## Reservation wages for young people in training in sub-Saharan Africa: does gender create differences?

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## **Summary:**

Based on data on the transition of young people to the labor markets of French-speaking Sub-Saharan Africa, carried out by the Centre d'Etudes et de Recherche et Economie et Gestion with the financial and technical support of the International Development Research Centre (IDRC) in 2021 on 4710 young people, this paper analyzes the reservation wage inequality between girls and boys still in the education system in Cameroon and Chad. The methods used are Ordinary Least Squares on the whole population and on girls and boys separately, the Oaxaca-Blinder decomposition technique and conditional and unconditional quantile decompositions. The estimates show that gender is significantly correlated with reservation wages for girls and boys. The Blinder-Oaxaca decomposition shows that around 30% of these differences are attributable to explained characteristics, against 70% attributable to unexplained characteristics. The decomposition by conditional and unconditional quantiles without taking covariates into account shows that this gap is variable at each considered decile and quartile of the reservation wages distribution. Furthermore, conditional decompositions with covariates taken into account show that gender differences in field of study and level of education are important in explaining the gender gap in young people's wage claims.

**Key words**: Gender; Inequality; Labor market; Wages distribution; Transition. JL classification : J16 ; D63 ; F16 ; E24.

## **1** Introduction

Gender wage differences have prompted numerous studies in labor economics (Kiessling et al, 2019; Briel et al, 2022). Human capital theories (Becker, 1964) have focused in particular on the effect of specific and general education on wage differences observed on the labor market. By focusing on the level of education of individuals, Mincer's (1974) analyses, inspired by those of Becker (1964), made it possible to identify the influence of levels of education and experience on wage differentials observed on the labour market. And on the other, they have made it possible to assess the influence of human capital investment decisions on gender differences in reservation wages (Kunze, 2017; Blackaby et al, 2007). Within this framework, Briel et al (2022) analyzing differences in wage claims between girls and boys in Germany, find wage claims 5 to 15% lower for girls. They find that at all distribution percentiles considered, the gender gap is more pronounced in the distribution of salary claims than in the distribution of real average salaries among certain average students. Within this framework, they establish that biased beliefs about salary claims relative to others and about real average salaries play a major role in explaining gender differences in salary claims for oneself. Analyzing gender differences in reservation wages, Kiessling et al (2019) establish that sorting and negotiation types significantly influence the difference in reservation wages between girls and boys than work- and youth-related factors.

Since the reservation wage during the schooling years is a key determinant in the human capital investment decision. It conditions the choice of training course and level of education attained, and can force students to limit the number of years of schooling, to reconcile study and experience, or to opt for certain training courses that are profitable on the labour market. However, for Jerrim (2011), too high a wage expectation would have less disadvantageous effects on human capital accumulation. Spending too much time studying can reduce the likelihood of dropping out and repeating a year. On the other hand, having too high a reservation wage until leaving the education system may reduce the probability of skill mismatches or of benefiting from on-the-job training. Finally, in countries where students have access to school loans, an overestimation of the reservation wage would lead them to over-indebtedness at the end of their studies and at the start of their professional career (Jerrim, 2011; Rao, 2017).

In the literature, relatively few studies have been devoted to the specific analysis of reservation wage differences between girls and boys still in training situations in both developing and developed countries. Yet, while recent empirical evidence points to the fact that reservation wage differences between girls and boys have decreased over the decades in both developed and developing countries, women continue to earn less than men (Blau and Kahn, 2017). Gender-based inequalities also exist not only in the actual wages observed on the labor market, but also in the reservation wages and wage claims of young people in training (Filippin and Ichino, 2005; Kiessling et al, 2019). In this context, Reuben et al (2017) argue that the wage inequalities that affect girls more than boys on the labor market can be explained by gender discrimination and by a lower level of reservation wages for girls than for boys. Such differences in reservation wages between girls and boys are important in that they help determine differences in educational and job choices, women's bargaining power in the household and wage-setting (Kiessling et al, 2019; Kunze, 2017; Taylors et al, 2013). In addition, there may be important feedback effects whereby differences in educational attainment and fields of training determine differences in reservation wages (e.g., fertility, labor market segments and jobs in industries), thus justifying the persistence of reservation wage gaps between girls and boys.

Despite the fertility of work on reservation wages, the literature has remained focused on developed countries (Bjuggren and Elert, 2019; Blau and Kahn, 2017; Christofides et al, 2019) and analyzes gender differences in optimism towards the labor market. Within this framework, Bjuggren and Elert (2019) find that boys are more optimistic than girls. However, men are also more likely to be wrong in their beliefs about the future state of the economy. What's more, during severe economic downturns, inequalities in girls'/boys' optimism disappear, and girls' anticipations are equal to those of boys. As for Blau and Kahn (2017), conventional human capital variables taken together explain little of the gender wage gap, yet gender differences in occupation and industry continue to be significant. For Christofides et al (2019), the size of the gender wage gap varies considerably between countries. Also, they find large average gender differences and more evidence of glass ceilings for full-time employees, leading her to conclude that girls are at a greater disadvantage in the best jobs. For Christofides et al (2019) these characteristics may be linked to each country's economic policy.

In developing countries, the literature has remained focused on the effects of education on wage differentials observed on the labor market, i.e. investment in human capital accumulation (Fomba, 2017; Totouom et al, 2018; Njifen and Aicha, 2021; Sikod, 2007; Major and Ellen, 1984). Thus, in analyzing the influence of education on labor market participation in Cameroon, Totouom et al (2018) highlight the negative influence of being a woman on the probability of getting a job. They establish that education and the interaction term between gender and education have a positive and statistically significant influence on the probability of working in the formal public and private sectors. Njifen and Aicha (2021), find from quantile regressions that, the returns to education differ according to the age of the child depending on the wage quantile considered, which are higher for the highest paid workers and lower for middle-income workers. Fomba et al (2017) find the existence of an adhesive floor phenomenon against women for jobs in the informal and informal jobs is partly explained by differences due to individual characteristics, the size of the unexplained share suggests the existence of wage discrimination against women.

Despite the fact that Africa has enshrined the principles of equal pay for work of equal value and the prohibition of discrimination in work and education, inequalities of opportunity and chance continue to exist in access to education and on the labor market in these countries. By way of illustration, gender inequalities in terms of reservation wages continue to be observed on the Cameroonian and Chadian labor markets. To this end, a study by Fomba et al (2018) shows that having a formal job and being a man constitute two sources of wage premiums on the Cameroonian labor market in 2005 and 2010. Thus, men working in the formal sector benefit from a wage premium, varying between 18% and 21% compared to women in the same segment of the labor market, which increase between 30% and 42% when one is in the formal segment of the labor market. This shows that reservation wage inequalities and aspirations in Africa and Sub-Saharan Africa (SSA) in particular are a priority for public policies to facilitate the transition of young people to the labor market.

Recent empirical literature investigates whether reservation wage inequalities between girls and boys, approximated by wage claims, are increasing, constant or decreasing according to training course or level of education (Blau and Kahn, 2017; Kiessling et al, 2019; Briel et al, 2021). This work is based on the "*job search*" theory, which states that an unemployment compensation policy tends to increase the reservation wage and consequently discrimination between girls and boys. Under this assumption, Lancaster (1985) shows that the reservation wage is linked to bilateral interactions between time spent unemployed and wage claims. Also, some authors show that while reservation wage differentials between girls and boys have fallen

in recent years due to the scarcity of jobs available on the labor market in both developed and developing countries, girls continue to earn less than boys (Blau and Kahn, 2017). Gender differences not only exist in the wages received on the labor market, but are reflected in the reservation wages of young people still in the education system (Reuben et al, 2017; Kiessling et al, 2019). These inequalities may be linked to biased beliefs about real wages prevailing on the labor market with regard to future wages (Filippin and Ichino, 2005; Kiessling et al, 2019; Briel et al, 2021). Reuben et al (2017) show that these differences are due to the fact that girls tend to accept jobs that don't match their conviction even if the jobs were not the desired ones. For Kiessling et al (2019) these significant gender gaps in reservation wages are attributed to discrimination, late and early fertility of girls, working hours, and bargaining power vis-à-vis the employer. In this vein, Bjuggren and Elert (2019) show that boys are more optimistic than girls in their field about future job prospects, yet Reuben et al (2017) find that gender gaps in wage claims are linked to preferences and biases in educational choices.

