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Chapter 4.
What explains inequalities in health for women of reproductive age?

This chapter describes the specific circumstances and to what extent they contribute to inequality of opportunities from different perspectives. Firstly, the contributions of different circumstances to inequality at country level are examined through the simple averages of the decomposition results (see specific country results in Appendix A). An additional analysis is performed dividing countries into two groups by human immunodeficiency virus (HIV) prevalence, to examine the differences in circumstances' contributions for the HIV-related opportunities. Secondly, a multi-country approach is presented through a multi-country pooled data analysis of the Human Opportunity Index (HOI) decompositions. These results thus complement the country level analyses of circumstances by providing insights on how maternal and reproductive health services and outcomes among sub-Saharan African (SSA) women are associated with differences in their individual and household characteristics, when women from all countries are considered as a single group. Finally, a more in-depth analysis is presented to examine which circumstances drive inequality of opportunities among the older adolescent girls' subgroup.

4.1
Explaining inequality at country level

This section addresses how different circumstances contribute to inequality of opportunity in maternal and reproductive health indicators and outcomes at country level. The results of the analysis are summarised by showing the unweighted average contribution (simple mean) of each circumstance across all countries to the dissimilarity index (D-index) for each opportunity. In other words, the results show the contribution of each circumstance to the inequality of a certain health opportunity, averaged across all countries, where every country is treated equally, regardless of its share in the population of women.

Presenting the averages rather than single country results enables us to highlight key patterns in how circumstances matter for inequality of different opportunities. This would be difficult if more disaggregated country-level information was shown, given the large number of decompositions included (29 countries, 15 opportunities, and multiple circumstances)[IX]. Another important consideration to take into account: Shapley decomposition results show the relative contribution of each circumstance to the D-index[X] for an opportunity, but not the "absolute amount of inequality" that each circumstance is generating. For example, in the case of opportunities with a low D-index, a circumstance that may significantly contribute to the D-index could be responsible for a very small "amount of inequality" in terms of magnitude. Figure 4.1 shows the differences across opportunities in a graph that displays the unweighted average D-index for all countries. The average D-index shows that there are large differences in the D-index across opportunities, meaning that the magnitude of inequality is not the same for the different indicators analysed. This is relevant for interpreting the results on the


[IX]Decomposition results for all countries are accessible to interested readers in Appendix A.

[X]Using the definition explained earlier, the D-index measures inequality between groups differentiated by circumstances.

relative contributions of circumstances to inequality of opportunity, since the same percentage contribution of a circumstance to inequality would have different implications for different opportunities.

Notably, the most unevenly distributed health opportunities are (Figure 4.1): "currently attending school" (D-index: 26 percent) – that applies exclusively to the older adolescents group –, "maternity care package" that includes "four antenatal care visits", "delivery attended by skilled personnel" and "postnatal checkup" (D-index: 25 percent), "met need for family planning" (older adolescents group) (D-index: 19 percent) and "delivery attended by skilled personnel" (D-index: 17 percent).

Figure 4.1 Average D-index by opportunity (unweighted)
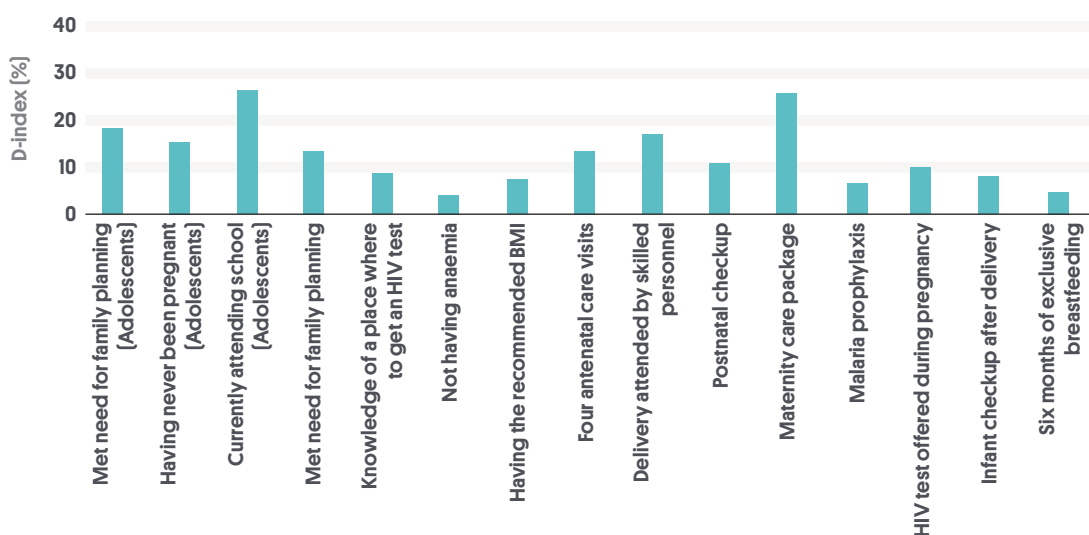
Note: The average D-indices (inequality) for the group of countries are calculated as the unweighted or simple average of the D-indexes for each country.

Box 5. D-index: country cases

To demonstrate the average D-indices with some examples, a selection of countries and opportunities with their D-index is presented, which in some cases are far from the average D-index. The different results displayed highlight the importance of focusing also on the particular results of each country to take into account their specific features.

Country	D-index (%)				
	Average D-index	Example 1		Example 2	
Currently attending school	26	Gabon	10	Niger	62
Not having anaemia	3	Zimbabwe	2	The Gambia	11
Delivery attended by skilled personnel	17	Rwanda	3	Nigeria	37

4.1.1
Women of reproductive age (15-49 years old) and pregnant women

- Country level inequalities are largely explained by differences in household wealth (i.e. which quintile of wealth in a country women belong to), educational level and area of residence (urban/rural) (Figure 4.2). In most countries, a pattern is observed where women who are more educated, living in urban areas and in relatively wealthier households have an advantage for almost all indicators. The only exception to this situation is for the body mass index (BMI); the wealthiest and most educated women are the ones with inadequate BMIs, mostly being overweight.

- A similar trend is observed for opportunities with the highest levels of inequality (i.e. "maternity care package" and "delivery attended by skilled personnel"), where household wealth, area of residence and the woman's educational level are the most significant contributors to inequality, in respective order of importance (Figure 4.2).

- Marital status is one of the most significant contributors to inequality for some health indicators and outcomes: "malaria prophylaxis during pregnancy", "met need for family planning", "not having anaemia" and "exclusive breastfeeding". Single women have a significant advantage over married women in some health indicators such as "not having anaemia" or "met need for family planning", whereas married women have better malaria prophylaxis during pregnancy uptake. Overall inequality is high only for "met need for family planning" and quite low for the other mentioned indicators (Figure 4.1), suggesting that marital status contributes to a significant share of inequality only in the case of access to family planning.

- Certain circumstances stand out for specific indicators. In general, sex of the household head, number of children, age and religion are not significant contrib-

utors to inequality. For example, age does not seem to be a major driver of inequalities in health for women of reproductive age except in the case of "having the recommended BMI", where older women tend to have poorer BMI scores. The low level of overall inequality for this indicator (Figure 4.1) suggests that the differences in BMI attributable to age are not large. However, averages can conceal significant variations between different countries (Box 6).

