

## BASIC PROFILE OF CHILD MARRIAGE IN COTE D'IVOIRE

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### KEY MESSAGES:

- Measures of child marriage are high in Côte d'Ivoire. The share of women ages 18-22 who married as children is 32.0 percent, but it has declined over time. The share of girls marrying very early, before the age of 15, is under nine percent and has also declined slightly.
- Child marriage is associated with lower wealth, lower education levels, and higher labor force participation. These are however only correlations, not necessarily causal effects.

In order to design programs and policies to reduce child marriage, information is needed on the trend in the practice over time, where it is most prevalent in a country, and what the characteristics of girls marrying early are.

#### Measuring child marriage is needed to inform policy.

Child marriage is recognized as a major development issue that affects girls in many developing countries. The practice has been linked to a number of health risks, higher fertility, and lower education attainment, among others. The negative impact of child marriage on a wide range of development outcomes explains why in many countries child marriage is now prohibited by law, and why the elimination of child marriage is part of the new Sustainable Development Goals. Yet more is needed to eliminate the practice than adopting laws. In order to inform program and policies to reduce the practice, this brief provides a basic profile of child marriage in Côte d'Ivoire. The brief is part of a series of standardized briefs on this topic for several countries.

#### Box 1: Brief and Series Primer

**How is child marriage defined?** Child marriage is defined as a marriage or union taking place before the age of 18.

**Why a series on child marriage?** Child marriage has significant negative impacts – not only for girls, but also for a range of development outcomes. Demonstrating these impacts will assist governments and others to make the case for intervening to reduce the practice.

**What are the topics discussed in the series?** The series looks at the impacts of child marriage on health, population, education, employment, agency, and violence, among other outcomes. The welfare, budget, and non-monetary costs of child marriage are estimated. Legal/institutional aspects and options to reduce the practice are also discussed.

**What is the question asked in this brief?** The question is: How widespread is the practice, not only in terms of the share of girls marrying early, but also in terms of how early they marry?

**How is the question answered?** Measures and a profile of child marriage inspired by the literature on poverty are provided.

### A third of women in Côte d'Ivoire still marry early.

The analysis is based on data from the 2011-12 Demographic and Health Survey (DHS) for Côte d'Ivoire. This is the latest DHS available. Table 1 provides basic statistics on the age at first marriage for women. Two samples are considered: women ages 18 to 22, which is the youngest age group that can be used to measure child marriage in the country<sup>1</sup>, and women ages 18-49 (the women's questionnaire in the DHS collects data for women up to age 49). Clearly, a large share of women marry below the age of 18, and many do so before the age of 15, but there are some differences in the likelihood of marrying as children between the two groups. This suggests that child marriage may have decreased over time, as will be discussed below.

**Table 1: Age at First Marriage for Women (%)**

	18-22 years	18-49 years
Not Married	54.1	22.5
18 or Above	13.9	42.4
Below 12	0.8	1.1
12	0.8	1.4
13	2.2	2.8
14	5.0	5.4
15	5.6	7.4
16	7.8	8.1
17	9.9	8.9
Total	100.0	100.0
Mean age at first marriage	16.5	18.9

Source: Authors' estimation.

The consequences of child marriage are not the same whether girls marry at 12 or 17. Measures inspired from the poverty literature help in capturing better how early girls marry (see the annex). The headcount (H) measures the share of girls who marry early. The child marriage gap (CMG) measures the "depth" of the practice, taking into account how early girls marry. The squared gap (SG) puts even more weight on the girls who marry very early.

### Beyond the share of girls who marry early, other measures of child marriage are also important.

The negative impact of child marriage for a girl's health, education, and well-being is often larger when the girl marries very early. For example, child marriage is known to have a negative impact on school enrollment and attainment. The earlier a girl marries, the more likely it is that she will drop out early and thereby have a low level of education attainment. This will not only limit her employment and earnings potential for the rest of her life,

<sup>1</sup> Child marriage measures must be estimated on the population older than 18, because some younger girls not yet married in the survey could still get married by age 18. It is best to measure child marriage as early as possible after the age of 18 to provide data on conditions as current as possible, which is why the age bracket 18-22 is used here.

but it will also have other negative consequences for her as well as for her children.

Most studies on child marriage report the incidence of child marriage - the share of girls who marry early (before 18), sometimes also with the share of girls who marry very early, before age 15. Such statistics are useful, but they do not capture the "depth" and "severity" of the practice very well. Better measures of child marriage can be adopted from the poverty literature (Ngyuen and Wodon (2012)). Three measures are used here: the incidence of child marriage or headcount index, the child marriage gap, and the squared child marriage gap. Definitions of these measures is provided in the annex. The measures are estimated for child marriage as well as very early marriage defined as marrying before age 15.

The child marriage gap represents the "depth" of child marriage. It takes into account not only the share of girls who marry early, but also the mean number of years of early marriage. When using the child marriage gap for the evaluation of programs or policies, instead of simply looking at the share of the girls who marry early, more weight is placed on the girls who marry at a very young age. While the child marriage gap takes into account the average number of years of early marriage for girls who marry early, the squared gap takes into account the square of that number, thereby putting even more emphasis on girls who marry very early and taking into account inequality in the age of marriage among girls marrying early.

