

# AFCW3 ECONOMIC UPDATE

## DISRUPTING *the* GENDER DIVIDE

*in* MALI, CHAD, NIGER & GUINEA



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## FOREWORD

Child marriage is prevalent in some Sub-Saharan countries. In Niger, more than three out of four girls marry as children. In Chad, the proportion is more than two in three. In Guinea and Mali, it is above half. As a result, at most, one in ten girls completes secondary education, and high rates of early childbearing are common in these countries. The main article in the present volume is devoted to the pressing challenges of child marriage, childbearing and low educational achievements in the afore-mentioned four countries.

Beyond these dramatic statistics, which are well above average African ratios (e.g. child marriage is about 35 percent in Sub-Saharan Africa), in practice this means that most girls from these four countries are married just after reaching puberty. Once a girl is married, it is very difficult for her to remain in school. Hence, keeping girls in school is probably the best way of reducing child marriage and, indirectly, early childbearing since child marriage is the major contributing factor behind early childbearing. Moreover, keeping girls in school is a major determinant, if not the most important one, in lowering rising population rates and fostering better socioeconomic development outcomes. However, the challenge is enormous.

Progress toward better educational attainment for girls and fewer child marriages is uneven across the four focal countries. Guinea has achieved the largest gains over the last few decades, but progress in Chad, Mali, and Niger has been slow to negligible.

Child marriage, early childbearing and low educational attainment hinder girls' empowerment, and adversely impact their children (in terms of under-five mortality and stunting, as well as birth registration) and their families (for example, in terms of earnings and poverty). There are large economic and health costs related to high fertility and population growth. Child marriage and early childbearing mean lower women's earnings, and can lead to poor health conditions of young mothers and their children.

Based on best practices worldwide, dealing with these inter-related issues requires a multiple and integrated approach. First, adopting appropriate laws and strategies is a necessary first step in making progress in improving the lives of adolescent girls, but it is not sufficient. Basic infrastructure conditions must also be in place, particularly with regard to education systems. For instance, there is a need to build secondary schools closer to where girls live and/or to provide dedicated modes of transportation to such schools. Providing water, sanitation, and hygiene facilities for girls is also important. Secondary education should be made more affordable for girls. In addition, providing employment opportunities after girls complete their schooling is also essential. One solution is to provide targeted interventions that alleviate economic constraints on girls' education, such as conditional cash transfers, which tend to be the most reliable. Other interventions could include providing skills for those adolescent girls who dropped out of school.



Finally, these intertwined problems for Sub-Saharan girls are rooted in social norms that perpetuate gender inequality. To tackle this challenge, community-based interventions working with men as well as women and community leaders have proven beneficial.

Governments are already strongly involved in testing or implementing several of these approaches. It is my hope that this report will provide further insights to help them in addressing the gender divide.

The second special article, also of major concern to the governments of these four countries, examines public debt vulnerabilities and risks. This is relevant because after several years of following debt relief requirements under the Highly-Indebted Poor Countries (HIPC) initiative, debt vulnerabilities in Sub-Saharan Africa have increased, and in many cases to alarming levels. However, Guinea, Mali, and Niger keep belonging to the group of moderate-risk of external debt distress countries; despite their less favorable external environment, past domestic shocks, and fiscal slippages. Weak debt management has also contributed to arrears accumulation. Hence, continued efforts are needed to implement sound fiscal policies, clear arrears and upgrade debt management to reduce their debt vulnerabilities.

In terms of the economic outlook, I am especially pleased to report that all countries are projected to experience positive growth rates in 2018, with Guinea at 5.9 percent, Niger and Mali at 5.2 percent and 5.1 percent, respectively, and Chad approaching 3.1 percent for the first time since its 2-year-long, severe downturn. Chad's return to growth also follows the successful restructuring of its debt with Glencore.

Macroeconomic stability, featuring low inflation rates, is also being preserved in a context of rising oil prices with mixed performance: while Mali and Chad are projected to keep rates at 2.1 percent, Niger and Guinea are projected to increase their 2017 rates by 3.9 percent and 9.6 percent, respectively.

Positive growth performance with price stability should be highlighted not only because growth resilience needs to be rebuilt, but because for the first time in many years, all countries are now switching their efforts from stabilizing their economies in the short term to growth recovery over the longer term. Growth recovery is being driven by resource-based export revenues combined with economic diversification reforms in the real sectors. Reforms are being implemented mainly in the agriculture and infrastructure (especially energy, transport and information and communication technology) sectors.

Downside risks to a broadly positive outlook originating either from external shocks, domestic conflict or policy reversals remain significant. This helps to explain why all governments implementing fiscal consolidation policies supported by International Monetary Fund (IMF) programs are currently on track.

Finally, I want to remind our readers that this is the sixth edition in a series of reports dealing with key development issues in Chad, Guinea, Mali, and Niger. The AFCW3 Economic Update series is intended to foster public debate about key macroeconomic and structural developments in support of poverty reduction. More specifically, the series encourages the exchange of ideas on some of the most critical issues affecting the Sub-Saharan countries. It provides a broad analysis on special topics — even if the findings are preliminary and less than fully polished. And in so doing, it also provides a glimpse of the regional macroeconomic trends. In short, this series represents an innovative knowledge-sharing vehicle for the World Bank, and our AFCW3 sub-region. Indeed, it can be used to approach the media, civil society, universities and the public at large to discuss priority policy reforms introduced or debated in these countries.<sup>1</sup>

Hence, I would like to again express my gratitude to our governments and technical and financial partners for their cooperation and many joint contributions over the past few months. Their encouragement, inputs and

technical advice have made it possible to create an environment particularly well suited to a rich and regular exchange of views on development policy. I hope that this series will make it possible to deepen these discussions and move them into the public space to better inform and enable citizens to express their own views.

**Soukeyna Kane**

*World Bank Director of Operations*

Chad, Guinea, Mali, and Niger (AFCW3 Sub-Region)

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<sup>1</sup>It should be noted that the findings, interpretations, and conclusions expressed in this report are entirely those of World Bank staff, and do not necessarily represent the views of the World Bank Group and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.



## SPECIAL TOPIC

# DISRUPTING *the* GENDER DIVIDE *in* MALI, CHAD, NIGER & GUINEA

### CHILD MARRIAGE, EARLY CHILDBEARING, & LOW EDUCATIONAL ATTAINMENT FOR GIRLS<sup>2</sup>

#### SUMMARY

Mali, Chad, Niger and Guinea have some of the lowest rates of secondary school completion in the world for girls. They also have some of the highest rates of child marriage and early childbearing. While some other countries in West and Central Africa are making rapid progress toward better educational attainment for girls and fewer child marriages, progress is uneven across the four focal countries. Among them, Guinea has achieved the largest gains over the last few decades, but progress in Chad, Mali, and Niger has been slow and in some cases inexistent. Child marriage, early childbearing, and low educational attainment hinder girls' empowerment. This Note documents trends in these areas over time as well as their impact on other development outcomes and economic costs. Finally, policies and programs that could improve outcomes for adolescent girls are discussed.

#### TRENDS OVER TIME

- In Niger, more than three out of four girls marry as children. In Chad, the proportion is more than two in three. In Mali and Guinea, it is above half. As a result, in all countries, at most one in ten girls completes secondary education, and high rates of early childbearing are predominant.
- Even in comparison with other countries in West and Central Africa, the four countries under study lag badly as their progress over the last few decades toward improving these indicators has been much slower on average.
- In practice, after puberty, girls must often choose between marriage and schooling and, once a girl is married, it is very difficult for her to remain in school. Hence, keeping girls in school is probably the best way to reduce child marriage and, indirectly, early childbearing since child marriage is the major contributing factor behind early childbearing.

#### IMPACTS AND COSTS

- Child marriage, early childbearing, and low educational attainment for girls have a wide range of negative development impacts not only on girls' empowerment (for example in terms of intimate partner's violence and decision-making ability) but also on their children (for example in terms of under-five mortality and stunting as well as birth registration) and their families (for example in terms of earnings and poverty).

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<sup>2</sup> This note was written by Quentin Wodon, Chata Male, and Adenike Onagoruwa. It relies in part on results from global studies prepared at the World Bank, including: 1) a study of the economic impact of child marriage (jointly with the International Center for Research on Women); 2) a study of the cost of not educating girls; and 3) a study of the cost of gender inequality. Support for the work was provided by the Children's Investment Fund Foundation and the Global Partnership for Education. The authors are grateful to comments provided by (among others) Christophe Lemièrre, Jose López-Calix, and Marcel Nshimiimana..

- The largest economic costs relate to fertility and population growth, women's earnings, and the health of children born to young mothers.
- As illustrative economic costs and acknowledging that this cannot be achieved in the medium term, reducing child marriage in Mali and Niger in 2015 could have generated up to US\$1.6 billion in annual benefits by 2030 (at purchasing power parity – PPP) for each country, simply from lower rates of fertility and population growth.
- In addition, the loss of women's earnings due to lower educational attainment following early marriage today is estimated for Mali and Niger together at over US\$350 million (again in purchasing power parity terms).
- Other benefits from lower population growth include budget savings for the government for the provision of basic services.

## SOLUTIONS

- Adopting appropriate laws and strategies is a necessary first step in making progress toward better opportunities for adolescent girls, but it is not sufficient. Basic conditions must be met by education systems, and targeted interventions are required.
- In terms of basic conditions, there is a need to build secondary schools closer to where girls live or to provide dedicated modes of transportation to schools. Providing water, sanitation, and hygiene facilities for girls is also important, as is the need to reduce the risk of violence or sexual harassment in school and on the way to school. Making secondary education affordable is also essential, as are improvements in the quality of the learning experience in school and employment opportunities after girls complete their schooling so that incentives to keep girls in school can be effective.
- In terms of targeted interventions, those that alleviate economic constraints on girls' education, such as conditional cash transfers, tend to be the most reliable. There is also a role for interventions that expand economic opportunities for adolescent girls who dropped out of school and are not likely to be able to go back to school. Imparting adolescent girls with life skills and reproductive health knowledge is also promising, whether girls are in or out of school. Safe space clubs have proven effective for such purpose.
- Finally, child marriage, early childbearing, and low educational attainment for girls are rooted in social norms that perpetuate gender inequality. To tackle this challenge, community-based interventions working with men as well as women and community leaders can also be beneficial.

## INTRODUCTION

**Despite substantial progress over the last two decades, girls still have on average lower levels of educational attainment than boys at the secondary level in many countries.** This is in part because many girls are married or have children before the age of 18, often before they may be physically and emotionally ready to become wives and mothers. Educating girls, ending child marriage, and preventing early childbearing is essential for girls to have agency, not only as future wives and mothers but also beyond those roles. It is also essential if countries are to reach their full development potential.

**Girls' educational attainment, child marriage, and early childbearing are closely linked. Ending child marriage and early childbearing would improve girls' educational attainment.** Conversely, improving girls' educational attainment would help reduce child marriage and early childbearing. In addition, low educational attainment, child marriage, and early childbearing affect girls' life trajectories in many other ways. Girls marrying or dropping out of school early are more likely to experience poor health, have more children over their lifetime, and earn less in adulthood. This makes it more likely that their household will live in poverty. Other risks include intimate partner violence and lack of decision-making ability within the household. Fundamentally, girls marrying, having children, or dropping out of school early are disempowered in ways that deprive them of their basic rights. This in turn affects their children. For example, children of young mothers often face higher risks of dying by age five, being malnourished, and doing poorly in school.



**The economic and social costs of child marriage, early childbearing, and low educational attainment for girls are large.** The fact that these costs are substantial and that investing in adolescent girls, including by ending child marriage and early childbearing and providing better educational opportunities, is smart economics is not news. The point was made in the World Development Report on Gender (World Bank, 2012) and in many other studies before that (see, for example, World Bank, 2001). The contribution of the present note is to document the negative effects of not investing in girls in a more comprehensive way based on more recent survey data than has been the case so far for Mali, Chad, Niger and Guinea. The analysis builds on previous work conducted at the World Bank on the global cost of not investing in girls (Wodon et al., 2018) and on a global study on the economic impacts of child marriage conducted by the World Bank in partnership with the International Center for Research on Women (Wodon et al., 2017a). The conceptual framework for the analysis is provided in the Appendix to the present note. The hope is that the analysis will foster even greater policy mobilization toward improving education opportunities for girls and ending the practice of child marriage in the four countries under study.

## TRENDS IN GIRLS' EDUCATION AND CHILD MARRIAGE

**Table 1 shows trends in educational attainment and child marriage for girls in the four countries under study as well as for West and Central African countries overall.** These are based on estimates for 21 countries of the region, with all countries weighted equally (thereby not accounting for differences in population size across countries). For consistency with the rest of the analysis conducted for this report, the trends are based on the latest available demographic and health surveys (DHS) for each of the four countries. This means that the data are a few years old since the surveys were implemented in 2011 for Niger, 2012 for Guinea, 2012–2013 for Mali, and 2015 for Chad. Yet, while progress is likely to have been achieved in the various countries since the most recent surveys were conducted, the broad patterns are not likely to have changed dramatically.

### Box 1: NOTE ON DATA FOR MALI AND NIGER

The data for Mali used for this study are less reliable than for other countries because the latest DHS for Mali was implemented in 2012–2013 and therefore did not cover the north of the country due to the conflict that started there in early 2012. As a result, indicators from the 2012–2013 DHS provided in this study for Mali tend to be more positive than what would have been measured if the whole country had been covered by the survey, given that the north often fares less well on those indicators. Some of the trends over time for Mali should also be read with caution due to a lack of national representativeness in the data. Mali is in the process of implementing a new DHS for 2018, with new results to be expected soon.

For Niger, the analysis is based on the 2011 DHS. A new survey for 2017 has been completed, but its results are not yet publicly available. However, preliminary results suggest a decline in the fertility rate, especially among young women aged 15 to 19. If those results are confirmed, they are likely to have been achieved in part through gains in school enrollment for girls as well as a corresponding decline in child marriage. Indicators related to child health, including under-five mortality and stunting, may have also improved. Policies such as free healthcare services for pregnant women and children under five, efforts for the prevention of malaria (the leading cause of death among young children) through increased distribution of long-lasting mosquito nets, and awareness campaign on cleanliness, may all have contributed to gains. However, these gains are not reflected in this study because the results from the 2017 DHS have not yet been officially released and the unit level data from the household survey are not yet publicly available for analysis.

Three measures are included for educational attainment, namely the share of girls of various ages who complete their primary, lower secondary, and upper secondary education. The age groups are defined to allow girls a few years beyond the normal age for completing a level (to account for the possibility of late entry and repetition). Thanks in part to the Education for All initiative, there has been substantial progress at the primary level. In Chad for example, while only 6.4 percent of women aged 41–49 completed their primary education, the share is 30.0 percent for young women aged 15–18 in the latest survey. This represents a gain of 23.6 points over the last three decades. For Guinea, Mali, and Niger, gains have also been large. However, completion rates remain much lower in the four countries in comparison to the average for West and Central African countries. Furthermore, the average magnitude of the gains in percentage points for primary completion observed for Chad, Guinea, Mali, and Niger is also lower than the average gain observed for the West and Central Africa region over the last three decades.

*On average, primary completion rates increased by 22.4 percentage points across the four countries over the last three decades. For lower and upper secondary, average gains for the oldest and youngest age groups are 10.1 points and 4.5 points, respectively. However, these gains are below the values observed for West and Central Africa. Gains at secondary level tend to be smaller in absolute terms than at primary level, in part due to child marriage.*

**Table 1: COMPLETION RATES FOR EDUCATION AND CHILD MARRIAGE, BY AGE GROUP, LATEST DHS (%)**

	Primary Completed					Lower Secondary Completed (3 years)				
	15-18	19-22	23-30	31-40	41-49	18-20	21-24	25-30	31-40	41-49
West & Central Africa	53.3	51.6	40.4	33.3	29.3	29.7	32.7	23.8	19.1	15.9
Chad	30.0	29.7	17.5	10.8	6.4	14.3	16.2	7.3	5.2	2.9
Guinea	33.8	35.0	21.1	10.4	9.3	20.6	26.5	13.7	6.2	4.1
Mali	34.7	25.8	13.1	8.8	9.9	13.1	13.7	6.1	4.3	4.6
Niger	22.3	13.7	7.2	7.1	5.8	7.1	7.9	3.3	4.1	3.2
	Upper Secondary Completed					Child marriage				
	21-24	25-30	31-40	41-49		18-22	23-30	31-40	41-49	
West & Central Africa	13.9	11.6	8.0	5.6		38.6	42.7	43.8	46.6	
Chad	5.9	3.0	2.4	1.0		64.1	69.7	68.5	68.8	
Guinea	11.0	7.4	3.0	1.4		51.1	56.5	60.1	60.1	
Mali	4.6	2.6	1.8	1.5		59.9	56.3	46.9	42.8	
Niger	1.4	1.0	1.0	1.0		76.8	76.1	76.6	80.1	

Source: Male and Wodon (2018)

Note: The regional average is not weighted by each country's population size

**Similar findings hold for lower (three years) and upper secondary completion rates.** On average, the four countries have registered smaller gains in percentage points than the region, and completion rates are also lower than in the region as a whole. For example, as regards the completion of upper secondary education, all four countries are below the regional average, and the average gain for the four countries (4.5 percentage points) is lower than the average gain for 21 regional countries (8.3 percentage points). As will be discussed in greater detail below, this is in part due to the persistence of very high rates of child marriage, ranging from 51.1 percent in Guinea to 76.8 percent in Niger among girls aged 18 to 22.

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*On average, across 21 countries, the prevalence of child marriage decreased by 8.0 percentage points in West and Central Africa over the last two and a half decades. Guinea made good progress toward reducing child marriage, but this was less apparent in Chad and Niger. In Mali, child marriage increased.*

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**On average across the 21 countries of the region, the prevalence of child marriage decreased by only 8.0 percentage points over two and a half decades.** This represents the difference in prevalence rates between the cohorts of women aged 18–22 and those aged 41–49. For Guinea, the reduction was larger, at 9.0 percentage points, but for Chad and Niger, the average reduction in child marriage was smaller, at 4.7 points and 3.3 points, respectively. In Mali, there was an increase in the prevalence of child marriage over time, which may be due to difficult conditions in the country. While these conditions may have affected child marriage rates, they also affected data collection, as noted in Box 1. Among the 21 countries, the only other country where child marriage rates also increased is the Central African Republic, possibly again because of conflict and fragility.

**Overall, the situation of adolescent girls in Chad, Mali, and Niger is much worse than in the rest of West and Central Africa.** Niger, especially, has rates of child marriage that are twice the level observed for the region, and completion rates for primary, secondary, and tertiary education well below half the completion rates observed for the region. Major investments must be made to provide better opportunities for girls in Niger, but also in the other three countries.

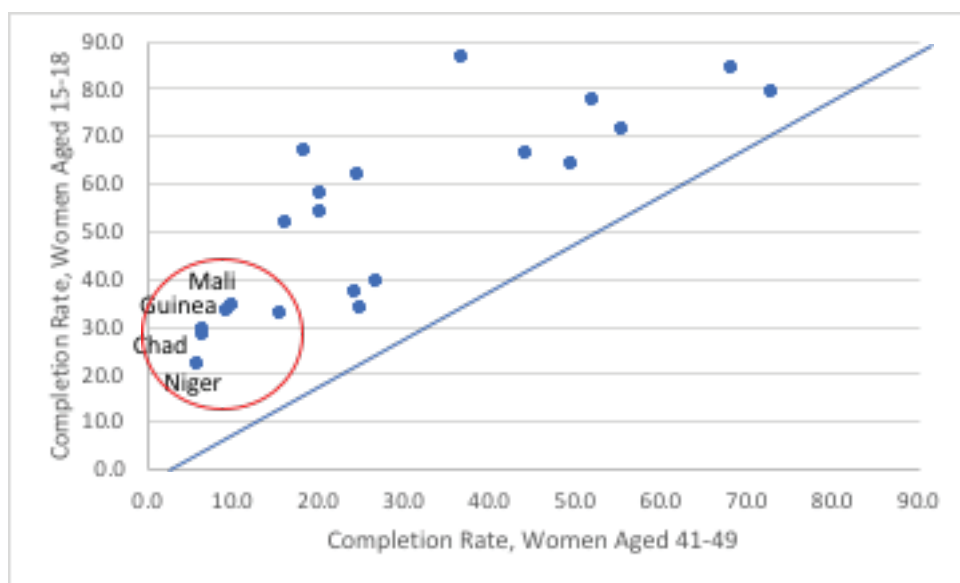
**The trends in completion rates by education level and child marriage are shown in Figures 1 to 4.** For education, completion rates for women aged 41–49 are shown on the horizontal axis, while those for the youngest age group appear on the vertical axis. This is also the case for child marriage in Figure 4, with the oldest age group shown on the horizontal axis and the youngest age group on the vertical axis. In the case of educational attainment, the fact that all countries are above the diagonal indicates progress, and the vertical distance from the diagonal is the measure of that progress in absolute percentage points. For child marriage, as just mentioned, prevalence rates increased in two countries, including Mali. As mentioned earlier, across Figures 1 to 4, Chad, Guinea, Mali, and Niger fare poorly in comparison with other West and Central African countries. In all four figures, the four countries are located in the clusters of countries within the red circles, sometimes with Burkina Faso, Guinea-Bissau, and the Central African Republic.