Figure 4.2 Women of reproductive age and pregnant women: circumstances' contributions to the D-index
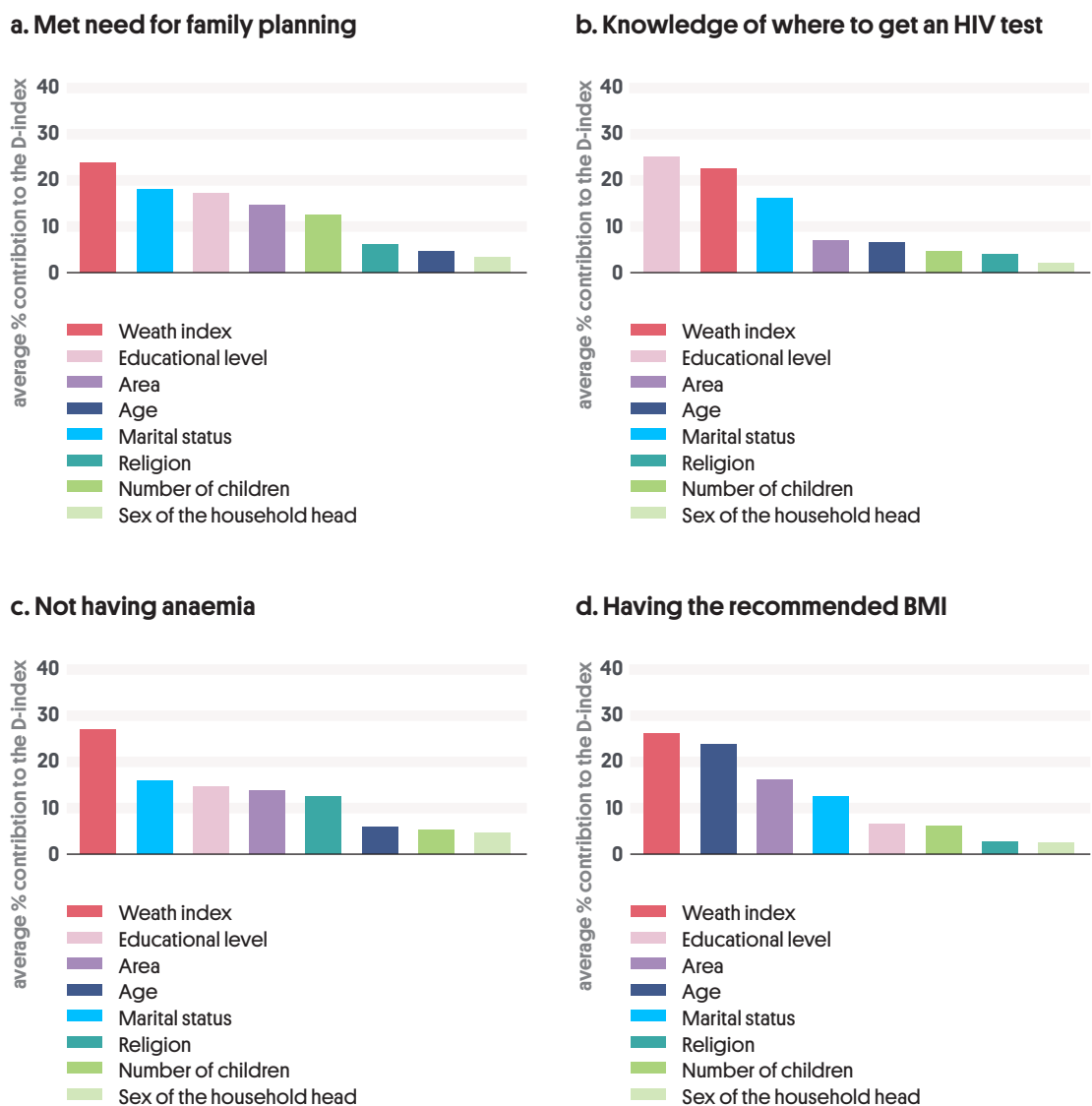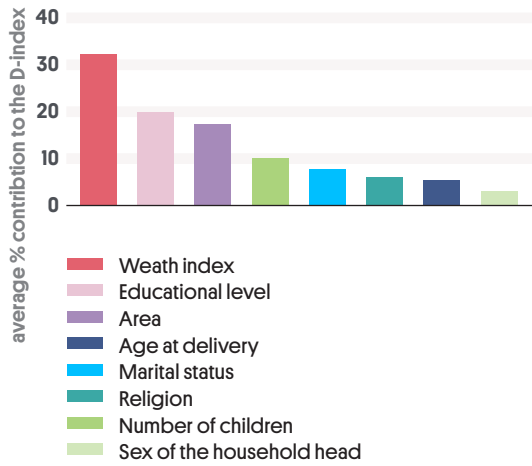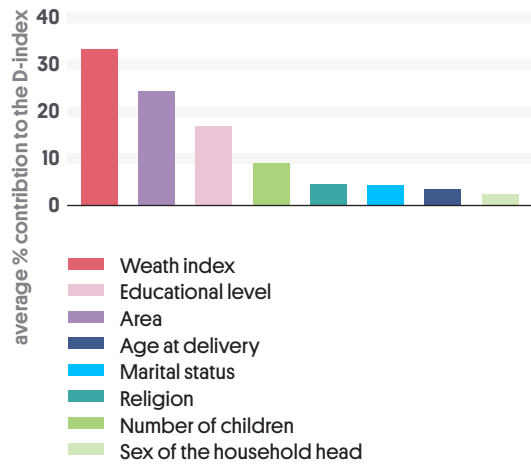
a. Met need for family planning

- Weath index
- Educational level
- Area
- Age
- Marital status
- Religion
- Number of children
- Sex of the household head

b. Knowledge of where to get an HIV test

- Weath index
- Educational level
- Area
- Age
- Marital status
- Religion
- Number of children
- Sex of the household head

c. Not having anaemia

- Weath index
- Educational level
- Area
- Age
- Marital status
- Religion
- Number of children
- Sex of the household head

d. Having the recommended BMI

- Weath index
- Educational level
- Area
- Age
- Marital status
- Religion
- Number of children
- Sex of the household head

figure continues next page

Figure 4.2 Women of reproductive age and pregnant women: circumstances' contributions to the D-index (continued)

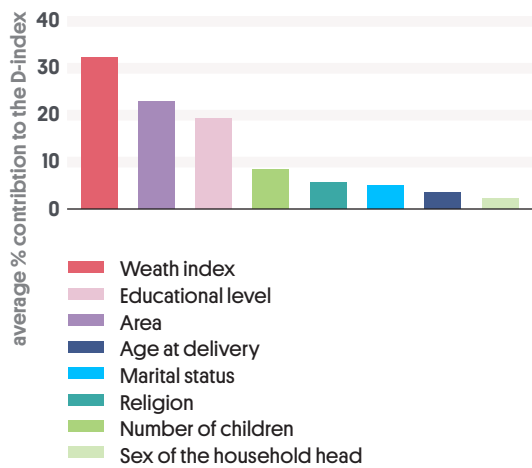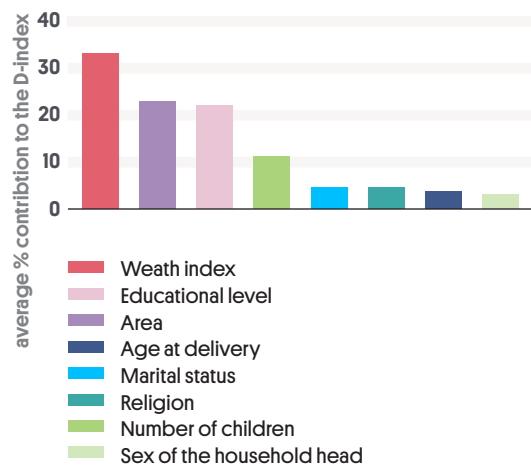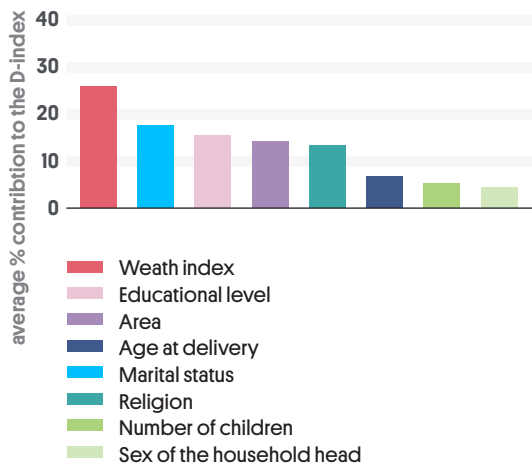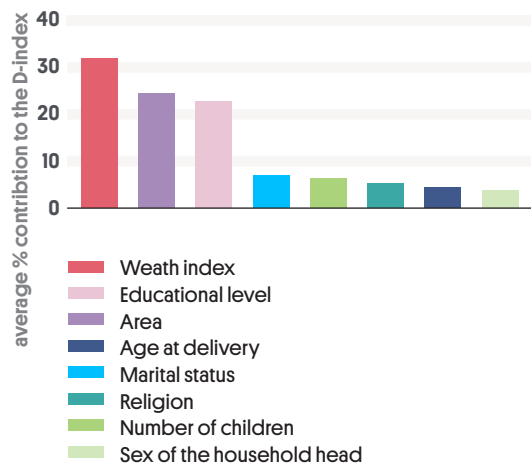### e. Four entenatal care visits

