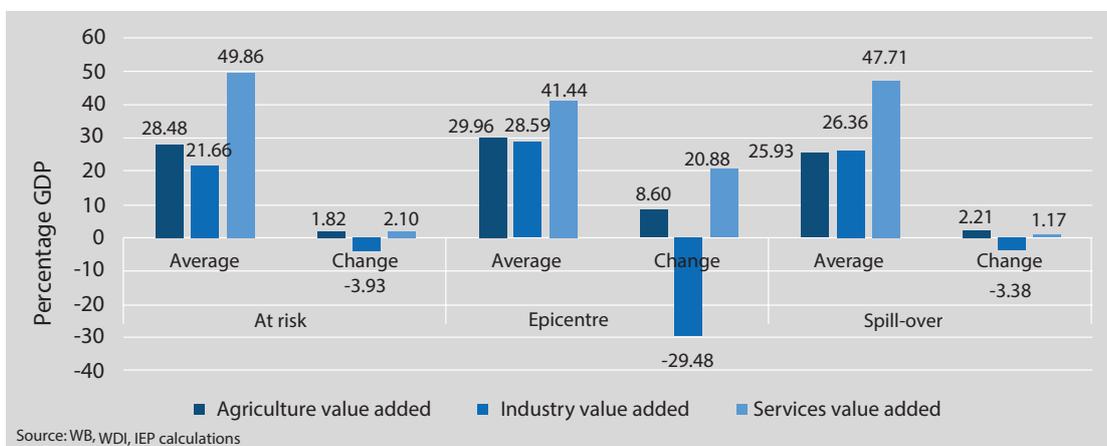
**Violent Extremism and the Composition of the Economy**  
Different sectors of the economy may be more or less resilient to violent extremism, and more or less elastic in terms of response to changes in the intensity of violent extremism. This resilience and elasticity are dependent on a number of factors including the labour dependence of the sector, the reliance on public or private infrastructure, and the reliance on investment – whether domestic or international.

As the intensity of violent extremism has increased across the focus countries in the ten-year period between 2007 and 2016, there has been a marked change in the composition of sectoral contribution to countries' Gross Domestic Products, away from industry. Since 2007, industry value added as a percentage of GDP fell by nine percentage points across the focus countries. At the same time agricultural value added as a percentage of GDP increased by 3.2 percentage points, and services' value added as a percentage of GDP grew by over five per cent.

The epicentre group of countries suffered the largest decrease in industry value added to GDP, as seen in figure 2.4.

### FIGURE 2.4: SECTORAL CONTRIBUTION TO GDP AND CHANGES IN SECTORAL CONTRIBUTION BY GROUP, 2007-2016

*In sectoral terms, industry's GDP value added has suffered the most since the uptick of violent extremist activity*



<sup>18</sup> <https://www.atkearney.com/documents/20152/435992/FDI+on+the+Rebound-FDICI-2016.pdf/2fe88cfe-1d84-d7e3-7934-22caf510b0e4>

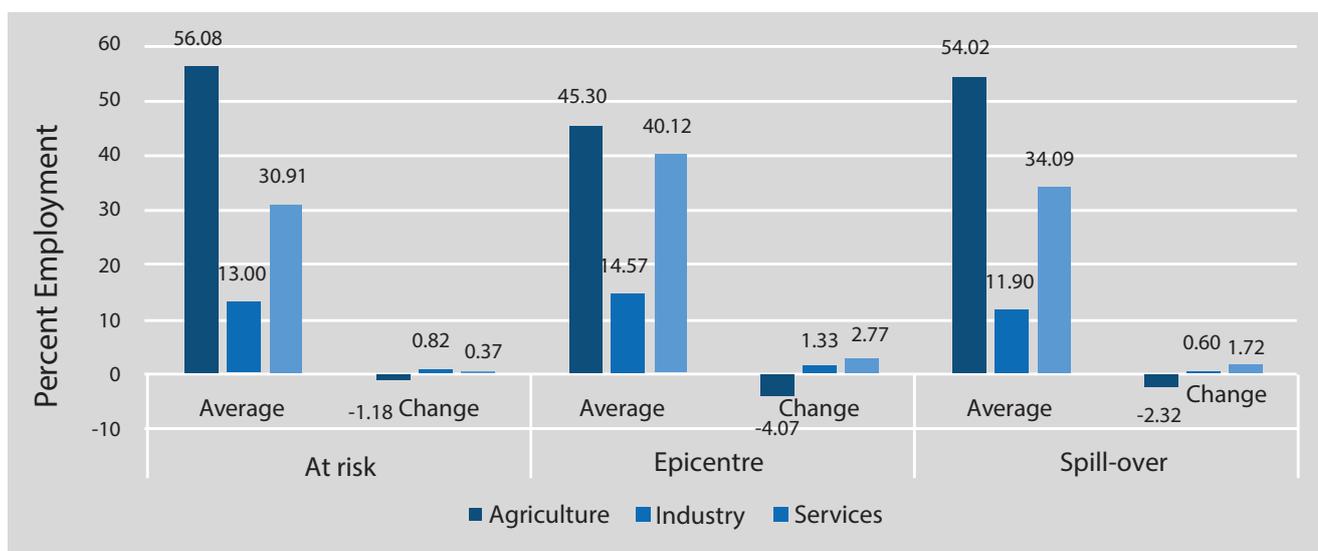
Employment in agriculture has consistently accounted for the highest proportion of employment amongst the three sectors, averaging 53 per cent of total employment. But while agriculture's contribution to GDP increased since 2007, its contribution to employment fell by 2.3 per cent on average across the focus countries.

Across all three country groups, agriculture has consistently accounted for the majority of employment out of the three sectors considered, accounting for 56 per cent of employment

in at risk countries, 54 per cent in spill-over countries and 45 per cent in epicentre countries on average between 2007 and 2016. Agriculture was the only sector of the three considered here that saw a fall in the percentage of employment across each of the three country groups, as seen in figure 2.5. Both industry and services saw an increase in terms of share of employment across all country groups, suggesting a restructuring of the workforce away from agriculture which has often been most directly affected by violent extremist activity.

**FIGURE 2.5: SECTORAL CONTRIBUTION TO EMPLOYMENT AND CHANGES IN SECTORAL CONTRIBUTION BY GROUP, 2007-2016**

*Employment in agriculture fell across all groups, while employment in industry and services increased marginally*



The changing composition of the economy in terms of sectoral contribution to both GDP and employment over the last ten years, has had differing effects for men and women's employment, and this difference varies across the three groups of countries.

Although agriculture has seen the largest reduction in employment contribution for both men and women across all three groups, women's employment in agriculture in the epicentre group of countries has decreased most dramatically, decreasing from 51 per cent of the female labour force in 2007 to 45 per cent in 2016. While in at risk and spill-over countries female and male employment in agriculture declined almost equally since 2007 in terms of the share of the respective gender in employment, in epicentre countries female employment share in agriculture declined by almost three times as much as male employment. This macro data corroborates what was stated in multiple stakeholder interviews in Nigeria; namely, that as females have tended to be most involved in agriculture, the disruptions to agricultural production due to violent extremism particularly in the north east, has had a disproportionate impact on women's livelihoods and living conditions.

## AGRICULTURE

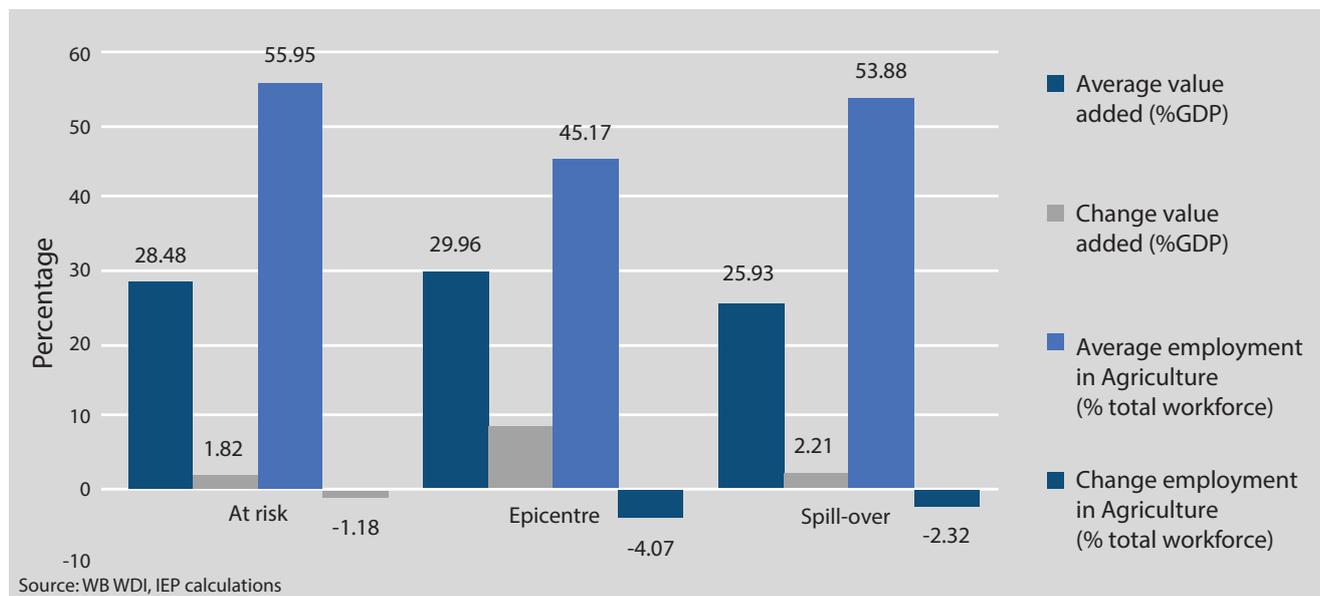
Agriculture plays an important role in the economies of the focus countries both in terms of its contribution to GDP as well as its role in employment. But agricultural activity is particularly vulnerable to fluctuations with levels of violent extremism as attacks may make land inaccessible, working the fields too dangerous, and the logistics around trading produce difficult to navigate. In numerous stakeholder interviews in both Kenya and Nigeria, the adverse effect of violent extremism on agricultural production, particularly small scale subsistence agriculture, was a frequent theme.

Data across countries indicates that agriculture contributes between 26 per cent of GDP (in spill-over countries), and 30 per cent of GDP (in epicentre countries), with at risk countries' agricultural value added approximately 28 per cent of GDP. Although contributing the largest share to epicentre countries' GDPs, epicentre countries have had the lowest average share of employment in agriculture as a percentage of the total work force, and saw the greatest decline in employment in agriculture over the ten year period.

<sup>19</sup> Mercy Corps LRMA 2017

## FIGURE 2.6: AGRICULTURE'S CONTRIBUTION TO GDP AND EMPLOYMENT ACROSS GROUPS, 2007-2016

*Agricultural activity is particularly vulnerable to fluctuations with levels of violent extremism*



Security instability is the biggest impediment to agricultural production as it effects access and availability.

“My people are ready to farm. If the government gives us security, they will all go back.” – FGD male respondent from Bama, Nigeria.

In North-Eastern Nigeria, access to land and farms has been severely curtailed due to security concerns around attacks from insurgents, but also by the security measures that government has implemented including setting up security perimeters around ‘garrison towns’. One estimate posits that only 20 per cent of agricultural land is accessible to farmers, and that 66 per cent of primary roads still require a military transport.<sup>19</sup> Multiple interviewees mentioned the 2km security perimeter around garrison towns and how that limits their ability to access land. A 2016 estimation of the impact to the agricultural sector from damages to infrastructure and social services puts this figure at US\$3.7 billion between 2011 and 2015.

In addition to this, the Nigerian government has imposed restrictions on certain types of crop production as well as the use of certain fertilizers, severely hindering the agricultural productivity of communities even when they do have access to land. For example, crops which are considered to be tall (above waist height), may not be planted, because of the potential for fighters to use high-crop fields as hiding grounds. This includes maize – a staple of the region both from individual consumption as well as trade perspective. Chemical fertilizers have been restricted because of security concerns, as there is an overlap between certain chemical elements in fertilizers and certain types of explosives that have been used by Boko Haram in attacks in the past.

“Before the crisis I was a farmer and employed 10 people. Then Boko Haram came and we had to leave. Now, I sell small-small wood and tomatoes.” – FGD male respondent

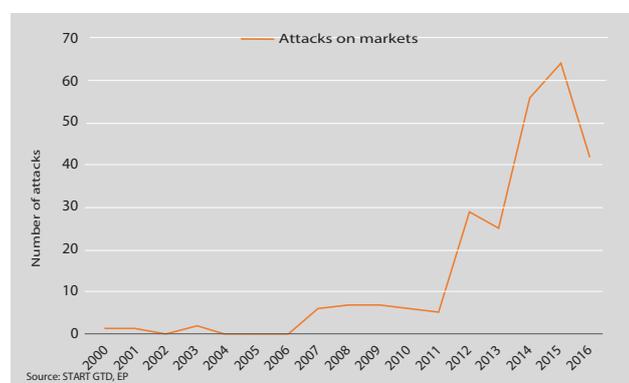
One of the immediate consequences of limited agricultural production is a severe level of food insecurity, which has been shown to affect the more vulnerable groups in communities, such as women, children and the elderly, more severely and more quickly. Estimates from the World Food Programme in 2017 put the level of food insecure households in Borno state at 64 per cent<sup>20</sup>.

Markets, where agricultural products often constitute a key component of trade, are often the hub of economic activity for towns and the disruption of a market can take a long time to recover. Attacks on marketplaces have lingering economic, as well as emotional, social, structural, impacts. A study of the Lahore Moon Market bombing in Pakistan in 2009 showed that well after the attack the market only recovered to around 30 per cent of the level of trade. In the 18 focus countries, there have been innumerable markets that have never opened again since an attack. Furthermore, there has been disruption of markets even in the absence of an attack, for example if a market is deemed to be in an area dominated by violent extremist groups. Since 2011 in particular, the number of attacks on markets in focus countries has increased dramatically, as seen in figure 2.7.

<sup>20</sup> World Food Programme, “Emergency Food Security Assessment in Three North East States (Adamawa, Borno & Yobe) of Nigeria”, April 2017; <https://www1.wfp.org/publications/nigeria-emergency-food-security-assessment-adamawa-borno-yobe-nigeria-april-2017>

## FIGURE 2.7: NUMBER OF VIOLENT EXTREMIST ATTACKS ON MARKETS ACROSS 18 FOCUS COUNTRIES, 2000-2016

*There has been an increase in attacks on markets across the 18 focus countries particularly since 2011.*



In field research conducted in Borno state, Nigeria, evidence suggested that there is a strongly held belief that Boko Haram intentionally targeted markets and trade routes to cripple the economy and disrupt trade routes and relationships. Markets, once a vibrant central point for communities and traders, are still closed in 16 of the 27 LGAs in Borno state. One assessment found that 80 per cent of farmers still do not have access to their most preferred or frequented markets<sup>21</sup>.

Closures, curfews, restricted items: in response to the deliberate targeting of markets by Boko Haram, the Nigerian government has responded by imposing restrictions on the movement of goods and people, the types of goods traded, and the manner in which they are traded.

While some markets remain closed outright, others operate on a very limited basis, with the LGA determining market days and hours of operation. Curfews are often imposed, limiting business hours of operation to daylight hours only. Finally, there have also been restrictions on the trading of certain items such as fertilizer. Table 2.1 summarizes results from a market recovery assessment conducted in 2017 as to the levels of restrictions on certain goods.

**TABLE 2.1: PERCENTAGE OF FARMERS REPORTING ISSUES WITH RESTRICTIONS<sup>22</sup>**

Item	Before Insurgency	During Insurgency	2017
Motorcycles	13%	27%	37%
Fertilizer	5%	17%	15%
Petrol/Fuel	5%	15%	13%
Food imports	5%	10%	9%

Attacks on markets have a substantial impact on women. A large portion of the traded goods in marketplaces that have been targeted are agricultural goods sold by women. Women make up almost half of all the agricultural labour force in Africa<sup>23</sup>. If there is a disruption of a market, women agricultural workers are unable to sell their perishable produce and lose a valuable source of income.

Furthermore, in Nigeria for example, women constitute around 30 per cent of traders and vendors in market places, thus disruption to market activity disrupts this form of economic activity as well. Figure 2.8 shows that although employment in agriculture was decreasing for both males and females since 2007, the share of employment for women decreased substantially after the start of the uptick in terrorist attacks on markets in 2010, decreasing from 18.6 per cent of female employment in 2010 to 14.6 per cent in 2016. The share of male employment in agriculture only decreased by 1.5 percentage points over the same time.

