

# Is Demography a threat **TO PEACE AND SECURITY IN THE SAHEL?**



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# 1 EXECUTIVE SUMMARY

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The increase in various forms of violent conflicts across sub-Saharan Africa has led scholars and policy makers to raise questions about the correlations between demography, peace and security. In regions such as the Sahel, peace and development have in recent years been threatened by increasing internal and cross-borders security challenges including armed conflicts, extreme terrorist attacks (by jihadist groups such as Boko Haram, Al Qaeda, or IS- affiliated groups, and the separatist Tuareg rebel) and organized crime. Precisely, the region has observed a devastating surge in terrorist attacks, with its so-called Sahel countries like Mali, Niger and Burkina Faso witnessing terrorist-related casualties increasing five-fold since 2016 (UN News, 2020). The situation is further exacerbated by environmental degradation, poor governance, and massive influx of migrants from other sub-Saharan African states.

Meanwhile, the general focus of explaining underlying causes of the armed conflicts and struggle for the control of resources and international terrorism across the region have been placed on lack of socioeconomic structural factors including economic opportunities, high level of poverty and political exclusion. Consequently, various regional and bilateral frameworks aimed at resolving the security challenges and combatting the cross-border threats have been put in place to realize these specific outcomes. However, the lack of effective solutions achieved so far with these mechanisms have made various policy-makers and academics suggest that the fragility and instability in the Sahel and other sub-Saharan region demand a more comprehensive approach. Approaches that place more emphasis on other underlying factors such as demography. In other words, it is important to note that while poor governance, high youth unemployment rates, resource scarcity and poverty have contributed to these unfavorable conflicts trends, it vital to take into account demographic elements as well.

In order to gain new insights on this dynamic, the United Nations Population Fund's West and Central Africa Office (UNFPA/WCARO) therefore initiated this study on the topic of demography, peace and security in the African context. As there still remains few comprehensive empirical studies on this theme, the UNFPA (WCARO) aims to provide such evidence-based study, in order to highlight the demographic dimension of these continued security challenges. In order to better understand this dynamic, the current report specifically focuses on the relationship between demographic characteristics such as youthful age structure and violent conflict (e.g. armed conflict and terrorism). There is an increasing focus on these dynamics in security and demographic literatures. Research in these fields suggests that there is a clear correlation between large youthful age cohorts or so-called 'youth bulges' and risk of political violence. High unemployment, and political and economic marginalization have been highlighted as some of the structural reasons why countries facing these forms of demographic challenges and are more susceptible to armed conflict and terrorism. Such findings had led to the resurgence of following inquiry: "does the phenomenon of youth bulges underline the increasing security challenges in the Sahel region?". The African region is not solely regarded as the world's youngest continent due to its large share of youth populations; it is also one of the regions hosting majority of the world's underdeveloped and unstable states. As affirmed by Klugman and Moore (2018:1) "today's generation of youth (aged 15-29 years) is close to

1.8 billion– of whom about 90 percent live in developing countries, and about 140 million live in the 36 countries classified by the multilateral development banks as fragile and conflict- affected states". Most of these fragile and conflict affected states are found in Africa.

Undertaking an empirical study of this relationship is of great importance due to various reasons. Firstly, as one of the regions with the highest level of political violence, poverty and inequality, there is an urgent need to identify an effective solution to Africa's security challenges in order to overcome development concerns, and achieve sustainable peace and prosperity. Secondly, by clearly understanding the relationship between these phenomena in this specific context, African governments may develop holistic policies to effectively manage various demographic factors. And to reserve the curse associated with Africa's youth bulges, and turn it into a 'demographic dividend', or blessing. Furthermore, this evidence-based report may empower governmental stakeholders to mitigate other negative association between youth bulges and violent conflict and terrorism while attaining long-term political stability. The fact that the idea of youth bulges continues to be an important factor in explaining security threats faced by fragile states, means that identifying pathways to better manage its large youth populations have immense policy implications for states within this region.

Moreover, clearly understanding the demographic implications on security and peace in the context of sub-Saharan as a whole, and in particularly the Sahel region, and developing dynamic pathways by which countries within this region can reverse adverse security trends has important global policy implications. Not only does it add invaluable insights to the growing literature of demography, peace and security, it is also of great importance for the overall economic development and political stability of Africa and other regions. In similar vein, the report ensures that the detrimental implications caused by exclusion policies which affect these youths in various societal spheres are acknowledged and effectively addressed. This in return will enable positive value creation in regards to the continent's search for inclusive peace and sustainable development.

This report is an extension of a previous literature review work done for the UNFPA (WCARO). It integrates the previous report and add new valuable insights in order to provide a comprehensive overview on the determinants of peace and security in Africa. In overall, this extensive report explores and provides a comprehensive study on the relationship between demography, peace and security in the context of the Sahel region. The report also presents conflict projections between the year 2011-2050 based on an existing statistical model developed by Hegre et al. (2013). Lastly, it offers recommendations for how to address the region's insecurities in the long term. The report does not provide a separate empirical model for West Africa or Sahel region, as such model is not likely to produce new insights, because the socio-demographic patterns do not vary extensively between countries within this region. Such analysis could also be done while using existing models, and the forecasting results presented in this report, to some extent cover this need. Moreover, we are not able to produce a statistical analysis model while using variable such as extremism or juvenile delinquency as dependent variable for the Sahel regions region separately. Such analysis is impeded by the lack of access to a cross-national time series data allowing for such analysis within the timeframe for this current report.

## 2 INTRODUCTION

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Does the risk of security challenges increase with the presence of demographic structures such as “youth bulges” or relative large youth cohorts? Over the past decades, debate on the various implications of high population growth has received tremendous attention from scholars and policy-makers around the world. Given the complex effects of population distribution and demographic challenges, analysis of the consequences of this social phenomenon on peace, conflict and development have varied widely, with some studies focusing on the positive implications while others on the challenging outcomes (Birdsall and Sinding, 2001). For those emphasizing the positive aspects, the case of the Asian Tigers (Hong Kong, South Korea, Singapore and Taiwan) has been used as an example to demonstrate how adapting policies that encourage a lower fertility rate while simultaneously capitalizing on young people’s working forces can effectively contribute to economic growth. In other regions such as sub-Saharan Africa, evidence has shown that the link between population growth and poor economic conditions can in fact contribute to insecurities and set the scene for violent conflict (Kelly and Schmidt, 2001).

Meanwhile, in order to comprehensively understand the relationship between peace, security and population, researchers have emphasized the role of the population’s age structure, particularly large youth populations, and how this can indeed provide conditions conducive to violent conflict and other forms of security threats (Kelly and Schmidt, 2001). The link between large youth populations and greater risk of security challenges such as internal armed conflict (Goldstone, 1991; 2001; Urdal, 2006; Sachs, 2008) has been confirmed in several occasions. However, it is important to note that this does not directly indicate that youth are inherently a threat to a societal security dimensions nor does this suggest that states with large youthful populations are predestined to experience violent conflicts. In fact, armed conflict associated with large youth populations has in many instances been linked to socioeconomic and political structures such as educational attainment, employment opportunities, political exclusions, delays in regards to family formation, and lack of migration possibilities. Nowhere has this discussion become more relevant than in the context of African states and their search for developing suitable policies and programmes to lower their nation’s fertility rate, sustain positive peace and achieve sustainable development (Agbiboa, 2015).

While the global growth rates of youth populations have been steadily declining over the past years, the slow demographic transition and high fertility rate in the African region, however, has resulted with youth becoming proportionally the largest population segment. This trend has led demographic data to highlight Africa as the youngest continent in the world - with over 60 percent of its population under the age of 25 (Gates, 2018; Sciubba, 2011). As confirmed by Barakat, Paulson and Urdal (2010:8), "by 2050, the United Nations Population Division (UN, 2007) predicts that only Sub-Saharan Africa will still have young adult shares above 25%, while in most part of the world's regions, the share of young adults will be below 15%". The United Nations' World Population Prospects 2019 indicates that 19 out of the world's 20 youngest countries are in Africa. In African states such as Niger, a woman has an average of 7.2 children over her lifetime. Despite youth constituting "the vast majority of Africa's population, they remain largely excluded from 'mainstream economic life, political acknowledgement and civic responsibility'" (Agbiboa, 2015: 30). For example, the share of youth unemployment, for both genders in sub-Saharan Africa is among the highest in the world. Hence, a pattern which in return has resulted into great incidences of political violence, terrorism and others forms of security risks in the region.

In fact, many scholars have pointed out that the political instabilities witnessed in various parts of Africa over the decade can be linked to the combination of the large youth population, poor governance and stagnated economic reforms throughout the region. Notably, this has also led to a resurgence in the debate about the specific properties of population growth, especially large youth cohorts on political violence (Campante and Chor, 2012; Urdal, 2006) in the sub-Saharan Africa context. For example, the combination of large youth cohorts and the pressure on resources, such as land or water and basic social services (education and health), are all demographic factors which have been considered to have contributed to the rising conflict trend in the Sahel region in Africa (Lazar, 2017; Assaad and Barsoum, 2009; Boudarbat and Ajbilou, 2009). The situation in the Sahel demonstrates the importance of comprehensively understanding the mechanism between population, peace and conflict.

Before shading a light over the African region, particularly Sahel context, it is indeed important to stress that, in contrast to the warning about the youth bulges from many conflict studies, economists emphasize how youth bulges can present a significant resource and potential for countries to improve development through "demographic dividend" (e.g. Kelley & Schmidt 2001; Groth & May 2017; Bilal, Paulson and Urdal, 2010). The Asian Tigers states have again been used to in this context to document this so-called dividend, which in studies has been operationalised as economic growth due to the potential productivity gains from having growing numbers of young people in the workforce relative to the number of dependents. Therefore, if well managed, a large youthful population can be a demographic blessing rather than a curse as it has the potential to enable the society to produce higher economic growth – "the demographic dividend" and attain sustainable development.

Meanwhile, building upon the insights from the literature, this report aims to provide an overview over theoretical framework necessary to analyze the relationship between demography, especially large youth populations and political violence with a focus on Africa, especially the Sahel. The report uses results from recent global research on youth bulges and violent conflict to discuss security trends and threats across Africa. It addresses the linkage between demography, peace and security challenges by presenting patterns and conflict projection while utilizing data on youth bulges, education, and contextual determinants known for impacting armed conflict risk. These forecasts are systematically deliberated with reference to the respective global studies. The model provides conflict risk projections for Africa as a whole as well as some individual countries within the Sahel region in particular. Thus, the paper proceeds

as follows: it starts by providing a broad overview of the linkage between population, peace and security. This is then followed by a review of the relevant literature on the correlation between youth and conflict, and other interactive factors that might play a role in this relationship. This is followed by overview over conflicts, demographic and socioeconomic trends across Africa. While doing so, the case of the Sahel region will be used to effectively demonstrate the implications of high population growth, especially large youth cohorts on peace and security dimensions. Lastly, it draws on the case of Mali to illustrate how a large youth population with a sense of political and economic exclusion can potentially become a severe security issue.



## 3 LITERATURE REVIEW: DEMOGRAPHY, PEACE & SECURITY

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### 1.1 Demography and Security Challenges: Empirical Evidence

Over the past centuries, “demographics have increasingly been employed in security literature in order to understand the mass social processes that underlie the emergence of traditional and non-traditional security threats” (Droogan, Guthrie and Williams, 2012: 473). For policy makers faced with challenges of tackling terrorism, famine, underdevelopment and armed conflict, understanding the relationship between population, peace and conflict has therefore become an important subject (Sciubba, 2011:1). As suggested by the latter scholar, “population issues of fertility, mortality, and migration are central to all facets of national security, whether it is the ability of the state to defend itself from external threats, avoid collapse, or provide for the individual need of its citizens”. Importantly, the combination of an unfavorable population age structure and environmental challenges have appeared to exacerbate numerous demographic issues, particularly for fragile regions including the Sahel in Africa, where armed conflict, poverty, lack of an adequate water supply and drought have been evident for several years now (Lazar, 2017).

To understand the relationship between demography and security threats, researchers have focused on the role of large youth cohorts, and how the combination of this phenomenon, extensive youth unemployment, resource scarcity, high levels of social inequality and poor governance, can create motivations for rebellion. More precisely, the idea of youth bulges has become an important factor in explaining security threats faced by fragile states (Kuzio, 2006). Research highlights that countries with youthful age structures are generally not only less democratic (Weber, 2012) but tend to also be less developed and have a high risk of experiencing armed conflict. The correlation between youth and political violence has been confirmed in several cases.

**TABLE 1: Feasibility of Nonviolent Resistance Onset 1955-2013**

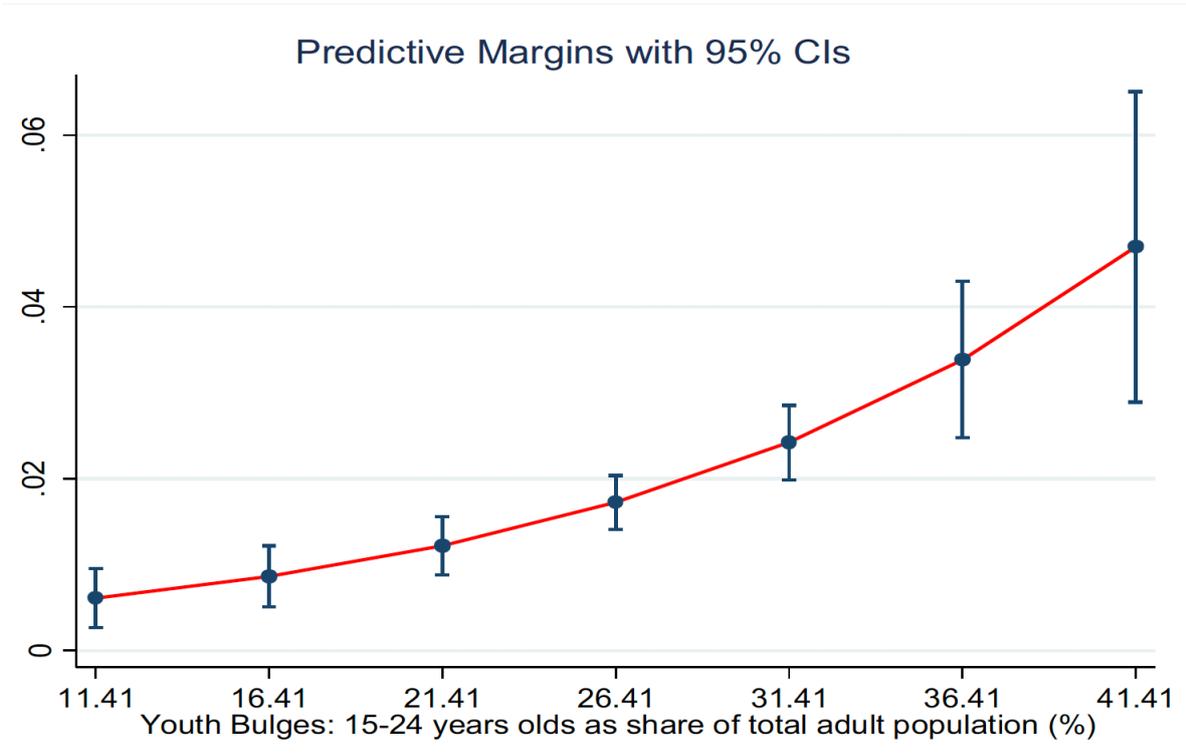
	Restricted Sample		Full Sample		Model 3	
	Model 1		Model 2			
<b>Explanatory variables</b>						
Youth bulges	0.0712***	(0.016)	0.0678***	(0.020)	-0.0651**	(0.030)
Youth bulges x Regime type					-0.00107**	(0.001)
Youth bulges x Regime type, squared					0.00159**	(0.000)
<b>Control variables</b>						
Total population (ln)	0.438***	(0.052)	0.411***	(0.059)	0.442***	(0.055)
Infant mortality rate	-0.00977***	(0.002)	-0.00608*	(0.004)	-0.0129***	(0.004)
GDP/cap growth (%)	-0.00485	(0.016)				
State-led discrimination	0.0648	(0.182)				
Brevity of nonviolent resistance	-0.0891**	(0.042)	-0.0898**	(0.044)	-0.0497	(0.046)
Brevity of nonviolent resistance squared	0.00300	(0.002)	0.00241	(0.002)	0.00174	(0.002)
Brevity of nonviolent resistance cubic	-0.0000294	(0.000)	-0.0000220	(0.000)	-0.0000168	(0.000)
Dependency ratio			-0.643*	(0.371)		
Urbanization			-0.00996*	(0.006)		
Regional contagion <sub>(t+1)</sub>			0.804***	(0.052)		
Organizational capacity <sub>(t+1)</sub>			0.459***	(0.082)		
Ongoing civil war			-0.0227	(0.236)		
Regime type squared					-0.0675***	(0.015)
Missing regime data					0.299	(0.543)
GDP/cap, PPP					-0.0000272	(0.000)
GDP/cap, PPP (ln)					0.330	(0.207)
Missing GDP/cap, PPP data					-0.322	(0.235)
Secondary school enrolment rate (lagged)					-0.00947	(0.007)
<b>Constant</b>	<b>-8.970***</b>	<b>(0.739)</b>	<b>-7.979***</b>	<b>(1.086)</b>	<b>-5.914**</b>	<b>(2.078)</b>
<b>N</b>	<b>7399</b>		<b>7399</b>		<b>7399</b>	
<b>pseudo R<sup>2</sup></b>	<b>0.071</b>		<b>0.244</b>		<b>0.124</b>	

Standard errors in parentheses  
\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.00

Source: Sakor (2017)

In fact, “six out of nine new outbreaks of civil conflict between 2000 and 2006 occurred in countries with very young or youthful age structures” (Sciubba, 2011:18). However, it is important to point out that civil conflict is not the only security threat faced by countries with large youth cohorts, as the range of these challenges varies from terrorism and crime to major nonviolent campaigns, as shown both in Table 1 above, and Figure 1 below. Findings in Table 1 lend strong support to the assumption that relatively large youth cohorts increase the likelihood of nonviolent resistance campaign onset. For example, Figure 1 below shows the distribution of nonviolent resistance onset by percentage of youth bulges. The pattern observed in the figure follows the distribution expected; as the rate of youth bulges increases in the full sample, so does the higher the probability of nonviolent resistance campaign onset. In other words, countries with a high percentage of youth cohorts are more likely than those with a lower proportion of youth to experience onset of nonviolent conflict. Based on this figure, we can predict the probability of countries experiencing nonviolent conflict onset.

