Challenges for Development in Current Conflict Settings

The Impact of Conflict on Child Marriage and Adolescent Fertility
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Challenges for Development in Current Conflict Settings

The Impact of Conflict on Child Marriage and Adolescent Fertility
Acknowledgements

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Executive Summary

Conflict has a gendered impact, oftentimes reversing hard won gains and advances to ensure the safety, health and empowerment of women and girls. Over recent decades, the Arab region has seen positive progress for women on many fronts. However, several alarming trends have emerged since the conflicts stemming from the 2010-2011 uprisings. For example, while child marriage had been on the decline in the Arab region, the emergence of national and localized conflicts has resulted in its more frequent use as a negative coping mechanism. In an environment where girls and young women are perceived to be susceptible to sexual assault and rape, child marriage is seen as “protective”, despite it being a form of gender-based violence.

Gender inequality, poverty, exclusion, marginalization and insecurity, particularly among conflict-affected and displaced communities, are some of the factors that contribute to the practice of child marriage. Commonly hand and in hand with the increasing rates of child marriage is an increase in fertility rates, which may compromise the short- and long-term health of mother and child, as well as the life choices (including education and employment opportunities) of the girl and her family.

It is universally agreed that child marriage is a core development and human rights issue, as it hinders the achievement of Agenda 2030 for Sustainable Development and the Sustainable Development Goals and contravenes several human rights frameworks such as the Convention on the Elimination of All Forms of Discrimination against Women (1979) and the Convention on the Rights of the Child (1989). Furthermore, child marriage and increased adolescent fertility are likely to have long-term impacts not just on the girl and her immediate family, but also society as a whole, given that her ability to contribute to a robust, thriving and stable society and region will be severely hindered.

This report considers the growing adversities faced by women and girls in conflict-afflicted countries across the Arab region, noting that younger girls are increasingly disadvantaged due to exposure to violence in their communities and heightened perceptions of insecurity; this includes child marriage. Moreover, child marriage has been linked to the transmission of intergenerational disadvantage.

This report studies the effects of conflict exposure on child marriage and adolescent fertility using exposure data from the Uppsala Conflict Data Program and the Peace Research Institute Oslo (PRIO), the Uppsala Conflict Data Program (UCDP) Georeferenced Event Dataset (GED Data), and retrospective nuptiality, the frequency of marriage in a population, and birth history data from household surveys in Iraq, Libya and Yemen collected between 2003 and 2018, to calculate rates of child marriage and fertility rates. The report reveals that exposure to conflict affects subnational patterns in child marriage and fertility in detrimental ways. In Iraq, exposure to conflict appears to be positively correlated with both child
marriage and an increase in adolescent fertility. While in Libya, significant legislation against child marriage appears to have changed the culture and attitudes towards early marriage since the mid-1980s, and thus appears to be protecting girls for the time being against this practice even under a state of institutional collapse, though caution is necessary. In Yemen, where the practice of child marriage is common, exposure to increased levels of violence appear to be breaking the secular trend of decline in child marriage.

This report adds another dimension to the understanding of the link between violent conflict, marriage patterns and fertility behaviours for young women, and the role of public policies to mitigate such practices in conflict-afflicted countries. Moreover, the results add to the understanding of how demographic changes can generate social exclusionary dynamics, leading to self-perpetuating poverty traps and the long-term disempowerment of women and girls.
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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>ACRWC</strong></td>
<td>African Charter on the Rights and the Welfare of the Child</td>
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<td><strong>ASFR</strong></td>
<td>Age-specific fertility rate</td>
</tr>
<tr>
<td><strong>CEDAW</strong></td>
<td>Convention on the Elimination of All Forms of Discrimination Against Women</td>
</tr>
<tr>
<td><strong>CEDAW Committee</strong></td>
<td>Committee on the Elimination of Discrimination Against Women</td>
</tr>
<tr>
<td><strong>CRC</strong></td>
<td>Convention on the Rights of the Child</td>
</tr>
<tr>
<td><strong>DHS</strong></td>
<td>Demographic and Health Survey</td>
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<tr>
<td><strong>ESCWA</strong></td>
<td>Economic and Social Commission for Western Asia</td>
</tr>
<tr>
<td><strong>GED</strong></td>
<td>Georeferenced event dataset</td>
</tr>
<tr>
<td><strong>ICCPR</strong></td>
<td>International Covenant on Civil and Political Rights</td>
</tr>
<tr>
<td><strong>ICESCR</strong></td>
<td>International Covenant on Economic, Social and Cultural Rights</td>
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<tr>
<td><strong>IHSES</strong></td>
<td>Iraq Household Socioeconomic Survey</td>
</tr>
<tr>
<td><strong>ISIL/ISIS</strong></td>
<td>Islamic State of Iraq and the Levant/Islamic State of Iraq and Syria</td>
</tr>
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<td><strong>LSMS</strong></td>
<td>Living Standards Measurement Study</td>
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<tr>
<td><strong>MDG</strong></td>
<td>Millennium Development Goal</td>
</tr>
<tr>
<td><strong>MICS</strong></td>
<td>Multiple Indicator Cluster Survey</td>
</tr>
<tr>
<td><strong>NGO</strong></td>
<td>Non-governmental organization</td>
</tr>
<tr>
<td><strong>PAPFAM</strong></td>
<td>Pan-Arab Project for Family Health</td>
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<tr>
<td><strong>PRIO</strong></td>
<td>Peace Research Institute of Oslo</td>
</tr>
<tr>
<td><strong>SDG</strong></td>
<td>Sustainable Development Goal</td>
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<tr>
<td><strong>TFR</strong></td>
<td>Total fertility rate</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Name</td>
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<tr>
<td>UCDP</td>
<td>Uppsala Conflict Data Program</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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Definitions

Age-specific fertility rate: Age-specific fertility rate is defined as the annual number of births to women of a specified age or age group per 1,000 women in that age group. The computation is based on Age-Period Rates, for all women age 15-49 years in seven five-year age groups (15-19, 20-24, 25-29, 30-34, 35-39, 40-44 and 45-49 years). The rate is calculated for each group using information from the three years preceding the survey. The numerator is the number of births that occurred in a period (typically the 1-36 months before the survey) to women in the age group at the time of the birth, divided by the number of women in the age group.

Birth rate (or crude birth rate): The number of live births per 1,000 population in a given year.

Child marriage: The marriage or union between two people in which one or both parties are younger than 18 years of age. Throughout this report we define child marriage as the number of girls under age 18 who have already married plus the number of adult women who were married before age 18. The definition differs from the Sustainable Development Goals (SDG) indicator 5.3.1 which measures child marriage as the proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18.

Death rate (or crude death rate): The number of deaths per 1,000 population in a given year.

Demography: The scientific study of human populations, including their sizes, compositions, distributions, densities, growth and other characteristics, as well as the causes and consequences of changes in these factors.

Demographic transition: The historical shift of birth and death rates from high to low levels in a population. The mortality decline usually precedes the fertility decline, resulting in rapid population growth during the transition period.

Early marriage: Early marriage encompasses child marriage but also includes situations that do not qualify as child marriage, such as marriages in which one or both spouses may lack capacity to give full and informed consent or may lack capacity to consent to sex within a marriage.

Family planning: The conscious effort of couples to regulate the number and spacing of births through artificial and natural methods of contraception. Family planning connotes conception control to avoid pregnancy and abortion, but it also includes efforts of couples to induce pregnancy.
**Marital fertility rate:** The number of live births to married women per 1,000 married women ages 15-49 in a given year.

**Marriage rate (or crude marriage rate):** The number of marriages per 1,000 population in a given year.

**Nuptiality:** The frequency, characteristics and dissolution of marriages in a population.

**Structural break:** A structural break occurs when a time series abruptly changes at a point in time. This change could involve a change in mean or a change in the other parameters of the process that produce the series. Being able to detect when the structure of the time series changes can give us insights into the problem we are studying.

**Secular trend:** A phenomenon that is not cyclical or seasonal and exists over a relatively long period of time.

**Secular decline:** An observed decline in a variable over that exists over a relatively long period of time and is not cyclical or seasonal.

**Total fertility rate:** The average number of children that would be born alive to a woman (or group of women) during her lifetime if she were to pass through her childbearing years conforming to the age-specific fertility rates of a given year.
Introduction: The Impact of Conflict on Child Marriage and Adolescent Fertility

This report considers the growing adversities faced by women and girls in conflict-afflicted countries across the Arab region, noting that younger girls are increasingly disadvantaged due to exposure to violence in their communities and heightened perceptions of insecurity.

These environments present unique challenges for women and girls, predominantly the most marginalized, as exposure to violence weakens their situation both inside and outside the home. Young women living in conflict-affected countries face risks that are likely to have negative effects on their sexual health and wellbeing.3

Not only are women and girls at high risk of being directly targeted by violence; in some instances, the mere perception of insecurity can translate into a deterioration of women’s liberties and mobility, as the general state of chaos and lawlessness intensifies the risk of sexual violence. This includes the adoption of child marriage as a coping mechanism. Child marriage refers to any formal marriage or informal union between a child, defined as under the age of 18, and an adult or another child.4

Child marriage serves as a negative coping mechanism, meant to “protect” women and girls from sexual violence. Perceptions of insecurity may compel guardians to marry off women and girls earlier than they might have in the absence of violence; this, in turn, may result in early childbearing.5 Moreover, increased levels of poverty in conflict settings may also encourage families to marry off girls early.

Likewise, conflict leads to a steady erosion of socioeconomic rights, where women and girls are particularly hard hit. Conflict impacts individuals in specifically gendered way. These situations are disproportionately difficult for women, not only because they may be deliberately targeted by violence, but because violence also diminishes women’s rights, agency and decision-making power, not because women are inherently vulnerable but because the context creates vulnerability. Violence exacerbates pre-existing gender inequalities, and adaptive responses to conflict may re-entrench harmful gender norms, leaving women and girls at a great risk of marginalization.6

Child marriage is a core development and human rights issue, as it hinders the achievement of 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs). These include target 5.3, which seeks to “eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation” (under Goal 5 to “achieve gender equality and empower all women and girls”). Target 5.3 is critical to the sustainable
development agenda, as child marriage is rooted in gender inequality. Moreover, child marriage has been linked to the transmission of intergenerational disadvantage. Gender inequality, poverty, exclusion, marginalization and insecurity are both cause and consequence of child marriage.

This report examines how the recent conflicts in Iraq, Libya and Yemen have altered the marriage and fertility trends of young women in these countries. Despite the increasing attention to the practice of child marriage, it is still very widespread in Arab countries.

This report adds another dimension to the understanding of the link between violent conflict and marriage and fertility behaviours of young women, and the role of public policies to mitigate such practices in conflict settings.

The analysis is based on novel national individual and household microdata covering both the pre- and post-conflict periods, exploring a more refined geographical and timely sequence of violent events on individual outcomes, where timing and intensity of exposure to conflict are considered critical to the analysis.

The report is divided into five sections. The first section provides a conceptual framework to understand the effects of conflict on child marriage and adolescent fertility. The second section discusses the cultural and legal framework for marriage and family formation in Iraq, Libya and Yemen. The third section describes the evolution of conflict in these three countries. Section four presents the results, and section five provides a conclusion. The “Concluding remarks and discussion” section sums up the key findings from the report.
1. Conceptual Framework

Understanding the Effects of Conflict on Child Marriage and Adolescent Fertility

Understanding how conflict affects girls’ health, education and productivity over the life cycle

Most of the human and economic costs of conflict do not result directly from deaths and injuries in battle, but indirectly from the loss of livelihoods caused by the dislocation of the economy and society. Conflict weakens all aspects of human development, however, often the most marginalized groups, including women, are the most ill-protected.

Aside from the material destruction, the most pervasive effect of exposure to violence is the erosion of human development. Events and circumstances that are commonly experienced in conflict settings can have lasting effects on an individual’s trajectory. The adverse effects of conflict on human development often linger even after the violence has subsided.

The destruction of human capital and health is usually borne directly by individuals and their families, mainly the most vulnerable.

This section sets the stage by introducing a conceptual framework that allows us to understand how exposure to violence affects girls’ health, education and productivity over the life cycle, exacerbates gender inequalities and perpetuates deprivation.

This report uses the life cycle skill formation model developed by Cuhna and Heckman (2007) as a conceptual framework to understand how conflicts might affect human development.

It is well established that early childhood is a critical period for skill development, and even prenatal events have lifelong consequences on the skill formation process. Extensive literature has documented the impact of exposure to conflict on investments in children. Exposure to violence in early life has been directly associated with poor educational and health outcomes. Moreover, exposure to violence in critical and sensitive periods for skill development can lead to health and cognitive declines.

These studies suggest that exposure to violence represents a relevant marker of risk and inequality. These inequalities often translate into different health and human capital outcomes over the lifecycle, that can be carried from one generation to the next.

This report studies two aspects of human development affected by conflict, namely: child marriage and adolescent fertility. These two aspects are important determinants of human development with potential repercussions for future generations.
When a young girl marries, she rarely has decision-making power within the household, and she will possibly have no say on or power to make any consequential decisions.\textsuperscript{13}

Conflict often disproportionally affects young, impoverished and poorly educated girls. Child marriage and pregnancy appear to be particularly detrimental to their human development prospects. Child marriage affects every aspect of a girl’s life. Girls who marry early often have little or no access to education and economic opportunities, and they and their families are more likely to live in poverty.\textsuperscript{14} Child marriage and pregnancy increase the risk of experiencing dangerous, life-threatening complications in pregnancy, contracting diseases and suffering domestic and sexual violence.

Life cycle circumstances and the skill formation process

Conflict is a particularly intense type of shock that unambiguously affects all aspects of human development, as it poses a serious threat to health and human capital accumulation over the lifecycle. Conflict leads to infrastructure destruction, food insecurity, deterioration of family resources and reduction of family investments in children; all of which have devastating long-term consequences on human development.

Since the foundations of later-life success are for the most part built in the early years, children and youth exposed to conflict will most likely carry these adversities throughout their lives. The skill formation model developed by Cunha and Heckman (2007) sets the stage to understand how conflicts could impact human development.

