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Expectations about Returns to Education. The Role of Parental and Youths' Characteristics

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Investing in human capital requires, among others, access and capacity to process information. This paper focuses on understanding the role of expected returns to education in determining schooling decisions. Using data for youths in seven countries in Latin America and the Caribbean, we find that expected returns to education are associated with schooling choices, particularly for tertiary education. However, expectations differ across individuals and in specific domains that public policies can address to reduce intra- and inter-generational transmission of poverty and inequality.

KEYWORDS

Expectations, returns to education, youths, Latin America and the Caribbean

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Expectativas sobre los retornos a la educación. El rol de las características de los padres y los jóvenes

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La inversión en capital humano requiere, entre otras cosas, acceso y capacidad para procesar información. Este trabajo se centra en comprender el papel de los retornos esperados a la educación en la determinación de las decisiones educativas. Utilizando datos de jóvenes de siete países de América Latina y el Caribe, encontramos que los rendimientos esperados están correlacionados con las decisiones de educación, en particular para el nivel terciario. Sin embargo, las expectativas difieren entre individuos en ámbitos específicos que pueden ser abordados por las políticas públicas de modo de atenuar la transmisión intra e intergeneracional de la pobreza y la desigualdad.

KEYWORDS

Expectativas, retornos a la educación, jóvenes, América Latina y El Caribe

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1 | INTRODUCTION

Expectations are a central aspect in the decision-making of economic agents (Shiller, 2018). In human capital formation, expectations about how investing in education and job training affect future employment opportunities are essential for education and labor market decisions. The literature shows that youths' expectations and those of their parents affect educational choices, including years of study and career paths, among others (Dornitz and Manski, 1996; Betts, 1996; Baker et al., 2018; Zafar, 2011; Arcidiacono et al., 2012; Attanasio and Kaufmann, 2014; Kaufmann, 2014; Wiswall and Zafar, 2021).

Commonly, economic analyses and public policies' design and implementation assume that youths and their families have complete information when making education and work investment decisions (Basu, 1999). However, this information may be inaccurate or misguided (Jensen, 2010; Nguyen, 2008; Wiswall and Zafar, 2015; Rapoport and Thibout, 2018), and could lead youths to choose suboptimally. For instance, adolescents may drop out of education when they do not fully understand the returns delivered by the programs of their choice or when they have low expectations about the net return on investment in education, given their individual and family characteristics and those of their peers. They may also decide not to apply to tertiary education if they are unaware of its requirements, costs, and returns. Thus, imperfect information can lead to distorted expectations and suboptimal investment decisions in education and participation in the labor market.

From a public policy standpoint, a body of research shows that youths' decisions can be influenced by providing information that changes their expectations and knowledge about the educational system and the labor market. Effective interventions can be carried out at a very low cost (Novella and Repetto, 2021). For instance, Jensen (2010) provides information on the expected returns to reaching different educational levels to eighth-grade students in the Dominican Republic. The study found a relevant impact on the probability of returning to school the following academic year and on the years completed four years after the intervention. In Latin America, similar interventions have also shown positive impacts. For instance, Busso et al. (2017) and Hastings et al. (2015) provide personalized information to students in Chile before enrolling in higher education. Meanwhile, Bonilla-Mejía et al. (2019) deliver information on average returns associated with different university education programs to students in the last year of high school in Colombian public schools. Likewise, Avitabile and De Hoyos (2018) randomize the delivery of information on earnings at different educational levels, life expectancy, and financing for higher education to tenth-grade students in Mexico.

This study builds on the literature on schooling decisions and human capital accumulation. The human capital accumulation theory establishes that individuals make schooling decisions based on complete information about future returns to education. Empirical analysis has usually relied on earnings realizations as an approximation of expected returns to education, making strong assumptions about information sets and how expectations are built (Attanasio and Kaufmann, 2014). A second, less exploited approximation relies on future expectations to address schooling decisions (Jensen, 2010; Nguyen, 2008; Attanasio and Kaufmann, 2014; Rapoport and Thibout, 2018; Favara et al., 2021). We follow this novel approach to elicit the relationship between future earnings expectations and educational attainment in Latin America and the Caribbean.

Empirical research has established that expectations shape educational decisions. Atta-

[nasio and Kaufmann \(2014\)](#) show that expected returns and risk perceptions are important determinants of schooling decisions. They show that higher future expected earnings are positively related to enrollment decisions for Mexican junior and high school graduates. Importantly, they show that this relationship is different for boys and girls. They also show that mothers' expectations are important determinants for girls' enrollment but not for boys. Similarly, [Favara et al. \(2021\)](#) show that earnings expectations and expected returns to university are positively associated with university enrollment in Peru. They also find that boys have higher expectations than girls and that socioeconomic background plays an important role.

Both educational expectations and aspirations represent a potential channel for inter-generational inequality and poverty transmission. If children from less advantaged backgrounds have lower aspirations and expectations due to their socioeconomic background, they could acquire low levels of education, reinforcing inequalities over time. In this vein, [Favara \(2017\)](#) shows that parents' and children's aspirations are both related to educational choices in Ethiopia. Also, the study finds that aspirations vary significantly with socioeconomic background, where children from low-income families have lower aspirations as they internalize their context-dependent constraints. The same effect is documented in Peru regarding future expectations, where persistent inequalities affect schooling decisions through youths' beliefs ([Favara et al., 2021](#)).

We use data from the "Millennials in Latin America and the Caribbean: to work or study?" project, comprising seven countries: Brazil, Chile, Colombia, El Salvador, Haiti, Mexico, and Paraguay ([Novella et al., 2018](#)). This unique dataset contains youths' educational expectations and allows us to derive the implicit future expected returns to university education. The Mexican database also contains information on parental expectations. We analyze whether expectations influence schooling decisions among two groups of youths: those who face the decision to enroll in secondary, given that they have finished primary education; and those deciding to enroll in tertiary after having completed secondary education.

We find that expectations about returns to university are positively related to enrollment in tertiary education, but not to enrollment in secondary education. The latter might be due to most youths in the sample have already completed secondary education when observed. The positive association between expectations and tertiary enrollment is robust to the addition of controls capturing socioeconomic characteristics, family background, and youths' cognitive and non-cognitive skills.

To discuss how expectations affect schooling choices, we provide a heterogeneity analysis. In particular, we explore whether expectations and their role in schooling decisions vary across groups. We do not find relevant differences in expected returns across gender, age, cognitive and non-cognitive skills, and youth's environment characteristics such as mothers' education, household income, and mother's working status. However, we find differences in the magnitude of the correlation between expectations and school enrollment for specific subgroups: gender, cognitive abilities, maternal education, and household income.

Moreover, using the Mexican sample, we find that youths' expectations are positively and significantly associated with secondary education enrollment. However, parental expectations do not seem to play an additional role in this decision. However, when analyzing tertiary education enrollment, we find that parental expectations seem to be more critical than youths' expectations. Once controlling for parental expectations, youths' expectations

are no longer significantly related to tertiary education enrollment. Overall, we do not find evidence of expected returns affecting differently schooling decisions for a set of youths' individual and environmental characteristics.

The remainder of the paper is organized as follows. Section 2 provides a detailed description of the data, while Section 3 describes the empirical strategy. Section 4 presents the results. Finally, Section 5 concludes.

2 | DATA

2.1 | Data Sources

This study uses data from the "Millennials in Latin America and the Caribbean: to work or study?" (Millennials in LAC, hereafter) project, conducted between 2017 and 2018 (Novella et al., 2018). This project, funded by the International Development Research Centre (IDRC—Canada) and the Inter-American Development Bank (IDB), focused on studying youths' schooling and labor market decisions. In the interest of having a representative sample of similar countries within the sub-regions in Latin America and the Caribbean and acknowledging data availability constraints, we selected seven countries for this study: Brazil, Chile, Colombia, El Salvador, Haiti, Mexico, and Paraguay.¹

The survey comprises two questionnaires administered to approximately 12,000 youths aged 15 to 24 living in urban areas.² The first questionnaire captures demographic and socioeconomic characteristics, cognitive and non-cognitive skills, and expectations and aspirations. The second questionnaire collects information about sensitive questions. To improve the response rate and the quality of the data, the latter questionnaire was self-administered (Tourangeau et al., 1997; Krumpal, 2013). In addition, if youths were under 18 years old, either respondents or their parents provided written consent before participating in the survey. Finally, the survey was collected using a stratified multistage sampling method. In the first stage, households were selected based on previous censuses in each country. Subsequently, a youth was randomly chosen within the household.

This rich dataset stands out for capturing information about socioemotional skills. The dataset includes the Grit test, which measures perseverance and passion for long-term goals (Duckworth and Quinn, 2009). It also measures the Rosenberg self-esteem test that measures the image that people have of themselves (Rosenberg, 1965). Finally, it includes a locus of control scale that measures the degree to which people believe they have control of their outcomes in life (Rotter, 1966).

The data set also measures cognitive abilities. In particular, a numeracy test poses simple problems in which respondents need to divide and multiply to obtain the correct answers (e.g., distributing a given amount of money between five individuals). We use the fraction of correct answers as a measure of numeracy skills.

Importantly, this unique dataset contains detailed information about educational expectations and aspirations. Following Attanasio (2009) and Attanasio and Kaufmann (2014), we designed the expectations and aspirations module to elicit the expected distribution

¹Although the Millennial project includes Peru and Uruguay, the respective datasets provide information on expectations that is not comparable with the rest of the sample.

²As explained, the Mexican survey includes a third questionnaire answered by their parents.

of future earnings and probabilities of being employed conditional on the education level achieved. The approach collects information on future earnings expectations for different highest educational level attainment scenarios.

The expected distribution of future earnings and the probabilities of finding a job after acquiring education involve uncertainty about the future. The data collection process relies on the concept of probability, possibly a complex concept to many respondents, to capture this uncertainty. Thus, before administering the expectations and aspirations module, respondents were provided with a short explanation of probabilities. Specifically, youths were asked to assign probabilities of occurrence of different events using ten marbles.³ Enumerators proceeded to ask questions on expectations and aspirations, assuring that respondents understood the concept of probability. The questions that followed captured employment and earnings expectations. Besides the example below, which illustrates the case for secondary education, we also asked about university education.

- "Think of someone with your characteristics (age, gender, socioeconomic status, etc.) who has completed middle/high school, and this is his/her highest level of education attained. On a scale of 0 to 10, **how likely is that this person will be working in 10 years?** [Remember that 0 corresponds to "not likely to happen/impossible." and 10 corresponds to it will certainly happen.]
- Now think of that same person (someone with your characteristics) who has completed middle/high school, and this is his/her highest level of education attained. Moreover, assume that this person has a job in 10 more years.
 - (i) How much is the **maximum amount** this person can earn per month at that time?
 - (ii) How much is the **minimum amount** this person can earn per month at that time?
 - (iii) On a scale of 0 to 10, **what is the probability that his/her earnings are at least [the mean value between (i) and (ii)]?**"

The CAPI instrument calculated the mean between (i) and (ii) (i.e., the maximum and the minimum expected earnings).⁴ Therefore, at the interview, respondents were asked to estimate the probability that the corresponding earnings would be at least a specific amount of money without performing any algebraic calculations.

In addition, a third questionnaire was administered to parents in Mexico, capturing their expectations and aspirations regarding their offspring's future. Under a perfect information scenario, parental and youths' expectations should be equal. Nevertheless, if the available information is different for parents and their offspring, a difference in their expectations is foreseen. Therefore, the additional information corresponding to parents in Mexico allows us to analyze the relationship between parents' and youths' expectations and human capital investment.

Finally, it is worth emphasizing that unlike [Attanasio and Kaufmann \(2014\)](#), who focus on the respondent's expected distributions of their own future earnings, the Millennials in LAC survey captures a population expected distribution of future earnings. Specifically, it asks the respondents to consider different scenarios that a person with similar characteristics—gender, age, and socioeconomic background—would face in the labor market, having completed alternative educational levels.

³For instance, respondents were asked, "How likely is it that the country's Independence Day will be celebrated on [country's Independence Day]?"

⁴In exceptional cases, when data was collected on paper, the enumerator estimated the mean.

2.1.1 | Sample construction

While the Millennials in LAC survey collected data of about 12,000 youths, our final sample considers only those with complete information regarding their socioeconomic characteristics, family background, and future expectations about returns to education. Importantly, as one of the main aims of this paper is to study how parental education and expectations affect youths' expectations about the returns to human capital, we focus on individuals with information on parental education (specifically, mother's education).⁵ After imposing restrictions, we are left with a sample of 5,060 youths.⁶

2.1.2 | Descriptive Statistics

Sample characteristics

Table 1 shows summary statistics for the selected sample, including 5,060 youths aged 15-24 residing in any of the seven LAC countries in the sample. It contains information on youths' educational attainment, socioeconomic characteristics, family background, and cognitive and non-cognitive skills. In addition, Table 1 displays information about the distribution of observations across countries.

Roughly 95 percent of youths in the sample completed at least primary education —approximately 43 percent of youths completed primary education only, and 47 percent finished secondary schooling. Explained mainly by the age of individuals in the sample, youths who completed tertiary education represent a small fraction: only 5.4 percent hold a tertiary education degree (i.e., tertiary technical education, university, or postgraduate degrees).

The socioeconomic characteristics displayed in Table 1 allow a further description of the youths that compose the sample. On average, youths are 19 years old. Moreover, the sample is balanced on gender. Youths live in households where, on average, the monthly per capita income is US\$ 158.⁷

⁵The sample construction process drops observations subsequently. First, we drop six observations with missing values on educational level information. Next, we drop 2,022 observations due to a lack of information on secondary and tertiary schooling expectations. Subsequently, we exclude 865 observations with incomplete information on socioeconomic characteristics. We also excluded a total of 3,526 observations due to missing values on family background characteristics, including the mother's years of education. Given the large number of observations without information on paternal education, we decided to constrain the sample only to those with complete information on maternal education. Next, we dropped 141 observations because of inconsistencies related to expected earnings: where minimum expected values were larger than the maximum amount (113), inconsistencies in mean expected earnings (20), and outliers in expected earnings (8). In addition, we excluded 513 observations that lacked information about cognitive skills and 317 due to missing non-cognitive skills. We also dropped two observations with a declared age out of range. Finally, we dropped observations with inconsistencies on both the expected returns to education; following [Attanasio and Kaufmann \(2014\)](#), we consider inconsistent cases as those where the minimum exceeds the maximum expected earnings conditional on the level of education.