**FIGURE 1:** Distribution of nonviolent resistance onset by percentage of youth bulges



Source: Sakor (2017)

For instance, in comparison to Greece whose youth bulge constituted a low 12 per cent of its adult population in 2011 with a 0.008 probability of experiencing nonviolent resistance onset, Yemen with its high youth bulge of 39 per cent had a probability of roughly .042 to experience the same phenomenon. Additionally, whereas Japan with its 13 per cent youth bulge of total adult population in 2009 had a 0.009 likelihood of witnessing nonviolent campaign, Zimbabwe on the other hand, with a youth bulge ratio of 41 per cent had a probability of 0.048 to observe breakout of nonviolent resistance campaign. For simplicity, using youth bulge, defined as the size of youth cohorts (age 15-24) relative to the total adult population (15 year and over) and simultaneously controlling for other factors, these numbers states in relative terms: Yemen and Zimbabwe had a risk more than five times as high as Greece and Japan.

## 1.2 Theoretical Framework: Youth Demographic and Political Violence

In general, most of the literature on youth bulges and political violence are based on the work of Jack A. Goldstone (Urdal, 2006; Campante and Chor, 2012, and Hart et. al., 2004; Collier and Hoeffler, 2004, and Fearon and Laitin, 2003). Goldstone (1991 and 2001) has shown that large youth cohorts have played a prominent role in several political upheavals historically, including the 17th-century English Revolutions and the 18th- century French Revolution. Moreover, in his Clash of Civilizations thesis, Huntington (1996) stresses that youth in general, and especially males, are a key ingredient in causing political unrest. Meanwhile, one of the notable theories within the civil war literature which have addressed the issue of youth is the political opportunity, also known as the “greed” theory (e.g., Collier, 2000). With its origins in economic theory, this approach deliberates about “structural conditions that provide opportunities for a rebel group to wage war against a government” (Urdal, 2006: 609). As argued by the author, these structural factors are conditions which reduce the cost of rebellion, through low recruitment costs for participants. Over the years, several scholars including Collier (2000) have affirmed that a large youth population can indeed be regarded as a key factor that lowers recruitment costs via the abundant supply of rebel labor with low opportunity costs; therefore, increasing the feasibility of security threats, in particular a violent conflict.

Other factors such as a weak government with limited ability that is incapable of suppressing mobilization, may increase the opportunity for rebellion to take place as well (Collier and Hoeffler, 2004). This argument is supported by Goldstone (2002), who stresses that vulnerability of the regime, either politically or economically, is necessary in order for

popular discontent to transform into large scale conflicts. While addressing the limited political aspect of state capacity, Chenoweth and Stephan (2014) underline that elite divisions can serve as another significant perceived opportunity for rebellion, as this may signify the regime's vulnerability to any form of domestic challenge, whether nonviolent mobilization or armed conflict. Moreover, according to the political opportunity approach, the combination of private rewards and existing organizational structure for dissent can make collective action problems to be presumed as less important (Urdal, 2006: 609). Consequently, one can argue that consideration of joining a rebellion group is determined by the fact that joining such groups can provide more profitable rewards. While Collier's (2000) opportunity thesis can be used to highlight the mechanisms through which youth bulge may affect the onset of armed conflict, Urdal (2006) urges that most of the theoretical framework on youth bulge and political upheaval fits more into the motive of grievance theory.

The grievance or motive theory views outbreaks of political unrest as "a rational means to redress economic or political grievances" (Urdal, 2006: 609). In other words, it stresses that the motive for committing rebellion ranges from economic reasons such as recession, inequality and poverty to political factors like lack of democracy and political exclusion (Schwartz, 2010; Sambanis, 2002; Gurr, 1970; Tilly, 2003; Goldstone, 1991; 2001; Braungart, 1984). With regards to youth, the theory argues that large youth cohorts "facing institutional bottlenecks and unemployment, lack of political openness, and crowding in urban centers may be aggrieved, increasing the risk of political conflict" (Urdal, 2006: 610). Although redressing common grievances may be perceived as a collective good, overcoming collective action problems can indeed be a challenge. Arguably, grievances alone may not be a sufficient condition for the onset of violent conflict, as the probability that these motives are addressed through political unrest increases where opportunities such as low recruitment cost, weak government and other means exist (Sambanis, 2002). This indicates that, while it is important to identify various explanations concerning the implications of large youth cohorts on security challenges such as armed conflict and terrorism, the difference between these competing theories should not be exaggerated, as they are most likely to be interconnected and yield similar empirical predictions. What one academic may perceive as a condition increasing motives for rebellion onset, another regards as an opportunity.

**TABLE 2: A multivariate model of Youth Bulges and Conflict Onset, 1950-2000**

<b>Explanatory variables</b>		
	<b>Model 2</b>	
Youth Bulges $\beta$ st.e.	0.043*	(0.017)
Infant mortality rate	0.006***	(0.0015)
Total population (ln)	0.271***	(0.047)
Regime type	0.011	(0.014)
Regime Type Squared	-0.012***	(0.003)
Missing regime data	-0.021*	(0.256)
Brevity of Peace	1.887***	(0.268)
<b>Constant</b>	<b>-7.409***</b>	<b>(0.759)</b>
<b>N</b>	7640	
<b>Log Likelihood</b>	-809.25	
<b>pseudo R<sup>2</sup></b>	0.101	

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.005$ .

Source Urdal (2006)

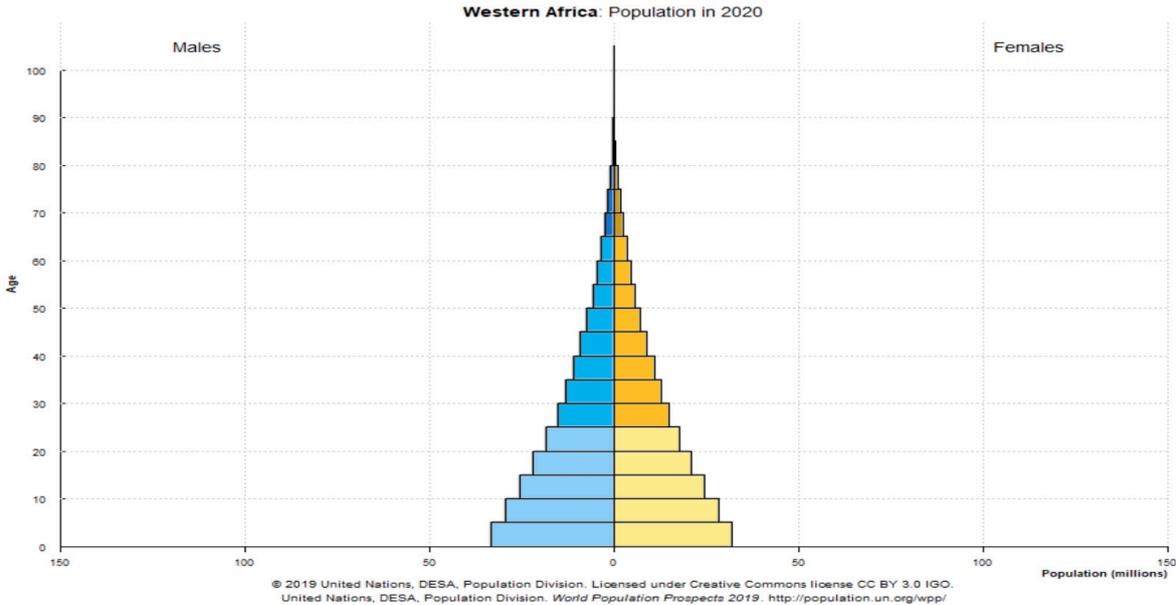
The analysis presented in Table 2 above shows the replication of the basic global multivariate analysis conducted by Urdal (2006). Similar to other findings highlighted above, the empirical analysis indicates a statistical significant relationship between youth bulges and armed conflict onset. In addition to youth bulges, other demographic and socioeconomic factors such population size, infant mortality rate (aimed as measuring development level), conflict history and regimes type appear to be strongly correlated with conflict risk as well.

### 1.2.1 The Size of Youth Cohorts and Unemployment

While examining the security effects of a large youth population, Heinsohn (2003) confirms that when males between the ages 15 to 29 make up more than 30 per cent of a country's population, the risk of rebellion, either violent or nonviolent unrest increases. He emphasizes that a community experiencing a large youth cohort is almost inevitably headed for security challenges. Taking a somewhat less deterministic view, yet supporting the general argument, Droogan, Guthrie and Williams (2012) stress that empirically the mere size of a youth cohort has proved to be a relevant factor in explaining the outbreak of various forms of insecurities. They point out that "in 2003 there were 67 nations in the world experiencing youth bulges and 60 of them were affected by some kind of civil war or experience of mass killing" (2012: 473). In recent economic demographic studies, it has been discussed that the specific size of a cohort matters. According to the 'cohort size' theory; "other things being constant, the economic and social fortunes of a cohort (those born in a given year) tend to vary inversely with its relative size" (Easterlin 1987, quoted in Urdal, 2006: 610). This hypothesis suggests that those belonging to larger cohorts are more likely than those in smaller cohorts to suffer from challenging conditions within an area such as the labour market (LaGraffe, 2012). While using wage data for smaller samples of countries in a cross-national time series

study, Machunovic (2000) found that an increase in relative cohort size leads to a reduction in fertility and male income. Meanwhile, Urdal (2006) notes the importance of the correct measurement of the term youth bulges, as this can have implications on the effect large youthful age structure can have on security challenges such as armed conflict and terrorism. Consequently, he affirms that the appropriate operationalization is the size of youth cohorts (age 15-24) relative to the total adult population (15 year and over) (Urdal, 2006).

**FIGURE 2:** Population tree for Western Africa, 2020.



**Source:** United Nations Population Division, World Population Prospects 2019

Furthermore, a study by Korenman and Neumark (1997) suggested that a large proportion of youth cohort is statistically associated with low employment rates. As highlighted by LaGraffe (2012:67) “compared to adults, youth are approximately three times as likely to be unemployed”. Alongside Campante and Chor (2012), Amin et al. (2012) note also that the combination of high unemployment and youths constituting a disproportionate share of the total population causes political turmoil in a society. This is further acknowledged by LaGraffe (2012), who states that youth unemployment in most cases does not solely contribute to feelings of alienation from society, but it can also lead to hostility towards the incumbent regimes; therefore, giving rise to political unrest and recruitment in terrorist organisations. The issue of terrorism is further stressed by Urdal (2006), where he found that under conditions of educational and economic marginalization, youth bulges can increase the risk of terrorism. Moreover, in their book called *A Convergence of Civilization: The Transformation of Muslim Societies Around the World* which was published in 2011, demographic theorists Youssef Courbage and Emmanuel Todd claim that the youth bulge phenomenon is relevant in explaining the popular uprisings during the 2011 Arab Spring.

**1.2.2 Higher Education**

In addition to the cohort size and economic marginalization, various studies on armed conflict have found a link between rapid expansion of higher education and political violence. According to Goldstone (2002), the combination of over-education and lack of jobs among the youth population is likely to create political discontent. Literacy plays an important role, as it enables those youths who were previously politically

inactive to access ideological concepts and ideas which can be used to undermine existing political authority, thus creating instability (Goldstone et al., 2002). From political revolution scholars Courbage and Todd's (2011) perspectives, the youth bulge phenomenon does not become a problem simply because youth increasingly make up a larger share of the population, but rather because, unlike their parents, these youths have acquired the ability to read and write; factors which enable them to consider themselves as politically active individuals.

As noted by Droogan, Guthrie and Williams (2012:474), expansion in higher education is often caused by the process of "demographic modernization", which not only contributes to democratization, but also a reduction in fertility rates, endogamy and the demise of traditional family structures. The scholars use the case of the Arab spring to support their argument and note that when political unrest meets with the rise of youth populations, and other cited- dynamics, then outbreaks of civil conflict are likely to take place. The link between expansion of educational institutions and political challenges is also confirmed by Austin (2011) and Lia (2005). The latter writer states that most of these states' labour markets inability to absorb these youths has not solely resulted with violent conflict, but also radicalization and recruitment of youth in jihadist militant groups in the regions. In short, the failure to accommodate highly educated youths into the national economy can arguably cause economic-related grievances which could possibly motivate civil conflict and other forms of insecurity (Goldstone, 2001). However, attempts at assessing the effects of education in the youth-conflict nexus have found very little evidence supporting the assumption that expanding higher education in youthful populations carries an additional security risk (Barakat & Urdal, 2009; Urdal, 2006). On the contrary, it appears that youthful societies are particularly prone to conflict if the provision of education to these youth cohorts are low.

### 1.2.3 Political Exclusion

Empirical analyses from the mentioned literatures (opportunity and motive) yield different results regarding the role of political marginalization and regime type in causing political unrest. While some point out that the less autocratic a state is, the higher the opportunity for conflict, others highlights the contrary. Importantly, the grievance-oriented approach emphasizes the role of democratic values and political exclusion or oppression as factors for increasing the risk of armed conflict. This is confirmed by Goldstone (2001), who claims that a lack of political rights can motivate large youth groups, who may feel isolated from participating in general political processes, to engage in violent behaviour while aiming for democratic regime change.

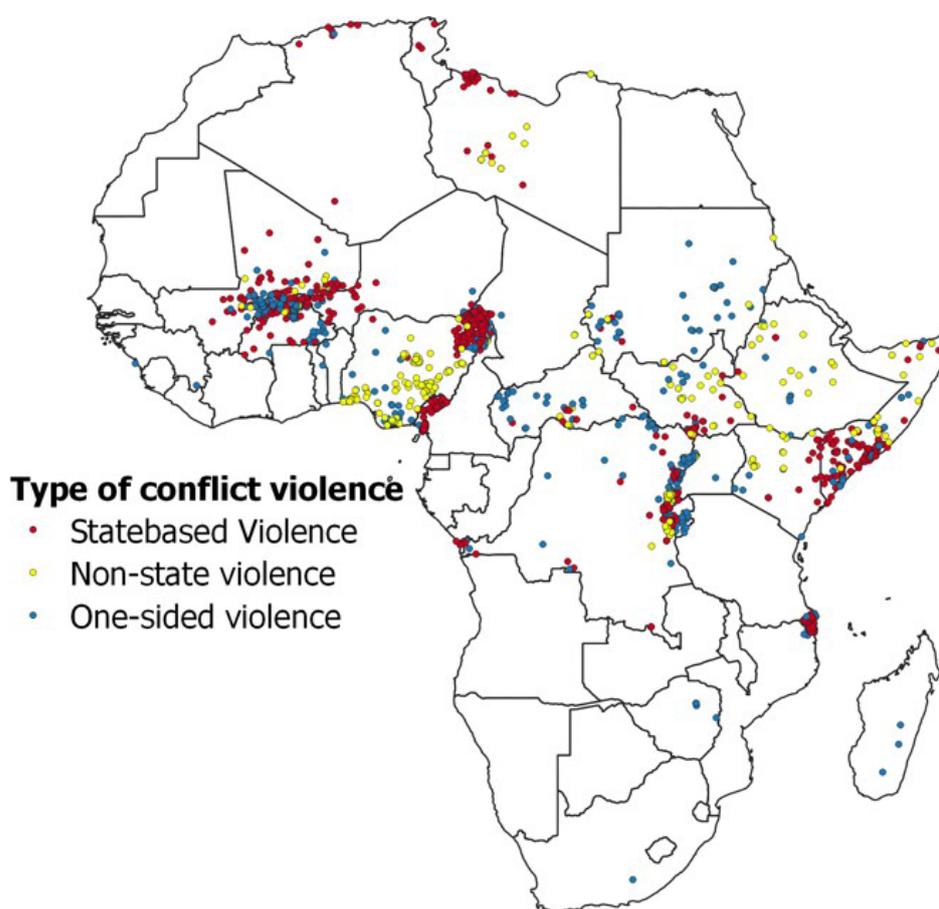
Moreover, research on regime type and conflict such as Hegre et al. (2001) find support for an "inverted U" relationship between conflict and democracy. The results indicate that while consolidated democratic and autocratic states are the most peaceful, the semi-democratic regimes, also known as anocracies, have a higher likelihood of experiencing conflicts. According to Goldstone (2002:11), large youthful age structures have a greater effect on violent conflict when an anocratic (or 'semidemocratic') regime is present, as this type of governance exhibits "neither a fully democratic nor fully autocratic character". Butcher and Svensson (2016:7) add to this by asserting that, the combination of exclusion policies of certain social groups, "commitment and information problems create the general conditions for rebellion in authoritarian states". As a result, one should therefore expect youth bulges to have a greater effect in an anocratic regime. Hence, the combination of large youth population and a weak government with limited capacity creates opportunity for conflict; a situation which is highly evident in the case of Africa.