The incidence of child marriage in Côte d'Ivoire in 2011-12 was lower than that observed 25 years ago. There has been a limited reduction in how early girls marry.

### Child marriage has been reduced over time.

Table 2 provides trends over time in the measures of child marriage inspired by the poverty literature. Consider first the age group 18-22. In that age group almost one third of girls marry before the age of 18 (32.0 percent for the 18-22 age group). The child marriage gap (CMG) is at 4.7 percent and the squared gap (SG) at 0.9 percent for that group. By estimating the same measures on older groups, the table provides the trend in child marriage over time. When considering the 18 years threshold, there has been a decline in the headcount, at least comparing the youngest and oldest age groups, as well as a decline (in proportional terms) in other measures, suggesting that girls tend to marry slightly less early when they marry as children. Nevertheless, recent gains remain limited.

The fact that girls who marry early may marry slightly less early is confirmed by the measures based on the 15 years age threshold which suggest a decline in the headcount for those measures. Overall, the share of girls marrying as

children has decreased by ten percentage points over the last 25 years (the approximate time gap between the first and last age group), and the decline for extreme child marriage (15 years threshold), is at five points<sup>2</sup>. In recent years though, little progress was achieved.

**Table 2: Trend in Child and Very Early Marriage (%)**

	18 years			15 years		
	H	CMG	SG	H	CMG	SG
All 18-49 years	35.1	5.54	1.16	10.8	1.35	0.23
<b>Age group</b>						
18-22 years	32.0	4.66	0.92	8.8	1.02	0.16
23-30 years	32.9	5.21	1.08	9.8	1.21	0.20
31-40 years	36.5	5.89	1.28	11.9	1.55	0.27
41-49 years	42.7	7.04	1.51	14.1	1.80	0.30

Source: Authors' estimation.

**Girls are more likely to marry early if they live in rural areas and are from poorer socio-economic groups.**

Child marriage is more prevalent in rural than in urban areas. There are also differences between regions, with the lowest measures observed in Abidjan and the highest measures observed (according to the headcount index for the 18 years threshold) in the North-West and North regions, followed by the West-Center, West, South-West and North-East regions. Child marriage tends to be less prevalent in the East- Center region. The ranking of the regions in terms of the measures obtained with the 15 and 18 years thresholds tends to be similar.

Rural girls are much more likely to marry early than urban girls. Girls from the bottom four quintiles of wealth are much more likely to marry than girls from the top quintile.

**Table 3: Child Marriage by Location, Age 18-22 (%)**

	18 years			15 years		
	H	CMG	SG	H	CMG	SG
All 18-22 years	32.0	4.66	0.92	8.8	1.02	0.16
<b>Region</b>						
Center	22.4	3.40	0.69	5.8	0.74	0.13
East- Center	21.2	3.08	0.59	5.3	0.61	0.08
North-Center	22.0	2.42	0.36	3.9	0.26	0.02
West-Center	48.3	7.05	1.39	10.8	1.48	0.26
North	54.4	8.76	1.91	18.7	2.38	0.42
North-East	33.5	5.40	1.21	9.0	1.39	0.30
North-West	55.3	8.91	1.89	18.8	2.30	0.36
West	44.9	6.71	1.29	13.7	1.38	0.17
South out Abidjan	24.0	3.63	0.82	8.2	1.10	0.22
South-West	42.8	5.53	0.92	10.5	0.80	0.07
Abidjan City	16.9	2.40	0.46	4.6	0.51	0.08
<b>Residence</b>						
Urban	21.0	3.01	0.60	6.1	0.70	0.11
Rural	46.9	6.89	1.36	12.4	1.46	0.24

Source: Authors' estimation.

Household welfare is measured through a wealth index with households categorized in five quintiles from poorest to richest. For most women the level of wealth observed is that of the household in which they married, not their household or origin, but it is likely that many women marry with men who have similar socio-economic profiles, so the quintile after marriage may not be that different from the quintile before. Also, for younger women, assets and wealth may be lower than for older women. In Côte d'Ivoire, the measures of child marriage differ by quintile, but it is only in the top quintile of wealth that child marriage is much less prevalent.

**Table 4: Child Marriage by Quintile, Age 18-22 (%)**

	18 years			15 years		
	H	CMG	SG	H	CMG	SG
All 18-22 years	32.0	4.66	0.92	8.8	1.02	0.16
<b>Wealth quintiles</b>						
Poorest	55.8	8.09	1.58	13.3	1.64	0.28
Poorer	39.2	5.96	1.23	10.8	1.37	0.24
Middle	31.4	4.15	0.75	7.8	0.78	0.11
Richer	31.1	4.76	0.98	10.0	1.18	0.18
Richest	15.4	2.28	0.46	5.0	0.54	0.08

Source: Authors' estimation.