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*“Age is not a criteria for girls’ marriage. There is no tradition that says a girl must be married at a particular age. We judge a girl ready when her mother notices that she is menstruating and her breasts have developed.” Perlman et al. (2018a, b).*

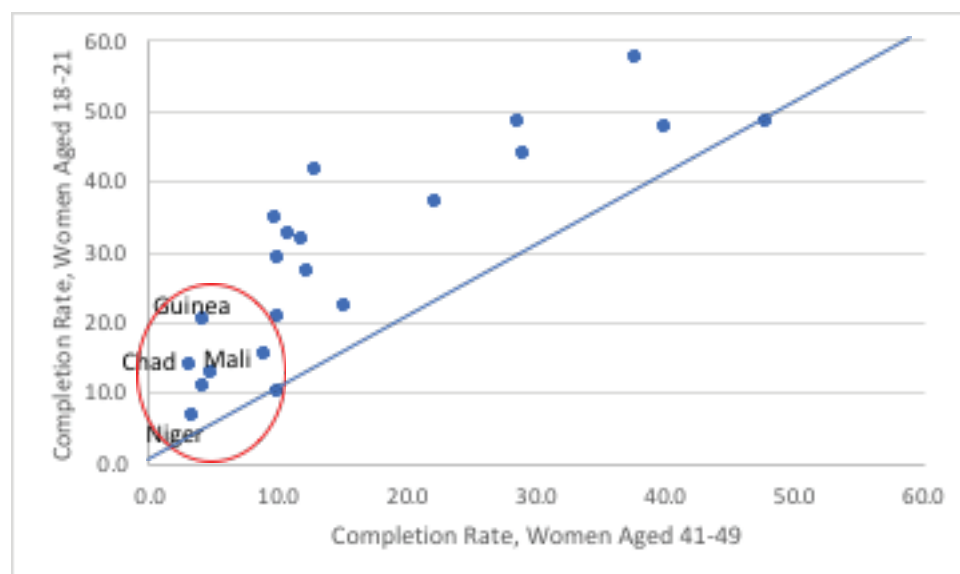
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**Figure 1:** TREND FOR PRIMARY SCHOOL COMPLETION FOR GIRLS BY AGE (%)  
(21 West and Central African Countries)



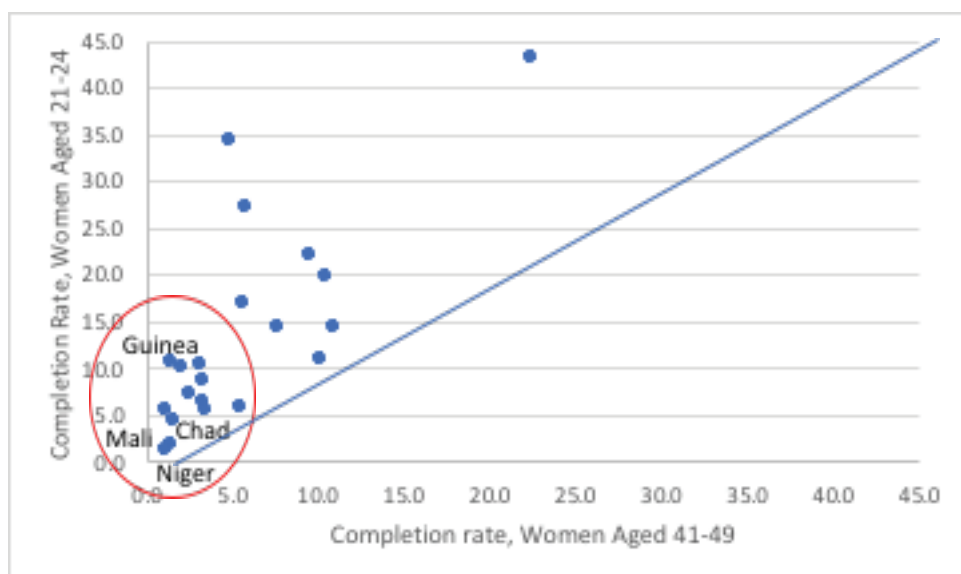
Source: Male and Wodon (2018)

**Figure 2:** TREND FOR LOWER SECONDARY SCHOOL COMPLETION FOR GIRLS BY AGE (%)  
(21 West and Central African Countries)



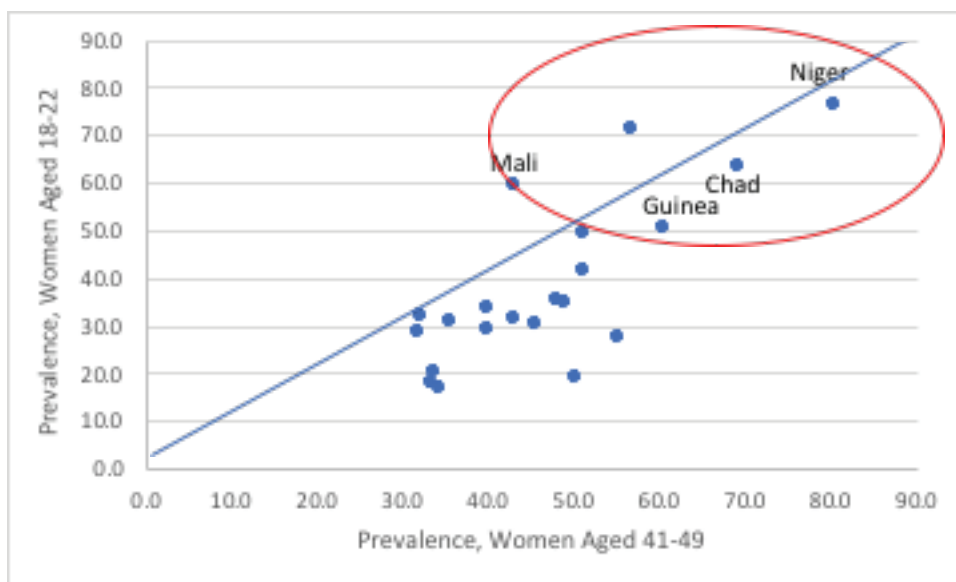
Source: Male and Wodon (2018)

**Figure 3:** TREND FOR UPPER SECONDARY SCHOOL COMPLETION FOR GIRLS BY AGE (%)  
(21 West and Central African Countries)



Source: Male and Wodon (2018)

**Figure 4:** TREND FOR THE PREVALENCE OF CHILD MARRIAGE BY AGE (%)  
(21 West and Central African Countries)



Source: Male and Wodon (2018)



## RELATIONSHIPS BETWEEN CHILD MARRIAGE, EARLY CHILDBEARING, AND GIRLS' EDUCATION

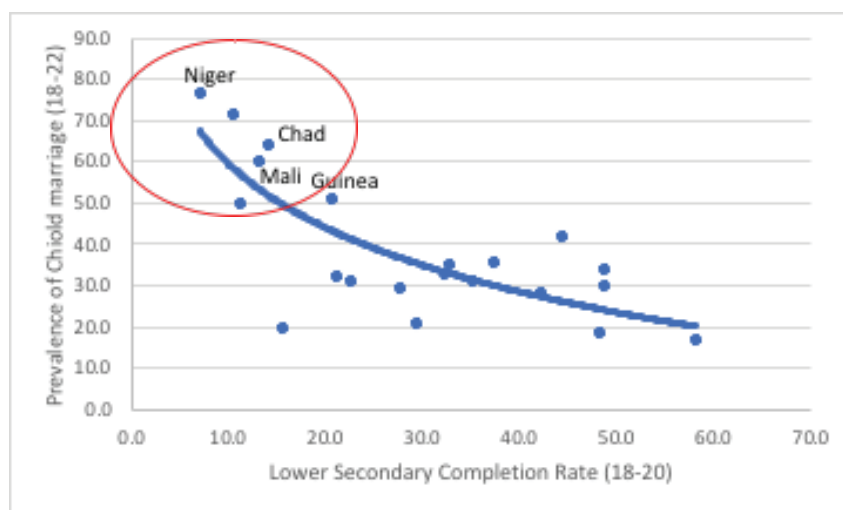
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*The relationship between educational attainment and child marriage is strong. Lower secondary completion rates account for almost 60 percent of the variance in the prevalence of child marriage between countries in West and Central Africa. Perlman et al. (2018a, b).*

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The issues of child marriage, early childbearing, and low educational attainment for girls are closely related. They all affect each other. A cursory look at the data suggests that this relationship is strong. In Figure 5, the completion rate for lower secondary school is shown on the horizontal axis, and the child marriage prevalence rate is shown on the vertical axis. The trend line through the scatter plot accounts for almost 60 percent of the variance in the prevalence of child marriage between countries. The figure points to the important role of schooling at the secondary level in ending child marriage, as noted in the literature. The figure also suggests that as secondary schooling rates rise, the marginal impact on child marriage may be lower. This could be because it is often more difficult to reach the “last mile” (ending as opposed to only reducing child marriage) in this area as in many others. Together with the Central African Republic, Chad, Guinea, Mali, and Niger, those countries located in the upper left corner of the figure, again fare poorly.

**Figure 5:** RELATIONSHIP BETWEEN EDUCATIONAL ATTAINMENT AND CHILD MARRIAGE (%)



Source: Male and Wodon (2018)

The close relationship between child marriage and girls' education can also be illustrated through a simple typology of adolescent girls according to their marriage and schooling status. Table 2 provides measures of the share of girls in various categories. The results suggest that after a certain age, girls must often choose between marriage and schooling. In addition, once a girl is married, it is very difficult for her to remain in school. Put simply, the fact that for many girls in the four countries, the options are to continue schooling or marry but not both implies that causality between marriage and schooling goes both ways: child marriage reduces education prospects for girls, and better education and employment opportunities for girls reduce the likelihood of marrying early. In addition, child marriage is the likely cause of more than two thirds of all instances of early childbearing (a girl having her first child before the age of 18) and early childbirth (a child being born to a mother younger than 18). Based on the timing of marriage and childbearing, Table 2 also shows the shares of instances of early childbearing and early childbirth attributed to child marriage. While this is an imperfect

way to identify causality, the data suggest that early childbearing is due in most cases to child marriage. In some cases, early childbearing may lead to child marriage, but this is less likely in the four focal countries under study.

**Table 2:** RELATIONSHIPS BETWEEN CHILD MARRIAGE, EARLY CHILDBEARING, AND GIRLS' EDUCATION (%)

	CHAD	GUINEA	MALI	NIGER
<b>Share of girls aged 15-19 by schooling and marriage status (%)</b>				
In school, not married, aged 15-16	16.6	17.1	13.2	7.9
In school, not married, aged 17-19	12.2	16.9	13.3	6.6
Out of school, not married, aged 15-16	18.2	15.1	15.1	13.9
Married, not in school, any age	38.4	31.7	40.4	61.7
Out of school, not married 17-19 years	11.9	16.8	15.1	9.2
Married and in school, any age	2.7	2.4	2.8	0.7
Total	100.0	100.0	100.0	100.0
<b>Share of early childbearing likely due to child marriage (%)</b>				
Mothers having a child before 18	84.9	75.3	59.8	69.6
Children born to mothers younger than 18	76.0	77.3	73.3	75.7

Source: Authors' estimation

**Table 3:** RELATIONSHIPS BETWEEN CHILD MARRIAGE, EARLY CHILDBEARING, AND GIRLS' EDUCATIONAL ATTAINMENT (*Chad, Guinea, Mali, Niger*)

**Relationship between child marriage and early childbearing**

Child marriage is the likely cause of more than two thirds of girls having children before the age of 18  
 Child marriage is the likely cause of about three quarters of births of children from mothers younger than 18  
 Ending child marriage could reduce early childbearing for girls and early childbirth for children substantially

**Impacts of child marriage and early childbearing on girls' educational attainment**

According to parents, early pregnancies and marriages are major reasons for girls dropping out of school  
 Each year of early marriage raises the risk of not completing secondary school by five percentage points or more  
 Once a girl is married, statistical data suggest that it is very difficult for her to remain in school, whatever her age  
 Child marriage affects the education of the children of girls marrying early, at least indirectly

**Impacts of girls' educational attainment on child marriage and early childbearing**

Each year of secondary education reduces the risk of marrying as a child by five percentage points or more  
 Each year of secondary education reduces the risk of early childbearing by seven percentage points or more

Source: Authors' estimation

When parents are asked in surveys why their daughters dropped out of school, child marriage and pregnancies are often mentioned (see Box 2 for a broader set of factors leading girls dropping out of school). Additional econometric work based on regression analyses for Mali and Niger also suggests that the causality between child marriage and early childbearing on the one hand and girls' educational attainment on the other goes both ways and is strong (on the impact of child marriage on education, see, for example, Field and Ambrus, 2008; Nguyen and Wodon, 2014; Wodon et al., 2016). Finally, across generations, by reducing educational attainment for girls, child marriage and early childbearing have implications for the opportunities available to the children born to young mothers. In summary, child marriage and early childbearing have a negative effect on educational attainment. Conversely, keeping girls in school reduces the risk of child marriage and early childbearing substantially. A summary of the estimates for the various relationships at play is provided in Table 3. When talking about the benefits of ending child marriage or early childbearing and achieving universal educational

## Box 2: WHY DO GIRLS DROP OUT OF SCHOOL? FINDINGS FROM ETHNOGRAPHIC WORK IN NIGER

This note is not a detailed investigation of the reasons why girls drop out of school prematurely, even if child marriage is one of those reasons. However, it is useful to note that these reasons are complex. When parents are asked in surveys why their daughters dropped out of school, issues related to the cost of schooling (which comprises both out-of-pocket and opportunity costs), early marriage and pregnancy, a lack of learning while in school, and a lack of interest in remaining in school often come up. In some countries, some factors play a larger role, while in others, other factors may be more prominent. But in many countries, even if this may not appear explicitly in survey responses by parents about reasons for girls dropping out, social norms and gender roles also affect the ability of girls to remain in school. This emerges clearly from qualitative work. In the case of Niger, for example, ethnographic work by Perlman et al. (2018a, b) suggests that six main obstacles lead most girls not to pursue their education beyond the primary level:

1. *Poor learning outcomes and cost.* Rural government schools are so poor in quality and resources that many children graduate from primary school without having learned to read. These schools do not charge tuition, but parents complain that the cost of uniforms, other fees, travel, lunches, and the opportunity costs of losing their daughters' labor are hardly worth the poor learning outcomes they see.
2. *Failure at examinations.* Students can only take the primary school completion exam twice. If they fail, they are ineligible to continue in public education. When girls fail exams, parents say that they have little choice but to begin looking for a suitable suitor their daughter could marry.
3. *Lack of nearby secondary schools.* In rural areas especially, few communities have their own secondary school, and there are few boarding schools serving rural communities. Parents must send their children to nearby towns and cover the cost of transportation and room and board. Students may stay with relatives or contacts, but parents are reluctant to leave their children, and especially their daughters, without what they consider proper oversight. Furthermore, in the case of adolescent girls, when they have to walk long distances to school, some parents are concerned that their daughters may be sexually harassed or assaulted along the way and in some cases even in school.
4. *Forced withdrawal of married adolescents.* Once a girl is married, she is likely to be expelled from school. Husbands show little interest in supporting their adolescent wife's education, especially if they must enroll in a private school. This is an expense they cannot afford. Conversely, the fear of not being allowed to withdraw their daughters from school for marriage is a complaint voiced by some parents.
5. *Never enrolling in school or enrolling too late.* Some families never enroll girls in school, perhaps in part because parents had no educational opportunities themselves. In some cases, teachers may refuse to enroll children considered too old to start primary school.
6. *Influence of relatives and demands made of first daughters.* Extended family members may influence parents regarding the value of educating girls, not always with positive outcomes. Schooling decisions may also depend on household composition and the activities of other children. Being the first daughter lessens a girl's chances of going to school as they are expected to help their mother at home during the day.

While finding solutions to keeping girls in school and enabling them to learn while in school is necessarily context-specific, the literature suggests that various types of interventions and policies can be effective. Some of these interventions are briefly discussed in a subsequent section of this report.

attainment for girls in the analysis in this note, we acknowledge that these goals are aspirational. But showing the benefits of achieving these goals can help motivate action in order to make progress towards those aspirations.

**These mutual relationships are the reason why incentives for girls to remain in school or go back to school if they dropped out appear to be among the most effective interventions to delay the age of first marriage and prevent early childbearing.** It is worth noting that achieving universal secondary completion for girls could dramatically reduce the prevalence of child marriage and early childbearing. On the other hand, while ending child marriage and early childbearing would help improve girls' educational attainment, this would not be sufficient by itself to ensure universal secondary completion.

## IMPACTS ON OTHER DEVELOPMENT OUTCOMES

### *Fertility and Population Growth*

**Child marriage, early childbearing, and girls' education have large impacts on how many children women have in their lifetime and therefore on population growth (see Box 3 on what is meant by impacts and associated economic costs).** Women who marry earlier are likely to begin childbearing earlier and have more children over their lifetime (these effects are estimated using a model adapted from Onagoruwa and Wodon, 2018). This is the case for the three countries for which the analysis was conducted (Guinea, Mali, and Niger) as well as another dozen countries (Table 4). Depending on the age at marriage and the country in question, child marriage increases by 13 percent to 35 percent the number of children women have over their lifetime (total fertility). Ending child marriage could reduce total fertility by 13 percent nationally in Guinea, while in Mali and Niger, reductions in fertility rates are estimated at 9 and 14 percent, respectively. Completing secondary education or pursuing studies at the tertiary level leads to even larger reductions in total fertility, even though the impacts for primary completion and lower secondary education are often not statistically significant. While ending child marriage could increase the use of modern contraceptives by about one tenth on average from the (albeit low) base across three of the four countries for which estimates were obtained, improving educational attainment for girls tends not to have a statistically significant impact.

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*“When a girl has physically matured, we assume her to be ready for marriage in order not to lose her to the more rugged boys in the community.” Perlman et al. (2018a, b).*

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#### Box 3: WHAT IS MEANT BY “IMPACTS” AND ASSOCIATED ECONOMIC COSTS?

Estimating the impacts of child marriage on a wide range of development outcomes and the economic costs associated with some of these impacts is critical. The term “impact” is used for the sake of simplicity, but care should be taken not to necessarily infer causality. Estimates of impacts in this study are typically obtained through regression analyses, aiming to isolate the potential impact of child marriage or early childbearing on various outcomes, controlling for other factors affecting those outcomes. In the literature, this approach is known as “association studies.” What is measured is a statistical association between child marriage or early childbirth and outcomes. This is not necessarily an impact as could be observed through a randomized control trial. Based on measures of likely impacts, costs associated with some of these impacts are computed. These costs are based on a number of assumptions that could be debated, including discount rates. Therefore, cost estimates only represent an order of magnitude of potential costs, as opposed to precise estimations.