## 4 TRENDS: SECURITY AND YOUTH IN AFRICA

### 4.1 Violent Conflict Trends in Africa: Internal Armed Conflict

Over the past decades, the world has witnessed a general steady decline in terms of number of internal armed conflicts or civil wars, though with an uptick following the Arab Spring. In this report, armed conflict indicates civil war as defined by one of the most robust conflict datasets currently available, namely the Uppsala/PRIO dataset (Gleditsch et al., 2002), which is also the basis of several studies addressing the relationship between demographic age structures, peace and security, including that of Barakat, Paulson and Urdal (2010).

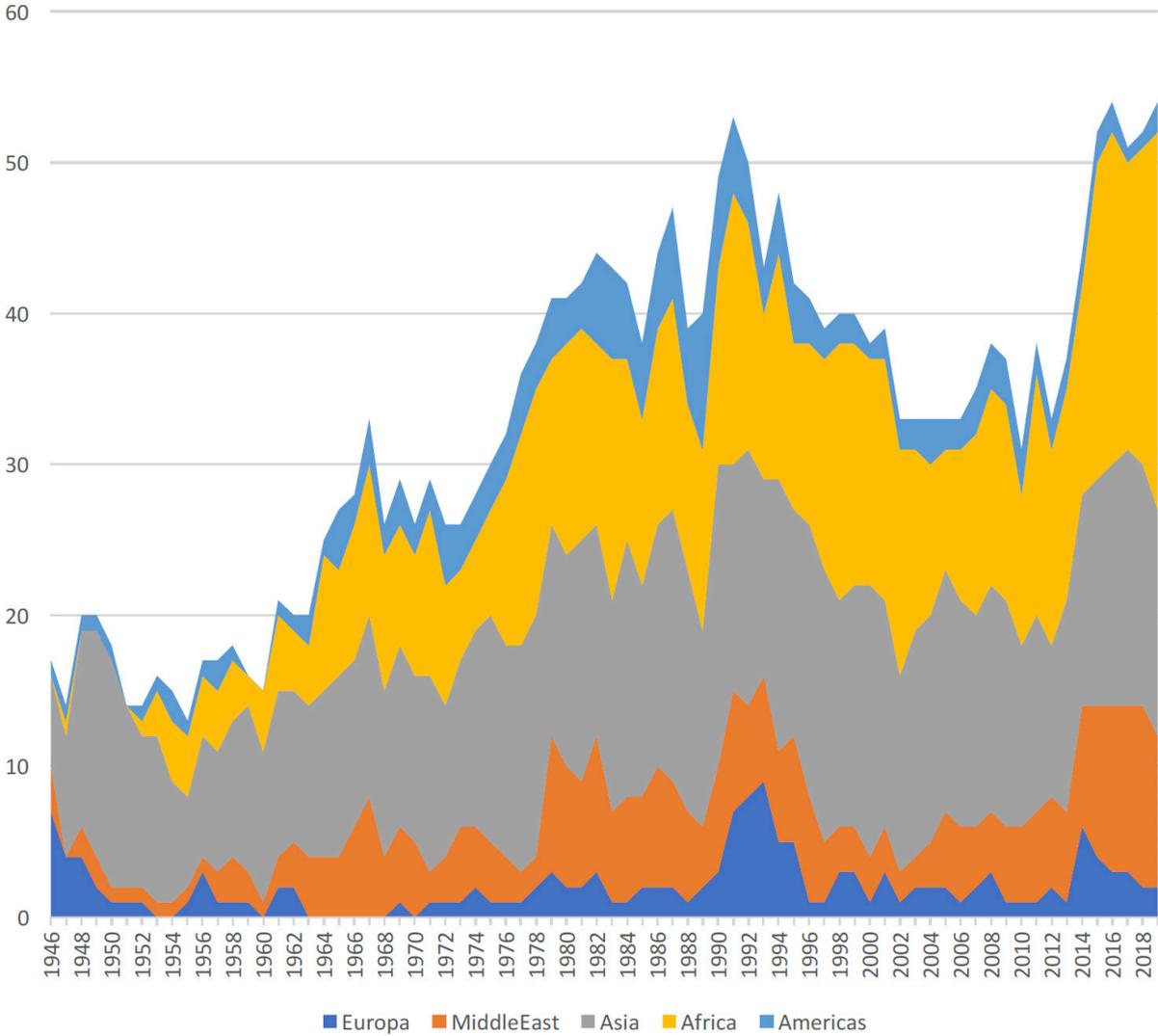
**FIGURE 3:** Conflict trends in Africa, 2019



**Data Source:** Palik and Rustad (2020) – Data source: UCDP (2020)

For a conflict to be defined as an internal armed conflict or civil war, it has to be a violent conflict over an incompatibility goal between two organized groups, often the government and a non-state actor (rebel group). It also needs to result in at least 25 battle-related deaths in a year. The map (see figure 3) above shows disaggregated patterns in violent conflict events, including state-based, non-state and one-sided violence across Sub-Saharan Africa. Meanwhile, figure 4 below shows distribution of state-based armed conflicts over time for the period 1946-2019 by region.

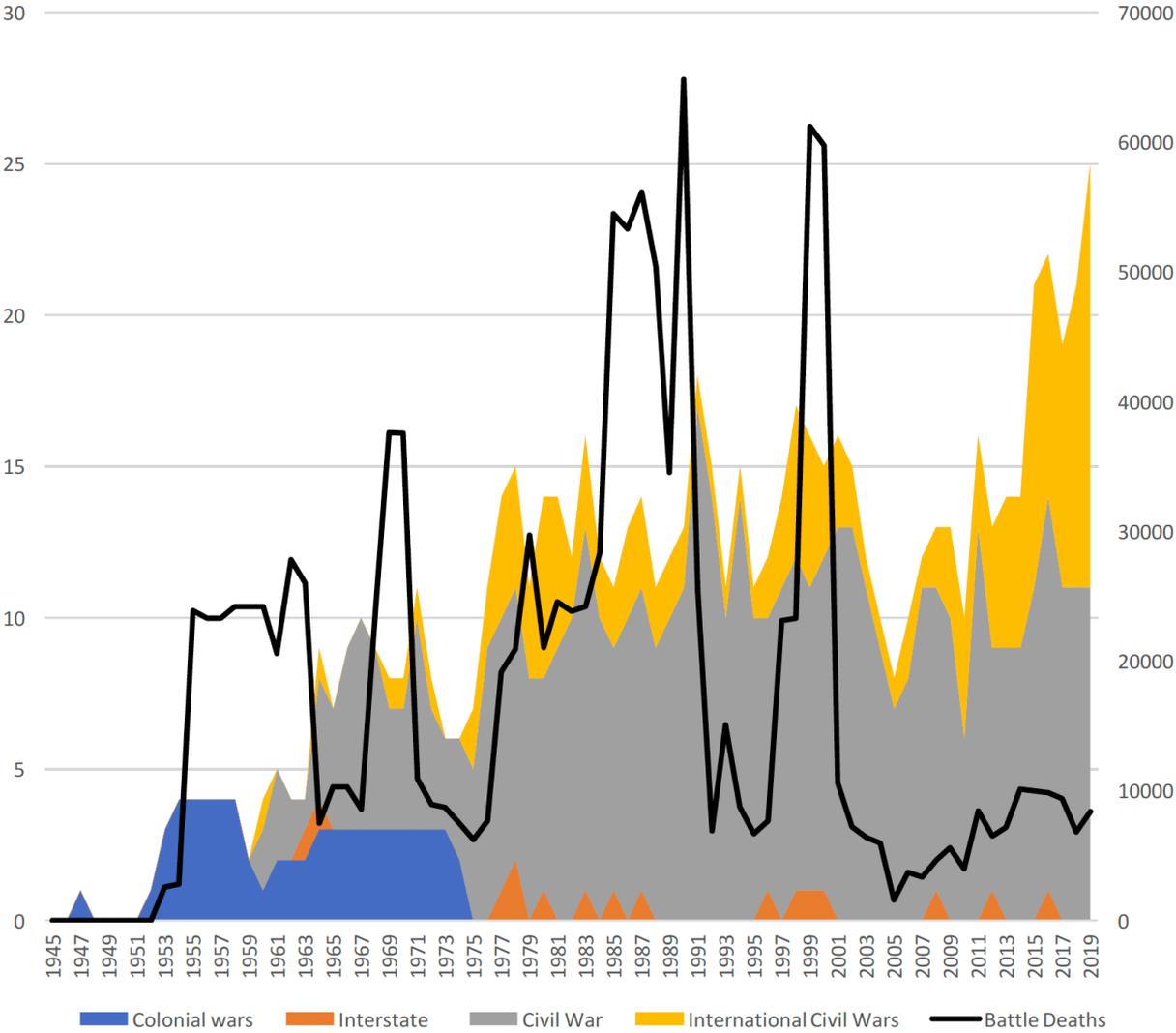
**FIGURE 4:** Number of countries with state-based armed conflict, by region, 1946–2019



**Data Source:** Palik and Rustad (2020) – Data source: UCDP (2020)

Over the past decades, the African continent has experienced one of the highest shares of global wars. Despite some of the deadliest wars such as that of the 1994 Rwandan genocide, the Congo wars, and the 1999-2000 Ethiopian- Eritrean wars ending, yet the number of severe conflicts continue to substantially increase.

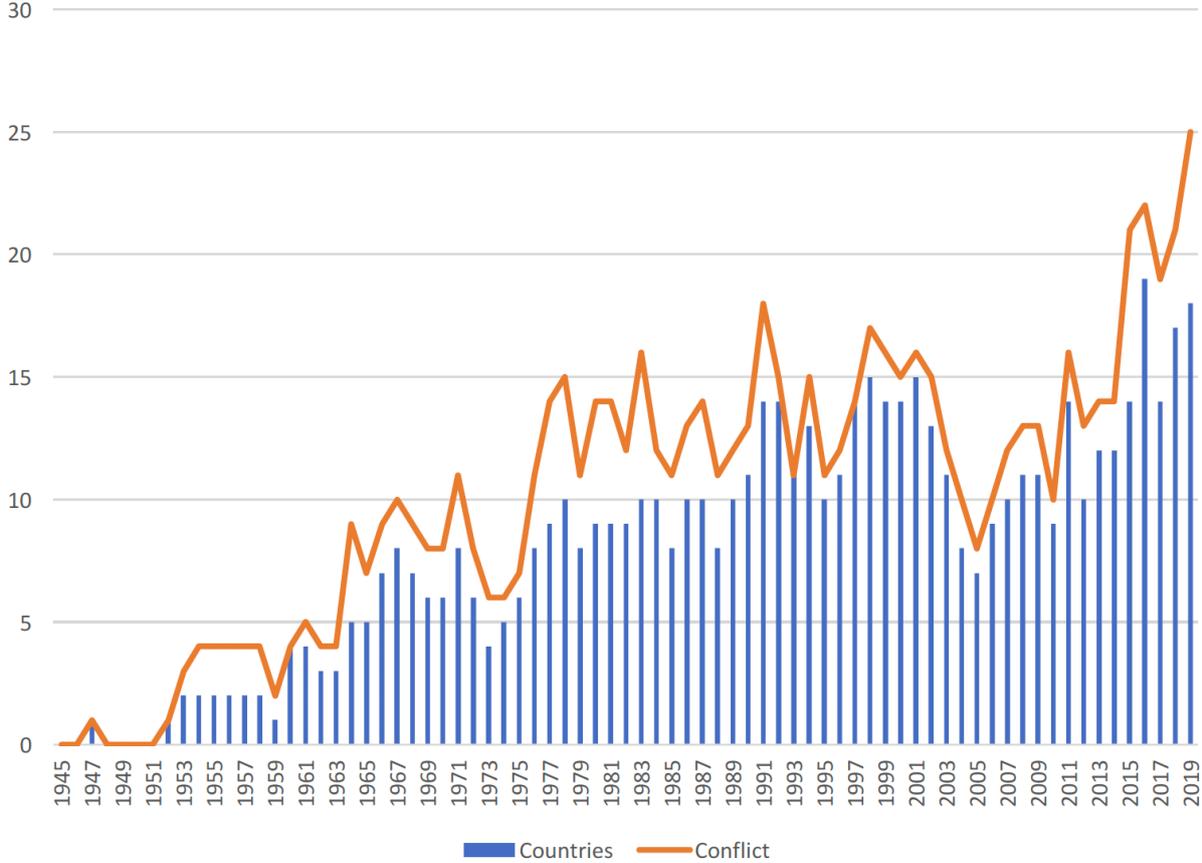
**FIGURE 5:** Battle deaths and state-based armed conflicts in Africa, by conflict type, 1946-2019



**Data Source:** Palik and Rustad (2020) – Data source: UCDP (2020)

Figure 5 above displays overview of various forms of violent conflicts patterns in Africa from 1945 to 2019. The threshold used in this data is based on the 25 battle-related deaths definition described above (for conflicts) and at least 1,000 battle related death (for wars). In a recent policy brief by Rustad and Bakken (2019:2), the scholars point out that “there has been a marked increase in the number of state-based conflicts in Africa over the past five years”. While globally, we observed a declining trend, Africa on the other hands saw the number of both conflicts and wars increased compared to 2018 (from 20 conflicts in 2018 to 22 in 2019 and from 1 war to 3 in 2019).

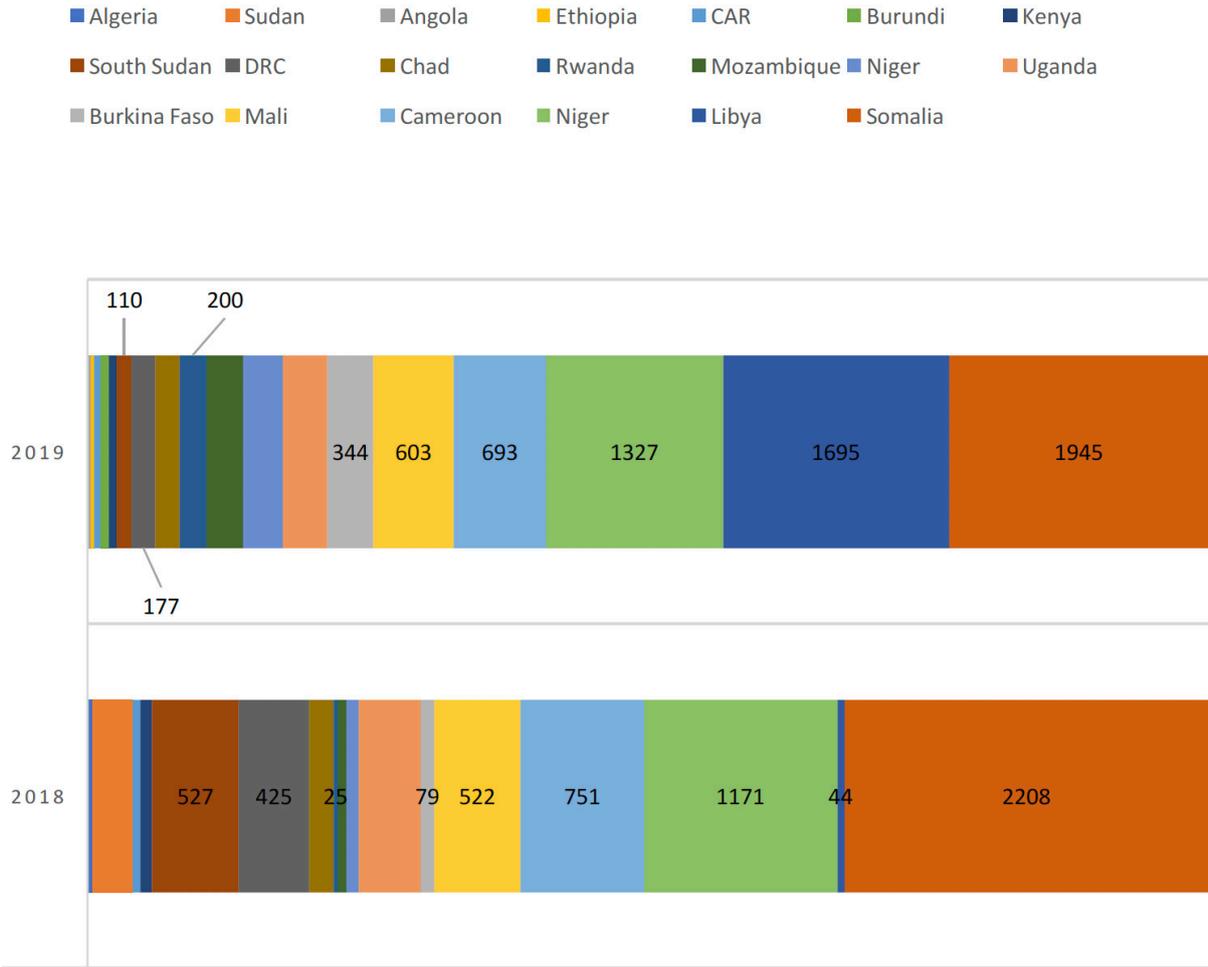
**FIGURE 6:** Number of countries with conflicts vs number of conflicts, Africa 1989-2019



**Data Source:** Palik and Rustad (2020) – Data source: UCDP (2020)

Furthermore, the scholars emphasize that “in 2018, the number of conflict-affected countries rose from 14 in 2017 to 17 in 2018. This is the second highest number since 1946; only surpassed by 2016 with 18 countries. This suggests that while the conflict areas are still geographically limited, there is an increasing number of conflict-affected countries” (Rustad and Bakken, 2019:2). The argument regarding an upward trend is clearly reflected in Figure 6 above. The number of recorded conflicted increased from 17 in 2018 to 25 in 18 affected countries in 2019, with Sahelian countries like Mali and Niger being some of the affected countries.

