Implications of early marriages on development outcomes in Uganda

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Executive Summary

Early marriage, or child marriage, is considered a human rights violation and a development issue that cuts across cultures, countries, and religions. Defined as any legal or customary union before the age of 18, it is prohibited by international law and is addressed by international conventions and resolutions like the Sustainable Development Goals, Convention on the Rights of the Child, Convention on the Elimination of All forms of Discrimination against Women and the Universal Declaration of Human Rights (Sagalova et al., 2021). Despite these efforts, it remains a pervasive practice across the developing world, most prominently in Sub-Saharan Africa, which accounts for 35 percent of early marriages globally followed by South Asia at 30 percent (UNICEF, 2021c).

Although rates of early marriage have been declining in the past two decades, it continues to endanger the lives of millions of girls in Uganda. It affects their ability to continue their education, enter the paid labor force and ultimately gain economic independence. At a societal level, these practices also adversely affect the population demographics and fertility patterns as well as overall educational attainment. Using the International Futures (IFs) forecasting tool, this policy note looks at the implications of early marriage on development outcomes such as population, fertility, and education completion of women.

Girls who are married early tend to have children earlier and have more children overall. This research shows that early marriages drive Uganda’s population and total fertility rate (TFR) estimates upward, with an Early Marriage scenario increasing TFR to about 5.1 live births per woman or an increase by about 1 live birth per woman relative to the business-as-usual trajectory (the Current Path) in 2030. This eventually leads to an addition of 1.5 million people by 2030, and further to 15 million by 2060. On the other hand, a Late Marriage scenario can suppress population growth and reduce the TFR to about 3.3 live births by 2030. We also observe improved benefits through reduction in crude birth rates, household size as well as larger demographic dividends.

Early marriages also often prevent girls from continuing and finishing their education. In an Early Marriage scenario, female lower secondary completion rates fall by around 4 percentage points by 2030, relative to Current Path, resulting in 23,000 fewer girls completing their lower secondary education and around 9,000 fewer completing upper secondary by 2060. On the other hand, later marriages can increase lower secondary completion rates by over 3 percentage points to around 46 percent in 2030, and further to around 76 percent in 2060 for Uganda.

Background

Elimination of child marriage,1 which is defined as “a formal marriage or informal union that takes place before one or both of the people involved are 18” (UNICEF, 2022), has been at the forefront of development efforts for decades. Target 5.3 of Sustainable Development Goal (SDG) 5 seeks to eliminate all harmful practices including child, early, and forced marriage by 2030. Globally, child marriage has fallen from 25 percent of girls married before age 18 in 2008 to 19 percent in 2022 (Harrison, 2023). However, the problem continues to threaten the well-being of girls worldwide with estimations showing that approximately 12 million girls are victims annually (Plan International, 2023). Moreover, the outbreak of the COVID-19 pandemic threatens to erode the progress that had been made, with estimations showing that over 10 million more girls will be prone to early marriage over the next decade (UNICEF, 2021a).

Uganda has one of the highest rates of child marriage in the world. With over 34 percent of women aged 20–24 years being first married or in a union before they were 18 years old (MoGLSD, 2022; UNICEF, 2021b), the country ranks 16th among countries

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1 Early marriage and child marriage are used interchangeably in this brief.
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with the highest prevalence of child marriage (UNFPA, 2020). Within Uganda, early marriage is more prevalent in rural communities (UNICEF, 2015).

Child marriage is often driven by gender norms, poverty, disasters and emergencies, a lack of access to education for girls, and institutional factors like poor implementation of policies and laws (Harrison, 2023; Siddiqi & Greene, 2022; UNFPA, 2020). While child marriage can affect all genders, girls are more predisposed to it due to deeply rooted social norms. Indeed, available evidence shows that child marriage is much more prevalent among girls than boys, with one in five young women aged 20 to 24 married before their 18th birthday, compared to one in thirty young men (UN, 2019). In Uganda, over 34 percent of women between 20-24 years were married before 18 years, compared to only 6 percent of boys (UNICEF, 2021b).