- Weath index
- Educational level
- Area
- Age at delivery
- Marital status
- Religion
- Number of children
- Sex of the household head

f. Delivery attended by skilled personnel

- Weath index
- Educational level
- Area
- Age at delivery
- Marital status
- Religion
- Number of children
- Sex of the household head

g. Postnatal checkup

- Weath index
- Educational level
- Area
- Age at delivery
- Marital status
- Religion
- Number of children
- Sex of the household head

h. Maternity care package

- Weath index
- Educational level
- Area
- Age at delivery
- Marital status
- Religion
- Number of children
- Sex of the household head

i. Malaria prophylaxis

- Weath index
- Educational level
- Area
- Age at delivery
- Marital status
- Religion
- Number of children
- Sex of the household head

j. HIV test offered during pregnancy

- Weath index
- Educational level
- Area
- Age at delivery
- Marital status
- Religion
- Number of children
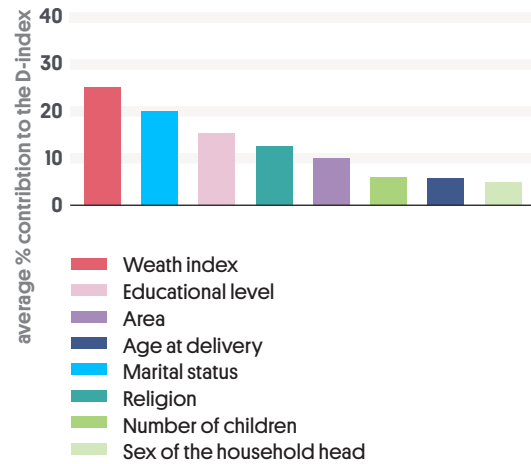- Sex of the household head

figure continues next page

Figure 4.2 Women of reproductive age and pregnant women: circumstances' contributions to the D-index (continued)

k. Infant checkup within two months after delivery
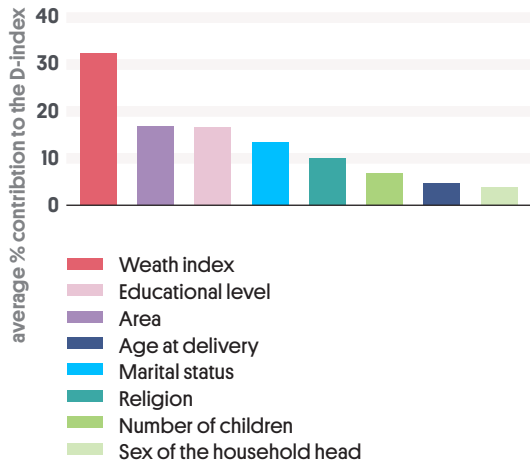
**l. Six months of exclusive breastfeeding**

Note: The average contributions of circumstances to inequality of opportunity for the group of countries are calculated as the unweighted or simple averages (across all countries) of Shapley decompositions of the D-index for that opportunity.

Box 6. Women of reproductive age and pregnant women's opportunities: country cases

To illustrate with examples the average results previously presented, below is a selection of countries and opportunities that follow the average trend or, in contrast, show very distant results from the average. The variability of the results indicates the need to review the results of each country to take into account their specific features (see Appendix A).
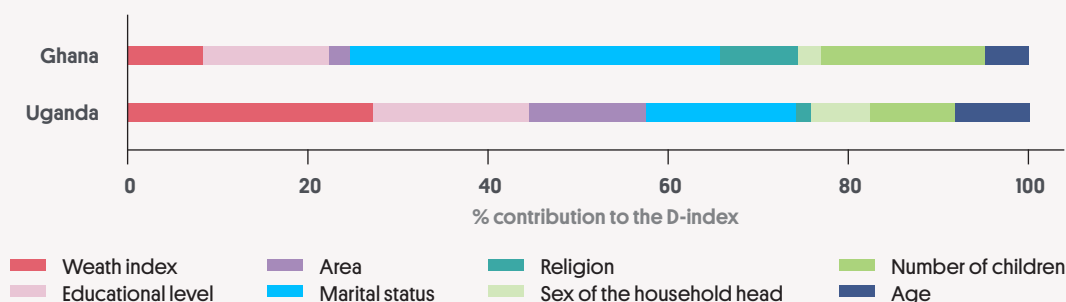
- *Not having anaemia*: this opportunity shows significantly different results across countries. For example, Ethiopia and The Gambia do not share any similarity.
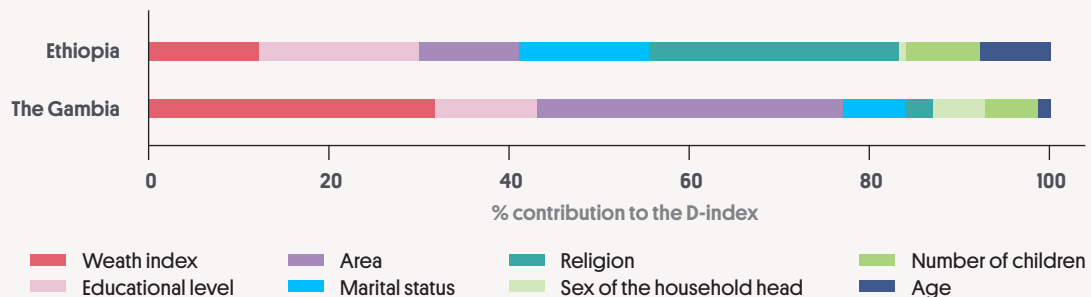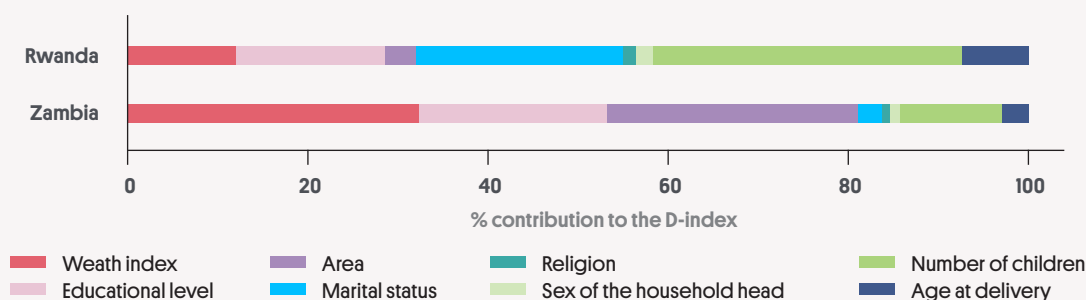

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Box 6. Women of reproductive age and pregnant women's opportunities: country cases (continued)
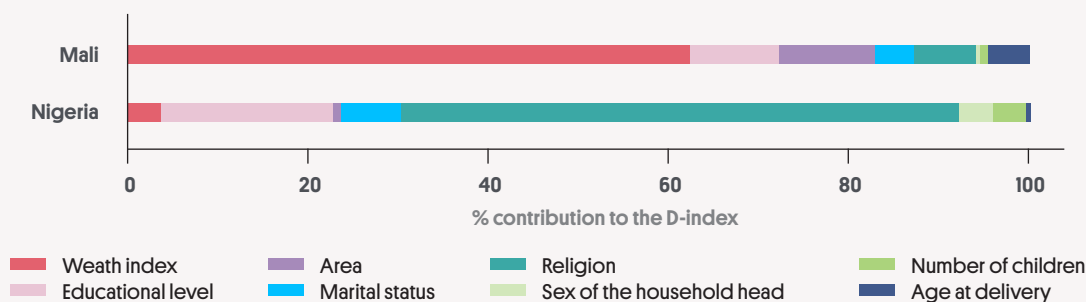
- *Met need for family planning*: while Uganda seems to represent the average results obtained for SSA quite well, Ghana shows different contributors to inequality; marital status being the main one.

% contribution to the D-index

Weath index	Area	Religion	Number of children
Educational level	Marital status	Sex of the household head	Age

- *Maternity care package*: this opportunity shows quite homogenous results across countries. Zambia's results reflect the regional average of the 29 SSA countries analysed, whereas Rwanda is the most notable exception with the number of children being the main contributor to inequality.