**Table 4: IMPACTS ON FERTILITY AND POPULATION GROWTH (Guinea, Mali, Niger)**

<i>Impacts of child marriage and early childbearing</i>	<i>Impacts of girls' educational attainment</i>
Depending on age at marriage, child marriage increases total fertility for women by 13% to 35%	Completion of secondary or tertiary education could lead to very large reductions in fertility
Ending child marriage could reduce total fertility by 9% to 14% nationally, depending on the country	Achieving universal secondary completion could lead to reductions in total fertility of almost 40%
Marrying as a child does not have a statistically significant impact on modern contraceptive use	Some secondary and higher education lead to increases in use of 6 points and 15 points, respectively
Ending child marriage affects could increase use of modern contraceptives by one tenth from the base	Achieving universal secondary completion tends not to substantially affect the use of modern contraceptives
Ending child marriage and early childbearing could reduce population growth by up to 0.39 percentage points in Niger, slightly less in other countries	While the impact of universal secondary completion on population growth was not estimated, it would probably be larger than the estimate for ending child marriage

Source: Authors' estimation

## Health, Nutrition, and Violence

*“Maternal mortality is high. Two young women died in childbirth during the first week of our stay in the community. The first woman married at fourteen and had three children. She had complications during each previous delivery and died from post-partum hemorrhage a few hours after being rushed to the health center. The second was twelve years old when she married. She lost her first child at age fourteen and was advised to wait several years before trying again. Her last pregnancy came with a series of complications that finally claimed her life a week after delivery.” Perlman et al. (2018a, b).*

**Early childbearing can impact the health of girls as well as their children.** As regards girls, physical immaturity may increase the likelihood of complications during pregnancy and childbirth, resulting in higher risks of maternal mortality and morbidity, although those risks were not measured in this study (for estimates of maternal mortality, see, for example, Nove et al., 2014).

**Early childbearing may also affect the health of young children at a time that is critical for a child's development (Black et al., 2017).** For example, stunting is associated with losses in earnings and consumption at the individual and household levels (Hoddinott et al., 2013) and losses in GDP nationally (Horton and Steckel, 2013). In all three countries for which the analysis was conducted (Guinea, Mali, and Niger), children born to mothers younger than 18 have substantially higher risks of dying by age five and being stunted. The reductions in under-five mortality and stunting that could result from preventing early childbearing are smaller because only a relatively small share of children are born to mothers younger than 18 at the time of birth. However, many children would be affected. Separately, while the impact of child marriage on intimate partner violence is small or not statistically significant in the two countries for which the analysis was implemented (Mali and Niger), some effects from higher educational attainment are observed not only in the four focal countries, but also in other countries (Savado and Wodon, 2018a). Table 5 summarizes the main findings.



## Work, Earnings, and Poverty

Reducing child marriage could increase earnings for women substantially. As mentioned earlier, ending child marriage is an aspirational goal for a country such as Niger. But progress towards this goal could affect labor force participation (LFP) through its impact on girls' educational attainment and total fertility; however, the likely impacts are small, as observed in the cases of Mali and Niger. By contrast, analyses for these two countries suggest that the impact of reduced child marriage on earnings for women in adulthood could be large. Women who married early could have benefited from an increase in earnings if they had married later, mostly because of the impact of child marriage on educational attainment. Nationally, this could lead to an increase of up to 1.0 percent in the population's overall earnings in Mali and up to 1.6 percent in Niger. Through their impact on both total fertility and educational attainment for girls, ending child marriage and early childbearing would also have positive effects on welfare and poverty. Finally, the impacts on earnings and thereby on poverty of universal primary or secondary education could be even larger. Table 6 summarizes the estimated impacts.

**Table 5: IMPACTS ON HEALTH, NUTRITION, AND VIOLENCE (Guinea, Mali, Niger)**

<i>Impacts of child marriage and early childbearing</i>	<i>Impacts of girls' educational attainment</i>
Being born to a mother younger than 18 increases the risk of under-five mortality by 3 to 7 percentage points	The educational attainment of the mother often does not statistically affect the risk of under-five mortality
Ending all early childbirth would reduce under-five mortality by 0.2 to 0.6 percentage points nationally	Except in Guinea, universal secondary education might not lead to a national decline in under-five mortality
Being born to a young mother increases the under-five stunting risk in two of three countries under estimation	The educational attainment of the mother has a large effect on under-five stunting in Mali and Niger
Ending all early childbirth would reduce under-five stunting by up to 0.7 percentage point nationally	Universal secondary education could lead to a large national decline in under-five stunting in Mali and Niger
Child marriage has a small impact on intimate partner violence in Mali and no observed impact in Niger	Educational attainment for women may reduce the risk of intimate partner violence but not necessarily by a substantial amount

Source: Authors' estimation

**Table 6: IMPACTS ON WORK, EARNINGS, AND POVERTY (Mali, Niger)**

<i>Impacts of child marriage and early childbearing</i>	<i>Impacts of girls' educational attainment</i>
Ending child marriage might not lead to large changes in LFP, although some impacts may be seen through education	In most countries, higher levels of educational attainment are associated with somewhat higher LFP
Ending child marriage could increase earnings in adulthood for women marrying early by up to 10%	Higher educational attainment for girls is associated with substantial increases in earnings in adulthood
Ending child marriage could increase earnings and productivity nationally by up to 1.6 percent	The impact on national earnings of universal secondary education for girls could be very large
Ending child marriage could have large positive effects on welfare and reduce poverty	Universal primary or secondary education could have large positive effects on welfare and reduce poverty

Source: Authors' estimation

## Agency and Other Impacts

A woman's capacity for choice depends on her agency, or her capacity to act given her environment, which includes whether she has access to resources and how confident she may be (based, for example, on past achievements). Child marriage clearly has an impact on resources by (among others) reducing earnings due to low educational attainment and limiting confidence, for example if she has not had access to certain types of employment, thereby affecting agency. Agency can be measured in a comprehensive or limited way, but one reliable indicator is whether women have any decision-making ability in the household, including the ability to seek care. Other factors that may affect agency or may be the result of a lack of agency include the likelihood of land ownership, knowledge about HIV/AIDS, and whether mothers register their children after birth (birth registration measures). While these indicators are partial, they are at least available in existing surveys. The direct impacts of child marriage on these various indicators associated with women's agency are typically not large and often not statistically significant. However, because child marriage as well as early childbearing reduce educational attainment for girls, they may have negative impacts on agency through lack of education. Indeed, for most indicators, the impact of girls' educational attainment is statistically significant, especially for decision-making in Guinea. Table 7 summarizes these estimated impacts.

**Table 7:** IMPACTS ON DECISION-MAKING, AGENCY, AND OTHER AREAS (*Guinea, Mali, Niger*)

<i>Impacts of child marriage and early childbearing</i>	<i>Impacts of girls' educational attainment</i>
Child marriage often does not affect decision-making directly, but it matters indirectly through education	Universal secondary education could increase women's decision-making ability substantially
Child marriage does not affect women's ability to seek care directly, but it matters through education	The impact of education on women's ability to seek care is not observed except for tertiary education
Child marriage is associated with a slightly higher likelihood of land ownership for women	Educational attainment for women is associated with a higher likelihood of land ownership for women
Child marriage is not associated with a reduction in women's knowledge of HIV/AIDS	Universal secondary education could increase women's knowledge of HIV/AIDS by up to one fifth
Early childbearing is associated with a reduction in birth registration rates for young children	Educational attainment for women is associated with an increase in birth registration rates in one country

Source: Authors' estimation

*For all indicators except birth registrations, either child marriage and early childbearing or secondary education completion have a statistically significant impact in at least some of the countries. This shows how pervasive and widespread the impacts of a lack of opportunities for girls are.*

## Summary of Impacts

Overall, the negative impacts of child marriage, early childbearing, and low educational attainment for girls are **substantial**. Table 8 summarizes the estimates qualitatively, taking into account not only the evidence provided for Chad, Guinea, Mali, and Niger in this study but also lessons learned from up to 16 countries for which the analysis was undertaken. The term "Always" is used when impacts are observed always or virtually always. The term "Often" suggests that an impact is observed often but not virtually always. The term "Sometimes" suggests that an impact is observed in some cases but not others. Finally, the term "Rarely" suggests that impacts are rarely observed. When looking at the combined impacts of child marriage and low educational attainment for girls, the higher of the two ratings is provided. Two conclusions emerge. First, the mutual relationships between child marriage, early

childbearing, and low educational attainment for girls are strong. Second, all three issues tend, in turn, to have negative impacts individually or collectively on a wide range of other outcomes. For all outcomes, in at least one of the four countries, child marriage and, early childbearing, or low educational attainment for girls have negative effects. In addition, in quite a few cases, as discussed above, the effects are large, apart from being statistically significant. Note that apart from the effects identified in Table 8, low educational attainment for girls has other negative effects that are not discussed in this study but that have been documented separately (see Box 4).

#### Box 4: OTHER IMPACTS OF LOW EDUCATIONAL ATTAINMENT FOR GIRLS

The World Bank recently released a study on the cost of not educating girls (Wodon et al., 2018). Apart from the impact of educational attainment on the development outcomes considered in this Note, the study considers a range of other outcomes. For example, women with secondary education may expect to earn almost twice as much, and women with tertiary education almost three times as much as those with no education. Women with secondary and tertiary education report higher standards of living compared to those with primary education or lower. For example, they are less likely to state that they do not have enough money to buy food. Women's psychological well-being could also improve with better educational attainment. Women with secondary education report lower satisfaction rates with basic services than women with no education, which may reflect a more realistic assessment of their quality. Achieving universal secondary education could also enable more women to display altruistic behaviors such as volunteering, donating to charity, and helping strangers. A secondary education is also associated with a higher likelihood for women of reporting being able to rely on friends when in need.

**Table 8:** SUMMARY OF STATISTICALLY SIGNIFICANT ESTIMATED IMPACTS BY DOMAIN ACROSS THE FOUR COUNTRIES

Domains and Indicators	Child marriage or early childbearing	Secondary education completion	Either one or the other
<b>Mutual relationships</b>			
Child marriage/Early childbearing	–	Always	Always
Educational attainment	Always	–	–
<b>Fertility and population growth</b>			
Fertility	Always	Always	Always
Population growth	Always	Always	Always
Modern contraceptive use	Sometimes	Often	Often
<b>Health and nutrition</b>			
Under-five mortality	Often	Often	Often
Under-five stunting	Often	Often	Often
Labor force participation	Sometimes	Often	Often
Demand for healthcare	Rarely	Often	Often
<b>Work and productivity</b>			
Intimate partner violence	Sometimes	Often	Often
Women's earnings	Rarely	Always	Always
Household welfare	Always	Always	Always
<b>Women's agency</b>			
Decision-making ability	Sometimes	Always	Always
Land ownership	Often, but positive	Often	Often
Knowledge of HIV/AIDS	Sometimes	Often	Often
Birth registration	Rarely	Often	Often

Source: Authors' estimation

## ECONOMIC COSTS AND BENEFITS: THE CASE OF CHILD MARRIAGE IN MALI AND NIGER

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*The economic benefit from reducing child marriage related to welfare gains from lower population growth is large. In Mali and Niger, this benefit could reach by 2030 up to US\$ 1.6 billion and US\$ 1.7 billion, respectively..*

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**While providing a monetary valuation of all the costs associated with child marriage, early childbearing, and a lack of educational attainment for girls is not feasible, costs for some of the largest impacts can be estimated.** For the purpose of this Note, the focus is on the costs of child marriage, or equivalently the benefits of ending the practice in two of the four countries: Mali and Niger. The focus is on benefits related to a reduction in the rate of population growth, gains in educational attainment and thereby earnings, and reductions in under-five mortality and stunting. In most cases, we estimate both immediate gains and longer-term gains, looking at the benefits that would accrue by 2030. This allows for the estimates to account for the cumulative nature of some of the benefits of ending child marriage, especially in the case of population growth. It also allows valuations to adjust for increases in standards of living (per capita GDP) over time. For Niger, more details on the analysis of economic costs is provided in Wodon et al. (2018b, 2018c) and similar information is available from the authors for Mali.

**These estimates of economic costs should not be considered as precise because they depend on several factors.** These are: (1) econometric estimates of impacts that have themselves standard errors, and (2) a range of assumptions for costing that could be debated (see Box 5 on some of those assumptions). However, they provide an order of magnitude of the potential costs of child marriage. The estimates of costs in this note are based on annual losses in per capita GDP or components thereof such as labor earnings. It should be mentioned that if lifetime losses were computed, for example based on estimates of the changing wealth of nations (Lange et al., 2018), estimates of costs would be substantially larger than those reported here (for illustrations, see for example Wodon and de la Brière, 2018 and Wodon et al., 2018). Illustrative estimates of annual costs are provided in Table 9. The welfare benefits from the lower population growth that would result from ending child marriage and early childbearing are substantial. If child marriage and early childbearing had ended in 2015, the immediate annual benefit could have been equivalent in Mali to US\$67 million (PPP), increasing to US\$1.6 billion by 2030. In Niger, the corresponding benefits are estimated at US\$58 million in 2015, increasing to US\$1.7 billion by 2030.

**In addition, over time, there would be budget savings thanks to reduced demand for public services due to lower population growth.** Based on an analysis using a model by Wils (2015), reducing child marriage and early childbirth could result in education budget savings for the government of up to US\$305 million (at current US\$) in Mali and US\$327 million in Niger by 2030 if the two countries were able to achieve universal secondary education completion by 2030 (for more details of the analysis for Niger, see Wodon, 2018b). However, these estimates for education budget savings are an upper bound, as actual savings are likely to be lower since the countries are unlikely to achieve a no child-marriage target. As to the benefits from a reduction in under-five mortality and stunting, these could be valued at US\$42 million (PPP) by 2030 in Niger (no estimates were computed for Mali, but the costs could be larger than for Niger because the marginal impacts of early childbearing on under-five mortality and stunting are larger in Mali than in Niger). The estimates are provided in table 9.

**The impact of child marriage on educational attainment also has implications for the earning potential of child brides as they age.** This is reflected in gains in earnings that would have been observed today if the women who married as children had been able to marry later. There is a large literature on the potential impact of

educational attainment on earnings that applies to boys and girls alike (for a recent review, see Psacharopoulos and Patrinos, forthcoming). By leading girls to drop out of school prematurely, child marriage results in losses in earnings in adulthood (Savado and Wodon, 2018b). In Mali, the value of the additional earnings that women would have been able to earn in 2015 if they had not married early is estimated at US\$175 million (PPP). In Niger, the corresponding estimate is US\$188 million. Due to data and time limitations, the present study does not provide measures of the potential impact of low educational attainment and child marriage on monetary poverty in the four focal countries. Yet these potential effects are likely to be large, as suggested by UNESCO (2017) in the case of the impact of educational attainment on poverty globally.

#### Box 5: CONSIDERING POTENTIAL GENERAL EQUILIBRIUM EFFECTS WHEN ESTIMATING COSTS

The estimation of the costs of child marriage through lost earnings implicitly assumes that labor markets will be able to absorb a larger supply of better educated women. Specifically, the assumption is that gains from educational attainment for women thanks to the elimination of child marriage will not lead to a decrease in returns on education once more women become better educated. If ending child marriage were to lead to a large increase in the proportion of better educated women, the assumption may be problematic, especially in countries such as Chad, Guinea, Mali, and Niger, where many women have low levels of educational attainment. The estimation also does not consider potential effects on men of rising educational attainment for women. Men's earnings may decrease if more women become better educated and have access to the same employment opportunities as men, resulting in reductions in the occupational segregation by gender that has traditionally led to higher earnings for men.

There is evidence in other countries that over time, labor market premiums associated with higher levels of educational attainment may be reduced once more workers attain those higher levels of education. Angrist (1995) showed that the expansion of access to education in the Palestinian territories led to a reduction in the skills premium. Acemoglu et al. (2004) note that during World War II, higher labor force participation by women depressed wages for low-skilled workers. Duflo (2004) suggests similar effects in Indonesia following a large school construction program. These are just a few examples of studies that document general equilibrium effects, which, as noted by Acemoglu (2010), may be large. In the World Bank study on the cost of not educating girls globally (Wodon et al., 2018), this was considered by providing a range of estimates, with and without general equilibrium effects. This seems less necessary here because only a portion of women marrying early are assumed to complete secondary education in the absence of child marriage, given other constraints to secondary schooling such as cost or distance to schools. Changes in earnings due to the elimination of child marriage remain limited, typically at about 1.0 percent on average of aggregate wages. This may not lead to large general equilibrium effects.

However, if general equilibrium effects are at work, the estimates provided may be overstating the cost of child marriage in terms of lost earnings. At the same time, other factors could lead to larger costs than reported. First, the estimation does not factor in the potential effect of ending child marriage on labor force participation or hours worked. In addition, through multiplier effects, increasing women's earnings through better educational opportunities could generate larger gains for both men and women than suggested here. Finally, intergenerational benefits from higher earnings for women through better education for their children are also not accounted for. In the long run, gains from ending child marriage could thus be larger than suggested by earnings regressions capturing current conditions only.



*Another large economic benefit from reducing child marriage is higher earnings for women in adulthood, estimated up to US\$175 million (PPP) for Mali and up to US\$188 million for Niger in 2015.*

**Table 9: ORDER OF MAGNITUDE OF SELECTED BENEFITS FROM ENDING CHILD MARRIAGE (US\$ PPP Unless Noted)**

	ANNUAL BENEFIT IN 2015	ANNUAL BENEFIT IN 2030
<b>Mali</b>		
(1) Welfare benefit from reduced population growth	\$67 million	\$1.6 billion
(2) Benefit from reduced under-five mortality	Not estimated, but likely large	Not estimated, but likely large
(3) Benefit from reduced under-five stunting	Not estimated, but likely large	Not estimated, but likely large
(4) Education budget savings	None	Up to \$305 million (at current US\$)
<b>Niger</b>		
(1) Welfare benefit from reduced population growth	\$58 million	\$1.7 billion
(2) Benefit from reduced under-five mortality	\$19 million	\$34 million
(3) Benefit from reduced under-five stunting	\$4 million	\$8 million
(4) Education budget savings	None	Up to \$327 million (at current US\$)

**Source:** Authors' estimation. For details on how these estimates were obtained, see Wodon (2018a).

**Note:** Estimates for education budget savings are an upper bound, and actual savings are likely to be lower.

**To illustrate the magnitude of the potential benefits from ending child marriage, comparisons with net Official Development Assistance may be useful.** For comparison purposes, it may be useful to compare some of the above estimates with Net Official Development Assistance (ODA), which consists of disbursements of loans made on concessional terms (net of repayment of principal) and grants by official agencies. The agencies included are the members of the Development Assistance Committee (DAC), multilateral institutions, and non-DAC countries. Net ODA includes loans, at least a quarter of which consists of grant elements. In Mali, net ODA has amounted to 8 to 13 percent of Gross National Income over the last 15 years. In Niger, the corresponding proportion has been 9 to 18 percent. This suggests that by 2030, ending child marriage and early childbirth in 2015 could generate benefits equivalent to at least one third of the net ODA received by both countries simply through the welfare effects of population growth. When adding all the benefits from ending child marriage, gains would be larger, and they would continue to grow over time, especially for the effects related to population growth.

## POLICY OPTIONS FOR IMPROVING OPPORTUNITIES FOR ADOLESCENT GIRLS

**Investing to reduce child marriage and improve educational opportunities for girls could generate substantial economic benefits for Chad, Guinea, Mali, and Niger.** There are three main reasons why investing in adolescent girls is often highly cost-effective. First, earlier investments tend to bear fruits for longer as they may have effects that persist throughout a woman's life after the intervention. If a girl completes her secondary education or avoids an early marriage, this generates benefits for many years afterward. Second, the cost of interventions in adolescence, and in some cases even earlier, tends to be lower than the cost of interventions

### Box 6: WHY ARE SOME IMPACTS AND COSTS LARGE AND OTHERS SMALLER? THE CASE OF CHILD MARRIAGE

In economic terms, the fact that child marriage or early childbirth may only lead to relatively small reductions in national measures for some outcomes does not imply that the economic costs associated with those impacts are small. For example, across many countries, child marriage tends to reduce the earnings of populations by about 1.0 percent on average nationally. While 1.0 percent may not appear to be a very large proportion, the associated economic cost is very large, and for the women affected, the losses in earnings are even larger.

Some of the largest impacts of child marriage in terms of their economic costs tend to be related to fertility and population growth, education, and earnings, and the health of the children born to young mothers. These impacts are closely related. Particularly when the use of modern contraception is low, child marriage leads to early childbirth, which increases health risks for mothers as well as the children born to young mothers while also leading to higher fertility rates. The timing of child marriages and early childbirth also conflicts with the ability of girls to continue their education, which depresses earnings in adulthood. All those effects are at work at the time of marriage (through dropping out of school) or soon after (through childbearing).

By contrast, impacts in other domains – from violence to labor force participation and decision making – are observed in the analysis for this Note throughout a woman's life and may depend on many other factors apart from whether and when girls marry. For example, intimate partner violence and a lack of decision-making ability are the result, at least in part, of widespread gender inequality. Although child marriage for girls contributes to perpetuating gender inequality, delaying marriage by a few years without other gains may not be sufficient on its own to fundamentally change gender roles and social norms. This is probably why while ending child marriage may help, impacts tend to be smaller, and often smaller than the impact of higher educational attainment for girls.