Skill formation is a multistage process in which each stage corresponds to a period in a person’s life cycle, from conception to death. Skills are multiple in nature and encompass cognition and personality, as well as health.\textsuperscript{15} Skills are capacities to act; they shape expectations, constraints, and information.\textsuperscript{16} The acquisition of more skills enlarges a person’s potential. At each stage of life, inputs or endowments, combined with investments, produce a set of outputs at each stage of life. In turn, the output is the level of skill achieved during that stage. The important feature of the skill formation model is that the skills produced at one stage become the inputs for the subsequent stages of life. This is what is referred to as “self-productivity”. Consequently, skills acquired in one period will determine the skills acquired in future periods.

Figure 1 shows a representation of the skill-formation technology over different stages of life.

Skill formation is a life cycle process. It starts in the womb and continues throughout life. Central to our analysis is the concept that all stages of life matter and have effects on the subsequent stages of life.

Families play the central role in this process, and thus any shock affecting their decision-making process will have serious consequences on the human development prospects of all family members. However, these effects may not be homogeneous across all family members.

The loss of livelihoods caused by the dislocation of the economy and society have a direct impact on the decision-making processes of families, and in turn make the transmission of disadvantage from one generation to the next more probable. Conflict is rarely gender neutral and frequently exacerbates gender inequalities that can be particularly detrimental to women and girls.\textsuperscript{17}
Deteriorating conditions related to conflict often diminish the ability of women and girls to make adequate investments in their own human capital and health and that of their children and, through this mechanism, increase the prospect of their children living in poverty, and the likelihood of inequality being transferred to the next generation.\(^\text{18}\)

Child marriage also has implications for the well-being of families, and for society as a whole. Where girls are uneducated and ill-prepared for their roles as mothers and contributors to society, the costs are borne at every level, from the individual household to the nation as a whole.\(^\text{19}\)

Moreover, child marriage and pregnancy seriously compromise intergenerational mobility by curtailing schooling opportunities for young mothers as well as those of their children.\(^\text{20}\)

Girls who marry early have limited opportunities for education and employment, are at increased risk of domestic violence and have little agency and decision-making power within the household. Moreover, adolescent pregnancy and childbirth can have negative consequences
for girls’ physical and mental health and social well-being, their educational attainment and their income-earning potential.\textsuperscript{21}

Child marriage is generally associated with early childbearing and high fertility, both of which pose health risks for women and their children. Married adolescents are less likely to know about contraceptive methods and sexually transmitted diseases and are also at greater risk of dying from causes related to pregnancy and childbirth.\textsuperscript{22}

The next section presents a systematic review of the literature of the impact of armed conflict on child marriage and adolescent fertility to better understand the mechanisms at play and how these affects human development.
2. Empirical Evidence on Child Marriage and Fertility in Armed Conflict Settings
2. Empirical Evidence on Child Marriage and Fertility in Armed Conflict Settings

Violent conflict has the potential to affect child marriage and adolescent fertility via several mechanisms. The empirical literature suggests four causal pathways to explain the observed variations in child marriage and adolescent fertility in conflict settings.

Exposure to violence induces changes in the local economic and social conditions, as well as individual behaviour. In response to exposure to conflict, families may change their preferences regarding the timing of marriage and childbearing.

The framework to understand the causal pathways in which conflict affects nuptiality and fertility decisions was initially developed by Staveteig (2011) and further analysed by Neal, Stone and Ingham (2016). They describe four causal pathways that can be grouped as: (a) material and economic factors; (b) involuntary factors; (c) sex and gender role factors; and (d) psychosocial factors. Material and economic factors refer to the lack of basic resources and poverty constraints. Involuntary factors refer to the effects of displacement and mortality on local sex ratios. Sex and gender role factors refer to traditional practices and customs such as pro-natalist policies. Finally, psychological factors refer to attitudes towards sex and discrimination. In many conflict settings several causal pathways may be at play.

The mechanisms at play are likely conflict-specific, yet, the empirical evidence suggests that trends in fertility are predominantly driven by marriage patterns.

A. The divergent effects of conflict on child marriage

1. Mechanisms that may increase the likelihood of child marriage in conflict settings

Several mechanisms can play a role in an observed increase in child marriage in conflict settings:

(a) Material and economic factors:
- The loss of livelihoods increases the likelihood of transactional marriages;
- Limited access to education reduces the opportunity costs of marriage, mostly for girls;
- Schooling interruptions induce additional dropouts who ultimately marry at a younger age.

(b) Involuntary factors:
- Girls may enter marriages earlier due to sex ratio imbalances, as a disproportionate share of young males may be killed or conscripted during violent conflicts;
• Ethnic pronatalism encouraged within group family formation.\textsuperscript{27}

(c) Sex and gender role factors:

• Reversion to traditional gender roles during wartime, as parents resort to child marriage to protect girls against the threats of sexual violence, and institutional degradation that allows judicial or parental discretion regarding marital laws.

(d) Psychological factors:

• Parents play a big role in organizing and facilitating child marriage out of protection or honour concerns.

Several recent studies found that exposure to conflict increases the likelihood of child marriage. For example, Randall (2005), Clifford et al (2010), Shemyakina (2009) and Cetorelli (2014) suggest that the sex and gender role factors played the main part in the observed increase in nuptiality among adolescents, as parents fear that a young woman’s honour could be tainted in times of conflict. Valente (2011a) suggests that material and economic factors were the determinant factors as child marriage is deemed as transactional by parents. Finally, Staveteig (2011) suggests involuntary factors were the main pathway leading young women to enter the marriage earlier than normal in response to the reduced availability of male partners.\textsuperscript{28}

2. Mechanisms that may reduce the likelihood of child marriage in conflict settings

There are also mechanisms that may reduce the likelihood of child marriage in conflict settings:

(a) Material and economic factors:

• Lack of income and unemployment induces couples to postpone marriage;
• High level of male unemployment reduces pool of viable male partners;
• Poverty reduces the ability to afford a dowry.

(b) Involuntary factors:

• Couples postpone marriage due to displacement or disruption;
• Demographic transition\textsuperscript{29} that began before war restarts.

(c) Sex and gender role factors:

• Decreased male-female sex ratio reduces the number of potential husbands, as conflict implies separation of sexes because males are conscripted or have disproportionately larger mortality rates as they are involved in the active fighting.

(d) Psychological factors:

• Couples postpone marriage due to uncertainty about future;
• Weakening of social bonds makes it more difficult to meet prospective partners;
• Girls who have been sexually assaulted during the conflict face discrimination in their communities and are less likely to marry.

In other conflict contexts, several recent micro-level studies found that exposure to conflict reduces the likelihood of child marriage. For example, Saxena and other (2004) and...
Khawaja and others (2009) suggest that material and economic factors are likely to reduce nuptiality among adolescents. These authors cite unemployment and the high costs of marriage, respectively, as the factors behind the reduction in adolescent nuptiality. Blanc (2004) and Woldemicael (2008, 2010) and Kraehnert, Brück, Di Maio and Nisticò (2019) cite the reduced availability of men of marriage of age due to participation in conflict. De Walque (2006) and Heuveline and Poch (2007) suggest marriage declined from its pre-war level due to excess mortality among young men.

B. The divergent effects of conflict on adolescent fertility

The direction and magnitude of the effect of violence on fertility depends on both the intensity and the duration of a conflict. Long-lasting conflicts have differential consequences compared with short ones. Short-term conflicts are more likely to affect fertility through micro-level mechanisms, as they can cause momentary disruptions in individuals’ lives. Micro-level mechanisms include the postponement of births and temporal reduction in fecundity due to deprivation. Conversely, long-lasting conflicts are more likely to affect both micro- and macro-level conditions such as overall economic productivity, employment opportunities, poverty levels and infrastructure. While short-term conflicts tend to be negatively associated with changes in fertility, protracted conflicts can lead to ambiguous effects as both micro-level as well as macro-level conditions are affected.

Most studies have found a decline in fertility during conflict, followed by an increase in the early post-war period, as well as a gradual decline in fertility in the longer term for most conflicts. Yet, the evidence is mixed. Fertility can increase, decrease or remain the same as a result of exposure to conflict. However, fertility trends are usually strongly correlated to the shifting trends in marriage observed among young women during time of conflict.

1. Mechanisms that may increase adolescent fertility in conflict settings

Several mechanisms may increase adolescent fertility in conflict settings:

(a) Material and economic factors:

- By reducing the supply and demand for education, conflict reduces a girl’s lifetime earning potential, in turn reducing the opportunity cost of having children;
- Poverty conditions may revert the quantity-quality trade-off for the demand for children;
- Parents may want to have more children to replace those lost during conflict, also known as “old-age security theory of reproductive behaviour”.

(b) Involuntary factors:

- Conflict and violence reduce the supply and demand for health services, decreasing the knowledge of and access to contraceptives;
- Curfews and closures lead to increased opportunity for sexual activity;
- Ethnic groups that feel threatened develop pronatalist norms and encourage fertility.
(c) **Sex and gender role factors:**

- Lower levels of education reduce a woman’s relative bargaining position within the household, and thus their agency over the decision to have children.

(d) **Psychological factors:**

- Young girls are at higher risk of sexual violence, increasing the likelihood of having children as a result of rape or early marriage.

Several studies report an increase in birth rates of adolescents during a period of conflict, including Clifford (2009) in Tajikistan, and Fargues (2000) as well as Khawaja (2000) and Khawaja and Randall (2006) for the West Bank and Gaza. These studies concluded that the observed increase in fertility resulted largely from a surge in marriage.

Staveteig (2011) in Bosnia and Rwanda, and Torres and Urdinola (2018) in Colombia reported that conflict exposure increased the likelihood of having a first birth before the age of 20. Staveteig (2011) concludes that the observed increase in fertility of young women appears to be consistent with the “Old Age Security Theory” in both countries, whereas Torres and Urdinola (2018) suggest that the increased fertility of young women in Colombia may be associated with the use of rape as a weapon of war.

2. **Mechanisms that may decrease adolescent fertility in conflict settings**

Several mechanisms may decrease adolescent fertility in conflict settings:

(a) **Material and economic factors:**

- Material and economic deprivation experienced during conflict reduces fertility such as famine, disease or ill-health.

(b) **Involuntary factors:**

- Separation during displacement or conscription;
- Excess mortality;
- Higher incidence of widowhood.

(c) **Sex and gender role factors:**

- Higher mortality rates of men of marriage age.

(d) **Psychological factors:**

- Economic uncertainty;
- Trauma after sexual violence, discrimination after sexual violence.

Several studies report a decline in birth rates of adolescents during a period of conflict. Curlin, Chen and Hussein (1976) observed a sharp decline in fertility in Bangladesh after the war for independence. Heuveline and Poch (2007) in Cambodia also observed a decline in marital fertility of adolescent girls during the Khmer Rouge regime, however, it was followed by a sharp increase in fertility for adolescent women in the post-conflict period. Woldemicael (2008, 2010) finds that adolescent fertility in Eritrea fell during the conflict period due to an increase in age at marriage but also due to conflict-related spousal separation. Kraehnert, and others (2019) analysing data for Rwanda find that the genocide-induced reduction in the local sex ratio has a negative impact on the hazard.
of having a child in the five years following the genocide, for all age cohorts of women, but in particular affecting older women.

Similarly, Khawaja and others (2009) observed a decline in adolescent fertility in Gaza and the West Bank during the second Intifada. While the decline was observed for all cohorts of women, it was less pronounced for adolescents. When examining education levels, the results suggested an increase in fertility for adolescents with little education.
3. Cultural and Legal Framework

Understanding Child Marriage and Family Formation in the Arab Region
3. Cultural and Legal Framework: Understanding Child Marriage and Family Formation in the Arab Region

Child marriage and family formation in the Arab region

In recent decades, the Arab region has experienced significant changes in marriage and family formation patterns. Marriage remains almost universal in the Arab region and families serve as its main social security system; this is especially true for the elderly, sick or those with disabilities. Furthermore, families provide economic refuge for children and youth, the unemployed and other dependents. In the Arab region, parents are commonly responsible for children well into those children’s adult lives, and children reciprocate by taking responsibility for the care of their aging parents. Marriage and family are valued for maintaining connections – social, political and economic – and are also a means for transmitting traditions. Furthermore, for many, marriage serves as a well-defined turning point into adulthood.

Early marriage (including child marriage) has been common practice in the Arab region, with few exceptions. However, the average age of marriage has been increasing steadily for both men and women over recent decades, like other parts of the world. While child marriage persists in the region, its prevalence varies. According to UNICEF, from 1985 to 2010, the prevalence of child marriage decreased in the Arab region from 34 per cent to 18 per cent. Prior to 2010, the highest rates of child marriage were seen in the most impoverished Arab States (such as Mauritania, Somalia, the Sudan and Yemen), whereas other States had almost eliminated the practice (such as Algeria, Libya and Lebanon). While sociocultural practice and increasing poverty impact rates of child marriage in the region, the primary factors for child marriage and its disproportionately female face is the persistence of patriarchal attitudes that sustain and perpetuate gender inequality and discriminatory gender norms. This is not unique to the Arab region as it is cause and consequence globally.

The centrality of marriage to daily life and its near universality in the Arab region translates into public policies and legal structures that privilege the family, while tending to subordinate women as both wife and mother. Regionally, this is most evident in the construction of personal status laws (regardless of religion) that focus on regulating marriage, divorce, the family, child custody and inheritance, often to the detriment of women’s individual human rights. Many personal status laws in the region allow for the marriage of both males and females under the age of 18 years, though, more often than not, it is females whose age is lowest. Furthermore, such laws allow for judicial and/or parental exceptions to the minimum age of marriage.
Other important legal frameworks, such as constitutions, also perpetuate women’s subordination and deny their individual rights when they designate marriage as the basis of family, and the family as the foundation of society (rather than the individual citizen). Several constitutions highlight the value of motherhood (and childhood) and women’s maintenance of the family, explicitly ensuring care and protection for motherhood and childhood. Such articles highlight the value placed on women’s identity within marriage and family and thus may implicitly and explicitly encourage women and girls to take on the roles of wife and/or mother to “legitimize” their citizenship.