% contribution to the D-index

Weath index	Area	Religion	Number of children
Educational level	Marital status	Sex of the household head	Age at delivery

- *Malaria prophylaxis during pregnancy*: Nigeria is a country that in many cases is an outlier because of the important contribution of religion to inequality. Intermittent Preventive Treatment of malaria in Pregnancy (IPTp) is an example. While religion is not relevant for Mali's inequality, for Nigeria it is the main contributor to the D-index.

% contribution to the D-index

Weath index	Area	Religion	Number of children
Educational level	Marital status	Sex of the household head	Age at delivery

4.1.2
Older adolescent girls (15-19 years old)

- The opportunities analysed for this age subset are among the most unevenly distributed health opportunities of the report (Figure 4.1): "currently attending school" (D-index: 26 percent), "met need for family planning" (D-index: 19 percent) and "having never been pregnant" (D-index: 15 percent).

- In general, the main drivers of inequality for the older adolescent group (Figure 4.3) are: marital status, which ranks first for all the opportunities examined (40 percent, 39 percent and 69 percent of the D-index), followed by wealth index, occupation and area of residence.

- The main circumstance contributing to inequality in the case of older adolescent girls' pregnancies, i.e. the "having never been pregnant" opportunity, arises from marital status (i.e. being married) that accounts for as much as 70 percent of the D-index (Figure 4.3). Adolescent pregnancies are more prevalent among married adolescent girls than among those who are unmarried.

- Occupation is an especially relevant driver of inequality with regard to school attendance (28 percent of the overall D-index for "currently attending school"). Among older adolescent girls who are employed, school enrolment rate is lower than for girls who are not working.

A more in-depth analysis of older adolescent girls with regard to marital status is presented at the end of this chapter.

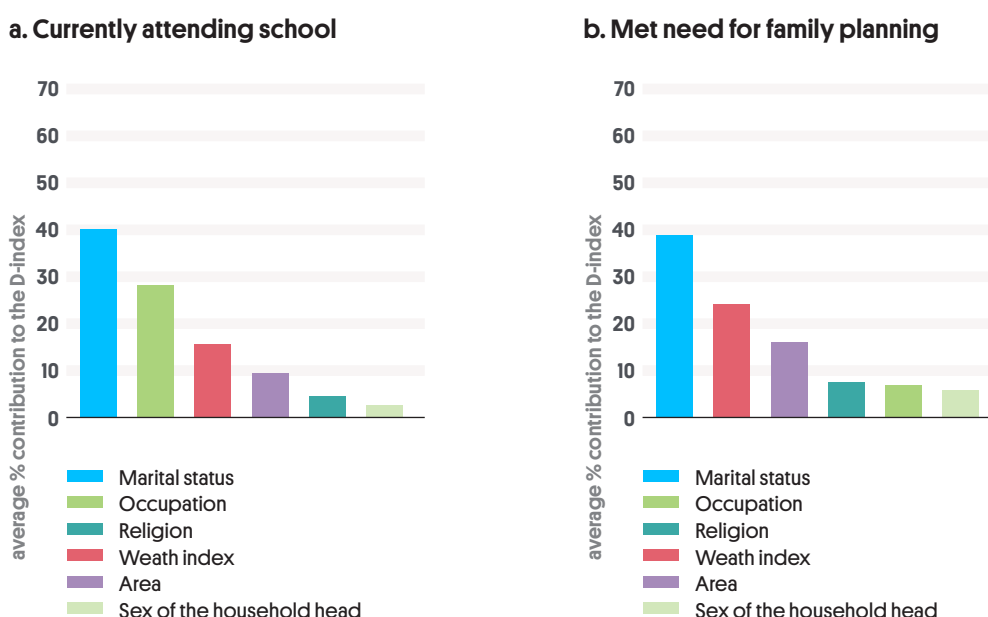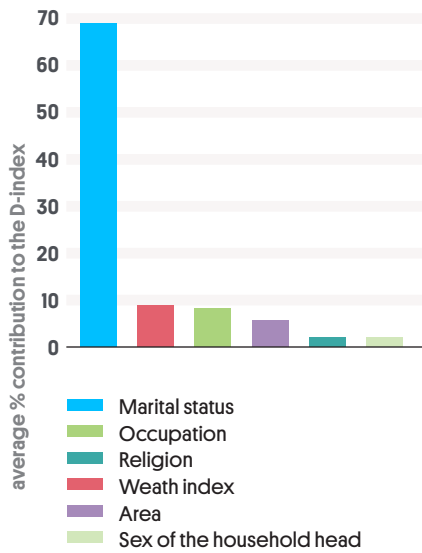**Figure 4.3** Older adolescent girls' opportunities: circumstances' contributions to the D-index

a. Currently attending school

b. Met need for family planning

figure continues next page

Figure 4.3 Older adolescent girls' opportunities: circumstances' contributions to the D-index (continued)
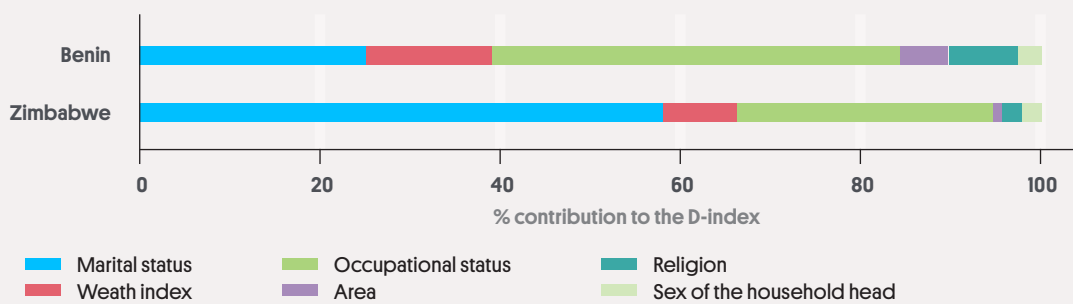
c. Having never been pregnant

Note: The average contributions of circumstances to inequality of opportunity for the group of countries are calculated as the unweighted or simple averages (across all countries) of Shapley decompositions of the D-index for that opportunity.

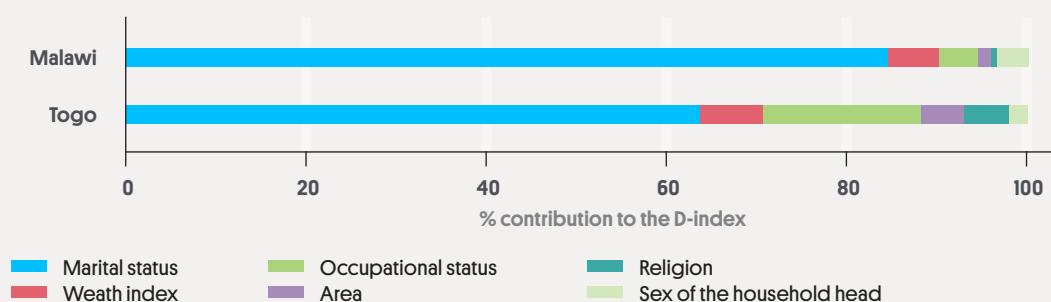### Box 7. Older adolescent girls' opportunities: country cases

▪ *School attendance*: while for Zimbabwe marital status is the most important contributor to the inequality (D-index) followed by occupational status, Benin shows the inverse, with occupation as the main source of inequality.

box continues next page

Box 7. Older adolescent girls' opportunities: country cases (continued)

- *Having never been pregnant*: in both examples marital status stands for the main contributor to the D-index. In the case of Togo occupational status also seems to contribute significantly to inequality, while in Malawi its contribution is minor.

% contribution to the D-index

- Marital status
- Weath index
- Occupational status
- Area
- Religion
- Sex of the household head

The variability of the results indicates the need to review the results of each country to take into account their specific features (see Appendix A).

4.1.3
HIV-related indicators

HIV-related indicators have been further analysed in order to ascertain possible differences for inequality in countries with different HIV prevalence rates. Thus, the study sample has been divided into countries with high HIV prevalence (those with an HIV prevalence rate of more than five percent of the population infected) and low prevalence (countries below or at the five percent threshold) (Figure 4.4), which might in turn have implications for the design of public health policies and programmes in countries with different epidemic settings.