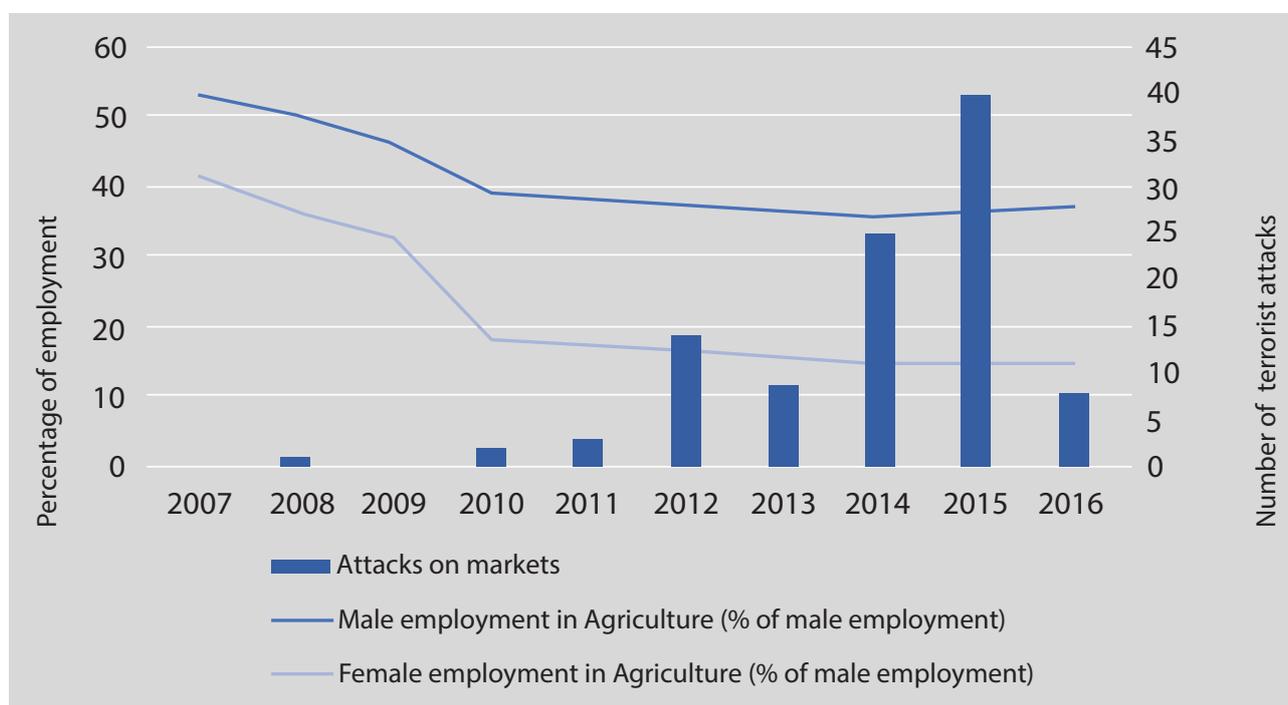
<sup>21</sup> Mercy Corps study "North East Nigeria Joint Livelihood and Market Recovery Assessment", 2017; <https://www.mercycorps.org/sites/default/files/Northeast%20Nigeria%20Joint%20LMRA%202017.pdf>

<sup>22</sup> *Ibid*

<sup>23</sup> <http://www.fao.org/docrep/013/am307e/am307e00.pdf>

## FIGURE 2.8: MALE AND FEMALE EMPLOYMENT IN AGRICULTURE AND ATTACKS ON MARKETS IN NIGERIA, 2007-2016

The share of employment for women decreased substantially after the start of the uptick in terrorist attacks on markets in 2010, decreasing from 18.6 per cent of female employment in 2010 to 14.6 per cent in 2016



Whereas men are more able to travel elsewhere in the event of the destruction of their local market, women are often the primary caregiver and thus need to be closer to the family home. This is not to say of course that a male's ability to relocate to another market is without costs. The impact of any lost revenue from either the necessity to relocate to another market or the inability to continue to carry out market activities can have severe consequences for the local economy such as an increase in food prices, and for families such as food shortages, or even flow-on effects such as removing children from school. A 2014 study of the effects of conflict in Mali on local agricultural investments found for example that the price of livestock increased by between two and five fold during the peak of terrorist activity<sup>24</sup>.

Table 2.2 reproduces the findings of this study with respect to livestock prices.

**TABLE 2.2: CHANGES IN THE PRICE OF LIVESTOCK IN MALI, WEST AFRICAN CFA**

Livestock	2011 Price	2013 Price
Cattle	115,000	400,000
Sheep	22,500	115,000
Goat	15,000	35,000

In multiple interviews with stakeholders in both Kenya and Nigeria, the disastrous consequences of violent extremism on agriculture production and trade was emphasized. In Nigeria for example, while urban centres in the north-east have been secured to some extent, this security perimeter extends to only approximately 10km from the centre; thus populations working on lands further than this perimeter, either for subsistence farming or for trade production, are either risking their lives on a daily basis or have abandoned their plots of land altogether. Stakeholders stated that this impeded ability to make a living has been one of the main indirect reasons for large scale population displacement in the north east.

A Mercy Corps study of market recovery in North Eastern Nigeria found that there is variation by states in terms of employment in agriculture and thus who may be most affected by disruptions to production, transport and trade. In Nigeria, the Ministry of Women estimated that 70 per cent of farming activities are carried out by women, but that the true extent of their participation in the sector is underestimated.

The survey responses to the Mercy Corps study show that variation exists in terms of women's employment as well as the employment of other vulnerable groups, across the North East, with selected survey data reproduced in Table 2.3 below.

<sup>24</sup> Kimenyi et. Al, "The impact of conflict and instability on agricultural investments in Mali and Nigeria", Africa Growth Initiative Working Paper 17, Brookings Institute, 2014

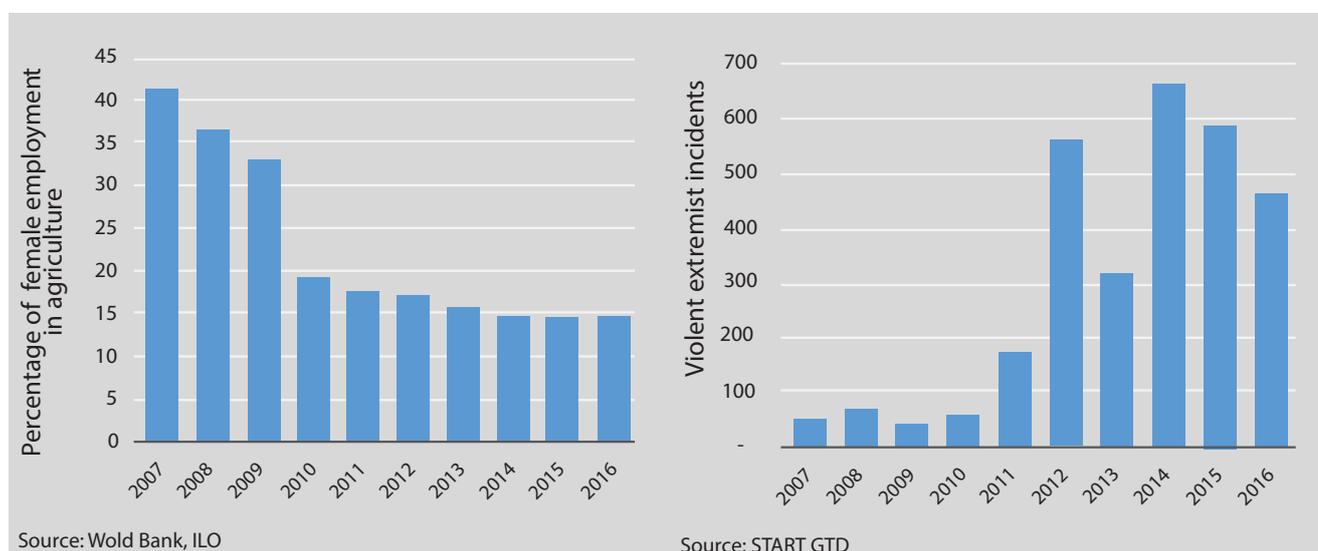
**TABLE 2.3: WHO IS HIRED FOR AGRICULTURAL WORK, NORTH-EAST NIGERIA<sup>25</sup>**

Group	Adamawa	North Borno	South Borno	Yobe
Youth	60%	68%	67%	88%
Women/ women's groups	42%	29%	58%	52%
Fulani	0%	8%	14%	7%
Internally Displace People	5%	1%	11%	4%

This disruption is further reflected through the contrast between female employment in agriculture in Nigeria and the increase in violent extremist acts. According to projections by the International Labour Organization, over a third of agricultural workers were female before the beginning of the Boko Haram insurgency in 2009. As violent extremist acts became more common, the share of female workers in agriculture more than halved to less than one in six workers.

**FIGURE 2.9: PERCENTAGE OF AGRICULTURAL WORK DONE BY FEMALES AND NUMBER OF VIOLENT EXTREMIST ACTS, NIGERIA 2007-2016**

*The reduction in the proportion of female workers in the agricultural industry in Nigeria corresponds with the increase in violent extremist acts.*



## TOURISM

The costs of terrorism to the tourism industry include direct costs such as decreased tourist numbers leading to decreased spending and hence GDP, and indirect costs such as decreased employment in the tourism sector. Between 2014 and 2015, revenues from tourism sectors declined by US\$40 billion around the world as a result of increased impact of terrorism. Tunisia, which experienced a horrific attack on the Sousse beach in 2015, lost US\$19 billion in tourism revenue that year. In 2015, one million fewer tourists visited Tunisia compared to the same period the year before.<sup>26</sup> Morocco, where no deaths from terrorism occurred in 2015 lost only US\$5 billion in tourism revenue.

Between 2008 and 2014, tourism's contribution to GDP growth was 1.9 percent for countries with terrorist attacks deliberately

targeted at tourists, but almost double that at 3.6 percent for countries with no targeted attacks. The adverse economic effects of terrorism for the tourism sector are felt by all countries that suffer terrorist incidents regardless of whether or not these incidents are targeted at tourists.

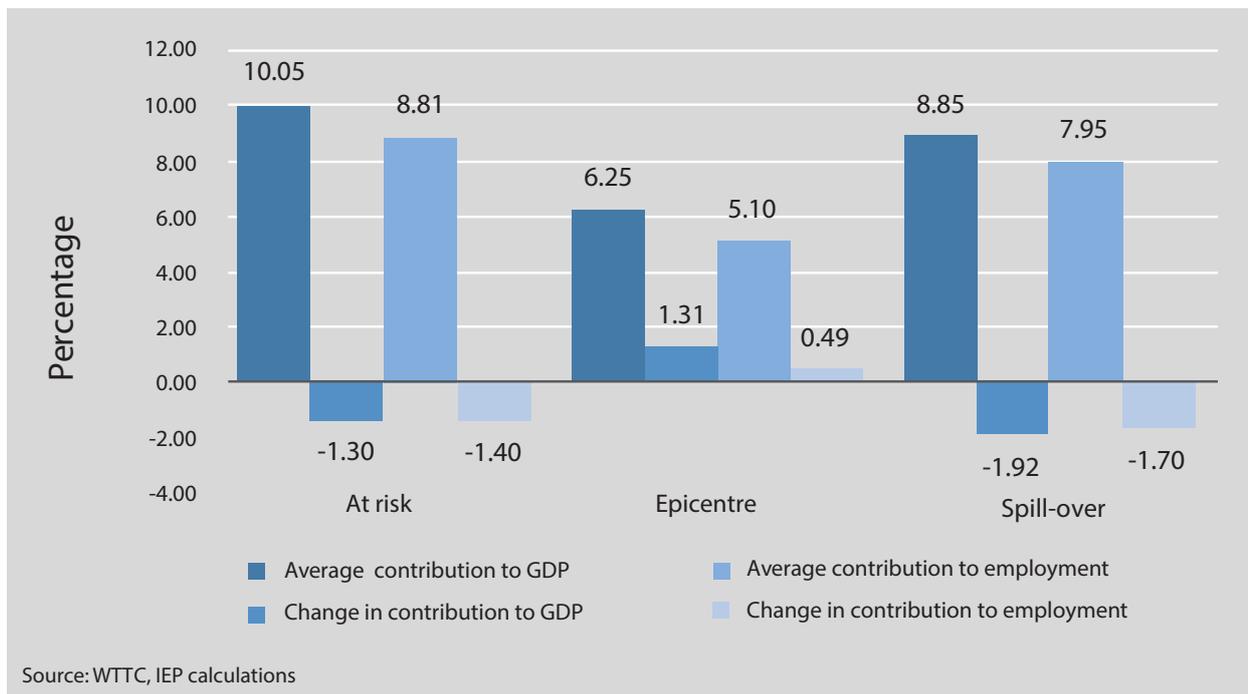
Data from the World Travel and Tourism Council (WTC) shows that tourism contributes the highest amount both in terms of GDP and employment to the economies of the at risk group of countries, and spill-over countries have suffered the largest reductions in tourism's contribution to GDP and tourism's contribution to employment. In epicentre countries, tourism's contribution to both GDP and employment actually grew in the ten year period between 2007 and 2016, due to the uptick in tourism in Mali.

<sup>24</sup> Kimenyi et al, "The impact of conflict and instability on agricultural investments in Mali and Nigeria", Africa Growth Initiative Working Paper 17, Brookings Institute, 2014

<sup>25</sup> Data is replicated from Mercy Corps study "NorthEast Nigeria Joint Livelihood and Market Recovery Assessment", 2017; <https://www.mercycorps.org/sites/default/files/Northeast%20Nigeria%20Joint%20LMRA%202017.pdf>

## FIGURE 2.10: TOURISM'S CONTRIBUTION TO THE ECONOMY BY GROUP, 2007 TO 2016

Tourism contributes the highest amount both in terms of GDP and employment to the economies of the at risk group of countries, and spill-over countries have suffered the largest reductions in tourism's contribution to GDP

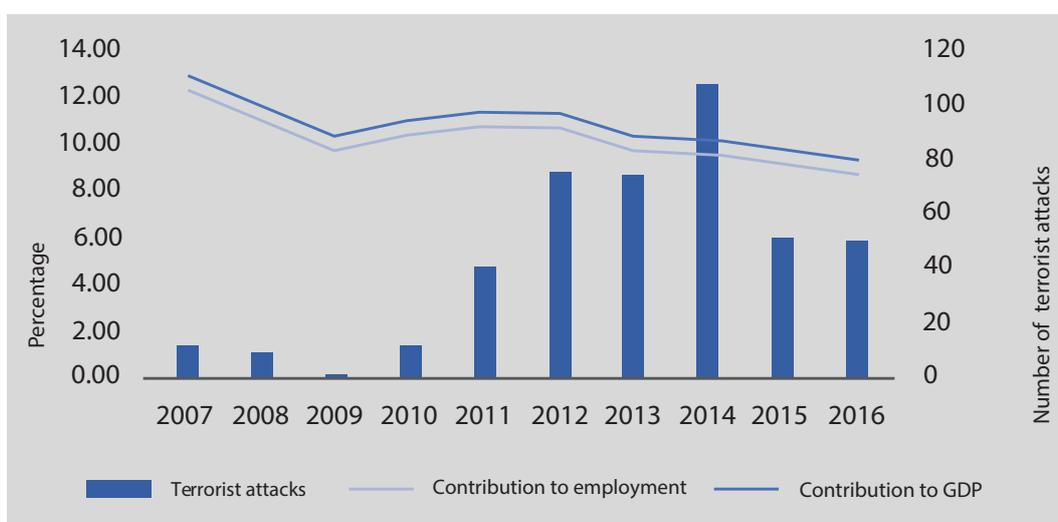


Terrorism has most severely affected the tourism sectors of the group of spill-over countries; more specifically Tunisia and Kenya have been hardest hit. As a recent UNDP policy brief on the pathways of the impact of terrorism and violent extremism on the Kenyan economy articulates, a country such as Kenya which is heavily reliant on tourism as a source of economic activity, growth and foreign exchange earnings, has been severely impacted.<sup>27</sup>

Between 2007 and 2016, tourism's contribution to GDP fell by 7.7 per cent in Tunisia to 13.65 per cent, and by 3.7 per cent in Kenya, to 10.9 per cent. At the same time, tourism's contribution to employment fell by 6.8 per cent in Tunisia to 12.5 per cent, and by 3.5 per cent in Kenya to 8.7 per cent. Figure 2.11 shows the trend in terrorist incidents and tourism related economic metrics for Kenya between 2007 and 2016.

## FIGURE 2.11: TERRORISM AND TOURISM IN KENYA, 2007-2016

Kenya has seen a decline in tourism's contribution to the economy at the same time as terrorist related incidents have increased.



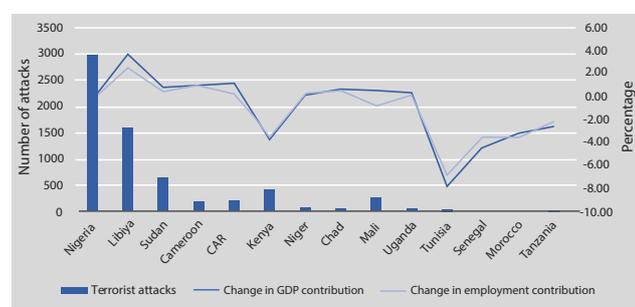
<sup>26</sup> <http://english.aawsat.com/2016/07/article55355229/morocco-foils-terrorist-attacks-arrests-52-militants>

<sup>27</sup> UNDP Policy Brief, "Articulating the pathways of the impact of terrorism and violent extremism on the Kenyan Economy", Issue 1/2017; <http://www.ke.undp.org/content/kenya/en/home/library/strategic-policy-advisory-unit-/Policy-Brief-Impact-of-terrorism-on-Economy.html>

Despite the deleterious impact of terrorism on tourism in certain countries, in other countries tourism has been proven to be resilient to the trend of increased impact of terrorism. Figure 2.12 shows the total number terrorist attacks between 2007 and 2016, as well as the average annual change in tourism's contribution to GDP and employment, by country. Only six of the 14 focus countries for which data was available saw a decline in tourism's contribution to GDP over the period, and Nigeria, the country most affected by terrorism over the period saw only marginal declines in GDP and employment contribution. But perhaps most surprising has been the case of Libya – an epicentre country- which has seen strong positive growth in both tourism's contribution to GDP and employment over the ten-year period, and which the WTTC forecasts to be number one in growth of the relative importance of tourism's contribution to GDP in 2018.<sup>28</sup>

## FIGURE 2.12: LEVELS OF TERRORISM AND THE TOURISM SECTOR, 2007-2016

*The tourism sectors of most focus countries are resilient to terrorism in the long-run*



## VIOLENT EXTREMISM AND THE LABOUR MARKET

Labour Market effects of violent extremism include most directly the loss of human resources and concomitant loss of production and output associated with this. These effects also include disruptions to normal labour market functioning including potentially higher rates of unemployment, underemployment or informal employment. Additionally, the composition of the labour market may change.

The impact of violent extremism on the labour market occurs through at least three mechanisms. First, there is the lost productivity of people who join violent extremist groups. These are often young and economically productive males. Second, the dependents and relatives of fighters often lose the opportunity to engage in formal employment due to their association with fighters. This includes the wife or wives of fighters who may become destitute when a fighter dies or is unable to provide ongoing financial support. In some contexts, the parents and relatives of fighters are heavily monitored by security services and hence find it very difficult to do legitimate work. And finally, the presence of violent extremist groups or response of security services means that many people are unable to engage in economic activity.

## EMPLOYMENT

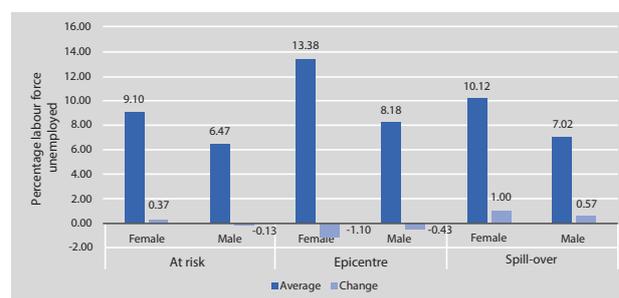
The lack of employment opportunities is both a driver and a consequence of violent extremism. As highlighted in UNDP's Journey to Extremism in Africa report, the regions most affected by violent extremism in Africa often have levels of unemployment and economic need well above national averages.<sup>29</sup>

Unemployment data shows that epicentre countries have had on average the highest levels of unemployment for both males and females since 2007. But this group of countries has seen the largest declines in unemployment for both males and females over the ten year period, with female unemployment declining by more than male unemployment. This is despite the fact that epicentre countries have also seen the most dramatic increases in the intensity of violent extremism over the period.