**FIGURE 7: Battle Deaths in Africa in 2018 and 2019**



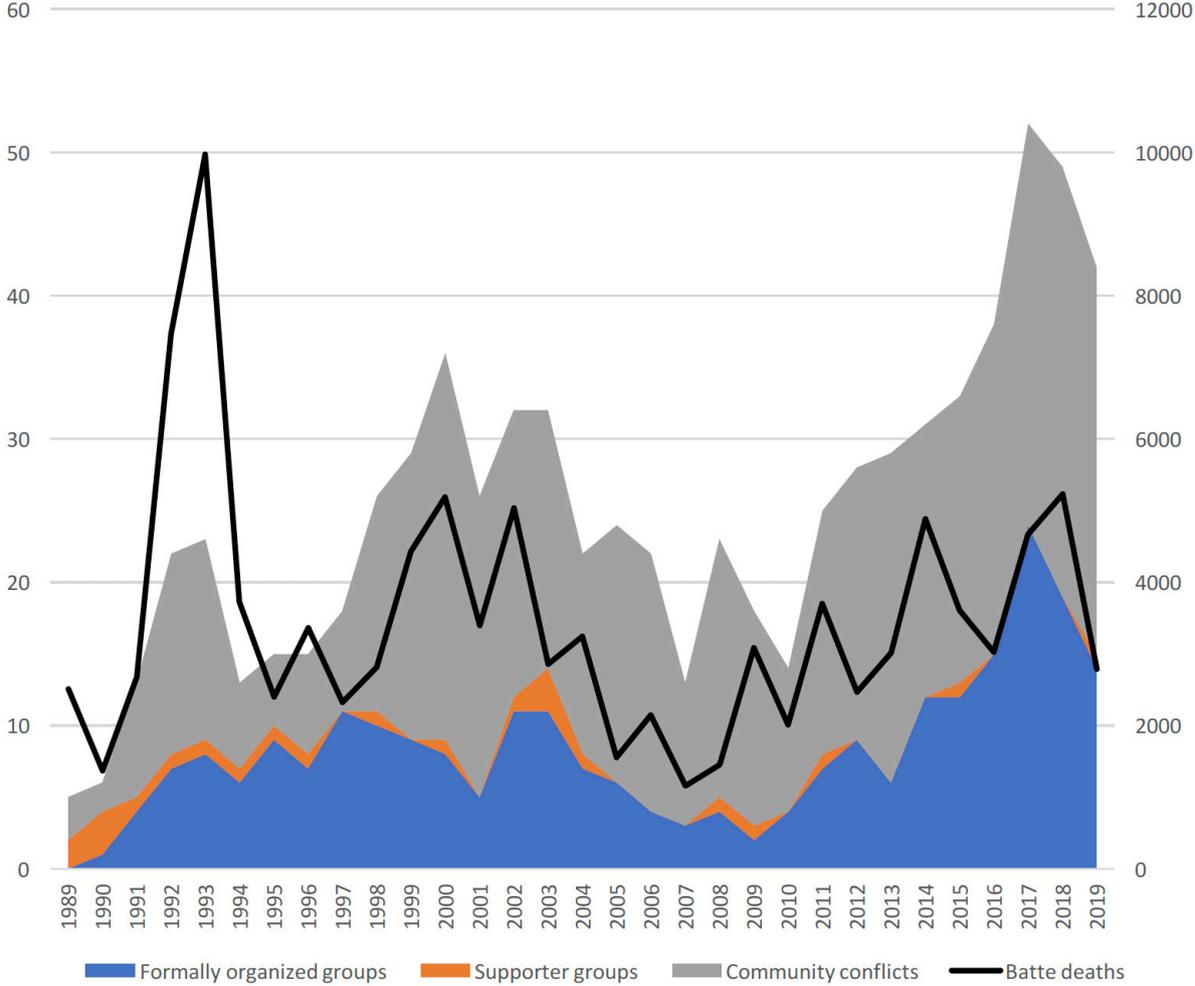
**Data Source:** Palik and Rustad (2020) – Data source: UCDP (2020)

Figure 7, which compares battle-related deaths in Africa between 2018 and 2019. In general, the total number of conflict-related deaths has decreased from a peak in the early 1990s, and in the recent years, this decrease has been even more significant. However, Africa continues to bear the burden of a large portion of global conflict fatalities, stemming from several protracted or cyclical conflicts that have been affecting the same countries or regions for decades. As it can be observed from the plots above in Figure 6, two of the top Sub-Saharan countries with the highest deaths include Nigeria, Somalia and Niger. Despite a slight de-escalation, Somalia remain on the top.

**4.1.1 Non-State Conflict**

While the illustration above highlights the relevance of conventional armed conflict in Africa, other types of conflicts have posed equally great challenges for the continent as well. One of the main forms of violence experienced by African countries is non-state conflict. The UCDP collect data also on this form of conflict, which is defined as a violent conflict between two organized non-state groups resulting in at least 25 battle-related deaths in a calendar year.

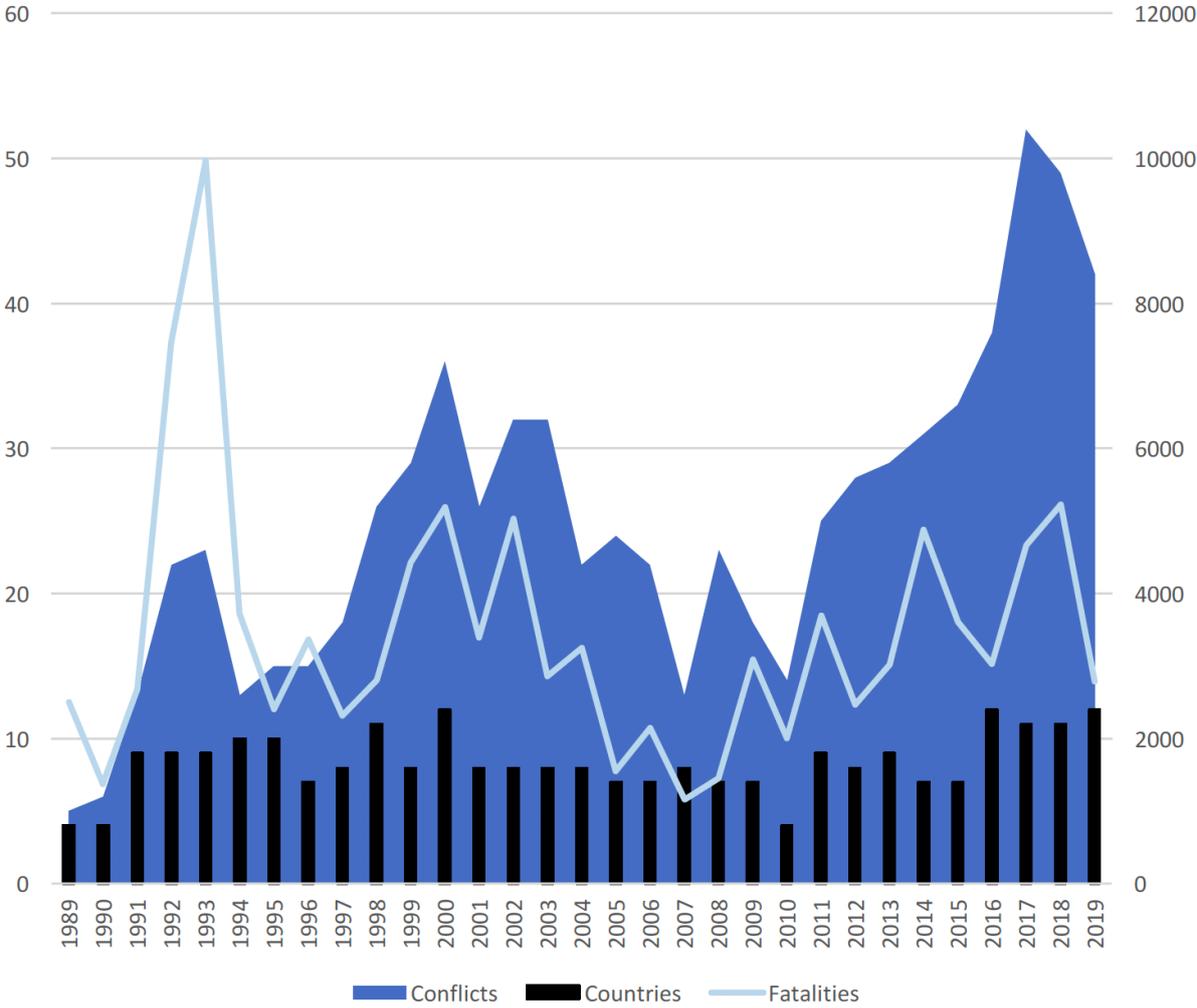
**FIGURE 8: Non-state conflicts, in Africa, 1989-2019 by type of conflict**



Data Source: Palik and Rustad (2020) – Data source: UCDP (2020)

As it can be observed from the plot in Figure 8, this form of conflict has been on rise over the past 10 years, and the Africa continent continues to be the region with the highest number of non-state conflicts. However, in 2019, the region saw a minor decreased from 19 in 2018 to 14 non-state conflicts between formalized groups. As for 2019, Africa saw a reduction in its recorded non-state conflict deaths from 5,228 in 2018 to 2791 in 2019, which is then the lowest since the year 2012.

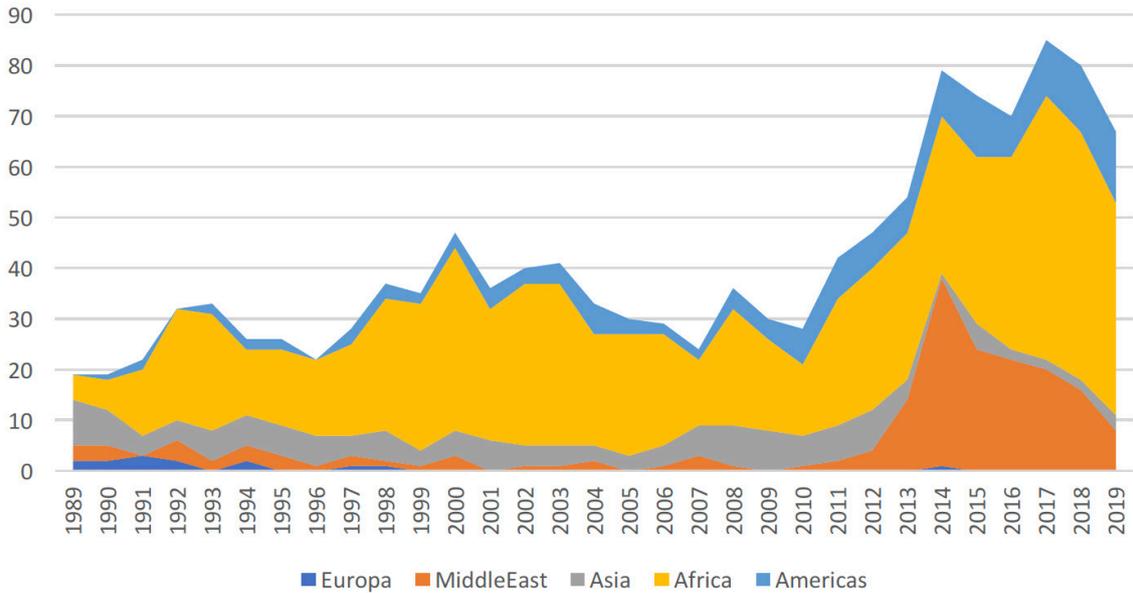
**FIGURE 9: Non-state conflicts, number of countries and battle deaths in Africa, 1989-2019**



Data Source: Palik and Rustad (2020) – Data source: UCDP (2020)

In the meantime, while Figure 9 shows the patterns in the number of non-state conflicts, countries affected by this form of conflicts and battle-related deaths, Figure 10 on the other hand, presents the distribution of non-state conflicts by region for the period 1989-2019.

**FIGURE 10:** Total number of non-state conflicts, by region 1989–2019

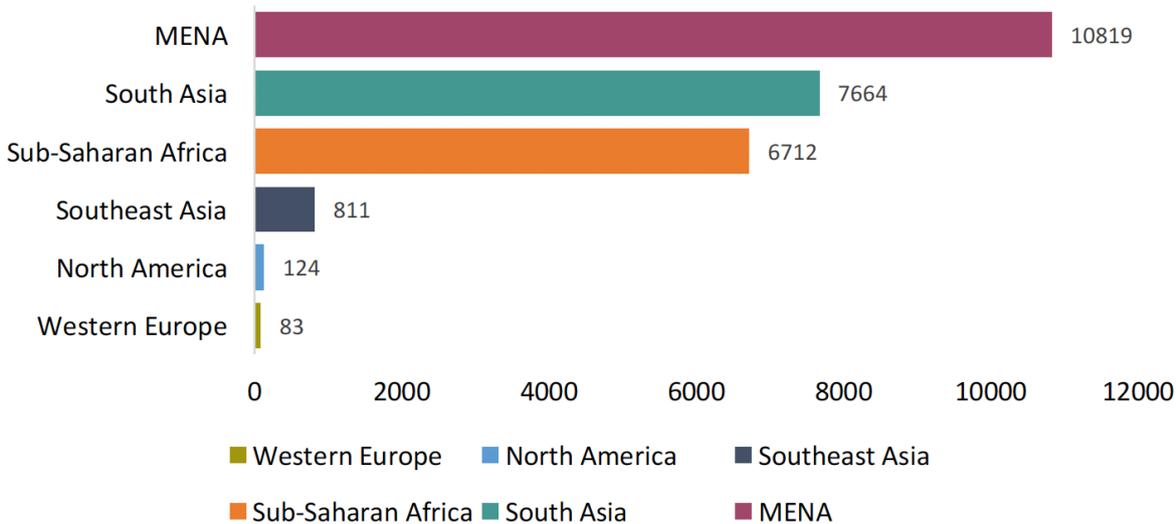


Data Source: Palik and Rustad (2020) – Data source: UCDP (2020)

**4.1.2 One-Sided Violence - Extreme Terrorism**

As for one-sided violence which is defined as violence against civilians by a formally organized group, which can be either the state or a non-state actor, this form of conflict has since 2012 increased substantially across Africa. Specifically, in recent years, the continent has experienced a rapid increase in militant Islamist group activity (see Figure 11 below). Especially in the Western region, this form of violence has received considerable global attention. The attacks have been concentrated in Western Sahelian countries such as Mali, Niger, Burkina Faso, and are carried out by terrorist groups such as Boko Haram, the al-Qaeda or Islamic State -affiliate, Islamic State in the Greater Sahara (ISGS) and Jama’at **Nasr al-Islam** wal Muslimin (JNIM), Tuareg (Le Roux, 2019).

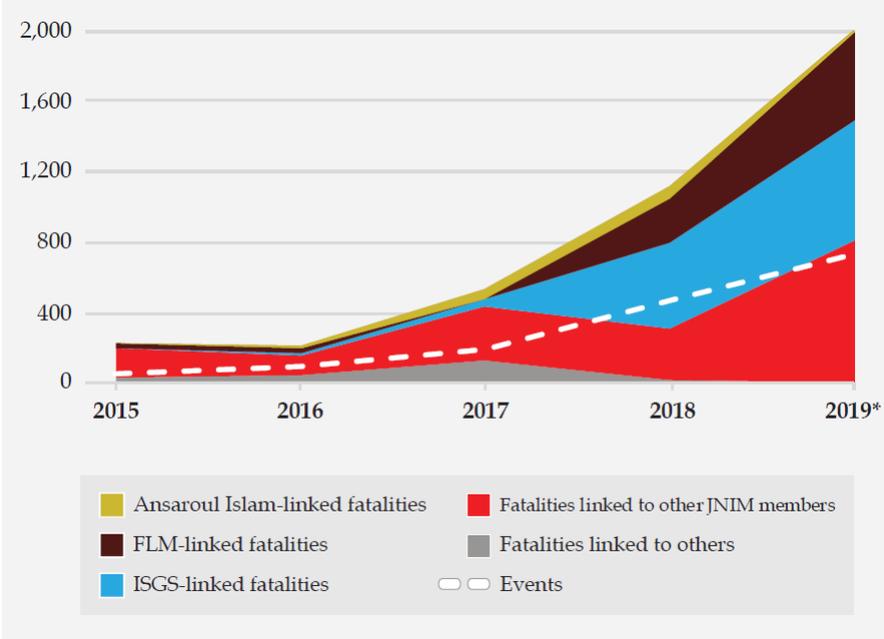
**FIGURE 11:** Distribution of confirmed terrorist related deaths in 2017 by regions (including all victims and attackers who dies as a result of the incident)



Source: Global Terrorism Database (2018)

As this was not complex and challenging enough, the national governments in these countries are under strain in combatting other growing threats posed by several other self-defense militias and criminal enterprises across the Sahel region as well.