Knowledge of where to get an HIV test

- Education is a key contributor to inequality in high and low HIV prevalence countries, with D-index values of 25 percent.

- In high prevalence countries, the relative contribution of marital status is much higher (24 percent) than for low prevalence countries (14 percent). Further research would be needed to understand why marital status is more important than other circumstances (i.e. wealth, area of residence and other factors) in explaining differences in knowledge of where to get an HIV test (married women have better opportunities than those who are unmarried), and why this is so different as compared to low prevalence countries.

- Household wealth status and area of residence (urban/rural) contribute less to inequality in high prevalence countries – 14 percent and eight percent of the D-index compared to 24 percent and 18 percent of the D-index, respectively – than in low prevalence countries.
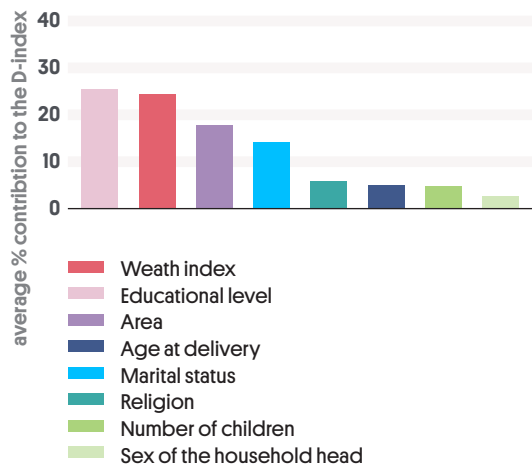
HIV test offered during pregnancy

- The circumstances that most contribute to inequality are similar across high and low HIV-prevalence countries. Women's wealth, area of residence and education, are the main drivers for both groups of countries, albeit with some differences in the order of importance.
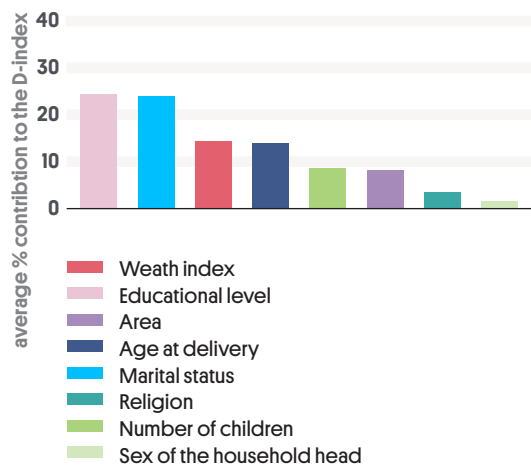
Figure 4.4 HIV prevalence country groups: circumstances' contributions to the D-index

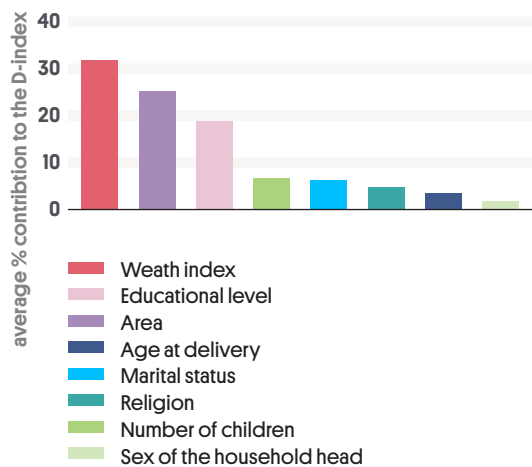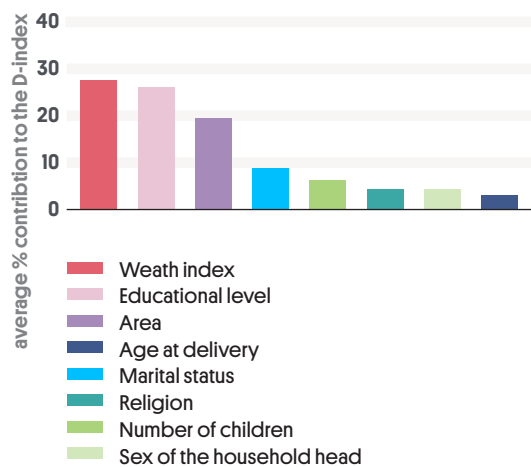**Knowledge of where to get an HIV test**

a. HIV prevalence ≤ 5

- Weath index
- Educational level
- Area
- Age at delivery
- Marital status
- Religion
- Number of children
- Sex of the household head

b. HIV prevalence > 5

- Weath index
- Educational level
- Area
- Age at delivery
- Marital status
- Religion
- Number of children
- Sex of the household head

HIV test offered during pregnancy

a. HIV prevalence ≤ 5

- Weath index
- Educational level
- Area
- Age at delivery
- Marital status
- Religion
- Number of children
- Sex of the household head

b. HIV prevalence > 5

- Weath index
- Educational level
- Area
- Age at delivery
- Marital status
- Religion
- Number of children
- Sex of the household head

Note: The average contributions of circumstances to inequality of opportunity for the group of countries are calculated as the unweighted or simple averages (across all countries) of Shapley decompositions of the D-index for that opportunity.

Conclusions

- Overall, for SSA women of reproductive age (15-49 years old), wealth, area of residence (rural/urban) and the women's educational level are the leading contributors to inequality in maternal and reproductive health indicators, including those with the highest levels of inequality such as access to a basic maternity care package and having the delivery attended by skilled personnel.

- Marital status is the main contributor to inequalities for older adolescent girls (15-19 years old), as well as for several opportunities for adult women, most notably, access to family planning services and malaria prophylaxis uptake. Married adolescents have fewer opportunities for reproductive health and education opportunities. However, for adult women marital status can contribute positively for some indicators ("malaria prophylaxis during pregnancy") and negatively for others ("met need for family planning").

- Other circumstances (i.e. number of children, age, sex of the household head and religion) are of marginal importance. However, there are significant differences across countries underlying the averages. For example, in Nigeria, religion stands out as the main contributor to inequality in "malaria prophylaxis during pregnancy".

4.2
Explaining inequalities across countries: a multi-country pooled analysis

This section describes the sources of inequalities among the population of women of reproductive age in SSA from a different angle. The analyses performed include all country samples in the same pool, all weighted by each country's share of women's population to the total. The results are subject to the caveat that the estimated contributions of circumstances could be affected by the presence of country-specific factors, correlated with the observed circumstances. Those could be unobservable but systematically present in some countries. For example, religion in a subset of countries could be geographically distributed in a way that results in a confounding factor.

While the above limitation calls for caution in interpreting results, the findings are still instructive. The results are best seen as providing a picture of how maternal and reproductive health services and outcomes among SSA women are associated with differences in their characteristics, when women from all countries are considered as a single group.

In performing the pooled analysis, the circumstances measured by the wealth index also have to be interpreted with caution. The wealth quintiles for the pooled analysis remain the same as those defined for each country analysis. This fact

implies that wealth in the multi-country pooled analyses indicates the relative wealth position (in terms of quintile) of an individual woman in her country[XI].

Finally, as in the previous section, the D-indices of all opportunities have to be taken into account before interpreting the results because Shapley decomposition results are relative contributions to the inequality. For this analysis, the D-indices used are those computed from the multi-country weighted analysis pooling all samples included in the report (Figure 4.5).

Although results do not differ significantly from the country level D-indices (Figure 4.1), some features merit attention. First, there is a marked reduction in the D-index (inequality) of "six months of exclusive breastfeeding" opportunity that results in it scoring the lowest inequality across SSA. Second, there is a significant increase in the D-index (inequality) of the "infant checkup after delivery" and "maternity care package" opportunities. This last one shows a D-index above 30 percent.