**Child marriage is associated with lower education attainment and a lower likelihood of literacy.**

Table 5 provides data on child marriage by level of education of the women, as well as literacy. Child marriage affects education attainment negatively, because girls often drop out of school when they marry. The causality goes the other way as well, as the ability to pursue one's education may help delay the age at marriage. This relationship between education and child marriage is apparent in the data, in that the measures of child marriage tend to be higher among women with lower levels of education. The same relationship is observed when considering literacy where three categories are considered: the woman cannot read at all, can read part of a sentence, or can read a full sentence.

The relationship between child marriage and schooling is important for policy as the causality goes both ways. Child marriage may lead to dropouts and lower education attainment. But the reverse is true as well: keeping girls in school is often one of the best ways to delay marriage.

Marrying between the ages of 15 and 17 tends to affect primarily secondary education enrollment or completion, and may not necessarily affect the completion of primary education. But marrying even earlier can also prevent girls from completing their primary education (primary school takes in principle six years to complete, but some students start primary school late and may also repeat grades, so the actual age of completion may be delayed).

<sup>2</sup> These measures have standard errors (not shown to save space). Some differences may not be statistically significant.

**Table 5: Child Marriage by Education Level and Literacy Status, Age 18-22 (%)**

	18 years			15 years		
	H	CMG	SG	H	CMG	SG
All 18-22 years	32.0	4.66	0.92	8.8	1.02	0.16
<b>Education</b>						
No education	47.8	7.25	1.49	14.6	1.73	0.28
Primary, some	31.6	4.19	0.73	5.7	0.63	0.10
Primary, compl.	26.9	3.35	0.60	2.9	0.50	0.13
Secondary, some	12.8	1.77	0.33	4.4	0.41	0.04
Secondary, compl.	1.3	0.42	0.14	1.3	0.25	0.05
Higher	0.4	0.04	-	-	-	-
<b>Literacy</b>						
Cannot read	45.3	6.71	1.35	12.9	1.51	0.24
Limited ability	19.8	2.76	0.47	3.4	0.28	0.03
Full sentence	13.8	1.86	0.35	3.4	0.39	0.06
No card available	44.8	3.11	0.24	-	-	-

Source: Authors' estimation. Values rounding to 0.0 not shown.

### Relationships between child marriage and labor force participation can be complex and depend on context.

Table 6 provides data on labor force participation. In some countries child marriage may reduce labor force participation through higher fertility. In others, if child marriage is associated with poverty, women may have little choice but to work. Other effects could be at work, so that the relationship between child marriage and labor force participation is complex. In Côte d'Ivoire, child marriage measures are lower for women not working, suggesting a positive association between child marriage and work. In addition, the type of work associated most with child marriage is work without cash earnings, which may be work with low productivity. These basic statistics however do not imply causality.

**Table 6: Child Marriage by Labor Force Participation Status, Age 18-22 (%)**

	18 years			15 years		
	H	CMG	SG	H	CMG	SG
All 18-22 years	32.0	4.66	0.92	8.8	1.02	0.16
<b>Working</b>						
No	29.1	4.00	0.74	7.5	0.76	0.10
Yes	33.9	5.10	1.05	9.7	1.20	0.21
<b>Type of work</b>						
Not paid	24.6	3.80	0.79	7.9	0.95	0.14
Cash only	30.8	4.48	0.94	7.7	1.10	0.22
Cash and in-kind	53.6	8.46	1.76	16.4	2.01	0.35
In-kind only	55.0	7.56	1.28	15.1	1.01	0.07

Source: Authors' estimation.

### Conclusion

This brief has provided a basic profile of child marriage in Côte d'Ivoire. Measures of child marriage are very high. The share of women ages 18-22 who married as children

is 32.0 percent and it has declined over time (although less so in recent years). The share of girls marrying very early, before the age of 15, has declined as well. Child marriage is associated with lower wealth, lower education levels, and higher labor force participation. These are however only correlations, not necessarily causal effects. Other briefs in this series look at potential causal effects.

### References

Foster, J., J. Greer, and E. Thorbecke, 1984, A Class of Decomposable Poverty Measures, *Econometrica* 52: 761-776.

Nguyen, M. C., and Q. Wodon, 2012, Measuring Child Marriage, *Economics Bulletin* 32(1): 398-411.

### Annex: Methodological Note

The headcount index, child marriage gap, and squared child marriage gap are the first three measures of the so-called FGT class (Foster et al., 2014). Denote by  $q$  the number of girls who marry early and by  $n$  the number of girls in the overall population. Denote by  $y_i$  the age of marriage of girl  $i$  and by  $z$  the age threshold defining child marriage (18 years of age, but a lower age threshold can also be used to measure extreme child marriage). The general formula for the FGT class of measures depends on a parameter  $\alpha$  which takes a value of zero for the headcount, one for the child marriage gap, and two for the squared child marriage gap in the following expression:

$$P\alpha = \frac{1}{n} \sum_{i=1}^q \left[ \frac{z - y_i}{z} \right]^\alpha$$

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