The gender trend in epicentre countries – where female unemployment has decreased more than male unemployment on average – speaks to some of the comments made by stakeholders in Nigeria that as the male working age population has become involved in conflicts in the North-east and the Middle Belt, females have stepped in to fill the gap in livelihood generation for their households.

## FIGURE 2.13: UNEMPLOYMENT RATES BY GENDER AND GROUP, 2007-2016

*While epicentre countries have had on average the highest levels of unemployment for both males and females they have also seen the largest declines in unemployment for both males and females*



## YOUTH UNEMPLOYMENT

Youth unemployment has been consistently higher in all three groups of countries than general unemployment for both males and females, as seen in Table 2.4.

**TABLE 2.4: DIFFERENCE BETWEEN YOUTH UNEMPLOYMENT LEVELS AND GENERAL UNEMPLOYMENT LEVELS, AVERAGE BY GENDER AND GROUP, 2007-2016**

Group	Difference for Females	Difference for Males
At Risk	5.98	4.39
Epicentre	11.09	6.69
Spill-over	6.62	7.31

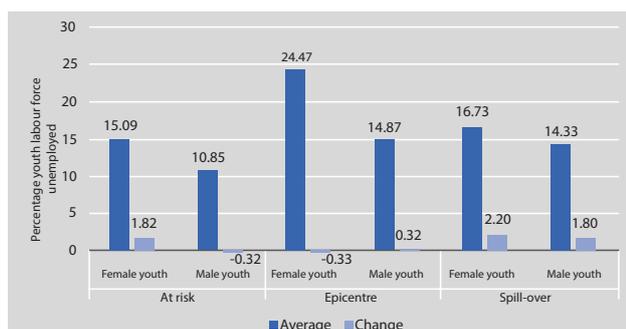
<sup>28</sup> WTTC, "Economic Impact 2018: Libya"; <https://www.wttc.org/economic-impact/country-analysis/country-data>

<sup>29</sup><http://journey-to-extremism.undp.org/content/downloads/UNDP-JourneyToExtremism-report-2017-english.pdf>

Youth unemployment levels for females has been highest in the epicentre group of countries, averaging around nine percentage points higher than rates in at risk and spill-over countries. However, female youth unemployment in epicentre countries has also seen the largest decline across groups and genders, decreasing by 0.33 percentage points between 2007 and 2016.

## FIGURE 2.14: YOUTH UNEMPLOYMENT BY GENDER AND GROUP, 2007-2016

*Youth unemployment levels for females have been highest in epicentre countries, but they have also seen the largest declines in female youth unemployment since 2007*



## WHY AND HOW VIOLENT EXTREMISM IMPACTS ECONOMIC ACTIVITY

Violent extremism has a significant impact on economic activity and this impact can be shaped by perceptions rather than reality. Some of the mechanisms through which violent extremism impacts economic activity include behaviour changes due to fear, a loss of infrastructure, changes in costs of doing business and a shift toward informal economies. Each of these is discussed in the context of the focus countries.

### Changes in Behaviour

Extremists often use violence to incite fear to further a particular ideology, political, or religious view. People may change both their immediate behaviours and actions in response to violence, but also future behaviour and actions, and the anticipation or expectation of future violence has a deleterious economic impact.

“Before, I was attending school and selling small-small peanuts to earn some money, about 1150 naira a day. I used to use about 1000 naira to buy more product and save 150 naira for myself and my family. My father had a shop. Then Boko Haram came. They started demanding money from my father. Eventually he couldn’t pay more and they killed him. He left behind four wives and 30 children. Me, I am eldest of nine in my household. I stopped going to school. I stopped selling peanuts. I have no income.” – FGD female respondent

Fear of falling victim to violence changes consumption and work-related decisions. It leads to increased transportation costs, reduced productivity and dampened consumption. Fear of victimisation can also lead to adverse mental health effects

such as anxiety, anger and reduced mental wellbeing, all of which have productivity implications. In addition, the social cost of the fear of violence manifests itself in reduced trust in society and the erosion of social cohesion. Although this is extremely difficult to measure, there have been attempts at labelling the economic cost associated with fear of being a victim of violent crime.<sup>30</sup> The fear of being a victim of violent extremism has similar impacts, shaping economic decisions. For example, following the restoration and reopening of the Westgate Shopping Mall after the terrorist attack in 2013, initially fewer businesses returned<sup>31</sup>, although over time the mall has expanded and is thriving for businesses and consumers alike. The initial depression in business activity was reportedly been because of fear both that a business may be vulnerable to an attack, but also that there would be less customers frequenting the mall due to the associations with the attack. Globally, the indirect costs of fear of violence are very high, US\$120 billion PPP in 2015<sup>32</sup>. The indirect costs include a changed view of society (loss of trust) and behaviour changes.

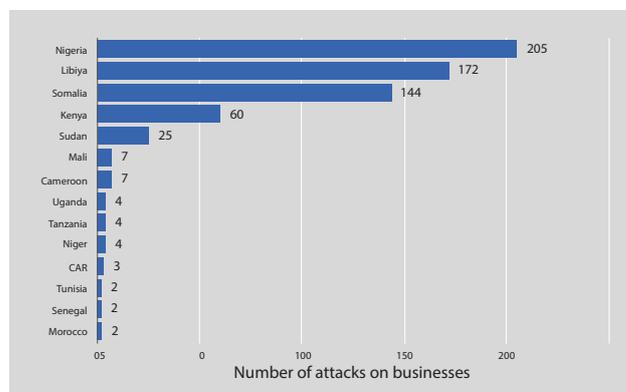
### Changes in Costs of Doing Business

Violent extremism may increase the costs of doing business directly by targeting businesses, or indirectly by increasing security costs, operating costs due to damaged infrastructure and costs associated with bureaucratic measures amongst other things. The cost of doing business in turn is one factor affecting decisions of both international and local businesses to start or expand operations. If levels and trends in violent extremism affect cost of business, domestic and international firms may err on the side of caution either foregoing, delaying or relocating business decisions.

Businesses were the targets of eight per cent of attacks between 2000 and 2016 in the 18 focus countries. But not all the focus countries have seen the same extent of terrorist attacks directly targeting businesses, as can be seen in figure 2.15. Terrorist attacks against businesses have overwhelmingly affected epicentre countries, accounting for 82 per cent of the 641 attacks on businesses in the focus countries between 2007 and 2016.

## FIGURE 2.15: TERRORIST ATTACKS ON BUSINESSES, 2007-2016

*Epicentre countries have been highly affected by terrorist attacks against businesses accounting for 82 per cent of the 641 attacks on businesses in the focus countries between 2007 and 2016.*



<sup>30</sup> Brauer, J., and Marlin, J.t., ‘Nonkilling Economics: Calculating the size of peace gross world product’, *Toward Nonkilling*, 2009, p. 125-148.

<sup>31</sup> <https://qz.com/457808/kenyan-consumers-win-this-round-against-al-shabaab-as-westgate-mall-reopens/>

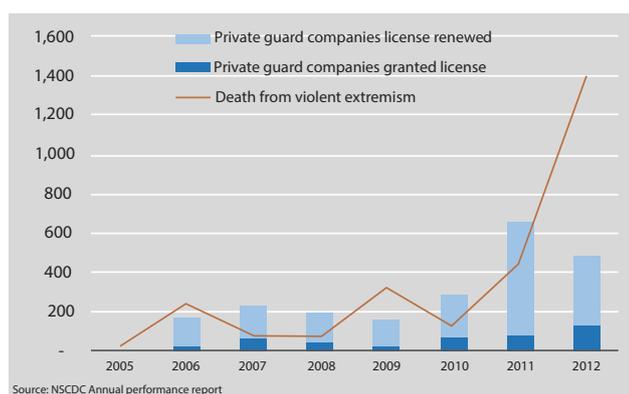
<sup>32</sup> <http://visionofhumanity.org/app/uploads/2017/02/The-Economic-Value-of-Peace-2016-WEB.pdf>

“Before, I was a trader and farmer. My main crop was maize, and I traded eggs. I had two small carts to transport and a shop. I employed 20 people. Then the insurgency came. There was an attack outside my shop and the military closed it down. 100,000 eggs perished. My transport carts were burned. I lost 8 million Naira. Today I only have this 20 Naira. I haven’t eaten since midday yesterday. I have nothing.” – FGD male respondent

Businesses have recognised the significant costs of disruption due to an attack and are seeking increased security. There has been an increase in the number of private security in many countries impacted by violent extremism. This in turn has increased the cost of doing business. Many office buildings in major cities with a risk of violent extremism have in recent times expanded security, employing a security desk with security scanning, logging visitors and a general increase in physical security. This has in turn resulted in an increase in rent for office facilities and a general increase in the cost of doing business. Figure 2.23 shows in Nigeria that there has been an increase in the number of licenses for private security, also known as Private Guard Companies, corresponding with the increase in deaths from terrorism. There have been similar increases in security services across other countries affected by violent extremism. Now, many countries have higher levels of private security than police. For example, in Kenya for every 100,000 people there are 136 private security guards and 101 police. However, the increase in private security companies is not just a response to violent extremism. There is also a connection between the growth of private security companies and the perceived failures and inefficiency of the public security sector. In many countries, including those impacted by violent extremism, there has been a reduction in the number of police.

**FIGURE 2.16: NUMBER OF PRIVATE SECURITY COMPANIES COMPARED TO DEATHS FROM VIOLENT EXTREMISM IN NIGERIA, 2005-2012**

*The increase in private security companies in Nigeria corresponds with an increase in deaths from violent extremism.*



There have been several prominent incidents of violent extremists targeting oil infrastructure which has halted production. Several multinational oil companies have been forced to close certain facilities due to attacks. Attacks on oil pipelines have occurred in four of the 18 focus countries between 2000 and 2016. However, it is largely an issue in Nigeria which accounts for 111 of the 123 total attacks. Notably, there have been 13 separate groups that have been responsible for all of these attacks in Nigeria, albeit they are all based in the Niger Delta. There were seven attacks in Libya all undertaken by ISIL affiliates, four attacks in Sudan undertaken by Beja Congress and the Ummah Liberation Army, and one attack in Tunisia.

As a result of attacks on pipelines, oil production in Nigeria in 2016 decreased from 2.2m barrels per day to 1.5m.<sup>33</sup> Over the course of a year this is the difference in revenue of US\$10.4 billion or the equivalent to around three per cent of Nigeria’s GDP that year. However, it is likely the impact to the Nigerian economy has been much greater. The Ministry of Budget and National Planning for Nigeria state that the oil sector provides 70 per cent of government revenue and 95 per cent of export revenue.<sup>34</sup>

On ease and cost of doing business more generally, the World Bank Group has measures on various aspects related to the ease of doing business around the world, including a cost of business measure - a score between 1 and 100 where a higher score means a better more conducive environment for starting and operation of a local firm.

Between 2007 and 2016, the group of at risk countries have had the highest average score on starting a business, outperforming epicentre and spill-over countries, who perform almost equally. But all three groups of countries have seen improvements on this front since 2007 despite the increases in violent extremist activity, indicating a resilience of business confidence in the face of adverse security situations. Epicentre countries saw the largest improvement in their starting a business score – a 182 per cent improvement in the ten year period.

**TABLE 2.6: STARTING A BUSINESS SCORE AND CHANGE IN SCORE ACROSS GROUPS, 2007-2016**

	Average Starting a Business Score	Percentage Change
At risk	64.25	30.03
Epicentre	56.43	182.56
Spill-over	56.60	72.65

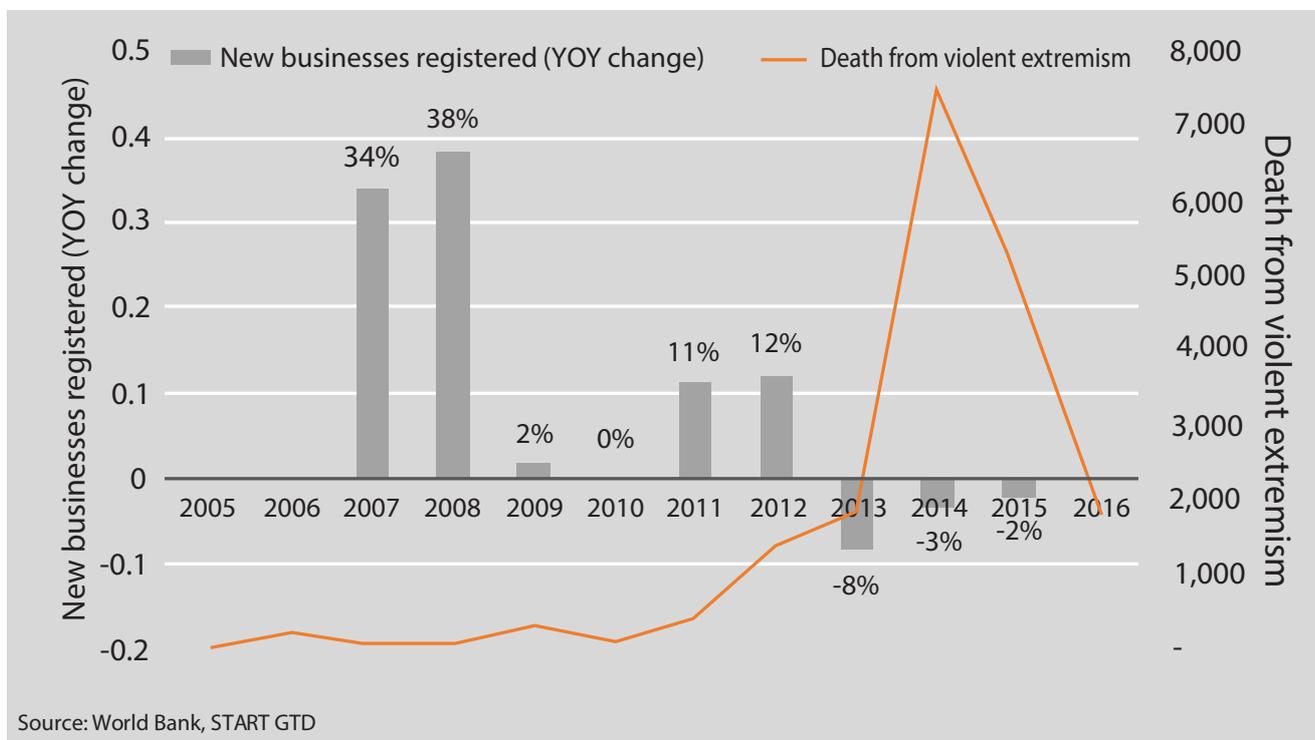
Having said that, in Nigeria for example, data shows that as violent extremism has intensified, fewer new businesses were registered, indicating entrepreneurial risk aversion in extreme situations.

<sup>33</sup><https://www.economist.com/news/leaders/21701124-nigerias-turbulent-oilfields-cannot-be-pacified-bribing-rebels-danegeld-delta>

<sup>34</sup><https://www.eia.gov/todayinenergy/detail.php?id=27572>

## FIGURE 2.17: NEW BUSINESS REGISTRATION VS DEATHS FROM VIOLENT EXTREMISM IN NIGERIA, 2005-2016

As violent extremism increased, fewer new businesses were registered. This is a proxy measure for business confidence as well as the strengths of government institutions.



Stakeholders in Kenya emphasized the fact that certain counter terrorism responses by the government to violent extremist activity have also had the effect of disrupting or hindering business operations. For example, the road between Mombasa and Lamu in eastern Kenya has between six to ten road blocks where all travellers must exit their vehicles as they are searched introduced as a security precaution. This increases the travel time it takes to travel to Lamu which makes the transporting of spoilable goods, such as fish, less viable. The perceived danger of an attack or a negative experience with security services also influences business operators from risking capital. In Lamu, for example, there have been reports of a shortage of trucks and other larger vehicles as business owners do not want to risk losing their livelihoods if their vehicles are damaged.

### LOSS OF INFRASTRUCTURE

Another tangible cost of violent extremism is the destruction of infrastructure and private property which has long term flow-on effects for businesses and economic activity. If roads, transport and telecommunications are affected, this reduces the ability of businesses to operate. The result of this can be increased operating costs with attempts to bypass the missing infrastructure, losses of stock and capital as well as lost revenue. Attacks on infrastructure include those targeting utilities, telecommunications and food and water supply. Attacks on infrastructure and businesses averaged thirteen per cent of attacks in the focus countries between 2000 and 2016.

A 2016 assessment of the impact of damages to infrastructure and social services in North-East Nigeria found that the crisis resulted in US\$9 billion worth of economic devastation across all six states of the north-east, with two-thirds of the damage (US\$5.9 billion) occurring in Borno state.<sup>35</sup>

<sup>35</sup>*ibid.*

## SECTION III - THE INFORMAL ECONOMY

### Key Findings

- The African continent suffered losses of US\$1.68 trillion in informal economic activity between 2007 and 2015.
- The focus countries lost approximately US\$870 billion in the nine years, or US\$97 billion per year.
- Of the focus countries, Nigeria's informal economic sector has suffered the biggest potential losses between 2007 and 2015, estimated at around US\$560 billion USD.
- This is equivalent to 15.5 percent of Nigeria's total GDP over that period.
- Terrorism and terrorist activity affects the informal economy as well in at least two ways: shifting economic activity from the formal to the informal realms, and disrupting informal economic activity.

The African continent is home to some of the highest levels of informal economic activity globally, with the size of the informal economic sector in sub-Saharan African countries averaging above 36 per cent of GDP between 1991 and 2015. In this time period, the size of the informal economy has seen on average a decline in all regions of the world including both sub-Saharan Africa and North Africa. Between 1991 and 1999, the average size of the informal sector in sub-Saharan Africa was estimated to be 42.4 per cent of GDP, but by 2010-15, this had fallen to 36 per cent. Similarly, in the MENA region the size decreased from an average 27 per cent to 23.4 per cent.<sup>36</sup> Despite the overall decline in the size of the informal sector, in the African continent, informal economic activity still plays a paramount role in livelihoods and the general functioning of the economy.