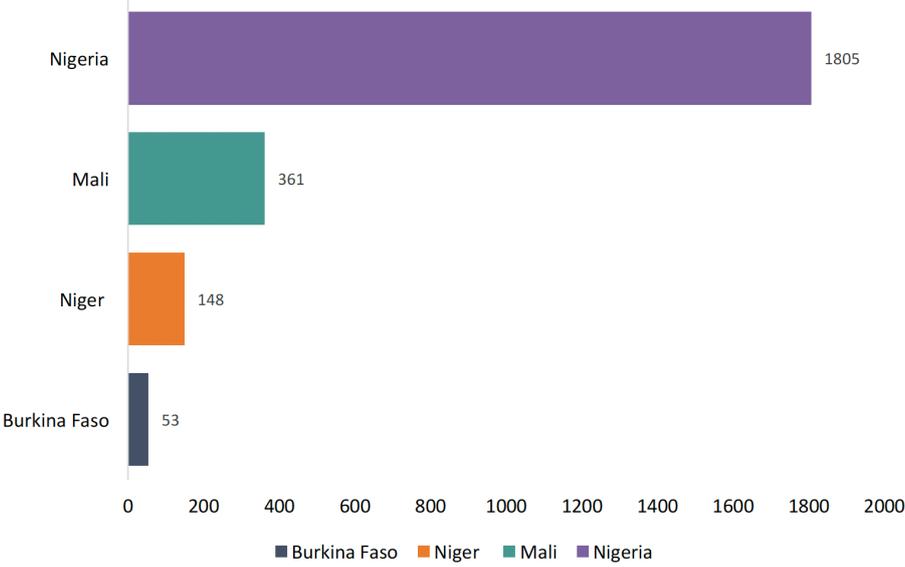
FIGURE 12: Trend in militant Islamist group activity in the Sahel, period 2015-2019



Source: Le Roux (2019). Data source: Armed Conflict Location & Event Data Project (ACLED)

Since 2015, these violent events involving militant jihadist groups in the Sahel have not solely doubled, but also caused more lives. In a recent report, the UNOWAS flagged that in Burkina Faso, Mali and Niger particularly, the number of terrorist casualties doubled 2016 “with more than 4,000 deaths reported in 2019 alone as compared to some 770 three years earlier” (UN News, 2020).

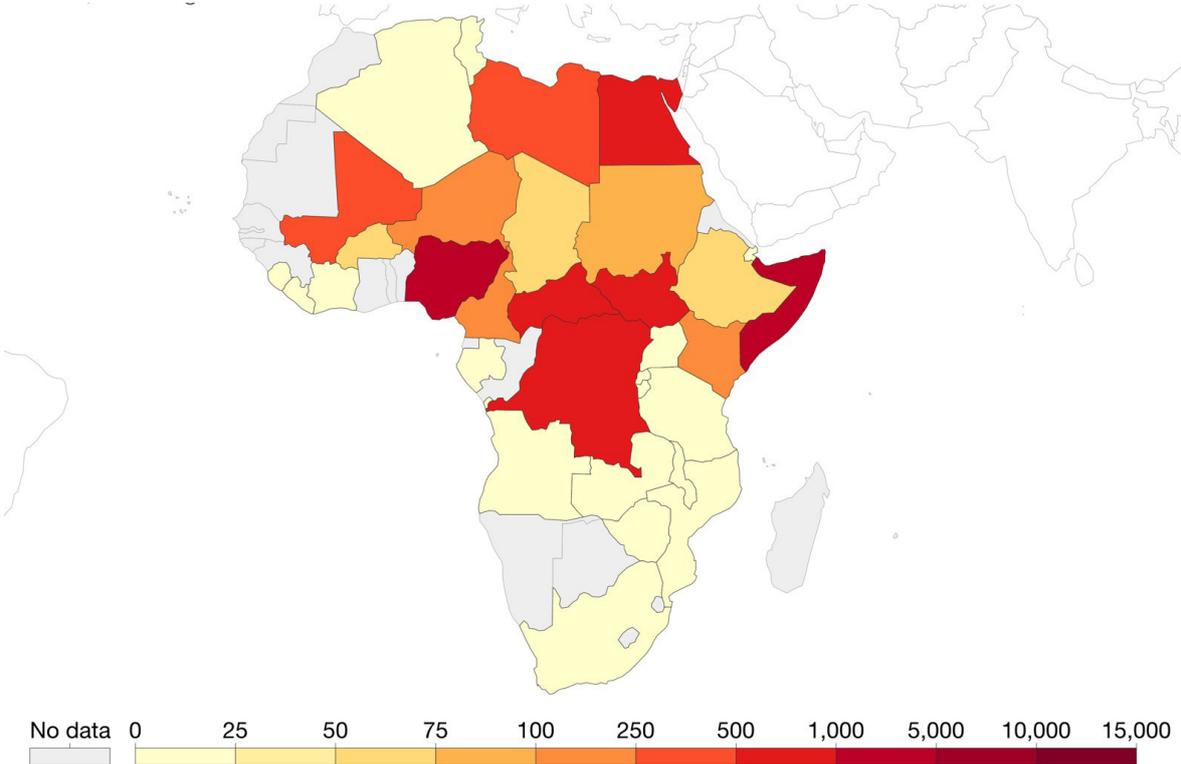
**FIGURE 13:** Deaths from terrorism in 2017 across the Sahel (including all victims and attackers who dies as a result of the incident)



Source: Global Terrorism Database (2018)

Another report highlighted that in 2019 alone, the fragile region observed over 700 violent events resulting in extremely high number of fatalities (Le Roux, 2019). As highlighted by Coleman (2020) “the number and lethality of attacks carried out in Mali, Niger, and Burkina Faso have exponentially increased over the past year – Burkina Faso alone saw a 2150% increase in fatalities in terrorist attacks from 2018 to 2019”.

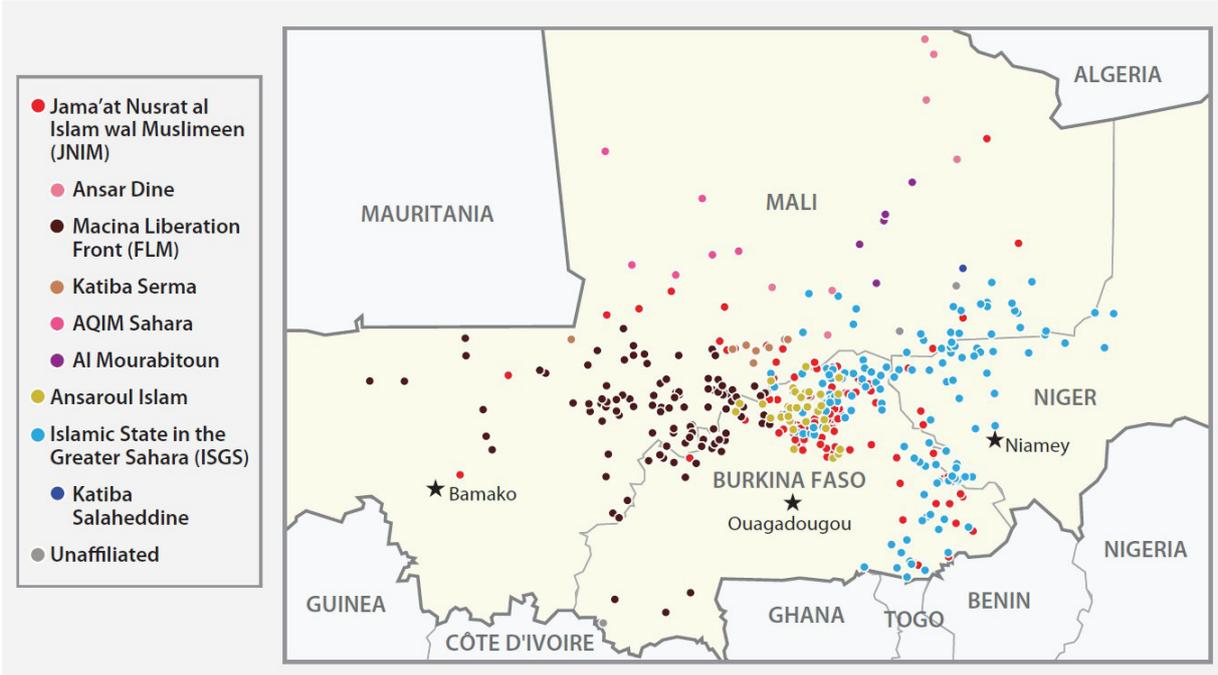
**FIGURE 14:** A map over confirmed deaths from terrorism in Africa, 2017 (including all victims and attackers who die as a result of the incident)



Source: Global Terrorism Database (2018)

These violent events have affect more than 900,000 people in this fragile region, and in Burkina Faso alone, the number in 2019 was as high as 500,000 (Le Roux, 2019). The shifts in geographic focus of the attacks from Mali to Burkina Faso and other parts of Western Africa has not only led to overall increasing insecurity, but also resulted with higher number of displacements. While undertaking his first formal meeting of the year, the Special Representative and Head of the UN Office for West Africa and the Sahel (UNOWAS), Mr. Mohamed Ibn Chambas, told the Security Council that the Liptoka region had experienced a rise in displacement and this figure “has grown ten-fold to about half a million, on top of some 25,000 who have sought refuge in other countries” (UN News, 2020).

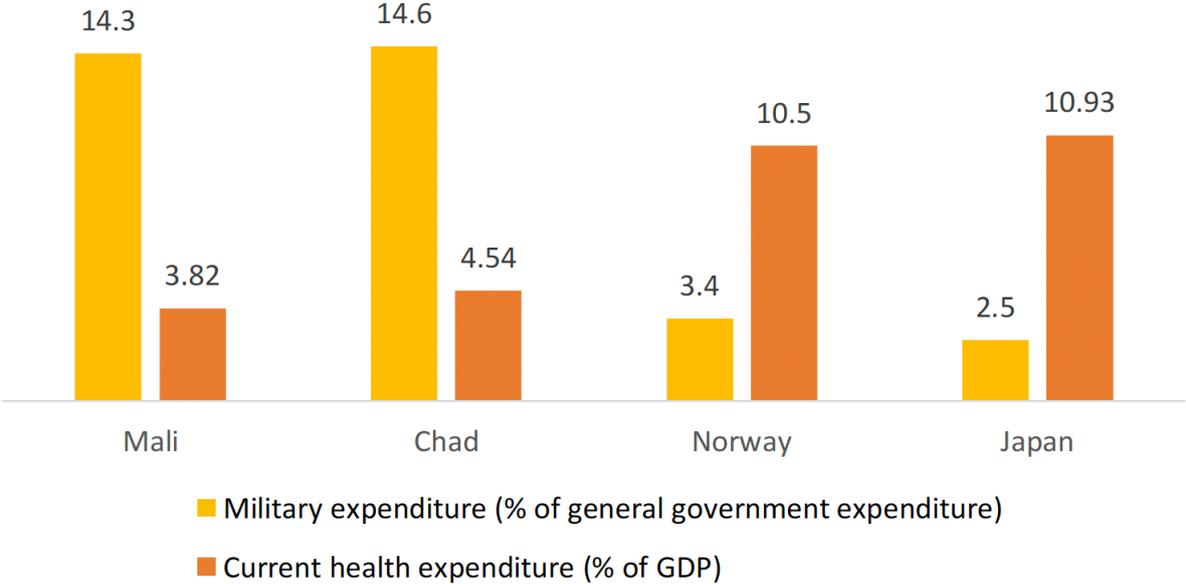
**FIGURE 15:** Trend in violent conflict associated with jihadist groups in the Sahel



**Source:** Le Roux (2019). Data source: Armed Conflict Location & Event Data Project (ACLED)

Despite deployment of various international and local security frameworks and support, limited progress has been realized in handling this violent crisis. This is emphasized by Coleman (2020) who claims that despite international community assistance (e.g. United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA) as well as leading EU-operations like Operation Barkhane) “JNIM, ISGS, and other extremist groups appear to be gaining ground by exploiting longstanding issues in the region: poor governance, perceived neglect of vast areas of territory, and existing inter-ethnic tensions (often generated by scarcity of resources)”. Meanwhile, on both national and local levels, efforts to tackle the rise of extremist violence, by governments of Burkina Faso, Niger and Mali have aimed at mobilizing and strengthening security structures across these states. More specifically, in recent years, national budgets aimed for enforcement of security forces have doubled from an average 5.4 per cent of government spending to 10,6 per cent for these three named affected states (Le Roux, 2019). As highlighted by the academic, “this equates to an increase of nearly \$600 million in military expenditures for these three countries” (Le Roux, 2019:1). The continued escalation of the extremist violent behavior has undermined various development efforts by the respective governments.

**FIGURE 16:** Comparison of governmental expenditures for military and health sectors



**Data Source:** World Bank (2020)

The root causes of the increased radicalization and violent extremism has often been linked to youth bulges and the inability of governments to effectively respond to the various political and economic grievances experienced by their youths; a factor further explained below in the report. As for the groups, their ability to take advantage of local grievances fueled by narratives centered on marginalization by the central governments have enabled them to effectively radicalize and recruit young individuals from various communities. For groups such as the Tuareg in the Malian case, the combination of charismatic leaders, ideological persuasion and local engagement have attracted numerous young followers to the group and their causes (Le Roux, 2019). As pointed out by the latter writer “the void created by diminished government presence gives the militant groups more leverage to assert influence in the affected communities” (2019:1).

## 4.2 The African Context: Demography & Socioeconomic Factors

### 4.2.1 Defining Youth

Demographic statistics do not only show the stark differences in age structures between developed and less developed countries, but also the fact that around 98 per cent of the growth in world population during the next decades will take place in less developed nations. This means that their populations are the youngest and that in some less developed countries the share of the population younger than the age of 30 can be as high as two-thirds of the total population (Lazar, 2017). In general, high population growth is caused by the fertility rate exceeding the mortality rate, as it can be observed from the classical pyramid-shaped age structure, like Western Africa's above on page 15. Africa remains the region with the highest fertility rate and the youngest populations.

**FIGURE 17:** Population Dynamics by Region

Populations of the major world regions in 2050 and 2100 under different assumptions (United Nations, 2019) (in millions)						
	2050			2100		
	Fertility variant			Fertility variant		
	Medium	Low	Instant-replacement*	Medium	Low	Instant-replacement*
<b>World</b>	<b>9,735</b>	<b>8,907</b>	<b>9,418</b>	<b>10,875</b>	<b>7,322</b>	<b>10,415</b>
Sub-Saharan Africa	2,118	1,944	1,557	3,775	2,683	1,879
Rest of Africa	372	340	327	505	348	380
Asia	5,290	4,832	5,460	4,719	3,025	5,764
Europe	710	655	763	630	428	831
Latin America and Caribbean	762	693	804	680	434	886
North America	425	391	450	491	350	598
Oceania	57	53	57	75	54	78

\* Immediate transition (in 2020) to replacement level fertility.  
Source: United Nations [2].

Source: Leridon (2020)

Despite fertility rates declining in several African countries over the last two decades, the high fertility is still a major driving factor in Africa's rapid population growth. For example, while an average European woman's fertility rate is as low as 1.6, in Africa the average woman could expect to have 4.5 children (Pison, 2017). According to the United Nations population data, by 2050, the continent's population is likely to be four times as large compared to its current (2020) size (United Nations, 2020).

#### 4.2.1.1 Africa's Youth Bulges

Compared to other regions, Africa has by far the largest relative youth populations. The number of youth in Africa continue to grow, and between 2020 and 2030 the continent is projected to see its youth population increase by 42 percent. This upward trend is expected to continue throughout the remainder of the 21st century (UN, 2015). In 2020, the continent median age is around 19.8, with Sahelian countries such as Niger expecting to have the lowest median age,

15.1. If the long-term projections are accurate, Africa's youth population size is expected to soon be equivalent to twice Europe's entire population. Hence, with one-third of its population being below age 34, youth are considered to be the continent's greatest resources (Mo Ibrahim Foundation, 2019). If well managed, Africa has the potential to effectively reap its enormous youth demographic benefits - "demographic dividend" presented by its largest shares of population. However, in order for Africa to put its youth in a more advantageous position and offer them improved conditions for advancing their level of human capital, improvements in areas like education, healthcare and employment are key and necessary. Finding effective ways to harness this potential nevertheless seems so far to be lacking.

#### 4.2.2 Education Attainment

The education structures of many African countries remain poorly developed, therefore leaving out a large proportion of the population unable to attain basic education. The 2018 Ibrahim Index of African Governance (IIAG) noted that between 2013-2017, ½ of the continent's (27) countries reported deterioration in their education systems. This implies that the majority of the continent's population experience declining education (Mo Ibrahim Foundation, 2019). According to an UN report, in some countries, fewer than 80 per cent of the 15-24 years olds are literate. In countries such as Niger, where youth population is projected to grow by 96 % within the next 15 years (as of 2015), only 24 percent of the youth population were literate in 2014. Similar trends of anticipating rapid youth growth in the context of low literacy rates are observed in Burkina Faso, Mali, Nigeria, among others (UN, 2015). As highlighted by this latter report "inadequate investment in the health and education of young people limits their ability to reach their full productive potential and to contribute to economic development". Furthermore, "only 1.1% of 15-24 year olds in sub-Saharan Africa participated in a vocational education programme in 2017" (Mo Ibrahim Foundation, 2019). The combination of this unfavorable trend and limited access to program that prepare young people for labor market and other forms of transitions has significant negative implications for the continent's search for achieving a "demographic dividend" or economic development. The mismatch between education system and labor markets' needs is well evident across the continent and has resulted in an unprecedentedly high youth unemployment rate.