While the literature on the gender gap in reservation wages is abundant, it refers almost entirely to high-income countries. Following the work of Gradin et al (2020) on low-income sub-Saharan African countries, this study compares gender gaps in reservation wages in a low- and middle-income country. Specifically, it aims to investigate the extent and nature of gender inequalities in reservation wages for girls and boys still in training. As Cameroon and Chad are low- and middle-income countries, the substantial gender gaps in reservation wages could have an impact on the choice of education level, training stream or field, and the transition of young people from school to the job market. The **aim of this study is** therefore to **highlight the inequalities in reservation wages between girls and boys still present in the education system in Central Africa, particularly in Cameroon and Chad.** 

Existing studies have attempted to analyze the role of biased beliefs in inequalities in wage expectations between girls and boys (Briel et al, 2021; Reuben et al, 2017; Blau and Kahn, 2017), academic achievement expectations (Jacob and Wider, 2011) and the gender wage gap (Antonczyk et al, 2010; Christofides et al, 2013; Bjuggren and Elert, 2019). If girls' and boys' reservation wages are too high, finding a job becomes almost impossible, which risks lengthening the transition or unemployment period and contributing to human capital depression. Training course, level of education and family origin (rich, middle-income or poor) are increasingly appearing as determinants of reservation wages. Indeed, Wiswall and Zafar (2015) establish that young people with higher levels of education are at times ill-informed about real labor market wages, and have excessively high reservation wages.

One of the specific features of this work is that it takes into account several independent variables (preparation for the job market, Francophone/Anglophone attendance sub-system; Francophone/Arabophone) whose influence on inequality in wage claims between girls and boys can be proven. What's more, while there are a number of studies on this topic in developed countries, to our knowledge no work has been done in developing countries, notably Cameroon and Chad, which are different in their context. Yet this issue is all the more interesting in that these countries are characterized by a highly segmented labor market, dominated by the informal sector, in the face of the ever-increasing number of school leavers. The weight of informality and the lack of internal market structure relegate school leavers to the status of *outsiders* on the market.

Our analyses thus contribute to an extensive literature on salary pretensions which, initiated by Dominitz and Manski (1997) and Manski (2004), has repeatedly analyzed the importance of expectations and aroused beliefs in explaining the educational choices and labor market behaviors of job prospectors (Briel et al, 2021; Kiessling et al, 2019; Boneva and Rauh, 2017;

Kaufmann, 2014). It also relates to a series of previous studies documenting the existence of a gender gap in ex ante salary claims in a number of samples containing information on students enrolled in particular colleges/universities or fields of study. These studies separately identified several potential drivers of the gender gap in salary pretensions, including differences in key choices, personality traits and economic preferences (Reuben, Wiswall and Zafar, 2017; Zambre, 2018).

The rest of the paper is structured as follows, section 1 presents the data and methodology applied to analyze reservation wage inequalities girls/boys, section 2 presents the results of OLS regressions, gender gap decomposition and conditional and unconditional quantiles. Section 3 concludes the paper.

## 2 Methodology

The methodology for analyzing gender and reservation wage inequality between girls and boys still in the education system will be organized around three points. The first will highlight the data used, the second will present the specification of the empirical model and the third will present the decomposition technique.

## 2.1 Analysis data

This work uses data from the Enquête sur la Transition des Jeunes vers les Marchés du Travail d'Afrique Subsaharienne francophone (ETJMAF): cas du Cameroun, du Tchad et du Burkina Faso, carried out in 2021 by the International Development Research Centre (IDRC) and the Centre de Etudes et de Recherche en Economie et Gestion (CEREG). The survey is being conducted using a gender-sensitive methodology<sup>1</sup>. The gender-sensitive survey provides full information on the reservation wages of girls and boys in the 15-35 age bracket, which are not censored, and on the number of girls and boys surveyed. In fact, the question was asked: "If a job opportunity presented itself to you, for what minimum monthly salary would you accept this job to the detriment of your studies/training?". A total of 6535 young people were surveyed (3415 boys vs. 3027 girls), or 2329 in Cameroon, of whom 50.24% were male and 49.76% female. In Chad, 2,381 young people were surveyed, of whom 48.15% were boys and 51.85% girls. In Burkina Faso, 1,825 young people were surveyed, 62.26% of them males and 37.04% females. This survey represents an advance over national surveys in that it includes a section on young people still in the education system, a section on those who have already left the education system and are looking for work, a section on young people who are neither in the education system nor on the job market, and a section on young people already on the job market. In the end, our analyses cover 2,401 individuals: 1,136 in Cameroon and 871 in Chad. Table 1 presents some descriptive statistics for the variables used.

Dependent variable:		Cam	eroon		Chad				
reservation wage inequality	Set	Boys	Girls	Difference	Set	Boys	Girls	Difference	
Salary claim	217849.6	228218.9	207032.7	21186.15**	196161.8	221031.7	172009.8	49021.82***	
Age	23.16	23.32	23.00	0.32	23.67	24.17	23.20	0.96***	
Place of residence									
Rural	100	49.81	50.19	7995.49	100	44.03	55.97	25775.4	

**Table 1:** Inequality of reservation wages in French-speaking Africa

<sup>&</sup>lt;sup>1</sup> This methodology stipulated that if the young person surveyed in the first household was a boy, the interviewer should ensure that the young person surveyed in the next household was a girl. In addition, the survey covers only young people in the 15-35 age bracket, as defined by the United Nations. This methodology was applied in all three countries surveyed.

Field of study         0         43.93         56.07         -162246.9         100         46.05         53.95         50194           Coher         100         46.15         53.85         -1906.83.5         100         44.12         55.88         -757           Letter and art         100         40.51         59.49         5674.85         100         46.22         53.78         -44           Social sciences and law         100         43.72         56.28         27801.39         100         75.21         24.79         570.           Andmematics and IT         100         62.28         37.72         863.69         100         75.21         24.79         570.           Education level	3.1***
Other         100         43.93         56.07         -162246.9         100         46.05         53.95         50194           Education sciences         100         46.15         53.85         -19068.35         100         44.12         55.88         -75           Letter and art         100         40.51         59.49         5674.85         100         46.22         53.78         -40           Social sciences and Iaw         100         43.72         56.28         27801.39         100         57.21         24.79         570           Engineering         100         73.39         26.61         111361***         100         72.73         27.27         718           Education level	
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Letter and art         100         40,51         59.49         5674.85         100         46.22         53.78         40           Social sciences and law         100         62.28         37.72         863.69         100         59.78         40.22         708           Mathematics and IT         100         62.28         37.72         863.69         100         75.21         24.79         570           Education level         -	
Social sciences and law         100         43.72         56.28         27801.39         100         59.78         40.22         708           Mathematics and IT         100         62.28         37.72         863.69         100         77.21         24.79         570           Engineering         100         73.39         26.61         1113161***         100         72.73         27.27         718           Education level	
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Academic superior         100         48.84         51.16         43574.5**         100         54.24         45.76         4465           Professional superior         100         55.95         44.05         3811.52         100         50.00         6022           School guidance               6922           Bersonal conviction         100         50.04         49.96         20208.85         100         55.35         44.65         57796           Family         100         51.46         48.54         20941.16         100         47.02         52.98         2595           Establishment         100         47.70         52.30         17027.91         100         33.00         67.00         88525           Preparing for the job market	
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School guidance         Image: School guidance	
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No         100         58.43         41.57         7732.21         100         54.92         45.08         48218           Household financial situation	7.66**
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Medium         100         50.90         59.10         24442.24*         100         46.15         53.85         53573           Difficult         100         49.55         50.45         34351.8         100         51.99         48.01         3525	4.4**
Difficult         100         49.55         50.45         34351.8         100         51.99         48.01         3525	.08***
	1.18**
Attendance Subsystem	
	26***
	-069
Father's business sector	
Unemployed 100 47.79 52.21 20465.82 100 52.55 47.45 15	000
	.61***
	3.6**
	4.89*
Number of observations         1136         580         556         /         871         431         439	/

**Source**: Author, based on Enquête sur la transition des jeunes vers les marchés du travail d'Afrique francophone (ETJMT), 202. Standard deviations are in parentheses. \*, \*\* and \*\*\* are significance at the 10%, 5% and 1% thresholds respectively.