⁶There are minor statistically significant differences between the restricted sample and the complete sample. Overall, our sample comprises slightly more educated, younger, and richer youths (Table A.1). The restricted sample also presents a more significant percentage of male youths and a lower proportion of youths with children.

⁷All monetary values are expressed in 2018 US\$, using the World Bank official exchange rate.

Table 1 also contains information regarding youths' responsibilities over and above their studies. Approximately, 32 percent of the sample is employed. In addition, 25 percent of youths in the sample have children, with 8 percent having their first child during adolescence (i.e., before turning 20 years old). Further, 38 percent declare having family care duties. Moreover, youths are more likely to live with a household member under the age of 5 than with a member over 65 years old. However, on average, the number of dependents per household is less than one.

Youths' family background reveals that, on average, mothers have acquired approximately ten years of education, which is close to completing secondary education.⁸ In addition, 72 percent of mothers have a job. Table 1 shows that both biological parents raised 56 percent of the youths in the sample before they turned five years old. However, when analyzing the presence of each parent, essential differences arise. For instance, while the biological mother raised roughly 94 percent of youths, only 58 percent were raised by the father. This pattern is also present in youths' family composition, as only 57 percent of our sample lives with their father and mother.

Concerning youths' cognitive and non-cognitive skills, Table 1 unveils significant heterogeneities. On the one hand, individuals present a substantial lag in cognitive skills. Remarkably, the numeracy skills measure shows that close to 36 percent of youths cannot satisfactorily perform basic arithmetic calculations. In contrast, youths in the sample show relatively high (relative to the maximum scores of each scale) non-cognitive skills.⁹ Their GRIT average score is higher than three on a scale that ranges from one to five. To summarize some of the measures of non-cognitive skills, we also constructed a core self-evaluation index, using factor analysis, on 30 dimensions measuring self-esteem, locus of control, and self-efficacy. This index is normalized to have a mean of zero and a standard deviation of one.

Finally, Table 1 shows the distribution of the sample across the seven countries included in the Millennials in LAC survey. The largest sample corresponds to youths in Chile (38 percent), followed by 17 percent in Colombian and Mexico, 12 percent in Paraguay, 8 percent in El Salvador, 5 percent in Brazil, and 4 percent in Haiti.¹⁰

⁸For the reasons mentioned above, we did not include the father's education in the analysis. Nevertheless, an exploratory analysis confirmed that, on average, the father's education closely follows the mother's.

⁹Similar evidence is reported by Novella et al. (2018) for the whole sample of youths in the Millennials in LAC study. Individuals in the sample exhibit high levels of self-esteem and self-efficacy. The average score on the self-esteem variables is approximately 32 on a scale with a maximum of 40. Similarly, the average self-efficacy score is higher than three on a scale that ranges from one to five. Finally, the locus of control reaches a mean of 41 on a scale with a maximum value of 63.

¹⁰Tables A.11 to A.18 in the Appendix test whether the results in the paper hold when including or not Chile from the sample.

CUADRO 1 Descriptive statistics selected sample, all countries

	N	Mean	SD	Min	Max
<i>Highest level of education completed</i>					
None	5,060	0.051	0.221	0	1
Primary	5,060	0.425	0.494	0	1
Secondary	5,060	0.470	0.499	0	1
Tertiary	5,060	0.054	0.226	0	1
<i>Socioeconomic characteristics</i>					
Age	5,060	18.9	2.7	15	24
Male	5,060	0.497	0.500	0	1
Monthly per capita income (US\$)	5,060	158	145	0	1,767
Employed	5,060	0.316	0.465	0	1
Has children	5,060	0.247	0.432	0	1
Had children (or currently pregnant) before turning 20 years old	5,060	0.079	0.270	0	1
Has family care duties	5,060	0.379	0.485	0	1
Number of household members aged 0-5	5,060	0.238	0.534	0	4
Number of household members over 65 years old	5,060	0.175	0.454	0	4
<i>Family Background</i>					
Mother's years of education	5,060	10.285	3.761	0	28
Mother is employed	5,060	0.715	0.451	0	1
Raised by both biological parents before age 5	5,060	0.564	0.496	0	1
Biological mother present	5,060	0.938	0.242	0	1
Biological father present	5,060	0.578	0.494	0	1
Currently lives with father	5,060	0.566	0.496	0	1
Currently lives with mother	5,060	1.000	0.000	1	1
<i>Youths' cognitive and non-cognitive skills</i>					
Numeracy skills	5,060	0.637	0.391	0	1
Core self-evaluation Index	5,060	0.000	2.533	-7	5
Self-efficacy average score	5,060	3.119	0.405	1	4
Self-esteem score	5,060	31.598	4.632	10	40
Locus of control score	5,060	41.126	9.599	11	63
Grit average score	5,060	3.391	0.513	2	5
<i>Countries</i>					
Brazil	5,060	0.047	0.212	0	1
Chile	5,060	0.379	0.485	0	1
Colombia	5,060	0.170	0.376	0	1
El Salvador	5,060	0.078	0.268	0	1
Haiti	5,060	0.043	0.204	0	1
Mexico	5,060	0.167	0.373	0	1
Paraguay	5,060	0.116	0.320	0	1

Notes: The selected sample considers observations with complete information on outcome variables, expectations about the return of secondary and tertiary education, socioeconomic characteristics, and family background information. Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate of 2018 (LCU per US\$, period average) for each country.

Mexican Sample

Table 2 shows additional summary statistics for the Mexican sample. As described above, the Mexican dataset contains further information on the primary caregiver's expectations. Table 2 shows that parents have remarkably high expectations for their offspring. While the average self-assessed socioeconomic level is 6.6 on a scale from 1 to 10, the average expected future socioeconomic position for their children is 8.7, implying a 2.1 points increase. Finally, it is noteworthy that, on average, 50 percent of caregivers declare to have lived in a rural

area at age 14.

CUADRO 2 Descriptive statistics selected sample, Mexico

	N	Mean	SD	Min	Max
<i>Main Caregiver information</i>					
Main caregiver's socioeconomic level (1-10)	699	6.578	1.803	1	10
Main caregiver's future expectations for youth's socioeconomic level (1-10)	698	8.706	1.264	3	10
Difference main caregiver's expectations for youth and own current socioeconomic level	696	2.118	1.885	-4	9
Main caregiver lived in the urban area at 14	703	0.495	0.500	0	1

Notes: The selected sample considers observations with complete information on outcome variables; expectations about the return of secondary and tertiary education; socioeconomic characteristics; and family background information.

2.1.3 | Expectations to the returns of education

Expected earnings

Under different educational attainment scenarios, expected earnings are captured using youths' self-reported elicitation about future labor market outcomes. Following [Attanasio and Kaufmann \(2014\)](#), we assume an underlying triangular distribution for expected earnings.¹¹ Subsequently, we combine this assumption with the minimum and maximum expected earnings and the probability that individuals assign to an earnings amount of at least the mean of these extremes.¹² While the mean value provides information about the central tendency of the data, the variance is a measure of perceived earnings risk ([Attanasio and Kaufmann, 2014](#)). This section details the main results regarding youths' expected earnings, conditioning on current educational attainment, mother's maximum level of education, and household income.

Table 3 shows the unconditional mean and variance of expected earnings, the expected returns to university education—the difference between the expected earnings in logs—, and the probability assigned to finding a job in the future under two maximum educational attainment scenarios: secondary and university education. Overall, youths associate better labor outcomes with higher educational levels. For instance, individuals expect higher earnings when acquiring a university degree than a secondary education degree. It is worth noting that the average expected return on obtaining a university degree is very high and close to 90%. Moreover, while youths have high expectations of finding a job in the future when achieving an education level (over 70 percent for any education level), they assign a 16 percentage point (p.p.) higher probability to finding a job when holding a university degree. Finally, our proxy for expected risk (i.e., the variance of expected earnings) is higher for the scenario of having a university degree. This result could reflect that youths are uncertain about the range of future earnings when having a university degree, with some of them perceiving potentially significant gains.

¹¹Given that the questionnaire provides information on the support of the distribution (y_m, y_M) and the probability mass to the right of the midpoint of the support, the mean and variance could be express as: $E(y) = \int_{y_m}^{y_M} y f(y) dy$, $Var(y) = \int_{y_m}^{y_M} y^2 f(y) dy - (\int_{y_m}^{y_M} y f(y) dy)^2$. [Guiso et al. \(2002\)](#) provide a complete derivation of the triangular distribution when information on the support and probability mass is available.

¹²Alternatively, we calculated the estimates using a uniform distribution, obtaining similar results (see Figures 1 and 2).

CUADRO 3 Youths' expectations, all countries

	N	Mean	SD	Min	Max
Mean expected wage, secondary completed (log)	5,060	5.788	0.687	1	9
Mean expected wage, college completed (log)	5,060	6.672	0.822	1	10
Expected returns to college education	5,060	0.884	0.641	-4	5
Prob working in 10 years, secondary completed	5,060	0.708	0.242	0	1
Prob working in 10 years, college completed	5,060	0.868	0.172	0	1
Variance log expected wage, secondary completed	5,060	0.014	0.036	0	1
Variance log expected wage, college completed	5,060	0.020	0.045	0	1

Notes: The mean and variance of expected wages are estimated assuming a triangular distribution. Expected wages are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

Table 4 displays youths' future expectations conditional on their current level of education. It shows relevant differences between students whose maximum attainment is secondary education and those who hold a university degree. On average, youths with a university degree expect higher mean earnings for both educational scenarios. However, individuals with a secondary degree seem to have a slightly higher expected return to university education (89 percent *versus* 92 percent). At the same time, individuals with a secondary degree assign a slightly lower probability of finding a job in the future with a secondary degree and a somewhat higher likelihood of finding a job with a university degree, compared with youths who reached university education. Finally, the variance of the mean expected earnings does not seem to be significantly affected by the current level of education, as youths with secondary and university education show similar levels of uncertainty.

CUADRO 4 Youth's expectations by current education level, all countries

	Secondary completed			Tertiary completed		
	N	Mean	SD	N	Mean	SD
Mean expected wage secondary completed (log)	2,376	5.863	0.612	272	5.967	0.555
Mean expected wage college completed (log)	2,376	6.786	0.734	272	6.855	0.661
Expected returns to college education	2,376	0.923	0.606	272	0.888	0.561
Prob working in 10 years secondary completed	2,376	0.695	0.247	272	0.721	0.24
Prob working in 10 years college completed	2,376	0.871	0.164	272	0.866	0.17
Variance log expected wage secondary completed	2,376	0.013	0.028	272	0.012	0.031
Variance log expected wage college completed	2,376	0.022	0.049	272	0.02	0.032

Notes: The mean and variance of expected wages are estimated assuming a triangular distribution. Expected wages are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

Table 5 shows the results conditioning on mother's educational attainment. Youths whose mothers hold a secondary degree or more expect on average higher earnings. In addition, their expected returns for higher education are also higher. At the same time, there are significant differences in expected returns to university education. For instance, while youths whose mothers did not acquire any level of schooling expect a 77 percent return, those with mothers who hold a university degree expect more than a 100 percent return. However, the perceived probability of finding a job in the future does not increase monotonically with the mother's education level. Finally, individuals with less educated mothers display the lowest variance in the mean of expected earnings, which reflects that their low expectations seem widely shared among their peers.

CUADRO 5 Youth's future expectations by mother's education level

	Mother's education level - None			Mother's education level - Primary			Mother's education level - Secondary			Mother's education level - Tertiary		
	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
Mean expected wage secondary completed (log)	1,091	5.578	0.673	1,343	5.74	0.762	1,933	5.931	0.618	693	5.81	0.643
Mean expected wage university completed (log)	1,091	6.343	0.779	1,343	6.577	0.909	1,933	6.862	0.734	693	6.845	0.744
Expected returns to university education	1,091	0.765	0.668	1,343	0.837	0.642	1,933	0.93	0.601	693	1.034	0.664
Prob working in 10 years secondary completed	1,091	0.689	0.251	1,343	0.728	0.24	1,933	0.715	0.233	693	0.68	0.256
Prob working in 10 years university completed	1,091	0.851	0.195	1,343	0.874	0.168	1,933	0.873	0.159	693	0.869	0.172
Variance log expected wage secondary completed	1,091	0.014	0.042	1,343	0.013	0.031	1,933	0.014	0.034	693	0.018	0.036
Variance log expected wage university completed	1,091	0.016	0.044	1,343	0.018	0.043	1,933	0.02	0.041	693	0.03	0.059

Notes: The mean and variance of expected wages are estimated assuming a triangular distribution. Expected wages are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

Another possible source of heterogeneity closely related to the intergenerational transmission of inequalities is income. As in the case of the mother's educational attainment, the income analysis shows that the least advantaged children exhibit lower earnings expectations. Table 6 contains descriptive statistics for groups arranged by income tercile. Children belonging to lower-income levels have the lowest overall expectations: they expect lower earnings when acquiring both secondary and university education, lower returns to university, and lower probabilities of finding a job in the future.

CUADRO 6 Youth's future expectations by household income level

	Low income level households			Middle income level households			High income level households		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Mean expected wage secondary completed (log)	886	5.500	0.743	871	5.707	0.68	1,071	6.014	0.568
Mean expected wage university completed (log)	886	6.294	0.863	871	6.56	0.781	1,071	6.941	0.693
Expected returns to university education	886	0.794	0.69	871	0.853	0.666	1,071	0.927	0.608
Prob working in 10 years secondary completed	886	0.712	0.243	871	0.71	0.239	1,071	0.72	0.233
Prob working in 10 years university completed	886	0.856	0.195	871	0.88	0.151	1,071	0.879	0.159
Variance log expected wage secondary completed	886	0.015	0.034	871	0.015	0.039	1,071	0.013	0.026
Variance log expected wage university completed	886	0.016	0.034	871	0.02	0.045	1,071	0.021	0.044

Notes: The mean and variance of expected wages are derived assuming a triangular distribution. Expected wages are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

In section 4, we analyze whether these differences remain after controlling for youths' characteristics. The goal is to understand the role of household income and mothers' education as intergenerational inequality transmission channels through earnings expectations and educational decisions.