Further compounding this issue is the bias in several nationality laws in the region that prevent women from passing their nationality on to their children if their spouse is foreign-born (or is missing or dead in conflict-affected areas) or if they are in displacement limbo. In States where this is the case, children may, at the very least, be unable to access appropriate services or education or, at worst, left stateless. In this situation, child marriage may seem like a helpful option for girls and young women who wish to avoid raising a generation of stateless persons unable to access services or realize their human rights. Likewise, the restricted position of women in the political, economic and religious spheres may impact the persistence and acceptance of child marriage due to an inability of women to influence policy and/or practice. Notably, activists and civil society are contesting many of these discriminatory frameworks and practices across the region.

In the Arab region, early childbearing is linked to early marriage as very few births occur outside of marriage (and if they do, they are most likely never reported). Childbearing is an expected outcome of early marriage due to the strong focus on family and kinship in the region, in addition to a female’s presumed “natural role” as wife and mother, as evidenced in national legislation. Early childbearing has numerous health consequences for young women and girls, including miscarriage and complications associated with pregnancy and childbirth complications, including fistula and such as haemorrhaging. In the long term, early childbearing impacts a girl’s educational opportunities, which in turn impact her employment opportunities and ability to carve out a sustainable and dignified life for herself and her children. This is of particular concern in impoverished or conflict-affected contexts, as can be seen in greater contrast in the Arab region since 2010-2011.

While gender-based discrimination and inequality persist during times of stability, they tend to increase or re-entrench during conflict or transition. The same is true for child marriage. Conflicts weaken institutions and accountability mechanisms, resulting in the degradation of rule of law. In this void, religious or tribal entities, or non-State actors, may have more discretion over the minimum age for marriage. Furthermore, institutional degradation triggered by conflict may lead to stricter or more traditional interpretations of law, including religious or customary law, that in turn may result in the greater likelihood of child marriage.
4. Legal Framework on Child Marriage
4. Legal Framework on Child Marriage

A. International, regional and national legislation on child marriage and fertility in Iraq, Libya and Yemen

Child marriage is a human rights violation that includes any legal or customary union involving a boy or girl below the age of 18 years, though it disproportionately affects females. This definition is based on article 1 of the Convention on the Rights of the Child (CRC), which defines a child as, “every human being below the age of 18 years unless, under the law applicable to the child, majority is attained earlier”. According to the World Bank, 7.5 million girls are married illegally each year.46

Most Arab States have ratified human rights treaties obliging signatories to respect, protect, and fulfill the human rights of girls; this includes the prohibition of early marriage.47 However, many have also made some type of reservation to treaty provisions that they consider incompatible with religious law or State sovereignty; this is especially true of CEDAW.48 The World Bank has noted that some of the weakest legal protections are in the Arab region, explaining that, “three in four girls (73.3 per cent) between 10 and 17 years of age [were] not protected against child marriage in 2017 when the possibility of parental or judicial consent is acknowledged”.49 Despite these State interventions and reservations, international law must always take precedence over national law as treaties are binding on States that accede to them.50 Even when States have not formally acceded, customary international law dictates that States must abide by global human rights norms and practice.

The following section provides an overview of international, regional and national legal frameworks affecting child marriage and fertility in Iraq, Libya and Yemen.

1. International frameworks

Several international human rights treaties condemn child marriage and call upon States (and international and local organizations) to take action to eliminate its practice. The Universal Declaration of Human Rights (1948) provides that men and women of “full age” have the right to marry (article 16(1)) and that marriage shall be entered into only with the, “…free and full consent of the intending spouses” (article 16(2)). The International Covenant on Economic, Social and Cultural Rights (ICESCR, 1966) echoes this stance under article 10,51 as does the International Covenant on Civil and Political Rights (ICCPR, 1966) under article 23.52 Specific to child marriage, the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages (1962) reaffirms the same under article 1, and calls upon State Parties in article 2 to specify a minimum age for marriage.53 It is worth noting that while all Iraq, Libya and Yemen are parties to ICESCR and ICCPR, only Yemen is party to the latter convention.

Iraq, Libya and Yemen have all acceded to CEDAW. Still, they maintain several reservations
to articles concerning custom, religious practice and the applicability of the Convention. Under article 16(2), CEDAW provides that the marriage of a child will have no legal effect and that States shall set a minimum age of marriage. This is reinforced by several subsequent General Recommendations (GR) issued by the Committee on the Elimination of Discrimination Against Women (CEDAW Committee). Equality in marriage and family relations is addressed under GR no. 21. In addition to reaffirming article 16(2) and noting that the minimum age for marriage should be 18 years, GR no. 21 discusses fertility, clarifying that “women are entitled to decide on the number and spacing of their children” because of the impact that bearing and raising children have on women’s access to “education, employment and other activities related to their personal development”. Lastly, GR no. 21 calls for States to require the registration of all marriages to ensure compliance with the minimum age for marriage. General Recommendation No. 24: on women and health calls for the prohibition of child marriage, among other harmful practices. General Recommendation no. 30 on women in conflict prevention, conflict and post-conflict situations calls upon States to safeguard against forced and child marriage, as well as forced pregnancies, abortions or sterilization of women and notes that women have the right to “decide freely and responsibly on the number and spacing of their children”. The CEDAW Committee, in conjunction with the Committee on the Rights of the Child, jointly issued GR no. 31 (also known as General Comment no. 18 of the Committee on the Rights of the Child) on harmful practices, detailing the need to abolish child and/or forced marriage. Lastly, GR no. 35 on gender-based violence against women, updating GR no. 19 calls for the repeal of all “provisions that allow, tolerate or condone forms of gender-based violence against women, including child or forced marriage and other harmful practices”.

All three countries are signatories to the CRC, which clarifies that a child is under the age of 18. Additionally, all have acceded to two of the CRC’s Optional Protocols.

Table 1. International and regional human rights instruments concerning early marriage

<table>
<thead>
<tr>
<th>International instruments</th>
<th>Obligations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Universal Declaration of Human Rights</strong></td>
<td>Article 16</td>
</tr>
<tr>
<td></td>
<td>1. Men and women of full age, without any limitation due to race, nationality or religion, have the right to marry and to found a family. They are entitled to equal rights as to marriage, during marriage and at its dissolution.</td>
</tr>
<tr>
<td></td>
<td>2. Marriage shall be entered into only with the free and full consent of the intending spouses.</td>
</tr>
<tr>
<td><strong>International Covenant on Civil and Political Rights</strong></td>
<td>Article 23</td>
</tr>
<tr>
<td></td>
<td>2. The right of men and women of marriageable age to marry and to found a family shall be recognized.</td>
</tr>
<tr>
<td></td>
<td>3. No marriage shall be entered into without the free and full consent of the intending spouses.</td>
</tr>
<tr>
<td>International instruments</td>
<td>Obligations</td>
</tr>
<tr>
<td>-------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>International Covenant on Economic, Social and Cultural Rights</td>
<td>Article 10</td>
</tr>
<tr>
<td></td>
<td>1. …marriage must be entered into with the free consent of the intending spouses.</td>
</tr>
<tr>
<td>Convention on Consent to Marriage, Minimum Age for Marriage and</td>
<td>Article 1</td>
</tr>
<tr>
<td>Registration of Marriages</td>
<td>1. No marriage shall be legally entered into without the full and free consent of both parties, such consent to be expressed by them in person after due publicity and in the presence of the authority competent to solemnize the marriage and of witnesses, as prescribed by law.</td>
</tr>
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<td></td>
<td>2. Notwithstanding anything in paragraph 1 above, it shall not be necessary for one of the parties to be present when the competent authority is satisfied that the circumstances are exceptional and that the party has, before a competent authority and in such manner as may be prescribed by law, expressed and not withdrawn consent.</td>
</tr>
<tr>
<td>Article 2: States Parties to the present Convention shall take legislative action to specify a minimum age for marriage. No marriage shall be legally entered into by any person under this age, except where a competent authority has granted a dispensation as to age, for serious reasons, in the interest of the intending spouses.</td>
<td></td>
</tr>
<tr>
<td>Convention on the Elimination of All Forms of Discrimination</td>
<td>Article 16</td>
</tr>
<tr>
<td>against Women (CEDAW)</td>
<td>1. States Parties shall take all appropriate measures to eliminate discrimination against women in all matters relating to marriage and family relations and in particular shall ensure, on a basis of equality of men and women:</td>
</tr>
<tr>
<td></td>
<td>(a) The same right to enter into marriage;</td>
</tr>
<tr>
<td></td>
<td>(b) The same right freely to choose a spouse and to enter into marriage only with their free and full consent.</td>
</tr>
<tr>
<td>2. The betrothal and the marriage of a child shall have no legal effect, and all necessary action, including legislation, shall be taken to specify a minimum age for marriage and to make the registration of marriages in an official registry compulsory.</td>
<td></td>
</tr>
<tr>
<td>General Recommendations to CEDAW</td>
<td>General Recommendation no. 21 on equality in marriage and family relations: Reaffirms Article 16 of CEDAW</td>
</tr>
<tr>
<td></td>
<td>General Recommendation no. 24 on women and health: Reaffirms Articles 12 and 16 of CEDAW</td>
</tr>
<tr>
<td></td>
<td>General Recommendation no. 30 on women in conflict prevention, conflict and post-conflict situations: Reaffirms Articles 1-3, 5(a), 15, and 16 of CEDAW</td>
</tr>
<tr>
<td>International instruments</td>
<td>Obligations</td>
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<tr>
<td><strong>General Recommendation no. 31 of the Committee on the Elimination of Discrimination against Woman and No. 18 of the Committee on the Rights of the Child on harmful practices:</strong> Reaffirms child and/or forced marriage as a harmful practice; Reaffirms Article 16 of CEDAW; Calls for a minimum legal age of marriage for girls and boys, with or without parental consent, is established at 18 years; Calls for the legal requirement of marriage registration; Calls for the empowerment of women and girls</td>
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<tr>
<td><strong>General Recommendation no. 35 on gender-based violence against women, updating general recommendation No. 19:</strong> Calls for the repeal, including in customary, religious and indigenous laws, of all legal provisions that are discriminatory against women, including child marriage</td>
<td></td>
</tr>
<tr>
<td><strong>International Convention on the Rights of the Child</strong></td>
<td>Article 1: For the purposes of the present Convention, a child means every human being below the age of eighteen years unless under the law applicable to the child, majority is attained earlier. Article 24 3. States Parties shall take all effective and appropriate measures with a view to abolishing traditional practices prejudicial to the health of children. Article 28: States Parties recognize the right of the child to education, and with a view to achieving this right progressively and on the basis of equal opportunity. Article 34: States Parties undertake to protect the child from all forms of sexual exploitation and sexual abuse.</td>
</tr>
<tr>
<td><strong>Beijing Declaration and Platform for Action</strong></td>
<td>Platform L. The girl child  • Considers child marriage as a harmful practice;  • Acknowledges that early marriage and early motherhood can severely curtail educational and employment opportunities and are likely to have a long-term adverse impact on their and their children’s quality of life;  • Calls upon governments to: Enact and strictly enforce laws to ensure that marriage is only entered into with the free and full consent of the intending spouses; in addition, enact and strictly enforce laws concerning the minimum legal age of consent and the minimum age for marriage and raise the minimum age for marriage where necessary (Article 274(e));  • Calls upon governments and international and national organizations to: Generate social support for the enforcement of laws on the minimum legal age for marriage, in particular by providing educational opportunities for girls (Article 275 (b));  • Calls upon governments and international and national organizations to: place special focus on programmes to educate women and men, especially parents, on the importance of child marriage (Article 277(d)).</td>
</tr>
<tr>
<td>International instruments</td>
<td>Obligations</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Sustainable Development Goals</td>
<td>SDG 5.3: Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation</td>
</tr>
</tbody>
</table>
| Maputo Protocol | Article 6:  
(a) No marriage shall take place without the free and full consent of both parties;  
(b) The minimum age of marriage for women shall be 18 years. |
Article 21: Governments should do what they can to stop harmful social and cultural practices, such as child marriage, that affect the welfare and dignity of children. |
| Arab Charter on Human Rights | Article 33  
1. ... no marriage shall be entered without the full consent of the intending spouses. The law in force shall regulate the rights and responsibilities of spouses as to marriage, during marriage and at its dissolution. |

In the Beijing Declaration and Platform for Action (1995), child marriage is condemned in the Platform’s General Framework and is addressed repeatedly throughout the document, explicitly under Platform B on “Education and training of women”, Platform C on “Women and health”, and Platform D on “Violence against women”. Platform L specifically addresses the situation of “The girl child”, and elaborates that, “Overall, early marriage and early motherhood can severely curtail educational and employment opportunities and are likely to have a long-term adverse impact on their and their children’s quality of life”.

More recently, Agenda 2030 and the Sustainable Development Goals (SDGs) have sought to address gender concerns in a cross-cutting manner while still acknowledging the need for a stand-alone goal. Under SDG 5, which focuses on achieving gender equality and the empowerment of all women and girls, target 5.3 aims to “Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation”.