The most comprehensive results aiming to measure the size of the informal economic sectors of countries around the world suggest that there is significant heterogeneity within the African continent in terms of size, ranging from lows of between 20 and 25 per cent of GDP in countries such as Mauritius and Namibia, to highs between 50 and 65 per cent of GDP in Tanzania and Nigeria.<sup>37</sup>

There are a number of factors affecting the size of the informal sector in any country including the levels of development of the formal economy, the quality of institutions and corruption, regulations around business, labour and taxation, and levels of unemployment. Despite differences in some or all of these factors in the focus countries, the average size of the informal sectors varies by only seven per cent: between 1991 and 2015, the average size of the informal sector's economic activity was equivalent to 43 per cent of GDP in epicentre countries, 42 per cent of GDP in at risk countries, and 36 per cent of GDP in spill-over countries.<sup>38</sup>

### ESTIMATING LOSSES TO THE INFORMAL ECONOMY

Informal economies tend to be more resilient than formal ones, and provide both opportunities and challenges. Often informal economies are the only alternative to breakdowns in formal economies, thus providing a social safety net mechanism. But many of the same terrorism related factors that affect a population's ability to carry out formal economic activity will affect informal activity as well. Disruptions to trade routes, market activity, increased security response as well as a fear of attacks, will all influence decisions to engage in informal economic activity.

In line with the general global trend which has seen a gradual decline in the size of the informal economies of most countries around the world, the estimated size of the informal economy measured as a percentage of GDP has declined across all three groups of focus countries since 1991. The size of the informal economy has declined by over nine percentage points in at risk and spill-over countries, and five percentage points in the epicentre group of countries since 1991.

Although the size of the informal economy in GDP terms has been declining on average since 1991, according to the Global Terrorism Index the real uptick in terrorist activity in the African continent has occurred since 2007, and this has disproportionately been driven by activity in the focus countries. Both focus countries and non-focus African countries have seen declines in the average size of informal economic activity in these pre-terrorism uptick and post-terrorism uptick periods, but the decline in the focus countries has been greater than the rest of Africa. This overall decline may in part be attributed to the Global Financial Crisis of 2008/09 which affected economic activity both formal and informal, around the world. However, the declines in the size of the informal economy in the focus countries has been larger than the rest of Africa, potentially suggesting an effect of terrorist activity on informal economic activity. In particular, countries making up the spill-over and at risk group, have seen the largest declines in average size of informal economic activity, declining by an average of 6.5 per

<sup>36</sup> L. Medina and F. Schneider, "Shadow Economies around the World: What Did We Learn Over the Last 20 years?", IMF Working Paper WP/18/17, January 2018

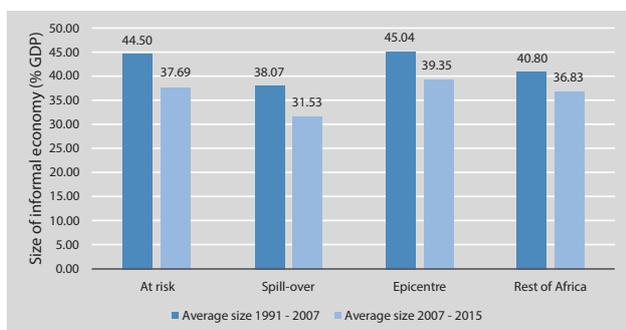
<sup>37</sup> L. Medina et al, "The Informal Economy in Sub-Saharan Africa: Size and Determinants, IMF Working Paper, WP/17/156, July 2017

<sup>38</sup> L. Medina and F. Schneider, "Shadow Economies around the World: What Did We Learn Over the Last 20 years?", IMF Working Paper WP/18/17, January 2018

cent of GDP, as seen in figure 3.1. In contrast, the average size of the informal economy in the rest of Africa declined by only four per cent in the same periods.

### FIGURE 3.1: AVERAGE SIZE OF INFORMAL SECTORS IN FOCUS COUNTRIES, PRE TERRORISM UPTICK AND POST TERRORISM UPTICK

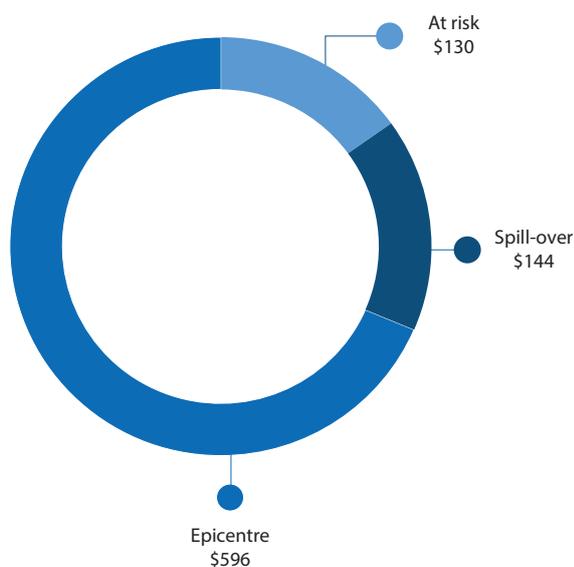
*Countries making up the spill-over and at risk group, have seen the largest declines in average size of informal economic activity*



Between 2007 (corresponding to the start of the uptick in terrorism level), and 2015, the informal economy across 16 of the 18 focus countries for which estimates are possible, suffered losses of approximately US\$870 billion USD, or US\$97 billion per year. The estimated losses to the entire African continent are US\$1.68 trillion USD over the time period. Box 3.1 provides an overview of the methodology used to derive these figures, which should be taken as a rough estimation only, and a starting point for further refining the quantification of losses.

### FIGURE 3.2: LOST VALUE ADDED TO THE INFORMAL ECONOMY OF FOCUS COUNTRIES, 2007-2015

*The epicentre group of countries lost approximately US\$596 billion in informal economic activity between 2007 and 2015*



LOST VALUE ADDED, (Constant 2017, USD billions)

### BOX 3.1: ESTIMATING THE VALUE OF LOST INFORMAL ECONOMIC ACTIVITY

To date, there has been very limited research looking at how terrorism affects informal economic activity, and in particular, no known estimates exist of the lost monetary value of informal economic activity that would have taken place in the absence of terrorist activity. This is in part because estimating the magnitude of informal economic activity is in itself a complex task.

Both direct and indirect methods have been used to try and estimate the size and importance of informal economic activity around the world. Direct methods, generally conducted on a micro-scale, include conducting surveys of businesses and traders, and auditing taxes of small and micro businesses. Indirect estimations, of which there are five main methods, take a more macro approach. Briefly, these five methods are:

1. The national accounts approach: An estimation of the difference between national expenditure and income statistics
2. Estimating the difference between the official and actual labour force
3. The Electricity consumption approach: Here it is assumed that the difference between the growth of electricity consumption and growth of GDP is indicator of growth of informal economy (Kaufmann and Kaliberda)
4. The Currency demand approach: Here it is assumed that any excess demand for currency is due to the fact that informal transactions mostly rely on cash payments
5. Multiple Indicators Multiple Causes (MIMIC) approach: Here, the Informal Economy is modelled as a latent variable which multiple factors effect.

In order to estimate the losses to informal economic output, two elements are critical: an estimate of the actual size of the informal economy, and an estimate of the size of the informal economy under a hypothetical alternative scenario in which terrorist activity hasn't taken place.

To get an estimate of the actual size of the informal economy, the International Monetary Fund's most recent results estimating the size of shadow economies around the world, is used.<sup>39</sup> This estimation uses the MIMIC methodology to calculate the size of the shadow economy as measured as a percentage of GDP, for 158 countries, since 1991.

The second element, the estimation of the size of the informal economy in a hypothetical terrorism-less world, is based on a simplifying assumption around the projected growth rate of the informal sector. Namely, the growth rate of the informal economy in the period prior to the uptick in terrorist activity in 2006/2007, is a good predictor for what growth would have looked like since the uptick in terrorist activity in the absence of such activity.

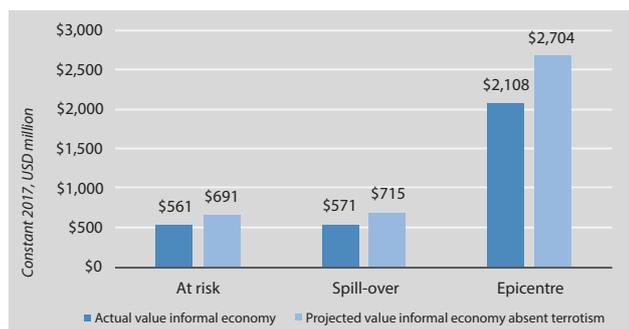
Using the estimated average annual growth rate of the informal economies of each country in the years between 1991 and 2006 as the projected hypothetical growth rate, we estimate the projected value of economic activity in the informal sector for each country between 2007 and 2015. This projected value is then compared to the actual value, as estimated by the IMF's most recent results.

<sup>39</sup> See L. Medina and F. Schneider, "Shadow Economies around the World: What Did We Learn Over the Last 20 years?", IMF Working Paper WP/18/17, January 2018, for an explanation of their methodology.

Figure 3.3 shows the actual value of the informal economy over the nine-year period compared to the hypothetical predicted value in the absence of terrorism, for all three groups of focus countries. Epicentre countries, which have been worst affected by terrorism, have suffered the largest lost potential value added from the informal economy, driven by the losses in Nigeria.

### FIGURE 3.3: ACTUAL AND PREDICTED VALUE OF THE INFORMAL ECONOMY IN FOCUS COUNTRIES, 2007-2015

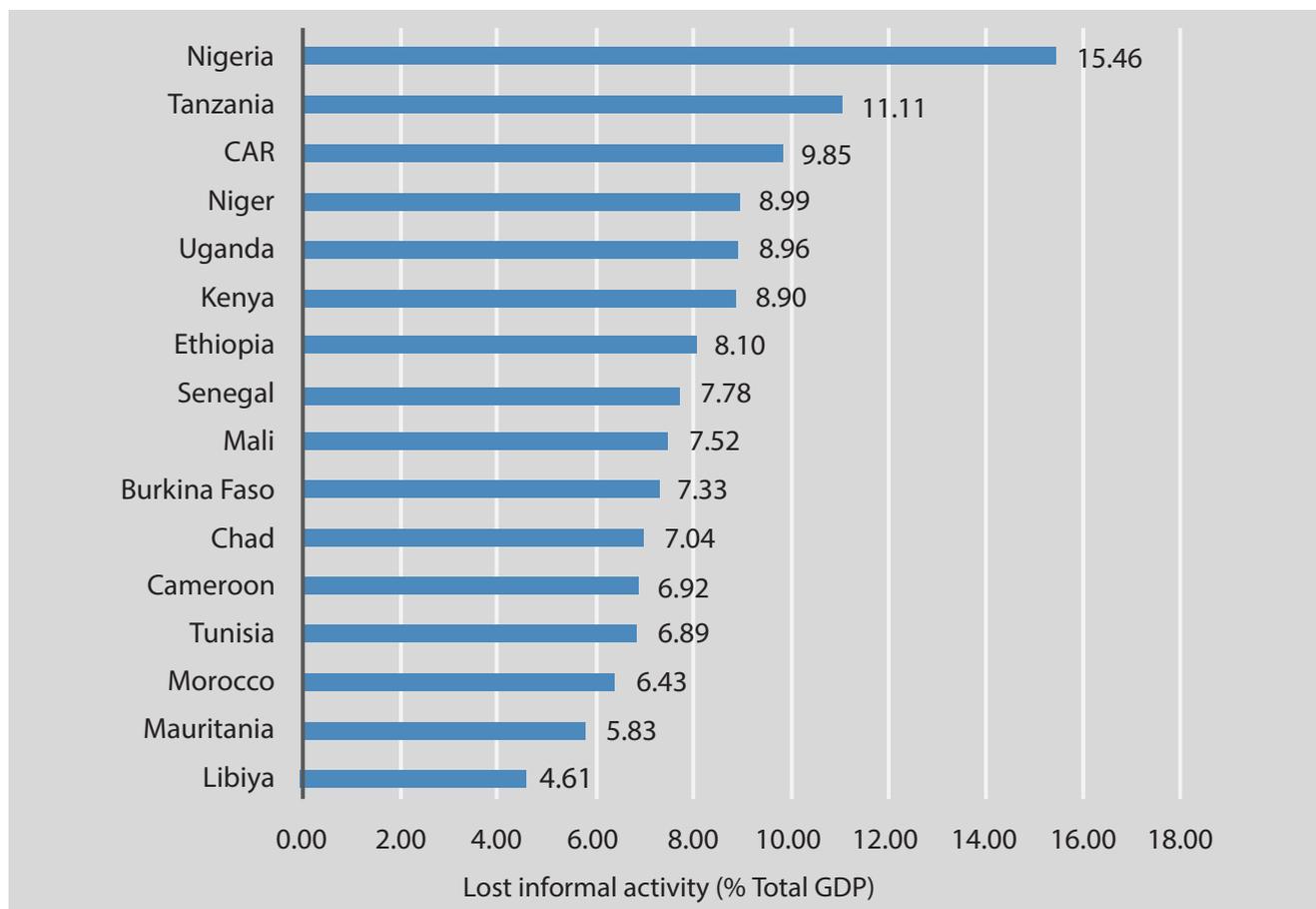
*Epicentre countries, which have been worst affected by terrorism, have suffered the largest lost potential value added from the informal economy*



For the 16 of 18 focus countries for which estimations were able to be calculated, Nigeria's informal economic sector has suffered the biggest potential losses in the nine years between 2007 and 2015, estimated at around US\$560 billion USD, or 15.5 percent of total GDP over that same period. Figure 3.4 shows the estimated lost value added from informal economic activity as a percentage of the total GDP between 2007 and 2015, for the 16 focus countries for which estimation was possible.

### FIGURE 3.4: LOST VALUE ADDED INFORMAL ECONOMIC ACTIVITY AS A PERCENTAGE OF GDP, 2007-2015

*The lost value of economic activity between 2007 and 2015 in the focus countries ranges from 4.6 per cent of GDP in Libya to 15 per cent of GDP in Nigeria*



## HOW TERRORISM AFFECTS THE INFORMAL ECONOMY

Terrorism and terrorist activity affects not only the formal economy but the informal economy as well in at least two ways. First, increasing levels of terrorism can shift the realm of economic activity from the formal to the informal, which can have serious consequences on a state's ability to collect taxes, provide security and other public goods, and monitor the flow of goods and services. Second, high levels of terrorist activity also disrupt informal economic activity, leading to losses in livelihood opportunities, and economic output more generally.

Previous academic and policy analysis of the economic impact of Boko Haram related conflict in North Eastern Nigeria has identified three transmission channels through which this impact occurs. First, the conflict leads to the disorganization of production as businesses and farms close down. Second, there is the physical destruction of capital such as roads and buildings. And third, there is the dislocation of labor as people are displaced or die.<sup>40</sup>

### A SHIFT FROM THE FORMAL TO THE INFORMAL

Terrorism can shift economic activity from the formal realm to the informal realm by pushing trade and cross-border trading underground, either directly because of terrorist activity, or because of a state's response to terrorism including a crack-down on regulations and security.

Insecurity and violence can lead to significant disruptions in cross-border trade and can shift it further from the formal to the informal realm. Official cross-border trade statistics in the focus countries, which often seem to suggest cross-border trade is not significant, do not paint a complete picture of cross-border trade flows as they fail to account for informal cross-border trade. Estimates of the value of cross-border trade suggest that informal cross-border trade (ICBT) constitutes up to 43 percent of African countries' GDP, and that in many cases, informal cross-border trade makes up almost 90 per cent of official flows.<sup>41</sup> In monetary terms, in the Southern African Development Community (SADC), it was estimated that 30-40 per cent of intra-SADC trade was in ICBT, generating nearly US\$18 billion a year for those involved. ICBT has also been estimated to provide anywhere between 20 and 75 per cent of employment in most African countries.

In North Eastern Nigeria's Borno state, the formal sector, although never big in scope, was characterized by a good spread of formal institutions throughout the state pre- Boko Haram crisis, with banks for example existing in 23 of the 27 LGAs. One interviewee recounted that with the advent of Boko Haram, the formal financial system was decapitated. Boko Haram often deliberately targeted banks and financial institutions because they needed funds, and this was especially true in the rural LGAs of Borno state. The immediate effect of this was that banks shut down in these outlying areas

and became concentrated around Maiduguri. They also began taking more precautionary measures including increased security and shorter opening times.

This in turn created financial hardships for petty traders and market sellers, who due to these bank measures, couldn't deposit profits and earnings and ended up with large quantities of cash, making them targets of Boko Haram attacks as well.

Today, the interviewee said, the formalization of the economy in town centres at least is improving somewhat due in large part to the influx of NGOs in the region. In his estimate the urban economy is more formalized than pre-crisis levels as the local population, seeing livelihood opportunities working for INGOs or doing business with them, have been forced to become 'registered' business enterprises with formal financial accounts. Banks however, are still only operating in 2 or 3 LGAs, he claimed.<sup>42</sup>

"The biggest challenge to making a living today is the lack of capital. There is no cash flow, no lending. Everything is done on credit, and businesses can't operate that way, not to mention that people end up just not paying" – Female FGD participant.

### A DECREASE IN INFORMAL ECONOMIC ACTIVITY

In North-eastern Nigeria, the informal economy by one estimate constituted between 80 and 90 per cent of business in Borno pre-crisis. Petty traders with businesses worth between 10 and 15 USD in terms of capital and revenue, involved 60-70 per cent of the population.<sup>43</sup> The main forms of informal activity were agriculture, market based petty trade and informal cross-border trade. Each of these informal activities have been impacted by the insurgency and the state's response to the insurgency.

"The informal economy has by far been most impacted by the insurgency. People's sources of incomes were completely destroyed." – interviewee, Ministry of Reconstruction, Rehabilitation and Resettlement.

Agriculture dominated the economy pre-crisis, with both cash crops such as cotton and ground-nut and food crops such as maize, as well as livestock and fisheries. The service sector followed – trade and transport in particular – with significant cross-border trade with Cameroon, CAR, Chad and Niger.<sup>44</sup>

Although the loss of livelihoods, trade and economic activity as a result of disruptions to cross-border trade was mentioned in multiple stakeholder interviews in both Kenya and Nigeria, to date, there has been very little research aimed at consistently and comparably tried to assess the lost economic value of cross-border trade due to violent extremist activity across countries in Africa. One global statistical estimate of the effect of terrorism on bilateral trade flows have put the reduction in trade anywhere between 25 per cent and 32 per cent.<sup>45</sup> These disruptions may in part be a direct consequences of violent extremist activity, with infrastructure destruction, the

<sup>40</sup> M. Masha et al, 2017. "North-East Nigeria - Recovery and peace building assessment: Synthesis report (English)". Washington, D.C.: World Bank Group; <http://documents.worldbank.org/curated/en/542971497576633512/Synthesis-report>

<sup>41</sup> United Nations Economic and Social Council, "Report on the Magnitude of and Tools for Measuring Informal Cross Border Trade in Africa's Regional Economic Communities", Eighth Session of the Committee on Trade, Regional Cooperation and Integration, 2013

<sup>42</sup> Interview, Forum for International NGOs, Maiduguri, May 2019

<sup>43</sup> Interview, Forum for International NGOs, Maiduguri, May 2019

<sup>44</sup> Ibid.