3 | METHODOLOGY

We follow [Attanasio and Kaufmann \(2014\)](#) and [Favara et al. \(2021\)](#) who model school enrollment as an investment decision that depends on expected returns and associated risks. We estimate linear regressions that associate enrollment decisions with expected returns to university education, the variance of expected earnings under different educational scenarios, the subjective probability of finding a job conditional on education, and a set of control variables including family background, socioeconomic characteristics, cognitive and non-cognitive skills, and country fixed effects. Formally, the main specification has the

following functional form:

$$S_i = \alpha + \beta \times \rho_i + \sum_{z=1}^2 \gamma_{zi} \times \text{Var}(\log Y_{zi}) + \sum_{z=1}^2 \delta_{zi} \times P_{zi}^W + X_i' \theta + \varepsilon_i \quad (1)$$

where S_i represents schooling decisions of individual i for both secondary and tertiary levels; $z = 1, 2$ corresponds to secondary and university education, respectively; and X is a vector containing covariates expected to affect enrollment decisions (e.g., youths' and their parents' characteristics). Expectations about returns to university education (relative to secondary) are denoted by ρ . We expect higher expectations on the returns to university to be positively associated with youths' decision to enroll in secondary and tertiary education. $\text{Var}(\log Y_z)$ corresponds to the variance of future expected earnings under different educational attainment scenarios and captures the possibility that the perceived educational investment risk affects enrollment decisions. Finally, P_z^W denotes the subjective probability of being employed under the different educational scenarios.

It is worth emphasizing that the interpretation of the estimated parameters needs caution given the setting of this paper (i.e., the cross-sectional nature of the dataset and the absence of an exogenous shock on expectations). That is, we cannot establish any causal relationship between youths' future expected returns to education and schooling choices. Even though we control for several covariates, including cognitive and non-cognitive skills, it could be the case that omitted variables or reverse causality play a role in the estimation of the effect of expectations on schooling decisions. Future work should aim at addressing these problems and estimating the causal effect of educational expectations on schooling decisions.

4 | RESULTS

4.1 | Main Results

This section presents four sets of results. First, it presents evidence about the association between individual and household characteristics and the expectations on the returns to university education. Second, it shows how the expected returns to university education is associated to enrollment into secondary and tertiary education. Third, it provides evidence about the heterogeneous association between expectations and school decisions across a set of individual and contextual variables. This evidence aims at motivating the discussion of potential mechanism through which expectation might affect schooling decisions. Finally, this section provides evidence about the additional role of parental expectations on schooling decisions in Mexico.

Table 7 shows the association between expectations on university returns and the set of individual, household, and country variables discussed above. The first column presents results for the whole sample, the second column for the subsample of youths who have not finished secondary education, and the last column for the subsample of youths who have completed secondary education. Overall, maternal education and household per capita income are positively correlated with youths' expectations. At the individual level, there is a positive association between youths' skills level (cognitive and non-cognitive) and expectations. In contrast, having children is negatively associated to expectations on university education. These results are aligned with previous evidence about the role of

socioeconomic conditions in the formation of expectations (Favara, 2017). More educated parents might provide youths with information about the labor market returns to education, through their direct or indirect (through their peers) working experience. Similarly, living in a relatively richer household might allow youths to access better quality goods and services affecting their expectations. Finally, having better skills might allow youths to be more optimistic about the expected returns to education.

CUADRO 7 Correlates of expectations, all countries

	Expectations college returns		
	All sample	Secondary education sample	Tertiary education sample
Mother's years of education	0.007** (0.003)	0.002 (0.004)	0.009** (0.004)
Monthly per capita income (log)	0.051*** (0.014)	0.039** (0.019)	0.067*** (0.021)
Mother is employed	0.026 (0.020)	0.011 (0.028)	0.033 (0.028)
Raised by both biological parents before age 5	-0.007 (0.021)	0.003 (0.030)	-0.001 (0.029)
Lives with father	0.015 (0.020)	0.019 (0.028)	0.030 (0.028)
Age	-0.002 (0.004)	-0.006 (0.006)	-0.010 (0.006)
Male	-0.006 (0.019)	0.018 (0.026)	-0.030 (0.026)
Employed	0.004 (0.020)	-0.037 (0.029)	-0.003 (0.025)
Has children	-0.114*** (0.043)	-0.078 (0.060)	-0.095* (0.054)
Teenage pregnancy	0.018 (0.042)	0.013 (0.055)	0.003 (0.054)
Has family care duties	0.013 (0.021)	0.018 (0.029)	-0.045 (0.030)
Number of household members aged 0-5	0.044** (0.020)	0.044 (0.028)	0.070** (0.034)
Number of household members over 65 years old	-0.023 (0.019)	-0.017 (0.030)	0.003 (0.026)
Numeracy skills (z-score)	0.039*** (0.009)	0.025* (0.013)	0.054*** (0.013)
Core self-evaluation Index (z-score)	0.050*** (0.017)	0.067*** (0.024)	0.056** (0.024)
Grit average score (z-score)	0.024*** (0.009)	0.023* (0.013)	0.010 (0.013)
Constant	0.589*** (0.092)	0.760*** (0.138)	0.646*** (0.152)
Observations	5,060	2,828	2,403
R-squared	0.058	0.045	0.070
Country FE	Yes	Yes	Yes
Mean of Dependent Variable	0.884	0.862	0.922

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variable: *Expectations to university returns*. Country FE: *Brazil, Colombia, El Salvador, Haiti, Mexico, Paraguay*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

Regarding the role of expectations on schooling decisions, Table 8 shows that expected returns to university education and earnings risk are strongly associated to the probability

of being enrolled in tertiary education. Interestingly, these variables are not relevant for the probability of being enrolled in secondary education, which might be explained by the large enrollment rate in secondary education among youths in the sample (94 percent).

CUADRO 8 Outcomes regression analysis - enrollment, all countries

	Secondary enrollment	Tertiary enrollment
Expected returns to college education	0.007 (0.006)	0.043*** (0.016)
Variance log expected wage secondary completed	0.019 (0.119)	
Variance log expected wage college completed	0.076 (0.079)	0.516*** (0.154)
Mother's years of education	0.006*** (0.001)	0.017*** (0.003)
Monthly per capita income (log)	0.015** (0.007)	0.077*** (0.014)
Mother is employed	0.025** (0.011)	0.028 (0.021)
Age	0.009*** (0.002)	0.052*** (0.005)
Male	-0.015* (0.009)	-0.071*** (0.019)
Numeracy skills (z-score)	0.007 (0.005)	0.034*** (0.010)
Core self-evaluation Index (z-score)	0.014* (0.008)	0.045*** (0.017)
Constant	0.550*** (0.066)	-1.080*** (0.118)
Observations	2,828	2,403
R-squared	0.074	0.198
Country FE	Yes	Yes
Subjective probability of being employed	Yes	Yes
Family background	Yes	Yes
Socioeconomic characteristics	Yes	Yes
Cognitive and non-cognitive skills	Yes	Yes
Mean of Dependent Variable	0.942	0.587

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Mexico, Paraguay*. Family background: *raised by both biological parents before age 5, lives with father*. Socioeconomic characteristics: *employed, has children, teenage pregnancy, has family care duties, number of household members aged 0-5, number of household members over 65 years old*. Cognitive and non-cognitive skills: *numeracy skills (z-score), core self-evaluation index (z-score), Grit average score (z-score)*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

4.2 | Heterogeneity Analysis

We now explore whether the role of expectations on schooling decisions varies across different subgroups. This evidence motivates the discussion on potential mechanisms through which expectations might affect schooling decisions. Thus, Table 9 starts presenting the results by gender. Overall, we find that the role of expectations of schooling decisions is similar for boys and girls. While for girls, expected returns are not associated with secondary or tertiary education enrollment, for boys, a marginal increase in the expected returns to university education is significantly associated with a 5.8 p.p. increase in the probability of being enrolled in tertiary education.

In addition, opportunity costs and information about the labor market might differ by individuals' age. To account for this, the second set of results in Table 9 shows that the role of expected returns does not vary among younger (aged 15-18) and older (aged 19-22) individuals. We find no evidence of a differential effect. However, we find that expected returns to university education are positively and significantly associated with tertiary education enrollment for the older sample. Similarly, a marginal increase in the expected returns to tertiary education is related to an increase in 1.2 p.p. in the probability of being enrolled in secondary education for the younger sample.

The effect of expected returns might also vary by the youth's skills level. For instance, youths knowing their own skills or where they stand in the population distribution might better estimate the returns to education. The third set of results of Table 9 does not show any difference in this regard. However, we find qualitative evidence that the role of expectations on tertiary education enrollment is larger for youths with better numeracy skills (4.8 p.p.) than for those with lower skills (3.9 p.p.).

The role of expected returns might also vary by the level of self-perception of youths. For instance, those with a high self-perception might consider that the population expected return does not match the returns that they might get, which could make this variable irrelevant for their schooling decision. The last set of results in Table 9 shows whether the role of expected returns varies among those with lower (below the median) and higher (above the median) levels of self-esteem. We find that the effect of expected returns to university education on the probability of being enrolled in secondary education is lower for youths with high self-esteem than for those with low self-esteem.

CUADRO 9 Heterogeneity Analysis - Youth's characteristics

	Male		Age 15-18		Numeracy score 100 %		Self-esteem above median	
	Secondary	Tertiary	Secondary	Tertiary	Secondary	Tertiary	Secondary	Tertiary
Expected returns to university education	-0.002 (0.008)	0.028 (0.021)	-0.007 (0.011)	0.049*** (0.018)	0.002 (0.009)	0.039* (0.023)	0.020** (0.010)	0.059*** (0.021)
Heterogeneity variable	-0.029** (0.015)	-0.100*** (0.035)	-0.024 (0.021)	-0.097** (0.048)	-0.018 (0.022)	-0.123** (0.056)	0.046*** (0.015)	0.094*** (0.035)
Exp returns to university X Heterogeneity variable	0.016 (0.012)	0.031 (0.030)	0.019 (0.013)	-0.037 (0.037)	0.010 (0.012)	0.009 (0.031)	-0.028** (0.012)	-0.039 (0.030)
Variance log expected wage secondary completed	0.018 (0.119)		0.029 (0.119)		0.019 (0.120)		0.018 (0.119)	
Variance log expected wage university completed	0.080 (0.080)	0.517*** (0.154)	0.075 (0.080)	0.507*** (0.155)	0.077 (0.079)	0.515*** (0.158)	0.081 (0.080)	0.521*** (0.157)
Constant	0.555*** (0.067)	-1.070*** (0.119)	0.587*** (0.090)	-0.705*** (0.152)	0.558*** (0.066)	-1.026*** (0.121)	0.541*** (0.067)	-1.073*** (0.119)
Observations	2,828	2,403	2,828	2,403	2,828	2,403	2,828	2,403
R-squared	0.074	0.198	0.075	0.204	0.074	0.200	0.077	0.201
Subjective probability of being employed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Family background	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Socioeconomic characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cognitive and non-cognitive skills	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.942	0.587	0.942	0.587	0.942	0.587	0.942	0.587
Coefficient heterogeneity variable	0.014	0.058**	0.012*	0.012	0.012	0.048**	-0.008	0.020
SE	(0.009)	(0.023)	(0.007)	(0.033)	(0.008)	(0.021)	(0.008)	(0.022)

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Mexico, Paraguay*. Family background: *mother's years of education, monthly per capita income (log), mother is employed, raised by both biological parents before age 5, lives with father*. Socioeconomic characteristics: *age, employed, has children, teenage pregnancy, has family care duties, number of household members aged 0-5, number of household members over 65 years old*. Cognitive and non-cognitive skills: *numeracy skills (z-score), core self-evaluation index (z-score), Grit average score (z-score)*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

Table 10 explores additional differential effects related to household's characteristics. The first set of results shows no sign of a differential effect of expected returns on enrollment between youths whose mothers have low (less than completed secondary) or high (at least secondary) educational levels. Regarding household income, although we do not find any differential effect between those below and above the median per capita income, we find that expected returns are particularly important for determining school enrollment for those living in richer households. Finally, Table 10 shows that youths do not behave differently if their mothers work or not. However, we find that the expected returns to university education are significantly important for the probability of being enrolled in tertiary education for youths whose mothers work. Overall, results from Table 10 suggest that maternal education and working status, and household income might contribute to the formation of expectations and the schooling decision, particularly in tertiary education.

CUADRO 10 Heterogeneity Analysis - Youth's environment

	Mothers education					
	level above secondary		Income above median		Employed mother	
	Secondary	Tertiary	Secondary	Tertiary	Secondary	Tertiary
Expected returns to university education	0.004 (0.010)	0.037 (0.025)	0.002 (0.010)	0.026 (0.022)	0.000 (0.013)	0.012 (0.030)
Heterogeneity variable	0.001 (0.017)	0.042 (0.042)	-0.013 (0.017)	-0.063 (0.042)	0.017 (0.017)	-0.011 (0.038)
Exp returns to university X Heterogeneity variable	0.004 (0.012)	0.010 (0.031)	0.011 (0.012)	0.036 (0.031)	0.009 (0.015)	0.043 (0.034)
Variance log expected wage secondary completed	0.020 (0.119)		0.020 (0.121)		0.018 (0.119)	
Variance log expected wage university completed	0.073 (0.082)	0.516*** (0.155)	0.075 (0.080)	0.493*** (0.151)	0.079 (0.079)	0.513*** (0.154)
Constant	0.554*** (0.067)	-1.058*** (0.120)	0.548*** (0.070)	-1.113*** (0.129)	0.556*** (0.066)	-1.055*** (0.120)
Observations	2,828	2,403	2,828	2,403	2,828	2,403
R-squared	0.074	0.199	0.074	0.199	0.074	0.199
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Family background	Yes	Yes	Yes	Yes	Yes	Yes
Socioeconomic characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Cognitive and non-cognitive skills	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.942	0.587	0.942	0.587	0.942	0.587
Coefficient heterogeneity variable	0.009	0.047**	0.013*	0.062***	0.009	0.055***
SE	(0.007)	(0.020)	(0.007)	(0.022)	(0.007)	(0.018)

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Mexico, Paraguay*. Family background: *mother's years of education, monthly per capita income (log), mother is employed, raised by both biological parents before age 5, lives with father*. Socioeconomic characteristics: *age, employed, has children, teenage pregnancy, has family care duties, number of household members aged 0-5, number of household members over 65 years old*. Cognitive and non-cognitive skills: *numeracy skills (z-score), core self-evaluation index (z-score), Grit average score (z-score)*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

4.3 | Main results Mexico

As discussed above, the sample of Mexico contains more information about parental characteristics than the sample for the other countries in the Millennials in LAC study. Table 11 shows some evidence of a positive correlation between the parental expectations about their offspring and youths' expectations about the returns to university.

