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The Returns to Education in Arkansas: Evidence from the 1987 Compulsory Education Law

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Abstract

This paper estimates the returns to education in Arkansas — one of the last states to extend compulsory schooling — using ACS 2023 data and the 1987 Compulsory Schooling Law (CSL) reform as an instrument. OLS estimates imply returns of 9.5–10.4 percent per year of schooling. The CSL reform increased schooling among compliers by 0.67–0.73 years and yields IV returns of 10.4–11.7 percent, exceeding OLS estimates. The results indicate that those compelled to remain in school benefited most, consistent with global evidence on higher causal returns for disadvantaged students.

JEL classification

I26, J24, C26, J31, I21

Keywords

returns to education, human capital, wage differentials, earnings function, Arkansas, instrumental variables, compulsory schooling

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1. Introduction

Education is at the center of human capital theory (Becker 1964; Schultz 1961; Deming 2022). Therefore, governments and households invest in education with the aim of strengthening their human capital and improving their labor market prospects. The returns to education estimates help to assess the effectiveness of human capital investments. At the global level, the average rate of return to schooling is estimated at 9 percent (Patrinos and Psacharopoulos 2020), meaning that for each additional year of schooling a person sees their earnings increased by 9 percent on average. The returns to schooling in the U.S. are slightly higher at 11 percent (Patrinos and Rivera 2025a; Montenegro and Patrinos 2023).

Although these findings are indicative of the positive relationship between schooling and wages, some argue that more education does not necessarily produce higher wages. This is because omitted or unobserved factors could affect schooling and wages simultaneously. For instance, innate ability, skills, and motivation are correlated with both schooling choices and earnings (Heckman et al. 2018). To disentangle the effect of education on earnings from unobserved personal ability or skill bias and establish a causal relationship, studies have modeled the effect of schooling on wages using an exogenous variable correlated with education but unrelated to earnings (e.g., Angrist and Krueger 1991; Card 1993, 1999). This is usually done with Instrumental Variables (IV).

Angrist and Krueger (1991) find that IV estimates of the returns to education are close to the conventional OLS estimates, indicating little bias, and that compulsory schooling laws increase attainment and raise returns for disadvantaged students. Card (1993) uses distance to college as an instrument and shows that IV estimates are 25–60 percent higher than OLS, implying higher marginal returns for individuals who would otherwise have attained less schooling. Krashinsky and DeCicca (2025) show that additional compulsory schooling increases attainment and earnings in states where the laws meaningfully affect school choices.

Oreopoulos (2006) finds IV estimates significantly larger than OLS, suggesting that students at the margin—"compliers"—benefit most. In the U.S., most causal estimates of the returns to schooling find significant effects and higher returns when using IV than OLS, though in a few cases OLS estimates remain higher (e.g., Carneiro et al. 2011; Stephens and Yang 2014).

There are few studies of the returns to education in Arkansas (Belfield 2015; Patrinos and Rivera-Olvera 2025b), but none have tested the causal effect of education on wages for this state. Proving that education has a positive effect on earnings could have important policy implications. Where education causes higher earnings, a policy increasing the access and educational attainment of the population with an equality focus will contribute to promoting social mobility (Pfeffer and Hertel 2015), even across generations (Oreopoulos et al. 2006).

The main contribution of this paper is to test the causality of education on earnings in Arkansas. The state is worthy of analysis as it was the second to last to increase the minimum legal dropout age above 16 years, just before Mississippi (Kennedy 2023). The findings help policymakers assess the role of education in promoting social mobility. For that purpose, we exploit the CSL change that increased the school leaving age in Arkansas from 16 to 17 in 1987 to instrument the effect of schooling on labor earnings.

The remainder of this paper is structured as follows. Section 2 provides the educational context for Arkansas. Section 3 details the data and the empirical approach used to measure the returns to education and prove causality in the state. The results of the analysis are exhibited in Section 4 followed by the discussion section.