The practice is associated with a myriad of consequences like school drop-out, higher incidence of gender-based violence, unwanted pregnancy, social isolation, and poor mental health (Siddiqi & Greene, 2022). Particularly, women married as children tend to both start having children earlier and have more children than those married as adults. In Uganda, it is estimated that child marriage is responsible for over 52.4 percent of early childbearing (Sebudde et al., 2017). Further, taking into consideration other factors, when a girl marries at the age of 14, they are likely to have on average 19 percent more children than when they marry at the age of 18 or later (Sebudde et al., 2017). Thus, at an aggregate level, early marriage directly influences fertility patterns and population dynamics within countries.

Early marriage also perpetuates financial and economic dependence for girls and women, as it takes away the freedom of choice to pursue education and work outside of the home early on in their lives. Early marriage and education are highly interconnected, as girls who marry early may alter their educational trajectory. Early marriage may lead children to drop out of school and inhibit returning or continuing their education (MoGLSD, 2022; UNFPA, 2020). Evidence shows that child marriage coupled with teenage pregnancy cause over 15-20 percent of school dropouts for secondary school girls in Uganda (MoES, 2020).

Against this background, this policy note explores the trends and effects of early marriage in Uganda, with a focus on the effects of early marriage on fertility rates and girls’ education.

Methodology

International Futures (IFs) is an integrated assessment modeling tool used for exploring long-term futures of countries, regions, and the world. The sub-modules in IFs, including agriculture, economy, education, energy, environment, health, infrastructure, population, sociopolitical, and technology are dynamically interconnected, thereby producing long-term forecasts of hundreds of variables for 186 countries for every year from 2017 to 2100 (Hughes, 2016). It leverages historical data, identifies and measures trends, and simulates how changes in one system lead to changes across others. As a result, IFs endogenizes more relationships from a wider range of key global systems than any other model in the world. The scenario analysis feature allows users to explore alternative pathways to development. It must be noted that IFs forecasts are informed extensions of current dynamics built on our current knowledge of development patterns, and thereby should be used to explore long-term trends in development rather than produce precise predictions.

For this research project, we developed two new variables to measure early marriage, integrating them into the model through connections to the demographic and education sub-modules. The two newly included variables are: (1) average age of first marriage for women, and (2) the proportion of married women in the 15-19 age cohort. The data for these variables come from the Gender Statistics Database by World Bank and the World Marriage Data by United Nations Department of Economic and Social Affairs. They are empirically linked to outcome variables of interest such as fertility rates, population, and educational completion of women. Further details can be found on the technical model documentation (Sahadevan et al., 2023) that follows incorporating early marriage indicators into IFs.

Using these new variables, we employ three scenarios (see Table 1) to provide insights on potential development effects arising from marriage patterns in Uganda.

2 The model uses 15-19 age cohort data as a representation of early marriages even though girls marrying after 18 years is not classified as early marriages. This is due to reporting and data constraints on early marriage incidence.
Findings

The Current Path of early marriage in Uganda

We measure early marriages for women using two indicators i.e., the proportion of married women in the 15-19 age cohort and the average age of first marriage for women. The earliest data available from 1970 shows that around 36.5 percent of women and girls in the 15-19 cohort were married in Uganda. While this has continued to reduce showing marked improvements in marriage patterns and frequency of early marriages, it remains high compared to countries in East Africa, lower-middle, upper-middle income countries as well as the global average. Figure 1 illustrates these trends across Uganda and other groups from 2017 up to 2060.

We estimate that in 2022, around 20 percent of girls aged 15 to 19 in Uganda — approximately 553,000 young women — were married. Along the Current Path, we project this to reduce just slightly to 19 percent by 2030 but, with a growing population, increase in number to 595,000 young women. By 2060, the number of married young women reduces to 470,000 or around 11 percent. Despite continuing reductions over the next few decades, Uganda is estimated to show significantly higher rates of early marriages compared to other groups. By 2060, it is projected that other East African as well as lower-middle income countries may witness a reduction to around 9 percent, while the global average may fall further to around 7 percent.