CUADRO 11 Correlates of expectations, Mexico

	Expectations university returns		
	All sample	Secondary education sample	Tertiary education sample
Mother's years of education	0.009 (0.007)	0.012 (0.009)	-0.007 (0.016)
Monthly per capita income (log)	0.049 (0.035)	0.019 (0.043)	0.160** (0.077)
Mother is employed	-0.080 (0.092)	0.017 (0.096)	-0.233 (0.219)
Raised by both biological parents before age 5	-0.172*** (0.061)	-0.180** (0.081)	-0.006 (0.125)
Lives with father	0.106* (0.057)	0.078 (0.075)	0.046 (0.111)
Age	-0.003 (0.009)	0.002 (0.014)	-0.025 (0.020)
Male	0.115** (0.051)	0.186*** (0.060)	0.017 (0.098)
Employed	0.044 (0.051)	0.046 (0.067)	0.084 (0.092)
Has children	-0.004 (0.090)	0.029 (0.158)	0.229 (0.180)
Teenage pregnancy	-0.081 (0.084)	-0.083 (0.135)	-0.133 (0.155)
Has family care duties	-0.063 (0.051)	-0.060 (0.061)	-0.163* (0.095)
Number of household members aged 0-5	0.010 (0.044)	0.038 (0.072)	0.094 (0.156)
Number of household members over 65 years old	-0.002 (0.077)	0.036 (0.138)	0.105 (0.137)
Numeracy skills (z-score)	0.012 (0.027)	-0.012 (0.035)	0.030 (0.049)
Core self-evaluation Index (z-score)	0.125** (0.053)	0.099 (0.067)	0.219** (0.089)
Grit average score (z-score)	0.044 (0.033)	0.048 (0.040)	0.048 (0.066)
Difference main caregiver's expectations for offspring and current socio-economic level	0.036* (0.021)	0.030 (0.028)	-0.038 (0.056)
Main caregiver's socio-economic level (1-10)	0.015 (0.023)	0.008 (0.031)	-0.057 (0.059)
Main caregiver lived in the urban area at 14	0.028 (0.050)	0.043 (0.059)	-0.010 (0.101)
Constant	0.448* (0.249)	0.421 (0.302)	1.314** (0.646)
Observations	696	459	231
R-squared	0.082	0.082	0.122
Mean of Dependent Variable	0.837	0.836	0.927

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variable: *Expectations to university returns*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average).

Table 12 shows that youths' expected returns to university education are associated with the probability of being enrolled in secondary education but not in tertiary education. Interestingly, we find that parental expectations for their offspring positively and significantly correlate with being enrolled in tertiary education.

CUADRO 12 Outcomes regression analysis - enrollment, Mexico

	Secondary enrollment	Tertiary enrollment
Expected returns to college education	0.049** (0.021)	0.016 (0.054)
Variance logarithm expected wage secondary completed	0.403** (0.192)	
Variance logarithm expected wage college completed	0.283** (0.130)	-0.637 (1.024)
Difference main caregiver's expectations for offspring and current socio-economic level	-0.002 (0.011)	0.119*** (0.034)
Main caregiver's socio-economic level (1-10)	0.001 (0.011)	0.070** (0.035)
Main caregiver lived in the urban area at 14	-0.020 (0.027)	-0.120* (0.068)
Mother's years of education	-0.000 (0.004)	0.031*** (0.009)
Monthly per capita income (log)	0.047** (0.021)	0.071 (0.054)
Mother is employed	0.114* (0.066)	0.127 (0.128)
Age	0.015** (0.006)	0.027* (0.015)
Male	-0.038 (0.023)	0.095 (0.068)
Numeracy skills (z-score)	-0.023 (0.014)	0.015 (0.040)
Core self-evaluation Index (z-score)	0.025 (0.022)	0.030 (0.066)
Constant	0.171 (0.218)	-1.205** (0.546)
Observations	459	231
R-squared	0.214	0.247
Family background	Yes	Yes
Socioeconomic characteristics	Yes	Yes
Cognitive and non-cognitive skills	Yes	Yes
Mean of Dependent Variable	0.942	0.587

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Family background: *raised by both biological parents before age 5, lives with father*. Socioeconomic characteristics: *employed, has children, teenage pregnancy, has family care duties, number of household members aged 0-5, number of household members over 65 years old*. Cognitive and non-cognitive skills: *numeracy skills (z-score), core self-evaluation index (z-score), Grit average score (z-score)*. Expected returns to university education are derived assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average).

4.4 | Heterogeneity Analysis, Mexico

As with the other countries in the study, Tables 13 and 14 show whether the effect of expected returns vary across different subsamples of interest. In this case, however, specifications include additional information about parents, particularly expectations for their offspring. Overall, we do not find evidence of expected returns affecting the school decisions of boys and girls, older and younger youths, or youths' skills level differently.

CUADRO 13 Heterogeneity Analysis - Youth's characteristics, Mexico

	Male		Age 15-18		Numeracy score 100%		Self-esteem above median	
	Secondary	Tertiary	Secondary	Tertiary	Secondary	Tertiary	Secondary	Tertiary
	Expected returns to university education	0.051 (0.037)	0.039 (0.070)	0.000 (0.048)	-0.013 (0.062)	0.040** (0.020)	-0.043 (0.074)	0.068** (0.029)
Heterogeneity variable	-0.035 (0.046)	0.150 (0.124)	-0.031 (0.060)	-0.385** (0.160)	-0.116* (0.064)	-0.385** (0.167)	0.069 (0.046)	-0.192 (0.155)
Exp returns to university X Heterogeneity variable	-0.004 (0.045)	-0.058 (0.107)	0.062 (0.054)	0.103 (0.136)	0.024 (0.052)	0.160 (0.102)	-0.049 (0.041)	0.121 (0.104)
Variance log expected wage secondary completed	0.404** (0.195)		0.420** (0.201)		0.393* (0.209)		0.385* (0.200)	
Variance log expected wage university completed	0.286** (0.132)	-0.580 (1.021)	0.303** (0.147)	-0.931 (1.078)	0.291** (0.142)	-0.691 (0.842)	0.255* (0.140)	-0.584 (0.916)
Difference main caregiver's expectations for offspring and current socio-economic level	-0.003 (0.011)	0.120*** (0.034)	-0.003 (0.011)	0.103*** (0.036)	-0.004 (0.011)	0.119*** (0.033)	-0.003 (0.011)	0.124*** (0.034)
Main caregiver's socio-economic level (1-10)	0.001 (0.011)	0.072** (0.036)	0.001 (0.011)	0.061* (0.036)	-0.000 (0.011)	0.074** (0.034)	0.001 (0.011)	0.073** (0.036)
Main caregiver lived in the urban area at 14	-0.020 (0.027)	-0.123* (0.069)	-0.021 (0.027)	-0.103 (0.069)	-0.019 (0.026)	-0.110 (0.068)	-0.020 (0.027)	-0.124* (0.069)
Constant	0.170 (0.221)	-1.192** (0.548)	0.137 (0.301)	-0.179 (0.667)	0.248 (0.215)	-0.967* (0.552)	0.155 (0.220)	-1.147** (0.555)
Observations	459 0.214	231 0.248	459 0.218	231 0.279	459 0.222	231 0.267	459 0.218	231 0.254
Family background	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Socioeconomic characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cognitive and non-cognitive skills	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.919	0.503	0.919	0.503	0.919	0.503	0.919	0.503
Coefficient heterogeneous variable	0.047* (0.025)	-0.019 (0.083)	0.063*** (0.024)	0.090 (0.122)	0.064 (0.046)	0.117* (0.069)	0.019 (0.029)	0.094 (0.078)

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Family background: *mother's years of education, monthly per capita income (log), mother is employed, raised by both biological parents before age 5, lives with father*. Socioeconomic characteristics: *age, employed, has children, teenage pregnancy, has family care duties, number of household members aged 0-5, number of household members over 65 years old*. Cognitive and non-cognitive skills: *numeracy skills (z-score), core self-evaluation index (z-score), Grit average score (z-score)*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average).

As for the general sample, we find that, even after controlling for parental expectations, the expected returns to university are more critical for enrollment in tertiary education for youths living in wealthier households than for youths living in poorer households.

CUADRO 14 Heterogeneity analysis - Youth's environment, Mexico

	Mothers' education					
	level above secondary		Income above median		Employed mother	
	Secondary	Tertiary	Secondary	Tertiary	Secondary	Tertiary
Expected returns to university education	0.024 (0.025)	0.018 (0.073)	0.043 (0.028)	-0.051 (0.069)	0.207 (0.133)	-0.078 (0.224)
Heterogeneity variable	-0.090 (0.066)	0.007 (0.146)	-0.129** (0.053)	-0.240 (0.147)	0.250 (0.153)	0.019 (0.284)
Exp returns to university X Heterogeneity variable	0.087* (0.049)	-0.006 (0.107)	0.012 (0.041)	0.216** (0.094)	-0.168 (0.133)	0.104 (0.231)
Variance logarithm expected wage secondary completed	0.375** (0.187)		0.327* (0.198)		0.372* (0.194)	
Variance logarithm expected wage university completed	0.296** (0.131)	-0.633 (1.032)	0.374*** (0.142)	-0.650 (1.039)	0.302** (0.128)	-0.599 (1.029)
Difference main caregiver's expectations for offspring and current socio-economic level	-0.003 (0.011)	0.119*** (0.034)	-0.004 (0.011)	0.115*** (0.034)	-0.004 (0.011)	0.123*** (0.035)
Main caregiver's socio-economic level (1-10)	0.000 (0.011)	0.071** (0.035)	-0.002 (0.011)	0.065* (0.035)	0.000 (0.011)	0.075** (0.036)
Main caregiver lived in the urban area at 14	-0.020 (0.027)	-0.120* (0.069)	-0.030 (0.026)	-0.112 (0.068)	-0.021 (0.027)	-0.125* (0.068)
Constant	0.185 (0.223)	-1.210** (0.564)	0.037 (0.226)	-1.157** (0.566)	0.058 (0.257)	-1.115* (0.592)
Observations	459	231	459	231	459	231
R-squared	0.222	0.247	0.232	0.262	0.222	0.248
Family background	Yes	Yes	Yes	Yes	Yes	Yes
Socioeconomic characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Cognitive and non-cognitive skills	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.919	0.503	0.919	0.503	0.919	0.503
Coefficient heterogeneous variable	0.111***	0.012	0.056*	0.165***	0.039*	0.027
SE	(0.043)	(0.080)	(0.030)	(0.062)	(0.020)	(0.056)

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Family background: *mother's years of education, monthly per capita income (log), mother is employed, raised by both biological parents before age 5, lives with father*. Socioeconomic characteristics: *age, employed, has children, teenage pregnancy, has family care duties, number of household members aged 0-5, number of household members over 65 years old*. Cognitive and non-cognitive skills: *numeracy skills (z-score), core self-evaluation index (z-score), Grit average score (z-score)*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average).

5 | CONCLUSIONS

The decision to invest in human capital requires having access and capacity to process several resources and information, which, in turn, vary among individuals, households, and countries. This paper focuses on understanding the role of expected returns to education in determining schooling decisions.

We find evidence that expected returns matter at determining education enrollment, particularly in tertiary education. However, we also find that expected returns are heterogeneous. They are associated with an individual (e.g., having children, skills level), parental (e.g., education, working status, expectations about their offspring), and household (e.g., income level) characteristics.

From a policy perspective, all individuals should have access to the same set of information and no inequalities in the access to information that could lead to inefficient

human capital decisions. This paper contributes to the identification of potential areas of intervention for providing youths with accurate information about the returns to education. Designing and implementing interventions in these areas is expected to favorably impact resources for youths, households, and societies and maximize the potential impact of education on productivity and wellbeing.

ACKNOWLEDGEMENTS

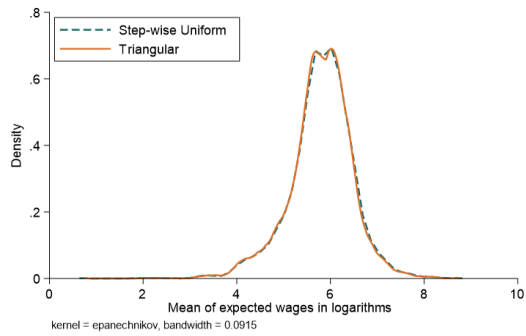
We are especially grateful to Marcelo Gantier for outstanding research assistance. We would also like to thank Ricardo Estrada and CAF seminar participants for comments and suggestions. We acknowledge financial support from CAF.

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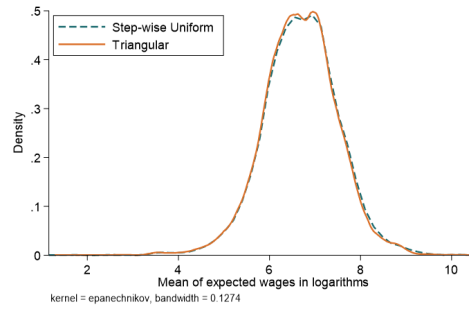
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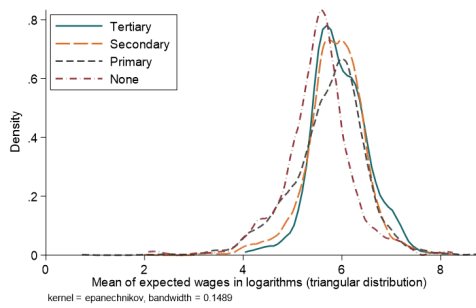
A | OTHER TABLES AND FIGURES



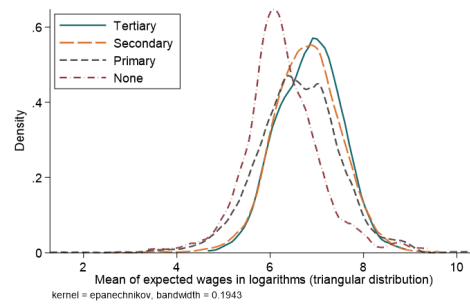
(a) Secondary Completed



(b) Tertiary Completed



(c) Secondary completed, by current ed. level



(d) Tertiary completed, by current ed. level

FIGURA A.1 Distribution mean expected earnings under different educational scenarios