<sup>45</sup> <https://kelley.iu.edu/riharbau/RePEc/iuk/wpaper/bepp2006-13-fratianni-kang.pdf>

targeting of markets, and general atmosphere of fear hindering production, but it can also be caused by government responses to violent extremism. Restrictions on the movements of goods and people including border closures has affected trade routes, prices of goods, and of course the livelihoods of populations dependent on cross-border trade.

One anecdotal yet common example of market and petty trade disruption that came up in multiple interviews in Nigeria was the disruption to the Baga fish trade around Lake Chad, which in 2001 was estimated to be valued at US\$19 million in annual sales<sup>46</sup>. With its strategic location on Lake Chad and being a border town, Boko Haram had overrun the fishing town twice and taken over fishing activities since it was so profitable. In response to this, with the securitization response to Boko Haram including the imposition of administrative and security barriers, this fishing trade has fallen to a fraction of its previous levels. The state targeted this trade with barriers exactly because of its large revenue, with a fear that Boko Haram, in search of funds would aim to usurp the trade and profits. In addition to curtailing the fishing, the security related road closures means that even those who can fish, cannot move their fish to markets without military escort. The price of transporting fish went up from approximately 700 Naira pre-crisis to around 2000-2500 Naira now. One interviewee stated that in a recent visit to Baga, he bought a bag of dried fish for 10,000 Naira, but that same bag in Maiduguri could fetch 45,000 Naira and in Lagos 80,000 Naira. The trader can't move

his fish though so is forced to sell it well below market price, and suffers severe income hardship.<sup>47</sup> Recently, there have been claims that the Nigerian security forces have 'taken over' this informal trade for its own benefit, imposing high tariffs on transport and generally regulating the sales of fish stock<sup>48</sup>.

While insecurity may disrupt official cross-border trading, trade activities tend to be quite resilient. A study of six conflict affected countries in Africa found that trade still flows across borders despite violence, with traders operating informally, paying a price for security, and even making deals with violent groups to facilitate the movement of goods across borders. However, evidence collected in Borno state Nigeria tends to show that cross-border trade remains severely impacted by the insurgency.

Maiduguri in particular was a large hub for cross-border trade of agricultural goods and also of cattle herding prior to 2009. With the insurgency and the security sector response to the insurgency, some roads remain inaccessible or require heavy military escort, markets remain closed, and fear stops the normal flow of trade. Insecurity and lack of infrastructure were cited by FGD respondents as the critical barriers to cross-border trade.

Table 3.1 shows the reduction in the flow of grains from Borno state to its neighbouring countries in tonnes, between 2008 and 2014.<sup>49</sup>

**TABLE 3.1: REDUCTION IN CROSS-BORDER FLOW OF GOODS, TONNES, 2008-2014**

ITEM	2008	2009	2010	2011	2012	2013	2014
Maize	33,600	35,000	31,000	28,500	25,000	20,000	16,000
Millet	5,040	7,500	8,200	6,000	5,200	3,600	3,600
Beans	88,200	82,000	80,000	72,000	64,000	43,000	21,000
Sorghum	27,300	30,000	24,000	19,000	20,000	15,200	7,000
<b>Total</b>	<b>154,140</b>	<b>154,500</b>	<b>143,200</b>	<b>125,500</b>	<b>114,200</b>	<b>81,800</b>	<b>47,600</b>

<sup>46</sup> Y. Mukhtar and W. Gazali, "The dynamics of fish trade in North-East Nigeria: a case study of Doron Baga", 2006, <https://core.ac.uk/download/pdf/14501824.pdf>

<sup>47</sup> Interview, Ministry of RRR

<sup>48</sup> Interview, Senior Advisor, Centre for Civilians in Conflict, January 2019

<sup>49</sup> M. D. Tukur et. Al, "The Effect of Insurgency on Borno State Economy (2008-2014)", *Journal of Economics and Sustainable Development*, 6:16, 2015

"Before, I was a petty trader in tomatoes and kola nuts. Also I was a tailor. I traded a lot with Cameroon and Chad, but when the insurgency came, many of the middlemen that facilitated trade between petty traders and bigger markets were killed and I lost my capital and assets. After a while, the youth in our community became sick of the attacks and formed a vigilante group to fight Boko Haram. Also, we created a youth community association to help those people in our community affected by the violence and to do environmental clean-up. We realized that if one of us can be attacked, any one of us can be attacked." – FGD male respondent

A 2016 assessment of infrastructure damage in the north east of Nigeria, estimated that between 2011 and 2015, the transport sector, critical for trade, suffered US\$508 million in damage, mostly due to road damage.

In the short to medium term, informal trade provides households and individuals with income and employment opportunities and may contribute to food security. Informal trade may also encourage entrepreneurial activity and increased regional trade.<sup>50</sup> ICBT is dominated by women. In the SADC region, approximately 70 per cent of those involved in ICBT are women, while in Western and Central Africa this is estimated at 60 per cent.<sup>51</sup> Thus a shift toward ICBT may offer opportunities for women not only in income generation, but also in changing roles within the household. For example, a study of the role of women in ICBT in Cameroon found that women involved in ICBT were more empowered to be involved in decision-making within the household.<sup>52</sup>

But ICBT may have spill-over security implications including the continued financing of terrorist and violent extremist groups, and the ability of terrorist groups to use financial incentives and leverage to recruit. In both Nigeria and Mali for example, there were documented cases of Boko Haram and AQIM paying traders to become informants.<sup>53</sup> Additionally, women's involvement in ICBT subjects them to increased risks of sexual and physical violence in conflict zones as they travel across borders to trade.

From an economic perspective too, many argue that in the long term informal trade presents several challenges for developing economies which may in fact hinder growth and development. Perhaps the most obvious 'cost' to a country from informal trade is the loss or erosion of government revenue that would have accrued had trade been formal. In sub-Saharan Africa, it has been estimated that trade taxes still account for approximately 25 per cent of total tax revenue.<sup>54</sup>

Other concerns with ICBT relate to unfair competition for domestic businesses and producers which is compounded by weak regulatory frameworks in many African countries to enforce property rights and competitive practices.<sup>55</sup>

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<sup>50</sup> FAO, "Formalization of informal trade in Africa: Trends, Experiences and Socio-economic Impacts", Accra 2017; <http://www.fao.org/3/a-i7101e.pdf>

<sup>51</sup> FAO, "Formalization of informal trade in Africa: Trends, Experiences and Socio-economic Impacts", Accra 2017; <http://www.fao.org/3/a-i7101e.pdf>

<sup>52</sup> O. Njikam, G. Tchouassi, "Women in Informal Cross-border Trade: Empirical Evidence from Cameroon", *International Journal of Economics and Trade*, 3:3, August 2011

<sup>53</sup> T. Cantens and G. Raballand, "Cross-Border Trade, Insecurity and the Role of Customs: Some Lessons from Six Field Studies in (Post-)Conflict Regions", *ICTD Working Paper No. 67*, August 2017; [http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/research/papers/ictd\\_workingpaper67.pdf](http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/research/papers/ictd_workingpaper67.pdf)

<sup>54</sup> Lesser, C. and E. Moisé-Leeman (2009), "Informal Cross-Border Trade and Trade Facilitation Reform in Sub-Saharan Africa", *OECD Trade Policy Working Papers*, No. 86

<sup>55</sup> K. Jean-Guy, G. Ajumbo, "Informal Cross Border Trade in Africa: Implications and Policy Recommendations", *Africa Economic Brief*, 3:10, November 2012; <https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Economic%20Brief%20-%20Informal%20Cross%20Border%20Trade%20in%20Africa%20Implications%20and%20Policy%20Recommendations%20-%20Volume%203.pdf>

## SECTION IV - SECURITY SPENDING AND DEVELOPMENT SPENDING

### Key Findings

- The economic cost of terrorism in the focus countries has grown faster than the spending on military and internal security between 2007 and 2016.
- Although the economic cost of terrorism was 14 times higher in the epicentre group of countries than in spill-over or at-risk countries at US\$45 per person per year, military expenditure was only 3.5 times higher at US\$114 per person per year.
- Spill-over and at risk countries spent on average 2.2 per cent of their GDPs on the military per year between 2007 and 2016, as contrasted with the average of 0.9 per cent per year for epicentre countries.
- Relative government spending on military takes highest priority in epicentre countries which between 2007 and 2016 allocated on average 12 per cent of their national budgets to the military. This figure is 9.8 per cent for at risk countries, and 4.9 per cent for spill-over countries.
- There has been a shift in security spending away from internal security spending in areas such as the police force, toward the military. This comes at a time when many communities feel that a more nuanced local level security approach would be both better received and more effective in combating violent extremism
- There has been some spending dislocation in epicentre and spill-over countries away from social spending on education and health and towards military. This is not the case in the group of at risk countries.
- In Nigeria and Kenya, regional reallocation of funds rather than sectoral reallocation per se was a concern repeatedly raised by interviewees.
- Since 2007, US\$769 million in ODA has gone toward security sector related activities in the focus countries, growing 13 fold from US\$10.5 million in 2007 to US\$134.5 million in 2016. Epicentre countries received 41 per cent of the total over the ten year period.
- As a percentage of net ODA, security sector ODA to the sixteen focus countries grew eight fold from 0.08 per cent in 2007 to 0.62 per cent in 2016. ODA directed towards security sector activities grew significantly faster than other ODA, averaging a year-on-year growth rate of 86 per cent as compared to 5.1 per cent for other development activities.
- Epicentre countries had the highest shares of ODA allocated toward security sector activities averaging 1.6 per cent of net ODA between 2007 and 2016, compared to around 0.4 per cent of net ODA for spill-over and at risk countries.

In 2017, the world spent US\$5.5 trillion on military expenditure, US\$3.8 trillion on internal security and US\$810 billion on private security. These basic categories of violence containment expenditure cost the world almost US\$9.4 trillion in just one year, driven largely by the ongoing conflicts in Afghanistan, Iraq and Syria.

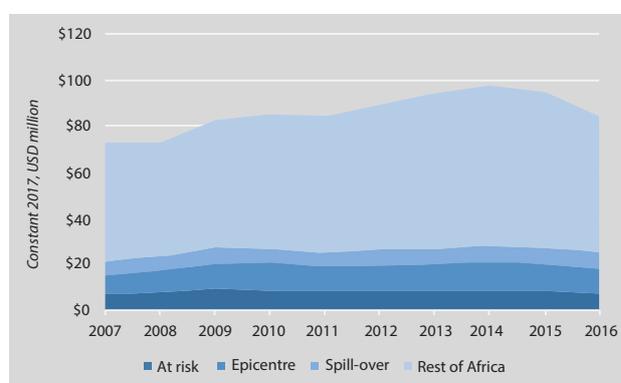
Relative to the world as a whole, continental Africa tends, in general, to spend little on securitization: between 2007 and 2016, total security spending in the African continent was conservatively estimated to be US\$838 billion. In absolute terms, this amount is of course hugely significant, at almost US\$84 billion per year, or the equivalent of immunizing the 117 low and lower-middle income countries for approximately ten years.<sup>56</sup> The 18 focus countries accounted for over 30 per cent of this total continental amount, spending at least US\$259 billion on securitization.

### Violent Extremism and Security Sector Spending

Spending on securitization across the African continent has grown from an estimated US\$73.45 billion in 2007 to US\$84.3 billion in 2016. This growth however has not been uniform across the continent: while epicentre countries increased security spending by 26 per cent over the period, at risk countries increased spending

by only five per cent, well-below the 13 per cent figure for the rest of the African continent. Figure 4.1 shows the trend in security spending since 2007.

**FIGURE 4.1: TREND IN THE COST OF TERRORISM, MILITARY AND INTERNAL SECURITY SPENDING, 2007-2016**



<sup>56</sup> [http://www.who.int/choice/publications/p\\_2007\\_Scaling-up\\_Immunisation.pdf](http://www.who.int/choice/publications/p_2007_Scaling-up_Immunisation.pdf)

Substantial variation exists in terms of security sector spending between epicentre, spill-over and at risk countries. Although the absolute economic impact of terrorism was highest in the epicentre countries over the ten year period between 2007 and 2016, the group of at risk countries spent the most amounts on military and internal security, at US\$62.1 billion and US\$55.5 billion respectively.

In per capita terms, while the economic cost of terrorism was 14 times higher in epicentre countries than in spill-over or at-risk countries, at US\$45 per person per year, military expenditure per capita in epicentre countries was only 3.5 times higher than in spill-over and at risk countries. Epicentre countries spent only 2.5 times more per person per year on internal security than at risk countries, and only 1.25 more than spill-over countries.

Over the last ten years, both spill-over and at risk countries have remained relatively consistent in their levels of security spending in terms of military and internal security. Epicentre countries, whose impact from terrorism has increased on average 18 per cent per year since 2007, have seen a substitution effect between internal security and military spending between 2007 and 2016. In 2007, the per capita spending on internal security in epicentre countries averaged US\$102, and fell to US\$31 in 2016 - a 69 per cent decline. At the same time, military spending grew from US\$51 per capita in 2007 to US\$171 per capita in 2016 - a 234 per cent increase.

While internal security expenditure decreased in all four epicentre countries between 2007 and 2016, the sharp increase in military expenditure was driven by the crisis in Libya. Somalia is an outlier amongst the epicentre group, having decreased both internal security and military expenditure.

**TABLE 4.1: CHANGE IN SECURITY SPENDING IN EPICENTRE COUNTRIES, 2007-2016**

	Change in Internal Security Spending, 2007-2016	Change in Military Expenditure, 2007-2016
Libya	-69.89%	328.03%
Mali	-72.31%	71.47%
Nigeria	-65.47%	47.17%
Somalia	-41.08%	-75.33%

The relatively stable security spending in spill-over and at risk countries over the ten- year period comes despite a rise in the overall impact of terrorism in both country groups. The average year-on-year growth between 2007 and 2016 in the Global Terrorism Index was six per cent in at risk countries and five per cent in spill-over countries. At the same time, both spill-over and at risk countries saw an average decline of one and two per cent per annum respectively in internal security spending.

Although epicentre countries spend more on military relative to their population sizes, spill-over and at risk countries spend more on military relative to the size of their economies. Spill-over and at risk countries spent on average 2.2 per cent of their GDPs on the military per year between 2007 and 2016, as contrasted

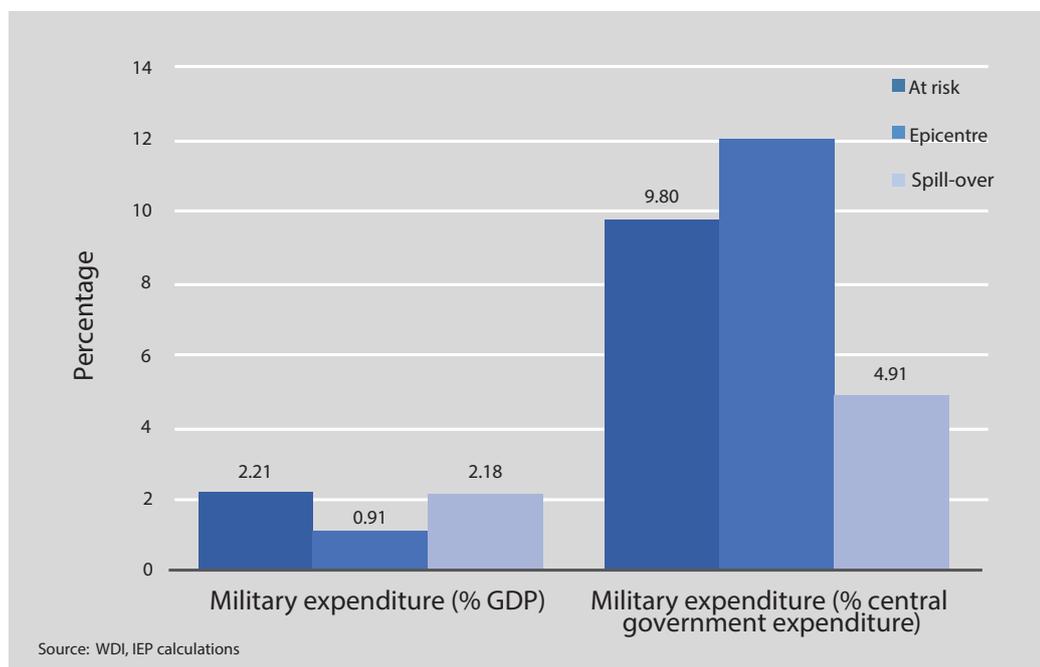
with the average of 0.9 per cent per year for epicentre countries. Epicentre countries however, were the only group of countries to experience a growth, although mild, in military expenditure as a percentage of GDP, growing from 0.96 per cent of GDP in 2007 to 1.02 per cent of GDP in 2016.

In terms of how governments allocate spending, of the three groups of countries, military spending takes highest priority in epicentre countries which between 2007 and 2016 allocated on average 12 per cent of their national budgets to the military. This figure is 9.8 per cent for at risk countries, and 4.9 per cent for spill-over countries. Military expenditure as a percentage of central government spending grew over 140 per cent in epicentre countries over the ten years between 2007 and 2016, from 8.8 per cent on average in 2007, to 21.4 per cent in 2016.

<sup>57</sup> <https://d2071andvip0wj.cloudfront.net/237-nigeria-the-challenge-of-military-reform.pdf>

## FIGURE 4.2: AVERAGE MILITARY SPENDING IN PROPORTION TO THE ECONOMY BY GROUP, 2007-2016

Average military expenditure as a percentage of GDP is lowest in the epicentre group of countries, but military expenditure as a percentage of total government expenditure is highest in epicentre countries



Despite the high proportionate levels of government funding allocated to the military in epicentre countries, research has suggested that in Nigeria, overall levels of military funding and resourcing are inadequate to deal with the current conflict situations in the North-East, the Middle Belt and the Delta Region, with only 120,000 military personnel for a country of over 170 million people.<sup>57</sup> Stakeholders interviewed in Nigeria said that endemic corruption in the military means that much of the time, additional funding allocated for militarization never translates into tangible outcomes, giving the example of a notorious corruption scandal around the procurement of additional military equipment for Borno state. They mused that somehow the money allocated for the purchase of twelve helicopters, four alpha jets and bombs and ammunition “just disappeared”. An audit of weapons and equipment procurement since 2007, conducted in 2015, found that of the 513 contracts reviewed, 53 were not delivered, totalling an estimated US\$2.1 billion.<sup>58</sup>

### SECURITY SECTOR OFFICIAL DEVELOPMENT ASSISTANCE

Aside from the allocation of national resources, funding for securitization can come from overseas in the form of security sector related official development assistance (ODA). Since 2007, US\$769 million in ODA has gone toward security sector related activities in the focus countries, 41 per cent of which went to epicentre countries. This segment of ODA flow has grown 13 fold from US\$10.5 million in 2007 to US\$134.5 million in 2016. Security sector ODA in epicentre countries grew by over 2200 per cent from US\$3.13 million in 2007 to US\$73.1

million in 2016. Over the same time, security sector ODA increased by over 1400 per cent in spill-over countries (from US\$3.2 million to US\$49.4 million), and 189 per cent in at risk countries (from US\$4.1 million to US\$12 million).