Source: Unterhalter et al. (2014)

implemented later in life. Third, at a formative age, interventions may be more successful in influencing values and behaviors, not only for girls but also for communities and societies. Later in life, it may become more difficult for girls and women to fully benefit from new opportunities provided to them. This does not mean that new opportunities should not also be provided in adulthood, but adolescence is a crucial time during which investments in girls should be made. To reduce child marriage and early childbearing and to enable all girls to complete their secondary education, some general conditions must be met. In addition, specific interventions can also help. Both aspects are discussed below.

#### BASIC CONDITIONS

It is beyond the scope of this study to provide a comprehensive analysis of what needs to be done in the four focal countries. However, the best way to reduce child marriage and early childbearing is to find ways to keep adolescent girls in school, which of course also increases educational attainment for girls. For this to work, specific programs can be helpful (see Box 7 on findings from international experience), but general conditions for education systems must be also in place. These general conditions are not fulfilled in low income countries such as Chad, Guinea, Mali, and Niger.

- First, there is a need for additional schooling infrastructure. In the four countries, access to lower secondary education remains extremely low in part because there just are not enough secondary schools around, especially in rural areas. Schools also need to provide access to water, latrines, and hygienic facilities, which are important to adolescent girls. In cases where schools cannot be built nearby, providing modes of transport

transportation for girls to go to school is an option. Finally, interventions are needed to ensure that girls are not harassed on the way to school or even in school (on gender-based violence and how to reduce it, see, for example, Abramsky et al., 2014).

- Second, the education system needs to ensure learning. In many countries in Africa (Bashir et al., 2018) and more generally in the developing world (World Bank, 2018), student performance is low as measured by national and international student assessments. This could be reversed with investment in the education system not only for better access but also for higher quality.
- Third, to reach all girls, schooling must be affordable for parents. Yet the out-of-pocket and opportunity costs of secondary education remain high in many countries in the region. Policy changes as well as targeted interventions are needed to reduce those costs.

### Box 7: IMPROVING EDUCATIONAL ATTAINMENT AND LEARNING FOR GIRLS

Because multiple factors may contribute to gender gaps in educational attainment and learning, the types of interventions that could be implemented to reduce these gaps are multiple. Should distance to schools be reduced, whether by building new schools in remote areas or reducing travel time through modes of transportation? Should scholarships be provided to girls? Should more female teachers be hired? Should the priority be to make separate toilet blocks available for boys and girls? Should greater focus be placed on understanding and changing cultural practices? Should pedagogical interventions targeting girls be implemented? The right choice between potential interventions depends on a country's or a community's context. However, reviews of the evidence can help, and such reviews are becoming available thanks to a substantial increase in rigorous impact evaluations in recent years.

One such review was prepared by Unterhalter et al. (2014) to assess the evidence on the impact of interventions for girls' education, with a focus on interventions that (i) provide resources (including transfers) and infrastructure, (ii) change institutions, and (iii) change norms and include the most marginalized in education decision making. The review summarized the impact of different types of interventions on three outcomes: participation, learning, and empowerment. For each type of intervention and category of outcome, the evidence on the likelihood of impact was classified as strong, promising, limited, or needed (i.e., weak). As regards participation, evidence on the impact of conditional cash transfers, information about the potential employment returns on education, and the provision of additional schools in underserved and unsafe areas was found to be strong. This was also the case for evidence on some interventions related to teacher training, group learning, and measures designed to promote girl-friendly schools as well as learning outside of the classroom, for example through tutoring. Several of these interventions (group learning, programs for learning outside of the classroom, and scholarships linked to student performance) were also found to have impacts on learning. The evidence on the impact of interventions on empowerment was generally weaker.

Source: Unterhalter et al. (2014)

**Beyond policies related to education, additional efforts are needed to change the social norms that perpetuate gender inequality from one generation to the next.** Although this has not been discussed much here to keep this report succinct, the issues of child marriage, early childbearing, and low educational attainment for girls of deep-seated patterns of gender inequality (Klugman et al., 2014). Broader reforms are needed in this area

to change the social norms and other constraints that limit opportunities for girls (see Box 8 for examples of such efforts in Niger). Adopting laws is one important step in the right direction, but it is not enough. The Convention on the Rights of the Child emphasizes the need for full and informed consent for marriage, and notes that children do not have the capability to provide such consent. This is one of the reasons why the age of 18 is recommended as the minimum age for marriage. Yet in several countries in the region, the Civil Code sets the minimum legal age for statutory marriage below 18 years of age for girls. In addition, even when the minimum age for marriage is set at 18, there are often exceptions in the law that allow girls to be married earlier with parental consent or the consent of courts. Finally, beyond legislation, specific interventions are needed since child marriage continues to be prevalent even in countries that have adopted laws banning the practice. In fact, as noted by Wodon et al. (2017), most child marriages take place below the legal minimum age for marriage adopted in specific countries, demonstrating that passing laws is not enough.

## SPECIFIC INTERVENTIONS

**As a necessary condition, countries need to promulgate appropriate laws, especially in the case of child marriage. However, laws and more generally strategies to empower girls are not sufficient.** For example, information and mobilization campaigns designed to tackle gender inequities are not likely to be enough by themselves. Hence, specific targeted interventions to empower girls are needed to ensure that they have appropriate life skills and knowledge of reproductive health. Economic incentives are also needed for girls to be able to remain in school, go back to school if they dropped out, or expand their livelihood opportunities if they cannot go back to school.

**To suggest options for targeted programs, this section summarizes the international evidence on three types of interventions for adolescent girls.** These are: (1) programs providing life skills and knowledge of reproductive health; (2) programs expanding economic opportunities; and (3) programs keeping girls in school or enabling them to return to school. The focus on these three types of interventions stems from a body of evidence showing that they can have positive impacts. The three types of programs are hypothesized to potentially delay marriage and childbearing and increase educational attainment in various ways. They are based on different theories of change (see Box 9). The summary findings provided below are based on close to 40 interventions reviewed by Botea et al. (2017). To be included in the review, interventions had to fulfill the following selection criteria: (1) targeting girls aged 10–19 either exclusively or as part of a broader target group; (2) providing life skills and knowledge of sexual and reproductive health (SRH), economic opportunities, or educational opportunities; (3) demonstrating results in terms of improving the health of young women, especially as regards SRH, or delaying marriage or childbearing; and (4) having been tested in a developing country, usually in sub-Saharan Africa, but also in other low-income settings such as Bangladesh or parts of India (for another review of the international evidence, see also Kalamar et al., 2016).

### *Empowering Girls*

**The first category of programs emphasizes the empowerment of girls by providing life skills and knowledge of reproductive health.** The typical intervention is that of a “safe space club” for adolescent girls. These clubs constitute delivery platforms for convening girls with a trusted adult mentor at a specific time and place. The approach was pioneered by Building Resources Across Communities (BRAC) in South Asia and the Population Council in Africa and Latin America. The clubs have proven effective when implemented well. By combining socializing, fun, and access to mentors, the clubs are attractive for girls to attend. From there, other services are delivered. Clubs can be held in a variety of settings, including schools or community centers. Girls meet regularly and with the help of the mentors, are able to discuss a range of issues, including those related to SRH. They learn life skills, including “soft” or socio-emotional skills such as critical thinking and problem solving, communication and negotiation (for example within their household). One of the objectives is often to boost girls’ self-awareness and self-esteem so that they can explore and fulfill their own aspirations. In many cases, safe space clubs are also used to impart “hard” skills such as literacy and numeracy or basic business skills.

### Box 8: EFFORTS TO REDUCE GENDER INEQUALITY AND EMPOWER WOMEN: THE CASE OF NIGER

Adopting laws and ratifying international conventions is a step in the right direction to empower women, but it is not enough. Consider the case of Niger. The country has ratified the convention on the elimination of all forms of discrimination against women (CEDAW) and the 2004 optional protocol on violence against women. Niger's Constitution states in Article 22 that "(i) the State shall ensure the elimination of any form of discrimination against women, girls, and persons with disabilities; (ii) public policies in all fields shall ensure women's full participation in national development; [and] (iii) the State shall also take measures to combat violence against women and children." In May 2011, the country adopted a national charter for the improvement of the image of women in the media. Article 5 of Law no. 2012-45 of 2012 prohibits discrimination by employers based on sex, age, race, religion, disability, or HIV/AIDS status. The country also adopted laws instituting a quota system in favor of women for elected positions and other positions in public service. In 2017, a decree was adopted to keep girls in school longer with a view to delay marriage and childbearing. A campaign for its implementation is underway. Finally, the country is a member of the African Union, ECOWAS, and WAEMU, all of which have adopted documents and protocols emphasizing the responsibility of the State in ensuring the protection of women's rights.

Despite these efforts, the prevalence of child marriage remains high in Niger. Further reforms are therefore needed, including setting the legal minimum age for marriage for girls at 18 instead of 15. Beyond laws, targeted interventions are also required. One promising example is the regional Sahel Women's Empowerment and Demographic Dividend (SWEDD) Project, which, in addition to Niger, covers Burkina Faso, Chad, Côte d'Ivoire, Mali, and Mauritania. The project provides a model for how to address both supply- and demand-side constraints to family planning and reproductive and sexual health. Under the component of the project related to women and girls' empowerment, sub-projects target adolescent girls at high risk for early marriage and early childbearing and support them with age-appropriate and evidence-based interventions. In Niger, the Government is implementing community safe spaces for girls aged 10 to 19 along with initiatives to engage men and boys as partners in promoting women and girls' empowerment through "schools for husbands" and boys' clubs. The project also provides educational incentives such as stipends for vulnerable households aiming for adolescent girls to remain in secondary school.

At the institutional level, steps have also been taken toward empowering girls and women. A Directorate of Women's Economic Empowerment has recently been created within Niger's Ministry of Gender. In 2015, a decree was adopted to establish the National Observatory for the Promotion of Gender (ONPG). The Observatory is attached to the Office of the Prime Minister and charged (among others) with the responsibility to monitor the implementation of national, regional, and international commitments in the area of gender. At the programmatic level, the Presidential Renaissance Act II Program emphasizes the elimination of all forms of discrimination against women and girls and their full and effective participation at all levels of political and economic decision making. The issue of equity between men and women features prominently in the Strategy for Sustainable Development and Inclusive Growth (SDDCI – Niger 2035) and in the Economic and Social Development Plan (PDES 2017–2021). Finally, Niger adopted an updated National Gender Policy (NGP) in 2017. Other steps at the operational level include the gender and Islam strategy, the strategy for training husbands ("schools for husbands"), the initiative for adolescent girls, and the adoption and implementation of awareness programs for behavioral change.



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*Without other interventions, safe space programs may not be sufficient to delay marriage and childbearing or improve schooling. However, they achieve important intermediary outcomes related to (among others) aspirations and self-esteem, confidence, and SRH knowledge.*

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**These programs have helped improve SRH knowledge and behaviors.** This includes an increase in girls undergoing HIV testing or counseling, an increase in the use of modern contraception or other family planning methods, a reduction in the desire for practicing female genital mutilation for daughters in countries where the practice is prevalent, a reduction in the risk of intimate partner violence when the program also reaches out to men, an increase in self-esteem, and gains in specific skills taught during safe space sessions, for example in the areas of financial literacy or basic literacy and numeracy.

At the same time, without additional interventions related to schooling or employment and livelihoods, it is not clear that safe spaces are sufficient to delay marriage and childbearing (even though this may not have been a primary goal of these projects). Therefore, it is important to consider programs whereby safe spaces have been combined with livelihood opportunities and incentives to remain in school, usually with larger impacts on the age at marriage and childbearing.

### ***Providing Employment Opportunities***

**The second category of programs combines an emphasis on empowering girls, often through safe spaces, with an additional focus on providing livelihood opportunities.** These programs are appropriate for girls who are not in school. For these girls, building skills for income-generation may provide an alternative to early marriage and childbearing. Two groups of interventions are distinguished: livelihood interventions, and financial literacy and access to financial services. Impacts on the age at marriage and early childbearing tend to be larger than with life skills or SRH knowledge alone, but not in all cases. Given their focus on economic opportunities, these programs often have had some success in increasing earnings, employment, and savings. Several of the programs also succeed in increasing the use of modern contraceptives and enhancing SRH knowledge, which may help delay childbearing. In some cases, the programs also succeed in delaying the age at marriage and reducing teen pregnancies. For example, the BRAC Uganda Empowerment and Livelihoods for Adolescent Girls program increased the likelihood of girls engaging in income-generating activities by 32 percent, increased self-reported routine condom use by those sexually active by 50 percent, reduced fertility rates by 26 percent, and reduced the reporting of unwanted sex by 76 percent. There were also reductions in teenage pregnancies and child marriage as well as a shift in gender dynamics in the community (Bandiera et al., 2014; Buehren et al., 2015). The message from the review is that adding a livelihood dimension to life skills and SRH knowledge programs may help delay marriage and childbearing, but not in all cases. The focus on economic opportunities may also help in ensuring regular participation by girls in the programs.

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*Interventions combining an emphasis on empowering girls, often through safe space clubs along with livelihood opportunities may improve reproductive health outcomes and delay marriage or childbearing. This has been the case, for example, in Uganda but not systematically so in other countries. Since these are often the only option available for out-of-school girls, more research is needed to determine what works and what does not.*

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### Box 9: THEORIES OF CHANGE FOR INTERVENTIONS TARGETING ADOLESCENT GIRLS

Life skills and sexual reproductive health (SRH) knowledge: By increasing knowledge and awareness, life skills can increase young women's perceived risk of becoming pregnant at an early age and the desire to avoid early pregnancies (through family planning). Through these channels, life skills may lead to better health outcomes for the girls and their children. By increasing girls' confidence and self-esteem, life skills may also increase girls' aspirations. With increased aspirations, girls may have a greater desire to delay marriage and childbearing. Finally, life skills can increase young women's communication and decision-making skills, leading to increased abilities to negotiate their preferences for delayed marriage and childbearing. At the same time, while life skills and SRH knowledge may empower girls, they may not be sufficient to delay marriage and childbearing if social norms curtailing agency for girls are not also addressed at the same time.

Life skills together with economic opportunities: Programs increasing earnings potential for young women may increase their ability to plan marriage and childbearing decisions in three ways. First, the ability to make an economic contribution expands the role of women beyond that of sex and reproduction. This can increase their desire to limit or space childbearing. The transformation of girls from economic liabilities into assets in the eyes of their societies and families can also alleviate external pressures on girls to marry or have children early. Second, the loss in earnings associated with childbearing is an opportunity cost that may increase women's desire to limit or space births and exercise reproductive control. Third, a young women's increased earnings may improve her bargaining power within the household and allow her to effectively exercise reproductive control by negotiating delays in sexual initiation or marriage, while negotiating the terms of sex, including the use of contraceptives. Creating income-generating opportunities for women can therefore contribute to female empowerment beyond the economic realm by widening personal choice and control over SRH outcomes.

Incentives for schooling or delayed marriage: In many communities, the economic, cultural, and social environment does not provide viable alternatives to marriage for adolescent girls. Once girls drop out of school, possibly because of poor quality or high cost, it may be difficult for parents to refrain from getting their daughters married. In those communities, improving the provision of quality and affordable primary and secondary education may be one of the best ways to delay marriage and childbearing as parents often see schooling as a viable alternative to marriage for their daughters. Incentives and programs to keep girls in school may also lead to tipping points in communities whereby more and more girls remain in school and are able to delay marriage. A few interventions have also aimed to delay marriage through financial incentives conditional on not marrying early, with additional schooling often as an additional benefit.

Source: Botea et al. (2017)

#### *Providing Incentives to Keep Girls in School*

The third set of programs focuses on keeping girls in school, enabling them to return if they dropped out, or directly delaying marriage. The literature suggests that multiple intervention options are available to keep girls in school and delay marriage (Kalamar et al., 2016). In a few cases, evaluations also show that programs providing incentives for schooling quite often succeed in keeping girls in school and sometimes in delaying marriage and childbearing. Some of these programs enable girls who dropped out of school to go back.

**Conditional cash transfers (CCT) to incentivize girls' education, promote health, and support families during shocks may be effective in incentivizing performance.** These are often related to child school attendance or

preventive medicine visits. A significant body of research shows that CCTs are effective in improving school outcomes among children in developing countries, and such initiatives have now been introduced in more than 29 low-income countries worldwide. CCT and income support programs also have positive outcomes, such as reduced child labor, increased schooling, and improved childhood nutrition (for Malawi, see Bastagli et al., 2016). Although not all programs succeed in all areas, the evidence is broadly convincing that in comparison to the other two types of programs reviewed above, those focusing on schooling for girls or in some cases on delaying marriage through financial incentives may be more successful in delaying marriage and childbearing.

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*Of the three types of interventions reviewed in this study, interventions to promote education, including by reducing out-of-pocket and opportunity costs for schooling, are the most likely to help delay marriage and childbearing.*

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### **Summary: Targeted Interventions**

The three types of interventions mentioned above are not meant to be exhaustive. For example, to improve educational attainment for girls, additional interventions are needed. The three types of interventions listed above were selected because their evaluations looked at changes in SRH knowledge, child marriage, and early childbearing. The various programs and interventions are also not mutually exclusive but may in fact complement each other. While some of the programs work better than others in delaying marriage and childbearing and improving educational attainment for girls, all three categories of programs have benefits. By targeting different groups of girls, for example those in school or with the potential to return to school as well as those who dropped out and may be unable to return, all three categories of programs should be considered when implementing a strategy aiming to improve opportunities for adolescent girls. Another example relates to the need for associating cash transfers with accompanying measures aiming at boosting agency, such as the development of soft skills and promoting knowledge of nutrition and reproductive health if they are shown to be effective (World Bank, 2012).

## **CLOSING REMARKS**

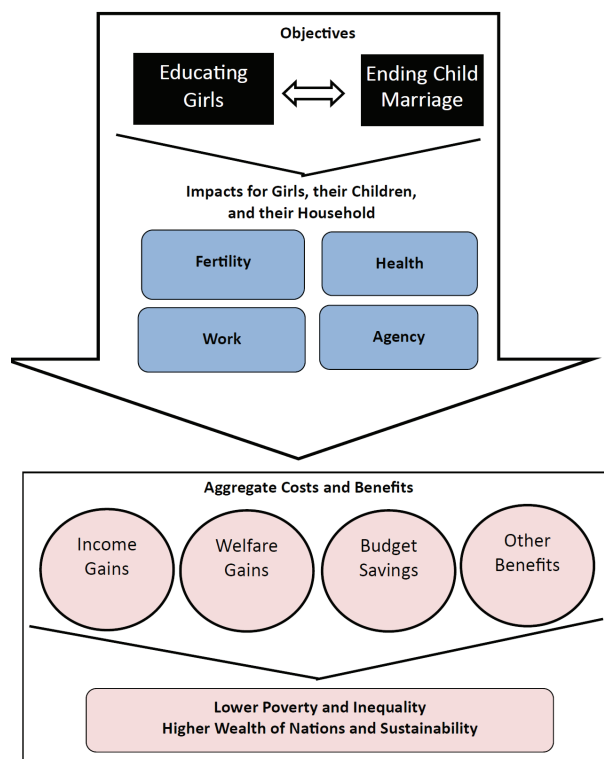
While investments to reduce child marriage, prevent early childbearing, and promote education for girls should not be based solely on economic considerations, this note demonstrates that the benefits from such investments would be large in Chad, Guinea, Mali, and Niger. The primary motivation for reducing child marriage, preventing early childbearing, and promoting education for girls should be to address the substantial risks and suffering faced by adolescent girls and their children. The evidence of the negative impacts of these issues on a wide range of development outcomes is clear. However, these issues also have large economic costs. Demonstrating the magnitude of these costs provides an additional justification for investments in adolescent girls in all four countries. While further work will be needed to identify the best policy options for investing in adolescent girls in each of the four countries, useful lessons can be learned from international experience, including programs implemented in the four focal countries.

## **APPENDIX: FRAMEWORK FOR ANALYZING IMPACTS AND COSTS OR BENEFITS**

One of the aims of this study is to document the impacts of girls' education, child marriage, and early childbearing on a wide range of development outcomes. Selected economic costs associated with those impacts are then estimated. A simple framework guides the analysis. As shown in Figure A1, we first recognize that girls' education, child marriage, and early childbearing are closely linked. The literature and estimates from this series suggest that

keeping girls in school is one of the best ways to delay marriage and childbearing. In contrast, marrying early or becoming pregnant leads girls to drop out of school. Furthermore, child marriage is one of the main drivers of early childbearing. These relationships are acknowledged in the upper part of the figure.