#### 2.2 Specification of the reservation wage inequality model

To achieve the objective of this work, we use the equation technique advocated by Mincer (1964), associating the number of years of education and the number of years of experience with the wage observed on the labor market. From this angle, the reservation wage equations of young people still in the education system, inspired by those of Mincer (1974), are estimated for each country as a function of gender using the ordinary least squares (OLS) method (Davia

and Hernanz, 2004). The reservation wage equations are first estimated without distinction as to gender, and then estimated separately for boys and girls. This second estimation is only possible if the gender variable (boys or girls) is significant in the overall model. As a result, the estimation of the log reservation wage equations is based on classical econometric mincer modeling. Calling *PS* the reservation wage for young people, we obtain the global equation below:

$$\ln(PS)_i = \beta_0 + \beta_1 Gender_i + \beta X_i + \varepsilon_i$$
(1)

With ln(PS) the logarithm of the reservation wage of young people still in training, Gender<sub>i</sub>

the sex of the young person taking the value 1 if the young person is male and 0 otherwise and  $X_i$  is a set of explanatory variables such as the socio-demographic characteristics of the young person (age, age squared, level of education, marital status), curriculum or field of training, grade repetition, seeking first work experience during studies, work-study balance, place of residence, family characteristics, educational guidance assistance for young people, perception of preparation for the job market by the education system and father's sector of activity.

Young people's reservation wages may differ depending on whether they are a boy or a girl. Therefore, if gender is significant in the overall model, we estimate two other OLS equations, taking into account whether the young person is a boy or a girl. Let  $PS^B$  be the reservation wage for boys and  $PS^G$  for girls, the reservation wage equations by gender are given by the relationship below:

$$\ln(PS^B)_i = \beta_0^B + \beta_1^B X_i^G + \varepsilon_i^G$$
<sup>(2)</sup>

$$\operatorname{And}\ln(PS^{G})_{i} = \beta_{0}^{G} + \beta_{1}^{G}X_{i}^{G} + \varepsilon_{i}^{G}$$

$$\tag{3}$$

Where  $\ln(PS^B)_i$  is the logarithm of the reservation wage for boys and  $\ln(PS^G)_i$  is the logarithm of the reservation wage for girls.  $X_i^B$  and  $X_i^G$  the socio-demographic characteristics of the girls

and boys and  $\mathcal{E}_i$  the error term following a normal distribution of  $N(0,\sigma^2)$  .

## 2.3 Analysis of gender inequality in reservation wages

To highlight and decompose the various reservation wage differentials, this study makes use of the decomposition method of Blinder (1973) and Oaxaca (1973) and of conditional and unconditional quantiles (Collischon 2019; Francesconi and Parey 2018; Osling and Meghir, 2000; Machado and Mata, 2005; Melly, 2006). The method of Blinder (1973) and Oaxaca (1973) makes it possible to decompose reservation wage differentials by distinguishing the shares that are attributable to the distribution of individuals' sociodemographic characteristics from those due to differences in investment in education (level of education, field of training, attendance subsystem, etc.) between girls and boys. Thus, this method analyzes the decomposition of the reservation wage gap at the mean level without taking into account the effect that individuals' socio-demographic characteristics and performance may have on the distribution of reservation wages between girls and boys. Empirical evidence shows that the reservation wage gap explained by the difference in training curriculum or level of education is qualified as unjustified and assimilated to discrimination when the analysis opposes girls (G) and boys (B).

For the two groups G and F, the specification of the Blinder-Oaxaca decomposition is defined by the relationship below:

$$\overline{\ln PS^G} - \overline{\ln PS^B} = b^B (\overline{X_B} - \overline{X_G}) + b^B (b^B - b^G) \overline{X_G}$$
(4)

Where B is the boys' group, G the girls' group,  $b^B$  and  $b^G$  are the estimated coefficients acquired by the Mincer-type equations specified above,  $\overline{X_B}$  and  $\overline{X_G}$  the average characteristics of groups B and G,  $\overline{\ln PS^G}$  and  $\overline{\ln PS^B}$  are the estimated average reservation wages of each of the groups. In this specification, the first term in particular,  $\overline{\ln PS^G} - \overline{\ln PS^B}$ , represents the observed reservation wage gap attributable to the difference in individual characteristics, and the second term in particular,  $b^B(\overline{X_B} - \overline{X_G}) + b^B(b^B - b^G)\overline{X_G}$ , is indicative of the contribution to the characteristic gap.

The specification of relationship (4) is indicative of whether B is the reference group (nondiscriminating group or feature). However, there is no consensus in the literature on the choice of reference group (Reimers, 1983; Neumark, 1988; Oaxaca and Ranson, 1994). However, the results obtained from the decomposition of reservation wages are supposed to be sensitive to the choice of technique for determining the non-discriminant coefficient. However, in this analysis we adopt the method proposed by Neumark (1998) and improved by Jann (2008)<sup>2</sup>. This orientation leads us to define relationship (4) as follows:

$$\overline{\ln PS^G} - \overline{\ln PS^B} = b^* (\overline{X_B} - \overline{X_G}) + (b^B - b^*) \overline{X_B} + (b^* - b^G) \overline{X_G}$$
(5)

With  $b^*$  the non-discriminating factor estimated by the technique proposed by Neumark (1998). This decomposition method proposed by Blinder (1973) and Oaxaca (1973) is limited by the fact that it focuses only on the decomposition of reservation wage differentials at the mean level, thus ignoring the different influence that individual characteristics or academic performance may have along the<sup>3</sup> reservation wage distribution. What's more, this method does not reveal the existence of a glass ceiling or adhesive floor.

To ensure the robustness of our results, we also use the technique of conditional and unconditional quantile decomposition, which allows us to perform a decomposition over the entire distribution of reservation wages. This technique has been the subject of a great deal of research, the contributions of which would make it possible to resolve the limitations identified in the method proposed by Blinder (1973) and Oaxaca (1973). This decomposition method relies on quantile regressions, which are less sensitive to outliers and provide more robust estimated values in the event of non-normality of residuals (Koenker and Basset, 1978) or in the presence of heteroscedasticity (Deaton, 1997). As it is possible for the reservation wage gap to vary throughout the distribution, following Collischon's (2019) and Francesconi and Parey's (2018) method the logarithm of the reservation wage is defined as below:

 $\ln PS_i = X_i \beta_\tau + u_{\tau i} \qquad \text{where } Q_{\tau i} (PS_i \mid X_i) = X_i \beta_\tau \tag{6}$ 

Where the function  $Q_{\tau i}(PS_i | X_i)$  is the  $\tau$ -*ième* conditional quantile of the estimated reservation wage conditional on socio-demographic characteristics, and  $u_{\tau i}$  is the white noise correlated with  $Q_{\tau i}(PS_i | X_i) = 0$  (See Koenker, 2005).