2. Institutional Background

Arkansas has visibly improved the educational attainment of its population in the last few decades. As of 2021, 88 percent of the Arkansas' population aged 25 or older had a high school diploma or more schooling, compared with 89 percent at the national level. However,

while the gap between the state and the national share of the population aged 25 or older with at least a high school diploma has consistently narrowed, particularly from the 1990s onwards, the share of the Arkansas' population with a college degree or higher has not kept pace with the national trend as only 25 percent of the state population has a college degree or higher compared to 35 percent at the national level (U.S. Census Bureau 2006).

The Arkansas State Legislature (1987) increased the school leaving age from 16 to 17 through Act 319 of the 1987 Regular Session. The law compelled parents and guardians to enroll or provide home schooling to all children aged 7 through 16 years, both inclusive (Annex 1). This was the first major change to compulsory schooling laws since 1917 (Annex 2), when the first statewide compulsory schooling law in Arkansas was established (Gateway to Global Aging Data 2025).

Empirical Approach

Our data source is the American Community Survey (ACS) 2023 (Ruggles et al. 2025), which is representative at the national and state level and provides information on sociodemographic and employment characteristics. Our sample is limited to full-time wage-earners who are not currently enrolled in school and aged between 25 and 65 years. The school enrollment and age restrictions are imposed to focus on the workers who have concluded their education cycle following the standard practice of the analyses done by the BLS (2024). As the ACS does not identify where the respondents studied, we limit our sample to those born and currently living in Arkansas and assume they studied in the state. Excluding Arkansas-born who emigrated to other states also prevents additional ability bias issues affecting the schooling decision and earnings at the same time (Borjas 1988; Chiswick 1999).

Our earnings equation has the following form:

$$\ln W_i = \alpha + \beta_1 S_i + \beta_2 EX_i + \beta_3 EX^2_i + \beta_4 Sex_i + \beta_5 Z_i + \varepsilon_i \qquad (1)$$

where W is the individual's i hourly wage, S is the number of years of schooling, and EX years of labor market experience is defined as (age - S - school starting age (6)), which is standard in the literature (Mincer 1974; Patrinos 2024), Sex indicates the individual's sex and Z is a vector of other socio-demographic characteristics including race, marital status, and region of residence (we present returns to schooling by region in Annex 3). In this function, the β_1 coefficient on years of schooling can be interpreted as the average rate of return to one additional year of schooling. The means of our variables of interest for our sample are shown in Table 1.

Table 1: ACS 2023 Sample for Arkansas

Variable	All	Men	Women
Wage per hour	27.61	31.04	23.98
Female	0.49		
Age	43.50	43.26	43.74
Experience	23.80	23.88	23.71
Schooling (years)	13.70	13.38	14.04
Married	0.64	0.67	0.62
Race:			
White	79.34	80.92	77.68
African American	12.88	10.88	15.01
Native American	0.48	0.36	0.61
Other	7.29	7.85	6.70
Region			
Central	24.51	23.72	25.34
Northwest	28.11	28.93	27.23
Northeast	25.58	26.17	24.96
Southwest	15.34	15.16	15.53
Southeast	6.46	6.02	6.94
Observations	4,362	2,243	2,119