Regarding reporting processes on gender equality and women’s empowerment, all three States are engaged in the quinquennial reporting process for the Platform for Action, however, only Iraq and Libya are participating in the Voluntary National Review process to report on the progress of the SDGs, including SDG 5 on gender equality.59

In 2013, Yemen co-sponsored a Human Rights Council resolution on strengthening efforts to prevent and eliminate child, early and forced marriage: challenges, achievements, best practices and implementation gaps.60 Two years later, the Human Rights Council adopted a resolution to end child, early and forced marriage that was co-signed by Libya.61 In subsequent years, the United Nations
High Commissioner for Human Rights, the Human Rights Council and the Secretary-General have all condemned child marriage, warning of its increase and persistence particularly in conflict-affected and humanitarian settings.62

Table 2. Iraq, Libya and Yemen: ratification status of selected international and regional human rights instruments

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Country</th>
<th>Status</th>
<th>Reservations/Subject to Reservation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)</strong></td>
<td>Iraq</td>
<td>Ratified: 1986</td>
<td>Reservations: Articles 2(f), 2(g), 9(1), 9(2), 16 and 29(1)</td>
</tr>
<tr>
<td></td>
<td>Libya</td>
<td>Ratified: 1989</td>
<td>Reservations: Articles 2, 16(c) and 16(d)</td>
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<td></td>
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<td></td>
<td>Upon accession, Libya also made a general reservation that accession to the CEDAW “…cannot conflict with the laws on personal status derived from the Islamic sharia”.</td>
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<td></td>
<td></td>
<td></td>
<td>Libya has also acceded to the Optional Protocol of CEDAW.</td>
</tr>
<tr>
<td></td>
<td>Yemen</td>
<td>Ratified: 1984</td>
<td>Reservation: Article 29(1)</td>
</tr>
<tr>
<td><strong>International Convention on the Rights of the Child</strong></td>
<td>Iraq</td>
<td>Ratified: 1994</td>
<td>Reservations: Article 14(1), which relates to the freedom of religion of the child, since according to Islamic law a child is not allowed to change his or her religion</td>
</tr>
<tr>
<td><strong>Maputo Protocol</strong></td>
<td>Libya</td>
<td>Ratified: 2004</td>
<td>Subject to a reservation about “judicial separation, divorce and annulment of marriage”.</td>
</tr>
</tbody>
</table>
2. Regional frameworks

Only a handful of regional binding frameworks discuss child marriage, and these are primarily African treaties: The Protocol to the African Charter on Human and Peoples’ Rights on the Rights of Women in Africa (Maputo Protocol) and the African Charter on the Rights and the Welfare of the Child (ACRWC). The Maputo Protocol sets the minimum age of marriage for women at 18 years and notes that “no marriage shall take place without the free and full consent of both parties” (article 6), whereas the ACRWC declares that “Governments should do what they can to stop harmful social and cultural practices, such as child marriage, that affect the welfare and dignity of children” (article 21). As the only African State under review, only Libya is party to the Maputo Protocol and the ACRWC.

The Arab region does not have any binding human rights legislation. However, the Arab Charter for Human Rights (2004) aspires to serve as a regional treaty despite its lack of accountability mechanisms. Within the Charter, article 33 notes that “Men and women of marrying age have the right to marry and to found a family according to the rules and conditions of marriage. No marriage can take place without the full and free consent of both parties”.

3. National legislation in Iraq, Libya and Yemen

Accession to international and regional treaties show only a partial picture of State efforts to address child marriage, as national laws continue to be systematically ignored even if constitutions and other legal frameworks guarantee the rights of the child and the rights of women. This is especially the case in contexts with plural legal systems where customary practice and/or religious law have the potential to undermine international, regional and codified national law. This is further enhanced by exceptions to the minimum age of marriage that may be granted through parental or judicial consent by officials who are either not aware of the legal age of marriage, or trust they have discretion over these rulings. Similarly, the absence of proper birth and marriage registration systems deepens the vulnerabilities faced by young women across the region.

In line with international and certain regional standards, the national legal systems of Iraq and Libya have a legal minimum age of marriage for both males and females of 18 and 20 years, respectively. However, both States prescribe a minimum age of marriage without explicitly criminalizing or banning the practice outright. For example, both States allow certain exceptions to this rule if there are circumstances that are in the interest of the minor, and provided it is approved by a judge and the legal guardian. In Iraq, this means that individuals can marry at 15 years with judicial consent according to Law No. (188) of the year 1959 Personal Status Law and amendments (unified). This is further complicated by article 41 of Iraq’s Constitution (2005), which enables every sect and religious community to follow its own religious teachings and laws regarding marriage. Some communities have come to interpret this article as allowing for particular practices that can be justified by certain religious interpretations, even those contravening Iraqi national law and its international commitments. The best example is the draft Ja’afari Personal Status Law of 2014, which was approved by Iraq’s Council of Ministers. The draft would have enabled girls as young as 9 years to legally marry. The law was rejected by parliament in November 2017.
In Libya, the divisions within the Government due to internal conflict have also resulted in multiple personal status laws. Thus, in the eastern part of the State, Law no. 10 of Personal Status (1984) remains in effect stating that a girl or boy under the age of 20 may get married with judicial approval if their guardian has given consent. Since 2015, the western part of the State has adopted Law no. 14, 2015, which sets the minimum age of marriage at 18 years. While in both cases, the age of marriage is at least de jure in line with international norms, anecdotal evidence highlights that the internal conflict is taking a toll on Libya sustaining a uniquely low child marriage rate in the Arab region.64

Alarmingly, Yemen has yet to set a minimum age for marriage though it has acknowledged the problem of child marriage in its yet to be passed Draft Child Rights Law of 2014.

The international community has taken note of the legal situation in the respective States with regards to child marriage. In 2014, Iraq engaged the CEDAW Committee. The Committee recommended that Iraq, “Adopt a comprehensive strategy to eliminate all harmful practices and stereotypes, in particular child marriage, temporary marriage […] that includes awareness-raising efforts targeting the general public, the media and religious and community leaders, in collaboration with civil society and women’s organizations”.65 Additionally, the Committee called for the repeal of legal exceptions to Law No. (188) and the registration of all marriages.66 Additionally, in 2015, the Committee on the Rights of the Child, called upon Iraq to “Ensure that the minimum age of marriage set at 18 years for both girls and boys is enforced, that in no circumstance can a child below 16 years of age be married…” 67

Furthermore, the State was called upon to, “Establish protection schemes for victims of forced marriage who file a complaint”.68

In 2008, the CEDAW Committee urged Yemen, “to take urgent legislative measures to raise the minimum age of marriage for girls”, as well as “to enforce the requirement to register all marriages in order to monitor their legality and the strict prohibition of early marriages as well as to prosecute the perpetrators violating such provisions”.69 Six year later, in 2014, the Committee on the Rights of the Child called upon Yemen to “take the necessary measures to ensure the adoption of the legislative amendment setting the minimum age of marriage at 18 years for girls and boys and raise the minimum age of criminal responsibility to bring it in line with international standards”.70

With regards to Libya, prior to 2010-2011, both the CEDAW Committee and the Committee on the Rights of the Child had very little to say on the situation of child marriage. This may be because the last submission to the CEDAW Committee was in 2009 and to the Committee on the Rights of the Child was in 2003, before the regional uprisings of 2010-2011 and the subsequent uprisings in Libya. However, it appears that the current conflict in Libya may have impacted the State’s ability to curb child marriage – this will only be confirmed with future constructive dialogues with the CEDAW Committee and the Committee on the Rights of the Child.

As can be seen, laws can be effective only if enforcement measures are in place. However, enactment and enforcement must be carefully designed to avoid a backlash. Legal reform in this area will only be effective if combined with other tools to raise awareness among the local
communities, and comprehensive strategies to address the main drivers of early marriage, such as poverty, gender inequality and insecurity. Furthermore, conflict has imposed enormous challenges on the institutional capacities of the State in these three contexts, and the increasing erosion of rule of law may also be contributing to the recession of human development and the human rights of women and girls across the Arab region.

Table 3. Legal minimum age of marriage outlined in national legislation

<table>
<thead>
<tr>
<th>Country</th>
<th>Legal minimum age of marriage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iraq</td>
<td>18 years</td>
</tr>
<tr>
<td><strong>Exceptions:</strong></td>
<td>Under exceptional circumstances and with the authorization of a judge and legal guardian, marriage may be allowed below the age of 18.</td>
</tr>
</tbody>
</table>

Key provisions

**Constitution of 2005**

Article 29 guarantees the protection of motherhood, childhood and old age and also prohibits all forms of violence and abuse in the family, school and society.

Article 41 guarantees that Iraqis are free in their commitment to their personal status according to their religions, sects, beliefs, or choices, and this shall be regulated by law.

**Law No. (188) of the year 1959 Personal Status Law and amendments (unified)**

Article 7.1 establishes that for a marriage to be valid, the two parties to the contract should have reached 18 years of age. However, article 8 allows, on an exceptional basis, the marriage of 15-year-old persons, under judicial authorization and after obtaining the approval of the legal guardian.

Article 9 indicates that no relative or non-relative has the right to force marriage on any person without their consent. Sentences might reach up to 10 years depending on the degree of relative.

**Amended Personal Status Law in the Kurdistan Region-Iraq no. 15 of 2008**

Article 5 states that, “if a 16-year-old person asks to be married, the judge can authorize the marriage if the eligibility and physical ability of the person in question was established and approval received from the guardian. If the guardian abstains from responding, the judge calls upon them to state their agreement during a determined period. If the guardian does not object or if s/he submits an objection that is unworthy of consideration, the judge shall allow the marriage”.

**Act No. 8 from 2011, Act of Combating Domestic Violence in the Kurdistan Region-Iraq**

Article 2 defines forced marriage and marriage of minors as a form of domestic violence.

<table>
<thead>
<tr>
<th>Country</th>
<th>Legal minimum age of marriage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Libya</td>
<td>20 years [eastern part of the State]; 18 years [in the western part of the State]</td>
</tr>
<tr>
<td><strong>Exceptions:</strong></td>
<td>Under exceptional circumstances and with the authorization of a judge and legal guardian, marriage may be allowed below the age of 20.</td>
</tr>
<tr>
<td></td>
<td>The law allows a perpetrator of rape, including statutory rape of a minor, to be excused of his crime if he marries his victim; a judge simply legitimizes the union.</td>
</tr>
</tbody>
</table>

5
Key provisions

Law no. 10 of Personal Status, 1984 (eastern part of the State)

Article 6: Establishes that a person becomes eligible for marriage at 18 years. Marriage before that age can happen with the consent of a guardian if it is believed to be advantageous or beneficial to both parties involved. Article 8 prohibits forced marriage.

The original law passed in 1984 set the minimum age at 20, however since the 2015 modification by the General National Congress the minimum age has been set to 18 years under Law no. 14, 2015, which is effective in the western part of the State.

It is unclear what law is in place in the southern part of the State.

Draft Constitution

Article 49: The State shall be committed to supporting and caring for women, enacting laws that ensure their protection, promoting their status in society, eliminating discrimination against women and eliminating the negative culture and social customs that detract from their dignity.

Yemen: Currently there is no legal minimum age of marriage

Key provisions

Personal Status Act No. 20 of 1992

Article 15 prohibits sexual intercourse with a girl until she reaches puberty, even if she is older than 15 years.

Draft Child Rights Law of 2014

Establishes 18 years as Yemen’s minimum marriage age and officially safeguards to verify the age of both the man and the woman. It also establishes criminal penalties for those involved in early marriage.


Box 1. Conflict, nationality laws and child statelessness

Many nationality laws within the Arab region continue to discriminate based on gender; nine States in the region hold specific reservations to article 9 of CEDAW, which demands equality in nationality. Except for Algeria and Djibouti, all States in the Arab region have national legislation that limits women’s ability to confer their nationality to their children and/or foreign-born spouses. While some States in the region allow women to pass their citizenship on to their children only in cases where the father is unknown or stateless, the remainder deny women the right to confer their nationality to both their children and their foreign-born spouses under any circumstances, potentially resulting in stateless children.

The rise of the Islamic State and ensuing conflicts in Syria and Iraq have been characterized by an influx of foreign fighters who have, through choice or force, married female nationals. This has had a severe impact on children born of such unions.
Women in Iraq can confer their nationality to their children if they are able to provide official papers to verify the identity of the father; this becomes difficult when the children are born outside of Iraq (such as in other areas that were previously held by the Islamic State). In Syria, women can only confer nationality if their child is born in Syria and if the father is unknown. Because of these restrictions, children born of female nationals and foreign fighters are more than likely to become stateless as they are not officially registered. As a result, stateless children are not only denied their right to a nationality, but also their right to access education and health care, among other important services.

Grassroots campaigns, such as “Who Is Your Husband?” in Idlib, aimed to discourage Syrian women from having relationships with foreign fighters, outlining the problems women and their children would face if their husband is relocated, killed or returns to his home country. While important in the short term, these campaigns address the legal gaps superficially, instead of challenging discriminatory nationality laws that result in the vulnerability of women and their families.

In other instances, documentation under the Islamic State was intentionally destroyed or is not recognized, despite both parents having citizenship. This has been particularly true in the case of Iraq, leaving little recourse for families whose children were born during this period and are currently undocumented and suffer the same fate as stateless children.

Furthermore, women and children who are refugees in neighboring States encounter similar problems, particularly in the case of child marriage, when the host State does not acknowledge such unions. To avoid penalization, these marriages may never be officially registered, which means that children born of these unions will not be officially registered.

Note: * Saieh, 2019.  
  b Akoush and Ioanes (2018); and see the “Meen Zawjk?” campaign Facebook page at https://www.facebook.com/meen.zawjk/photos/a.1563161317138885.1073741828.1555162854605398/1563688677086349/?type=3&theater.  
  c Trew, 2019; Saieh, 2019.
5. Exposure to Violent Conflict in Iraq, Libya and Yemen
5. Exposure to Violent Conflict in Iraq, Libya and Yemen

A. Geographical differences in conflict intensities

Geographic information is critical to understanding the advancement of any violent conflict. During the conflicts in Iraq, Libya and Yemen, the number of casualties and the intensity of violence have significantly shifted over time from certain regions to others.

This report focuses on the intensity of conflict and geographical variation rather than on the nature of the violence, as the main objective is understanding the role of conflict exposure on the civilian population and how this exposure affects human development. This section briefly describes the phases of each of the conflicts considered for the analysis, as well as its intensity.

The number of battle-related deaths is used as a proxy for a conflict’s intensity, as these account for the most visible and reliable measure of exposure to violence.

To measure exposure to conflict, the report uses data from the Uppsala Conflict Data Program (UCDP) Georeferenced Event Dataset (GED) and the Peace Research Institute Oslo (PRIO). The GED data records an incident where armed force was used by an organized actor against another organized actor, or against civilians, resulting in at least one direct death at a specific location and on a specific date.

UCDP and PRIO define armed conflict as “a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a State, results in at least 25 battle-related deaths in a calendar year”. Additionally, armed conflicts are subdivided by intensity: those that result in at least 25 but less than 1000 battle-related deaths per calendar year are considered as minor conflicts, while those conflicts with 1000 or more battle-related deaths per year are catalogued as major conflicts. The unit of observation, according to this definition, is the actual armed confrontation between two parties (plus other secondary actors, if relevant) at a given location and during a certain period.