Given the non-linear nature of the conditional quantile function, the reservation wage gender gap at  $\tau - i \grave{e}me$  conditional quantile may differ from the expected wage gender gap at  $\tau - i \grave{e}me$  unconditional quantile. For this reason, we also estimate the unconditional regressions using the technique of Firpo et al (2009), which will enable us to analyze the gender gap along the entire distribution of reservation wages for girls and boys. The idea here is to model the recentered function (RIF) of the reservation wages  $PS_i$ , defined below:

 $<sup>^{2}</sup>$  His work points out that using the technique proposed by Neumark (1998) or that of Oaxaca and Ranson (1994) can lead to the transfer of part of the inequality explained by the performance of individual characteristics to the part attributable to observable characteristics. To deal with this problem, Jann (2008) recommends using the global Mincer function including the variable accounting for both groups (gender in our case) to estimate the coefficient of the non-discriminating category whose mean value gap is decomposed.

<sup>&</sup>lt;sup>3</sup> To analyze reservation wage inequality across the entire distribution, Firpo et al (2009); Macho and Mata (2005) and Collichon (2019) recommend using conditional and unconditional regressions.

$$RIF(PS_i; Q_{\tau}) = Q_{\tau} + \frac{\tau - l\{(PS_i \le Q_{\tau})\}}{f_{PS}(PS_i \le Q_{\tau})}$$

$$\tag{7}$$

Where  $f_{PS}(Q_{\tau})$  denotes the marginal density of  $PS_i$  and l(.) is the indicator function (Firpo et al, 2009). Under the assumption that the conditional expectation function of the RIF of  $Q_{\tau}$  is linear, we obtain a linear regression model given by :

$$RIF(PS_i; Q_\tau) = X_i \eta_\tau + v_i \tag{8}$$

Where  $\eta_{\tau}$  is the vector of coefficients, and  $v_i$  is the white noise with  $E[v_i | X] = 0$ .

We also analyze robustness using the RIF-based unconditional quantile method of Firpo et al (2009, 2018). The advantage of this technique over quantile decompositions is that it gives the possibility of performing detailed expected wage decompositions (Machado and Mata, 2005). Within this framework, we can also quantify the contribution of gender differences along the reservation wage distribution. Thus, we model the specific FIRs for the boys' group (B=0) and the girls' group (G=1), again adopting a linear specification for the conditional expectation of FIRs given by :

$$RIF(PS_{Bi}; Q_{\tau B}) = X_i \lambda_{\tau, B} + v_{\tau B}$$
<sup>(9)</sup>

With G the gender of the young person, taking the value 0 if male and 1 if female. Thus, the explanatory variable  $X_i$  no longer includes the girls category (G=1). After regression of

relationship (9) by OLS in terms of gender, the overall deviation from the  $\tau$  – *ième* quantile,  $\Delta_0^{\tau}$ , can be decomposed as follows:

$$\Delta_0^{\tau} = \underbrace{\overline{X}_1(\lambda_{\tau,1} - \lambda_{\tau,0})}_{\Delta_u^{\tau}} + \underbrace{(\overline{X}_1 - \overline{X}_0)\hat{\lambda}_{\tau,0}}_{\Delta_w^{\tau}}$$
(10)

Where  $\lambda_B$  is the coefficient vector of the OLS and  $X_B$  is the vector of the sample means. Consequently, the gross gender difference in reservation wages at  $\tau$ -*ième* quantile is decomposed into explained  $\Delta_u^{\tau}$  and unexplained  $\Delta_w^{\tau}$ . In order to interpret reservation wages as the explained and unexplained part of wage composition and structure, Briel et al (2021) recommend assuming the error term  $v_{\tau B}$  as a gender-independent mean at each quantile  $\tau$ .

This requires conditioning on all variables that are correlated with both reservation wages and gender-specific. In the analyses below, we include a wide range of explanatory variables that we have selected on the basis of economic reasoning and recent empirical evidence on the determinants of reservation wages for young people still in the education system.

#### **3** Econometric results

We begin by analyzing inequality in reservation wages between girls and boys by ordinary least squares, considering the overall sample, then considering only the girls' sample on the one hand, and the boys' sample on the other. Secondly, we apply the decomposition method proposed by Blinder (1973) and Oaxaca (1973) to account for the explained difference on the one hand and the unexplained difference on the other. Finally, we test the robustness of our results with unconditional and unconditional quantile regressions (UQR).

#### 3.1 MCO analysis of inequalities in reservation wages between girls and boys

Table 2 presents the OLS estimates of the reservation wage equations for young people still in training in Cameroon and Chad. It emerges that gender is significantly and negatively correlated with the reservation wages of young people in Cameroon and Chad. The negative sign of the coefficient of the gender indicator means that being a girl has a negative influence on the reservation wages of young people. This effect is larger in Chad than in Cameroon, while it is statistically significant in either country at the 5% and 10% thresholds respectively.

Var dep=reservation wage	Cameroon	Chad		
	Set	Set		
Gender				
Girl	-0.083(0.05)*	-0.132(0.05)**		
Age	-0.162(0.05)***	0.044(0.04)		
Age <sup>2</sup>	0.003(0.001)***	-0.001(0.001)		
Marital status				
Single	0.009(0.127)	0.188(0.187)		
Married	0.280(0.201)	0.229(0.186)		
Place of residence: Urban	-0.108(0.059)*	-0.042(0.165)		
Field of study				
Education sciences	0.121(0.108)	0.067(0.089)		
Letter and art	0.111(0.073)	0.030(0.10)		
Social sciences and law	0.173(0.082)**	0.340(0.07)***		
Mathematics/IT	0.245(0.076)***	0.064(0.129)		
Engineering	0.143(0.090)	0.273(0.180)		
Education level				
General secondary 1 <sup>st</sup> cycle	0.347(0.295)	0.341(0.215)		
General secondary 2 <sup>nd</sup> cycle	0.604(0.029)**	0.435(0.207)**		
Technical secondary 1st cycle	0.281(0.312)	0.338(0.265)		
Technical secondary 2 <sup>nd</sup> cycle	0.753(0.304)**	0.408(0.218)*		
Academic superior	0.653(0.304)**	0.529(0.22)**		
Professional superior	0.897(0.307)***	0.610(0.23)***		
School guidance				
Family	-0.057(0.050)	-0.007(0.056)		
Training establishment	-0.268(0.08)***	0.054(0.113)		
Job preparation				
Not enough	0.066(0.059)	-0.099(0.076)		
Sufficient	-0.001(0.063)	-0.226(0.07)***		
Work-study balance	0.021(0.060)	0.025(0.063)		
Has already repeated a year	0.058(0.052)	-0.139(0.055)**		
Household financial situation				
Medium	0.020(0.070)	-0.089(0.08)		
Difficult	0.026(0.079)	-0.179(0.095)*		
Attendance subsystem				
Anglophone/Arabophone	-0.218(0.05)***	0.104(0.09)		
Father's business sector				
Public Sector	0.184(0.073)**	0.037(0.111)		
Private sector	0.104(0.083)	0.097(0.124)		
Independent	0.190(0.66)***	0.099(0.118)		
Constance	13.10(10.67)***	10.93(0.61)***		
Number of observations	1136	871		

**Table 2:** Econometric analysis of the determinants of reservation wage inequality in French-speaking Africa

**Source**: Author, based on Enquête sur la transition des jeunes vers les marchés du travail d'Afrique francophone (ETJMT), 202. Standard deviations are in parentheses. \*, \*\* and \*\*\* are significance at the 10%, 5% and 1% thresholds respectively.