#### 4.2.3 Unemployment & Waithood

The inability to effectively manage and serve its increasing number of youth population with adequate educational systems contributed Africa to become one of the continents with the highest youth unemployment. As pointed out "across the continent, unemployment rates among 15-24 year olds with advanced level education are higher than for those with basic education apart" (Mo Ibrahim Foundation, 2019:1). In Mali, for example, "more than 1/2 (55.6%) of 15-24 year olds with an advanced education are without a job, compared to 3.3% of those with basic education." (Mo Ibrahim Foundation, 2019). The lack of social safety nets and formal employment opportunities means that many young Africans need to find their sources of income through informal sectors in order to survive. In order words, for many of those

youths who are employed, informal jobs are often the default rather than the exception, and for several of these countries, informal sector makes up a large share of the national economy.

One of the consequences of this, is that unemployment rates often do not reflect the realities of these respective labor markets. Another implication of the unemployment and poverty trap is delays in transition to adulthood “waithood”, which in return results in a negative outlook in terms of financial independence. A survey by Afrobarometer shows that the lack of regular income continues to be one of the key challenges faced by African youths. Around 37 % of the correspondents aged 18-35 in the survey claimed to have been without income numerous times (Mo Ibrahim Foundation, 2019). Furthermore, the share of youth participating in the labor force is among the lowest in the world for both genders. For girls and young women, lack of access to education and training deprive them of ability to attain higher education and formal employment. In order to attain sustainable development and gender equality across Africa, empowerment of women and girls, their rights and investing in their human capital need to be taken seriously and regarded as a fundamental competent of the overall development process.

Nonetheless, given the extremely high unemployment and low labor force participation, it seems likely that many out-of-labor force youth, both male and female are not actively seeking employment because they see no possibility of obtaining it. The fact that many young Africans believe that their own governments are not doing enough to tackle unemployment issues highlights the need for African governments to reflect and take more decisive actions to ensure that the situation is reversed and that Africa begins to benefit from its youth bulges. So far, the development seems to point that a continue inaction to use this young synergy may in the long term contribute an increase in political instability. Hence, through extremist groups, and other socioeconomic challenges like migration among several, the continent’s overall future progress may potentially be threatening.

**1.3. Youth Bulges and Conflict in African Context**

A study carried out between 1970 and 1999 on the relationship between age structure, armed conflict, economic growth and democratization at Population Action International showed that not only was there a robust relationship between age structure and democracy, but also “countries with 67 percent or more of the population younger than 30 years of age were 26 percent more likely to experience civil conflict between 1970 and 1999” (Sciubba, 2011: 22). Urdal (2006) estimates that the risk of civil war is 150 per cent higher for a country where the youth population makes up to more than 35 percent of the total adult population compared to countries with population structures at the OECD average.

**FIGURE 18:** Correlation between demography, development & security

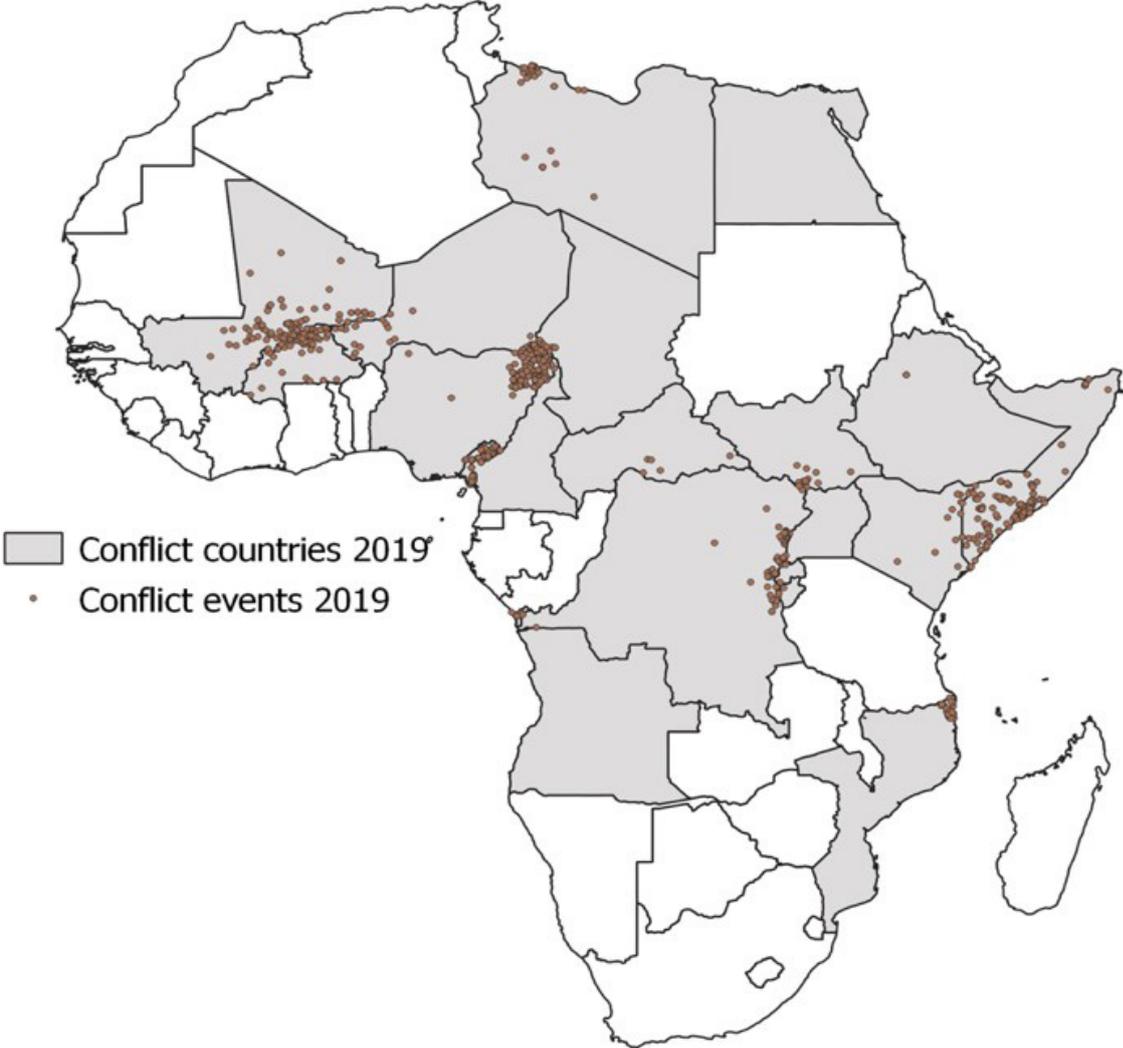
Percent Population 0-29 Years	Percent Likely to Have Civil Conflict	Percent Likely to Be Fully Democratic	Median Average GDP Growth
67 +	26	13	3.6
60-67	15	21	3.1
45-60	9	74	3.6
30-45	6	83	2.4

Source: Leahy, E., Engelman, R., Vogel, G. C., Haddock, S. and Preston, T. (2007) cited in Sciubba (2011:22).

Nonetheless these findings have immense policy implications for African states, as it implies that African governments emphasizing the fostering of peace, democracy and development

may face real security challenges following from youthful age structures that, if mismanaged, can undermine development prospects. This is because, as dependents, children have limited ability to financially contribute to their family’s well-being and less to their nation’s economic growth. In order to economically contribute, they require “care for their basic needs, education, and the hope of employment as they enter working ages. However, when these children become young adults, they can play an essential role in their country’s economy, and thus its development and security in a broader sense” (Sciubba, 2011: 22). Moreover, a youthful age structure often refers to both children and young adults, but academics are often interested in young people aged 15-29 years. This is because, at this age, the majority of these young people are often politically, socially and economically active and therefore can have an influence on the national security in a way that those younger are not capable of. This is also the time of adolescence when most are in search of attaining education, jobs, pursuing marriage and starting their own families. The map below (Figure 19) shows the trend in state conflicts only, indicating both conflict countries and conflict events. The point is to show that conflicts can be very local even if we talk about it at country level.

**FIGURE 19:** Conflict events and affected countries in Africa, 2019



Data Source: Palik and Rustad (2020) – Data source: UCDP (2020)

However, a large youthful age structure can limit these socio-economic and political opportunities, as is currently observed in many African societies. The obstacles faced in securing the basic needs such as education, jobs and a family have stalled many young men's transition to adulthood (Dhillon, Dyer and Yousef, 2009). The scholars use the case of Northern Africa to point out how the inability of these states to provide for their growing populations, especially the youth through access to basic resources such as free education, good health care, stable employment opportunities and political participation have resulted in many people postponing the transition into full adulthood and involuntarily delaying family formation. They argue that, contrary to common perceptions, young men in this part of Africa have one of the lowest marriages rates in less developed countries, with only 50 percent of these men between the ages 24 and 29 being married. This leads us to the next section: examining the situation in the Sahel in order to identify the main demographic, peace and security challenges that countries in this region face.

### 1.3.1 Youth and Security Challenges in the Sahel

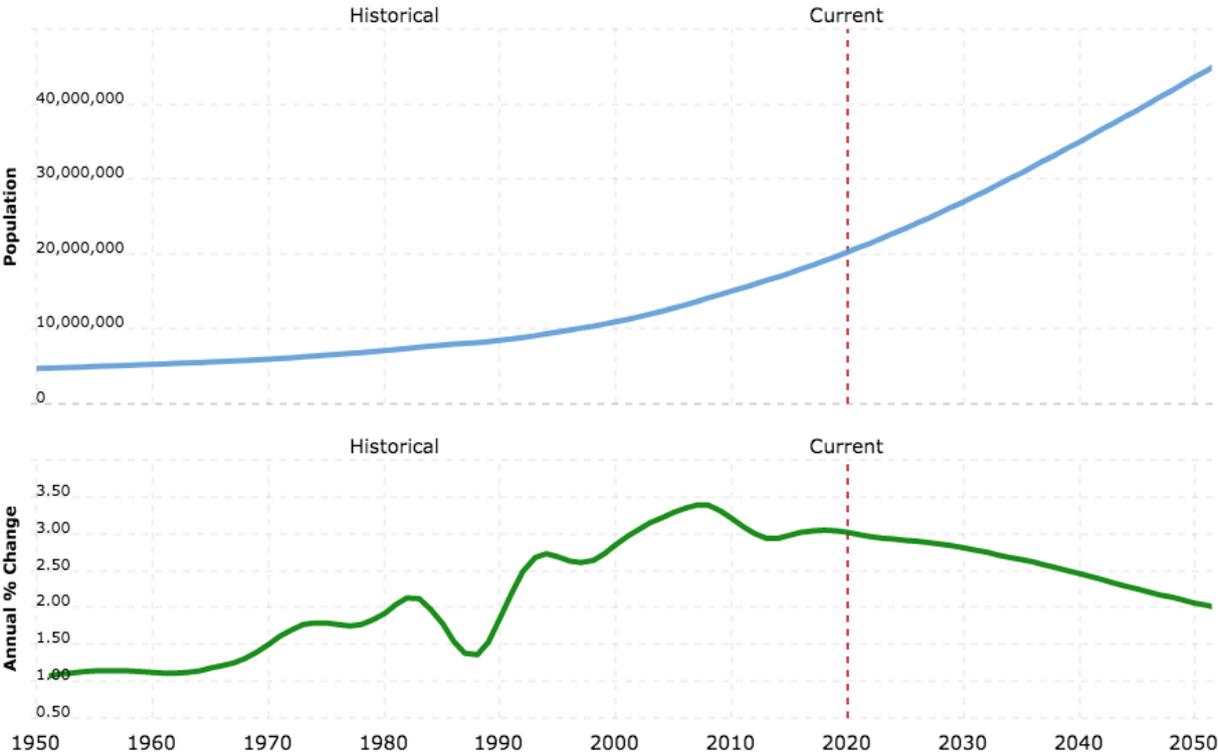
Plagued by multiple challenges, which range from economic instability, environmental degradation, climate change and food insecurity to armed conflict, terrorism and organized crime (e.g. illicit human, weapons and narcotics trafficking), the Sahel region is at the centre of international political debates (Danjibo, 2013). Geographically, the harsh environmental conditions in the region have made parts of it almost unsuitable for human existence, thereby making the region difficult to secure. This situation is further exacerbated by the massive influx of migrants from other African countries and the existence of terrorist groups such as Al Qaeda in the northern region and other jihadist groups including the separatist Tuareg forces and Boko Haram (Lazar, 2017). With the region including some of the world's weakest countries like Burkina Faso, Chad, Niger, Nigeria, Senegal, Mali and Mauritania, the Sahel region remains one of the most underdeveloped and complex areas in the world. Agbiboa (2015: 34) argues that "although the exact impact of the Sahelian crisis has varied from country to country, the overall sub-regional dynamics highlight that certain cross-cutting issues are shared by all of the countries." The foregoing situation in the region is additionally complicated by the presence of international and bilateral security alliance forces such as the G5 Sahel, funded by various European countries including France. These security frameworks have a goal of providing security services in order to combat the increasingly transnational security threats in the region.

However, the lack of effective security solutions achieved so far with these mechanisms in place has warranted the perspective that, countering the widespread insecurity challenges and fragility in the Sahel, requires a more holistic approach. This can be achieved by focusing on addressing the driving political and socio-economic structural causes of conflict, instead of the current strategy of seeking a military solution which has had limited success (Ikelegbe and Garuba, 2011). As suggested by Agbiboa (2015: 34) "it is critical to devise strategies that send reassuring messages to the beleaguered populations living in these Sahelian countries, especially the youth who constitute the vast majority of inhabitants". Consequently, many academics have argued that the key driving forces behind the instability in the Sahel is the large youth cohort and the government's inability to effectively absorb this segment of the population economically (e.g. education and employment opportunities), politically (democracy) and socially (marriage). For many of these youth, the lack of employment opportunities and not being financially capable of catering for themselves or getting married, creates favorable conditions for these youths to turn to crime or other forms of violence. Drawing on the case from Northern Mali, which is one of the fastest growing and youngest countries in the Sahel, the following section illustrates in more details how demographic dynamics such as large youthful age structures increase the risk for security challenges.

**4.2.3.1 Northern Mali: Youth and Conflict**

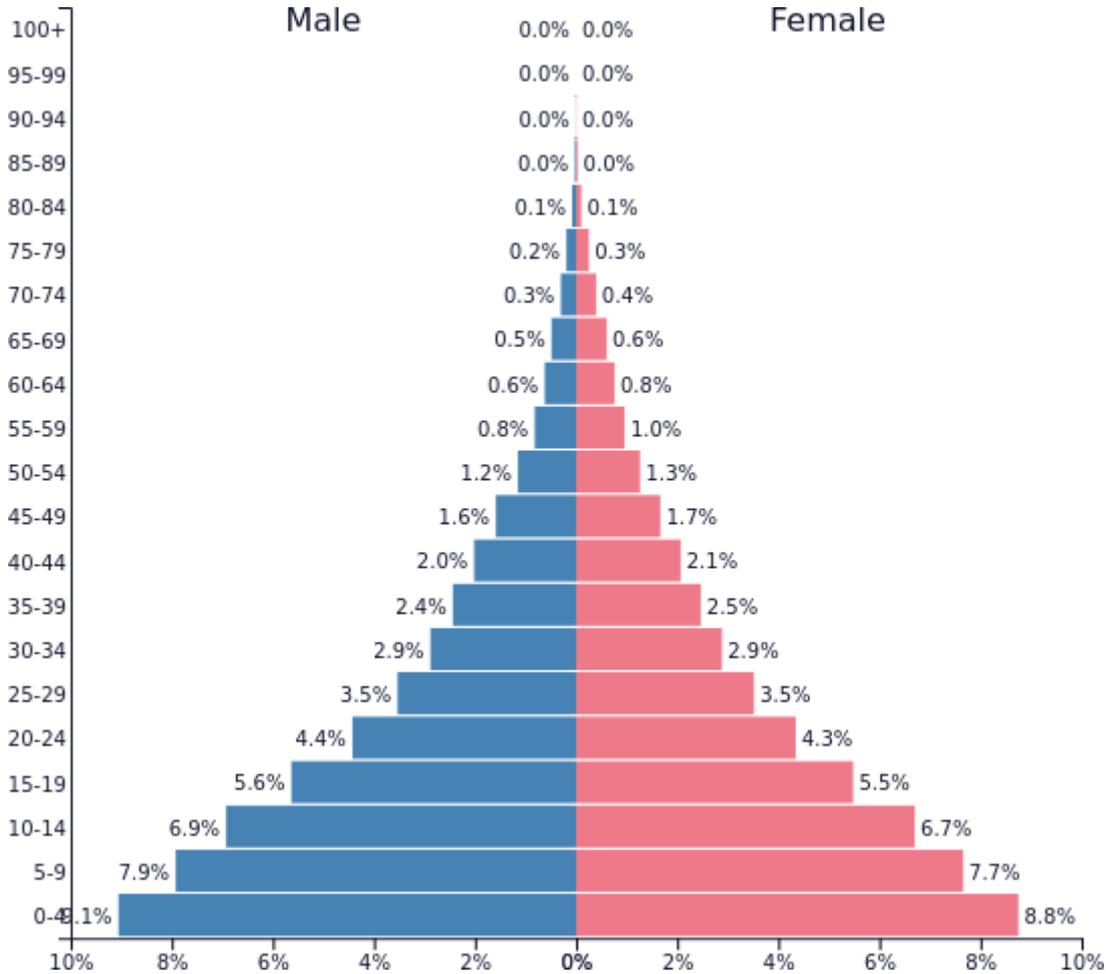
With a continuous declining economic growth, a high fertility rate of 5.92 per woman and a population of 20 million - a 3.02 % increase from 2019, the Sahel country of Mali is considered to have one of the highest shares of youth populations in the region. The country, which is also home to some of the most complex security challenges (e.g. terrorism) is expected by 2050 to observe a population increase up to 40 million (Macrotrends, 2020). Considered to be one of the poorest and weakest nations in the world, the Malian government has struggled to effectively manage the increasing demographic pressures. Poor governance combined with the state’s inability to provide basic needs such as education, health, food and stable employment have left a majority of its population feeling politically excluded and economically marginalized. Similar to its neighboring countries in the region, the majority of the country’s population consists of youth, a demographic trend which is the result of a very high fertility rate as described above. The vast bulk of these youth are often young unemployed men, who, as a result of the unfavorable labor market conditions, remain unmarried. Agbiboa (2015:38) points out a study conducted by Mali’s Poverty Reduction Strategy Paper (PRSP) which found that in 2015, around “300,000 youths approach the labour market annually and the vast bulk of them seek employment in vain”. While the blue line in Figure 20 indicates trend in population size up to 2050, the green one shows annual percentage change in population growth within the same timeframe. Based on the figure, the blue line seems to show an exceptional growth in Mali’s population between 2020-2050. As for the annual percentage change, there appears to be a downward trend.