Another way to look at early marriages is the average age of individuals at the time of their first marriage. The most recent
available data from 2016 suggests that the average age of first marriage in Uganda for women was 20.7 years, around 4 years younger than the average age of first marriage for men. In 2022, it is estimated to be around 21 years for women in Uganda, while the global average for women remains around 24.1 years. This is also roughly estimated to be the same level as the average for low-income countries (21.2 years) and just below that of lower-middle income countries (22.1 years).

In the coming decades, assuming no intervening policy actions addressing early marriage in Uganda, we estimate the average age to grow to around 21.5 years in 2030 and further to around 24 years in 2060 – today’s global average age of first marriage for women. Figure 2 shows these trends across other groups until 2060.

The following sections use scenario analysis to explore the implications of early marriage on fertility and population dynamics as well as girls’ educational attainment.

Early Marriage, Fertility and Population
One of the most prominent consequences of early marriage is through its effect on the overall population size and changing fertility patterns. Besides significant individual harms inflicted upon girls marrying at young ages, there are large effects at an aggregate, country level as well. These practices can lead to a vicious cycle of poverty through changing demographic trends and availability of fewer funds among families to support children’s education, healthcare, and other expenses (Wodon et al., 2017).

In Uganda, the population has been growing rapidly in the recent decades, with a high fertility rate and a relatively young population. The average population growth rate of about 3 percent per year places the country among one of the fastest growing populations in the world. Much of this is attributed to early marriages among women, low use of modern contraception as well as inequitable access to family planning services and education of girls (Wodon et al., 2016). Rapid population growth can put a strain on Uganda’s natural resources and infrastructure, contributing to poverty, unemployment, and food security. Despite legislation prohibiting early marriage of girls, the practice remains common due to social and cultural practices that encourage and normalize it within communities at large.

In 2021, the total fertility rate (TFR) of Uganda is estimated at 4.59 live births per woman and the overall population at 44.6 million. Growing at a rate of 3 percent, Uganda has the second-fastest growing population in Africa and is the tenth-largest country by population size in Africa. Along the Current Path, TFR is projected to reduce to 4.2 live births per woman by 2030, and further down to 3.18 live births per woman by 2060. Even with this moderate reduction, the population is estimated to continue growing to around 56 million in 2030, and further to over 95 million in 2060.

In the Early Marriage scenario, girls marrying younger results in an increase in TFR of about 1 live birth per woman in 2030 in the Current Path to 5.1 live births per woman. While it is projected to fall again after 2030, it will continue to remain well above the Current Path estimates. This results in an
additional 1.5 million added to the population by 2030 and an additional 15 million by 2060. These significant additions may further strain Uganda’s growth.

A Late Marriage scenario, which increases the average age at which women marry in Uganda to roughly the global average (24.1 years) and reduces marriage among 15-19-year-old women, shows significant improvements in the country’s efforts towards curtailing population growth. In 2030, the fertility rate drops from 4.2 live births per woman in the Current Path to fewer than 3.3 live births per woman in the Late Marriage scenario. By 2060, it further drops below 2 live births per woman, showing a sharp decrease in births due to shifting marriage age patterns. In this scenario, the population reduces by over 1.4 million in 2030 and a further reduction of over 14 million people by 2060, relative to the Current Path.

We further analyze the follow-on effects on other related dimensions of demography including crude birth rate changes, household size, demographic dividend, and the shifts in the population pyramid. These changes come about as a result of changes in population and fertility structures. The figures below illustrate these differences across scenarios.