**Figure A1: CONCEPTUAL FRAMEWORK**



In turn, girls' educational attainment as well as child marriage and early childbearing matter for other development outcomes. Four main outcomes are considered: fertility, health (including nutrition and the risk of exposure to intimate partner violence), work (including labor force participation and earnings), and agency (including decision making and other impacts). While some of these impacts are estimated for girls marrying or dropping out of school early, others are estimated for their children.

Selected economic costs or benefits associated with the impacts of girls' education, child marriage, and early childbearing are estimated next. Examples of benefits from educating girls, ending child marriage, and preventing early childbearing include: (1) higher growth in per capita GDP thanks to lower population growth; (2) higher labor earnings for women in adulthood; (3) higher labor earnings for children in adulthood thanks to a lower prevalence of stunting; (4) valuation of the benefits associated with children's lives saved; and (5) reduced budget needs thanks to lower population growth. Although this list of benefits is by no means exhaustive, it includes some of the largest economic benefits that can be expected.

Finally, we note that the benefits from educating girls and reducing or even ending child marriage at the level of individuals and households have broader implications at the national and even global levels. By raising standards of living (through higher per capita GDP combined with lower population growth and higher earnings for women), educating girls and reducing child marriage will reduce poverty as well as inequality.

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## COUNTRIES FOCUS

# Managing Debt Vulnerabilities in Mali, Chad, Niger & Guinea<sup>3</sup>

### SUMMARY

*Debt vulnerabilities in Sub-Saharan Africa have increased. Nearly half of the countries covered under the Low-Income Country Debt Sustainability Framework in Sub-Saharan Africa were at high risk of external debt distress at the end of fiscal 2018. As a result, the share of high-risk countries has more than doubled since 2013. Among the four countries examined below, Chad is the only one rated at high risk of external debt distress, and while Guinea, Mali, and Niger belong to the group of moderate-risk countries, their downside risks remain significant. Hence, continued efforts to clear arrears and implement sound fiscal policies and improved debt management are needed to improve these countries' debt sustainability outlook.*

### I. INTRODUCTION

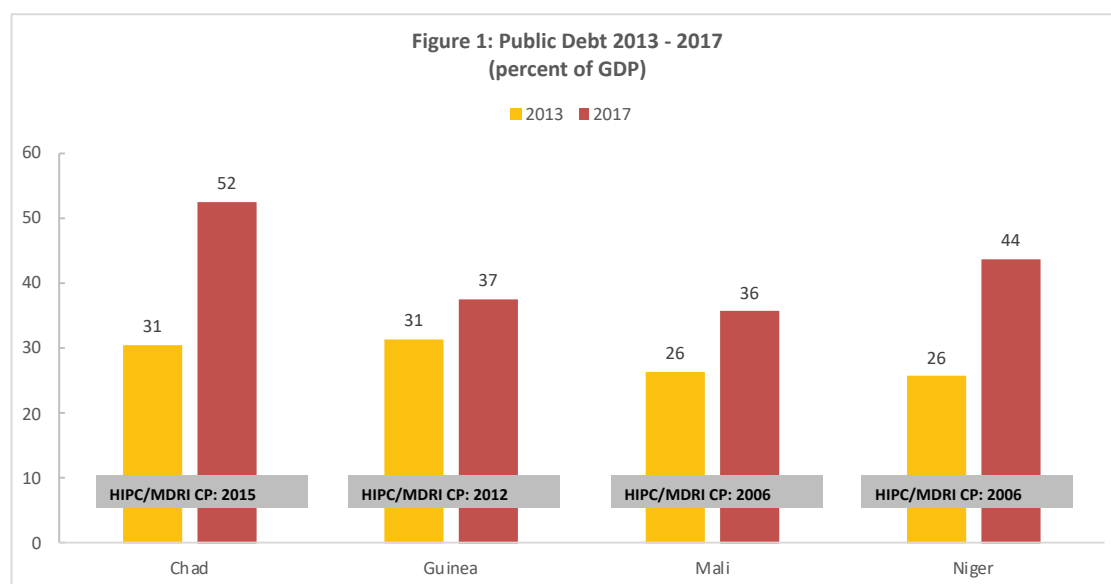
The number of Sub-Saharan African (SSA) countries at high risk of debt distress under the joint World Bank/IMF Low-Income Country Debt Sustainability Framework (LIC/DSF) has doubled since 2013. This worsening in debt sustainability is the result of rising debt levels and a change in the composition of public debt toward more expensive and riskier sources of financing. The share of multilateral debt has declined gradually on average, while the share of market-based debt and new bilateral creditors has increased.

Chad was at high risk of debt distress as of August 2018, while Guinea, Mali, and Niger were at moderate risk. All four countries are commodity-dependent and benefited from debt relief under the Heavily Indebted Poor Country (HIPC) plan and the Multilateral Debt Relief Initiative (MDRI). Chad and Mali are among the group of fragile and conflict-affected (FCS)<sup>4</sup> countries. Chad, Mali, and Niger are part of monetary unions: Chad belongs to the Economic Community of Central African States (CEMAC), while Mali and Niger form part of the West African Economic and Monetary Union (WAEMU). Public debt levels in Chad and Niger have increased sharply

<sup>3</sup>This Note was written by Doerte Doemeland and Sebastian Essl. Guidance and comments were received from Lars C. Moller and the AFCW3 leadership team, and contributions from the entire team of AFCW3 economists: Luc Razafimandiny, Markus Kitzmüller, Olivier Bégué, Marcel Nshimiyimana, Boulel Touré, Ernest Sergenti, and Olanrewaju M. Kasim.

<sup>4</sup>In line with the World Bank's Global Economic Prospects document, countries are defined as commodity-dependent when, on average in 2012–2014, total commodities exports accounted for 30 percent or more of total exports, or exports of any single commodity accounted for 20 percent or more of total goods exports. Chad, Guinea, Mali, and Niger are all classified as commodity-dependent, while roughly 75 percent of Sub-Saharan African countries are similarly classified. In addition, Chad and Mali are also classified as FCS countries. IDA FCS countries have either a) a harmonized average CPIA country rating of 3.2 or less, or b) the presence of a UN or regional peace-keeping or peace-building mission during the past three years. IBRD countries qualify only thanks to the presence of a peacekeeping, political, or peace-building mission. A list of FCS countries is available at: <http://pubdocs.worldbank.org/en/892921532529834051/FCSList-FY19-Final.pdf>

since 2013, significantly above the Sub-Saharan median<sup>5</sup> as well as the median of commodity-dependent countries, while increases in public debt in Guinea and Mali were below these medians (Figure 1).



Source: IMF World Economic Outlook database, April 2018; World Bank staff calculations

This Note compares key trends for public debt in Chad, Guinea, Mali, and Niger against peer groups, and concludes with a country specific focus on key debt issues. In this analysis, public debt refers to general government gross debt. When analyzed, external debt refers to public and publicly guaranteed (PPG) external debt, and domestic debt refers to debt issued in domestic currency.<sup>6</sup>

## II. BROAD PUBLIC DEBT DYNAMICS IN AFCW3

Median public debt levels declined after 2004 in Sub-Saharan Africa but have increased sharply since 2013. Following the substantial decline in public debt from 2004 onward, largely due to debt relief provided under the HIPC and MDRI initiatives, debt levels remained stable between 2008 and 2013. From 2013 until 2017, median<sup>7</sup> public debt in Sub-Saharan Africa increased by 20 percentage points, from 35 to 55 percent of GDP. The buildup in public debt in Sub-Saharan Africa since 2013 has been most pronounced in FCSs. Starting from a higher base level in 2013, median public debt in FCSs reached 66 percent of GDP at end-2017, up from 43 percent of GDP in 2013, and roughly 10 percentage points higher than the regional median.

*Public debt trends and levels among the four countries vary.*

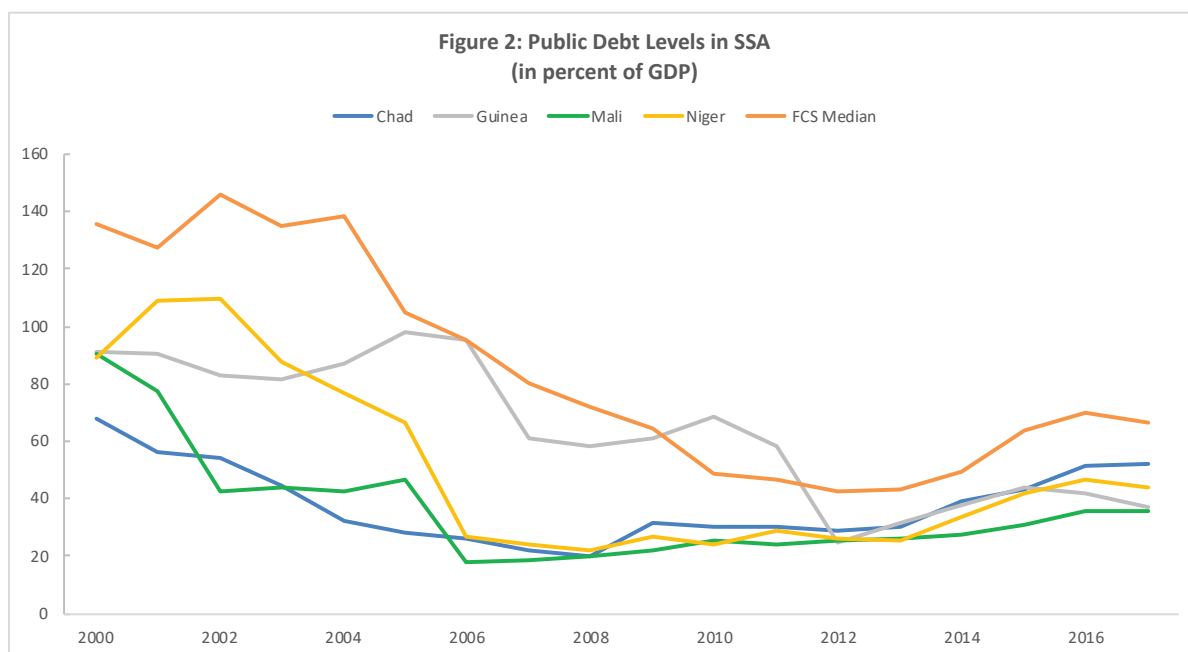
- Chad experienced one of the steepest increases in public debt in Sub-Saharan Africa, with debt increasing by 22 percentage points between 2013 and 2017 (Figure 3). Starting at a relatively low level in 2013, public debt remains slightly below the regional median and significantly below the median of other FCSs.

<sup>5</sup>Aggregate figures are presented as medians to better capture what a “typical” country would look like by controlling for outliers. However, the analysis and conclusions remain the same if other aggregation methods are used.

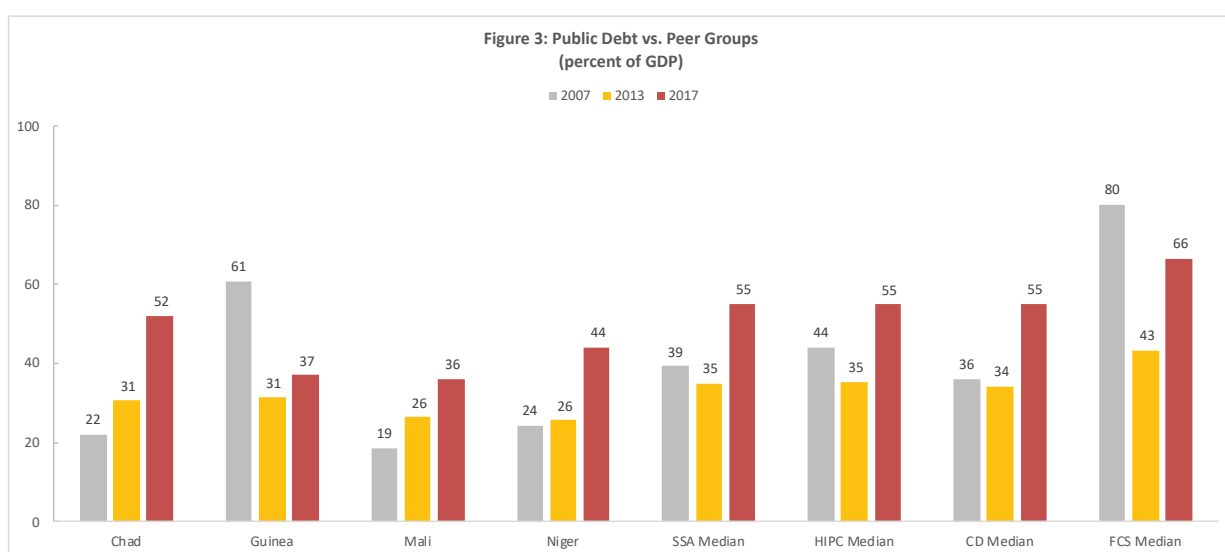
<sup>6</sup>Chad, Guinea, Mali, and Niger are excluded from peer groups (Sub-Saharan Africa, HIPCs, commodity-dependent countries, and FCSs) to make it possible to use peer groups as a control group in the analysis of public debt. All peer groups comprise Sub-Saharan African countries only. The Seychelles was excluded from the group of Sub-Saharan African countries due to its high-income status.

<sup>7</sup>Aggregate figures are presented as medians to better capture what a “typical” country would look like by controlling for outliers. However, the analysis and conclusions remain the same if other aggregation methods are used.

- **Niger's** public debt has increased at the same pace as in other Sub-Saharan African commodity-dependent countries since 2013, reaching 44 percent of GDP in 2017.
- Public debt in **Guinea and Mali** was substantially below the Sub-Saharan African median at end-2017, at 37 and 36 percent of GDP, respectively. Mali's public debt is one of the lowest among FCSs, at 30 percentage points below the median for FCSs in the region at end-2017.



Source: IMF World Economic Outlook database, April 2018; World Bank staff calculations



Source: IMF World Economic Outlook database, April 2018; World Bank staff calculations

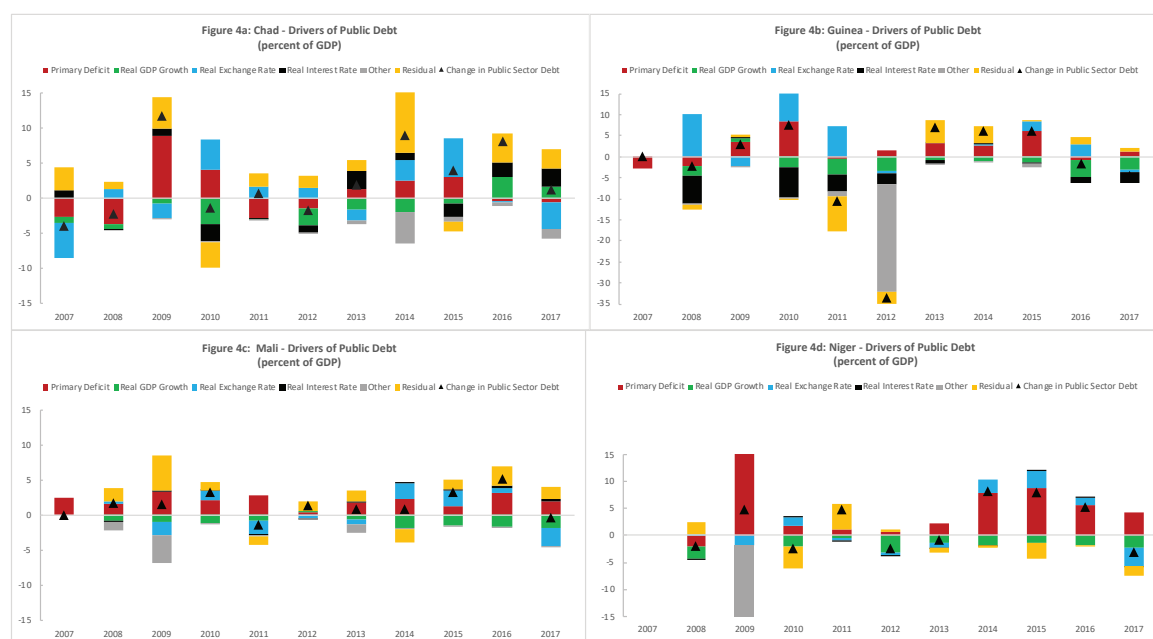
## Box 1: MALI

Debt relief under HIPC and MDRI reduced Mali's public debt from 80 percent of GDP in 2000 to 19 percent in 2006. In 2017, external PPG debt amounted to CFAF 2,231 billion (25.1 percent of GDP) and was largely owed to multilateral creditors and on concessional terms. However, the country's domestic debt stock increased substantially over recent years, from 5 percent of GDP in 2013 to 11 percent in 2017. Although issuances in the regional market account for an increasing share of domestic debt, Mali has also issued costlier instruments beyond the regional market, such as domestic currency sukuk (Islamic bonds) and syndicated bonds.

### III. DRIVERS OF PUBLIC DEBT

**Weak macro-fiscal policies, access to new sources of financing, and shocks led to the rise in public debt in Sub-Saharan Africa.** Widening fiscal deficits played an important role in the accumulation of public debt, particularly in commodity-dependent countries. Failure to build up fiscal buffers during the commodity price boom left many countries without fiscal space, hence borrowing increased sharply when commodity prices declined. In some countries, exchange rate depreciation also drove up debt. In several Sub-Saharan African countries, hidden debt, fraud, and other governance abuses also contributed.

**Several factors have contributed to the change in public debt since 2010 in all four countries, phenomena linked to country-specific policies as well as the international environment (Figures 4a-4d).** The breakdown of the evolution in public debt is based on a standard debt dynamics equation, which considers the effect of key factors such as the primary balance and exchange rate on the ratio of public debt to GDP. The breakdown of drivers of debt also includes a residual, which is tied to changes in public debt ratios due to inadequate data coverage and similar reporting issues.



Source: World Bank/IMF LIC/DSA database

**In Chad, failure to build fiscal buffers during the commodity boom, the severe oil shock followed by a deep and long recession in 2016 and 2017, and higher commercial borrowing drove up public debt.** Despite fiscal consolidation efforts, Chad incurred sustained primary deficits over the past years, thus increasing financing needs and hence public debt. Over 2016 and 2017, the economy contracted by 6.3 and 3 percent, respectively, further worsening debt dynamics.

**In Niger, large primary deficits in the wake of the sustained oil price slump put increased pressure on public debt.** In the absence of sufficient fiscal buffers, Niger's primary deficit averaged over 5 percent of GDP during the past four years, substantially increasing borrowing needs and public debt accumulation. In addition, Niger recorded substantial current account deficits, over 15 percent on average since 2010, thus increasing external financing needs.

**In Guinea, the buildup of public debt was mainly the result of sustained fiscal slippages and adverse exchange rate movements.** In the years following the HIPC completion point (2012), fiscal deficits widened consecutively, reaching nearly 7 percent of GDP in 2015, due to a fall in mining revenues following the commodity price shock as well as increased spending, especially to cope with the 2014–2015 Ebola pandemic. In 2016 and 2017, strong economic growth fueled by significant FDI inflows and improved revenue collection due to international trade taxes and additional tax measures outweighed upward pressure on debt stemming from adverse exchange rate movements and led to a fall in public debt. Guinea was one of only nine countries in Sub-Saharan Africa that managed to reduce their public debt stock between 2015 and 2017 by more than one percentage point of GDP.

### Box 2: GUINEA

Guinea is one of ten Sub-Saharan African countries with a public debt increase of less than eight percentage points of GDP in 2013–2017, with public debt increasing by 6 percentage points despite the occurrence of two major shocks during his period (the 2014–2015 Ebola pandemic, and the steep decline in commodity prices in 2014–2016, especially for bauxite, iron ore, and gold). Public debt increased rapidly between 2013 and 2015 (by 13 percentage points) but declined by seven percentage points from 2016 due to strong economic growth, reaching 8.2 percent. In addition, the authorities relied largely on multilateral concessional loans to finance key infrastructure projects, notably the Kaleta hydroelectric dam. Domestic debt increased by three percentage points between 2013 and 2017, significantly lower than in other Sub-Saharan African countries. In 2017, the Government repayed debt owed to the Central Bank, which led to a decline in domestic debt relative to GDP of one percentage point. However, over the next three years, public debt is expected to increase substantially due to large infrastructure investments. Further strengthening of fiscal policies along with prudent project selection, implementation, and financing will be important to maintaining public debt at a sustainable level.