**FIGURE 20: Population Trend for Mali**



Source: Macrotrends (2020)

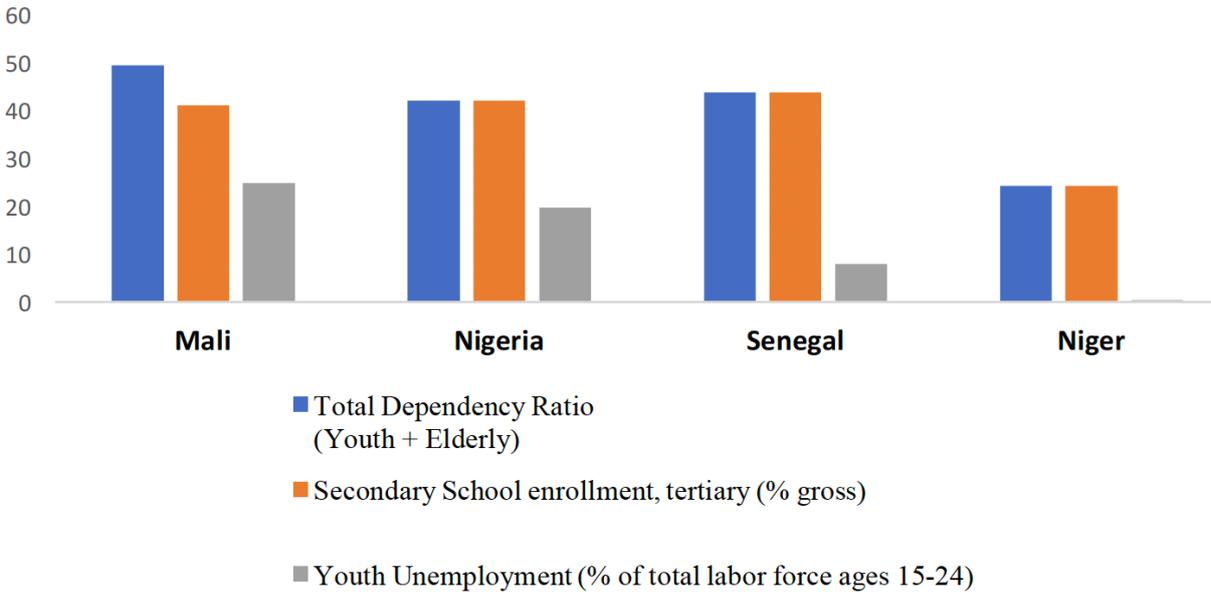
**FIGURE 21:** Population Pyramid for Mali, 2019



**Source:** United Nations and Population Pyramid (2020)

Given the fact that the youth in the country make up a large proportion of the population, the high rate of unemployment therefore can lead to an increase in poverty and frustration, especially in the urban areas (European Parliament, 2014). This in return has had severe implications on the country’s security, as it has often resulted in violent conflict (Danjibo, 2013). The combination of demographic challenge, economic instability together with environmental degradation such as droughts not only undermine the country’s human and economic development prospects, it has also resulted in an increase in terrorism and organized crime (e.g. illicit drug, human and weapon trade). To put it in another way, the high unemployment rate, which is exacerbated by the lack of inclusive governance, has enabled the rise of a religious extremism problem across the country. In many cases, marginalized youth seeking economic opportunities have chosen to become a part of a terrorist group just so that they can finance their social needs like emigration or marriage (Sommers, 2015; Lazar, 2017). As claimed by the latter “the issue of terrorism highlights the feedback cycle between security for the state and security for the individual. It is logical that large proportions of disadvantaged and disenfranchised youth would be more susceptible to terrorist recruitment” (Lazar 2017: 30).

**TABLE 3: Comparison: Education, Unemployment and Dependency Rate in the Sahel**



Source: World Bank (2020)<sup>1</sup>

For example, the security measures in Northern Mali, especially the Timbuktu, Gao and Kidal regions, which are known for immense poverty, climate change challenges, and the absence of government, have greatly deteriorated over the past years. The recent deplorable acts of violent conflict in the area are mainly a result of the protracted conflict between the mainly young separatist Touareg rebels and the Malian government. Some of the key underlying grievances in the recent Touareg uprising in 2007 are related to widespread unemployment, neglect of the Touareg youth who returned home with considerable military training. The majority of these youth were recruited while living as economic migrants in Northern Africa, especially Libya, following the drought crisis of the 1980s (Ikelegbe and Garuba, 2011). Other grievances include “charges of exclusion; discrimination; and the lack of opportunities, resources and infrastructures” (Ismail et al. 2009, 46). Political marginalization and the lack of employment opportunities in the North means that in most cases, the youth have had to migrate either to other parts of Africa or eventually Europe through a Libya plagued by violence and despite the dangers of crossing the Mediterranean (Ismail et al. 2009).

In short, the consequences of large youth cohorts, lack of development coupled with original grievances which can be traced all the way back to the 1960s during the French colonial era, have resulted in a surge of various security challenges across Mali. The threats have become difficult for the central state to effectively contain or quash. As if that was not enough, the existence of other terrorist groups such as Al Qaeda, pressure posed by external actors such as the US Panel-Sahel counter-terrorism mission, and the operation of French and other western multinational companies (e.g. Areva) have added to the “extraneous factors and cobweb of relations in the conflict that have put the youth at the centre of crossfire in the Sahel” (Ikelegbe and Garuba, 2011:107).

<sup>1</sup> Note that the World Bank does not provide any unemployment stat for Niger.

## 5 STATISTICAL FRAMEWORK & ANALYSIS

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### 5.1 The Data and Model

The main empirical analyses presented in this report are based on an existing model developed by Hegre et al. (2013) in their study *Predicting Armed Conflict, 2010-2050*. In this paper, the academics “predict changes in global and regional incidences of armed conflict for the 2010- 2050 period” (2013: 250). The predictions developed by the model are grounded on estimations from a 1970-2009 cross-sectional dataset with projected data for up to 2050. The global dataset covers 169 country-years. Key predictions take into account information on previous and current conflicts history, conflict details, neighboring countries’ conflict status, demographic characteristics as well as socio-economic factors. The following sub section provides more detailed information regarding these explanatory variables used in the empirical analysis, and where they are derived from.

### 5.2 Conflict Variables

Data on conflict onset are from the UCDP/PRIO armed conflict 2010 updated dataset (Gleditsch, Wallensteen, Eriksson, Sollenberg and Strand 2002; Themner and Wallensteen 2011). This dataset accordingly “records conflicts at two levels. Minor conflicts are those that pass the 25 battle related deaths threshold but have less than 1,000 deaths in a year. Major conflicts are those conflicts that pass the 1,000 annual deaths threshold”. The focus is only on civil wars and not interstates conflicts, and details on conflict status “no conflict, minor or major conflict” at (t-1). Moreover, “to capture the impact of conflict history further back in time, we also record in three variables the log of the number of years in each of the three states up to (t-2)”. Another conflict variable included in the analysis is neighboring conflict, this is because prior studies have confirmed the so-called cross-border spill-over effect.

### 5.3 Youth Bulges Operationalization

Similar to other few cross-national literatures over the past decades, which have addressed the relationship between security challenges such as armed conflict and youthful age structures and the measurement used by Urdal (2006) is applied as a frame of reference to seize the effect of youth bulges on conflict predictions. In other words, the model used to predict Africa’s future conflict incidents in this report operationalization youth bulges as the percentage of the populations aged 15-24 years relative to the total adult population (15 year and over). This again, goes back to Urdal (2006)’s argument for why this measure is more accurate than others. In which, he reasons that “youth bulges in countries with continued high fertility will be underestimated because of large under-15 populations that deflate the youth bulges indicator. At the same time: countries with declining fertility and a relatively small under-15 population are ‘weighted’ upwards” (2006: 615). Data on age distribution stems from the United Nations (UN, 2007).

### 5.4 Education, Population Size and Infant Mortality

The significant effect of education on risk of conflict onset has been noted in several studies. The common belief is that higher levels of primary and secondary enrollment are associated with lower conflict risk. Data on education used in the analysis are derived from a dataset for the period 1970-2000 compiled by

the International Institute for Applied Systems Analysis (IIASA). Studies also show that large population sizes are correlated with increased conflict risk. Consequently, countries with greater population sizes have a higher probability of experiencing civil war onset. To capture this, a measure of population size is included in the model (Hegre and Sambanis, 2006). Furthermore, prior research has found that the level of development (e.g. poverty) is one of the most significant determinants of civil conflict onset (Cederman, Weidmann and Gleditsch, 2011). For example, Gurr (1970) argues that relative “horizontal inequalities” or uneven distribution of national wealth, among other factors, have the potential to contribute to economic grievances. This in return, can result in a sense of collective grievance among the general population towards the wealthy minority ruling elites.

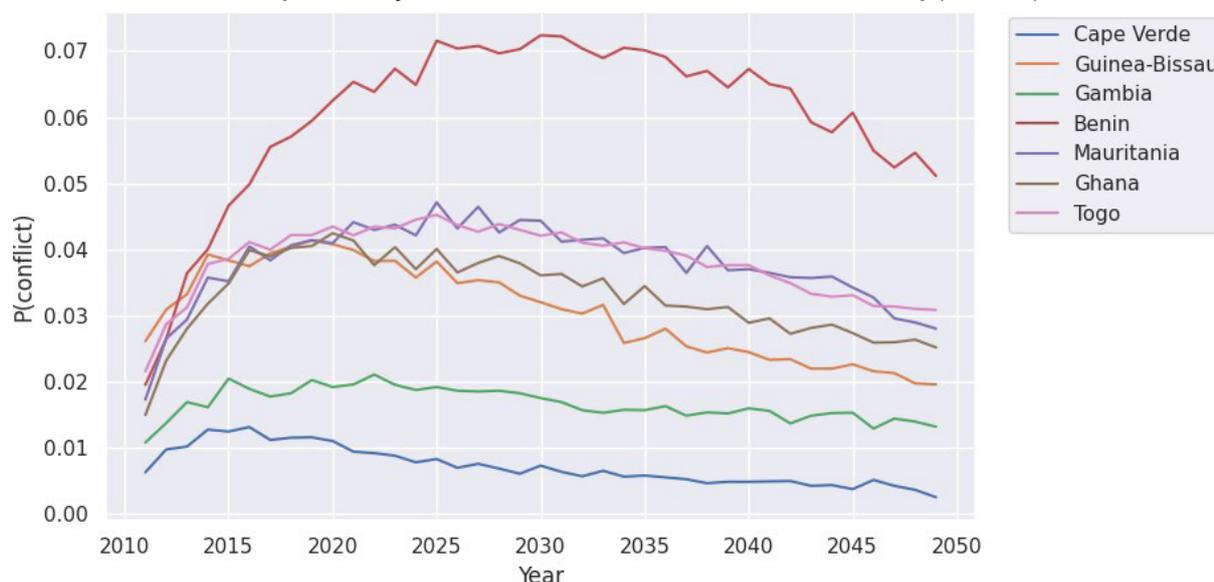
Since various aspects of development can strongly affect fertility rates, and thus the age structure, in which the level of development is therefore regarded as a possible predictor for conflict onset. Hence, to proxy for poverty or level of development, the model also relies on infant mortality rate (IMR), which is defined as “the fraction of live-born children who die before the age of one”. In comparison to other general economic variables like Gross Domestic Product (GDP), IMR captures better various aspects of development (Urdal, 2006). In addition to also being a good proxy for a state’s level of development, IMR also captures the level of gender inequality, education and the functionality of the national health care system (Sen, 1998). Data on both total population size and infant mortality rate are drawn from the 2006 Revision of the World Population Prospects (UN, 2007). Other key variables include ethnic cleavages, oil dependence and neighborhood characteristics. These explanatory variables which are used to produce forecasts up to 2050 cover the most significant structural determinants understood to explain risk, onset and duration of violent armed conflict.

According to the scholars the “predictions are obtained through simulating the behavior of the conflict variable implied by the estimates from this model” (2013: 250). Projections for the period 2011-2050 from the World Population Prospects and the International Institute for Applied Systems Analysis (IIASA), have been used as the base for the set of explanatory variables used in the model. Note that the model treats conflicts, neighboring conflicts and recent conflict history as endogenous variable, and out of sample validation indicates that the model framework used in the analysis predict well. While using this model, conflict projections for individual countries in the West African (including the Sahel) region as well as the whole Sub-Saharan Africa are presented. The aim of the model is to show the probability of future development of violent conflict incidents within individual countries in the African continent, for the period between 2011 up to 2050. Note again that, youth bulges and other demographics factors are some of the core determinants applied in this model. Therefore, making the predictions made by the model extremely relevant in understanding the dynamic relationship between demography, peace and security, with the focus on the Sahel context.

## 6 EMPIRICAL RESULT: PREDICTIONS 2010-2050

Figures below present simulated incidences for the 2010-2050 period for a set of Western African countries listed in the various categories. The countries are divided into three different categories based on their probability of conflict onset –  $p(\text{conflict})$  in 2011, which is presented on the Y-axis. Therefore, it is important to note that the value in the Y-axis is different for the three categories. Whereas figure 22 consists of countries with the lowest value  $p(\text{conflict})$ , figure 23 on the other hands, focuses on countries with the highest value. The figure 24 includes countries with various value for  $p(\text{conflict})$ . For the purpose of this report, the result presented in figures 23 and 24 are those of interest.

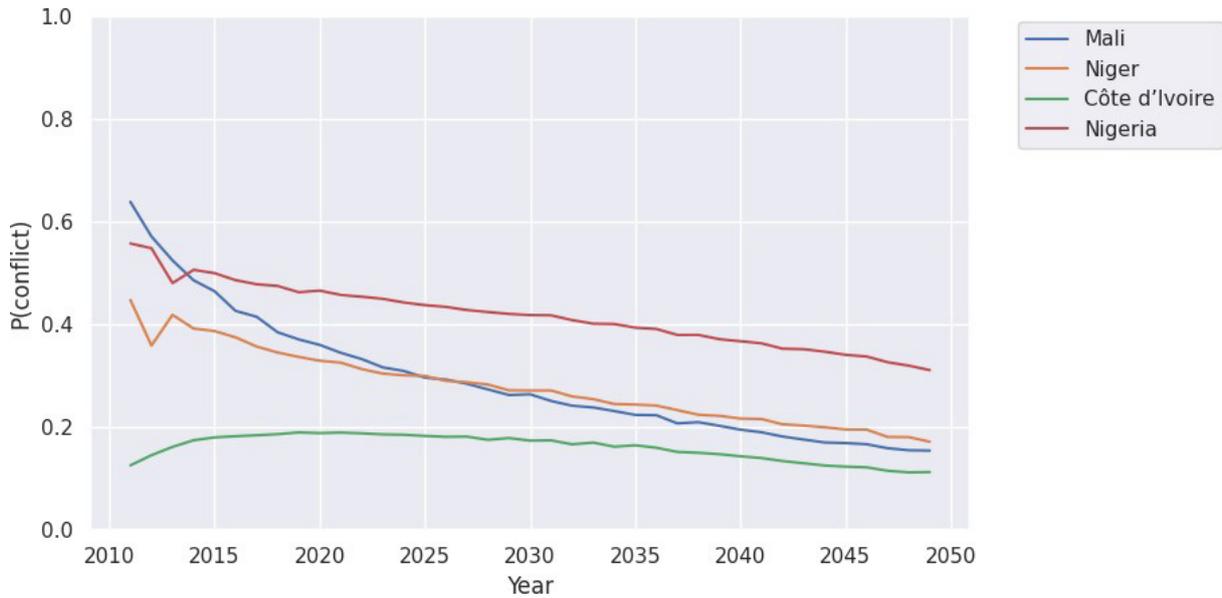
**FIGURE 22:** Predicted probability of conflict risk - countries with lower value  $p(\text{conflict})$



**Data source:** Hegre et al. (2013) replication data

As it can be observed from the result in figure 23, compared to other Sahel countries, Nigeria seems to have much more pessimistic forecasted trend, followed by Niger then Mali. Despite having on average high likelihood of risk of conflict onset, however; these probabilities seem to decrease as time goes by for all the states. In other words, the simulation indicates a continued decline in risk of internal armed conflicts taking place in these various countries; a downward trend which has been reflect in the global conflict pattern as well.