Figure 4.5 **Average D-index by opportunity (multi-country pooled analysis)**
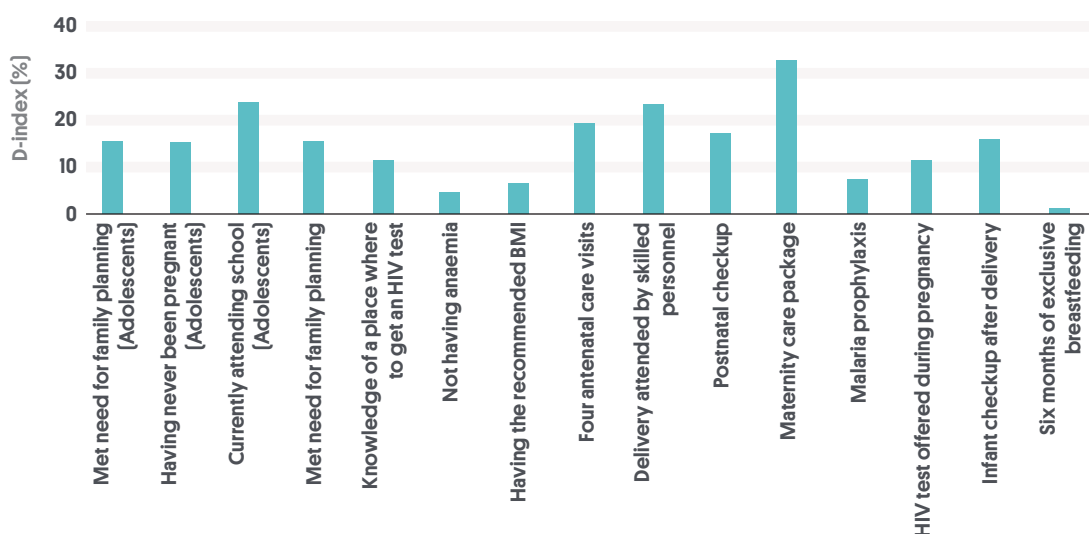
Note: The average D-indices (inequality) for the group of countries are calculated pooling all country samples and weighting them taking into account the number of women between 15 and 49 years old of each country.

[XI]The principal component analysis (PCA) used by the Demographic Health Surveys (DHS) programme to calculate the wealth index assigns a different number to each individual depending on the distribution of assets in the sample[10]. In other words, a person from Gabon could be as wealthy as another from Zimbabwe, but this methodology does not assign them the same wealth index value. By generating wealth quintiles, a country's population is classified into a relative wealth scale. In the multi-country pooled analysis, the wealth quintiles have been left unchanged, which means that wealth as a circumstance has to be understood as the relative wealth position of the household (that the woman belongs to) in her country rather than the value of assets owned by the household.

4.2.1
Women of reproductive age (15-49 years old) and pregnant women

- As previously observed for the country level analysis, wealth, education and area of residence (urban/rural) are the most important contributors to inequality for the majority of the opportunities for the subgroup of women of reproductive age and pregnant women examined (Figure 4.6).

- In general, the contributions of religion and number of children to inequality tend to be high in the pooled analysis (Figure 4.6). Possible explanations could be that these two circumstances are correlated with country-specific factors, since they appear more concentrated in some countries than in others or the contribution of these two factors to inequality actually reflect, at least in part, the effects of other circumstances that are country-specific but unobservable in the analysis.

- Religion accounts for a large share of inequality in the indicators of "not having anaemia" and "malaria prophylaxis during pregnancy" (Figure 4.6). However, since average D-index is very low in both cases (see Figure 4.5), the actual amount of inequality attributable to religion is quite small.

Box 8. The role of religion in women's health indicators' inequalities

Religion is not a typical sociodemographic characteristic included in the studies on anaemia or prevention of malaria infection in pregnancy in the SSA region. Therefore, there is scant evidence available regarding the contribution of religion to health inequalities. However, many studies conducted in India and South-East Asia highlighted religion as a possible risk factor for anaemia and found significant differences in religion between groups of the population with and without anaemia[1–4]. Regarding IPTp uptake, few studies use religion as a covariate in the analysis of the uptake of malaria prophylaxis among pregnant women. In general, the scarce evidence available did not find a statistically significant relationship between religion and IPTp coverage[5–7]. In contrast, a systematic review of the literature showed that beliefs and religious practices are barriers to access, delivery and use of preventive interventions against malaria during pregnancy[8].

A possible explanation of the relevance of religion for anaemia and malaria indicators may be the geographical and country distribution of religious groups in malaria endemic countries overlapped with other unobservable factors. Some countries such as Guinea, Sierra Leone or The Gambia are mostly Muslim, while in others such as, Zambia, Cameroon, Congo or Malawi, Muslim religion is less prominent. In the majority of the SSA countries, there are also communities and regions where animism predominates. Another plausible explanation that could explain the high contribution of religion to inequality in these health indicators is the geographical distribution of

box continues next page

Box 8. The role of religion in women's health indicators' inequalities (continued)

religious groups within countries where more than one religion is prevalent. In Nigeria, for example, Christian communities are placed mostly in the southern region, while most Muslims live in the north[9]. This regional distribution of religious groups combined with other factors – such as different climates, altitudes, types of crops and nutritional habits, or different malaria incidence/prevalence – could explain differences in anaemia prevalence and use of malaria preventive strategies across countries with different religions.

In some cases, these relationships may be due to chance, while in others, particular religious practices and beliefs might explain the results. More in depth analysis at country level is needed to understand the role religion is playing, not only regarding anaemia prevalence and malaria prophylaxis coverage, but also with respect to other health opportunities (e.g. maternity care indicators, family planning, etc.).

Figure 4.6 Multi-country pooled analysis for women of reproductive age and pregnant women: circumstances' contributions to the D-index
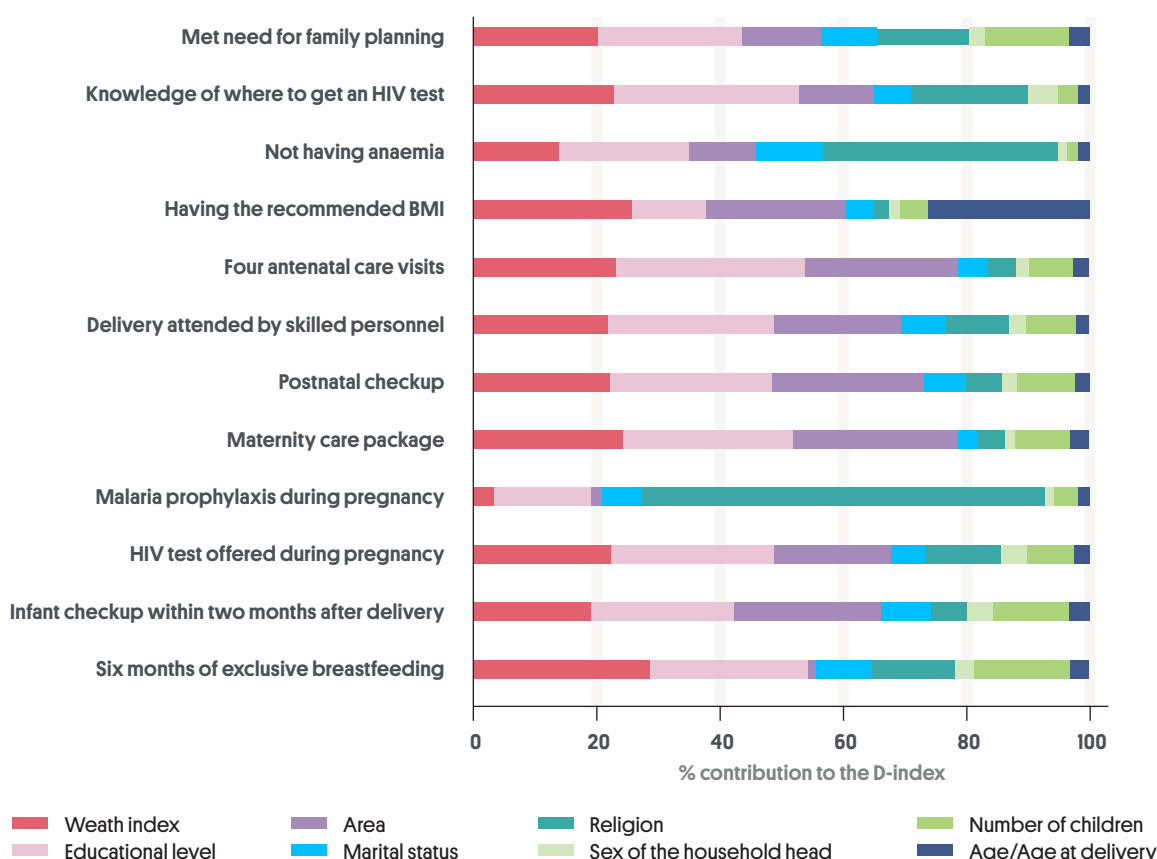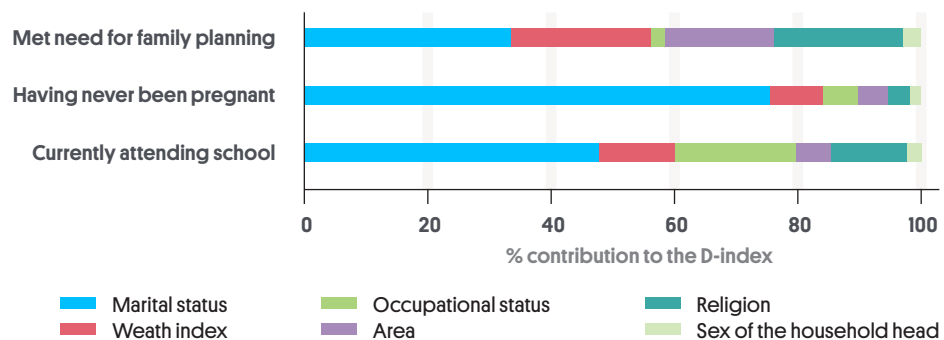