The basic unit of analysis for the UCDP GED dataset is the “event”, meaning an individual incident (phenomenon) of lethal violence occurring at a given time and place. More specifically, an event is defined as: “An incident where armed force was by an organized actor against another organized actor, or against civilians, resulting in at least one direct death at a specific location and a specific date”. The maximum (best) spatial resolution of the dataset is the individual village or town. The dataset is fully geocoded. The maximum (best) temporal
resolution of the dataset is the day. Only events linkable to a UCDP/PRIO Armed Conflict, a UCDP Non-State Conflict or a UCDP One-Sided Violence instance are included. Events are included for the entire period, meaning both for the years when such conflicts were active and for the years when such conflicts were not active.

Box 2. Conflict and the rule of fear – sexual violence as a weapon of war

In many conflict settings, parties to the conflict may not try to hide or deny their crimes. On the contrary, they may go to great efforts to publicize gruesome details of atrocities perpetrated against the civilian population. This tactic of instilling communal fear has proven an effective subordination strategy, as populations flee in response to the violence. Moreover, these tactics also affect behaviour as they heighten the perception of imminent danger. For example, in 2014, after ISIS captured the entire Sinjar area and abducted thousands of Yezidi women who were subsequently sexually enslaved, raped, forced into marriage and/or trafficked. The group rapidly publicized the harms perpetrated against these women which, they argued, were part of the group’s core tenets. Similar justifications have been employed by groups such as Boko Haram, which, in 2014, kidnapped 276 schoolgirls in the town of Chibok in Borno State, Nigeria.

In such settings, women and girls may be direct targets or collateral victims. Specifically, the parties to armed conflict may tactically abuse and dehumanize the female body. Sexual violence has been extensively used as weapon of war in all recent conflicts, including Iraq, Colombia, Sierra Leone, India (Kashmir), Rwanda, Sri Lanka, the Democratic Republic of Congo, Angola, the Sudan, Côte d’Ivoire, East Timor, Liberia, Algeria, the Russian Federation (Chechnya) and northern Uganda. The motivations behind sexual violence against women and girls in conflict-affected settings is multipronged. First, it is part of a continuum of violence that women experience throughout their lives, which means that many assume it is “natural” or “normal”. It serves as a means to control women and girls in times of stability as well as conflict, and stems from pre-existing gender-based inequality and discrimination. Second, sexual violence against women and girls in conflict may enable males on one side to “communicate” dominance to males on the other side, with female bodies assuming the role of territory. Third, embedded in this larger framework of gender-based inequality and discrimination is the assumption that women must be protected from sexual violence not because they are human but in order to maintain the honor of a family or community. Thus, the mere threat of sexual violence serves to instill fear in a population, prompting families and communities to further control the movements of women and girls.

This culture of fear deeply affects behaviour for populations exposed to violence resulting in choices that may initially seem protective in the short term but are actually quite harmful. In these settings, preferences towards marriage may shift, as some families may see it as a protective mechanism against rape for women and girls. Through this logic, sexual violence in conflict-affected settings may exacerbate vulnerability to child or forced marriage.

Note: * Callamachi, 2015.
     ** Jefferson, n.d.
B. The conflicts of Iraq, Libya, and Yemen

1. Iraq: 2003-2018

The Iraqi conflict is one of the most violent conflicts on record, yet the intensity of the conflict has changed substantially during the period 2003-2018. The conflict was marked by three different phases. The first phase was the initial transition between 2003 and 2007, initiated by the United States-led Coalition Provisional Authority. The second phase, from 2007 to 2011, was marked by subsiding violence. The third phase played out between 2012 and 2017, where increased tensions led to the rise of the Islamic State, and again increased the intensity of the fighting to levels like those observed in the first phase of the conflict. The bloodiest year on record was 2015. Figure 2 shows the subnational shifts in violence over time.

The bloodshed in Iraq has been so intense, that almost all years since 2003 classify the country as having a major conflict. The level of intensity, as well as the protracted nature of the conflict, has affected the population in a multiplicity of ways. Figure 3 shows conflict intensity in Iraq as measured by conflict-related deaths.

Figure 2. Violence shift in Iraq 2003-2018 by district

Source: ESCWA calculations based on data from UCDP Georeferenced Event Dataset.
Note: The heatmap shows the conflict events in Iraq (2003-2018), weighted by conflict intensity as measured by the combination of the number of events and battle-related deaths. It is calculated through a two-dimensional Gaussian kernel smoothing of the event location pattern with sigma equal to 0.5. The source defines a conflict event as “an incident where armed force is used by an organized actor against another organized actor, or against civilians, resulting in at least one direct death at a specific location and a specific date”. The boundaries and names shown, and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
Box 3. Formerly enslaved Yezidi women and children born of rape

On 3 August 2014, the Islamic State invaded Sinjar in Iraq’s Nineveh Governorate, killing men and abducting women, girls and boys from the Yezidi community. Subsequently, women and girls were enslaved and “sold” to Islamic State fighters. Rape and sexual violence became part and parcel of the enslavement; however, several doctors treating Yezidi women and girls who escaped enslavement noted that rates of pregnancy were relatively low given the numbers of women abducted and the frequency of rapes endured.

To possibly explain this deviance, there is documentation that Yezidi women and girls who were sexually enslaved by the Islamic State were forcibly given birth control. This may be due to the Islamic State’s prohibition on abusing a woman while she is pregnant. Thus, some Yezidi women reported that they regularly received oral and injectable contraception, and that the birth control followed them, as they were passed among fighters, to ensure the viability of the sex trade. Also of note is that enslaved Yezidi women and girls showed signs of severe malnourishment, with some appearing emaciated, which also may have also impacted fertility rates. For women who did become pregnant, forcible abortions were reported.

For Yezidi women who did bear children of Islamic State fighters, reintegration into their communities has proven difficult. While the spiritual leader, Baba Sheikh, called upon the Yezidi community to accept returning women, there has been no such call for the children. In some instances, children have been left behind, given away or turned over to an orphanage.

Complicating matters is that Yezidi identity is passed solely through the father’s side, leaving many to view the children as inherent outsiders. Another complication is article 26 of Iraq’s National Identity Card Law no. 3 (2016), which says that a child shall automatically be registered as Muslim if one of the parents is Muslim; there are no exceptions for children born of rape. For the Yezidi population, this serves as yet another reminder that their identity is on the verge of erasure. The sectarian and gendered nature of these frameworks creates further vulnerabilities for women and girls, while also reifying their subordinate status.

Note: * Moussa, 2018. 

b Callamachi, 2016. 


d Callamachi, 2016. 

e PA/HRC/32/CRP.2, p. 15. 

f Yazda and The Free Yezidi Foundation, 2015. 

h HRW, 2019. 

2. Libya: 2011-2018

In Libya, the crisis began with the Arab uprisings in February of 2011. The uprisings led to a civil war, foreign military intervention, and the ousting and death of the former leader Muammar Gaddafi in October 2011.

In the aftermath of the conflict there has been a proliferation of armed groups that have increased the use of violence and have generated pervasive instability across all regions of the country. In September 2012, armed factions allied with Al-Qaida attacked the United States consulate in Benghazi. This prompted an intensification of the violence, which escalated in 2014. This has now evolved into an ongoing conflict among rival groups seeking control of different territories. Figure 4 shows the geographical variation in conflict intensity over the years, and figure 5 shows conflict intensity in Libya as measured by conflict related deaths.
Figure 3. Violence intensity in Iraq 2003-2018

Source: ESCWA calculations based on data from UCDP Georeferenced Event Dataset.

Figure 4. Violence shift in Libya 2011-2018 by governorate

Source: ESCWA calculations based on data from UCDP Georeferenced Event Dataset.
3. Yemen: 2011-2018

In Yemen, the current conflict has roots in the failure of a formal political transition following popular uprisings. The country headed on a downward spiral of instability that culminated in a full-fledged civil war in 2015. Fighting continued through 2016 until the United Nations brokered a months-long cessation of hostilities to initiate peace talks. However, the talks ended without an agreement. Since then, further attempts for peace have failed and neither side has made decisive battlefield gains, perpetuating the conflict and causing a massive humanitarian crisis.

The presence of several insurgent and terrorist groups has also caused the situation to deteriorate, as the conflict now includes many different factions and fronts, making negotiation efforts difficult as agreements are not necessarily binding for all parties involved. Currently, the conflict comprises a variety of interconnected local conflicts involving regional and international powers competing for influence.

Figure 6 shows the geographical variation in conflict intensity over the years, and figure 7 shows conflict intensity in Yemen as measured by conflict-related deaths.
Figure 6. Violence shift in Yemen 2011-2014 by governorate

Source: ESCWA calculations based on data from UCDP Georeferenced Event Dataset.

Figure 7. Violence intensity in Yemen 2011-2018

Source: ESCWA calculations based on data from UCDP Georeferenced Event Dataset.
6. Measuring the Effects of Exposure to Violence on Child Marriage and Adolescent Fertility
6. Measuring the Effects of Exposure to Violence on Child Marriage and Adolescent Fertility

A. Rates of child marriage and fertility rates

This report uses retrospective nuptiality and birth history data from the household surveys in Iraq, Libya and Yemen collected between 2003 and 2018 to calculate rates of child marriage and fertility rates.

The report draws from:

(a) the Iraq Multiple Indicator Cluster Surveys (MICS) implemented by the Central and Kurdistan statistical offices with support from UNICEF in 2006, 2011 and 2018;
(b) The Libyan Pan Arab Project for Family Health Survey (PAPFAM) collected in 2007 and 2014;
(c) The Yemeni Multiple Indicator Cluster Surveys (MICS) implemented by Yemeni statistical offices with support from UNICEF in 2006, and the National Health and Demographic Survey collected in 2013 by the Ministry of Public Health and Population, and the Central Statistical Organization.

Further information on the individual surveys are presented in the Appendix.

These surveys collect data on the date and age at first marriage. These data allow for estimating two useful trends:

(a) The proportion of marriages before the age of 18 by year of marriage;
(b) The average age at first marriage by year of marriage.

Population fertility refers to the number of live births of any population group. Demographic and health surveys usually collect retrospective marital birth history data.

A birth history collects the dates of birth of all the children a woman has had in her life, starting from her first child until the time of the survey. Both the year and month of birth are recorded in these surveys, and information on child survival is also collected. Birth histories are usually collected from a sample of women aged 15-49 at the time of the survey.

Three types of information are necessary to compute fertility rates from birth histories:

(a) the dates of births of the children;
(b) the date of birth of each woman (whether she has ever given birth);
(c) the date of the survey.
These dates allow for locating events and computing exposure by age, period and cohort. Two other variables are, in some cases, also necessary:

(a) A sampling weight variable to correct for the over- or under-sampling of some women because of sample design or differential response rate;\(^76\)
(b) An all-women factor, which is used to compute age-specific fertility rates for all women when the sample is limited to women who have ever been married.\(^77\)

The Total Fertility Rate (TFR) is a common measure of current fertility and is defined as the number of children a woman would have by the end of her childbearing years if she were to pass through those years bearing children at the current age-specific fertility rates.

Additionally, these surveys collect retrospective birth histories for all interviewed women who were ever married at the date of the interview. Complete and accurate information regarding the birth date of women and the date of each live birth they had are crucial for a correct estimation of fertility trends. For the analyses, women ages 15 to 39 years are considered and associated with a corresponding violence category given their current governorate where they reside. Further information on the individual surveys is presented in the Appendix.

Descriptive analyses on these four measures of demography are considered, and further desegregated by conflict exposure category:

(a) Child marriage trends;
(b) Age at first marriage trends;
(c) Total fertility rates;
(d) Age-specific fertility rates.

B. Child marriage in Iraq

Prior to 2003, the regime in Iraq actively supported family planning services.\(^78\) After 2003 a general deterioration of the status of women took place due to an exacerbation of sectarian-religious conservatism and an increase in both the real and perceived level of danger outside the home.\(^79\) With the onset of violence in 2003, physical insecurity and movement restrictions, combined with wide-scale poverty and unemployment, led to higher instances of child marriage among women and girls in the name of security. Likewise, this led to higher instances of early childbearing than would have been the case in the absence of war.\(^80\)

Using data from UCDP GED, the data is clustered into four violence-level categories.\(^81\) Using all three waves of Iraq MICS (2006, 2011 and 2018) the proportion of women who married before the age of 18 by year of marriage was calculated. Figure 8 depicts the national child marriage trend in Iraq since 1990 and figure 9 depicts the child marriage trend in Iraq since 1990 by violence cluster. The figures show the percentage of married women who wed before the age of 18 in each year.

Figure 9 describes the trends in child marriage by year since 1990. From 1990, there was a secular decline in child marriage, falling from about 40 per cent in 1990 to about 25 per cent in 2003 at the national level. Figure 9A presents estimate clusters of violence in two separate periods. The first uses data from 2003 until 2006 and the second uses data from 2014 to 2018. The reason to disaggregate these separate clusters is to capture the shift in violence that took place after 2014. The shift in violence changed governorates from low to high intensity violence. With these clusters we estimate the trends of the percentage of women
marring by age 18 by year of marriage. The graphs show that governorates experiencing no violence continued to experience a declining percentage of women marrying by age 18, while governorates experiencing violence experienced an increase in the percentage of women marrying before the age of 18. To further confirm these results and carried out tests for structural change as shown in the Appendix.

Figure 10 further disaggregates child marriage trends by conflict intensity. Additional examination of the data reveals that, after 2003, child marriage rates jumped in governorates afflicted by conflict but remained low in governorates not experiencing violence. Governorates not afflicted by conflict continued a declining secular trend in the years following the United States-led invasion of Iraq.

Figure 8. Child marriage trend in Iraq 1990-2018

Source: Authors’ calculations based on MICS 2006, 2011 and 2018. Note: No violence region = Dohuk, Sulaymaniya, and Missan; Low violence = Erbil, Karbala, Wasit, Najaf, Al-Qadisiya, Thi-Qar and Basra; Medium violence = Kirkuk, Diyala, Al-Anbar, Babil, and Salahaddin; and High violence = Ninewa and Baghdad.
Figure 9. Child marriage trend by cluster in Iraq 1990-2018

Source: Authors’ calculations based on MICs 2006, 2011 and 2018.
Note: No violence region = Dohuk, Sulaymaniyah, and Missan; Low violence = Erbil, Karbala, Wasit, Najaf, Al-Qadisiya, Thi-Qar and Basra; Medium violence = Kirkuk, Diyala, Al-Anbar, Babil and Salahaddin; High violence = Ninewa and Baghdad.