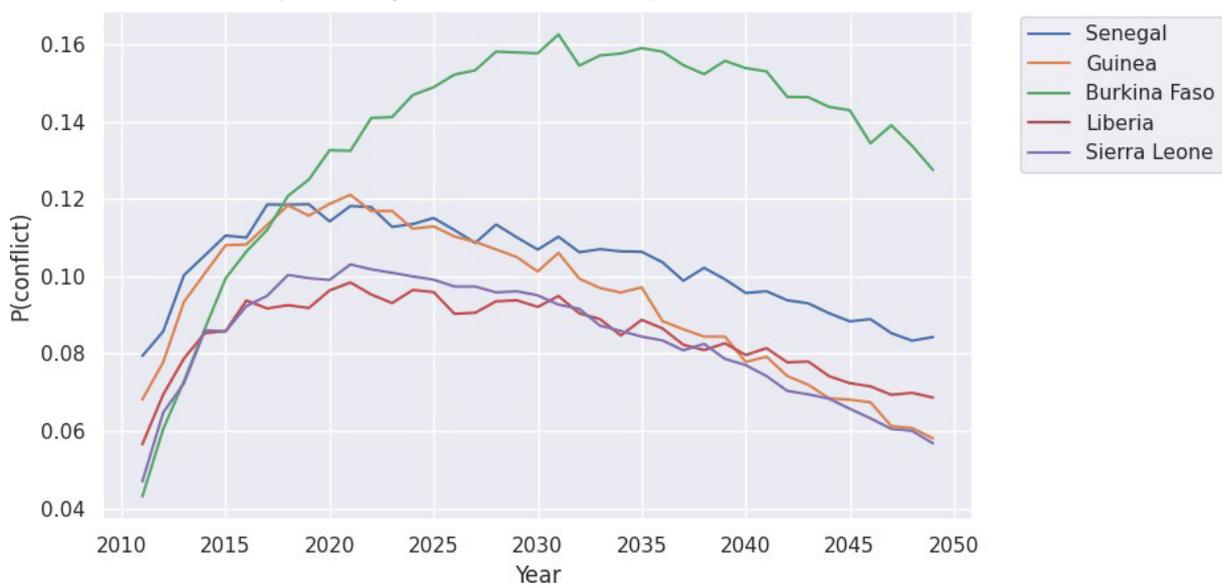
**FIGURE 23:** Predicted probability of conflict risk (Sahel) - countries with higher value p(conflict)



Data source: Hegre et al. (2013) replication data

Figure 24 shows projected incidence of conflict, and as it can be observed, there is a significant difference between Sahelian countries such as Burkina Faso and its neighboring Western African states like Senegal and Guinea. With its peak of potentially experiencing conflict onset around year 2031, the country seems to have unconventional higher p(conflict) value than other countries in this category. This is arguably a reasonable prediction based on the increasing violent trends observed over the past years in Burkina Faso. The forecasted trends for other countries in the figure are considerably lower. With varying degree, the overall forecasted trend shows a decrease in incidence of conflict for the various countries used in the model. This is despite taking into account the history of serious conflicts in states such as Côte d'Ivoire, Sierra Leone and Liberia.

**FIGURE 24:** Predicted probability of conflict risk- comparison

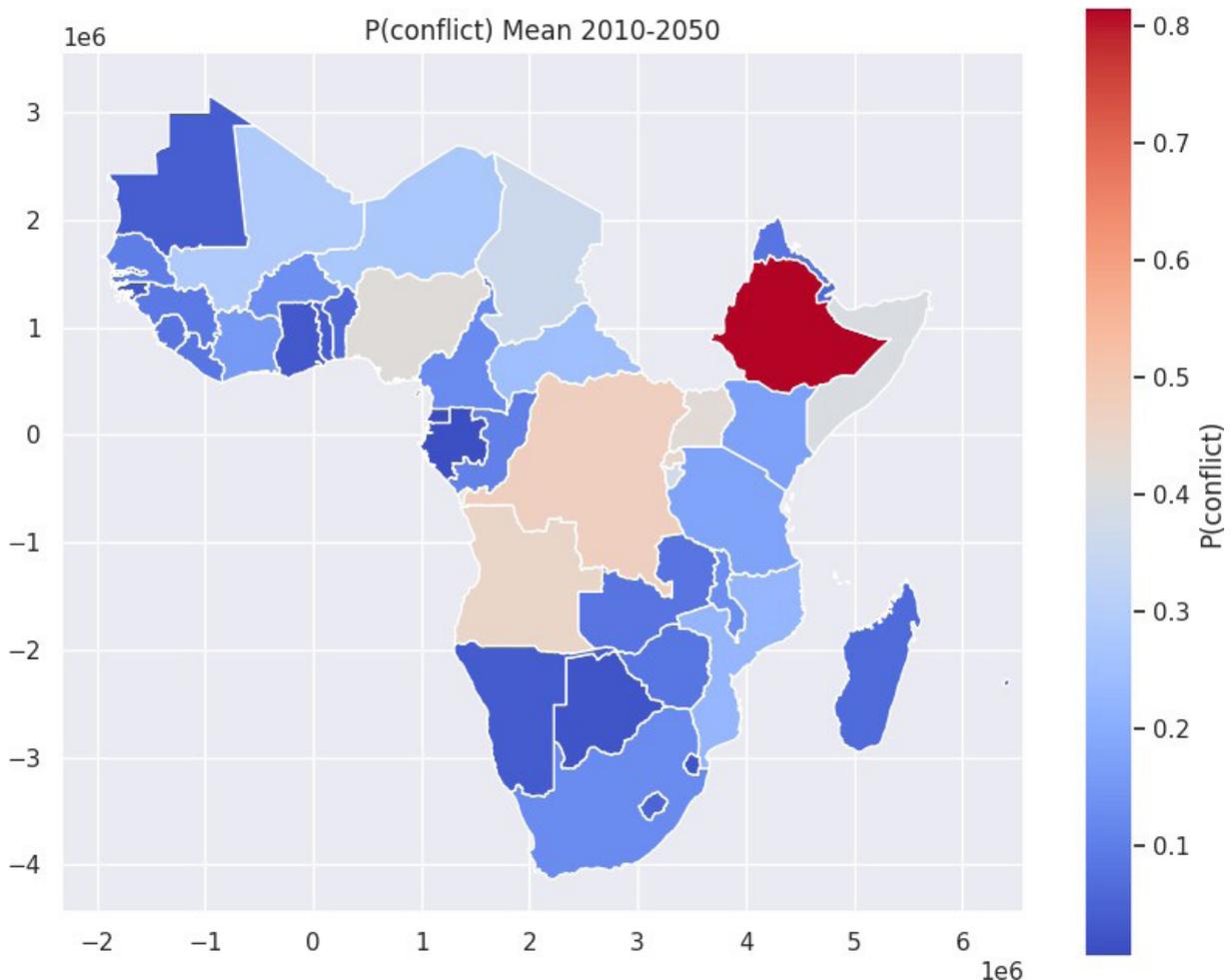


Data source: Hegre et al. (2013) replication data

## The Heat Map

The two maps below show empirical results from the simulation, and report the average and maximum findings across the model specifications. Figures 25 and 26 show maps of the probability of various African countries experiencing armed conflicts sometimes between the period 2010 to 2050. The maps indicate how the forecasted patterns of conflict gradually changes with time. Dark red shades represent high risk of conflict. The first map presents the mean likelihood of conflict onset in this timeframe for Sub-Saharan African states.

**FIGURE 25:** Predicted probability of conflict risk- on average across Africa 2010-2050



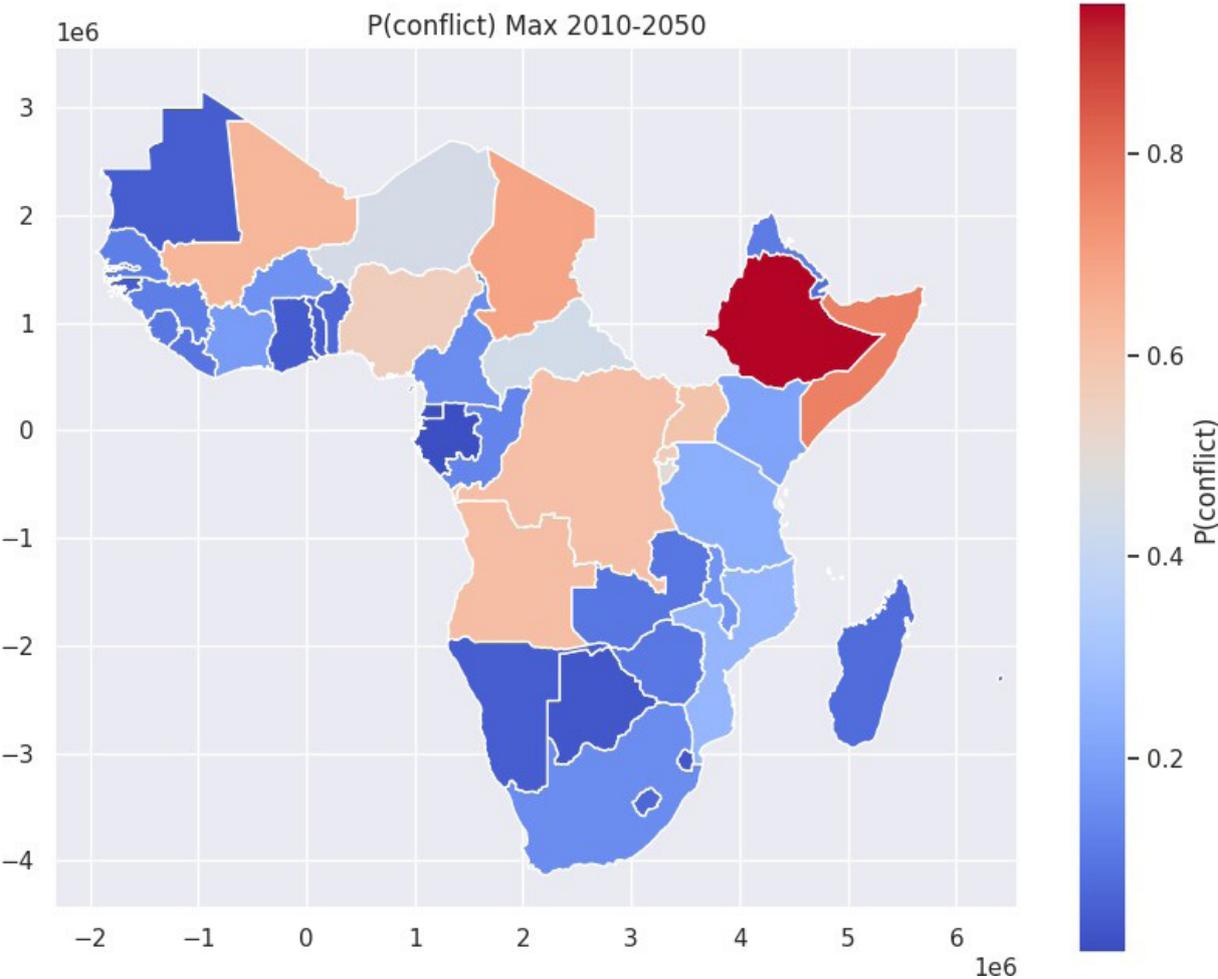
**Data source:** Hegre et al. (2013) replication data

A noteworthy trend observed from both maps is the extreme red color overshadowing Ethiopia, a conflictual country with a long conflict history. The country seems to have the highest predicted probability of conflict onset sometimes between the period 2011-2050, when taking into account both the average and maximum values. Another obvious but noteworthy country to have high simulated risk of conflict is Democratic Republic of the Congo (DR Congo), followed by Angola and Nigeria. On average, the Sahelian countries seem to fare better off than expected in figure 25.

As for Figure 26, it shows the maximum probability of the simulated risk of conflict in the whole timeframe (2010-2050). Conflict risks are predicted to be highest in Ethiopia, Somalia, Angola, Rwanda and DR

Congo among several. This can be due to the seriousness of recent history of conflicts in these respective countries. Another way of, for example, interpreting the meaning of the prediction for DR Congo is that conflict is likely to “recommence” or continue. The forecast further highlights that some of the African countries that have no recent conflict histories are predicted to see an increase in the risk of conflict onset over the next decades, which is the case for example, Uganda. When taking into account the maximum probability, the simulations imply that Sahelian countries such as Mali, Niger and Niger are predicted to see a continuation of increased probability of conflicts.

**FIGURE 26:** Predicted probability of conflict risk- maximum across Africa 2010-2050



Data source: Hegre et al. (2013) replication data

In overall, the simulation predicts a clear increase in the incidence of conflict for certain countries within the Sahel. For many of these countries, major reason for the estimated increase in conflict risk may be due to factors related to lower level of socio-economic development. As the UN populations projections indicates a growth of populations for many African states by 2050, factor such as demography (e.g. increased in population size, youth bulges) is therefore considered to be contributing predictors for the higher level of conflict risks. For example, for country such as Niger, which has one of the fastest growing populations – is estimated to increase approximately up to 250 % by 2050, and the conflict estimate seems to reflect this pattern as well. Hence, the forecast implies that higher population growth is linked to increased conflict risk. In short, the countries with red shades have high risk of conflict primarily because they are underdeveloped, large population and high infant mortality, low education attainment, and are neighbors to other states with high conflict risk.

## 7 CONCLUSION

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### 7.1 A Population Dividend or Demographic Threat for the Sahel?

Drawing on current research literature and demographic data, this paper analyses the correlation between population growth, peace and structural security, and illustrates how a youthful age structure, or large youth cohorts, can potentially pose a threat to national security. In order to fully understand how youth bulges can increase insecurity issues such as armed conflict, terrorism and other forms of violent behaviours, the article has examined the role played by the youthful African age structure in increasing the risk of violent conflict, with a particular focus on the Sahel region. Whereas the current humanitarian and growing insecurity issues facing the Sahel region today require an urgent international and regional attention, the long-term success may prove ineffective if limited resources are deployed to address structural issues such as demography and population growth (Agbibo, 2015). Despite facing unique sets of challenges, factors such as longstanding poor governance, political, social and economic marginalisation, combined with lack of access to resources like jobs, education and marriage have lowered the cost for youth in the Sahel to engage in violent behaviours in order to achieve their objectives. Consequently, the conditions fostering instability and armed rebellion in the region can solely be tackled through implementation of effective demographic policies and inclusive political and economic reforms.

Likewise, it is important to note that large youth populations do not inherently have to be a security problem. They may in fact also present opportunities to create greater prosperity and security for the state. The Asian Tigers provide examples of countries that were able to efficiently and significantly reduce fertility rates while exploiting the labour force resource represented by large youth bulges (Birdsall and Sinding, 2001; Kelly and Schmidt, 2001). Through a rapid demographic transition, the Asian Tiger countries were able to successfully achieve a demographic dividend, a boost in the national economy, and long-term general economic and social development. This is because the fertility decline at the household level meant reducing resource needs for dependent children, allowing the governments to take advantage of the aggregate effects and reallocate these resources to other activities more useful to the state's economic development, such as education and public investment. A policy recommendation relevant to tackling the insecurity in the Sahel would therefore be that governments in the region implement appropriate mechanisms which not only contribute to a further decline in fertility, but also deal with economic and political struggles faced by youths. Pursuing such policies may not only strengthen youths' faith in political institutions, but also reduce youth unemployment, thereby preventing them from emigrating, participating in armed conflict, or being recruited to terrorist groups.

As for the case of Mali, the overall violent conflicts observed in the country can only be resolved through a strengthening of governance and implementation of the right demographic transition policies which will not put undesirable pressure on resources (land or water) and basic social services (employment and education). However, with the current demographic structures coupled with continued severe economic constraints, the youth bulge issue is most likely to continue to have a profound negative impact on the general development of the country (Ikelegbe and Garuba, 2011:107). Further research is therefore crucial for the development of accurate demographic, political and economic policies to tackle the immense security challenges in the Sahel as a whole.

## Acknowledgements

The author acknowledges the support of the Peace Research Institute Oslo (PRIO) and the United Nations Population Fund (UNFPA) (Regional Bureau for West and Central Africa Regional Office - WCARO).



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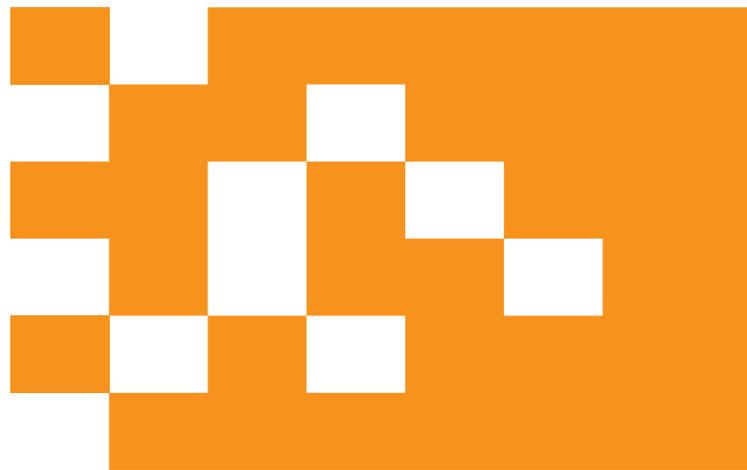
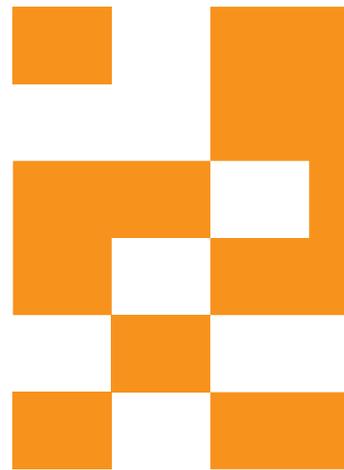
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