In other words, age, age squared, having a child, place of residence, educational orientation and work-study balance are all significantly correlated with reservation wages for young Cameroonians, but not for young Chadians. Age has a negative effect on the reservation wages of young people in Cameroon, which is not the case in Chad. Its sign, which changes from negative to positive when age is squared, means that there is a threshold called the reservation

wage at which young Cameroonians are no longer prepared to accept a job at the expense of their studies. With regard to education-related variables, Table 2 shows that, with the exception of general lower secondary and technical lower secondary education, all levels of education have a positive impact on the reservation wages of young people in Cameroon and Chad. This shows that the level of education is likely to play a major role in explaining the reserve wages of girls and boys in Cameroon and Chad. In addition, the social sciences and law, mathematics and computer science training streams are significantly and positively correlated with reservation wages of girls and boys in Cameroon. However, only social sciences and law, and mathematics and computer science were significantly and positively correlated with the reservation wages of girls and boys in Chad. The fact that a young person is referred by his or her school is negatively correlated with the reservation wages of young people in Cameroon, which is not the case in Chad. A young person's attendance in the English-speaking education sub-system is negatively correlated with the reservation wages of young people in Cameroon, which is not the case in Chad for young people in the Arabic-speaking sub-systems.

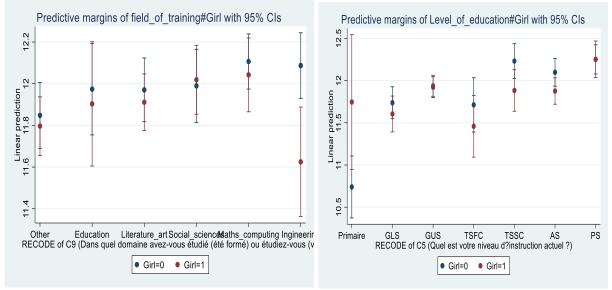
Finally, having a parent working in the public sector or self-employed has a positive impact on the reservation wages of young people in Cameroon, which is not the case in Chad. Being insufficiently prepared for the labor market in Chad is negatively correlated with the reservation wages of young Chadians only, and being sufficiently prepared for the labor market by the education system is significantly and negatively correlated with the reservation wages of Chadian men and women. This result is counter-intuitive and can be explained by the fact that the training offered in Chad does not always meet the needs of the labor market. The academic performance of young people, and in particular the fact of having repeated a year, has a negative effect on the reservation wages of young Chadians, especially girls, which is not the case in Cameroon.

Graphs 1 and 2 show the estimated differences in reservation wages between girls and boys according to training stream and level of education for young people still in training in Cameroon and Chad. In fact, when the estimation is carried out globally, girls and boys are grouped together and by including the 'sex' dummy variable, only the intercept for girls may differ from that for boys. In this framework, all estimates are mean estimates for boys and girls. Also, in the regressions for girls and boys estimated separately, all the variables may be different for boys and girls. As a result, the coefficients are not directly comparable between the two because the error terms are also different in the two regressions. One way of correcting for this is to use all the observations as in the 'global' regression, but to interact the gender dummy variable with all the other explanatory variables. This limits the error term and allows a direct comparison of the coefficients for boys and girls.

When we look at the field or stream of training, we can see that in Cameroon, for the fields of education sciences and literature and art, boys' reservation salaries are always higher than girls', whereas in Chad, girls' reservation salaries are higher than boys' for these same fields of training. In Cameroon, girls studying social sciences and law have higher reservation salaries than boys, which is not the case in Chad. On the other hand, girls in mathematics, computer science and engineering courses have lower reservation salaries than boys in Cameroon and Chad. In terms of level of education, graphs 1 and 2 show that girls in Cameroon who are still enrolled in general lower secondary education (GLS) have lower reservation salaries than boys, which is the opposite in Chad. Although there is almost no difference between the reservation wages of girls and boys with upper general secondary education (GUS), it can be observed that for this same level of education in Chad the reservation wage is higher for boys than for girls. For young people with lower secondary technical education (TSFC), the reservation wage for girls is lower than boys' for the upper secondary technical education (TSSC) and higher academic education (AS) levels in Cameroon, in Chad there is almost no difference in the reservation

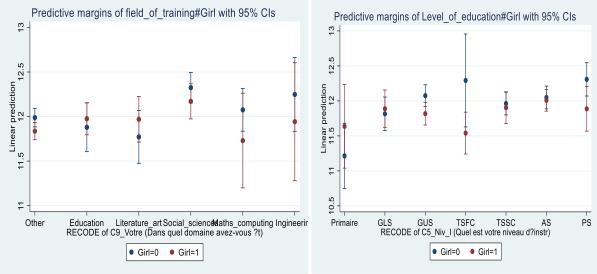
wages of girls and boys at these same levels of education. However, if it emerges that there is almost no difference in the reservation wages of girls and boys with higher vocational education (PS), it can be observed that at this same level of education in Chad, girls have lower reservation wages than boys.

**Figure 1:** Differences in reservation wages between girls and boys by field of training and level of education in Cameroon



Source: author

**Figure 2:** Differences in reservation wages between girls and boys by field of training and level of education in Chad



Source: author

# **3.2** Analysis of reservation wage inequality between girls and boys using the Blinder (1973) and Oaxaca (1973) methods and quantiles

Table 3 presents the results of the decomposition of the logarithm of reservation wage inequality between girls and boys in sub-Saharan Africa following Blinder (1973) and Oaxaca (1973). This shows that the estimated difference in reservation wage inequality between girls and boys

is 0.116 in Cameroon. Of this difference, 0.032 or 28% is attributable to differences in observed or explained characteristics and 0.084 or 72% is attributable to differences in unobserved or unexplained characteristics. This estimated reservation wage inequality difference between girls and boys still in the education system is 0.193 in Chad. And 0.048 or 25% of this difference is attributable to differences in observed characteristics, compared with 0.144 or 75% attributable to unobserved characteristics. We can conjecture that in sub-Saharan Africa 25 to 28% of the differences in reservation wages between girls and boys still in the education system are attributable to differences in observable characteristics between boys and girls. In addition, more than half (72% to 75%) of these reservation wage differences are attributable to differences in unobserved characteristics between girls and boys. These excessively high differences in Cameroon and Chad could be explained by the cultural characteristics of the countries. Indeed, the negative sign of the interaction analysis between the variable gender (girl) and level of education confirms the negative sign assigned to the variable gender in the overall regression, according to which the difference in reservation wages linked to gender and level of education would be disadvantageous to young girls in Cameroon and Chad. This is because, compared with boys, girls with a high level of education are more likely to be expected to carry out family duties (marriage, looking after the home and children, cooking, etc.) than to perform well at school and on the job market.

Reservation wage log variable for young people in	Blinder (1973) and	nd Oaxaca (1973)
training situation	Cameroon	Chad
Men	12.015***	12.074***
	(0.033)	(0.037)
Women	11.899***	11.880***
	(0.035)	(0.038)
Predicted difference	0.116***	0.193***
Fledicied difference	(0.049)	(0.053)
Difference explained	0.032**	0.048*
Difference explained	(0.016)	(0.029)
TT 1 ' 1 1'CC	0.084*	0.144**
Unexplained difference	(0.049)	(0.056)
	1136	871

Table 3: Breakdown of reservation wage inequality between men and women

**Source**: Author, based on Enquête sur la transition des jeunes vers les marchés du travail d'Afrique francophone (ETJMT), 202. Standard deviations are in parentheses. \*, \*\* and \*\*\* are significance at the 10%, 5% and 1% thresholds respectively.