Note: The average contributions of circumstances to inequality of opportunity for the group of countries are calculated pooling all country samples and weighting them taking into account the number of women between 15 and 49 years old of each country.

4.2.2
Older adolescent girls (15-19 years old)

- The results obtained from the pooled analysis for the older adolescent girls group are similar to those previously observed for the country level analysis, with the most significant variation from the earlier results being the greater role of religion as a contributor to inequality (Figure 4.7). This finding could be related to certain religions being concentrated in a few countries, where unobserved country-specific factors likely affect access to services and outcomes in maternal and reproductive health for this subset of girls.

Figure 4.7 **Multi-country pooled analysis for older adolescent girls: circumstances' contributions to the D-index**

Note: The average contributions of circumstances to inequality of opportunity for the group of countries are calculated pooling all country samples and weighting them taking into account the number of women between 15 and 49 years old of each country.

Conclusions

- In general, results are similar to those obtained in the country level analysis, with a few exceptions. Wealth, education and area of residence are the most important contributors to inequality for adult women, while for older adolescent girls marital status is the main contributor.

- Religion has a more important role in the pooled analysis and appears to be a relevant contributor to inequality across SSA.

4.3
Adolescent girls and marital status: the major source of inequalities

Analyses of older adolescent girls' opportunities reveal that a major share of inequalities in this particular age group is attributable to differences in marital status. The large contribution of marital status indicates that the drivers of inequality are likely to be very different for groups with different marital status, which in turn makes the interpretation of the contributions from other circumstances difficult. To account for these differences, the same analyses (country level and multi-country pooled analysis) have been performed in this section for older adolescent girls by dividing them into two groups: adolescent girls who are married or "in union"[XII] (i.e. living with the partner, widowed, divorced or separated), and adolescent girls who were never in union.

4.3.1
Country level analysis results

- Wealth appears to be the highest contributor to inequalities between both groups of older adolescent girls (i.e. "in union" and "never in union") in most cases (Figure 4.8). The only exception to this pattern is observed for the group of "never in union" adolescents with regard to the "school attendance" opportunity, where differences in occupation contribute the most to the D-index.

- In all cases, there are differences in the order of importance of the contributors to inequality between the two groups of older adolescent girls, with the most significant differences seen for inequality in "school attendance", where occupation accounts for as much as 46 percent of the D-index (inequality) for the "never in union" adolescents.

- For the other two opportunities (i.e. "having never been pregnant" and "met need for family planning"), an important difference between the two groups is that "religion" is an important contributor to inequalities among "in union" adolescents, while "sex of the household head" is relatively more important for "never in union" adolescents.
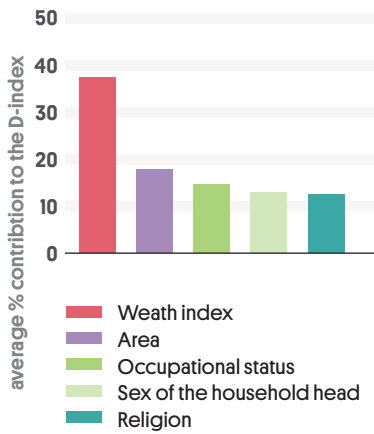
[XII]Women currently or previously married or in union.

Figure 4.8 Country level analysis – Older adolescent girls' opportunities by marital status: circumstances' contributions to the D-index
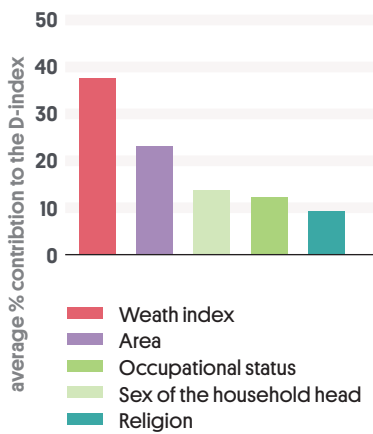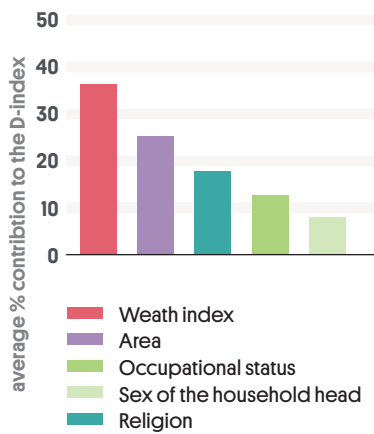
Currently attending school
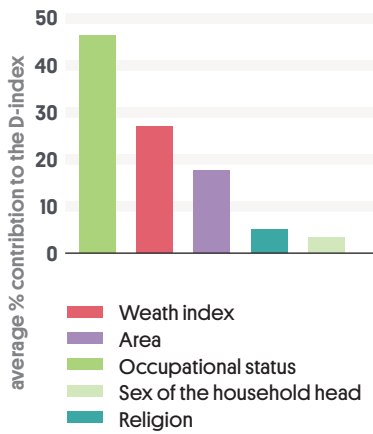
a. Never in union

b. In union

Met need for family planning

a. Never in union

b. In union
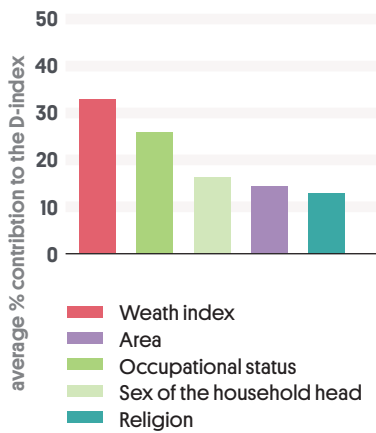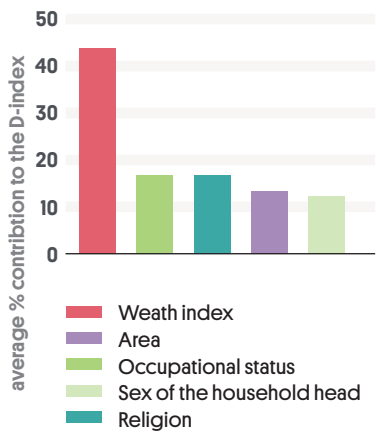
Figure 4.8 Country level analysis – Older adolescent girls' opportunities by marital status: circumstances' contributions to the D-index (continued)