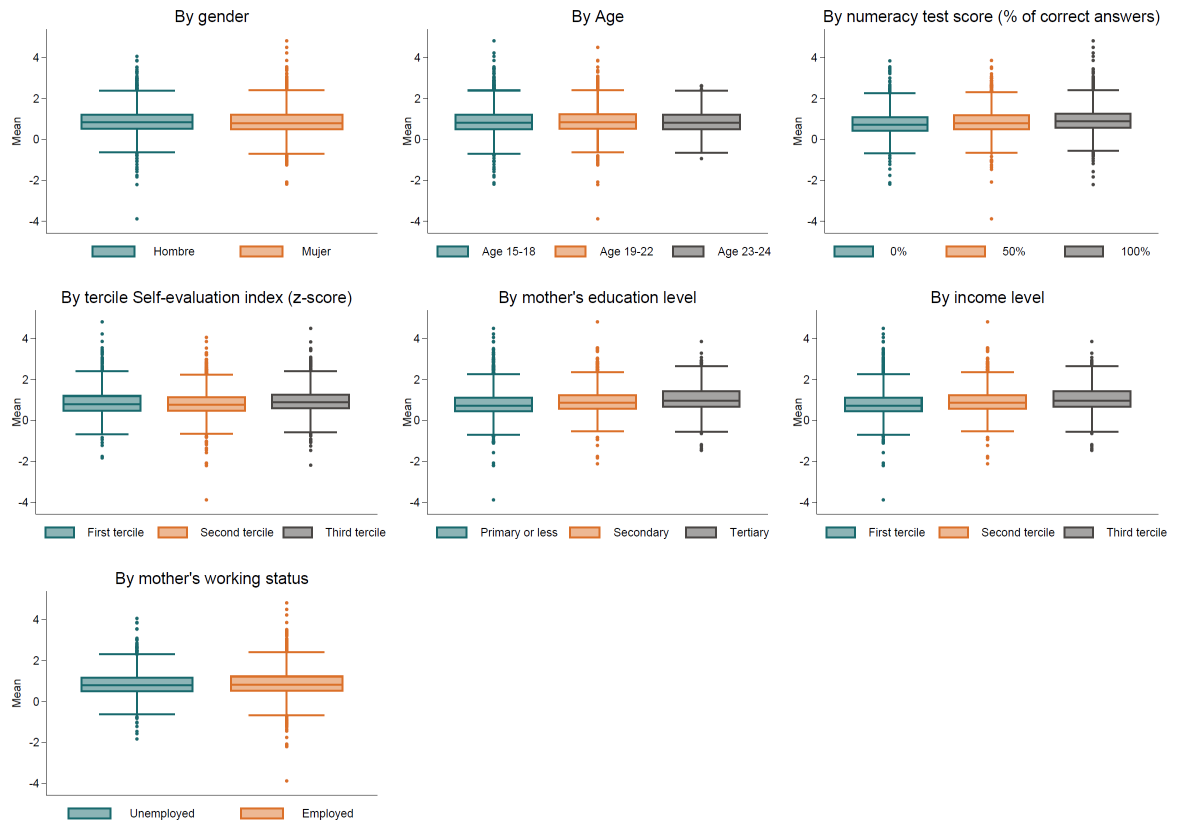


FIGURA A.2 Expected returns to University

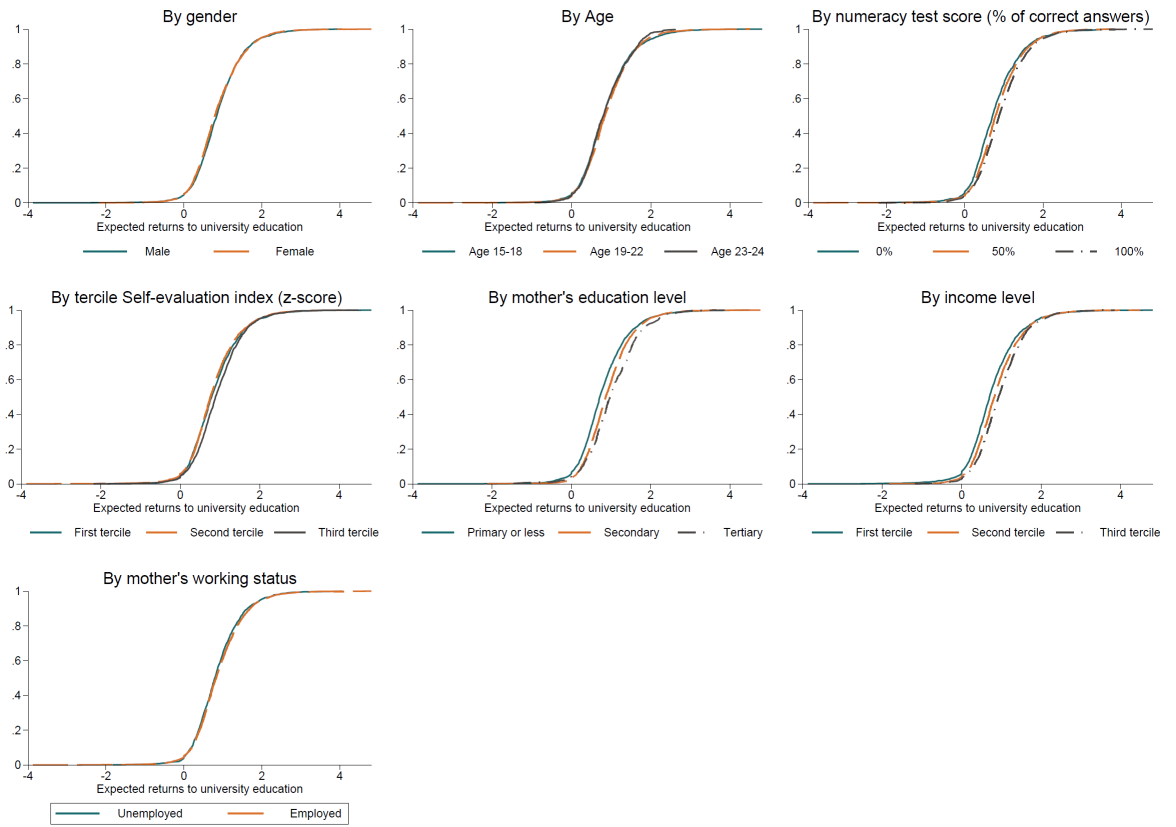


FIGURA A.3 Expected returns to University

CUADRO A.1 Mean difference test: Millennials sample vs final sub-sample

	Not in sub-sample	sub-sample	Mean1	Mean2	diff	SE	p-value
Level of education							
None	7386	5060	.11	.052	.059	.005	0
Primary	7386	5060	.446	.425	.021	.009	.025
Secondary	7386	5060	.402	.47	-.068	.009	0
Tertiary	7386	5060	.043	.054	-.011	.004	.005
Age	7390	5060	19.495	18.939	.556	.051	0
Male	7390	5060	.432	.497	-.065	.009	0
Monthly per capita income	6325	5060	140.604	158.299	-17.695	2.926	0
Employed	7380	5060	.314	.316	-.003	.009	.783
Has children	7314	5060	.278	.247	.03	.008	0
Teenage pregnancy	7392	5060	.164	.08	.084	.006	0
Has family care duties	7261	5060	.438	.379	.059	.009	0
Number of household members aged 0-5	7390	5060	.356	.238	.119	.011	0
Number of household members over 65 years old	7390	5060	.225	.175	.051	.009	0
Mother's years of education	3099	5060	9.377	10.285	-.908	.088	0
Mother is employed	3462	5060	.673	.716	-.042	.01	0
Raised by both biological parents before age 5	6924	5060	.477	.564	-.087	.009	0
Raised by biological mother before age 5	7240	5060	.832	.938	-.106	.006	0
Raised by biological father before age 5	6944	5060	.521	.578	-.057	.009	0
Lives with father	7390	5060	.335	.566	-.231	.009	0
Lives with mother	7390	5060	.476	1	-.524	.007	0
Numeracy skills (z-score)	5731	5060	-.073	.083	-.155	.019	0
Core self-evaluation Index (z-score)	6289	5060	.067	-.084	.15	.019	0
Grit average score (z-score)	6466	5060	-.031	.04	-.071	.019	0
Brazil	7392	5060	.17	.047	.122	.006	0
Chile	7392	5060	.223	.379	-.157	.008	0
Colombia	7392	5060	.087	.17	-.084	.006	0
El Salvador	7392	5060	.142	.078	.064	.006	0
Haiti	7392	5060	.087	.044	.043	.005	0
Mexico	7392	5060	.165	.167	-.002	.007	.759
Paraguay	7392	5060	.129	.116	.013	.006	.034

Notes: The mean test compares the selected sub-sample of 5,060 youths with the remaining observations for each characteristic.

CUADRO A.2 Outcomes regression analysis - secondary enrollment, all countries

	Secondary enrollment			
Expected returns to college education	0.011*	0.009	0.008	0.007
	(0.006)	(0.006)	(0.006)	(0.006)
Variance logarithm expected wage secondary completed	-0.005	-0.014	0.014	0.019
	(0.114)	(0.119)	(0.121)	(0.119)
Variance logarithm expected wage college completed	0.096	0.052	0.065	0.076
	(0.081)	(0.081)	(0.079)	(0.079)
Prob working in 10 years secondary completed	0.018	0.020	0.024	0.024
	(0.018)	(0.018)	(0.018)	(0.018)
Prob working in 10 years college completed	0.044	0.036	0.042	0.040
	(0.030)	(0.030)	(0.030)	(0.030)
Mother's years of education		0.006***	0.006***	0.006***
		(0.001)	(0.001)	(0.001)
Monthly per capita income (log)		0.017**	0.016**	0.015**
		(0.006)	(0.007)	(0.007)
Mother is employed		0.022**	0.025**	0.025**
		(0.011)	(0.011)	(0.011)
Raised by both biological parents before age 5		0.014	0.017*	0.017*
		(0.010)	(0.010)	(0.010)
Lives with father		0.019**	0.017*	0.016*
		(0.009)	(0.009)	(0.009)
Age			0.010***	0.009***
			(0.002)	(0.002)
Male			-0.014	-0.015*
			(0.009)	(0.009)
Employed			-0.003	-0.004
			(0.011)	(0.011)
Has children			-0.113***	-0.114***
			(0.031)	(0.031)
Teenage pregnancy			-0.040*	-0.036
			(0.024)	(0.024)
Has family care duties			0.002	0.003
			(0.010)	(0.010)
Number of household members aged 0-5			0.011	0.011
			(0.010)	(0.010)
Number of household members over 65 years old			0.019**	0.018**
			(0.009)	(0.009)
Numeracy skills (z-score)				0.007
				(0.005)
Core self-evaluation Index (z-score)				0.014*
				(0.008)
Grit average score (z-score)				0.007
				(0.004)
Constant	0.887***	0.714***	0.547***	0.550***
	(0.030)	(0.044)	(0.065)	(0.066)
Observations	2,828	2,828	2,828	2,828
R-squared	0.030	0.049	0.070	0.074
Country FE	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.942	0.942	0.942	0.942

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary enrollment*. Secondary enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary education conditional on having completed primary education and zero if youths completed primary and are yet not enrolled in secondary education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Mexico, Paraguay*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

CUADRO A.3 Outcomes regression analysis - tertiary enrollment, all countries

	Tertiary enrollment			
Expected returns to college education	0.081*** (0.017)	0.054*** (0.017)	0.052*** (0.016)	0.043*** (0.016)
Variance logarithm expected wage college completed	0.600*** (0.188)	0.425** (0.175)	0.450*** (0.156)	0.516*** (0.154)
Prob working in 10 years college completed	-0.081 (0.062)	-0.067 (0.058)	-0.019 (0.057)	-0.028 (0.056)
Mother's years of education		0.017*** (0.003)	0.017*** (0.003)	0.017*** (0.003)
Monthly per capita income (log)		0.108*** (0.013)	0.083*** (0.014)	0.077*** (0.014)
Mother is employed		0.018 (0.022)	0.026 (0.021)	0.028 (0.021)
Raised by both biological parents before age 5		0.007 (0.022)	0.010 (0.022)	0.005 (0.022)
Lives with father		0.073*** (0.022)	0.069*** (0.021)	0.073*** (0.021)
Age			0.053*** (0.005)	0.052*** (0.005)
Male			-0.068*** (0.019)	-0.071*** (0.019)
Employed			-0.065*** (0.019)	-0.072*** (0.019)
Has children			-0.253*** (0.047)	-0.257*** (0.047)
Teenage pregnancy			-0.067 (0.042)	-0.059 (0.042)
Has family care duties			-0.031 (0.022)	-0.029 (0.022)
Number of household members aged 0-5			-0.000 (0.024)	0.008 (0.024)
Number of household members over 65 years old			0.052*** (0.020)	0.052*** (0.020)
Numeracy skills (z-score)				0.034*** (0.010)
Core self-evaluation Index (z-score)				0.045*** (0.017)
Grit average score (z-score)				0.036*** (0.009)
Constant	0.620*** (0.057)	-0.185** (0.083)	-1.098*** (0.118)	-1.080*** (0.118)
Observations	2,403	2,403	2,403	2,403
R-squared	0.050	0.117	0.184	0.198
Country FE	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.587	0.587	0.587	0.587

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Tertiary enrollment*. Tertiary enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished tertiary education conditional on having completed secondary education and zero if youths completed secondary and are yet not enrolled in tertiary education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Mexico, Paraguay*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

CUADRO A.4 Outcomes regression analysis by gender, all countries

	Secondary enrollment		Tertiary enrollment	
	Male	Female	Male	Female
Expected returns to college education	0.013 (0.009)	-0.001 (0.008)	0.063*** (0.023)	0.025 (0.022)
Variance logarithm expected wage secondary completed	-0.010 (0.152)	0.003 (0.190)		
Variance logarithm expected wage college completed	0.010 (0.133)	0.159 (0.101)	0.474** (0.231)	0.507** (0.197)
Prob working in 10 years secondary completed	-0.003 (0.022)	0.045 (0.030)		
Prob working in 10 years college completed	0.047 (0.047)	0.031 (0.038)	-0.039 (0.081)	-0.036 (0.078)
Mother's years of education	0.005*** (0.002)	0.007*** (0.002)	0.020*** (0.004)	0.015*** (0.004)
Monthly per capita income (log)	0.021** (0.010)	0.010 (0.010)	0.066*** (0.020)	0.089*** (0.019)
Mother is employed	0.017 (0.016)	0.028* (0.015)	0.016 (0.031)	0.034 (0.029)
Raised by both biological parents before age 5	0.017 (0.013)	0.016 (0.015)	-0.037 (0.032)	0.037 (0.030)
Lives with father	0.000 (0.013)	0.031** (0.014)	0.080** (0.031)	0.064** (0.029)
Age	0.007** (0.003)	0.012*** (0.004)	0.048*** (0.007)	0.055*** (0.006)
Employed	-0.015 (0.016)	0.016 (0.016)	-0.114*** (0.029)	-0.023 (0.027)
Has children	-0.149** (0.064)	-0.114*** (0.039)	-0.289*** (0.083)	-0.217*** (0.058)
Teenage pregnancy	-0.046 (0.039)	-0.033 (0.032)	-0.021 (0.078)	-0.070 (0.050)
Has family care duties	0.012 (0.014)	-0.005 (0.014)	-0.044 (0.033)	-0.019 (0.031)
Number of household members aged 0-5	-0.006 (0.015)	0.018 (0.013)	0.055 (0.044)	-0.022 (0.030)
Number of household members over 65 years old	0.008 (0.015)	0.029*** (0.010)	0.053* (0.028)	0.046 (0.029)
Numeracy skills (z-score)	0.014** (0.007)	0.004 (0.007)	0.034** (0.016)	0.034*** (0.013)
Core self-evaluation Index (z-score)	0.005 (0.013)	0.023** (0.011)	0.029 (0.024)	0.060*** (0.023)
Grit average score (z-score)	0.003 (0.006)	0.010 (0.006)	0.026* (0.014)	0.042*** (0.012)
Constant	0.602*** (0.092)	0.501*** (0.099)	-0.987*** (0.177)	-1.215*** (0.160)
Observations	1,428	1,400	1,180	1,223
R-squared	0.077	0.085	0.174	0.250
Country FE	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.944	0.940	0.575	0.599