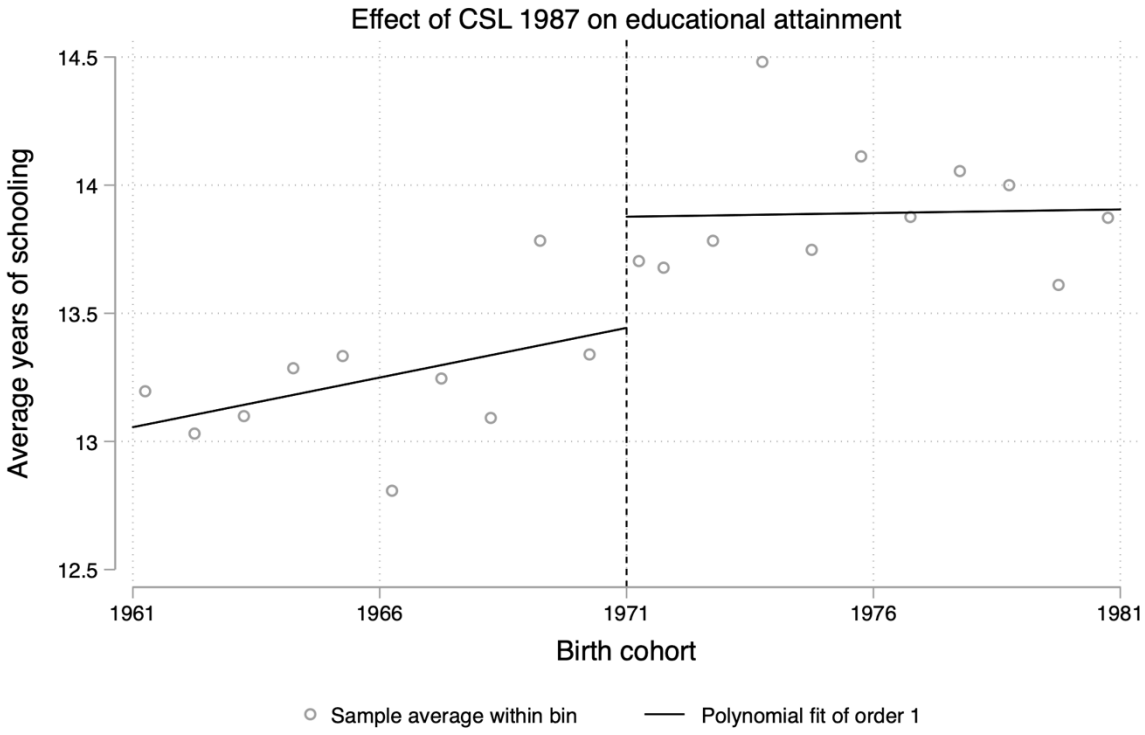
Notes: Sample of wage earners aged between 25 and 65 who are not currently enrolled in school. Race other includes people born in Arkansas that identify as Hispanics, Asian or of 2 or more races.
Source: ACS 2023.

As a second step, we adopt the Instrumental Variable (IV) approach using Two-Stage Least Squares (2SLS) to address potential endogeneity and ability bias issues. For the IV to work, the selected instrument needs to be relevant, meaning that it should strongly predict the endogenous variable (relevance assumption). Our identification strategy employs the CSL implemented in 1987 increasing the compulsory school leaving age from 16 to 17 in Arkansas

as an instrument. To fulfill the exogeneity condition (exclusion restriction or assumption), this reform should be related to a higher schooling attainment for compliers – those who would have dropped school at age 16 in the absence of the reform – and have no influence on wages other than through the change it brings about in the educational level of those affected. The third assumption for the IV to work is monotonicity, which implies that the instrument should affect the endogenous variable in one direction only. We rely on the monotonicity of our instrumental variable as education reforms expanding school age are associated with increases in average schooling of the population (Angrist and Krueger 1991; Oreopoulos 2006). If these assumptions hold for our database, the estimated coefficient of the instrumented years of schooling in the IV regression can be interpreted as the Local Average Treatment Effect (LATE) of an additional year of schooling on earnings for compliers.

Since the CSL change increased the compulsory school leaving age in Arkansas from 16 to 17 in 1987, we identify those born in the state in 1971 as the first cohort affected by the reform, as they would be aged 16 in 1987 and be compelled to stay in school at least one more year because of the reform. We also include the cohorts born from 1972 to 1976 as part of the affected group to consider the time needed for the internalization of the reform. Figure 1 shows that there was an increase in the mean years of schooling starting from the cohort born in 1971. This is a first indication of the positive association between the reform and an increase in schooling attainment in Arkansas.

Figure 1: Average years of schooling by birth cohort



Source: ACS 2023.