#### Analysis using conditional and unconditional quantile decomposition methods

Table 4 presents the econometric results of the girls/boys reservation wage decomposition from conditional and unconditional quantile regressions. The line entitled "DBFG\_1" is the gross difference between girls and boys, calculated as the difference between the respective quantiles in the distribution of girls and boys. The lines entitled "DBFG\_2" are the coefficients of the difference on the girls' category in the unconditional quantile regressions with control variables, and the line entitled "EBFG\_3" are the coefficients of the reservation wage gap obtained by conditional quantile estimation with control variables. Firstly, our results reveal that the gross reservation wage difference between girls and boys (DBFG\_1) is statistically significant at all quantiles of the reservation wage distribution in Chad. However, in Cameroon this is not the case for the first decile, third quartile and ninth decile respectively. With the exception of the third quartile, where reservation wage inequality is higher in Cameroon than in Chad, this difference is always higher in Chad than in Cameroon, whatever the decile or quantile considered. More precisely, at the first quartile, this difference is slightly more than twice as high in Chad as in Cameroon (0.151 vs. 0.267), while at the median, it is twice as high in Chad

as in Cameroon (0.075 vs. 0.159). Nonetheless, this difference increases further at the third quartile, and is this time higher in Cameroon-Chad (i.e. 0.967 vs. 0.270). As in the work of Biel et al (2021) and Callischon (2019), the gross reservation wage gap between girls and boys in SSA increases throughout the reservation wage distribution.

The second and third rows of Table 4 show the gender gaps in reservation wages, adjusted for gender differences in observed individual characteristics (field of study, level of education, father's sector of activity, preparation for the job market by the education system, educational orientation). Once certain individual characteristics have been taken into account, we can see that the reservation wage equality between girls and boys is declining, and is no longer significant in Chad at the first and ninth decile. We also note a drop in the significance of this gap at the first quartile, the median and the third quartile. Furthermore, this gender gap in reservation wages estimated from quantile regressions reflects gender differences in reservation wages, which persist after accounting for these differences in observed characteristics. The two lines differ, however, depending on the respective distribution analyzed. The gender differences displayed in the second row of both panels are estimated by unconditional quantile regressions (DBFG\_2) and can therefore be interpreted as the adjusted gender differences in the unconditional reservation wage distribution. The gender differences presented in the third row of the table are estimated by conditional quantile regressions (DBFG\_3). As a result, these estimates reflect the gender differences in the conditional reservation wage distributions in SSA, although they are not significant in Cameroon and Chad at the first decile, and only in Cameroon at the third quartile and ninth decile.

Compared to the raw gender differences, the adjusted gender gaps at the conditional and unconditional quantiles are, except at the median, always smaller, suggesting that a non-negligible part of the raw gender gaps can be attributed to differences in observed characteristics between girls and boys. Nevertheless, gender gaps in reservation wages remain large and statistically significant at all quantiles and medians studied after accounting for differences in observed characteristics. Similarly to the gross gender gaps in the expected average wage. So, while we find that young girls and boys differ more in how they perceive their personal income prospects, we also find that male students are more optimistic about the salary a graduate in the same field of study can expect to earn later. This result is consistent with previous studies showing that girls tend to be more pessimistic about future economic events (Jacobsen et al. 2014; Bjuggren and Elert 2019).

 Table 4: Reservation wage differentials between girls and boys in conditional and unconditional quantile regressions

Variable log of										
reservation wages and	100/		25%		50%		75%		95%	
log of wages of young	Camer	Chad	Camer	Chad	Camer	Chad	Camer	Chad	Camer	Chad
people undergoing										
training										
DBFG_1 obtained by	-0.050	-0.174**	-0.151***	-0.267***	-0.075**	-0.159***	-0.967	-0.270***	-0.016	-0.317***
RIFT	(0.049)	(0.082)	(0.055)	(0.065)	(0.075)	(0.049)	(0.062)	(0.074)	(0.095)	(0.092)
DBFG_2 obtained by	-0.047	-0.131	-0.125**	-0.203***	-0.160*	-0.125**	-0.090	-0.138*	-0.008	-0.168
unconditional quantiles	(0.052)	(0.103)	(0.051)	(0.062)	(0.082)	(0.059)	(0.066)	(0.076)	(0.091)	(0.004)
DBFG_3 obtained by	-0.030	-0.086	-0.199***	-0.232***	-0.120*	0.003*	-0.097	-0.166**	-0.088	-0.173*
conditional quantiles	(0.061)	(0.118)	(0.059)	(0.063)	(0.068)	(0.057)	(0.065)	(0.082)	(0.074)	(0.096)
Comments	1136	871	1136	871	1136	871	1136	871	1136	871

*Source*: Author, based on Enquête sur la transition des jeunes vers les marchés du travail d'Afrique francophone (*ETJMT*), 202. Standard deviations are in parentheses. \*, \*\* and \*\*\* are significance at the 10%, 5% and 1% thresholds respectively.

Overall, we find no major differences in reservation wages by gender in the conditional and unconditional distributions. For identical individual characteristics, the gender gap is least pronounced among girls and boys at the bottom of the conditional reservation wage distribution,

and the gap is most pronounced at the top. Consequently, the model of adjusted gaps at conditional and unconditional quantiles mimics a sticky floor effect. Ultimately, the adjusted gaps by youth gender are similar in size and structure to the adjusted gaps found by Briel et al (2021), who estimate the gaps by conditional and unconditional quantile regressions.

Table 5 disaggregates the results of the unconditional decomposition at different decile and quantile levels of the girl/boy reservation wage distribution. Panel (a) shows the aggregated results of the decomposition, while the detailed contributions of the most relevant covariates of the explained and unexplained part are given in panels (b) and (c) respectively. According to panel (a) and in line with the results in Table 4 a gross difference of around 15 percentage points in terms of gender is present throughout the distribution of reservation wages for girls/boys in Cameroon, which is slightly lower in the Tchat at around 5 percentage points. In absolute terms, the gap in Cameroon and Chad of the explained part oscillates around 16% and 15% at the first decile and median respectively, which is slightly lower at the first quartile (7%) and higher at the third quartile and ninth decile (i.e. 43% and 46% respectively). In sum, it should be mentioned that this gap is higher in Chad than in Cameroon for the first decile and the third quartile, and lower in Chad than in Cameroon for the first quartile, the median and the ninth decile.

Panel (b) of table 5 shows the detailed contributions to the explained part of the reservation wage gap between girls and boys. Among the covariates considered, gender differences in lower secondary technical education largely explain the gender difference in reservation wages, and its contrition is significant only in Cameroon, hovering around 47% at the median and 49% at the third quartile.

When we look at the unexplained part, we see a significant contribution from covariates such as the household's well-off financial situation, with a contribution of 96% to the first decile among young Chadians only, primary education level, with a contribution of 10% to the first decile and 9% to the first quartile among young Cameroonians only. Upper secondary general education, with contributions of around 39% to the first quartile, 66% to the median and 66% to the third quartile among young Chadians only. Higher academic education is only statistically significant in Chad at the first quartile, with a contribution of 84%. The social science, commerce and law field of education contributes 34% to the first decile, and 32% to the first quartile. With regard to place of residence, the contribution is negative at the median and third quartile when young Chadians live in urban areas. As for the father's sector of activity, the contribution is of the order of minus 60% at the first decile when the father works in the Cameroonian public sector. The contributions of the other covariates to the explained part not commented on in table 5 are quantitatively less important and not statistically significant.

Overall, the results of the decomposition are close to those presented in the quantile regressions in Table 4 above, as a substantial part of the gross gender gap in reservation wages can be attributed to differences in observed characteristics between young girls and boys. In addition, gender differences in field of study and level of education are important in explaining the gender gap in expected wages, which is in line with the empirical evidence on the gender gap in expected and actual wages (Briel, 2021, Collischon, 2019; Kiessling et al, 2019).