Figure 9A. Child marriage trend by cluster in Iraq 1990-2006 and 2007-2018

Cluster 1: 2003-2005

Source: Authors’ calculations based on MICs 2006, 2011 and 2018.
Note: CLUSTER 1 (violence 2003-2006): No violence region = Dohuk, Sulaymaniyah and Missan; Low violence = Erbil, Karbala, Wasit, Najaf, Al-Qadisiya, Thi-Qar and Basra; Medium violence = Kirkuk, Diyala, Al-Anbar, Babil and Salahaddin; High violence = Ninewa and Baghdad. CLUSTER 2 (violence in 2014-2018): No violence region= Wasit, Qadisyah, Missan, Erbil, Najaf, Sulaymaniyah; Low violence region = Diala, Duhok, Muthana, Thiqar, Babi and Karbalah; Medium violence region: Baghdad, Kirkuk and Salahaddin; High violence region=Ninewa and Anbar.
In figure 9A we reproduce figure 9, but now using two different clusters of violence. Following the surge in violence in 2003-2005, violence drastically shifted geographically in Iraq in 2015. Figure 9A shows the trends in child marriage in two separate clusters of violence so we can better understand the trends in child marriage over time, as there was a marked geographical shift in violence since 2014. Reclustering the violence according to the latest incidences, is shown in figure 9A. Again, the data suggests that child marriage continued to decline in governorates not exposed to violence.

The average age of marriage over time by level of violence is estimated from the data. Figure 10 depicts the trends in age at first marriage by year since 1990 at the national level and figure 11 depicts the trend in age of first marriage by violence cluster. The average age of marriage is increased in non-violent governorates but declined in regions more exposed to conflict. Figure 11A reproduces figure 11, using again the two different clusters of violence. Figure 11A shows the trends in age at first marriage in two separate clusters of violence so we can better understand the trends over time, as there was a marked geographical shift in violence since 2014. Reclustering the violence according to the latest incidences is shown in figure 11A. Again, the data suggests that the average age at first marriage continued to increase in governorates not exposed to violence.

**Figure 10.** Age at first marriage trend in Iraq 1990-2018

Source: Authors’ calculations based on MICS 2006, 2011 and 2018. Note: No violence region = Dohuk, Sulaymaniyah, Missan, Low violence = Erbil, Karbala, Wasit, Najaf, Al-Qadisiya, Thi-Qar, Basra; Medium violence = Kirkuk, Diyala, Al-Anbar, Babil, Salahaddin; and High violence = Ninewa and Baghdad.
Figure 11. Average age of marriage by violence cluster in Iraq 1990-2018

Source: Authors’ calculations based on MICS 2006, 2011 and 2018. Note: No violence region = Dohuk, Sulaymaniyah, and Missan; Low violence = Erbil, Karbala, Wasit, Najaf, Al-Qadisiya; Thi-Qar, Basra; Medium violence = Kirkuk, Diyala, Al-Anbar, Babil, Salahaddin; High violence = Ninewa and Baghdad.

Figure 11A. Average age of marriage by violence cluster in Iraq 1990-2006 and 2017-2018

Source: Authors’ calculations based on MICS 2006, 2011 and 2018. Note: CLUSTER 1: No violence region = Dohuk, Sulaymaniyah and Missan; Low violence = Erbil, Karbala, Wasit, Najaf, Al-Qadisiya, Thi-Qar and Basra; Medium violence = Kirkuk, Diyala, Al-Anbar, Babil and Salahaddin; High violence = Ninewa and Baghdad. CLUSTER 2: No violence region = Wasit, Qadisyah, Misan, Erbil, Najaf, Sulaymaniyah; Low violence region = Dlala, Duhok, Muthana, Thiqar, Babi and Karbalah; Medium violence region = Baghdad, Kirkuk and Salahaddin; High violence region = Ninewa and Anbar.
C. Child marriage in Libya

Data from the PAPFAM surveys (2007 and 2014) allows for calculating the proportion of women who married before the age of 18 by year of marriage. Using the data from UCDP GED, the data is clustered into four violence level categories. This indicator is calculated by aggregating the percentage of marriages occurring before the age of 18, by year of marriage. These estimates indicate that child marriage declined from about 20 per cent in 1990 to less than 5 per cent.

However, there is an observed small increase in child marriage after 2011, as depicted in figure 12. This percentage places Libya as the state with one of the lowest percentages of child marriage in the Arab region. Libya changed its marriage law to raise the minimum age to 20 in 1984; the minimum marriage age is the same for both men and women. In the aftermath of the enactment of the law it appears that enforcement may have played a role in reducing rates of underage marriage, even in the aftermath of violent conflict. The decline in early marriage cannot be solely attributed to the change in the law, as this change was accompanied by a large increase in access to education for Libyan women, in particular a large increase in access to tertiary education.

Similarly, there are no statistically significant differences by violence cluster in the prevalence of child marriage, as depicted in figure 13. Moreover, the introduction of Law no. 10 in 1984 appears to have also increased the average age of first marriage in Libya, from 21 years of age in 1990 to 26.5 in 2013. This is depicted in figure 14. Figure 15 depicts the age at first marriage by cluster with no observed statistically significant difference between these trends.

**Figure 12.** Child marriage trend in Libya 1990-2013

Figure 13. Child marriage trend by cluster in Libya 1990-2013


Figure 14. Age at first marriage trend in Libya 1990-2013

Figure 15. Age at first marriage trend by cluster in Libya 1990-2013


However, it is promising that the institutionalization and enforcement of the law radically changed the culture and practice of child marriage over the past 30 years. While the conflict has severely intensified since 2014, no additional survey data has been collected to assess if exposure to conflict has had impacted the rate of child marriage in Libya, though anecdotal evidence claims so.

D. Child marriage in Yemen

Even before the conflict, Yemen faced widespread poverty, food insecurity and environmental degradation. Conflict has compounded the existing predicament of poverty and generated a dramatic humanitarian crisis.

Moreover, Yemen has one of the highest prevalence of child marriage in the Arab region, only surpassed by Mauritania, Somalia and the Sudan. The practice of child marriage in Yemen is viewed as a sociocultural norm; however, it is driven by gender inequality and systematic discrimination against girls. The practice is widespread across all regions, as the country does not recognize a minimum age of marriage.
The trend in child marriage is calculated using data from the MICS 2006 and DHS 2013. Additionally, using the data from UCDP GED, the data is clustered into four violence level categories. Figure 16 shows that the trend in child marriage has been declining since 1990, when about 74 per cent of marriages occurred before the age of 18, to about 60 per cent in 2012.

Exposure to violence and the degradation of the state have severely increased the risk of child marriage for girls in Yemen. The violence has dramatically surged since 2015 followed by a state of institutional chaos. Figure 17 depicts child marriage by violence cluster. While the trend has been steadily declining since 1990, it appears to be changing in more violent governorates.

Similarly, figure 18 shows the trends in age at first marriage. This figure also suggests a worrying pattern, showing a deceleration of an upward trend in age at first marriage after 2011.

Figure 16. Child marriage trend in Yemen 1990-2012

Source: Authors’ calculations based on MICS 2006 and DHS 2013. Note: Low violence = Ibb, Taiz, Al-Jawf, Hajjah, Al-Hudaydah, Dhamar, Sadah, Sanaa, Aden, Lahj, Al-Mhweit, Al-Mhrah, Amran, Aldhalae and Reimah; Medium violence = Sanaa City, Al-Baidha, Hadramout, Shabwah and Mareb; High violence = Abyan.
**Figure 17.** Child marriage trend by cluster in Yemen 1990-2012

![Graph showing child marriage trend by cluster in Yemen from 1990 to 2012.](image)


**Figure 18.** Age at first marriage trend in Yemen 1990-2012

![Graph showing age at first marriage trend in Yemen from 1990 to 2012.](image)

Figure 19 further confirms the assumption that violence is the driving force behind these changing patterns, as the national trends are driving the trends in the highest violent governorates, where the age at first marriage has been declining since 2006.

To date, no additional survey data has been collected in Yemen to assess if the surge in violence is changing the trends of child marriage and age at first marriage, but the suggestive evidence presented here is extremely worrisome for a country with already alarming levels of child marriage.

Figure 19. Age at first marriage trend by cluster in Yemen 1990-2012

Source: Authors’ calculations based on MICS 2006 and DHS 2013. Note: Low violence = Ibb, Taiz, Al-Jawf, Hajjah, Al-Hodiehah, Dhamar, Sadah, Sanaa, Aden, Lahj, Al-Mhweit, Al-Mhrah, Amran, Aldhalae and Reimah; Medium violence = Sanaa City, Al-Baidha, Hadramout, Shabwah and Mareb; High violence = Abyan.
7. Total Fertility Trends and Age-specific Fertility Trends
7. Total Fertility Trends and Age-specific Fertility Trends

This report calculates the TFR for women aged 15-39 for all available surveys in Iraq, Libya and Yemen. Estimates from the analyses cover the period 1996-2017. The reason for this time period is that the oldest women whose birth histories were collected in these surveys were aged 49 at the date of the interview and were therefore aged 39 ten years earlier.\textsuperscript{86}

The computation of period age-specific fertility rates requires counting events and measuring exposure in age groups for a defined period. These rates are usually computed by five-year age groups (between exact ages) for the three years preceding the survey.\textsuperscript{57}

\textbf{Figure 20.} Total fertility rate

\textbf{Source:} ESCWA calculations based on data from Iraq MICS 2006, MICS 2011 and MICS 2018 household surveys.
A. Total fertility trends and age-specific fertility trends in Iraq, 1996-2017

Figure 20 shows the trend in TFR for women aged 15-39 in Iraq from 1996-2017. These rates were computed using three different waves of the Iraq MICS conducted in 2006, 2011 and 2018.88 Following the United States-led invasion in March 2003, there was a moderate increase in the total fertility rate up until 2006; it then plateaus from 2007-2010 and declines after 2010. To understand the increase in fertility, we proceed by decomposing the rates into age-specific fertility rates shown on figure 21. The decomposition allows identifying which age cohort experienced the largest change in fertility over the 1996-2017 period. Figure 21 displays the trends in age-specific fertility rates (ASFR) for the women aged 15-19, 20-24, 25-29, 30-34 and 35-39 years. The data reveals a large increase in age specific fertility rates after 2003 for the cohorts 15-19 and 20-24 years, while the age specific fertility rate declined or flattened for the other older cohorts of women. Data from the 2018 MICS survey reveals a declining trend in fertility for women of all age cohorts after 2011. While the confidence intervals of the 2011 and 2018 survey overlap for older cohorts, the ASFR appears to be much higher for the 15-19 and 20-24 age cohorts in the 2018 survey for the years of overlap.89

Figure 22 shows the change in the age-specific fertility rates relative to the year 1997. By comparing the different trends indexed changes, it becomes clearer that the younger women are the ones who experienced the largest percentage increase in fertility between the years of 2003 and 2010. This large increase is confirmed by Cetorelli (2014) who further asserts that the increase in fertility for women 15-19 in this period in Iraq was unprecedented, and mostly driven by an increase in child marriage observed after 2003. The age specific fertility rate for the cohorts 15-19 and 20-24 increased by 26 per cent and 33 per cent, respectively.

Figure 21. Age-specific fertility rate 1997-2017

Source: ESCWA calculations based on data from Iraq MICS 2006, MICS 2011 and MICS 2018 household surveys.
Figure 22. Age-specific fertility rate, indexed 1997-2017

Source: ESCWA calculations based on data from Iraq MICS 2006, MICS 2011 and MICS 2018 household surveys.

Figure 23. Total fertility rate by violence cluster
Notably, after 2010 there is a marked decline in fertility trends for all age cohorts. Yet, while cohorts 20-39 observed a significantly lower fertility level in 2017 compared to 1997, the youngest aged cohort only returned to the 1997 levels of fertility.

When we divide the data by violence clusters, we observe that fertility declines after 2010 for all regions.

Figure 23A shows the age-specific fertility rates from 2008-2018 for no violence governorates. The figure suggests that after 2015, the ASFR continued to decline for the older age cohorts while remaining constant for the youngest cohort 15-19.

Figure 23B shows the age specific fertility rates from 2008-2018 for low violence governorates. The figure suggests that after 2015, all ASFR followed a declining trend.

Figure 23C shows the age-specific fertility rates from 2008-2018 for medium violence governorates. The figure suggests that after 2015, all ASFR followed a declining trend, but more marked for cohorts 20-24, 25-29 and 30-34. The trend for the 15-19 as well as the 35-39 cohort fell less markedly.

**Figure 23.A** Age-specific fertility in no violence governorates

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**Source:** Authors’ calculations based on MICS 2006, 2011 and 2018. Note: No violence region = Dohuk, Sulaymaniyyah, and Missan; Low violence = Erbil, Karbala, Wasit, Najaf, Al-Qadisiya, Thi-Qar, Basr; Medium violence = Kirkuk, Diyala, Al-Anbar, Babil, Salahaddin; High violence = Ninewa and Baghdad.
Figure 23.B  Age-specific fertility in low violence governorates

Source: Authors’ calculations based on MICS 2006, 2011 and 2018. Note: No violence region = Dohuk, Sulaymaniyah, and Missan; Low violence = Erbil, Karbala, Wasit, Najaf, Al-Qadisiya, Thi-Qar, Basra; Medium violence = Kirkuk, Diyala, Al-Anbar, Babil, Salahaddin; High violence = Ninewa and Baghdad.

Figure 23.C  Age-specific fertility in medium violence governorates

Source: Authors’ calculations based on MICS 2006, 2011 and 2018. Note: No violence region = Dohuk, Sulaymaniyah, and Missan; Low violence = Erbil, Karbala, Wasit, Najaf, Al-Qadisiya, Thi-Qar, Basra; Medium violence = Kirkuk, Diyala, Al-Anbar, Babil, Salahaddin; High violence = Ninewa and Baghdad.
Figure 23.D Age-specific fertility in high violence governorates

Figure 23D shows the age-specific fertility rates from 2008-2018 for medium violence governorates. The figure suggests that after 2015, all ASFR remained fairly constant for all age cohorts, after experiencing a declining trend from 2008-2015.