3. Results

Table 2 summarizes the returns to schooling estimated using the two specifications described above: (1) Mincerian equation (OLS) and (2) IV (2SLS). Two sets of regression are run for each specification. The basic set regresses hourly wages on schooling years, experience and its square, and a dummy variable for men, while the extended set includes categorical variables for race, marriage, and region.

The OLS analysis shows that an additional year of schooling in Arkansas is significantly associated with an increase of earnings of 9 to 10 percent. These estimates are consistent with the global average of 9 percent (Patrinos and Psacharopoulos 2020) and higher than the rate of return of 7.7 percent estimated for Arkansas in a previous analysis (Patrinos and Rivera-Olvera 2025b) using the Current Population Survey (CPS) 2024 with a much smaller sample.

The positive and significant coefficient of the CSL cohort variable in the first stage of the IV indicates that the reform of 1987 increased the average schooling of compliers by 0.7 years. The first-stage *F*-value above 10 proves that the instrument (CSL reform) strongly predicts the endogenous variable (schooling) according to Stock and Yogo's (2005) critical values. Hence, we can conclude that the IV relevance assumption holds. The second stage of the IV reveals that schooling has a positive and significant effect on earnings. In fact, according to the IV, an additional year of schooling yields a return of 12.7 to 12.9 percent for CSL compliers, which is above the OLS estimates. This suggests that those at the margin – namely the disadvantaged that acquired more schooling because of the reform – benefit the most from each additional year of schooling (Card 1993). (Returns to schooling by sex are presented in Annex 4.)

Table 2: Summary of the Returns to Schooling

	Basic	**Extended**
OLS	0.104***	0.095***
	(0.006)	(0.006)
2SLS	0.127**	0.129***
	(0.050)	(0.050)
R-squared (OLS)	0.18	0.21
Wald chi-squared (2SLS)	80.380	272.290
Prob > chi-squared (2SLS)	0.000	0.000
Root MSE (2SLS)	0.565	0.558
Obs.	4,362	4,362
First Stage:		
CSL cohort	0.707***	0.708***
	(0.146)	(0.140)
R-squared	0.111	0.156
Adjusted R-squared	0.111	0.154
F-statistic	75.940	39.580
Prob > F	0.000	0.000
Root MSE	2.395	2.337
Obs.	4,362	4,362

Notes: Standard errors in parentheses; * p<0.1, ** p<0.05, *** p<0.01. See full results in Annexes 4, 5a and 5b.
Source: Own estimations based on ACS (2023).

4. Conclusions

The findings of this study show that education has a positive effect on earnings. This paper uses the CSL implemented in 1987 increasing the school leaving age from 16 to 17 as an instrumental variable to test the causality of education on earnings.

The results of the OLS analysis are indicative of the positive relationship between schooling and wages in the state but does not prove causality. According to the OLS estimates, workers in Arkansas could expect to see their earnings increase by 10 percent for each additional year of schooling.

The IV analysis demonstrates that the CSL of 1987 increased the average schooling of compliers and that education has an effect on earnings. Specifically, those who would have dropped out of school earlier in the absence of the reform accumulated 0.7 years of additional schooling due to the reform. Also, according to the second stage of the IV, the causal returns to schooling for compliers are between 12.7 and 12.9 percent, which is above OLS estimates. The higher IV estimates indicate that the students with lower initial attainment who remained in school because of the reform benefited more from each additional year of education than the average individual.

These findings provide evidence to support policies expanding education access and attainment in Arkansas, particularly for underserved populations, as they show that education can be leveraged to promote social mobility. These policies could aim at preventing dropout, improving school quality in disadvantaged areas, and providing support for at-risk students.