Variable log of reservation	10	· · · ·	· · · · · · · · · · · · · · · · · · ·	5%	50	0%	759	, <mark>%</mark>	95%	
salaries for young people	Cameroon	Chad	Cameroon	Chad	Cameroon	Chad	Cameroon	Chad	Cameroon	Chad
undergoing training	t'	·'	·'	·	·'	·'	·'	·'	<u> </u>	t
(a) Overall breakdown	1	1	1		'	1	'	1	'	1
Men	11.13(0.04)***	11.12(0.03)***	11.60(0.04)***	11.82(0.04)***	12.18(0.04)***	12.26(0.03)***	12.18(0.04)***	12.26(0.03)***	13.34(0.06)***	13.33(0.07)***
Woman	11.01(0.03)***	10.90(0.06)***	11.35(0.04)***	11.57(0.04)***	12.02(0.05)***	12.13(0.04)***	12.02(0.05)***	12.13(0.04)***	13.31(0.06)***	13.04(0.07)***
Predicted difference	0.115(0.03)**	0.218(0.07)***	0.245(0.06)***	0.252(0.04)***	0.160(0.07)**	0.133(0.05)**	0.160(0.07)**	0.133(0.05)**	0.0350(0.09)	0.293(0.11)***
Difference explained	-0.004(0.02)	0.0360(0.04)	0.0450(0.02)**	0.03(0.0674)	0.0511(0.02)**	0.0299(0.0274)	0.0511(0.02)**	0.0299(0.03)	0.0262(0.03)	0.0833(0.05)
Unexplained difference	0.119(0.05)**	0.182(0.08)**	0.200(0.06)***	0.218(0.02)***	0.109(0.07)	0.103(0.06)*	0.109(0.07)	0.103(0.06)*	0.00887(0.09)	0.210(0.12)*
(b) Contribution of covaria		ed difference								1
Age	0.0179(0.0300)	-0.001(0.006)	0.007(0.03)	0.004(0.006)	-0.008(0.03)	0.007(0.007)	-0.008(0.03)	0.007(0.007)	-0.102(0.09)	-0.002(0.008)
Age squared	-0.02(0.028)	/	0.0004(0.029)	/	0.02(0.04)	/	0.02(0.04)	/	0.08(0.08)	/
Household situation (well-	0.0001(0.001)	-0.0262(0.016)	-0.001(0.003)	0.003(0.008)	-0.001(0.001)	0.011(0.008)	-0.001(0.003)	0.012(0.017)	-0.0001(0.001)	0.0019(0.014)
off)	1	1	1	'	'	1	1	1		1
Primary level	0.0012(0.002)	-0.005(0.006)	0.007(0.012)	0.005(0.007)	0.005(0.008)	0.012(0.001)	0.005(0.008)	0.012(0.009)	0.002(0.004)	0.003(0.009)
General secondary 2 <sup>nd</sup> cycle	-0.011(0.007)	-0.004(0.007)	0.002(0.006)	-0.003(0.005)	0.002(0.007)	-0.004(0.006)	0.002(0.007)	-0.005(0.006)	0.007(0.011)	5.23e-05(0.006)
Technical secondary 1 <sup>st</sup> cycl	0.002(0.008)	-0.002(0.005)	0.015(0.009)	-0.002(0.004)	0.024(0.012)**	-0.001(0.003)	0.025(0.012)**	-0.001(0.003)	0.038(0.018)**	0.009(0.011)
Academic superior	-0.002(0.003)	0.003(0.006)	-0.0004(0.003)	-0.003(0.005)	-0.001(0.004)	0.001(0.003)	-0.001(0.004)	0.001(0.003)	-0.006(0.008)	-0.001(0.006)
Science of education	0.001(0.002)	-0.008(0.009)	-0.001(0.002)	-0.001(0.006)	-0.001(0.003)	0.004(0.005)	-0.001(0.003)	0.004(0.006)	0.005(0.007)	0.008(0.012)
Social sciences and law	-0.008(0.006)	0.026(0.021)	0.009(0.007)	0.023(0.013)*	0.011(0.008)	0.019(0.012)*	0.011(0.008)	0.019(0.011)*	-0.001(0.009)	0.052(0.025)**
Repeat	0.003(0.004)	-0.001(0.006)	0.004(0.005)	0.003(0.004)	0.003(0.006)	-0.0002(0.003)	0.003(0.006)	-0.0003(0.003)	-0.002(0.008)	0.005(0.008)
Orientation: Conviction pers	-0.002(0.004)	-0.006(0.024)	0.004(0.008)	0.004(0.025)	0.003(0.006)	-0.022(0.022)	0.003(0.006)	-0.022(0.021)	0.004(0.009)	0.049(0.047)
Family orientation	-0.0001(0.003)	-0.005(0.014)	0.0004(0.010)	0.009(0.015)	0.0003(0.007)	0.022(0.018)	0.0003(0.007)	0.022(0.018)	-0.0003(0.003)	-0.018(0.028)
Combining work and study	0.005(0.007)	0.061(0.032)*	-0.005(0.007)	-0.012(0.017)	-0.005(0.008)	-0.024(0.015)	-0.005(0.008)	-0.024(0.014)	-0.004(0.012)	-0.011(0.030)
Place of residence: urban	0.002(0.003)	0.002(0.005)	0.002(0.003)	0.002(0.004)	-0.0003(0.003)	0.004(0.005)	-0.0003(0.003)	0.004(0.005)	0.001(0.004)	-0.003(0.005)
Father working in the public	0.0002(0.003)	0.002(0.008)	0.0001(0.001)	0.001(0.005)	0.00002(0.001)	0.003(0.005)	0.00002(0.001)	0.003(0.005)	0.0002(0.003)	-0.011(0.012)
sector	1	1	1	'	'	1	1	1		1
(c) Contribution of covaria	ates to the unexpla	ined difference								
Age	0.322(2.532)	0.211(0.450)	2.356(2.785)	-0.201(0.399)	0.058(3.394)	-0.209(0.338)	0.058(3.392)	-0.209(0.338)	-6.274(4.424)	-0.507(0.649)
Age squared	0.077(1.190)	/	-1.018(1.288)	/	0.136(1.570)	/	0.136(1.570)	/	2.692(2.046)	/
Household situation (well-	0.048(0.062)	-0.175(0.086)**	0.092(0.071)	-0.002(0.089)	0.054(0.086)	-0.015(0.076)	0.054(0.086)	-0.015(0.075)	-0.023(0.112)	0.075(0.146)
off)	1	1	1	''	·   · · · · ·	1		1		1
Primary level	-0.012(0.007)*	-0.005(0.008)	-0.019(0.010)*	0.006(0.015)	-0.019(0.011)*	-0.010(0.012)	-0.019(0.011)*	-0.010(0.012)	-0.012(0.013)	-0.014(0.025)
General secondary 2 <sup>nd</sup> cycle	-0.055(0.044)	-0.031(0.048)	-0.094(0.058)	0.086(0.049)*	-0.133(0.071)*	0.069(0.042)*	-0.133(0.071)*	0.069(0.041)*	0.031(0.091)	-0.023(0.080)
Technical secondary 1 <sup>st</sup> cycle	-0.001(0.027)	0.001(0.023)	-0.0004(0.018)	-0.021(0.027)	0.039(0.023)*	-0.009(0.0233)	0.038(0.023)*	-0.009(0.023)	0.083(0.03)***	-0.018(0.045)