Interestingly, following the increase in violence experienced in 2015, fertility does not appear to be on the rise, even if we observe an increase in child marriage in this same period. In this period, it appears simultaneously that child marriage was on the rise while fertility was on the decline.

Source: Authors’ calculations based on MICS 2006, 2011 and 2018. Note: No violence region = Dohuk, Sulaymaniyah, and Missan; Low violence = Erbil, Karbala, Wasit, Najaf, Al-Qadisiya, Thi-Qar, Basra; Medium violence = Kirkuk, Diyala, Al-Anbar, Babil, Salahaddin; High violence = Ninewa and Baghdad.

B. Total fertility trends and age specific fertility trends in Libya, 1996-2013

Figure 24 shows the trend in TFR for Libyan women between 15-39, computed using the PAPFAM 2007 and 2014 household surveys. The figure shows a marked increase in total fertility rate going from 2.8 in 2007 to 3.2 in 2014. Further inspection of the data suggested by looking at the ASFR demonstrates that higher fertility rates of women aged between 20-24, 25-29, 30-34 are driving this trend, as illustrated in figure 25.
The data confirms that fertility was increasing for all cohorts of women; however, the highest absolute increase was observed in the women age 20-24 and 25-29. Indeed, the fertility rate of the women aged between 20-24 increased from 73.7 births per 1,000 women in 2007 to 80 births per 1,000 women in 2014, a non-negligible 10 per cent increase. The cohort of women between 25-29 showed an increase from 157.1 births per 1,000 women to 182.9 births per 1,000 in 2014, an increase of 16 per cent.

Figure 26 shows the relative change in the age-specific fertility rate of Libyan women indexed at 1997. From this figure it is indeed clear that the largest increase in fertility rates happened to women aged 20-24 and 30-34. It is worth mentioning that in relative terms, the youngest cohort of women aged 15-19 also experienced a very large increase in their fertility; however, the absolute value of the change is small as it changes from seven births per 1,000 to 10 births per 1,000 women.

**Figure 24.** Total fertility trend, Libya 1996-2013

**Source:** ESCWA calculations based on data from Libya PAPFAM 2007 and PAPFAM 2014 household surveys.
Figure 25. Age-specific fertility rate, Libya 1996-2013

Source: ESCWA calculations based on data from Libya PAPFAM 2007 and PAPFAM 2014 household surveys.

Figure 26. Age-specific fertility rate, indexed, Libya 1996-2013

Source: ESCWA calculations based on data from Libya PAPFAM 2007 and PAPFAM 2014 household surveys.
C. Total fertility trends and age specific fertility trends in Yemen, 2004-2013

The 2013 Yemen DHS was used to compute the trend in TFR for women aged between 15 and 39, as shown above in figure 27. The total fertility rate for Yemen is 4.4 children per woman, a large decrease since 1997, when the rate was 6.5 children per woman. Fertility has fallen steadily among women in all age groups over the past two decades. Substantial declines in age-specific fertility rates were observed from the period 10 years before the survey.90 Figure 27 shows that a steady decline in total fertility rates appears to have flattened after 2008.

Figure 28 shows the ASFR for Yemeni women aged between 15 and 39 years. The trends are stable with little fluctuation, similar to the one observed in the total fertility trend. However, further inspection of the data reveals that the youngest age cohort 15-19 experienced the largest decline in fertility in the period 2006-2008, as shown in figure 29.

Additionally, it is worth noting that fertility trends of the three youngest cohorts aged 15-19, 20-24 and 25-29 appear to have increased in 2009, and then flattened. Age specific fertility trends of older cohorts 30-34 and 35-39 level after 2008. Figure 29 shows the relative change in the ASFR of Yemeni women indexed at 1997. The figure confirms that the largest relative decline in fertility rates happened to the youngest cohort of women aged 15-19.

Figure 27. Total fertility trend, Yemen 2004-2013

Source: ESCWA calculations based on data from Yemen DHS 2013.
Figure 28. Age-specific fertility rate, Yemen 2004-2013

Source: ESCWA calculations based on data from Yemen DHS 2013.

Figure 29. Age-specific fertility rate, indexed, Yemen 2004-2013

Source: ESCWA calculations based on data from Yemen DHS 2013.
8. Concluding Remarks and Discussion
8. Concluding Remarks and Discussion

This report develops a framework to understand how exposure to conflict may be detrimental to human development. Conflict erodes human capital, health and lifelong economic productivity for numerous individuals. This study focuses on child marriage and adolescent fertility, which have a disproportionate impact on women and girls, and lead to intergenerational poverty.

Child marriage is linked to life cycle deprivation; positively associated with poverty; high birth and death rates; lower overall levels of education, lower health-care access and lower employment rates for women. Moreover, pregnancy-related deaths are known to be a leading cause of mortality for both married and unmarried girls between the ages of 15 and 19.

This report considers the growing adversities faced by young women in conflict-afflicted countries across the Arab region because younger girls are increasingly exposed to disadvantage caused by exposure to violence in their communities, and the heightened perceptions of insecurity.

In these settings public policies play a key role in mitigating adversities. The conflicts in Iraq, Libya and Yemen have put countless girls and young women at the risk of poverty and disadvantage by eroding human development, in turn making the transmission of poverty from one generation to the next more probable.

There are several policy recommendations that follow from our theoretical and analytical findings. Mitigating the marginalization of girls living in conflict settings across the region requires strong policy actions by national governments and the international community. Even in conflict-affected settings, strong institutional practices can lessen adversities. Such is the case of Libya, where the personal status law set the minimum age of marriage at age 20 for women and men alike. Not only the stipulation of the law but its enforcement broke with centuries of this traditional practice and effectively almost eliminated child marriage in a matter of decades. Moreover, fertility trends also corroborate these positive trends as adolescent pregnancy is negligible in Libya. However, there are some worrying signs that the local state of internal conflict and rampant violence, may be empowering extremist factions to embrace detrimental practices.

Iraq and Yemen could follow suit by adopting similar legislation and enforcement to protect girls against child marriage and adolescent pregnancy. The evidence suggests some worrying trends for both Iraq and Yemen, where the intensification of violence has led to a higher likelihood of child marriage and adolescent pregnancy. These countries could start by establishing a minimum age of 18 for marriage for boys and girls, as outlined by the United Nations. Moreover, these countries should undertake legislative reforms that allow ratifying and implementing international human rights treaties that advance the rights of women and children, including CEDAW and the CRC, as well as the removal of reservations to CEDAW to
ensure its effectiveness in protecting and promoting the rights of women and girls.

Furthermore, these countries should amend discriminatory provisions in personal status codes by:92

(a) Setting a minimum age for marriage at 18 for males and females alike and eliminating or limiting legal parameters for exceptions that allow girls and boys under the legal age to marry;

(b) Establishing penalties, such as jail terms or fines, for any person who facilitates the marriage of children;

(c) Adopting and enforcing laws to combat sexual and gender-based violence;

(d) Providing capacity-building trainings targeted at judges to clarify the interpretation of the law, as well establishing penalties for judges that act with discretionary power;

(e) Simplifying legal procedures to file for divorce and ensuring that minors who are married have the right to divorce;

(f) Strictly enforcing birth and marriage registration through an official registry;

(g) Advocating for norms change to go hand-in-hand with legal reform, etc. – this would entail working with leaders/influencers, religious leaders, families, youth, girls and others on cultivating more gender equal norms, investing in young girls, and developing positive coping mechanisms.

Furthermore, Iraq, Libya and Yemen as well as other countries directly or indirectly touched by conflict across the region, ought to start recognizing that the largest costs of violence are the costs on human development. To adequately prevent and alleviate the marginalization of young women:

(a) Efforts must be taken to increase girls’ access to education must be strengthened, by setting policies in place to encourage enrolment, and permanence through secondary, as well as policies deterring school dropouts;

(b) Efforts must be taken to increase access to physical and psychological health services for school aged girls and boys;

(c) Efforts must be taken to increase awareness of, and access to reproductive health services, for school-aged girls and boys.

Investing in the health and education of girls is indisputably the best way of ending the intergeneration transmission of disadvantage in conflict settings a beyond.
Appendix

Data and Methodology

The present report measures the correlation between armed conflict and child marriage and adolescent fertility in Iraq, Libya and Yemen. This report provides a descriptive analysis on the effects of exposure to conflict on child marriage and adolescent fertility. For such purpose we use two sources of data. First, the report draws from a series of a representative household surveys of the periods before and after the onset of conflict. Secondly, it relies on georeferenced data on conflict incidences. We then cluster the data by violence level and draw trends in child marriage and fertility over time. We also perform test for structural breaks, to understand when exposure to conflict has changed a demographic pattern.

Data Numerous studies have examined the relationship between armed conflict and development outcomes through aggregate, national-level data. While that body of research provided valuable insights into the linkages between variables, it faced several limitations. Conflicts are frequently contained to limited geographical areas, or their intensity varies considerably from one territory to another within the same country, so the use of country-level data could mask and underestimate the effect on the population that is directly hit by the violence. Armed conflict and sustainable development have a complex association in which the cause-effect link flows in both directions, in addition to numerous factors that affect both variables and make it difficult to differentiate the separate effects. The statistical methodologies applied in such cross-country, nation-level studies can identify only the degree of correlation between conflict and development outcomes, without necessarily establishing causality. Finally, a close inspection of the data available shows that some of the macrolevel variables frequently considered (for example, child mortality or labour market outcomes) are not always observed but, rather, interpolated through estimates obtained from econometric models. While that can be effective in certain circumstances, a conflict could be disruptive enough to make the actual outcomes very different from the values forecasted by those models. The study of the causal effect on development outcomes requires richer, more detailed data.

One way to overcome some of the problems mentioned above is to rely on micro-level socioeconomic data, a type of data where the unit of observation is the individual or the household. It is typically collected through surveys applied to a representative sample of the population. The surveys typically cover several topics related to livelihoods and human development (including household composition, housing conditions, education levels, health status, nutrition and food
security indicators, and sources of income). The present section describes the type and sources of the data that inform the analysis.

A. Household surveys

The estimation methodology described below has important data requirements. It needs household surveys representative of the population at the subnational level before and after the armed conflict being studied. It also relies on different degrees of violence intensity per region, to compare those households that were directly impacted by conflict with those that were not. If different degrees of individual exposure to violence could be determined from the surveys, that information also would be used. The approach calls for surveys that measure the development outcomes of interest following established and comparable definitions. That type of information unfortunately is not available for all the countries in conflict within the Arab region. In most cases, only surveys prior to the armed conflict are available. Only Iraq and Yemen have enough household surveys required for the identification strategy. The analysis presented in the present report will be extended to other countries in future, when additional surveys become available.

Table A.1 presents the household surveys covered in the analysis. A total of five surveys were considered for Iraq. The three MICS for the years 2000, 2006 and 2011 (Waves 2, 3 and 4, respectively) are co-implemented by the United Nations Children’s Fund (UNICEF) and conform to that institution’s long-standing experience in developing statistical monitoring tools of the well-being of children and women. The two Iraq Household Socioeconomic Surveys (IHSES) for the years 2007 and 2012 belong to the World Bank’s Living Standards Measurement Survey (LSMS) program. For Yemen, three surveys were used: MICS 2006 (Wave 3), the Household Budget Survey carried out in 2006, and the Demographic and Health Survey (DHS) of 2013, part of the DHS program implemented by the United States Agency for International Development (USAID). The most recent surveys for Libya and the Syrian Arab Republic are also included in the table, but they cover only the time prior to the start of the recent armed conflicts. They were included in the present study to describe the pre-conflict development situation in those countries. Those surveys were the main source of microlevel data about development outcomes over the different stages of the life cycle: infant mortality, child nutrition, educational indicators and labour-market outcomes. The surveys generally allowed the estimation of data disaggregated up to the governorate level. Further geographical precision was not allowed by the sampling methods employed.

The availability of survey data constrained the time coverage of the analysis. For Iraq, the MICS 2000 served as the main source of information for the pre-conflict period. The MICS 2006 and IHSES 2007 were carried out after the invasion and the first period of high conflict intensity, and as one of the deadliest phases of the conflict was starting. The MICS 2011 and IHSES 2012 were implemented after that phase had ended and during the least violent period of the conflict. The most recent wave of the conflict is covered by the MICS 2018.

For Libya, the National Survey on Family Health 2007 preceded the start of the conflict. The data collection for National Survey on Family Health 2014 took place after the 2010-2011 uprisings.
For Yemen, the Household Budget Survey (HBS) 2006 and MICS 2006 preceded the start of the conflict. The data collection for DHS 2013 took place after the first wave of the conflict and could be used as a source of information on the impact of the violence on the population, but only for this first wave.