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Annex 1: CSL Amendment of 1987 (excerpt from Arkansas State Legislature – Act 319 of the 1987 Regular Session)

Act 319 of the 1987 Regular Session

Act 319 SB140

"AN ACT TO AMEND SECTION 1 OF ACT 40 OF THE FIRST EXTRAORDINARY SESSION OF 1985 AND SECTION 1 OF ACT 42 OF THE FIRST EXTRAORDINARY SESSION OF 1985 [ARK. STAT. 80-1503.4], CLARIFYING THE OBLIGATION TO SEND A CHILD TO A PUBLIC, PRIVATE OR PAROCHIAL SCHOOL IF THE CHILD IS NOT PROVIDED A HOME SCHOOL; AND FOR OTHER PURPOSES."

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:

SECTION 1. Section 1 of Act 40 of the First Extraordinary Session of 1985 and Section 1 of Act 42 of the First Extraordinary Session of 1985, both being Arkansas Statutes 80-1503.4, are hereby respectively amended to read as follows:

"Section 1. Every parent, guardian or other person residing within the State of Arkansas having custody or charge of any child or children between the age of seven (7) through sixteen (16) years, both inclusive, shall enroll and send such child or children to a public, private or parochial school, or provide a home school for such child or children as described in this Act under such penalty for noncompliance as shall be set by law. Provided, however, this Section shall not be applicable to any child who has received a high school diploma or its equivalent as determined by the State Board of Education."

SECTION 2. All laws and parts of laws in conflict with this Act are hereby repealed.

APPROVED: 3/19/87

Annex 2: CSL of 1915 (excerpt from Arkansas State Legislature – Act 294 of 41st General Assembly, Regular Session 1509)

ACT 294.

AN ACT to provide compulsory school attendance between certain ages, providing a penalty for non-attendance, requiring school boards and giving them authority to furnish free textbooks under certain conditions.

SECTION

SECTION

Be It Enacted by the General Assembly of the State of Arkansas:

SECTION 1. That from and after September 1st, 1917, every parent, guardian or other person residing within the State of Arkansas, having in custody or charge any child or children between the ages of seven and fifteen, both inclusive, shall send such child or children to a public, private or parochial school under such penalty for noncompliance with this Act as is hereinafter provided for.

SECTION 2. That the minimum session of attendance required under this Act shall be three-fourths of the session or sessions of the public school in the district or districts in which the child or children resides. All children shall be required to enter school not later than two weeks after the opening of the session or term.

SECTION 3. That the following classes of children between the age of seven and fifteen years shall be ex-

Annex 3: Returns to Schooling by Region

Annex Table 3.1: Arkansas Region Reconstruction

Census PUMA	ACS PUMA	Imputed region	Counties / Area
500900	900	Central	Faulkner & Lonoke Counties
501400	1400	Central	Saline, Grant & Perry Counties
501501	1501	Central	Pulaski County (Outer)--North Little Rock, Sherwood & Jacksonville Cities
501502	1502	Central	Pulaski County (Central)--Little Rock City
500101	101	Northwest	Benton County (Outer)
500102	102	Northwest	Benton County (Central)--Bentonville & Rogers Cities
500201	201	Northwest	Washington County (Outer)--Springdale City
500202	202	Northwest	Washington County (Central)--Fayetteville City
500300	300	Northwest	Baxter, Boone & Carroll Counties
501000	1000	Northwest	Pope, Johnson & Conway Counties
501100	1100	Northwest	Sebastian, Crawford & Franklin Counties
500400	400	Northeast	Independence, Cleburne & Van Buren Counties
500500	500	Northeast	Northeast Arkansas
500600	600	Northeast	East Arkansas
500700	700	Northeast	Craighead & Poinsett Counties
500800	800	Northeast	White, Lonoke & Woodruff Counties
501200	1200	Southwest	West Arkansas
501300	1300	Southwest	West Central Arkansas
501700	1700	Southwest	Southwest Arkansas
501600	1600	Southeast	Southeast Arkansas

Note: Region identification done manually based on the map on the left and PUMA identification available PUMA reporter website.