**In Mali, a widening primary deficit and (hidden) debt surprises captured in the residual drove public debt over recent years.** Debt accumulation in Mali was more contained than in Chad or Niger. The biggest increase in public debt occurred in 2016, driven by fiscal and current account deficits. Strong economic growth of over 5 percent per year since 2014 along with strong investment helped to contain public debt accumulation and led to the level of public debt remaining constant relative to GDP in 2017.

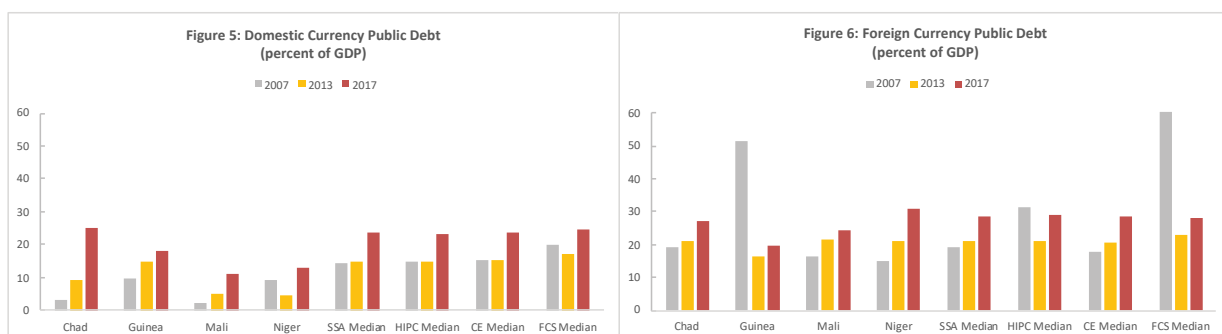
## IV. COMPOSITION OF PUBLIC DEBT

The composition of debt in Sub-Saharan Africa has changed significantly in recent years as the share of domestic and concessional external debt increased (Figures 5 and 6).<sup>8</sup> The share of foreign currency debt

<sup>8</sup> Control groups presented in Figures 6 and 7 cover a subset of countries for which detailed data on the currency composition of public debt is available.



increased from 21 percent in 2013 to 29 percent in 2017, and still accounts for the larger share of public debt in Sub-Saharan African countries. Meanwhile, median domestic currency debt increased from 15 percent in 2013 to 23 percent of GDP by 2017. In commodity-dependent and FCS countries, domestic debt increased at a faster pace than the Sub-Saharan African and HIPC median. Regarding external debt, accumulation was most pronounced in commodity-dependent countries.



Source: World Bank/IMF LIC/DSA database; IMF World Economic Outlook database, April 2018; World Bank staff calculations

### Box 3: NIGER

Domestic debt was a key driver of public debt in Niger. Over the course of four years, domestic currency debt increased by roughly 10 percentage points, mainly as a result of security issuances in the regional market as well as Central Bank debt. Despite the effects of higher demand in the regional market on terms and conditions of domestic debt, maturities tend to be shorter and interest rates higher compared to multilateral external debt. This in turn affects cost and risk indicators associated with public debt, including, for example, a lower average time to maturity and a higher share of public debt maturing in the short-term. Hence, sound debt management practices, including the development of debt management strategies and borrowing plans, are important.

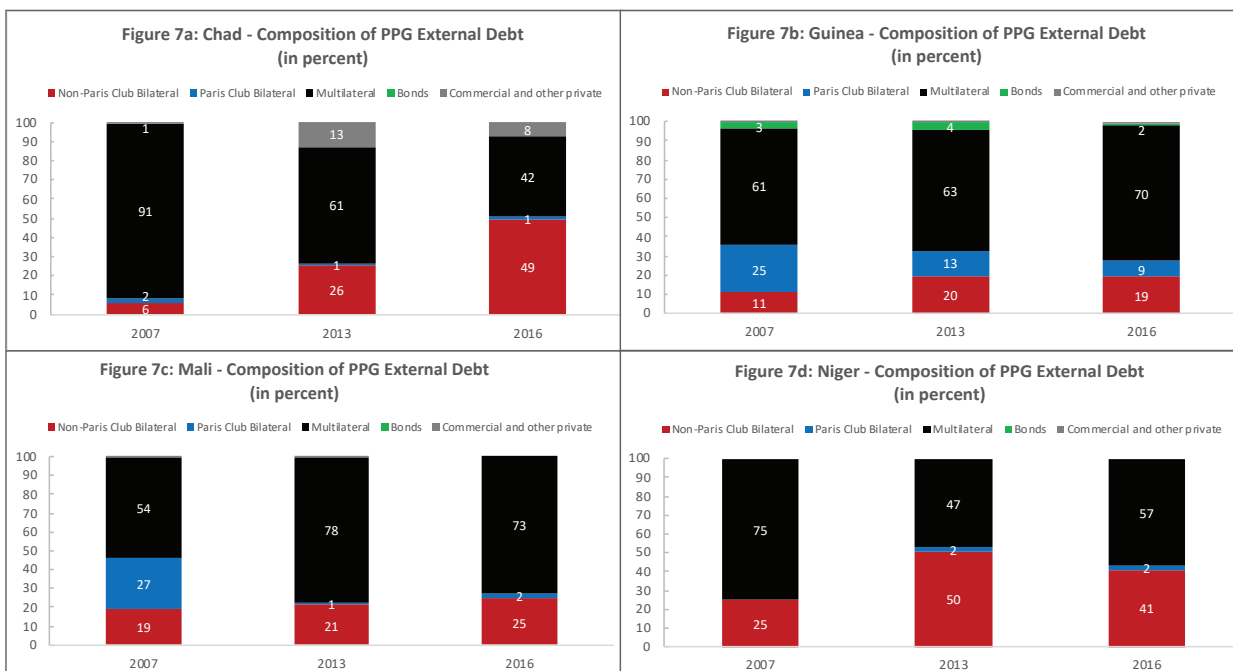
Debt management in Niger still faces low capacity, though efforts are being made to improve its framework. The Debt Directorate conducts domestic and external debt sustainability analyses twice a year. Debt servicing is fully integrated into the budget. An Inter-Ministerial Debt Management Committee chaired by the Prime Minister oversees overall budget support. The legal framework governing debt and the Inter-ministerial Debt Committee are consistent with the regional framework set by WAEMU. The Debt Committee, which is chaired by the Prime minister and supported by a Technical Committee, delivers an opinion on the debt strategy and the annual borrowing plan and evaluates the terms and conditions of traditional and non-traditional lenders as well as project loan agreements, including the Government's budgetary exposure to PPPs. The Committee is supported by a permanent secretary, who ensures the coordination of debt management across ministries and sees to it that contracted debts are in line with fiscal and debt sustainability. In addition, a quarterly report on debt management is published regularly along with the three-year borrowing plan that defines the debt strategy and identifies investment projects and sources of financing.

To effectively manage the risks stemming from an increase in domestic public debt, additional efforts should be made to increase debt management capacity and ensure the effective monitoring and management of cost and risk.

In recent years, several governments in Sub-Saharan Africa have turned to domestic bond markets to meet financing needs. Limited availability of external concessional financing, especially for budget support, banking sector financing, and efforts to reduce exchange rate risks in debt portfolios made domestic bond market development an attractive alternative as countries simultaneously tried to deepen financial markets. While domestic bond market development provides opportunities, countries need stable and credible macro-economic policy frameworks, sound debt management frameworks, institutions, and infrastructure, healthy financial systems, absence of financial repression, and a diversified investor base to develop sustainable domestic bond markets.

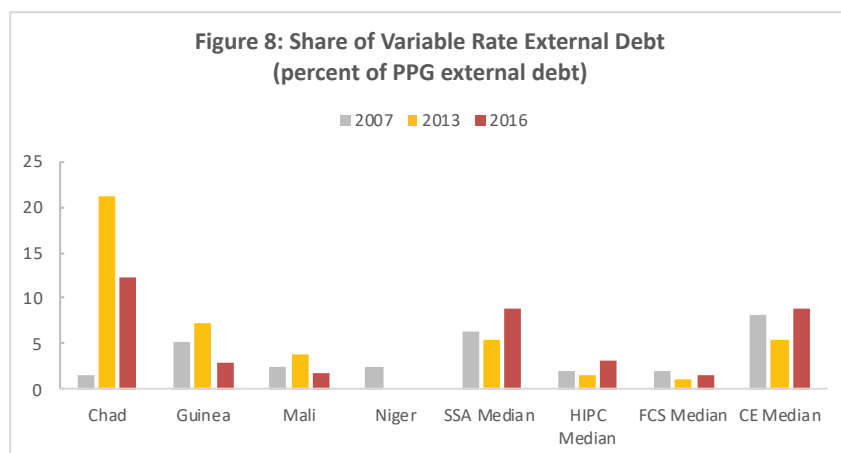
Chad displayed the highest level of domestic currency debt to GDP at end-2017. Domestic debt in Chad has increased by 16 percentage points since 2013, substantially faster than in peer countries. Over four years, domestic debt increased from 9 to 25 percent of GDP at end-2017, while foreign debt increased from 21 to 26 percent of GDP. In Mali and Niger, domestic public debt increased by 9 percentage points since 2017, faster than in the rest of Sub-Saharan Africa. Nevertheless, the level of domestic currency debt in Mali remained well below the Sub-Saharan African median in 2017, while in Guinea, the increase in domestic debt was limited, amounting to 3 percentage points since 2013.

The composition of PPG external public debt in Chad and Niger shifted away from multilateral toward more market-based debt and new bilateral creditors, increasing the cost and risk of public debt. Over the past decade, Chad's share of multilateral debt fell from roughly 90 percent of external debt to less than 50 percent in 2016 (Figure 7a), while the share of debt from non-Paris Club and commercial creditors increased. Niger experienced a similar shift toward non-Paris Club creditors (Figure 7d). Paris Club debt has been limited in both countries over the last decade. In contrast, the share of multilateral debt increased in Guinea and Niger as the share of Paris Club debt declined (Figures 7b and 7c).



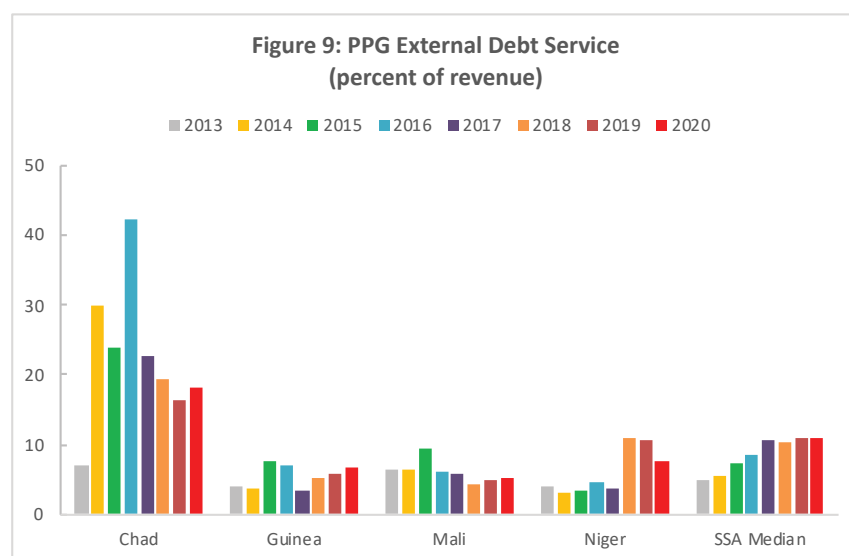
Source: World Bank International Debt Statistics; World Bank staff calculations

In Chad, the share of variable rate debt in total PPG external debt is high and substantially above the Sub-Saharan median, increasing exposure to interest rate risk (Figure 8). The share of variable rate debt compared to fixed-rate debt increased in Sub-Saharan Africa since 2013, but was on a downward trend in Chad, Guinea, Mali, and Niger. Nevertheless, Chad's share of variable rate debt in PPG external debt was substantially above that of peer countries, exposing Chad to higher interest rate risk.



Source: World Bank/IMF LIC/DSA database

Due to debt contracted under commercial terms, PPG debt service in Chad peaked significantly above the Sub-Saharan median in 2016 but has been on a downward trend since (Figure 9).<sup>9</sup> Although the shift toward market-based external borrowing led to unsustainable debt service costs in Chad, successful restructuring of debt with Glencore is expected to reduce debt servicing costs over the medium-run. In contrast, PPG debt service in Niger is expected to rise slightly above the Sub-Saharan African median over 2018–2019. While debt-service costs are expected to increase moderately in Guinea and Mali over the coming years, they remain at low levels compared to other Sub-Saharan African low-income countries.



Source: World Bank/IMF LIC/DSA database

<sup>9</sup> The median numbers for Sub-Saharan Africa shown in Figure 9 are based on a subset of low-income countries for which recent DSAs (either 2017 or 2018) were available.

#### Box 4: CHAD

Domestic currency debt, some of which is held by non-residents, has increased significantly in recent years. The larger part of this increase was due to the issuance of government securities as reliance on Central Bank financing decreased. At the same time, Chad contracted a significant amount of debt from non-Paris Club creditors as well as Glencore, the latter under commercial terms. As a result, liquidity pressures mounted in 2016 and 2017, leading to the accrual of external arrears vis-à-vis plurilateral, bilateral, and commercial creditors and placing Chad in debt distress under the joint Bank-Fund Debt Sustainability Framework. At end-2017, about US\$102 million (1 percent of GDP) remained in arrears, mainly to bilateral creditors. The authorities have since reduced this stock to US\$55 million by arrears owed to the Islamic Development Bank and reaching a rescheduling agreement with Libya. In early 2018, while temporary arrears accumulated, a portion was repaid after relatively short delays. To re-establish liquidity, Chad entered into debt restructuring negotiations with Glencore, reaching an agreement in 2018. The restructuring of the expensive debt owed to Glencore covered US\$1.3 billion and included an extension of maturities, a reduction in restructuring fees, and an interest reduction. The Glencore agreement also contains a cash-sweep mechanism, directly linking debt service payments to oil revenues.

## V. COUNTRY-SPECIFIC RISKS AND OUTLOOK

### Chad

**Chad's external debt is currently assessed to be at high risk of distress, and there are heightened public debt vulnerabilities.** Following the restructuring of commercial debt to Glencore completed in June 2018 and the progress made in clearing external arrears, debt vulnerabilities declined. Recent recovery in oil prices and continued expenditure rationalization support fiscal and debt sustainability. However, continued efforts to clear arrears and maintain prudent fiscal and debt management are needed.

**Public debt is projected to decline gradually under the assumption of stable oil prices and continued fiscal consolidation.** The present value (PV) of total public debt as a share of GDP at end-2017 stood at 50.3 percent, which is about 12.1 percentage points above the benchmark level associated with heightened public debt vulnerabilities for weak policy performers as measured by the World Bank's Country Policy and Institutional Assessment (CPIA).<sup>10</sup> Assuming prudent fiscal policy implementation, progress with respect to growth-enhancing structural reforms, conservative interest rate projections (LIBOR), gradually increasing oil revenues, and clearance of external arrears in 2018, the PV of debt to GDP is projected to decline continuously over the medium-term, falling below the threshold by 2020 and eventually stabilizing at about 17 percent in the long-term. In addition, policies aiming to stabilize the fiscal position and support a sustainable recovery in non-oil activity are also critical. It also assumes clearance of external arrears in 2018.

**However, this outlook is subject to several risks, which are largely on the downside in nature.** Hidden debt and arrears, a rise in non-concessional borrowing, and overruns in the wage bill could lead to a deterioration of public debt. In addition, a further deterioration in the liquidity position of banks presents a risk since it could undermine the rollover of domestic public debt. Developments in the international oil market continue to pose both upside and downside risks to the outlook, although the contingencies integrated into the Glencore debt restructuring agreement dampen the impact of fluctuations in oil prices on the fiscal position. Various scenario and stress analyses show continued vulnerability in the face of shocks to growth or the primary balance, underlining the need to maintain prudent fiscal policies.

<sup>10</sup> The World Bank's CPIA measures a country's quality of policies and institutions and was the basis for the thresholds countries faced for the LIC/DSA solvency and liquidity debt indicators.

## Guinea

**Guinea's external and total PPG debt are projected to increase substantially over the next two years.** Guinea plans to borrow US\$1.85 billion, or 16 percent of 2017 GDP, over 2018–2021 to finance large infrastructure projects. In addition to borrowing to finance the construction of the Souapiti dam (US\$1.2 billion, or 11 percent of 2017 GDP), to be signed in 2018, Guinea is also expected to borrow an additional US\$650 million in non-concessional loans from China Eximbank, to be disbursed over 2018–2021. As a result, new external borrowing is expected to rise to 9 percent of GDP in 2018, up from 1 percent in 2017. New borrowing is expected to average 4.9 percent over 2019–2021 before settling at a long-term average of around 2 percent of GDP.

**Guinea's external debt is currently assessed at moderate risk of debt distress.** The PV of the public debt to GDP ratio should peak in 2019 at 32 percent of GDP and is projected to decline gradually over the long term under the assumption of sustained fiscal consolidation, solid growth, and negative net domestic financing. If Guinea were to contract more as well as more expensive debt than projected as it scales up its investments in critical energy and transportation infrastructure, the outlook could deteriorate significantly. Delays in repaying domestic arrears or debt owed to the Central Bank of the Republic of Guinea (BCRG) or data revisions after new audits of domestic debt and arrears could worsen the dynamics of total public debt.

**Net government domestic financing is expected to be negative throughout 2018–2027 as the Government is expected to gradually repay past borrowings from the Central Bank, domestic arrears accumulated during 2017, and arrears owed to the private sector in line with the clearance strategy approved in December 2017.** These repayments will be supported by revenue mobilization and containing current non-priority spending. Net domestic borrowing is expected to turn positive and increase gradually from 2028 onward.

## Mali

**According to the recent debt sustainability analysis (DSA) (May 2018), Mali's risk of external debt distress remains moderate.** The DSA projects a moderate increase in the PV of PPG debt to GDP ratio, from 26.8 to 36.1 percent of GDP during the entire projection period, assuming that Mali continues to implement prudent fiscal and borrowing policies, largely relying on concessional financing and grants. Assuming an unchanged fiscal consolidation path from the previous DSA, the extent of the worsening in the debt profile will depend on the size and duration of the shift from external to domestic financing. As in the previous DSA, stress tests highlight a sustained breach of the threshold for the PV of PPG external debt to exports under the most extreme shock. The PV of the debt to exports ratio shows a breach of threshold from 2030 to 2038, in line with the previous DSA, under an assumption of tighter financing conditions for public debt ("terms shock").

**The Government continues to conduct a debt policy consistent with maintaining debt sustainability.** The Government is committed to covering its external financing needs through grants and loans in foreign currency, for which the grant element amounts to at least 35 percent. However, the Government also plans to borrow CFAF 276 billion in new external loans in 2018, of which 119 billion would be non-concessional, representing the equivalent of CFAF 158 billion in present-value terms. On this basis, the cumulative ceiling on external borrowing for 2015–2018 remains in line with the IMF program, amounting to CFAF 557 billion in PV terms.

**Mali's debt sustainability remains highly sensitive to a tightening of financing terms as well as a combination of shocks.** In addition to a financing shock (such as less favorable terms for external finance),

Mali's debt sustainability is also vulnerable to a decrease in both transfers and FDI and to an export shock owing to its export concentration in gold. It remains crucial that Mali maintain prudent macroeconomic policies, strengthens the effectiveness of public debt management, and continues to meet its external financing needs with grants and concessional loans, wherever possible. In addition, the country should ensure that underlying projects deliver a high return on investment while continuing with the implementation of structural reforms designed to improve the investment climate and export diversification amid an expected decline in gold's export performance over the medium term.

## Niger

**Niger's external public debt was assessed at moderate risk of debt distress based on the latest DSA in 2018, while debt vulnerabilities have dissipated.** Under the assumption of fiscal consolidation supported by stable revenues from oil and uranium and strengthening growth, the PV of PPG debt to GDP ratio is projected to remain largely flat over the projection horizon, peaking at 45.4 percent of GDP in 2020, or 33.8 percent of GDP in PV terms. Domestic debt is assumed to decline from 13.6 percent of GDP in 2019 to 10.5 percent by 2033. However, if the primary deficit were to remain constant at estimated 2018 levels (4.7 percent of GDP) over the projection period, Niger's public debt would turn unsustainable. This underscores Niger's underlying sensitivity to fluctuations in commodity prices (notably oil and uranium).