## Table 5: Unconditional decomposition (Oaxaca RIF) of reservation wage differentials in SSA

Academic superior	-0.019(0.035)	-0.069(0.085)	-0.007(0.044)	-0.184(0.073)**	0.012(0.054)	-0.091(0.061)	0.012(0.054)	-0.091(0.062)	0.110(0.070)	0.020(0.118)
Science of education	0.014(0.012)	-0.010(0.014)	4.36e-05(0.015)	-0.022(0.022)	0.007(0.018)	-0.022(0.018)	0.007(0.018)	-0.022(0.018)	-0.048(0.026)*	-0.011(0.036)
Social sciences and law	-0.041(0.025)*	-0.043(0.045)	-0.064(0.035)*	0.006(0.0208)	-0.094(0.043)**	-0.004(0.0177)	-0.094(0.043)**	-0.004(0.017)	0.011(0.056)	0.028(0.033)
Repeat	-0.074(0.057)	-0.0034(0.085)	0.009(0.056)	0.063(0.070)	0.053(0.068)	0.052(0.059)	0.053(0.068)	0.052(0.059)	-0.067(0.089)	0.149(0.114)
Orientation: Conviction pers	0.277(0.117)**	0.036(0.147)	0.067(0.126)	0.108(0.115)	-0.057(0.154)	-0.014(0.094)	-0.0579(0.154)	-0.013(0.094)	-0.120(0.201)	-0.030(0.191)
Family orientation	0.140(0.073)*	-0.103(0.165)	0.073(0.081)	0.062(0.181)	-0.019(0.098)	-0.199(0.150)	-0.019(0.098)	-0.199(0.150)	-0.0826(0.129)	-0.0235(0.303)
Combining work and study	0.131(0.113)	0.252(0.126)**	0.194(0.139)	0.051(0.138)	0.079(0.171)	0.109(0.118)	0.079(0.171)	0.109(0.118)	0.314(0.218)	0.215(0.223)
Place of residence: urban	0.044(0.097)	0.115(0.503)	0.002(0.113)	0.102(0.445)	0.182(0.138)	-0.668(0.380)*	0.182(0.138)	-0.668(0.380)*	0.0564(0.179)	-0.293(0.717)
Father working in the public	-0.072(0.036)**	-0.0525(0.0644)	-0.014(0.039)	-0.0185(0.066)	-0.062(0.048)	0.001(0.056)	-0.062(0.048)	0.0006(0.056)	0.010(0.062)	0.160(0.109)
sector										
Comments	1136	871	1136	871	1136	871	1136	871	1136	871

Source: Author, based on Enquête sur la transition des jeunes vers les marchés du travail d'Afrique francophone (ETJMT), 202. Standard deviations are in parentheses. \*, \*\* and \*\*\* are significance at the 10%, 5% and 1% thresholds respectively.

## Conclusion

Using the SSA Youth Transition to Employment Survey, we analyze gender inequality along the conditional and unconditional distribution of reservation wages for girls and boys still in the education system. Several econometric strategies, such as OLS, the Oaxaca-Blinder method and conditional and unconditional decompositions (at 1<sup>st</sup> decile, 1<sup>st</sup> quartil, 2<sup>th</sup> quartil, 3<sup>th</sup> quartil and 9<sup>th</sup> decile), have been applied and have enabled us to highlight not only the decisive factors in the gap between reservation wages for girls and boys still in the education system, but also the contribution of explained and unexplained factors to the overall difference.

The OLS estimates show that gender is significantly and negatively correlated with youth reservation wages in Cameroon and Chad. Thus, being a girl has a negative impact on the reservation wage of young people, which is greater in Chad than in Cameroon, at the 5% and 10% thresholds respectively. This confirms the results of our descriptive analyses, which previously established that the reservation wages of young boys would be higher than those of girls in SSA, which are also higher for Cameroonian boys and girls than for Chadian boys and girls than for boys in SSA. In addition, the Blinder (1973) and Oaxaca (1973) decomposition revealed that the estimated difference in reservation wage inequality between girls and boys is 0.116 in Cameroon. In this, 0.032 or 28% is attributable to differences in explained characteristics versus 0.084 or 72% which is attributable to differences in unexplained characteristics.

Subsequent robustness analyses using conditional and unconditional decompositions without taking factors into account reveal that at the first quartile, this difference is just over twice as high in Chad as in Cameroon (i.e. 0.151 vs. 0.267), while at the median it drops, but remains twice as high in Chad as in Cameroon (i.e. 0.075 vs. 0.159). However, this gap widens even more at the third quartile, and is higher in Cameroon than in Chad (i.e. 0.967 vs. 0.270). As in the work of Biel et al (2022) and Callischon (2019), this shows that the gross reservation wage gap between girls and boys in sub-Saharan Africa increases throughout the distribution, and persists even after certain observed characteristics are taken into account (level of education, field of training, father's sector of activity). Compared to the raw gender differences, the adjusted gender gaps at the conditional and unconditional quantiles are, except at the median, always smaller, suggesting that a non-negligible part of the raw gender gaps can be attributed to differences in observed characteristics between girls and boys. In absolute terms, the gap in Cameroon and Chad of the explained portion hovers around 16% and 15% at the first decile and median respectively, which is slightly lower at the first quartile (7%) and higher at the third quartile and ninth decile (i.e. 43% and 46% respectively). It is important to note that this gap is higher in Chad than in Cameroon for the first decile and third quartile, and lower in Chad than in Cameroon for the first quartile, median and ninth decile.

To this end, an educational policy based on reducing constraints on the acquisition of human capital and access to the labor market, and career guidance that induces differential anticipation of the salaries expected by boys and girls still in the education system, can motivate girls to have more ambitious aspirations, reducing inequalities on the Cameroonian and Chadian labor markets. This policy can motivate girls to have more ambitious aspirations, reducing inequalities on the Cameroonian and Chadian labor markets.

## Appendix

<b>Table 3:</b> OLS regression taking into account interaction between gender and other explanatory
variables

Var dep=reservation wage inequality	Cameroon	Chad		
	Girls *Variables	Girls *Variables		
Age	0.021(0.110)	0.119(0.104)		
Age <sup>2</sup>	-0.001(0.002)	-0.002'0.002)		
Marital status				
Single	0.223(0.251)	-0.277(0.280)		
Married	0.186(0.431)	-0.192(0.275)		
Place of residence: Urban	-0.115(0.116)	0.375(0.335)		
Field of study				
Education sciences	-0.019(0.218)	0.248(0.179)		
Letter and art	-0.008(0.148)	0.351(0.213)		
Social sciences and law	0.080(0.167)	-0.001(0.159)		
Mathematics/IT	-0.0129(0.154)	-0.193(0.304)		
Engineering	-0.411(0.195)*	-0.154(0.403)		
Education level		· · · · · · · · · · · · · · · · · · ·		
General secondary 1 <sup>st</sup> cycle	-1.139(0.457)**	-0.349(0.401)		
General secondary 2 <sup>nd</sup> cycle	-0.991(0.453)**	-0.678(0.389)*		
Secondary technical 1 <sup>st</sup> cycle	-1.260(0.498)**	-0.173(0.535)**		
Technical secondary 2 <sup>nd</sup> cycle	-1.355(0.476)***	-0.480(0.416)		
Academic superior	-1.228(0.472)**	-0.462(0.425)		
Professional superior	-1.005(0.479)**	-0.842(0.452)*		
School guidance				
Family	-0.036(0.101)	0.184(0.114)		
Training establishment	0.016(0.174)	-0.201(0.222)		
Job preparation				
Not enough	-0.020(0.119)	0.165(0.157)		
Sufficient	-0.071(0.127)	0.049(0.145)		
Work-study balance	-0.239(0.126)*	-0.191(0.135)		
Has already repeated a year	0.012(0.104)	-0.118(0.114)		
Household financial situation				
Medium	-0.089(0.139)	0.082(0.170)		
Difficult	-0.070(0.160)	0.056(0.201)		
Attendance sub-system				
Anglophone/Arabophone	0.131(0.118)	-0.247(0.195)		
Father's business sector				
Public Sector	0.069(0.146)	-0.025(0.227)		
Private sector	0.086(0.166)	-0.140(0.252)		
Independent	-0.034(0.141)	-0.093(0.226)		
Constance	12.646(0.857)***	11.113***		
Number of observations	1136	871		

**Source**: Author, based on Enquête sur la transition des jeunes vers les marchés du travail d'Afrique francophone (ETJMT), 202. Standard deviations are in parentheses. \*, \*\* and \*\*\* are significance at the 10%, 5% and 1% thresholds respectively.

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