Table Annex 3.2: Basic Mincerian by Region

	All					Men					Women				
	Central	Northwest	Northeast	Southwest	Southeast	Central	Northwest	Northeast	Southwest	Southeast	Central	Northwest	Northeast	Southwest	Southeast
Schooling	0.097***	0.116***	0.072***	0.093***	0.061***	0.099***	0.136***	0.093***	0.081***	0.082**	0.105***	0.105***	0.075***	0.119***	0.085***
	(0.012)	(0.009)	(0.010)	(0.014)	(0.022)	(0.018)	(0.013)	(0.018)	(0.023)	(0.032)	(0.015)	(0.013)	(0.013)	(0.014)	(0.029)
Experience	0.022***	0.031***	0.003	0.009	0.001	0.033***	0.044***	0.01	0.022	-0.002	0.013	0.018*	-0.007	0.01	0.002
	(0.007)	(0.007)	(0.008)	(0.011)	(0.016)	(0.011)	(0.010)	(0.013)	(0.014)	(0.021)	(0.010)	(0.010)	(0.010)	(0.014)	(0.022)
Experience-squared	-0.000**	-0.000***	0.000	0.000	0.000	-0.001**	-0.001***	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Constant	1.505***	1.148***	1.981***	1.612***	2.108***	1.449***	0.846***	1.734***	1.737***	2.029***	1.383***	1.342***	1.891***	1.141***	1.589***
	(0.201)	(0.158)	(0.172)	(0.242)	(0.347)	(0.299)	(0.205)	(0.294)	(0.373)	(0.455)	(0.257)	(0.236)	(0.213)	(0.259)	(0.438)
R-squared	0.17	0.207	0.074	0.13	0.048	0.175	0.27	0.1	0.095	0.091	0.204	0.185	0.102	0.259	0.092
Obs.	1,069	1,226	1,116	669	282	532	649	587	340	135	537	577	529	329	147

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	All					Men					Women				
	Central	Northwest	Northeast	Southwest	Southeast	Central	Northwest	Northeast	Southwest	Southeast	Central	Northwest	Northeast	Southwest	Southeast
Schooling	0.086***	0.112***	0.068***	0.085***	0.050**	0.079***	0.129***	0.095***	0.077***	0.069**	0.101***	0.103***	0.071***	0.110***	0.074***
	(0.011)	(0.009)	(0.010)	(0.014)	(0.021)	(0.016)	(0.012)	(0.018)	(0.023)	(0.031)	(0.015)	(0.013)	(0.013)	(0.014)	(0.028)
Experience	0.020***	0.028***	0.004	0.01	-0.003	0.027***	0.041***	0.007	0.015	-0.01	0.014	0.016*	-0.004	0.016	0.003
	(0.007)	(0.007)	(0.008)	(0.011)	(0.016)	(0.010)	(0.010)	(0.013)	(0.013)	(0.021)	(0.010)	(0.010)	(0.010)	(0.014)	(0.022)
Experience-squared	-0.000**	-0.000***	0.000	0.000	0.000	-0.000**	-0.001***	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
African American	-0.199***	-0.205	-0.157*	-0.072	-0.237***	-0.208**	-0.481**	0.059	0.014	-0.268**	-0.189**	0.054	-0.274**	-0.158	-0.147
	(0.059)	(0.126)	(0.092)	(0.077)	(0.086)	(0.082)	(0.206)	(0.101)	(0.103)	(0.118)	(0.081)	(0.147)	(0.130)	(0.102)	(0.111)
Native American	-0.209	-0.320**	-0.215***	0.364***	-0.680***	-0.479**	-0.041	-0.399***			0.375***	-0.345***	0.023	0.510***	-0.387***
	(0.225)	(0.153)	(0.059)	(0.108)	(0.078)	(0.192)	(0.277)	(0.057)			(0.077)	(0.083)	(0.063)	(0.142)	(0.112)
Other	-0.069	-0.009	-0.066	0.114	-0.384***	-0.183	0.013	-0.215	0.11	-0.464***	0.026	-0.033	0.119	0.093	-0.32
	(0.108)	(0.062)	(0.142)	(0.112)	(0.131)	(0.121)	(0.072)	(0.180)	(0.119)	(0.158)	(0.174)	(0.092)	(0.194)	(0.185)	(0.195)
Married	0.166***	0.144***	0.006	0.245***	0.199**	0.259***	0.204***	0.061	0.317***	0.129	0.051	0.079	-0.064	0.119	0.164
	(0.049)	(0.043)	(0.053)	(0.062)	(0.088)	(0.068)	(0.056)	(0.064)	(0.089)	(0.119)	(0.071)	(0.063)	(0.085)	(0.078)	(0.123)
Constant	1.672***	1.159***	2.041***	1.580***	2.339***	1.743***	0.872***	1.715***	1.669***	2.342***	1.471***	1.344***	1.999***	1.176***	1.772***
	(0.188)	(0.158)	(0.180)	(0.247)	(0.339)	(0.260)	(0.196)	(0.299)	(0.371)	(0.472)	(0.252)	(0.246)	(0.234)	(0.253)	(0.445)
R-squared	0.215	0.225	0.084	0.177	0.138	0.24	0.309	0.113	0.148	0.179	0.23	0.192	0.131	0.296	0.136
Obs.	1,069	1,226	1,116	669	282	532	649	587	340	135	537	577	529	329	147