**Going forward, Niger remains vulnerable to security threats, delayed recovery of the economy, and adverse commodity price shocks.** Failure to raise medium-term fiscal revenues in a politically sustainable manner would jeopardize fiscal and debt sustainability. In addition, delayed donor project implementation could affect medium-term economic growth negatively.

## V. OUTLOOK

**While Chad is rated at high risk of external debt distress, Guinea, Mali, and Niger belong to the group of moderate-risk countries (Table 1).** Following the restructuring of commercial debt to Glencore completed in June 2018 and the progress made in clearing external arrears, Chad moved from "in debt distress" to "high risk of debt distress." However, continued efforts to clear arrears along with sound fiscal policies and debt management will be needed to significantly improve Chad's debt sustainability outlook.

Table 1: Evolution of the Risk of Debt Distress

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Chad</b>	high	high	moderate	moderate	moderate	high	high	high	high	high	high	high
<b>Guinea</b>	high	high	high	high	high	high	moderate	moderate	moderate	moderate	moderate	moderate
<b>Mali</b>	moderate	low	low	low	moderate	moderate	moderate	moderate	moderate	moderate	moderate	moderate
<b>Niger</b>	high	moderate	moderate	low	low	moderate	moderate	moderate	moderate	moderate	moderate	moderate

Source: World Bank/IMF LIC/DSF.

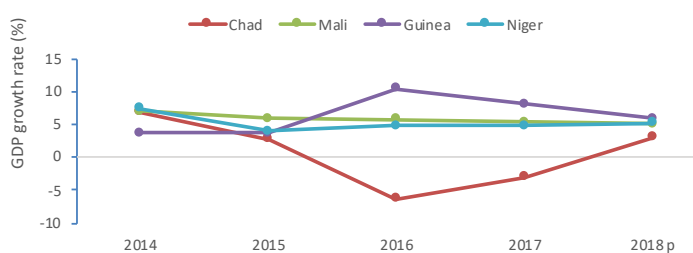
**Stemming the risks from increasing public debt levels and the changes in the composition of public debt will critically depend on sound and credible fiscal policies, sustained implementation of growth-enhancing structural reforms, and prudent public debt management.** Despite the moderate risk of debt distress in Guinea, Mali, and Niger, risks to debt sustainability have increased. All four countries will need to strengthen their fiscal and debt management frameworks if they are to meet their development needs in a sustainable manner. The sharp increase in Niger's public debt together with the changing composition of its debt are reason for concern. Increasing the capacity to prudently and effectively managing public debt will be critical in both Guinea and Mali.



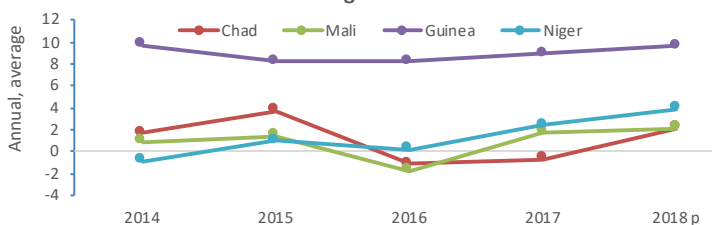
# ECONOMIC OVERVIEW

## MACROECONOMIC INDICATORS OF AFCW3 COUNTRIES AT A GLANCE, 2014-2018

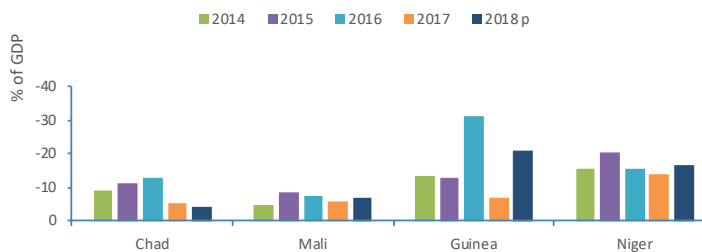
Growth will remain strong in 2018, with Chad emerging from a two-year severe recession...



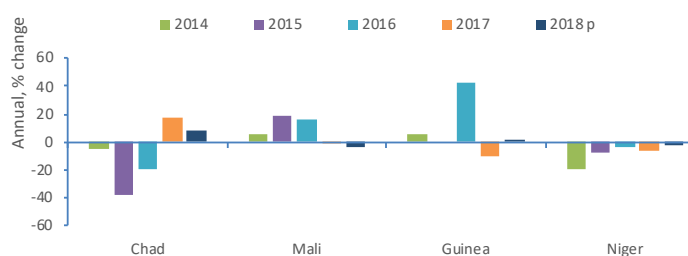
...and inflation rates below three percent, except for mild increases in Niger and Guinea.



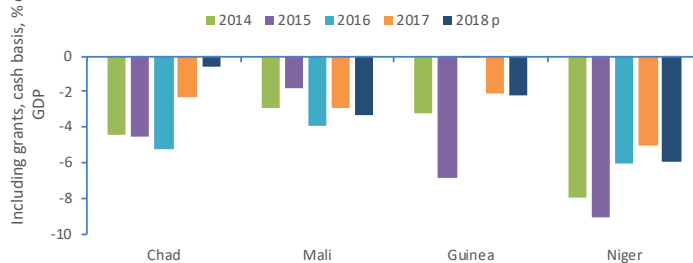
Rising current account deficits are expected in 2018 for all countries but Chad...



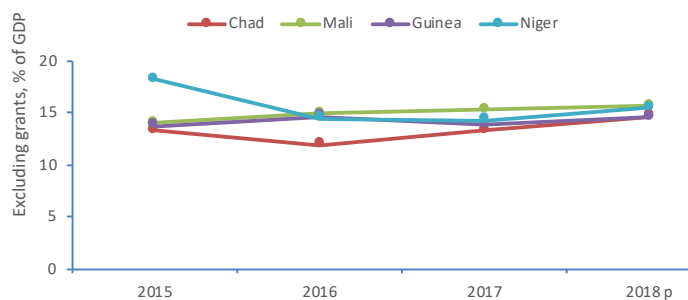
...partly due to falling terms of trade, except for Chad (oil) & Guinea (bauxite) prices



Except Chad, fiscal deficits will slightly rise, mainly in conflict-affected Niger and Mali...



...and despite significant revenue efforts in all four countries.



Source: IMF and World Bank staff estimates. Note: data for 2018 are projections. Fiscal deficits include grants and are on cash basis (except for Niger – on commitment basis)--they may slightly differ from those reported in text on a commitment basis.

# CHAD

*The economic situation has improved but remains fragile. Growth recovered to about 3 percent in 2018 due to high oil prices and strong performance in agriculture and services. Improved revenue collection and a declining wage bill should further reduce the fiscal deficit. In the medium term, oil exports would support growth to reach above 6 percent, strengthening fiscal balances while stabilizing the current account deficit. However, fluctuations in oil prices, insecurity, and banking sector vulnerabilities pose downside risks to the outlook.*

## RECENT DEVELOPMENTS

The economy recovered in 2018, after two years of severe recession. Growth is projected to recover to about 3.1 percent (0.02 percent per capita) due to increases in oil prices, oil production, and agricultural output. The negative output gap has been widening since oil prices plummeted in 2014 but is beginning to close as GDP grows faster than its potential. This narrowing gap is consistent with an acceleration in CPI inflation, reaching 2.1 percent in 2018 compared to -0.7 percent in 2017. The primary sector (mainly the agriculture and oil sub-sectors) contributed about 2 percentage points to 2018 headline growth. In contrast, the contributions of the secondary and tertiary sectors stood at 0.1 and 1.0 percentage points, up from -0.2 and -3.9 in 2017, respectively. The improvement in the industrial sector indicates a slow rise in capital investment while services benefited from strong primary sector activity and the clearance of some domestic arrears.

The external current account deficit fell from 5.1 percent in 2017 to 4.2 percent in 2018, due to higher oil prices and related oil export performance. Following a contraction in 2017, imports grew by 1.4 percent as private consumption and capital investment picked up. The financial account also improved as a result of lower debt servicing to Chad's main private creditor, Glencore.

The Government continues to pursue fiscal consolidation by mobilizing revenues and containing recurrent spending. Total revenues increased from 13.4 percent of GDP in 2017 to 15.4 percent in 2018 due to a boost in oil revenues. In addition, the collection of non-oil revenues increased as taxes are to be paid through commercial banks. Total spending remained at around 14.6 percent of GDP in 2018, supported by a significant drop in the wage bill from 6.5 percent of GDP in 2017 to 5.6 percent in 2018. External arrears are expected to be cleared by end-2018, while domestic arrears are currently being audited. The overall fiscal deficit is expected to decline from 1.4 percent of GDP in 2017 to a surplus of 0.8 percent in 2018.

In June 2018, Chad finalized the restructuring of its oil-collateralized loan with Glencore. The agreement includes significantly longer maturity, lower interest rate, and a cash sweep mechanism with interest and amortization payments proportional to available oil revenues. As a result, public debt returned to a sustainable path characterized by a significantly lower debt service to revenue ratio. Nonetheless, the risk of external debt distress remains high.

As a member of the Central African Economic and Monetary Union (CEMAC), Chad's monetary policy is conducted by the regional Bank of Central African States (BEAC). Following the rapid decline in foreign exchange reserve coverage from 5.8 months of imports at end-2014 to 2.7 months at end-2017, BEAC implemented tighter monetary policies to rebuild regional reserve buffers and ensure financial sector stability. BEAC also eliminated statutory advances and increased its policy rate from 2.45 percent to 2.95 percent in March 2017.

Poverty and vulnerability are pervasive in Chad. According to latest national household survey (2011), 29 percent of the population fall below the food poverty line, 47 percent below the total (also national) poverty line, and 68 percent are considered vulnerable. Consumption distribution indicates that there is greater income inequality in urban areas than in rural areas. The difference in per capita daily consumption between the 10th and 90th percentiles is US\$4.44 (2011 PPP) in urban areas, while the equivalent difference in rural areas is US\$2.78 (2011 PPP).

## OUTLOOK

Oil exports will remain a key driver of real GDP growth in the medium term. In addition, the privatization of the cotton public enterprise is expected to significantly improve the agriculture sector's contribution to (non-oil) GDP growth. Delays in implementing new extraction technologies will see marginal growth acceleration in 2019. However, the expected boost in oil production will ignite investment and exports in 2020, yielding around 6 percent real GDP growth. Import growth will accelerate to 4.1 percent by 2020, driven by gross fixed capital investment and private consumption but outweighed by strong export growth. Consequently, the current account deficit will stabilize at around 4.5 percent of GDP in 2020. CEMAC regional reserves are estimated to reach about 4.2 months of imports by 2020 as BEAC tightens monetary policy and exceptional financing.

The Government is expected to further rationalize current expenditures while improving its oil and non-oil revenue mobilization efforts. Thus, the fiscal balance should remain in surplus and could rise to about 1.2 percent of GDP in 2020. The Glencore agreement and expected clearance of arrears will decrease the public debt to GDP ratio from 52.5 percent in 2017 to 40.8 percent in 2020.

With projected positive real GDP over the period 2018–2020, poverty (using the international poverty line of US\$1.90 a day in PPP terms) is expected to decline by 0.5 percentage point annually. With population growth at 3.3 percent annually, this will still lead to an additional quarter million poor by 2020, increasing the absolute number to about 6.3 million, up from 4.7 million in 2011.

## RISKS AND CHALLENGES

Chad's economic recovery remains fragile and subject to significant risks. Oil price volatility poses both upside and downside risks to the economy, even though the cash sweep mechanism with Glencore dampens the fiscal impact of such volatility. Regional conflict may stretch government finances while disrupting non-oil exports. A further decline in bank liquidity and the potential for additional domestic arrears increase financial sector vulnerabilities and could undermine the rollover of domestic public debt. Lastly, a potential rise in the wage bill and total debt stock may shrink fiscal space and create a fiscal deficit in the medium term. To mitigate these risks, Chad needs to invest its revenue windfall in key sectors such as infrastructure, education, and health. In addition, economic diversification will be required to foster resilience and sustainable growth.

# KEY MACROECONOMIC AND FINANCIAL INDICATORS (2014–2020)

	2014	2015	2016	2017	2018(e)	2019(p)	2020(p)
<b>Real Economy</b>	<i>(annual percentage change, unless otherwise specified)</i>						
Real GDP	6.9	2.8	-6.3	-3.0	3.1	3.3	6.2
Oil GDP	5.7	32.1	-11.2	-16.2	15.7	4.4	22.6
Non-oil GDP	7.1	-2.9	-6.7	-0.5	0.5	2.7	2.5
Per Capita GDP (US\$)	967.1	962.7	874.8	821.8	820.4	820.2	845.8
GDP Deflator	1.1	-8.0	-1.2	1.1	1.2	1.3	1.3
CPI Inflation (average)	1.7	3.7	-1.1	-0.7	2.1	2.6	3.1
<b>Oil Prices</b>							
WEO (US\$/barrel)	96.2	50.8	42.8	54.4	64.7	60.7	58.0
Chadian Price (US\$/barrel)	94.0	39.9	36.2	49.4	60.7	56.7	54.0
Oil Production (millions of barrels)		47.5	44.4	35.9	39.1	41.1	52.1
<b>Fiscal Accounts</b>	<i>(percentage of non-oil GDP, unless otherwise specified)</i>						
Expenditure (total)	29.4	22.9	18.0	18.0	18.3	18.3	18.4
Revenue and Grants (total)	23.2	17.1	14.9	17.1	19.4	18.5	20.0
General Government Balance	-6.2	-5.8	-3.0	-1.0	1.0	0.2	1.6
Overall Balance	-4.4	-4.5	-5.2	-2.5	-0.6	-0.4	0.9
Non-oil Primary Balance	-16.2	-9.7	-4.4	-3.8	-4.4	-4.1	-3.7
<b>Selected Monetary Accounts</b>	<i>(annual percentage change, unless otherwise specified)</i>						
Base Money	26.5	-4.7	-7.7	5.8	—	—	—
Credit to the Private Sector	17.8	1.1	-2.7	0.7	—	—	—
Interest (BEAC key policy rate)	2.95	2.45	2.45	2.95	2.95	2.95	2.95
<b>External Sector</b>							
Exports of Goods and Services (GNFS)	9.4	-33.3	-23.1	25.0	15.6	7.6	11.7
Imports of Goods and Services (GNFS)	16.8	-24.7	-12.0	4.1	2.9	5.0	5.7
Terms of Trade	-4.8	-38.3	-19.3	17.0	8.2	0.1	0.1
	<i>(percentage of GDP, unless otherwise specified)</i>						
Current Account Balance (incl. transfers)	-9.0	-11.3	-13.0	-5.1	-4.2	-5.5	-4.4
Gross Reserves (US\$ billions, EOP)	1.2	0.4	-0.3	0.0	0.1	0.3	0.5
Gross Reserves	2.1	1.0	-1.0	-0.1	0.4	0.8	1.3
(imputed, months of next year's imports)							
External Debt	29.1	25.0	27.2	27.3	26.2	24.9	22.2
Exchange Rate (period average)	493.6	591.2	592.7	592.7	—	—	—
<b>Memorandum Items</b>							
Nominal Non-oil GDP (CFAF billions)	5,184	4,838	4,829	5,005	5,264	5,604	5,996
Nominal GDP (CFAF billions)	6,912	6,474	5,984	5,747	6,077	6,403	7,041

Sources: World Bank MFMOD, IMF, and Chadian Authorities

<sup>1</sup> The Chadian oil price is the Brent price minus a quality discount

# GUINEA

*Growth is expected to remain strong close to 5.9% in 2018, following its exceptional rate of 8.2% in 2017, also driven by the surge in mining activity and exports. Last year, the current account deficit declined to 7 percent of GDP while the fiscal deficit increased to 2.1 percent of GDP. Medium-term growth prospects are good as FDI into the mining sector remains substantial and increased infrastructure investments boost the construction and agricultural sectors. Downside risks to the outlook include socio-political tensions, reform slippage in the run-up to legislative elections expected in the first half of 2019, and declining commodity prices. The extreme poverty rate is expected to decline to 24 percent in 2020 from 31 percent in 2016.*

## RECENT ECONOMIC DEVELOPMENT

The economy continued its robust growth in 2017, at 8.2 percent, following 10.5 percent in 2016, thanks to increased mining production, resumed construction activity, good agricultural performance, and improved electricity provision. The secondary sector, which includes mining, contributed over 80 percent to 2017 growth as Guinea benefited from a surge of foreign direct investment (FDI) following the Ebola pandemic and commodity price shocks.

Exports also continued to increase robustly in 2017, growing at 67 percent, with mining exports up 79 percent in dollar terms. Imports declined by 7 percent, following an over 100-percent increase in 2016, as intermediate imports remained high. Consequently, the current account deficit declined to 7 percent of GDP in 2017 from 31 percent in 2016. FDI continued to be the main source of external financing, representing 13 percent of GDP in 2017, slightly lower than the 18 percent of GDP received in 2016. International reserves grew by over US\$100 million in 2017 to US\$686 million, equivalent to 2.4 months of imports. However, given that reserves are below adequate levels, the economy remains vulnerable to commodity price shocks.

Guinea recorded a fiscal deficit of 2.1 percent of GDP in 2017 compared to 0.1 percent in 2016. This fiscal slippage was the result of lower-than-expected revenues and higher-than-projected election-related spending during the final two months of 2017. Capital expenditures and transfers were 1.1 and 0.5 percentage points of GDP higher in 2017 than in 2016, with subsidies to the public utility reaching 1.3 percent of GDP in 2017 (up from 0.5 percent in 2016). To finance the shortfall, the Government borrowed from the Central Bank of the Republic of Guinea (BCRG) as well as commercial banks and accumulated domestic arrears of 1.0 percent of GDP. Encouragingly, the fiscal position improved substantially during the first quarter of 2018, with Guinea recording an overall budget surplus of 1.0 percent of GDP. The Government also repaid some Central Bank debt, limited borrowing from private banks, and reduced arrears by 0.5 percent of GDP.

As exports surged, the Guinean franc (GNF) appreciated against the dollar during the first half of 2017 (or 3.5 percent for all of 2017) but remained roughly constant for the remainder of 2017 and during the first five months of 2018. As a result, prices of imported products increased by only 5 percent on a cumulative basis since the beginning of 2016. Negative private sector credit growth (-1.3 percent) also represented a break with inflation in 2017 as the Central Bank maintained a high reserve requirement (16 percent) and kept its refinancing rate at 12.5 percent. Nevertheless, average headline inflation rose from 8.2 percent in 2016 to 8.9 percent in 2017 and 9.5 percent year-on-year during the first half of 2018, driven by a sustained increase in food prices, notably of fish and fresh vegetables. However, core inflation, which excludes energy and food prices, remained

moderate at 3.4 percent in 2017. Central Bank financing of the 2017 fiscal deficit also contributed to inflationary pressures, with the stock of reserve money increasing by 10 percent in 2017.

External debt was 19.6 percent of GDP in 2017, down somewhat from 21.6 percent in 2016. Guinea continues to use external borrowing to finance investments in energy and transportation infrastructure, with priority given to concessional loans. To preserve debt sustainability under an IMF Extended Credit Facility (ECF) approved in December 2017 for US\$170 million, Guinea agreed to limit additional non-concessional borrowing to US\$650 million in 2018–2020. Guinea remains at moderate risk of debt distress.

The 2014–2015 Ebola pandemic and a decline in commodity prices led to a worsening of living standards and a rise in poverty. Simulations based on the 2014 census indicate an increase in the poverty rate (using the national poverty line) to nearly 58 percent from around 55 percent between 2002 and 2012, with both urban and rural areas experiencing increased poverty. Because of the high incidence of poverty and fast population growth (around 3 percent per year), the population living in poverty is projected to have increased to about six million, a net increase of a half million compared to 2002. That said, the extreme poverty rate (using the international poverty line of US\$1.90 per day at purchasing-power parity – PPP) decreased to 31 percent in 2016 from an estimated 35 percent in 2012.

## OUTLOOK

As mining production stabilizes, growth is expected to remain strong at around 6 percent during 2018–2020. Mining and mining-related infrastructure investment will continue to drive growth, funded by a large influx of FDI over the forecast period. Construction and agriculture are also projected to grow strongly, with public and private investment into energy and transport infrastructure and improved agriculture productivity. Exports are projected to perform well and grow somewhat during 2018–2020, driven by the mining sector. Nevertheless, the current account deficit will remain between 16 and 21 percent of GDP between 2018 and 2020, with Guinea continuing to rely on intermediate input and equipment imports as it implements large public and private infrastructure projects. FDI inflows will meet 60 to 80 percent of financing requirements over 2018–2020, with long-term loans meeting the balance. International reserves are expected to increase gradually to 3.8 months of imports by 2020.