### SECURITIZATION AND SOCIAL & WELFARE SPENDING

As public finances are necessarily limited, increased spending on securitization needs to be funded by either increases in revenue through debt and higher taxes, or the reallocation of resources from other sectors. Given that it is generally less politically feasible to increase taxes, debt and the reallocation of resources are often the more likely options. But the financing of violence containment through debt increases the economic impact of violence in the long run, due to the interest on this debt. Stiglitz and Blimes calculated the cost of interest for a period of 13 years on borrowing to fund the war in Iraq at US\$400 billion to the United States.<sup>59</sup> High levels of spending on violence containment may also lead to reductions in spending on high return activities such as education, health and public infrastructure.

Aside from the reallocation of national resources, international donors too may vary their patterns of funding in terms of allocation official development assistance between security related activities, humanitarian responses to security threats, and other longer term development programming, in response to violent extremist activity.

<sup>58</sup> *Ibid. Crisis group*

<sup>59</sup> Stiglitz, J. and Blims, L., ‘The US\$3 trillion war,’ *New Perspectives Quarterly*, 2008, 25.2, p.61-64.

## NATIONAL GOVERNMENT SOCIAL AND WELFARE SPENDING

Comprehensive comparable data on government expenditure on social and development programs is scarce, however an examination of data on expenditure in two sectors – education and health shows that across all focus countries, between 2007 and 2014 (the last year for which data exists for all categories of expenditure), average spending on military, education and health, as a share of government expenditure, all declined. This is despite the increase in the impact of terrorism across all focus countries in this period.

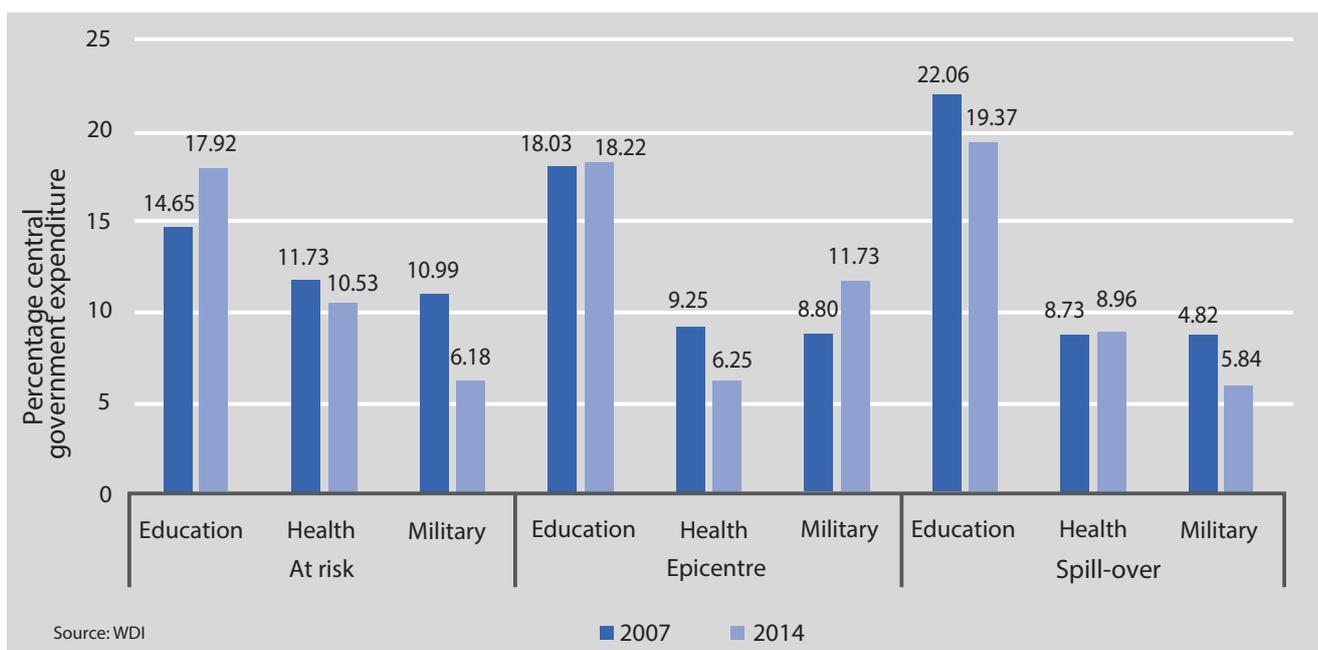
Military spending declined most significantly, by 10.5 per cent from an average of 8.4 per cent in 2007 to 7.5 per cent in 2014. Over the same period, the share of government expenditure allocated to public health spending fell an average 9.8 per cent from 10 per cent of total government expenditure to 9 per cent, and education spending allocation fell by three per cent from 19.1 per cent of expenditure in 2007 to 18.5 per cent in 2016.

Spending patterns on health and education vary substantially across the three groups of focus countries as seen in figure 4.3. The macro-level data would suggest that there has been some spending dislocation in epicentre and spill-over countries away from social spending (on education and health), and towards military. This does not however seem to hold true in general for at risk countries.

Epicentre countries saw a three percentage point increase in expenditure allocated to the military, while the share allocated to education remained largely unchanged and the share allocated to health decreased by three percentage points. Spill-over countries increased the expenditure share allocated to the military by one percentage point, whilst simultaneously decreasing the share allocated to education by 2.5 percentage points. At risk countries were the only group where there was a decrease in the share of funding allocated to the military – by over four percentage points, whilst at the same time increasing the share allocated to education by over three percentage points.

**FIGURE 4.3: ALLOCATION OF GOVERNMENT EXPENDITURE (PERCENTAGE OF GOVERNMENT EXPENDITURE), BY GROUP, 2007 -2014**

*Military expenditure increased most dramatically in epicentre countries which also saw the most dramatic decrease in public spending on health.*



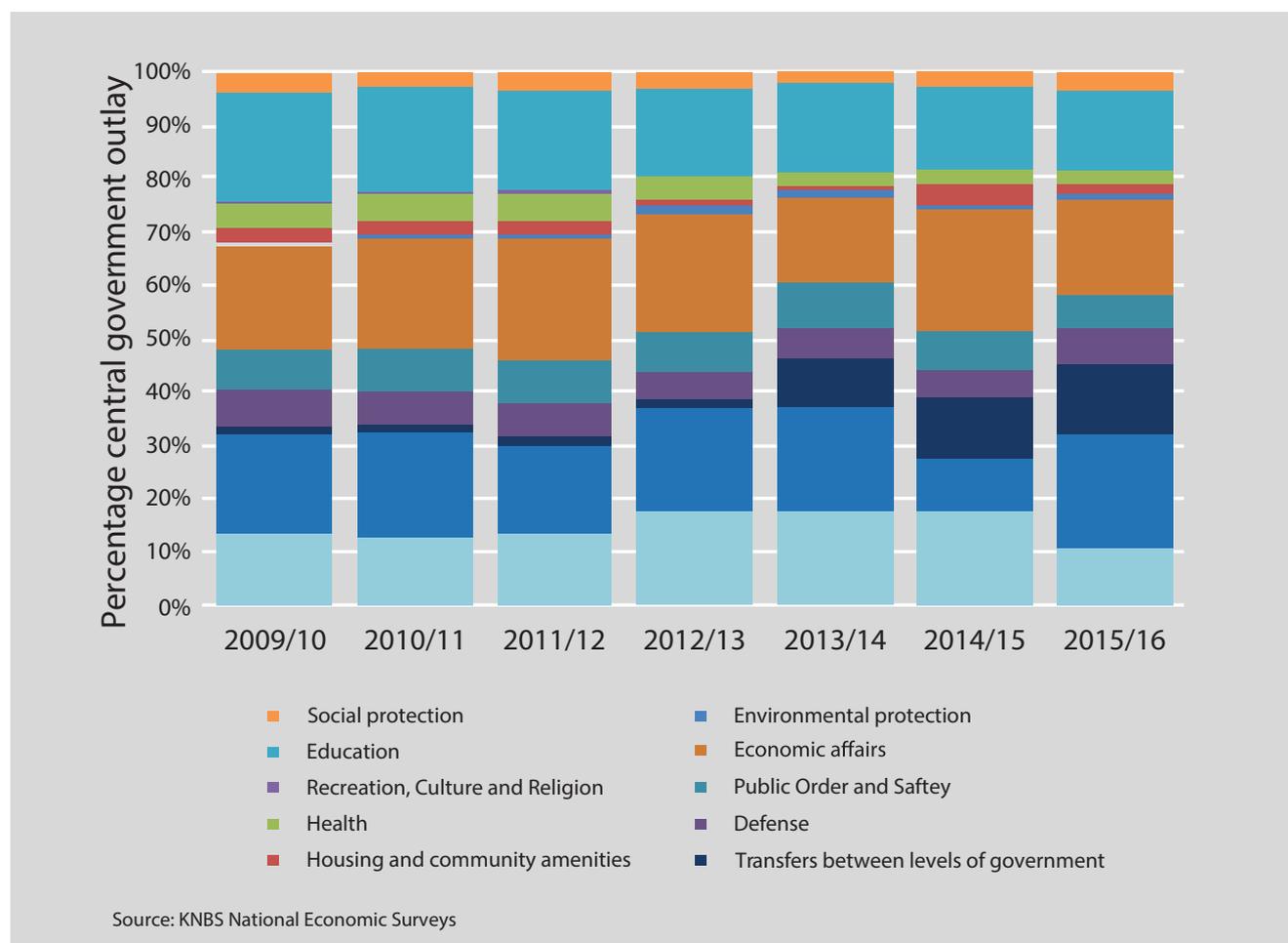
In Kenya, stakeholders emphasized the fact that patterns in security spending tend to revolve around election cycles rather than around levels of violent extremism. When an election season is imminent, money for security is taken from other areas and often lead to increased government debt.

Government expenditure data collected from the Kenyan National Bureau of Statistics shows that in the period 2009/10 to 2015/16, the absolute amount spent on defence and public order and security increased by 161 and 110 per cent respectively. The share of total central government outlay allocated to defence and public order and safety however has

not varied substantially, averaging 6.1 and 7.5 per cent of the yearly outlays respectively. Spending on health decreased in terms over the same time period, from 37.4 billion KsH in 2009/10 to 34.7 billion KsH in 2015/16. The relative spending on health, education and social protection has all decreased over the time period, as seen in figure 4.4.

## FIGURE 4.4: RELATIVE SPENDING BY KENYAN CENTRAL GOVERNMENT BY FUNCTIONS OF GOVERNMENT, 2009-2016

The absolute amount spent on defence and public order and security increased by 161 and 110 per cent respectively, but in relative terms, outlays have been quite stable



Budget data collected from Nigeria on allocations across different security and social ministries shows that between 2008 and 2016, the Ministry of Education received on average the highest percentage of federal executive budget allocation at 13.3 per cent, with the ministry of defence second at 11.4 per cent. But between 2009 and 2015 two additional executive bodies were established, that of police affairs, and that of police formation and commands, which also absorbed on average 9.1 per cent of the total federal

executive budget, funding for which tracked that of the Ministry of Defence almost exactly.

Although allocation to the Ministries of Education, Health and Youth Development all increased between 2008 and 2015, as a relative share of the total federal executive budget, funding allocated to police affairs, formation and command increased most substantially, as outlined in table 4.2.

**TABLE 4.2: BUDGET ALLOCATIONS ACROSS SELECTED FEDERAL MINISTRIES AND DEPARTMENTS, NIGERIA, 2008-2016**

	Change in percentage of Federal Executive Budget Allocation 2008 -2016	Average percentage of Federal Executive Budget, 2008-2016
Police Affairs, Formation and Commands	14.35	9.11
Federal Ministry of Education	7.55	13.32
Federal Ministry of Defence	6.62	11.44
Federal Ministry of Health	2.43	8.02
Federal Ministry of Youth Development	0.15	2.26

Nigeria also has a Ministry for Women's Affairs and a cursory examination of the budgetary allocation to this Ministry gives some insight into potential gender dimensions associated with securitization. Of the six ministries and departments for which data was examined (Education, Health, Defence, Youth Development, Women's Affairs and Police Affairs and Formation & Control), the share of the total Federal Executive Budget allocated to the Ministry of Women's Affairs has consistently been a fraction of that allocated to the other five areas, averaging 0.11 per cent of the total annual budget for the federal executive. Furthermore, between 2008 and 2015, this share has decreased, from 0.15 per cent of the total to 0.13 per cent of the total; the most dramatic decrease coinciding with the formation of the bodies for police affairs, formation and command.

The overall picture remains murky on whether levels of securitization has had a distinct impact on gender related funding however, with funding for defence and police by far more volatile over the 2008-2016 period, with average year on year growth in the share of budgetary allocation of 15.4 and 11.6 per cent respectively, compared to 1.5 per cent for the Ministry of Women's Affairs.

In both Nigeria and Kenya, information garnered from a variety of stakeholders suggested that where there were increases in the levels of security spending in hot-spot conflict areas, often this increased spending did not come from other social spending in these geographic areas as these areas have consistently been underfunded on a wide range of social metrics. The inequality in social welfare, real or perceived, was argued to be one of the key grievances of communities in conflict affected areas, and one powerful weapon of recruitment into violent extremist groups. An interviewee in Kenya for example stated that Garissa, Turkana and Marsabit, three of the states most affected by violent extremism and violence have always received less government spending on social programs because they are "in the government's bad books". Instead, the federal response to violent episodes which are often a manifestation of the grievances of the youth in these states, is severely increased securitization – thus perpetuating one of the main sources of grievances. Furthermore, Kenyan sources stated that increased securitization response of the government, centring around election cycles, has often led to an inability to focus on other grave humanitarian crises in Kenya – for example the current drought which has affected the lives and livelihoods of over three million people.

A cursory examination of county level data in Kenya shows large differences in the funding a county receives from the federal government and the revenue it can raise locally. Between 2013 and 2016, the two counties most affected by terrorism, Mandera and Garissa, were also among the least able to generate local revenue, whether for use in social development or security. On a per capita basis, Mandera raised the lowest amount of revenue locally between 2013 and 2016 of the 47 counties, at 419KSh per person, and Garissa the 9th lowest amount at 981 KSh per capita. Instead these two counties relied almost entirely on federal funding to cover their expenditures, but, on a per capita basis were ranked 34 (Mandera) and 23 (Garissa) of 47 in terms of how much federal funding they received.

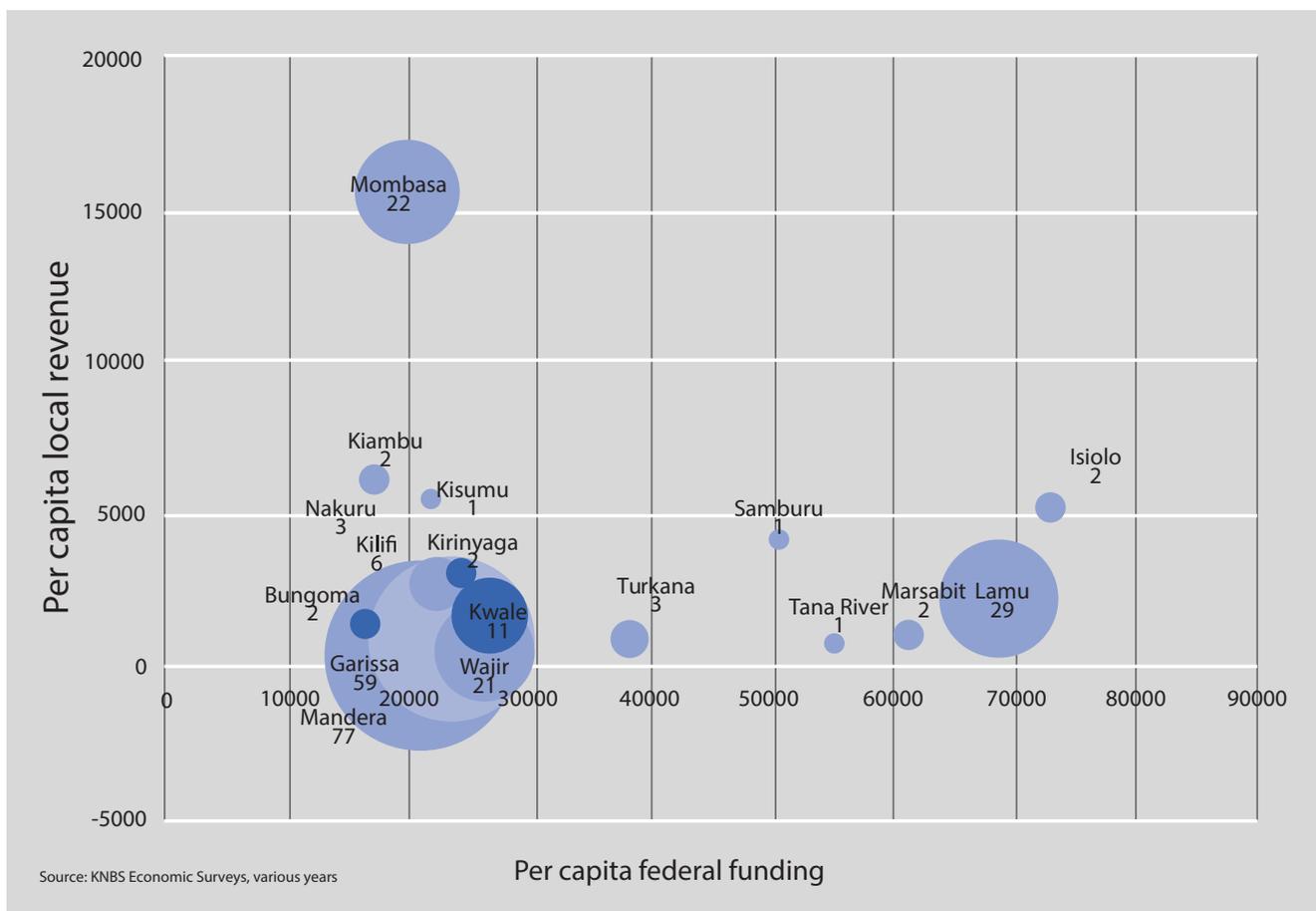
Given that analysis from the Kenyan Bureau of Statistics shows that Turkana and Marsabit are in the poorest five counties in terms of mean expenditure on public goods<sup>60</sup>, but that their overall levels of federal funding (at least since 2013) has been quite high, it may be the case that securitization has taken precedence in these counties overall social development. Figure 4.5 shows how the total amounts of per capita federal funding and locally raised revenue vary by county for all counties where there was at least one terrorist attack between 2013 and 2016.