Annex 4. Returns to Schooling using OLS

	Basic Mincerian			Extended		
	All	Men	Female	All	Men	Female
Schooling	0.104***	0.107***	0.101***	0.095***	0.095***	0.094***
	(0.006)	(0.009)	(0.007)	(0.006)	(0.009)	(0.007)
Experience	0.017***	0.027***	0.007	0.017***	0.025***	0.008
	(0.004)	(0.006)	(0.005)	(0.004)	(0.006)	(0.006)
Experience-squared	-0.000***	-0.000***	0.000	-0.000***	-0.000***	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Men	0.244***			0.228***		
	(0.023)			(0.022)		
African American				-0.148***	-0.122**	-0.183***
				(0.037)	(0.052)	(0.051)
Native American				0.215**	0.242	0.170
				(0.109)	(0.188)	(0.112)
Other				-0.033	-0.069	0.002
				(0.047)	(0.062)	(0.069)
Married				0.129***	0.200***	0.049
				(0.024)	(0.034)	(0.036)
Northwest				-0.047	-0.013	-0.080*
				(0.030)	(0.043)	(0.044)
Northeast				-0.124***	-0.070	-0.180***
				(0.033)	(0.046)	(0.048)
Southwest				-0.105***	-0.080	-0.130***
				(0.035)	(0.052)	(0.048)
Southeast				-0.112**	-0.013	-0.219***
				(0.046)	(0.068)	(0.062)
Constant	1.299***	1.392***	1.457***	1.462***	1.532***	1.641***
	(0.101)	(0.151)	(0.128)	(0.104)	(0.154)	(0.133)
R-squared	0.184	0.167	0.175	0.212	0.201	0.209
Obs.	4,362	2,243	2,119	4,362	2,243	2,119

Notes: Sample of wage earners aged between 25 and 65 who are not currently enrolled in school. Standard errors in parentheses. The reference categories for the categorical variables "race" and "region" are "White" and "Central", respectively. The cohort affected by the CSL implemented in 1987 in Arkansas includes those born between 1971 and 1976, to include people aged between 12 and 16 years old right when the reform aimed to increase the school leaving age from 16 to 17.