In addition to early marriages contributing to a larger size of population through its effects on fertility patterns, Uganda may take longer to reap the benefits of the demographic dividend with changing distribution of population across age cohorts. A demographic dividend refers to a shift towards a larger proportion of working-age individuals in the 15-65 age cohorts. IFs computes this indicator as a ratio of the working age population to the dependent population (<15 and >65 year cohorts). A higher ratio translates to greater economic benefits through a shift towards a larger proportion of working-age population.
age individuals. It provides a window of opportunity for Uganda to invest in human capital and infrastructure, allowing the country to reap benefits in the form of economic development and improved standards of living for its citizens.

To this effect, the Late Marriage scenario results in improved benefits over longer time horizons through a reduction in crude birth rates, household size and larger demographic dividends. The Early Marriage scenario on the other hand, is counter-productive in realizing these benefits. Figures 5 and 6 show that the share of dependent population, specifically children aged under 15, is projected to grow substantially over the next four decades, relative to the Current Path and Late Marriage scenarios.

Early Marriage and Female Education Completion
Socio-cultural norms of early marriage are argued to have serious negative impacts on girls' education, thereby limiting their opportunities for personal growth and making them more vulnerable to exploitation (Delprato et al., 2015). Girls who marry young are also more likely to drop out of school, as they are expected to take on domestic responsibilities. Additionally,

Figure 5: Crude birth rate, household size and demographic dividend trends across scenarios.

![Graph showing trends](source: IFs v7.93)
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Early childbearing – frequently associated with early marriage – makes it even more difficult for young mothers to continue their education.

Here, through an empirical scenario-based approach, we observe the potential follow-on effects of early and late marriages on the female lower and upper secondary completion in Uganda up to 2060. To date, there is no rigorous assessment conducted that analyzes the long-term implications of such practices on female educational outcomes through an integrated lens. Figures 7 and 8 show the lower and upper secondary completion rates for girls in Uganda through 2060 across three scenarios.

Source: IFs v7.93

Figure 6 Changing population structure across scenarios.

Figure 7 Effects on female lower secondary education completion rates across scenarios.

Source: IFs v7.93
As of 2022, around 34.2 percent of female students have completed lower secondary education in Uganda, while only about 11 percent of them end up graduating from upper secondary. This amounts to around 192,000 and 58,000 girl students with completed lower and upper secondary education respectively annually. In comparison, male students have a higher lower secondary completion rate of around 36 percent (273,000), while around 15.1 percent of them (95,000) graduate from upper secondary levels. In the Current Path scenario, the estimates suggest gradual improvements in the female education completion rates. However, the Early and Late Marriage scenarios illustrate the potential opportunity costs and benefits in the form of education completion rates for girls in Uganda.

In the Early Marriage scenario, we estimate that by 2030 the female lower secondary completion rates fall by around 4 percentage points while the upper secondary completion rates fall by around 1 percentage point, relative to the Current Path projections. Despite improving trends in female education completion rates at both lower and upper secondary levels, we observe that early marriages have a dampening effect relative to both Current Path and Late Marriage scenarios.

The Late Marriage scenario, on the other hand, shows improvements in the rate and the number of female lower and upper secondary graduates. In 2030, the lower secondary completion rates increase by over 3 percentage points to around 46 percent, and further to around 76 percent in 2060. In the Early Marriage scenario, we observe 23,000 fewer girls complete their lower secondary education and around 9,000 fewer girls complete their upper secondary education by 2060. See Tables 2 and 3.