Guinea is expected to maintain positive fiscal balances over 2018–2020 of around 1.5 percent of GDP. Total tax revenues are likely to increase from 13.5 percent of GDP in 2018 to 15.6 percent in 2020 as a result of efforts to mobilize more tax revenues. Total public spending is expected to increase from 18.0 percent in 2018 to 18.9 percent in 2020. Capital spending should increase by close to 2 percent of GDP during 2019–2020 from its 2017 level to finance increases in pro-growth and pro-poor infrastructure spending. Current expenditures are expected to be contained at around 11.5 percent of GDP between 2018 and 2020. Inflation is forecast to remain between 8 and 10 percent over the medium term as the Central Bank is committed to containing inflation and limit financing of the Government. The public debt to GDP ratio is forecast to increase to 43.0 percent in 2019 before declining slightly to 42.4 percent in 2020.

Thanks to strong economic growth over the next three years, especially in the agricultural sector, the extreme poverty rate is expected to decrease further, to around 24 percent by 2020.

## RISKS AND CHALLENGES

The economic outlook relies on the ability of the authorities to manage socio-political tensions and implement reforms, mainly through fiscal policy. As legislative elections are expected in early 2019, election-prone spending may weaken fiscal discipline and require corrective actions.

Low commodity prices, especially for aluminum and gold, remain a downside risk. Additional risks could be delays in the expected increase in mining and infrastructure investments. Weak implementation of structural



reforms and weak growth in the agriculture sector could also slow growth and poverty reduction. Finally, preserving debt sustainability will require close monitoring over the forecast period as Guinea scales up its investments in critical energy and transportation infrastructure.

KEY MACROECONOMIC AND FINANCIAL INDICATORS (2015–2020)						
	2015	2016	2017	2018(e)	2019(p)	2020(p)
	<i>(annual percentage change, unless otherwise specified)</i>					
<b>National Accounts and Prices</b>						
GDP at Constant Prices	3.8	10.5	8.2	5.9	5.9	6.0
GDP at Current Prices	6.8	18.3	19.6	14.4	14.5	14.4
GDP Deflator	2.8	7.1	10.5	8.1	8.1	7.9
<b>Consumer Prices</b>						
Annual Average	8.2	8.2	8.9	9.6	9.2	8.0
End of Period	7.3	8.7	9.5	9.8	8.5	7.9
<b>External Sector</b>						
Exports (in US\$ terms)	-6.8	35.6	67.1	0.8	10.2	12.3
Imports (in US\$ terms)	-6.7	102.1	-7.3	24.8	-5.3	15.9
<b>Money and Credit</b>						
Net Foreign Assets	-11.0	7.3	9.6	5.7	6.4	6.7
Net Domestic Assets	31.2	2.7	6.2	4.8	7.2	7.3
Net Claims on Government	2.4	0.9	0.9	5.2	7.7	7.7
Credit to Non-government Sector	10.8	2.4	0.9	5.2	7.7	7.7
Broad Money	9.9	15.8	15.8	10.4	14.4	15.8
Reserve Money	2.6	15.5	10.3	14.3	9.6	11.0
<b>Central Government Finances (as percentage of GDP)</b>						
Total Revenue and Grants	14.8	15.8	15.4	15.8	16.6	17.4
Revenue	13.7	14.6	13.8	14.5	15.4	16.2
Grants	1.2	1.2	1.5	1.3	1.3	1.3
Total Expenditure and Net Lending	21.7	16.0	17.5	18.0	18.8	18.9
Current Expenditure	14.1	11.2	11.6	11.5	11.3	11.6
Capital Expenditure	7.6	4.7	5.8	6.5	7.5	7.3
Overall Budget Balance (cash basis)						
Excl. grants	-8.0	-1.3	-3.6	-3.5	-3.4	-2.7
Incl. grants	-6.9	-0.1	-2.1	-2.2	-2.2	-1.5
<b>Current Account Balance (as percentage of GDP)</b>						
Incl. official transfers	-12.5	-31.1	-6.9	-21.0	-15.9	-17.1
Excl. official transfers	-12.7	-32.1	-7.4	-21.4	-16.4	-17.6
Overall Balance of Payments	-4.0	0.8	0.7	1.6	1.3	1.4
Gross Official Reserves (in months of imports)	1.5	2.4	2.4	3.2	3.5	3.8
External Public Debt	21.6	21.6	19.6	26.9	31.7	33.0
Total Public Debt	39.3	39.8	37.2	40.3	43.0	42.4
<b>Nominal GDP (GNF billions)</b>	65,829	77,899	93,160	106,561	122,055	139,623

Source: Guinean authorities, IMF, World Bank staff estimates and projections

# MALI

*Real GDP growth is projected to remain robust at around 5.1 percent in 2018, following a 5.4 percent rate in 2017 thanks to recovery in private investment despite rising insecurity. Last year, the fiscal deficit and the external position improved supported by fiscal consolidation. Poverty declined owing to a substantial increase in agricultural production. The economic outlook is positive but subject to downside risks related to security, adverse weather conditions, and commodity price shocks. Going forward, Mali needs to restore security and further diversify its economy.*

## RECENT DEVELOPMENTS

Despite spreading security threats, real GDP growth remained strong and close to potential at an estimated 5.4 percent in 2017 (2.3 percent in per capita terms) as against 5.8 percent in 2016. Growth was mainly driven by strong investment. Total investment increased sharply by 8.3 percent thanks to a rebound in private sector investment and the Government's efforts to reduce infrastructure gaps. While the agriculture sector contributed modestly to overall growth in 2017 due to adverse weather, the expansion of private investment generated positive spillover effects to the manufacturing and services sectors, which expanded by 6.8 percent and 4.9 percent, respectively. Inflation picked up from -1.8 percent in 2016 to 1.8 percent in 2017, driven by unfavorable weather and higher fuel prices.

The external current account deficit (including grants) fell from 7.2 to 5.8 percent of GDP in 2017, reflecting improvement in the services and trade balance. The trade balance improved by 1.2 percentage point to a deficit of 15.7 percent of GDP, reflecting an increase in exports of cotton and a decrease of food imports. The deficit was financed mainly by foreign direct investment (FDI) and public borrowing. Mali's real effective exchange rate (REER) has depreciated by about 5 percent since 2014, driven mainly by US dollar appreciation.

The overall fiscal deficit declined from 3.9 percent of GDP in 2016 to 2.9 percent in 2017. Although the protracted security crisis put pressure on public expenditures, the authorities managed to contain the fiscal deficit. Efforts to broaden the tax base and rationalize tax exemptions led to an increase in total revenues of 1.7 percentage points of GDP. Due to unbudgeted recurrent spending, public spending rose slightly from 22.3 percent of GDP in 2016 to 22.9 percent despite attempts to control spending. The fiscal deficit was financed mainly by regional bond issuance and donor budget support. To offset the temporary drop in external financing, domestic debt increased rapidly in recent years, reaching 11.0 percent of GDP at end-2017. However, total public debt remained stable at around 36 percent of GDP in 2017, and the risk of external debt distress is moderate.

Mali's monetary and exchange rate policies are managed at the regional level by the Central Bank of West African States (BCEAO), which maintains a fixed peg between the CFA Franc and the Euro. International reserves returned to four months of imports by end-2017 after temporarily peaking in the wake of Eurobond issuances of Côte d'Ivoire, Senegal, and the West African Development Bank. Continued fiscal consolidation among member countries is needed to support regional reserves.

The extreme poverty rate increased from 47.8 percent in 2011 to 50.4 percent in 2013 following the 2012 security and political crisis. However, exceptional agricultural output since 2014 coupled with tertiary sector expansion led to strong growth and a decline in the extreme poverty rate, estimated at 46.3 percent in 2015 and 42.7 percent in 2017. Strong cotton production likely increased consumption by rural households and led to a further decline in poverty.

## OUTLOOK

Real GDP growth is projected to remain robust at around 5 percent over the medium term, in line with the potential rate of growth. Agricultural growth is assumed to be underpinned by favorable weather conditions and input subsidy reforms. Services growth should remain strong, reflecting stronger activity in the telecom, transportation, and trade sectors. On the demand side, investment is expected to remain high, supported by the operationalization of the PPP law and the creation of the Sustainable Development Fund, which aims to finance the reconstruction of conflict-affected areas. Inflation is projected to remain moderate as good agricultural production helps stabilize food prices supported by prudent regional monetary policy.

Planned fiscal consolidation measures aiming to reduce recurrent spending and boost tax revenues should lower the overall fiscal balance from -3.3 percent of GDP in 2018 to around -3.0 percent in 2019–2020, in line with the WAEMU convergence criterion. Public debt is expected to increase slightly to 38 percent of GDP by 2020.

Higher oil prices, lower gold exports, and an increase in investment-related imports will widen the external current account deficit from 6.9 percent of GDP in 2018 to 7.4 percent by 2020. The trade balance is expected to widen over the medium term as terms of trade deteriorate. The deficit is expected to be financed by both FDI and public borrowing.

The poverty rate is projected to decline steadily provided the robust expansion of the Malian economy continues over the period 2017–2019 and the security threat does not spread further south. Under those assumptions, per capita GDP will rise, with a concomitant reduction in the poverty rate to about 40.2 percent in 2019. However, because of poor rains in some areas, poverty may rise locally as pastoral and agricultural households are expected to experience a difficult food security situation during the lean season.

## RISKS AND CHALLENGES

A key downside risk relates to the security threat and a potential post-election crisis linked to forthcoming parliamentary and local elections. The spread of violent attacks to economically important regions could significantly slowdown growth.

A negative climatic shock would reduce agricultural growth, aggravate food insecurity, create inflationary pressures, and raise social spending needs. Given Mali's limited fiscal buffers, such risks could affect budget execution, particularly domestically-financed public investment, which could lead to the accumulation of expenditure arrears.

An unexpected deterioration in terms of trade would worsen the fiscal and external imbalances and dampen growth. Mali remains resource-dependent, and further diversification of exports is critical to lowering output volatility and achieving greater macroeconomic stability.

KEY MACROECONOMIC AND FINANCIAL INDICATORS (2014–2020)

	2014	2015	2016	2017	2018(e)	2019(p)	2020(p)
<b>Real economy</b>	<i>(annual change in percentage, unless otherwise specified)</i>						
GDP (nominal, CFAF billions)	7,114	7,748	8,322	8,932	9,540	10,222	10,950
Real GDP	7.0	6.0	5.8	5.4	5.1	4.8	4.8
GDP Deflator	1.6	2.8	1.5	1.8	1.6	2.2	2.2
CPI Inflation (average)	0.9	1.4	-1.8	1.8	2.1	2.5	2.5
<b>Fiscal accounts</b>	<i>(percentage of GDP, unless otherwise specified)</i>						
Total Expenditure	20.0	20.9	22.2	23.0	23.6	23.0	23.2
Total Revenue	14.9	16.4	16.7	18.4	19.0	18.3	18.6
Grants	2.2	2.7	1.6	1.6	1.3	1.7	1.7
General Government Balance	-2.9	-1.8	-3.9	-2.9	-3.3	-3.0	-3.0
Public Debt	27.3	30.6	35.9	36.0	37.2	37.7	38.2
Domestic Debt	6.3	8.0	11.0	11.0	12.5	13.2	14.1
<b>Selected Monetary Accounts</b>	<i>(annual percentage change, unless otherwise specified)</i>						
Credit to the Government	0.8	1.6	10.4	3.9	14.5	2.9	—
Credit to the Economy	12.4	14.6	13.7	6.3	9.7	11.7	—
Broad Money (M2)	7.1	13.2	7.3	7.9	13.2	5.1	—
<b>Balance of Payments</b>	<i>(percentage of GDP, unless otherwise specified)</i>						
Current Account Balance	-4.7	-8.3	-7.2	-5.8	-6.9	-7.4	-7.4
Imports	38.0	39.6	40.3	38.8	38.8	38.3	37.0
Exports	22.6	24.0	23.5	23.1	23.3	21.9	20.7
Foreign Direct Investment	1.0	0.9	0.9	0.9	0.9	0.8	0.9
External Debt	21.0	22.6	24.9	25.0	24.7	24.5	24.1
Terms of Trade	5.5	18.6	15.5	-0.9	-3.4	-1.6	0.5
<b>Memorandum items</b>							
GDP nominal in US\$ billions	14.4	13.1	14.0	15.3	16.4	17.5	18.8

Sources: Ministry of Finance, IMF, and Bank staff estimates (2014–2017) and projections (2018–2020)

# NIGER

*Niger's economy should continue to grow at 5.2 percent in 2018 following another good crop season and rising external demand that already supported Niger's economic growth of 4.9 percent in 2017. Last year also featured narrowing external current account and fiscal deficits. Over the medium term, growth is expected to accelerate as structural reforms aiming to enhance productivity bear fruit. Poverty is expected to decline gradually in the medium term. Downside risks include heightened security threats and weather shocks, lower oil prices, and delayed reform implementation.*

## RECENT DEVELOPMENTS

Despite protracted shocks, growth reached 4.9 percent (1.0 percent in per capita terms) in 2017, above the potential rate of 4.7 percent. Solid growth in agriculture and increased oil output (+10.8 percent) were the main contributors. A good crop season, favorable oil prices and liberalization reforms in the oil sector supported this improvement. On the demand side, growth was driven by external demand, with exports increasing by 14.3 percent, largely driven by oil exports. Inflation picked up, reaching 2.4 percent at end-2017, and 5.0 percent in July 2018, reflecting hikes in administrative costs and taxation.

The external current account deficit (including grants) narrowed to 13.8 percent of GDP in 2017 from 15.7 percent in 2016. This improvement was mainly driven by the oil sector, completion of several import-intensive investment projects, and increased grants. The overall balance of payments turned positive in 2017, with Niger contributing to WAEMU's pooled international reserves. The current account deficit was financed by capital grants, project loans, and foreign direct investment (FDI).

Niger's monetary and exchange rate policies are managed at the regional level by the Central Bank of West African States (BCEAO), which maintains a fixed peg between the CFA Franc and the Euro. International reserves returned to four months of imports by end-2017 after temporarily peaking in the wake of Eurobond issuances by Côte d'Ivoire, Senegal, and the West African Development Bank. Continued fiscal consolidation among member countries is needed to support regional reserves.

The Government continued fiscal consolidation in 2017, with the fiscal deficit narrowing from 6.1 percent of GDP in 2016 to 5.0 percent in 2017. This improvement was largely the result of an increase in total revenue and grants (+0.9 percent of GDP). The Government contained recurrent spending, particularly wages and salaries. The fiscal deficit was financed by external concessional borrowing and the issuance of securities in the regional market as well as domestic bond issuance. Fiscal consolidation led to a decline of Niger's public debt to 43.9 percent of GDP in 2017 from 46.7 percent in 2016. The risk of debt distress remains moderate.

Niger has made significant progress in reducing poverty. Between 2005 and 2014, poverty fell from about 50.3 percent to 45.7 percent (using the international poverty line of US\$1.90 a day). Nevertheless, there are indications that extreme poverty may have worsened over the period to the extent that the bottom 10 percent of the population experienced negative growth in consumption. The Gini coefficient increased from 28.6 percent in 2005 to 33.6 percent in 2014.

## OUTLOOK

Niger's economic outlook remains broadly positive. The economy should continue to grow above potential, averaging 5.4 percent over 2018–2020. Growth should be mostly driven by the agriculture sector, intensified activities in the electricity, telecom, construction, and public works sectors. Despite fiscal consolidation in the medium term, growth will continue to be strong driven by a buoyant private sector. Inflation should increase to 4.0 percent in 2018 due partly to opportunistic behaviors by some economic agents following newly introduced taxes in the finance law of 2018 and some hikes in administrative costs. Inflation is expected to gradually converge to the 3 percent criterion by 2019 as transitory factors recede. The current account should deteriorate over 2018–2020 thanks to increased capital imports and construction of an oil pipeline. The overall fiscal deficit is projected to increase in 2018 mainly thanks to investments related to the beginning of implementation of the Economic and Social Development Plan (PDES) supported by donors' pledges in December 2017. The fiscal deficit should start to decline in later years and reach 3.0 percent in 2021, two years later than originally intended. Using the international poverty line of US\$1.90 a day (PPP terms), poverty is expected to decline by 2.5 percentage points over 2018–2020.

## CHALLENGES AND RISKS

Both external and domestic factors present downside risks to Niger's medium-term economic outlook. The economy remains vulnerable to external shocks related to volatile global oil demand and prices. Domestic risks include weather shock and a slower pace of implementation of structural and institutional reforms. Intensification in terrorist activities could also negatively impact production, investment, and exports. Further delays in the completion of major natural resource projects is also an important risk factor. Fiscal and debt sustainability will require successfully pursuing ongoing and planned reforms to increase revenues, contain expenditures, and enhance the efficiency of public investment. In Niger, most poor households continue to be in a weak asset position, and structural high asset inequalities in land and livestock ownership are bound to undermine long-term productivity.

KEY MACROECONOMIC AND FINANCIAL INDICATORS (2014–2020)

	2014	2015	2016	2017	2018(e)	2019(p)	2020(p)
<b>Real Economy</b>	<i>(annual percentage change, unless otherwise specified)</i>						
Real GDP	7.5	4	4.9	4.9	5.2	5.3	5.7
Non-resources GDP	8.2	4.5	4.9	4.5	5.3	5.4	6
Exports Volume	11.1	-4.5	-2.7	14.3	6.5	10.8	11
Real per Capita GDP	3.9	0.1	1	1	1.3	1.4	1.6
Imports Volume	5.5	7.3	-14.1	3.5	13.9	11	10.2
GDP Deflator	-0.5	0.5	-0.3	2	3.8	1.9	1.9
CPI Inflation (annual average)	-0.9	1	0.2	2.4	3.9	2	2
CPI End-of-period	-0.6	2.2	-2.2	4.8	2.4	2	2
<b>Fiscal Accounts</b>	<i>(in percentage of GDP, unless otherwise indicated)</i>						
Total Revenue and Grants	20.5	21.4	22.7	23.9	24.6	23	23.4
Total Expenditure and Net Lending	31	32.5	26.6	26.5	28.6	28.4	28.3
Current Expenditure	14.6	15.5	14.1	13.9	14	13.8	13.7
Capital Expenditure	16.4	17	12.5	12.6	14.5	14.6	14.6
Overall Balance (commitment basis, incl. grants)	-8	-9.1	-6.1	-5	-5.9	-4.5	-3.7
<b>Selected Monetary Accounts</b>	<i>(annual change, in percentage of beginning-of-period broad money)</i>						
Broad Money	25.7	4.6	8.7	6.1	9.5	7.9	8.3
Credit to Non-government	6.1	6.3	4.3	3.5	5.3	4.9	4.6
Net Bank Claims on the Government	1.1	9.1	6.3	3.3	2.1	0.2	-0.3
<b>Balance of Payments</b>	<i>(in percentage of GDP, unless otherwise indicated)</i>						
External Current Account Balance (incl. grants)	-15.4	-20.5	-15.7	-13.8	-16.7	-17.9	-19.5
Imports	26.2	27.4	22.8	22.8	24.3	25.7	26.9
Exports	17.6	15.1	13.7	14.1	14.1	14.6	14.9
Foreign Direct Investment	8.9	6.9	5.7	4.2	6.1	6.4	7.7
Pooled Gross Official Reserves (in months of next year's imports of goods and services)	4.9	5.1	4	4.2	4.2	4.3	4.4
<b>Total Public and Publicly Guaranteed Debt</b>	33.8	41.6	46.7	43.9	44.7	46.1	46.5
Public and Publicly Guaranteed External Debt	25.1	30.3	33	30.8	30.1	31.7	33.9
Public Domestic Debt	8.7	11.4	13.7	13.8	14.6	14.4	12.7
Terms of Trade (percentage change)	-19.4	-7.5	-3.8	-6.9	-2.3	-1.9	-3.1
<b>Memorandum Items</b>							
GDP (Nominal-local currency)	4,069	4,269	4,464	4,777	5,217	5,601	6,032

Source: Niger authorities, IMF, and World Bank staff estimates (August 2018)



AFCW3 ECONOMIC UPDATE

DISRUPTING

*the* GENDER DIVIDE  
*in* MALI, CHAD, NIGER & GUINEA



WORLD BANK GROUP