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Mexico, Paraguay*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

CUADRO A.5 Outcomes regression analysis by age group, all countries

	Secondary enrollment			Tertiary enrollment		
	Age 15-18	Age 19-22	Age 23-24	Age 15-18	Age 19-22	Age 23-24
Expected returns to college education	0.009 (0.008)	0.012 (0.012)	-0.046 (0.038)	-0.005 (0.037)	0.048** (0.021)	0.040 (0.037)
Variance logarithm expected wage secondary completed	-0.020 (0.149)	0.190 (0.194)	0.529 (0.627)			
Variance logarithm expected wage college completed	0.048 (0.090)	-0.040 (0.244)	0.760* (0.400)	0.180 (0.548)	0.476*** (0.173)	0.888* (0.508)
Prob working in 10 years secondary completed	0.021 (0.024)	0.042 (0.033)	-0.112 (0.076)			
Prob working in 10 years college completed	0.064 (0.040)	-0.019 (0.046)	0.122 (0.120)	0.004 (0.141)	-0.036 (0.076)	-0.048 (0.113)
Mother's years of education	0.006*** (0.002)	0.004** (0.002)	0.013* (0.008)	0.011* (0.006)	0.018*** (0.004)	0.019*** (0.006)
Monthly per capita income (log)	0.016** (0.008)	0.020 (0.012)	-0.003 (0.032)	0.017 (0.031)	0.087*** (0.017)	0.129*** (0.033)
Mother is employed	0.025* (0.013)	0.028 (0.019)	-0.025 (0.052)	0.039 (0.051)	0.023 (0.028)	0.013 (0.043)
Raised by both biological parents before age 5	0.018 (0.012)	0.019 (0.017)	-0.021 (0.061)	0.014 (0.053)	0.022 (0.028)	-0.077* (0.046)
Lives with father	0.026** (0.012)	-0.013 (0.016)	0.014 (0.057)	0.059 (0.050)	0.074*** (0.028)	0.095** (0.046)
Age	0.023*** (0.005)	-0.008 (0.008)	-0.052 (0.043)	0.105*** (0.024)	0.060*** (0.011)	0.041 (0.040)
Male	-0.007 (0.011)	-0.053*** (0.017)	-0.007 (0.043)	-0.050 (0.043)	-0.064*** (0.025)	-0.139*** (0.040)
Employed	-0.011 (0.016)	-0.025 (0.018)	0.111** (0.044)	0.034 (0.051)	-0.103*** (0.025)	-0.072* (0.040)
Has children	-0.331*** (0.103)	-0.071 (0.046)	-0.035 (0.080)	-0.016 (0.331)	-0.256*** (0.064)	-0.207** (0.086)
Teenage pregnancy	0.008 (0.039)	-0.034 (0.042)	-0.135* (0.073)	-0.018 (0.135)	-0.115* (0.059)	-0.023 (0.074)
Has family care duties	0.001 (0.012)	0.012 (0.019)	0.016 (0.053)	-0.008 (0.048)	-0.054* (0.030)	0.009 (0.050)
Number of household members aged 0-5	0.017 (0.011)	-0.009 (0.022)	0.030 (0.050)	-0.012 (0.055)	0.028 (0.032)	-0.037 (0.053)
Number of household members over 65 years old	0.022** (0.010)	0.006 (0.022)	0.048* (0.025)	-0.003 (0.049)	0.065** (0.026)	0.089** (0.039)
Numeracy skills (z-score)	0.005 (0.006)	0.015* (0.008)	0.019 (0.018)	0.055*** (0.021)	0.023* (0.013)	0.054** (0.026)
Core self-evaluation Index (z-score)	0.015 (0.009)	-0.000 (0.018)	0.033 (0.037)	0.060 (0.044)	0.046** (0.022)	0.055 (0.037)
Grit average score (z-score)	0.005 (0.005)	0.009 (0.008)	0.031 (0.022)	0.037 (0.023)	0.035*** (0.011)	0.022 (0.020)
Constant	0.304*** (0.115)	0.977*** (0.153)	1.980* (1.088)	-1.692*** (0.481)	-1.272*** (0.246)	-1.146 (0.956)
Observations	1,908	725	195	506	1,404	493
R-squared	0.105	0.084	0.212	0.150	0.190	0.267
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.940	0.950	0.933	0.389	0.630	0.665

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Mexico, Paraguay*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

CUADRO A.6 Outcomes regression analysis by numeracy skills, all countries

	Secondary enrollment			Tertiary enrollment		
	Low numeracy skills	Medium numeracy skills	High numeracy skills	Low numeracy skills	Medium numeracy skills	High numeracy skills
Expected returns to college education	0.005 (0.015)	-0.006 (0.012)	0.016** (0.008)	-0.036 (0.038)	0.068** (0.031)	0.052** (0.022)
Variance logarithm expected wage secondary completed	0.195 (0.342)	-0.365 (0.371)	0.170** (0.084)			
Variance logarithm expected wage college completed	0.096 (0.308)	0.114 (0.094)	0.057 (0.096)	0.585* (0.340)	0.143 (0.437)	0.725*** (0.184)
Prob working in 10 years secondary completed	0.065 (0.048)	-0.026 (0.030)	0.033 (0.026)			
Prob working in 10 years college completed	0.042 (0.076)	0.080 (0.057)	0.032 (0.036)	0.196 (0.135)	-0.113 (0.110)	-0.071 (0.075)
Mother's years of education	0.010*** (0.004)	0.006** (0.002)	0.004** (0.002)	0.019*** (0.007)	0.020*** (0.005)	0.017*** (0.004)
Monthly per capita income (log)	0.005 (0.016)	0.024** (0.012)	0.014 (0.009)	0.165*** (0.033)	0.073*** (0.027)	0.037** (0.019)
Mother is employed	0.041 (0.025)	-0.004 (0.019)	0.035** (0.014)	0.016 (0.052)	0.078* (0.041)	0.007 (0.029)
Raised by both biological parents before age 5	0.036 (0.027)	0.009 (0.018)	0.007 (0.012)	-0.046 (0.058)	0.012 (0.043)	0.005 (0.029)
Lives with father	0.014 (0.027)	0.005 (0.017)	0.025** (0.012)	0.117** (0.055)	0.127*** (0.041)	0.036 (0.028)
Age	0.013** (0.006)	-0.000 (0.004)	0.015*** (0.003)	0.063*** (0.012)	0.042*** (0.009)	0.056*** (0.006)
Male	-0.017 (0.024)	-0.043*** (0.015)	0.005 (0.011)	-0.071 (0.052)	-0.073** (0.037)	-0.065*** (0.025)
Employed	0.016 (0.026)	-0.001 (0.021)	-0.024 (0.016)	-0.114** (0.050)	-0.048 (0.038)	-0.094*** (0.026)
Has children	-0.034 (0.055)	-0.209*** (0.061)	-0.077* (0.046)	-0.363*** (0.101)	-0.276*** (0.089)	-0.212*** (0.068)
Teenage pregnancy	-0.064 (0.045)	-0.014 (0.043)	-0.032 (0.041)	-0.138 (0.086)	0.046 (0.071)	-0.100 (0.065)
Has family care duties	0.007 (0.025)	0.027 (0.017)	-0.019 (0.014)	-0.041 (0.054)	-0.054 (0.043)	-0.008 (0.031)
Number of household members aged 0-5	-0.006 (0.026)	0.018 (0.018)	0.019 (0.012)	0.085* (0.045)	-0.039 (0.049)	0.006 (0.036)
Number of household members over 65 years old	0.011 (0.024)	0.026* (0.014)	0.015 (0.012)	0.069 (0.048)	0.045 (0.036)	0.053* (0.028)
Core self-evaluation Index (z-score)	0.033 (0.022)	0.027* (0.016)	0.004 (0.010)	0.038 (0.045)	0.028 (0.034)	0.070*** (0.022)
Grit average score (z-score)	0.014 (0.012)	0.014** (0.007)	-0.001 (0.006)	0.095*** (0.025)	0.023 (0.018)	0.031*** (0.012)
Constant	0.399** (0.188)	0.723*** (0.112)	0.489*** (0.086)	-1.917*** (0.300)	-0.846*** (0.236)	-0.924*** (0.160)
Observations	650	887	1,291	391	708	1,304
R-squared	0.084	0.117	0.087	0.291	0.173	0.193
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.914	0.945	0.954	0.430	0.593	0.630

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Mexico, Paraguay*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

CUADRO A.7 Outcomes regression analysis by Self-esteem

	Secondary enrollment			Tertiary enrollment		
	Low self-esteem	Medium self-esteem	High self-esteem	Low self-esteem	Medium self-esteem	High self-esteem
Expected returns to university education	0.028** (0.012)	-0.008 (0.012)	-0.003 (0.010)	0.082*** (0.026)	0.042 (0.028)	-0.002 (0.030)
Variance logarithm expected wage secondary completed	-0.125 (0.231)	0.322* (0.166)	-0.022 (0.214)			
Variance logarithm expected wage university completed	0.184* (0.111)	-0.079 (0.211)	0.030 (0.115)	0.402 (0.267)	0.952** (0.412)	0.374 (0.257)
Prob working in 10 years secondary completed	0.045 (0.036)	0.039 (0.035)	-0.018 (0.028)			
Prob working in 10 years university completed	0.061 (0.050)	-0.006 (0.060)	0.026 (0.047)	-0.042 (0.088)	-0.044 (0.101)	-0.030 (0.114)
Mother's years of education	0.006** (0.003)	0.006** (0.002)	0.006*** (0.002)	0.016*** (0.005)	0.021*** (0.005)	0.015*** (0.005)
Monthly per capita income (log)	0.035*** (0.012)	0.010 (0.010)	-0.011 (0.011)	0.064*** (0.023)	0.086*** (0.025)	0.059** (0.026)
Mother is employed	0.014 (0.019)	0.038* (0.020)	0.030* (0.016)	0.098*** (0.036)	-0.023 (0.036)	0.025 (0.039)
Raised by both biological parents before age 5	0.014 (0.019)	0.021 (0.018)	0.018 (0.015)	-0.046 (0.038)	0.025 (0.037)	0.012 (0.037)
Lives with father	0.030 (0.018)	0.012 (0.016)	0.005 (0.014)	0.061* (0.036)	0.076** (0.038)	0.105*** (0.038)
Age	0.008* (0.004)	0.010** (0.004)	0.010*** (0.003)	0.059*** (0.008)	0.052*** (0.008)	0.041*** (0.009)
Male	-0.035** (0.016)	0.014 (0.016)	-0.018 (0.013)	-0.050 (0.033)	-0.048 (0.033)	-0.105*** (0.033)
Employed	0.003 (0.022)	-0.016 (0.020)	-0.007 (0.015)	-0.116*** (0.034)	-0.106*** (0.034)	-0.008 (0.033)
Has children	-0.202*** (0.062)	-0.091 (0.063)	-0.019 (0.026)	-0.332*** (0.075)	-0.210*** (0.079)	-0.265*** (0.102)
Teenage pregnancy	-0.005 (0.052)	-0.050 (0.050)	-0.029 (0.019)	-0.036 (0.070)	-0.030 (0.071)	-0.087 (0.087)
Has family care duties	0.012 (0.018)	0.001 (0.019)	-0.006 (0.015)	0.002 (0.037)	-0.078** (0.040)	0.011 (0.041)
Number of household members aged 0-5	0.028 (0.018)	-0.022 (0.020)	0.017 (0.012)	0.042 (0.041)	0.028 (0.038)	-0.053 (0.054)
Number of household members over 65 years old	0.037* (0.020)	0.014 (0.015)	0.007 (0.012)	0.045 (0.034)	0.032 (0.033)	0.081** (0.034)
Numeracy skills (z-score)	0.008 (0.009)	0.004 (0.009)	0.005 (0.007)	0.080*** (0.017)	0.012 (0.017)	0.001 (0.019)
Core Self-evaluation Index (z-score)	0.010 (0.019)	0.014 (0.028)	-0.003 (0.022)	0.014 (0.038)	0.008 (0.055)	0.096 (0.071)
Grit average score (z-score)	0.009 (0.009)	0.002 (0.008)	0.004 (0.006)	0.036** (0.018)	0.048*** (0.017)	0.003 (0.016)
Constant	0.428*** (0.127)	0.596*** (0.118)	0.756*** (0.089)	-1.197*** (0.198)	-1.114*** (0.215)	-0.705*** (0.248)
Observations	1,077	823	928	865	853	685
R-squared	0.100	0.086	0.080	0.209	0.198	0.205
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.923	0.944	0.962	0.517	0.560	0.708

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Mexico, Paraguay*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

CUADRO A.8 Outcomes regression analysis by mother's education Level, all countries