Annex 5a. 1st stage of the IV using CSL (1987)

	Basic Mincerian			Extended		
	All	Men	Female	All	Men	Female
CSL 1987	0.707***	0.644***	0.764***	0.708***	0.677***	0.742***
	(0.146)	(0.205)	(0.207)	(0.140)	(0.191)	(0.202)
Experience	-0.064**	-0.050	-0.074*	-0.065**	-0.055	-0.073*
	(0.027)	(0.035)	(0.040)	(0.026)	(0.035)	(0.039)
Experience-squared	0.000	0.000	0.000	0.000	0.000	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Men	-0.698***			-0.741***		
	(0.098)			(0.096)		
African American				-0.620***	-0.802***	-0.471**
				(0.139)	(0.180)	(0.202)
Native American				1.271***	1.239**	1.167**
				(0.380)	(0.502)	(0.534)
Other				-0.269	-0.193	-0.355
				(0.172)	(0.240)	(0.247)
Married				0.665***	0.727***	0.591***
				(0.110)	(0.157)	(0.152)
Northwest				-0.664***	-0.533***	-0.802***
				(0.138)	(0.196)	(0.194)
Northeast				-0.722***	-0.741***	-0.718***
				(0.141)	(0.192)	(0.207)
Southwest				-0.878***	-0.922***	-0.847***
				(0.159)	(0.226)	(0.221)
Southeast				-0.583***	-0.724***	-0.458*
				(0.189)	(0.255)	(0.275)
Constant	15.501***	14.520***	15.760***	15.799***	14.797***	16.068***
	(0.259)	(0.344)	(0.364)	(0.257)	(0.341)	(0.369)
F (1st stage)	75.971	30.082	53.159	39.623	18.403	21.421
Obs.	4,362	2,243	2,119	4,362	2,243	2,119

Notes: Sample of wage earners aged between 25 and 65 who are not currently enrolled in school. Standard errors in parentheses. The reference categories for the categorical variables "race" and "region" are "White" and "Central", respectively. The cohort affected by the CSL implemented in 1987 in Arkansas includes those born between 1971 and 1976, to include people aged between 12 and 16 years old right when the reform aimed to increase the school leaving age from 16 to 17.

Annex 5b. 2nd stage of the IV using CSL (1987)

	Basic Mincerian			Extended		
	All	Men	Female	All	Men	Female
Schooling	0.127**	0.155**	0.109	0.129***	0.158**	0.112
	(0.050)	(0.075)	(0.068)	(0.050)	(0.071)	(0.068)
Experience	0.018***	0.028***	0.007	0.018***	0.026***	0.009
	(0.004)	(0.006)	(0.006)	(0.005)	(0.006)	(0.006)
Experience-squared	-0.000**	-0.000**	0.000	-0.000**	-0.000**	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Men	0.261***			0.254***		
	(0.041)			(0.042)		
African American				-0.128***	-0.073	-0.175***
				(0.048)	(0.077)	(0.062)
Native American				0.172	0.160	0.150
				(0.126)	(0.223)	(0.134)
Other				-0.025	-0.057	0.007
				(0.049)	(0.064)	(0.074)
Married				0.106***	0.155**	0.038
				(0.040)	(0.064)	(0.050)
Northwest				-0.024	0.020	-0.066
				(0.045)	(0.059)	(0.072)
Northeast				-0.100**	-0.025	-0.167**
				(0.048)	(0.071)	(0.065)
Southwest				-0.075	-0.023	-0.115
				(0.056)	(0.087)	(0.074)
Southeast				-0.092*	0.033	-0.211***
				(0.055)	(0.089)	(0.068)
Constant	0.943	0.705	1.326	0.931	0.624	1.368
	(0.769)	(1.063)	(1.059)	(0.776)	(1.036)	(1.083)
Prob > Chi-squared	0.000	0.000	0.025	0.000	0.000	0.000
Obs.	4,362	2,243	2,119	4,362	2,243	2,119

Notes: Sample of wage earners aged between 25 and 65 who are not currently enrolled in school. Standard errors in parentheses. The reference categories for the categorical variables "race" and "region" are "White" and "Central", respectively. The cohort affected by the CSL implemented in 1987 in Arkansas includes those born between 1971 and 1976, to include people aged between 12 and 16 years old right when the reform aimed to increase the school leaving age from 16 to 17.