**Table 2** Number of female lower secondary graduates by years across scenarios.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Year</th>
<th>Current Path</th>
<th>Late Marriage</th>
<th>Early Marriage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2030</td>
<td>282,000</td>
<td>303,000</td>
<td>264,000</td>
</tr>
<tr>
<td></td>
<td>2040</td>
<td>354,000</td>
<td>372,000</td>
<td>335,000</td>
</tr>
<tr>
<td></td>
<td>2050</td>
<td>521,000</td>
<td>541,000</td>
<td>497,000</td>
</tr>
<tr>
<td></td>
<td>2060</td>
<td>629,000</td>
<td>646,000</td>
<td>606,000</td>
</tr>
</tbody>
</table>

**Table 3** Number of female upper secondary graduates by years across scenarios.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Year</th>
<th>Current Path</th>
<th>Late Marriage</th>
<th>Early Marriage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2030</td>
<td>117,000</td>
<td>122,000</td>
<td>113,000</td>
</tr>
<tr>
<td></td>
<td>2040</td>
<td>179,000</td>
<td>186,000</td>
<td>172,000</td>
</tr>
<tr>
<td></td>
<td>2050</td>
<td>285,000</td>
<td>293,000</td>
<td>276,000</td>
</tr>
<tr>
<td></td>
<td>2060</td>
<td>368,000</td>
<td>376,000</td>
<td>359,000</td>
</tr>
</tbody>
</table>

**Conclusion and Policy Recommendations**

Uganda is still grappling with higher-than-average rates of child marriage, an issue that puts the well-being of many girls at risk. Child marriage is often entrenched in harmful social norms and often influenced by poverty, conflicts, emergencies, and institutional failures. The practice contributes to early pregnancies with associated negative effects, school dropouts, gender-based violence, and mental and physical health harm, among other effects which are ultimately detrimental to economic growth and development. It is estimated that the country will spend over UGX 645 billion per annum on the healthcare of teenage mothers and the education of their children if nothing is done to remedy the situation (NPA, 2021).

This policy note investigates the effect of child marriage on fertility and girls’ education outcomes. Specifically, the note estimates the effect of a change in the age of marriage towards the global average of 24 years on fertility rates and girls’ education outcomes. It is projected that later marriages can reduce the population growth by reducing TFR to about 3.3 live births per woman in 2030, and further below 2 live births per woman in 2060. Relative to the Current Path, this amounts to 1.4 million fewer people by 2030, and around 14 million...
fewer people by 2060. It also improves educational outcomes of women as the upper and lower secondary completion rates climb over *Current Path* estimates. Lower secondary completion in particular, rises to 46 percent in 2030 and further to around 76 percent in 2060.

Child marriage is a multi-faceted issue that requires an integrated approach in order to curb its practice. In this regard, this policy note shows that increasing the age of marriage has the potential to reduce the effects that child marriage has on fertility and education outcomes for girls.

The note proposes the following recommendations:

i. **Strengthen legislative framework enforcement and coherence.** The government should align existing laws and policies surrounding the age of marriage to eliminate loopholes. Currently, the existing legal framework is complex, with some misalignments with respect to religious, civil, and customary law. The Customary Marriage Act (1973), Hindu Marriage and Divorce Act (1961), and Marriage and Divorce of Mohammedans Act (1906) allow the marriage of girls aged 16 in contravention of the constitution, which stipulates 18 as the legal age of marriage. Such incoherences need to be clearly ironed out and existing legal provisions must be comprehensively enforced.

ii. **Mobilize media and communities to influence social and cultural norms change.** Child marriages are enshrined in traditional norms. To counter such norms, there is a need to engage communities, especially key influencers like cultural and religious leaders. Moreover, men and boys should be engaged too in different capacities, such as champions or role models, in the fight against child marriages as they are the custodians of such traditional norms that encourage practices like early marriage. The media can be engaged to sensitize the masses on the costs of child marriages and provide sexual reproductive health training for girls in order to empower them to resist being forced into marriage at a young age.

iii. **Strengthen data and evidence generation.** The government should strengthen evidence generation to understand who the victims of child marriages are, where they are located, and their characteristics so that appropriate programs can be designed for them. To achieve impact, it is important to understand that this is not a homogenous group that can be targeted by blanket interventions.

iv. **Provide avenues for girls who have already been victims of child marriage to pursue educational and work opportunities.** While prevention of child marriage is critical, it is also important to provide support and services to girls who were married early, so that they have increased access to educational and economic opportunities.

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