	Secondary enrollment			Tertiary enrollment		
	Mother's educ:	Mother's educ:	Mother's educ:	Mother's educ:	Mother's educ:	Mother's educ:
	primary or less	secondary	tertiary	primary or less	secondary	tertiary
Expected returns to college education	0.000 (0.011)	0.015* (0.008)	0.023 (0.015)	0.029 (0.026)	0.089*** (0.028)	-0.021 (0.029)
Variance logarithm expected wage secondary completed	-0.020 (0.203)	0.026 (0.133)	0.133 (0.162)			
Variance logarithm expected wage college completed	0.143 (0.132)	0.061 (0.128)	-0.179 (0.141)	0.578** (0.278)	0.162 (0.296)	0.866*** (0.228)
Prob working in 10 years secondary completed	-0.026 (0.028)	0.087*** (0.029)	0.035 (0.048)			
Prob working in 10 years college completed	0.089* (0.046)	-0.024 (0.044)	-0.036 (0.049)	-0.067 (0.092)	0.004 (0.096)	0.044 (0.108)
Mother's years of education	0.007*** (0.003)	0.007 (0.005)	0.005 (0.005)	0.004 (0.006)	0.029* (0.015)	0.001 (0.010)
Monthly per capita income (log)	0.013 (0.010)	0.030*** (0.010)	-0.003 (0.018)	0.094*** (0.022)	0.067*** (0.023)	0.053* (0.029)
Mother is employed	0.042** (0.018)	-0.002 (0.013)	0.030 (0.034)	0.010 (0.034)	0.040 (0.033)	0.026 (0.048)
Raised by both biological parents before age 5	0.022 (0.017)	0.004 (0.011)	0.030 (0.020)	-0.024 (0.037)	0.039 (0.035)	-0.024 (0.043)
Lives with father	0.013 (0.016)	0.020* (0.012)	0.010 (0.012)	0.096*** (0.036)	0.077** (0.033)	0.028 (0.045)
Age	0.013*** (0.004)	0.003 (0.003)	0.008* (0.004)	0.045*** (0.008)	0.052*** (0.007)	0.066*** (0.010)
Male	-0.026* (0.015)	-0.000 (0.011)	-0.013 (0.022)	-0.071** (0.032)	-0.068** (0.030)	-0.092** (0.037)
Employed	-0.024 (0.019)	0.019 (0.013)	0.000 (0.016)	-0.123*** (0.032)	-0.062** (0.031)	0.013 (0.038)
Has children	-0.131*** (0.046)	-0.031 (0.041)	-0.219 (0.214)	-0.274*** (0.067)	-0.220*** (0.085)	-0.161 (0.150)
Teenage pregnancy	-0.067 (0.043)	-0.017 (0.029)	0.010 (0.052)	-0.055 (0.068)	-0.038 (0.070)	-0.158* (0.095)
Has family care duties	0.004 (0.015)	0.000 (0.014)	0.005 (0.025)	-0.028 (0.037)	-0.035 (0.036)	-0.044 (0.049)
Number of household members aged 0-5	0.012 (0.014)	0.009 (0.015)	0.005 (0.037)	0.031 (0.033)	-0.042 (0.043)	0.098 (0.071)
Number of household members over 65 years old	0.022 (0.017)	0.025*** (0.008)	-0.010 (0.028)	0.059 (0.036)	0.051* (0.030)	0.026 (0.040)
Numeracy skills (z-score)	0.012 (0.007)	0.002 (0.006)	0.007 (0.013)	0.046*** (0.015)	0.029* (0.017)	-0.005 (0.025)
Core self-evaluation Index (z-score)	0.016 (0.014)	0.009 (0.010)	0.016 (0.022)	0.057** (0.028)	0.059** (0.028)	-0.006 (0.031)
Grit average score (z-score)	0.006 (0.007)	0.005 (0.006)	0.015* (0.008)	0.029* (0.016)	0.034** (0.015)	0.042*** (0.015)
Constant	0.482*** (0.100)	0.589*** (0.122)	0.712*** (0.204)	-0.863*** (0.217)	-1.280*** (0.255)	-0.908*** (0.279)
Observations	1,461	1,075	292	1,003	983	417
R-squared	0.085	0.057	0.107	0.150	0.163	0.242
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.916	0.967	0.976	0.466	0.619	0.803

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Mexico, Paraguay*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

CUADRO A.9 Outcomes regression analysis by household income, all countries

	Secondary enrollment			Tertiary enrollment		
	Low Income Level	Middle Income Level	High Income Level	Low Income Level	Middle Income Level	High Income Level
Expected returns to college education	0.005 (0.012)	0.001 (0.012)	0.015* (0.008)	0.011 (0.027)	0.055* (0.030)	0.057** (0.028)
Variance logarithm expected wage secondary completed	0.159 (0.129)	-0.293 (0.430)	0.126 (0.099)			
Variance logarithm expected wage college completed	0.159 (0.148)	0.021 (0.184)	0.086 (0.079)	0.527* (0.301)	0.390 (0.325)	0.593*** (0.200)
Prob working in 10 years secondary completed	0.038 (0.033)	0.026 (0.038)	0.005 (0.028)			
Prob working in 10 years college completed	0.020 (0.047)	0.008 (0.051)	0.091 (0.057)	0.019 (0.094)	-0.014 (0.106)	-0.063 (0.095)
Mother's years of education	0.006** (0.002)	0.006** (0.003)	0.008*** (0.002)	0.020*** (0.005)	0.023*** (0.005)	0.005 (0.005)
Monthly per capita income (log)	0.020 (0.015)	0.004 (0.042)	-0.012 (0.019)	0.092*** (0.032)	-0.082 (0.102)	0.077** (0.039)
Mother is employed	0.031 (0.021)	0.031* (0.019)	0.012 (0.016)	0.033 (0.037)	-0.030 (0.039)	0.083** (0.035)
Raised by both biological parents before age 5	-0.002 (0.021)	0.035** (0.018)	0.023* (0.014)	0.022 (0.040)	-0.010 (0.039)	-0.004 (0.034)
Lives with father	0.039** (0.020)	0.002 (0.017)	0.010 (0.012)	0.061 (0.038)	0.089** (0.039)	0.058* (0.033)
Age	0.014*** (0.004)	0.009** (0.004)	0.003 (0.004)	0.042*** (0.008)	0.049*** (0.008)	0.070*** (0.008)
Male	-0.029 (0.018)	-0.024 (0.016)	0.008 (0.013)	0.002 (0.036)	-0.158*** (0.034)	-0.049* (0.030)
Employed	-0.006 (0.024)	-0.018 (0.020)	0.016 (0.015)	-0.014 (0.036)	-0.094*** (0.035)	-0.124*** (0.031)
Has children	-0.143** (0.056)	-0.161** (0.063)	-0.035 (0.034)	-0.276*** (0.069)	-0.178* (0.096)	-0.357*** (0.091)
Teenage pregnancy	-0.084** (0.042)	0.009 (0.052)	-0.030 (0.024)	-0.134** (0.062)	-0.082 (0.081)	0.065 (0.087)
Has family care duties	-0.009 (0.019)	0.013 (0.016)	0.001 (0.015)	-0.032 (0.038)	-0.046 (0.041)	0.000 (0.037)
Number of household members aged 0-5	0.014 (0.017)	0.018 (0.016)	0.009 (0.016)	0.036 (0.034)	-0.015 (0.044)	0.032 (0.058)
Number of household members over 65 years old	0.016 (0.016)	0.014 (0.018)	0.021* (0.011)	0.066* (0.035)	0.052 (0.033)	0.022 (0.035)
Numeracy skills (z-score)	0.003 (0.009)	0.009 (0.008)	0.012 (0.008)	0.065*** (0.016)	0.012 (0.018)	-0.002 (0.018)
Core self-evaluation Index (z-score)	0.004 (0.017)	0.013 (0.015)	0.019* (0.011)	0.064** (0.032)	0.043 (0.032)	0.041 (0.026)
Grit average score (z-score)	-0.002 (0.009)	0.007 (0.007)	0.010 (0.006)	0.044** (0.018)	0.034** (0.017)	0.032** (0.013)
Constant	0.480*** (0.121)	0.641*** (0.217)	0.722*** (0.153)	-0.994*** (0.227)	-0.221 (0.533)	-1.329*** (0.259)
Observations	960	930	938	821	787	795
R-squared	0.098	0.071	0.071	0.176	0.164	0.215
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.917	0.944	0.966	0.456	0.574	0.735

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Mexico, Paraguay*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

CUADRO A.10 Outcomes regression analysis by mother's employment status, all countries

	Secondary enrollment		Tertiary enrollment	
	Employed mother	Not employed mother	Employed mother	Not employed mother
Expected returns to college education	0.010 (0.007)	-0.004 (0.014)	0.054*** (0.019)	0.017 (0.032)
Variance logarithm expected wage secondary completed	-0.012 (0.142)	0.156 (0.214)		
Variance logarithm expected wage college completed	0.112 (0.071)	0.005 (0.246)	0.478*** (0.165)	0.688 (0.508)
Prob working in 10 years secondary completed	0.029 (0.021)	0.019 (0.039)		
Prob working in 10 years college completed	0.044 (0.032)	0.025 (0.068)	-0.001 (0.067)	-0.084 (0.104)
Mother's years of education	0.005*** (0.001)	0.009*** (0.003)	0.019*** (0.003)	0.014** (0.006)
Monthly per capita income (log)	0.016** (0.008)	0.013 (0.013)	0.068*** (0.016)	0.089*** (0.026)
Raised by both biological parents before age 5	0.025** (0.011)	-0.003 (0.023)	0.018 (0.025)	-0.026 (0.043)
Lives with father	0.008 (0.010)	0.038* (0.022)	0.057** (0.024)	0.113*** (0.043)
Age	0.009*** (0.003)	0.011*** (0.004)	0.053*** (0.006)	0.050*** (0.009)
Male	-0.017* (0.010)	-0.015 (0.019)	-0.073*** (0.022)	-0.070* (0.036)
Employed	0.001 (0.013)	-0.029 (0.025)	-0.076*** (0.023)	-0.060 (0.037)
Has children	-0.184*** (0.041)	0.020 (0.043)	-0.308*** (0.061)	-0.197** (0.077)
Teenage pregnancy	0.001 (0.027)	-0.111** (0.049)	-0.022 (0.052)	-0.117 (0.075)
Has family care duties	0.008 (0.010)	-0.009 (0.022)	-0.036 (0.027)	-0.017 (0.044)
Number of household members aged 0-5	0.016 (0.012)	0.011 (0.017)	0.019 (0.031)	0.005 (0.040)
Number of household members over 65 years old	0.019* (0.010)	0.020 (0.018)	0.057** (0.024)	0.037 (0.038)
Numeracy skills (z-score)	0.006 (0.005)	0.010 (0.010)	0.031** (0.012)	0.043** (0.019)
Core self-evaluation Index (z-score)	0.017* (0.010)	0.009 (0.016)	0.032 (0.020)	0.074** (0.032)
Grit average score (z-score)	0.008 (0.005)	0.002 (0.008)	0.030*** (0.011)	0.047*** (0.017)
Constant	0.569*** (0.077)	0.537*** (0.130)	-1.072*** (0.145)	-1.038*** (0.216)
Observations	2,020	808	1,689	714
R-squared	0.079	0.092	0.203	0.200
Country FE	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.948	0.928	0.599	0.559

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Mexico, Paraguay*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

B | ROBUSTNESS CHECKS

CUADRO A.11 Correlates of expectations excluding Chile

	Expectations college returns		
	All sample	Secondary education sample	Tertiary education sample
Mother's years of education	0.006* (0.003)	0.001 (0.005)	0.009* (0.005)
Monthly per capita income (log)	0.068*** (0.016)	0.048** (0.024)	0.102*** (0.025)
Mother is employed	0.029 (0.029)	0.024 (0.041)	0.006 (0.039)
Raised by both biological parents before age 5	-0.017 (0.028)	0.009 (0.041)	-0.008 (0.038)
Lives with father	0.019 (0.027)	0.020 (0.037)	0.044 (0.037)
Age	0.002 (0.005)	0.003 (0.007)	-0.013 (0.008)
Male	0.014 (0.025)	0.037 (0.035)	-0.002 (0.034)
Employed	0.006 (0.026)	-0.035 (0.039)	-0.012 (0.034)
Has children	-0.177*** (0.055)	-0.208*** (0.078)	-0.138* (0.080)
Teenage pregnancy	-0.009 (0.049)	0.021 (0.067)	-0.009 (0.070)
Has family care duties	0.019 (0.028)	0.000 (0.038)	-0.053 (0.039)
Number of household members aged 0-5	0.080*** (0.026)	0.094** (0.038)	0.140*** (0.045)
Number of household members over 65 years old	-0.055** (0.027)	-0.051 (0.043)	-0.007 (0.036)
Numeracy skills (z-score)	0.034*** (0.012)	0.018 (0.017)	0.044*** (0.017)
Core self-evaluation Index (z-score)	0.080*** (0.028)	0.096** (0.038)	0.114*** (0.040)
Grit average score (z-score)	0.035*** (0.013)	0.040** (0.018)	0.034* (0.017)
Constant	0.375*** (0.109)	0.468*** (0.162)	0.556*** (0.182)
Observations	3,143	1,724	1,510
R-squared	0.073	0.054	0.097
Country FE	Yes	Yes	Yes
Mean of Dependent Variable	0.838	0.811	0.897

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variable: *Expectations to university returns*. Country FE: *Brazil, Colombia, El Salvador, Haiti, Paraguay*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

CUADRO A.12 Outcomes regression analysis - enrollment excluding Chile

	Secondary enrollment	Tertiary enrollment
Expected returns to college education	0.007 (0.008)	0.042** (0.019)
Variance logarithm expected wage secondary completed	-0.082 (0.222)	
Variance logarithm expected wage college completed	0.223** (0.095)	0.468*** (0.179)
Mother's years of education	0.006*** (0.002)	0.015*** (0.003)
Monthly per capita income (log)	0.015** (0.008)	0.094*** (0.016)
Mother is employed	0.033** (0.015)	0.033 (0.028)
Age	0.013*** (0.003)	0.050*** (0.005)
Male	-0.024** (0.011)	-0.071*** (0.024)
Numeracy skills (z-score)	0.002 (0.006)	0.043*** (0.012)
Core self-evaluation Index (z-score)	0.000 (0.012)	0.021 (0.027)
Constant	0.506*** (0.077)	-1.079*** (0.141)
Observations	1,724	1,510
R-squared	0.099	0.215
Country FE	Yes	Yes
Subjective probability of being employed	Yes	Yes
Family background	Yes	Yes
Socioeconomic characteristics	Yes	Yes
Cognitive and non-cognitive skills	Yes	Yes
Mean of Dependent Variable	0.936	0.554