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<sup>60</sup> KNBS, "Exploring Kenya's Inequality: Pulling apart or Pooling Together? Turkana County", 2013

## FIGURE 4.5: FEDERAL FUNDING, LOCAL REVENUE, AND TERRORIST ATTACKS FOR KENYAN COUNTIES, 2013-2016

Wide variation exists among Kenyan counties affected by terrorism since 2013 in terms of their ability to raise revenue locally and the amounts of federal funding they receive



Regional displacement of security and social spending rather than an overall displacement effect between security spending and development spending by the government, was an oft repeated theme in stakeholder interviews in both Nigeria and Kenya. Stakeholders from Nigeria stated for example that in response to the spike in Boko-Haram violence in the North East of the country, police and security personnel from the North West were moved to 'bolster' security personnel in the affected areas. Kenyan sources claimed that the focus on the coastal and north-eastern regions of the country in terms of government resource allocation has left other areas suffering from conflict severely under-resourced, citing the example of the issues around cattle-rustling in the north.

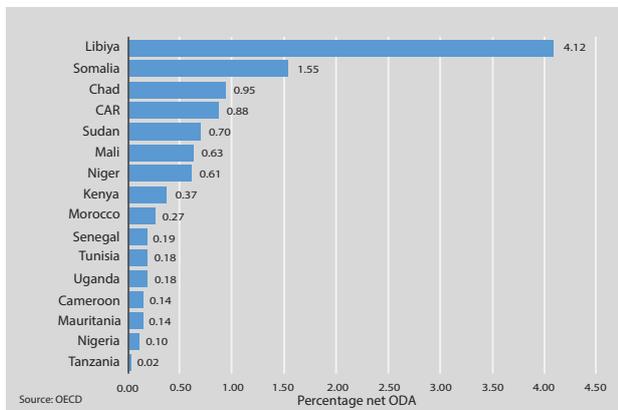
### REALLOCATION OF OFFICIAL DEVELOPMENT ASSISTANCE

Net ODA to focus countries has been growing steadily since 2007 from US\$13.45 billion to US\$20.84 billion in 2016. Security sector related ODA makes up only a small fraction of net ODA flowing to the focus countries, comprising just 0.62 per cent of net ODA in 2016. Nonetheless, this represents an eight fold increase over the level in 2007, which was just 0.08 per cent of net ODA. ODA directed towards security sector activities has also grown significantly faster than other ODA, averaging a year-on-year growth rate of 86 per cent as compared to 5.1 per cent for other development activities.

Substantial variation exists across the three groups of countries in terms of the share of ODA going toward security sector activities. Epicentre countries, with an average GTI score of 5.34 between 2007 and 2016, had on an annual basis an average 1.6 per cent of their ODA going toward security sector activities. This is compared to spill-over and at risk countries which both have had an annual average GTI of 3.9, and an average of 0.4 and 0.37 per cent of their annual net ODA respectively directed to security sector activities. At a country level, Libya has seen the highest share of net ODA allocated toward security sector activities, at an average of 4.1 per cent per year, while Tanzania at the other end of the spectrum has had on average 0.02 per cent of net ODA directed to securitization.

## FIGURE 4.6: AVERAGE LEVEL OF SECURITIZATION ODA AS A PERCENTAGE OF NET ODA BY COUNTRY, 2007-2016

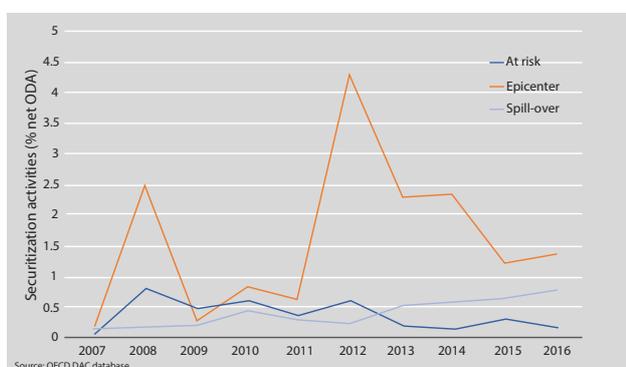
*Libya has on average 205 times higher share of its net ODA directed toward securitization than Tanzania*



Official Development Assistance allocation to security sector activities has grown in the ten year period across all country groups, and this growth has been strongest and most volatile in epicentre countries. In 2007, securitization activities constituted just 0.18 per cent of net ODA in epicentre countries, but this grew over seven fold to 1.6 per cent of net ODA in 2016. In spill-over countries spending allocated to securitization increased over six fold in the ten year period to 0.8 per cent of net ODA in 2016, and in at risk countries security allocation more than doubled to 0.2 per cent in 2016. These figures suggest that across the board spending by the international community is being reallocated toward securitization in the focus countries, away from other programming such as humanitarian response or long-term development work.

## FIGURE 4.7: ODA ALLOCATION TO SECURITIZATION ACTIVITIES (% NET ODA) BY GROUP, 2007-2016

*All three country groups saw an increase in the share of net ODA allocated toward securitization with the most dramatic increase and most volatile pattern seen in the epicentre group of countries*



These macro data confirm what was stated by multiple stakeholders in interviews in Nigeria. Interviewees said that bilateral funding from certain governments has shifted heavily to focus on security related activities, at the expense of general development. Numerous stakeholders from the international NGO community also stated that funding had been almost entirely reallocated toward humanitarian responses to the crisis in the north east, at the expense of longer term development programming. A leading local civil rights leader also stated that local NGOs in order to compete for funding, were being forced to refocus programming away from development towards "CVE" activities leaving a huge gap in the provision of basic social services in many areas (a gap which is in fact the government's responsibility).

Similar to the comments on regional reallocation of government resources, regional reallocation of NGO resources was also a theme continuously raised in stakeholder interviews. International NGOs operating in Nigeria have found that donor attention has been totally focused on the conflict in the North East, which has resulted in them having to pull funding for programs in the Middle Belt and the Delta regions. This regional reallocation of resources and attention has led, some interviewees claimed, to significant backsliding in many of the positive impacts that programming was having in the Middle Belt region in particular.

## SECTION V - CONCLUSIONS

The economic impact of violent extremism in any given country depends on a confluence of factors including the sophistication and complexity of the economy and its integration into or dependence on the global economy and the concomitant risks that that entails. In general we know that violence reduces investment in capital intensive sectors, lowering productivity and reducing returns.<sup>61</sup> Businesses tend to shift investment to conflict related goods instead of investing in the production of consumption and exportable goods. Similarly, investors shift from high risk, high return long term investment to low risk, low return and short term projects.<sup>62</sup> Foreign direct investment also declines due to risks associated with violence and the higher cost of crime to businesses. In the cases of high intensity conflict, capital flows out of the country. These adverse effects can spiral downward leading to lower economic growth, high volatility, uncertainty and high unemployment.

Deteriorations in economic growth and development, whether due to macro-economic shocks, global economic slow-downs, or because of violent extremist activity, in turn can contribute to vicious and difficult to break cycles of violence where particular drivers of violent extremism and grievances against governments increase. Lower economic performance combined with social and political fragmentation in a vulnerable context can contribute to the deterioration of peace. For instance, the UNDP's report on "Journey to Extremism" found that an initial contributor to grievances against governments and regimes in the focus countries, is a lack of economic opportunity of employment opportunities. If economic stagnation occurs for internal or external reasons, there will continue to be limited economic opportunities, which in turn has the potential to aggravate violence. Government spending allocated to responding to violent extremism may result in decreased spending on other areas such as education and public infrastructure, which could similarly further the cycle of violent extremism.

### CONCLUSIONS

According to IEP research, the global economic impact of terrorism reached US\$52 billion (constant 2017 USD)<sup>63</sup> in 2017, with the economic and opportunity costs arising from terrorism having increased by about two thirds in the ten years from 2008.<sup>64</sup> Nonetheless, the three years since 2014 have seen consecutive declines in the economic impact of terrorism which peaked at US\$108 billion in 2014.

In terms of GDP, globally, the economic impact of terrorism and violent extremism rose from 0.16 per cent of global GDP in 2007 to 0.5 per cent of global GDP in 2016. These estimates of the cost of terrorism are conservative as they do not include costs associated with countering terrorism and countering and preventing violent extremism nor the indirect costs on business.

This economic impact arises not only from the direct costs associated with deaths, injuries, displacement and property destruction, but also from disruptions to the macro-economy, spending on security and militarization by both national governments and international donors and funders, and efforts to combat the financing of terrorist organizations and activities.

The total economic cost of terrorism in Africa from 2007 to 2016 is at a minimum US\$119 billion, and to the 18 focus countries US\$109 billion. In reality, this figure is much higher once estimates for GDP losses, lost informal economic activity, extra security spending, and refugee/IDP costs are accounted for. The economic impact of terrorism in the 18 focus countries has increased by over 1700 per cent between 2007 and 2016, from an estimated US\$753 million in 2007 to US\$14 billion in 2016.<sup>65</sup>

### VIOLENT EXTREMISM AND THE FORMAL ECONOMY

The findings from this report suggest that countries with higher levels of violent extremism have had weaker economic growth than other countries but that this is in part reflects broader economic trends. From 2002 to 2016 on average, at risk countries grew their GDP per capita by 47 per cent and spill-over countries grew by 36 per cent. In contrast, epicentre countries on average had a 17 per cent decline in GDP per capita. Some of the economic impacts of violent extremism are the same grievances underlying drivers of recruitment to violent extremist groups. Although violent extremism aggravates these issues, it is likely many of the economic issues existed prior to an increase in violence making it difficult to determine causality.

IEP has estimated that over the last 70 years, GDP growth in highly peaceful countries was three times (about 2.8 per cent per annum), that, of those considered to have low levels of peace, such as the focus countries.

A scenario analysis suggests that lower peace countries would have had US\$ 4,352 higher GDP per capita in 2016 had they grown at the same rate as high peace countries.

<sup>61</sup> <http://visionofhumanity.org/app/uploads/2017/02/The-Economic-Value-of-Peace-2016-WEB.pdf>

<sup>62</sup> Brück, T., 'An Economic Analysis of Security Policies', *Defence and Peace Economics*, 2005.

<sup>63</sup> All dollar amounts in this report are constant 2017 USD unless otherwise explicitly stated

<sup>64</sup> *Global Peace Index 2017*, Institute for Economics and Peace

<sup>65</sup> For a comprehensive discussion of the methodology underpinning the economic cost estimates, please refer to Annex A.

In terms of Foreign Direct Investment, IEP has estimated that over the last 40 years, high peace countries have twice the foreign direct investment inflows as low peace countries.

In the focus countries, FDI decreased by over 43 per cent to US\$2.74 billion in the ten years to 2016. At the same time labor market disruptions are evident across all focus countries, and there is a distinct gender dimension to these shifts. Female participation rates have increased across epicentre, spill-over and at risk countries since 2007, and female youth unemployment has decreased most dramatically in epicentre countries. The increase in females working was found to be a result both of necessity, but also in some instances increased female empowerment. Employment across economic sectors has shifted away from agriculture as violent extremist activity disrupt production and trade, and toward services.

## **VIOLENT EXTREMISM AND THE INFORMAL ECONOMY**

The report finds that a rise in violent extremist activity and a state's response to this activity has caused disruptions and losses not only within the formal economic sphere, but also in informal economic activity. Although informal economic activity has declined in general in the world, and in the African continent as a whole as well since 1991, the decline in the focus countries since the surge in terrorist activity has been greater than the average decline in Africa.

The report estimates that 16 of the 18 focus countries have lost an average of US\$97 billion per year in informal economic activity since 2007.

Violent extremism on the one hand can increase informal economic activity by pushing otherwise formal sector activities into the informal sphere as regulations become harder to enforce and markets become disrupted. But analysis suggests that although the informal sector is traditionally more resilient to disruptions and violence than the formal sector, it too suffers.

## **DISPLACEMENT EFFECTS OF SECURITIZATION**

Since 2007, the rate of growth of the economic cost of terrorism has surpassed that of spending on military and internal security. But this doesn't imply that states ought to increase security spending; rather it highlights the complex nature of the interaction between securitization as a response to violent extremism and as a catalyst for further radicalization – as highlighted in UNDP's first report.

A security response to terrorism and violent extremism alone is unlikely to be successful in the long run. While short-term gains in terms of reductions in violent acts may be seen, over-securitization will create or exacerbate grievances in communities, and a heavy handed state security response can be used as a propaganda tool for recruitment into violent extremist groups.

The shift away from internal security spending, such as on the police force, toward military spending shifts the locus of authority away from a more local level to the federal level, at a time when many communities feel that a more nuanced local level security approach would be both better received and more effective in combating violent extremism.

This report found that relative government spending on military takes highest priority in epicentre countries which between 2007 and 2016 allocated on average 12 per cent of their national budgets

to the military. This figure is 9.8 per cent for at risk countries, and 4.9 per cent for spill-over countries.

There has been some spending dislocation in epicentre and spill-over countries away from social spending on education and health and towards military. This is not the case in the group of at-risk countries. Within countries, regional spending dislocation is also evident, with security spending moved toward regions with higher levels of violent extremist activity. This leaves open the potential for violent extremist groups to take advantage of short-term, or long-term, reductions in security levels in areas that may otherwise be relatively peaceful.

At the same time that national spending on securitization has increased, the international community has also allocated an increasing amount of ODA toward security sector activities, increasing 13 fold from US\$10.5 million in 2007 to US\$134.5 million in 2016. Epicentre countries received 41 per cent of the total over the ten year period. As a percentage of net ODA, security sector ODA to the sixteen focus countries grew eight fold from 0.08 per cent in 2007 to 0.62 per cent in 2016, implying a reallocation of ODA away from other development areas.

## **RECOMMENDATIONS**

Efforts to prevent and counter violent extremism in Africa must account for the indirect and flow-on costs both of terrorist activity and also their very own policies and programming. Particularly in a world where official development assistance is shrinking and competition for donor resources is increasing, both the international community and local stakeholders need to make informed decisions about effective resource allocation and the implications of these allocations on the cycle of violent extremism, which can be difficult to break.

As the UNDP report on the "Journey to Extremism in Africa" made clear, economic factors, including economic inequalities perceived or real, are a key factor driving the recruitment into and expansion of violent extremist organizations in Africa. Therefore, any policy responses aimed at addressing violent extremism must, at a very minimum, do no harm on either of these fronts.

Preventing and responding to the growth of violent extremism in Africa with a developmental approach, the approach that has been articulated and prioritized by the UNDP, requires not just a refocusing of responses from national governments, but also by the international community. It also requires coordination between governments, their militaries, international and local development agencies and key members of civil society. Every stakeholder must have buy-in to the developmental approach, and this involves the recognition that neither a security oriented approach, nor short-term macro-economic band-aids will be sufficient to create a lasting and effective solution.

The UNDP's first report on the Journey to Violent Extremism in Africa has already made significant strides in addressing both the policy implications of VE in Africa and programming recommendations. The following policy and programming recommendations for the international community, including donors and NGOs, are therefore focused more specifically on the three priority areas that this research was commissioned to address: the impacts on formal and informal economic activity, as well as the dislocation effects of securitization spending on welfare and social spending.

This should by no means be taken to be an exhaustive list, but rather a starting point for discussions.

# VIOLENT EXTREMISM AND THE FORMAL AND INFORMAL ECONOMY

Potential actions for the international community:

- Prioritize the recovery and reconstruction of local markets including supply chain logistics, as this is a critical source of livelihood for rural populations, and most of the focus countries rely heavily on the agricultural sector for their economic growth. Emphasizing the recovery and reconstruction of local markets may also provide a means for income generation for internally displaced people or refugees living in camps away from home.
- Prioritize communities that are considered the “sources” of violent extremist ideology and recruitment, for livelihood programming. The collective punishment of communities or families for the decisions and actions of individuals, either through sanctions on activities and finances, increased securitization and even stigmatization, has serious livelihood implications which exacerbate grievances and tensions. Ensuring an alternative better future is a critical component of the fight against extremist ideology and recruitment.
- Focus on skills training and support for micro-business development for females, based on the recognition of the increasing importance of female employment and labour force participation, especially in countries more highly affected by violent extremism.
- Create incentives for the reversion to formal channels of cross-border trade in order to better monitor the flows of goods, people and money, and contribute to a source of government revenue, whilst recognizing the importance of informal cross-border trade for livelihoods. Specifically target border regions particularly susceptible to violent extremist ideology and activity, for example, the Nigeria/Chad/Cameroon border.
- Continue to encourage the creation of savings mechanisms, for example Village Savings and Loaning Associations (VSLAs), to improve access to finance thereby potentially increasing agricultural activity as well as trade.
- One comprehensive study of North-eastern Nigeria found that cash and voucher programming is successfully taking place in several areas of the Northeast, with both the business community and by financial institutions reporting these as having a positive impact on small businesses. The study recommends that cash programming is extended and that in-kind aid is stopped for all but a few specific commodities. The idea of extending cash grant programming instead of in-kind aid was reiterated in interviews in Maiduguri, particularly with IDP communities who have tended to sell of in-kind aid received as a source of income.<sup>66</sup>
- Increase “cash-for-work” programming such as the waste collection program in Maiduguri, especially with IDP communities, as this helps not only income generation but also to regain a sense of dignity and a sense of empowerment.