Table A.1 Household surveys used in the analysis

<table>
<thead>
<tr>
<th>Country</th>
<th>Survey name</th>
<th>Start of data collection</th>
<th>End of data collection</th>
<th>Number of households in sample</th>
<th>Number of individuals in sample</th>
<th>Agencies involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iraq</td>
<td>Multiple Indicator Cluster Survey (MICS)</td>
<td>Oct-00</td>
<td>Dec-00</td>
<td>13 211</td>
<td>99 478</td>
<td>UNICEF, Central Organization for Statistics and Information Technology, Council of Ministers, Planning Commission</td>
</tr>
<tr>
<td></td>
<td>Household Socioeconomic Survey</td>
<td>Feb-06</td>
<td>Dec-07</td>
<td>17 822</td>
<td>127 189</td>
<td>World Bank, Central Organization for Statistics and Information Technology, Kurdistan Regional Statistics Office</td>
</tr>
<tr>
<td>Country</td>
<td>Survey name</td>
<td>Start of data collection</td>
<td>End of data collection</td>
<td>Number of households in sample</td>
<td>Number of individuals in sample</td>
<td>Agencies involved</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------</td>
<td>--------------------------</td>
<td>------------------------</td>
<td>--------------------------------</td>
<td>--------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Libya</td>
<td>National Survey on Family Health</td>
<td>May-07</td>
<td>Oct-07</td>
<td>18 629</td>
<td>118 183</td>
<td>League of Arab States – Pan Arab Project for Family Health (PAPFAM), National Centre of Disease Control, Ministry of Health, others</td>
</tr>
<tr>
<td>Libya</td>
<td>National Survey on Family Healtha</td>
<td>Jan-14</td>
<td>Mar-14</td>
<td>18 579</td>
<td>101 872</td>
<td>League of Arab States – Pan Arab Project for Family Health (PAPFAM), Bureau of Statistics and Census, National Centre of Disease Control, others</td>
</tr>
<tr>
<td>Yemen</td>
<td>Multiple Indicator Cluster Survey (MICS)</td>
<td>Aug-06</td>
<td>Sep-06</td>
<td>3 586</td>
<td>26 082</td>
<td>UNICEF, Ministry of Public Health and Population, League of Arab States – Pan-Arab Project for Family Health (PAPFAM)</td>
</tr>
<tr>
<td>Yemen</td>
<td>Household Budget Survey (HBS)</td>
<td>Apr-05</td>
<td>Mar-06</td>
<td>13 136</td>
<td>98 941</td>
<td>UNDP, World Bank, Central Statistical Organization</td>
</tr>
<tr>
<td>Yemen</td>
<td>Demographic and Health Survey (DHS)</td>
<td>Jan-13</td>
<td>Dec-13</td>
<td>17 351</td>
<td>120 923</td>
<td>Central Statistical Organization, Ministry of Public Health and Population</td>
</tr>
</tbody>
</table>

**Source:** ESCWA.

*a The 2014 wave of the National Survey on Family Health for Libya appears to be problematic for some indicators, and these poor responses lead to low data quality. Specifically, school attendance showed a straight line and pattern of responses indicating that the data may not represent the respondent’s actual situation. Moreover, similar problems are observed for anthropometric information collected in the survey.
B. Data for the intensity of armed conflict

In addition to household surveys, the estimation methodology required a measure of conflict intensity. However, in parallel to the problems described above for macro-level data, country-level measures of conflict (such as the total number of battle-related deaths) were insufficient. What was needed was an indicator that provided information on the intensity of violence with a higher geographical and temporal precision.

There were several other options available in the literature, although not all of them provided the coverage required for the present study. The most widely known database is the Georeferenced Event Dataset (GED) produced by the Uppsala Conflict Data Program (UCDP). This is a database with violent events as the unit of observation. A violent event is broadly defined as an “incident where armed force was used by an organized actor against another organized actor, or against civilians, resulting in at least 1 direct death at a specific location and a specific date”. It covers events from 1989 to 2017 (in its current version 18.1) and is linked to the other databases produced by the institute, including the well-established Armed Conflict Dataset of UCDP and the Peace Research Institute Oslo (PRIO). Each event is accompanied by information on the actors involved, the type of incident, the geographical location, and an estimate of deaths caused by the incident.

For the present study, the GED was the main source of data on armed conflict because of its broad definition, the precise geographical information that enabled calculation of measures of conflict intensity at the subnational level, and the extensive information that it provided for each event.

C. Methodology

1. Violence Clusters

We used an iterative clustering procedure that partition the governorates into four groups, or clusters according to the violence level. The procedure begins with four initial group centres. Observations are assigned to the group with the closest centre. The mean or median of the observations assigned to each of the groups is computed, and the process is repeated. These steps continue until all observations remain in the same group from the previous iteration. To avoid endless loops, an observation will be reassigned to a different group only if it is closer to the other group centre. For a tied distance between an observation and two or more group centres, the observation is assigned to its current group if that is one of the closest and to the lowest numbered group otherwise.
### Table A.2 Iraq violence clusters

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Baghdad</td>
<td>High violence</td>
<td>Medium violence</td>
</tr>
<tr>
<td>Ninewa</td>
<td>High violence</td>
<td>High violence</td>
</tr>
<tr>
<td>Anbar</td>
<td>High violence</td>
<td>High violence</td>
</tr>
<tr>
<td>Kirkuk</td>
<td>Medium violence</td>
<td>Medium violence</td>
</tr>
<tr>
<td>Diale</td>
<td>Medium violence</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Sulaimaniya</td>
<td>Low violence</td>
<td>No violence</td>
</tr>
<tr>
<td>Wasit</td>
<td>Low violence</td>
<td>No violence</td>
</tr>
<tr>
<td>Qadisyah</td>
<td>Low violence</td>
<td>No violence</td>
</tr>
<tr>
<td>Misan</td>
<td>Low violence</td>
<td>No violence</td>
</tr>
<tr>
<td>Salahaddin</td>
<td>Low violence</td>
<td>Medium violence</td>
</tr>
<tr>
<td>Duhok</td>
<td>Low violence</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Muthana</td>
<td>Low violence</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Thi-qar</td>
<td>Low violence</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Erbil</td>
<td>No violence</td>
<td>No violence</td>
</tr>
<tr>
<td>Najaf</td>
<td>No violence</td>
<td>No violence</td>
</tr>
<tr>
<td>Babil</td>
<td>No violence</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Karbalah</td>
<td>No violence</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Basrah</td>
<td>No violence</td>
<td>Low Violence</td>
</tr>
</tbody>
</table>

**Source:** ESCWA, Emerging and Conflict-related Issues (ECRI) Division calculations based on UCDP GED data.

### Table A.3 Libya violence clusters 2011-2014

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>El-Merqab</td>
<td>High violence</td>
</tr>
<tr>
<td>Jfara</td>
<td>High violence</td>
</tr>
<tr>
<td>Zwara</td>
<td>High violence</td>
</tr>
<tr>
<td>Ben-Ghazi</td>
<td>Medium violence</td>
</tr>
<tr>
<td>El-Wahat/El-Kufra</td>
<td>Medium violence</td>
</tr>
<tr>
<td>Murzuk</td>
<td>Low violence</td>
</tr>
<tr>
<td>Wadi El-Hayat</td>
<td>Low violence</td>
</tr>
<tr>
<td>Musrata</td>
<td>Low violence</td>
</tr>
<tr>
<td>Qasr Ben-Ghesheer</td>
<td>Low violence</td>
</tr>
<tr>
<td>Tubruk</td>
<td>No violence</td>
</tr>
</tbody>
</table>
## Table A.4 Yemen violence clusters 2011-2013

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abyan</td>
<td>High Violence</td>
</tr>
<tr>
<td>Sanaa City</td>
<td>Medium Violence</td>
</tr>
<tr>
<td>Al-Baidha</td>
<td>Medium Violence</td>
</tr>
<tr>
<td>Hadramout</td>
<td>Medium Violence</td>
</tr>
<tr>
<td>Shabwah</td>
<td>Medium Violence</td>
</tr>
<tr>
<td>Mareb</td>
<td>Medium Violence</td>
</tr>
<tr>
<td>Ibb</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Taiz</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Al-Jawf</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Hajjah</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Al-Hodiedah</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Dhamar</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Sadah</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Sanaa</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Aden</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Lahj</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Al-Mhweit</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Al-Mhrah</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Amran</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Aldhalaee</td>
<td>Low Violence</td>
</tr>
<tr>
<td>Reimah</td>
<td>Low Violence</td>
</tr>
</tbody>
</table>

*Source: ESCWA – ECRI calculations based on UCDP GED data.*
2. Testing for Structural Change

We are also concerned with methodological issues related to estimation, testing and computation in the context of structural changes in these linear trends. We carried out tests to test break dates for single equations without restrictions, using the Zivot-Andrews (1992) test (Baum, 2015); such test assumes the time of the break as an exogenous phenomenon. Zivot and Andrews propose a variation of Perron’s original test in which they assume that the exact time of the breakpoint is unknown. Instead a data dependent algorithm is used to proxy Perron’s subjective procedure to determine the break points.

Table A.5 Tests for structural break. Iraq 2003-2005

<table>
<thead>
<tr>
<th>Test</th>
<th>Violence level</th>
<th>Break date</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zivot-Andrews unit root test</td>
<td>No violence</td>
<td>2002m7</td>
<td>Child marriage</td>
</tr>
<tr>
<td>Zivot-Andrews unit root test</td>
<td>No violence</td>
<td>2002m12</td>
<td>Average age at marriage</td>
</tr>
<tr>
<td>Gregory-Hansen Test for Cointegration with Regime Shifts</td>
<td>No violence</td>
<td><strong>Child marriage</strong></td>
<td>Test Statistic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADF</td>
<td>-2.27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zt</td>
<td>-2.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Za</td>
<td>-13.73</td>
</tr>
<tr>
<td>Zivot-Andrews unit root test</td>
<td>Low violence</td>
<td>2001m9</td>
<td>Child marriage</td>
</tr>
<tr>
<td>Zivot-Andrews unit root test</td>
<td>Low violence</td>
<td>2001m12</td>
<td>Average age at marriage</td>
</tr>
<tr>
<td>Gregory-Hansen Test for Cointegration with Regime Shifts</td>
<td>Low violence</td>
<td><strong>Child marriage</strong></td>
<td>Test Statistic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ADF</td>
<td>-2.29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zt</td>
<td>-1.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Za</td>
<td>-12.57</td>
</tr>
<tr>
<td>Zivot-Andrews unit root test</td>
<td>Medium violence</td>
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<td>Child marriage</td>
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Source: ESCWA – ECRI based on UCDP GED data and household survey data.

Table A.6 Tests for structural break, Iraq 2015-2016

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**Source:** ESCWA – ECRI based on UCDP GED data and household survey data.

**Table A.7** Tests for structural break, Libya 2011-2014
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Table A.8 Tests for structural break, Yemen 2011-2013

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<td>2002m1</td>
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Source: ESCWA – ECRI based on UCDP GED data and household survey data.
Bibliography


Department of Peace and Conflict Research, Uppsala University (n.d.). Definitions. Available at https://www.pcr.uu.se/research/ucdp/definitions/.


Endnotes

Executive Summary

Introduction

Chapter 1
12. Ibid.
16. Ibid.
21. For a detailed analysis on the effects of early pregnancy on girls’ health, human capital and economic potential, please see UNFPA, 2017.
22. UNFPA, 2017; Rashad, Osman and Roudi-Fahimi, 2015.

Chapter 2
25. Ibid.
27. Ibid.

29. The demographic transition refers to a series of changes in mortality and fertility rates that a country goes through when transitioning from non-industrial to industrial, transitioning from a stage of high birth and death rates to a stage of low birth and death rates.


35. Verwimp and van Bavel, 2005.


Chapter 3


43. Ibid.

44. UNICEF and ICRW, 2018, p. 40; The rates in the Arab region are lower than the regions of South Asia, sub-Saharan Africa, and Latin America and the Caribbean.


Chapter 4


47. ESCWA, 2015.

48. Ibid.


50. ESCWA, 2015.


53. General Assembly resolution 1763 A (XVII).

54. General recommendation No. 21.

55. General recommendation No. 24.

56. CEDAW/C/GC/30.

57. CEDAW Committee and the Committee on the Rights of the Child Joint General recommendation No. 31.

58. CEDAW/C/GC/35.


60. See the Yemen page on https://www.girlsnotbrides.org/where-does-it-happen/atlas/.

61. See the Libya page on https://www.girlsnotbrides.org/where-does-it-happen/atlas/.

62. A/74/249.
63. HRW, 2017.
64. Gibril and Tashani, 2019.
65. CEDAW/C/IRQ/CO/4-6, p. 7.
66. Ibid., p. 16.
67. CRC/C/IRQ/CO/2-4.
68. Ibid.
69. CEDAW/C/YEM/CO/6.
70. CRC/C/YEM/CO/4.

Chapter 5
71. Department of Peace and Conflict Research, Uppsala University, n.d.
74. Ibid.

Chapter 6
75. A Stata module for computing fertility rates and TFRs from birth histories: tfr2; see Shoumaker, 2013, p. 1095.
77. Ibid.
79. Ibid.
80. Ibid.
81. No violence region = Dohuk, Sulaymaniyyah, and Missan; Low violence = Erbil, Karbala, Wasit, Najaf, Al-Qadisiya, Thi-Qar and Basra; Medium violence = Kirkuk, Diyala, Al-Anbar, Babil, and Salahaddin; and High violence = Nineawa and Baghdad. The classification uses clustering based on kernel density estimation — nearest local maximum searching algorithm — of the UCDP GED data.
82. The tests for structural break are presented in the appendix.
84. Girls Not Brides, n.d.

Chapter 7
88. The surveys overlap at the years of transition and the confidence intervals suggest that we are neither over nor underestimating the rates.
89. An important source of variation, even under the best of circumstances, is sampling error.
90. Ministry of Public Health and Population-MOPHP/Yemen and others, 2015, p. 44.

Chapter 8
91. Central Statistical Organization (CSO) [Iraq], and others (2019).
92. Svanemyr, and others (2013).
Appendix

93. See, for example, the previous issue in the present report’s series, ESCWA, 2015, and its references.
94. The series of National Surveys on Family Health for Libya (1997, 2003 and 2007) recently added a new survey for the year 2014. As soon as the data quality of the most recent survey is verified, it would be possible to undertake an assessment of the impact of the recent wave of violence on the health status of the population (and other variables, as enabled by the surveys).
97. The GED currently excludes the Syrian Arab Republic because of consistency and clarity issues. However, that did not affect the present study, since only Iraq and Yemen are included in the econometric analysis.
It is universally agreed that child marriage is a core development and human rights issue, as it hinders the achievement of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals, and contravenes several human rights frameworks. Furthermore, child marriage and increased adolescent fertility are likely to have long-term effects not only on girls and their immediate family, but also on society as a whole, given that child marriage severely hinders the ability of women and girls to participate in a robust, thriving and stable society and region.

This research considers the growing adversities faced by women and girls in conflict-affected Arab countries, noting that younger girls are increasingly disadvantaged by heightened perceptions of insecurity and exposure to violence in their communities, including child marriage. Child marriage has also been linked to the transmission of intergenerational disadvantage. This research adds another dimension to the links between violent conflict, marriage patterns and fertility among young women, and the role of public policies in mitigating such practices in conflict-affected countries. The results add to the understanding of how demographic changes can generate dynamics of social exclusion, leading to self-perpetuating poverty traps and long-term disempowerment of women and girls.