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Paraguay*. Family background: *raised by both biological parents before age 5, lives with father*. Socioeconomic characteristics: *employed, has children, teenage pregnancy, has family care duties, number of household members aged 0-5, number of household members over 65 years old*. Cognitive and non-cognitive skills: *numeracy skills (z-score), core self-evaluation index (z-score), Grit average score (z-score)*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

CUADRO A.13 Heterogeneity Analysis - Youth's characteristics, Excluding Chile

	Male		Age 15-18		Numeracy score 100%		Self-esteem above median	
	Secondary	Tertiary	Secondary	Tertiary	Secondary	Tertiary	Secondary	Tertiary
Expected returns to university education	0.002 (0.011)	0.030 (0.026)	-0.013 (0.012)	0.048** (0.022)	-0.000 (0.011)	0.038 (0.028)	0.030** (0.012)	0.072*** (0.026)
Heterogeneity variable	-0.032* (0.018)	-0.093** (0.042)	-0.039 (0.025)	-0.134** (0.056)	-0.030 (0.029)	-0.113 (0.072)	0.066*** (0.019)	0.092** (0.044)
Exp returns to university X Heterogeneity variable	0.010 (0.015)	0.025 (0.036)	0.029* (0.015)	-0.036 (0.042)	0.017 (0.015)	0.009 (0.036)	-0.045*** (0.016)	-0.069* (0.036)
Variance logarithm expected wage secondary completed			-0.084 (0.222)	-0.061 (0.224)		-0.083 (0.225)		-0.085 (0.221)
Variance logarithm expected wage university completed	0.223** (0.095)	0.465*** (0.180)	0.219** (0.097)	0.433** (0.182)	0.224** (0.096)	0.475*** (0.181)	0.232** (0.095)	0.494*** (0.188)
Heterogeneity variable			-0.039 (0.025)	-0.134** (0.056)				
Exp returns to university X Heterogeneity variable			0.029* (0.015)	-0.036 (0.042)				
Constant	0.509*** (0.078)	-1.071*** (0.141)	0.579*** (0.110)	-0.569*** (0.189)	0.517*** (0.076)	-1.035*** (0.144)	0.493*** (0.078)	-1.101*** (0.141)
Observations	1,724	1,510	1,724	1,510	1,724	1,510	1,724	1,510
R-squared	0.100	0.215	0.101	0.225	0.100	0.217	0.106	0.217
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Subjective probability of being employed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Family background	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Socioeconomic characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cognitive and non-cognitive skills	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.936	0.554	0.936	0.554	0.936	0.554	0.936	0.554
Coefficient heterogeneity variable	0.012	0.054**	0.015	0.012	0.017	0.048*	-0.015	0.003
SE	(0.011)	(0.027)	(0.010)	(0.037)	(0.011)	(0.026)	(0.010)	(0.027)

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Paraguay*. Family background: *mother's years of education, monthly per capita income (log), mother is employed, raised by both biological parents before age 5, lives with father*. Socioeconomic characteristics: *age, employed, has children, teenage pregnancy, has family care duties, number of household members aged 0-5, number of household members over 65 years old*. Cognitive and non-cognitive skills: *numeracy skills (z-score), core self-evaluation index (z-score), Grit average score (z-score)*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

CUADRO A.14 Heterogeneity Analysis - Youth's environment, Excluding Chile

	Mothers education					
	level above secondary		Income above median		Employed mother	
	Secondary	Tertiary	Secondary	Tertiary	Secondary	Tertiary
Expected returns to university education	0.007 (0.012)	0.034 (0.029)	0.009 (0.011)	0.015 (0.025)	0.011 (0.018)	-0.003 (0.038)
Heterogeneity variable	0.011 (0.023)	0.042 (0.053)	-0.016 (0.022)	-0.052 (0.053)	0.037 (0.024)	-0.018 (0.047)
Exp returns to university X Heterogeneity variable	0.000 (0.014)	0.016 (0.038)	-0.007 (0.014)	0.076** (0.038)	-0.005 (0.019)	0.059 (0.043)
Variance logarithm expected wage secondary completed	-0.083 (0.222)		-0.089 (0.222)		-0.084 (0.224)	
Variance logarithm expected wage university completed	0.226** (0.098)	0.471*** (0.180)	0.217** (0.095)	0.421** (0.179)	0.223** (0.095)	0.468** (0.182)
Constant	0.513*** (0.078)	-1.051*** (0.143)	0.478*** (0.080)	-1.021*** (0.155)	0.503*** (0.076)	-1.044*** (0.144)
Observations	1,724	1,510	1,724	1,510	1,724	1,510
R-squared	0.100	0.216	0.100	0.217	0.099	0.216
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Subjective probability of being employed	Yes	Yes	Yes	Yes	Yes	Yes
Family background	Yes	Yes	Yes	Yes	Yes	Yes
Socioeconomic characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Cognitive and non-cognitive skills	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.936	0.554	0.936	0.554	0.936	0.554
Coefficient heterogeneity variable	0.007	0.049**	0.003	0.091***	0.006	0.056**
SE	(0.008)	(0.025)	(0.009)	(0.029)	(0.008)	(0.022)

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Country FE: *Brazil, Colombia, El Salvador, Haiti, Paraguay*. Family background: *mother's years of education, monthly per capita income (log), mother is employed, raised by both biological parents before age 5, lives with father*. Socioeconomic characteristics: *age, employed, has children, teenage pregnancy, has family care duties, number of household members aged 0-5, number of household members over 65 years old*. Cognitive and non-cognitive skills: *numeracy skills (z-score), core self-evaluation index (z-score), Grit average score (z-score)*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average) for each country.

CUADRO A.15 Correlates of expectations, Chile

	Expectations college returns		
	All sample	Secondary	Tertiary
		education sample	education sample
Mother's years of education	0.010*	0.007	0.008
	(0.005)	(0.008)	(0.007)
Monthly per capita income (log)	-0.002	0.010	-0.008
	(0.024)	(0.033)	(0.033)
Mother is employed	0.026	-0.000	0.077*
	(0.028)	(0.039)	(0.039)
Raised by both biological parents before age 5	0.018	-0.002	0.023
	(0.033)	(0.044)	(0.045)
Lives with father	0.011	0.022	0.010
	(0.031)	(0.043)	(0.043)
Age	-0.007	-0.024***	-0.004
	(0.005)	(0.009)	(0.011)
Male	-0.037	-0.011	-0.078**
	(0.028)	(0.038)	(0.039)
Employed	0.007	-0.031	0.016
	(0.030)	(0.045)	(0.039)
Has children	-0.041	0.138	-0.048
	(0.072)	(0.099)	(0.074)
Teenage pregnancy	0.065	-0.076	0.010
	(0.077)	(0.097)	(0.081)
Has family care duties	0.000	0.035	-0.025
	(0.034)	(0.044)	(0.047)
Number of household members aged 0-5	-0.019	-0.023	-0.053
	(0.031)	(0.039)	(0.046)
Number of household members over 65 years old	0.023	0.018	0.009
	(0.027)	(0.040)	(0.034)
Numeracy skills (z-score)	0.045***	0.033*	0.074***
	(0.015)	(0.019)	(0.021)
Core self-evaluation Index (z-score)	0.038*	0.053*	0.032
	(0.022)	(0.030)	(0.030)
Grit average score (z-score)	0.011	0.006	-0.018
	(0.014)	(0.019)	(0.019)
Constant	0.932***	1.193***	0.943***
	(0.152)	(0.237)	(0.255)
Observations	1,917	1,104	893
R-squared	0.015	0.020	0.034
Mean of Dependent Variable	0.960	0.943	0.965

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variable: *Expectations to university returns*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average).

CUADRO A.16 Outcomes regression analysis - enrollment, Chile

	Secondary enrollment	Tertiary enrollment
Expected returns to college education	0.004 (0.010)	0.044 (0.030)
Variance logarithm expected wage secondary completed	0.110 (0.072)	
Variance logarithm expected wage college completed	-0.059 (0.139)	0.521 (0.338)
Mother's years of education	0.006** (0.003)	0.025*** (0.006)
Monthly per capita income (log)	0.013 (0.014)	0.025 (0.027)
Mother is employed	0.015 (0.015)	0.026 (0.033)
Age	0.003 (0.004)	0.052*** (0.009)
Male	-0.006 (0.014)	-0.061* (0.031)
Numeracy skills (z-score)	0.014* (0.007)	0.019 (0.017)
Core self-evaluation Index (z-score)	0.025** (0.011)	0.080*** (0.024)
Constant	0.599*** (0.125)	-1.013*** (0.218)
Observations	1,104	893
R-squared	0.053	0.169
Subjective probability of being employed	Yes	Yes
Family background	Yes	Yes
Socioeconomic characteristics	Yes	Yes
Cognitive and non-cognitive skills	Yes	Yes
Mean of Dependent Variable	0.951	0.642

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Family background: *raised by both biological parents before age 5, lives with father*. Socioeconomic characteristics: *employed, has children, teenage pregnancy, has family care duties, number of household members aged 0-5, number of household members over 65 years old*. Cognitive and non-cognitive skills: *numeracy skills (z-score), core self-evaluation index (z-score), Grit average score (z-score)*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average).

CUADRO A.17 Heterogeneity Analysis - Youth's characteristics

	Male		Age 15-18		Numeracy score 100%		Self-esteem above median	
	Secondary	Tertiary	Secondary	Tertiary	Secondary	Tertiary	Secondary	Tertiary
Expected returns to university education	-0.009 (0.012)	0.024 (0.040)	0.006 (0.023)	0.053* (0.031)	0.008 (0.016)	0.033 (0.045)	-0.002 (0.015)	0.032 (0.040)
Heterogeneity variable	-0.031 (0.026)	-0.104 (0.067)	0.012 (0.038)	0.011 (0.110)	0.008 (0.034)	-0.133 (0.095)	-0.020 (0.026)	0.082 (0.071)
Exp returns to university X Heterogeneity variable	0.026 (0.021)	0.043 (0.058)	-0.003 (0.026)	-0.061 (0.093)	-0.010 (0.019)	0.021 (0.058)	0.013 (0.019)	0.036 (0.054)
Variance logarithm expected wage secondary completed	0.113 (0.073)		0.107 (0.072)		0.112 (0.070)		0.116 (0.074)	
Variance logarithm expected wage university completed	-0.052 (0.144)	0.533 (0.333)	-0.061 (0.140)	0.515 (0.375)	-0.062 (0.141)	0.500 (0.356)	-0.065 (0.140)	0.500 (0.341)
Constant	0.607*** (0.125)	-1.002*** (0.219)	0.565*** (0.160)	-0.906*** (0.253)	0.596*** (0.124)	-0.955*** (0.223)	0.604*** (0.127)	-0.933*** (0.222)
Observations	1,104	893	1,104	893	1,104	893	1,104	893
R-squared	0.055	0.170	0.054	0.171	0.054	0.172	0.054	0.176
Subjective probability of being employed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Family background	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Socioeconomic characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cognitive and non-cognitive skills	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.951	0.642	0.951	0.642	0.951	0.642	0.951	0.642
Coefficient heterogeneity variable	0.017 (0.017)	0.067 (0.044)	0.003 (0.011)	-0.008 (0.090)	-0.002 (0.010)	0.054 (0.039)	0.011 (0.011)	0.068* (0.038)

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Family background: *mother's years of education, monthly per capita income (log), mother is employed, raised by both biological parents before age 5, lives with father*. Socioeconomic characteristics: *age, employed, has children, teenage pregnancy, has family care duties, number of household members aged 0-5, number of household members over 65 years old*. Cognitive and non-cognitive skills: *numeracy skills (z-score), core self-evaluation index (z-score), Grit average score (z-score)*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average).

CUADRO A.18 Heterogeneity Analysis - Youth's environment

	Mothers education					
	level above secondary		Income above median		Employed mother	
	Secondary	Tertiary	Secondary	Tertiary	Secondary	Tertiary
Expected returns to university education	-0.004 (0.019)	0.063 (0.051)	-0.027 (0.022)	0.069 (0.055)	-0.017 (0.021)	0.026 (0.049)
Heterogeneity variable	-0.010 (0.029)	0.072 (0.077)	-0.016 (0.032)	-0.077 (0.082)	-0.015 (0.027)	-0.004 (0.067)
Exp returns to university X Heterogeneity variable	0.013 (0.023)	-0.029 (0.060)	0.048* (0.024)	-0.037 (0.064)	0.032 (0.024)	0.031 (0.060)
Variance logarithm expected wage secondary completed	0.108 (0.071)		0.127 (0.079)		0.092 (0.070)	
Variance logarithm expected wage university completed	-0.071 (0.143)	0.549* (0.328)	-0.036 (0.138)	0.524 (0.339)	-0.048 (0.141)	0.511 (0.336)
Constant	0.607*** (0.127)	-1.002*** (0.224)	0.696*** (0.147)	-1.291*** (0.245)	0.620*** (0.125)	-0.999*** (0.220)
Observations	1,104	893	1,104	893	1,104	893
R-squared	0.054	0.170	0.059	0.174	0.055	0.170
Subjective probability of being employed	Yes	Yes	Yes	Yes	Yes	Yes
Family background	Yes	Yes	Yes	Yes	Yes	Yes
Socioeconomic characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Cognitive and non-cognitive skills	Yes	Yes	Yes	Yes	Yes	Yes
Mean of Dependent Variable	0.951	0.642	0.951	0.642	0.951	0.642
Coefficient heterogeneity variable	0.009	0.034	0.021**	0.032	0.015	0.057
SE	(0.011)	(0.035)	(0.009)	(0.035)	(0.011)	(0.036)

Notes: * p<0.1, ** p<0.05, *** p<0.01. Heteroskedasticity adjusted standard errors in parentheses. OLS regressions. Dependent variables: *Secondary and Tertiary enrollment*. Secondary (Tertiary) enrollment is a dummy variable that takes the value of one if youths are enrolled or have finished secondary (tertiary) education conditional on having completed primary (secondary) education and zero if youths completed primary (secondary) and are yet not enrolled in secondary (tertiary) education. Family background: *mother's years of education, monthly per capita income (log), mother is employed, raised by both biological parents before age 5, lives with father*. Socioeconomic characteristics: *age, employed, has children, teenage pregnancy, has family care duties, number of household members aged 0-5, number of household members over 65 years old*. Cognitive and non-cognitive skills: *numeracy skills (z-score), core self-evaluation index (z-score), Grit average score (z-score)*. Expected returns to university education are estimated assuming a triangular distribution (see section 2.1.3 for more details). Expected wages and monthly incomes are converted to US\$ using the World Bank's Official Exchange Rate 2018 (LCU per US\$, period average).