## DISPLACEMENT EFFECTS OF SECURITIZATION

Potential actions for the international community:

- Program for the long-term in any given community, rather than reacting in the short-term and shifting resources suddenly. Combating violent extremism requires long-term programming and investment, even when other newer, more news worthy or ‘sexier’ conflict hot-spots surface. Sudden decisions to pull funding or programming from communities can create resource gaps which have not only critical livelihood consequences but can create or exacerbate feeling of ill-will and grievances toward international, or local, development work.
- Prioritize the rehabilitation and reintegration of former fighters/terrorists. This rehabilitation must not however, come at the cost of zero accountability from former fighters.
- Allocate resources to women’s groups in particular in the effort to rehabilitate and reintegrate former fighters. Women continue to play a crucial role in reintegration, and resources should be devoted to empowering local women’s groups and leaders to work within their own communities to ensure the longer-term success of reintegration.
- Coordinate activities across international organizations such that organizations focus on issues in which they have a comparative advantage, rather than every organization trying to do humanitarian response or CVE activities. In the long-term, preventing violent extremism requires social and economic development activities as well as the more immediate response needs; some organizations are more suited to these longer-term programs and should be funded to focus on what they excel at.
- Ensure that funding to local organizations is matched to the needs of the communities in which they operate. Not all domestic civil society groups work directly on what the international donor community would refer to as “CVE” activities, and nor should they. Local groups have a long-term view to working in their communities and a better understanding of what is required to address the threats of violent extremism. Rather than all domestic groups trying to change their focus in order to compete for limited external funding, they too should be encouraged to work in their comparative advantage.
- Implement long-term partnerships and funding strategies with local organizations, including capacity building. Inevitably the international community will want, and need, an exit strategy from areas of operations, too often they want this too quickly, without leaving any mechanism in place for sustaining, continuing, and furthering work on preventing violent extremism. Identifying local organizations and community leaders with whom to work together, is critical to the long-term success of PVE/CVE.

<sup>66</sup> See Mercy Corps, LRMA 2017. Interview FAO Maiduguri, May 2019.

## ANNEX A - MEASURING THE ECONOMIC COST OF VIOLENT EXTREMISM METHODOLOGY

There are several approaches and methodologies to measuring the economic impact of violent extremism to a particular country. Due to limited microeconomic or subregional economic data, often a case study or unit cost approach is necessary to provide a comparable assessment of different countries. These focus on the direct costs associated with violent extremism by determining costs for particular attacks.

Recognising this difficulty, the Institute for Economics and Peace have developed a unit cost model that calculates some of the economic impact of terrorism around the world. The economic impact of terrorism is calculated using IEP's cost of violence methodology.

### IEP'S COST OF VIOLENCE METHODOLOGY

While there have been many studies that look at the cost of violence to society, there is no universally agreed method to aggregate the current and future financial effects of violence and conflict. IEP takes a holistic approach to counting the costs of violence. This methodology looks at both the costs of containing violence and of dealing with its consequences, in both the short and long term, where violence is directed against people or property. The sum total of these costs is labelled the **total economic impact of violence**.

There are two main approaches to measuring the economic cost of violence: cost accounting and economic modelling methods. The accounting method uses incidents of violence and spending on responding to and containing violence. The economic modelling method measures the impact of violence on consumption, investment, production, trade and overall GDP growth. IEP uses the cost accounting method, which aggregates costs arising from incidents of violence and expenditure on containing violence.

The main benefit of the accounting method is that costs can be disaggregated by category. For example, the cost of violence could be disaggregated to public and private spending. It could also be separated to direct and indirect costs depending on how the incident of violence impacts the victim, perpetrator and government. Further, the cost of violence could be broken down by whether it accrues in the short or long term. The flexibility of the accounting methods also allows sufficient flexibility for inclusion and exclusion of variables based on availability of reliable data.

The total global economic impact of violence is defined as expenditure related to "containing, preventing and dealing with the consequences of violence". IEP's model includes both direct and indirect costs of the violence as well as a peace multiplier. The multiplier effect calculates the additional economic activity that would have been accrued if the direct costs of violence had been avoided. Examples of direct costs include medical costs for victims of violent crime, capital destruction from violent conflict and costs associated with the security and judicial systems. Indirect costs include lost wages or productivity from crime due to physical and

emotional trauma. There is also a measure of the impact of fear on the economy, as people who fear that they may become a victim of violent crime alter their behaviour.<sup>67</sup>

An important aspect of IEP's estimation is the international comparability of the country estimates, thereby allowing cost/benefit analysis of country interventions. The methodology uses constant purchasing power parity (PPP) international dollars.

IEP estimates the economic impact of violence using a comprehensive aggregation of costs related to violence, armed conflict and spending on military and internal security services. The GPI is the initial point of reference for developing the estimates. The 2017 version of the economic impact of violence includes 17 variables in three groups.

**TABLE 5.1: VARIABLES INCLUDED IN THE ECONOMIC IMPACT OF VIOLENCE, 2016**

SECURITY SERVICES AND PREVENTION ORIENTED COSTS	ARMED CONFLICT RELATED COSTS	INTERPERSONAL VIOLENCE
1. Military expenditure	1. Direct costs of deaths from internal violent conflict	1. Homicide
2. Internal security expenditure	2. Direct costs of deaths from external violent conflict	2. Violent assault
3. Security agency	3. Indirect costs of violent conflict (GDP losses due to conflict)	3. Sexual assault
4. Private security	4. Losses from status as refugees and IDPs	4. Fear of crime
5. UN peacekeeping	5. Small arms imports	5. Indirect costs of incarceration
6. ODA peacebuilding expenditure	6. Terrorism	

The analysis presents conservative estimates of the global economic impact of violence. The estimation only includes variables of violence for which reliable data could be obtained. The following elements are examples of some of the items not counted in the economic impact of violence:

- The cost of crime to business
- Judicial system expenditure.
- Domestic violence
- Household out-of-pocket spending on safety and security
- Spill over effects from conflict and violence
- Self-directed violence

<sup>67</sup> Brauer, J., and Marlin, J.t., 'Nonkilling Economics: Calculating the size of peace gross world product', *Toward Nonkilling*, 2009, p. 125-148

The total economic impact of violence includes the following components:

- **Direct costs** are the cost of violence to the victim, the perpetrator, and the government. These include direct expenditures, such as the cost of policing, military and medical expenses.
- **Indirect costs** accrue after the violent event and include indirect economic losses, physical and physiological trauma to the victim and lost productivity.
- **The multiplier effect** represents the flow-on effects of direct costs, such as additional economic benefits that would come from investment in business development or education instead of containing or dealing with violence. Box xx provides a detailed explanation of the peace multiplier used.

The term economic impact of violence covers the combined effect of direct and indirect costs and the multiplier effect, while the economic cost of violence represent the direct and indirect cost of violence. When a country avoids the economic impact of violence, it realizes a peace dividend.

## BOX 5.1: THE MULTIPLIER EFFECT

The multiplier effect is a commonly used economic concept, which describes the extent to which additional expenditure improves the wider economy. Every time there is an injection of new income into the economy this will lead to more spending which will, in turn, create employment, further income and additional spending. This mutually reinforcing economic cycle is known as the 'multiplier effect' and is the reason that a dollar of expenditure can create more than a dollar of economic activity.

Although the exact magnitude of this effect is difficult to measure, it is likely to be particularly high in the case of expenditure related to containing violence. For instance, if a community were to become more peaceful, individuals would spend less time and resources protecting themselves against violence. Because of this decrease in violence there are likely to be substantial flow-on effects for the wider economy, as money is diverted towards more productive areas such as health, business investment, education and infrastructure.

When a homicide is avoided, the direct costs, such as the money spent on medical treatment and a funeral, could be spent elsewhere. The economy also benefits from the lifetime income of the victim. The economic benefits from greater peace can therefore be significant. This was also noted by Brauer and Tepper-Marlin (2009) who argued that violence or the fear of violence may result in some economic activities not occurring at all. More generally, there is strong evidence to suggest that violence and the fear of violence can fundamentally alter the incentives for business. For instance, analysis of 730 business ventures in Colombia from 1997 to 2001 found that with higher levels of violence, new ventures were less likely to survive and profit. Consequently, with greater levels of violence it is likely that we might expect lower levels of employment and economic productivity over the long-term, as the incentives faced discourage new employment creation and longer-term investment.

This study assumes that the multiplier is one, signifying that for every dollar saved on violence containment, there will be an additional dollar of economic activity. This is a relatively conservative multiplier and broadly in line with similar studies.

## ESTIMATION METHODS

A combination of approaches is used to estimate the economic cost of violence at the country level. The economic costing of violence involves three main approaches:

1. Financial information detailing expenditure on items associated with violence and included in this year's costing exercise were used. These expenditures were either obtained as actual expenditure or as per cent of GDP of a country. When sourced as percentage of GDP, GDP data from the IMF was used to get the actual expenditure.
2. A unit cost approach was used to cost variables included in this year's GPI costing and for which detailed expenditure were not available. The unit costs were obtained from a literature review and appropriately adjusted for all countries included in the 2016 GPI. The study uses unit costs from McCollister et al. (2010) for homicides, violent and sexual crimes.<sup>68</sup> The cost of homicides is also used for battle deaths and deaths due to terrorism. The unit cost for fear of crime is sourced from Dolan & Peasgood (2006).<sup>69</sup>
3. Where both expenditure and incidence data was missing for an item, it was either calculated using an appropriate proxy or was excluded from the study.

## SCALING UNIT COSTS

Unit costs were used to estimate the cost of incidents of violence such as homicide, violent and sexual crimes. However, unit costs are not available for most of the countries that are included in the costing model. Therefore, to estimate the cost of violence for these countries, the unit costs are adjusted using the ratio of GDP per capita in PPP terms. For example, a country with a GDP per capita PPP that was 26% of US GDP per capita would have a homicide unit cost equal to 26% of the US homicide unit cost.

## CONVERTING COSTS TO CONSTANT AND PURCHASING POWER PARITY

The cost of violence is presented in constant purchasing power parity terms to enable direct comparison between countries. Initially, the cost of violence was converted from current to constant using consumer price index (CPI). CPI data is sourced from the World Bank's world development indicators. In the second phase, the costs are converted to PPP using a PPP conversion factor.

## COST OF TERRORISM

The economic cost of terrorism model includes both the direct and indirect costs such as lost life time earnings as well as the cost of medical treatments and property destruction from incidents of terrorism. The direct costs include those borne by the victim of the terrorist act and associated expenditure such as medical costs. The indirect costs include lost productivity and earning as well as the psychological trauma to the victims, their families and friends.

The majority of the impact of violent extremism to the economy is indirect and flow-on costs. Indirect costs accrue after an act of violent extremism and include indirect economic losses, physical and physiological trauma to the victim as well as the lost productivity. Violent extremism can also damage private

<sup>68</sup> McCollister, K. E., Michael T. F., and Fang, H. 'The cost of crime to society: New crime-specific estimates for policy and program evaluation.' 2010, *Drug and alcohol dependence* 108.1, p. 98-109.

<sup>69</sup> Dolan, P., Peasgood, T. 'Estimating the economic and social costs of the fear of crime.' 2007, *British Journal of Criminology* 47.1 p. 121-132

and public infrastructure such as electricity, water supply, telecommunications, schools and businesses. Therefore, the economic cost model also applies a multiplier which represents the flow-on effects of direct costs. This recognises additional economic benefits that would accrue from investment in more productive areas of an economy such as education or infrastructure development rather than dealing with the immediate consequences of violent extremism. The model estimating the economic cost of terrorism for any given country recognises that violent extremism has different economic implications depending on the duration, level and intensity of the terrorist activities. As such, it costs to the relative size of an economy.

The methodology uses unit costs for homicide and injuries from McCollister et al. (2010), the leading study on estimating the cost breakdowns of different consequences and forms of crime to society.<sup>70</sup> The unit costs are adjusted to individual countries using GDP per capita at purchasing parity level relative to the source of the estimates. In addition, to present the cost in constant 2015 terms, average annual consumer price index data from International Monetary Fund (IMF) is used to adjust the unit costs. The adjusted unit costs are then used to estimate the cost of deaths and injuries from incidents of terrorism.

The analysis uses data on incidents of terrorism from the Global Terrorism Database (GTD) which is collected and collated by the National Consortium for the Study of Terrorism and Responses to Terrorism (START). The data provides the number of deaths and injuries for each incident as well as the extent of property destruction. The data provides estimated dollar values of property destruction for a sample of incidents. The property destruction estimates from the GTD are then used to generate costs of property destroyed by various types of violent extremist attacks. Each of the different property costs is further calibrated by country income type; OECD, high income non-OECD, upper middle income, lower middle income and lower income country groups.

Large scale terrorism has implications for the broader economy in countries experiencing intense conflict; therefore, where countries suffer more than 1,000 deaths from violent extremism, IEP's model includes losses of national output which is equivalent to two per cent of GDP.<sup>71</sup> This takes into account many of the flow-one effects associated with very high levels of violent extremism such as an impact on Foreign Direct Investment and business confidence in general.

## WHAT IS NOT CAPTURED IN THE ECONOMIC COST OF TERRORISM MODEL

The model developed by the Institute for Economics and Peace provides a conservative estimate of the impact of violent

extremism as it only includes variables of violence for which reliable data could be obtained. It does not include all costs associated with violent extremism. Whilst there is an attempt to include some of the broader macroeconomic impacts through including a reduction in GDP to account for lost output and the flow-on effect of spending, there are many other areas where data is incomplete or non-existent and hence rigorous estimates of costs are extremely difficult to make.

Indirect costs often far exceed the immediate costs of an attack relating to damages. For example, a study that calculated the costs of the 2004 Madrid train bombings found that the costs of property damage amounted to 5.3 million euros, which was 2.5 per cent of the 212 million euro total.<sup>72</sup> Some of the indirect costs associated with an attack can also flow-on from the response to an attack. This is demonstrated in the example of the Moon Market bombings in Lahore, Pakistan in 2009 that killed 60 and injured over 100. Some of the costs from the attack included the flow-on effect of absorbing the treatment of victims within the existing budgets of the local hospitals. Furthermore, many of the survivors displayed symptoms of Post-Traumatic Stress Disorder (PTSD) in the years that followed, which impacted their participation in the national economy. In some cases this included loss of employment.<sup>73</sup>

Another consideration when costing violent extremism is that a minority of attacks account for the majority of damage. For example, costs associated with the September 11 attacks in the United States alone accounted for 11 per cent of the total economic impact of terrorism around the entire world over the last 16 years. Hence, whilst catastrophic attacks may be very rare, they by definition have a disproportionate impact. These catastrophic attacks are those which disrupt businesses, particularly when a building in the business district has been targeted. There are also broader impacts on the economy, particularly when there has been substantial property damage. For example, direct business interruption losses associated with relocation after the September 11 attack in New York amounted to an estimated US\$12 billion.<sup>74</sup> Losses from terrorism extend beyond the direct impact from property damage and relocation. A study on the economic impact of the September 11 attacks determined that some of the flow-on economic impacts from the attacks included the wider macroeconomic effects. This was in part offset by government fiscal policy. However, the study determined that fear had a substantial effect on reducing economic activity, arguing it is the victims "rather than the perpetrators, are the major determinant of the consequences of a major terrorist attack."<sup>75</sup>

<sup>70</sup> <https://www.ncbi.nlm.nih.gov/pubmed/20071107>

<sup>71</sup> Collier, P. (1999). *On the economic consequences of civil war*. *Oxford Economic Papers*, 51(1), 168–183. <https://doi.org/10.1093/oep/51.1.168>

<sup>72</sup> <http://eprints.ucm.es/7940/1/54.pdf>

<sup>73</sup> <http://economicsandpeace.org/wp-content/uploads/2015/06/Global-Terrorism-Index-Report-2014.pdf>

<sup>74</sup> [http://create.usc.edu/sites/default/files/publications/totaleconomicconsequencesofterroristattacks-insightsfrom9\\_0.pdf](http://create.usc.edu/sites/default/files/publications/totaleconomicconsequencesofterroristattacks-insightsfrom9_0.pdf)

<sup>75</sup> [http://create.usc.edu/sites/default/files/publications/totaleconomicconsequencesofterroristattacks-insightsfrom9\\_0.pdf](http://create.usc.edu/sites/default/files/publications/totaleconomicconsequencesofterroristattacks-insightsfrom9_0.pdf)

## **ANNEX B: ORGANIZATIONS, INSTITUTIONS AND STAKEHOLDERS CONSULTED DURING FIELD WORK IN NIGERIA AND KENYA**

Between the 19th of February and the 7th of March, the Institute for Economics and Peace met with various representatives from government, civil society organisations, business and non-government organisations to discuss this research in Ethiopia (Addis Ababa), Nigeria (Abuja) and Kenya (Diani, Mombasa and Nairobi). These organisations included:

African Council of Religious Leaders  
African Union  
Australian High Commission, Nigeria  
Carolina for Kibera, Kenya  
Chemchemi ya Ukweli, Kenya  
Economic Community of West African States (ECOWAS)  
Embassy of the Netherlands, Nigeria  
Hekima Institute for Peace Studies and International Relations, Kenya  
Hifadhi Africa, Kenya  
Human Rights Agenda, Kenya  
International Alert, Nigeria  
International Finance Corporation, World Bank Group  
Inter-Religious Council of Kenya  
Kituo Cha Sharia, Kenya  
Life & Peace Institute  
Manyatta Youth Entertainment (MAYE), Kenya  
Mercy Corps, Nigeria  
Ministry of Mines and Steel Development, Nigeria  
Muslims for Human Rights (MUHURI), Kenya  
National Commission on Human Rights, Kenya  
Office of the National Security Adviser, Nigeria  
Peace Initiative Network, Nigeria  
Saferworld, Kenya  
Search for Common Ground, Nigeria  
The World Bank  
Ujamaa Kenya  
United Nations Development Program, Nigeria  
United Nations Women  
Usalama, Kenya  
Various tourism operators, hotel staff, MPESA vendors and shop keepers.

Between April 28th and May 3rd, IEP conducted a second field research trip to North-Eastern Nigeria, specifically Maiduguri, to collect information related to the effect of violent extremism on the informal economy. The list of organizations/individuals interviewed and focus groups held included:

The UNDP Maiduguri Office:

- Head of Office
- Monitoring and Evaluation officer
- Emergency livelihoods officer
- Early Recovery and Livelihoods sector coordinator

Forum of International NGOs secretariat

Food Security Sector; Food and Agricultural Organization, Maiduguri

International Organization of Migration

### **FOCUS GROUP DISCUSSIONS**

FGD 1: Male group, 12 men, 4 beneficiaries of UNDP vocational training program. 8 IDPs.

FGD 2: Female group, 11 women, 4 beneficiaries of UNDP vocational training program. All IDPs.

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## **MEASURING THE ECONOMIC IMPACT OF VIOLENT EXTREMISM LEADING TO TERRORISM IN AFRICA**

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