Having never been pregnant

a. Never in union

b. In union

Note: The average contributions circumstances to inequality of opportunity for the group of countries are calculated as the unweighted or simple averages (across all countries) of Shapley decompositions of the D-index for that opportunity.
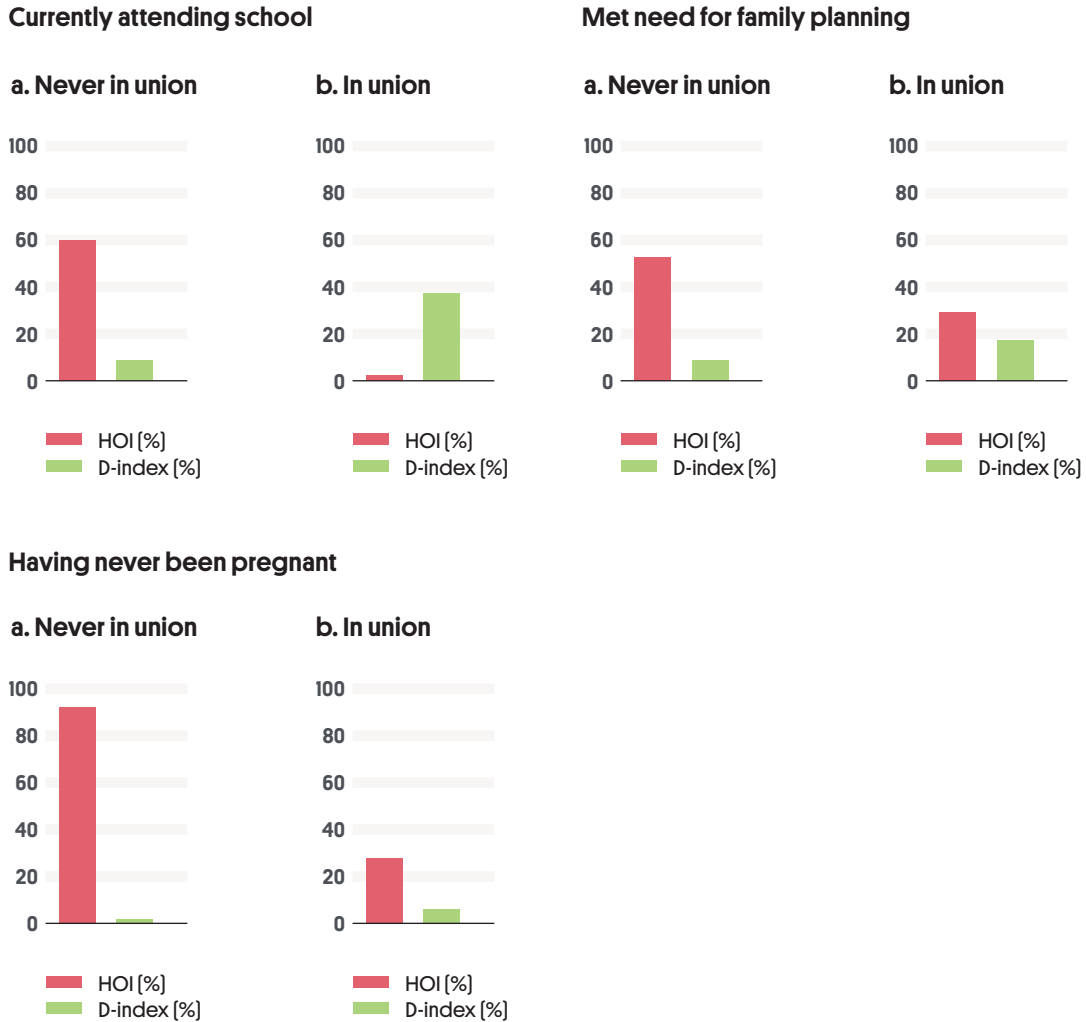
4.3.2
Multi-country pooled analysis results

In order to highlight the impact of marital status on the inequalities computed with the pooled data, weighted by the number of women in each country, the HOI and the D-index (inequality) are shown for each of the three opportunities applicable to adolescents for both subgroups (Figure 4.9).

▪ The HOIs for the "never in union" subgroup of adolescents are higher than those for the "in union" subgroup for all opportunities examined. Notably, there is a difference of almost 60 percent in adolescent pregnancies, over 50 percent in school attendance and about 25 percent in family planning needs between both groups of girls.

▪ Conversely, the D-index shows more inequalities among the subgroup of married or "in union" adolescents for all three opportunities – "school attendance", "met need for family planning" and "having never been pregnant"; 38 percent, 18 percent and 9 percent of the D-index, respectively, compared to ten percent, eight percent and one percent of the "never in union" subgroup.

Figure 4.9 Multi-country pooled analysis – Older adolescent girls' opportunities by marital status: HOI and D-index by opportunity

Currently attending school

a. Never in union

b. In union

Met need for family planning

a. Never in union

b. In union

Having never been pregnant

a. Never in union

b. In union

Note: The average HOIs and D-indices (inequality) for the group of countries are calculated pooling all country samples and weighting them taking into account the number of women between 15 and 49 years old of each country.

Figure 4.10 Multi-country pooled analysis - Older adolescent girls' opportunities by marital status: circumstances' contributions to the D-index
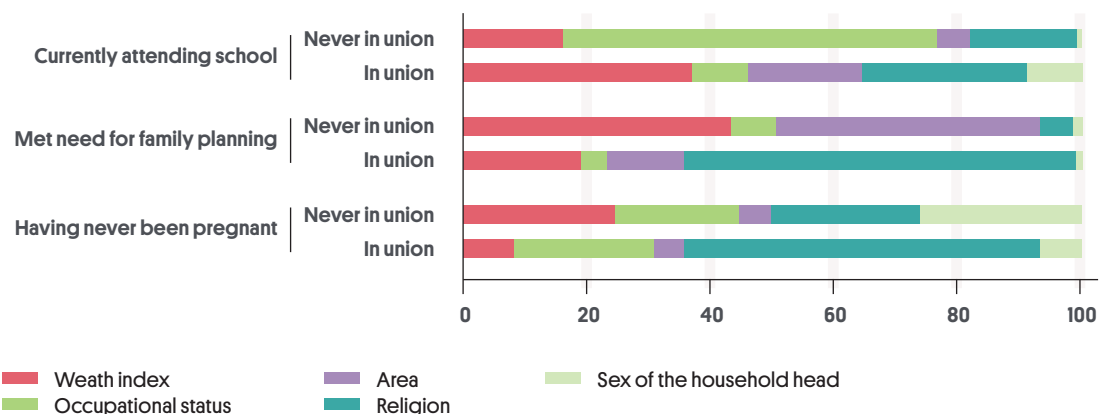
Note: The average contributions of circumstances to inequality of opportunity for the group of countries are calculated pooling all country samples and weighting them taking into account the number of women between 15 and 49 years old of each country.

- Shapley decompositions of the D-indices compared in Figure 4.10 show differences between the two subgroups that are qualitatively similar to what was observed in the averages obtained from country-specific analysis.

- For two of the three indicators ("met need for family planning" and "having never been pregnant"), religion is an important contributor to inequality among "in union" adolescents but not for the other group.

- For inequality in "school attendance", occupation is an important factor among the "never in union" group but not for the other group. A possible explanation of this finding could be that those girls who do not have a partner work for themselves and their families, whereas "in union" girls do not work outside home in many cases.

- Given the caveats discussed earlier, the results cannot be interpreted as the direct effect of religion on inequality of opportunities among older adolescent girls. What they show quite clearly are significant differences in the opportunities of older adolescent girls by religion, with these differences being much higher among married adolescents when it comes to meeting needs for family planning and the likelihood of being pregnant. Whether this indicates differential access to family planning services among married adolescent girls of different religions, is a question that would merit more in-depth analysis.

Conclusions

- In general, wealth is the main contributor to inequality for "in union" and "never in union" adolescents at country level.

- Religion appears to be an important driver of inequalities among "in union" adolescents in the multi-country pooled analysis.

- For all three indicators analysed, the HOI is always higher for "never in union" adolescents, and the D-index (inequality) is always lower for the same group, meaning that older adolescent girls that have ever been in union (married, living with their partner, etc.) have large disadvantages in access to reproductive health and education opportunities.

Key messages

- On average, wealth and related circumstances such as education and area of residence are the main sources of inequality for women of reproductive age health opportunities at country level in SSA.

- In the multi-country pooled analysis of women from all countries, a more prominent role of religion and a reduced contribution of wealth are observed.

- For older adolescent girls' education and reproductive health indicators and outcomes (i.e. access to contraception, pregnancy), the main source of inequalities is marital status.

  - In general, once marital status is controlled for, wealth becomes the first contributor to inequalities al country level.

  - For the "school attendance" opportunity, after adjusting for marital status, employment status of adolescents is the main source of inequality.

- For older adolescents, multi-country pooled analysis also shows a significant contribution of religion across countries.

  - Religion is more associated with inequalities for older adolescent girls who are married or have ever been in union, particularly with regards to access to family planning and becoming pregnant.

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