

Treasure in Heaven

Returns to Schooling in Clergy Labor Markets

Grant M. Seiter

Baylor University, Waco, TX

April 2, 2019



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Treasure in Heaven

Project Description: *I analyze changes in returns to schooling among clergy in order to provide a descriptive analysis of the financial incentives facing members of the occupation*

- I find that the opportunity cost of joining the clergy has increased from 1950-2010

Motivations:

- High educational attainment among clergy
- Well-documented rise in return to schooling
- Unlikely that clergy earnings have kept up with other college graduates
- Implications for quality of clergy?

- 1 Introduction**
 - Definitions
 - Literature Review
- 2 Data & Descriptive Statistics**
 - Census Data
 - Summary Statistics
- 3 Empirical Design**
 - Mincer Earnings Equation
- 4 Basic Results**
 - Detailed
 - Minority Markets
- 5 Discussion & Conclusion**
- 6 Endmatter**
 - Questions
 - Data Appendix

Return to Schooling

- A **rate of return to schooling (education)** is a growth rate of market earnings with years of schooling
- The **coefficient on schooling** in a regression of log earnings on years of schooling is often called a rate of return (Becker & Chiswick, 1966)
- Best interpreted as the average return to one year of schooling paid by the market
- Popularized and estimated by Mincer (1974) and is now known as the Mincer model

Return to Schooling

- Central component of human capital theory (Becker, 1964)
- Central to economic policy making, inquiries into wage inequality, and the structure of wages
- Rates of return to schooling signal the relative profitability of investment in education, quality of schooling, and vocational decision making

Religion as a Market

Conclusions from the Economics of Religion Literature:

- Self-Interest motivates clergy
- Market forces constrain churches
- Competition benefits churches similar to secular firms

Essentially, religious competition mirrors competition among secular firms, and clergy act rationally. Therefore, we can apply insights from secular markets to religious competition.

Selected Papers

- **Hartzell, Parsons, and Yermack (2010)**
 - Compensation schemes for Methodist ministers in Oklahoma
 - Incremental financial incentives affect minister effort
 - Pay-for-performance scenarios affect congregational performance
- **Trawick and Lile (2007)**
 - Concentration of Southern Baptist churches and pastor salary
 - Clergy received higher salaries in areas with greater church concentration
- **Zech (2007)**
 - Ministerial pay is unrelated to self-reported performance scores
 - Ministers from larger communities receive higher salaries

Data Sets

My analysis is focused on two sets of cross-sectional data:

- U.S. decennial census public-use samples (1950-2000)
- American Community Survey (ACS) sample (2010)

All data are sourced from the IPUMS-USA database at the University of Minnesota.

Full Appended Sample

- 60 million total observations
- 90,244 clergy observations

Variables of Interest

Occupation

- **Clergy** - all individuals who earn income by conducting religious worship or performing other spiritual functions associated with the practice of a religious faith

Income

- **Income from Wages** - total pre-tax wage and salary income received as an employee for the previous 12 months
- **Total Personal Income** - pre-tax personal income (or losses) from all sources for the previous 12 months

Constructed Variables

Years of Schooling

Grade levels correspond to a single year of schooling and numerical values 0 (for no schooling) through 12 (high school graduates). Each degree conferred beyond high school is assigned a value calculated as the average number of years to complete the degree + 12 years

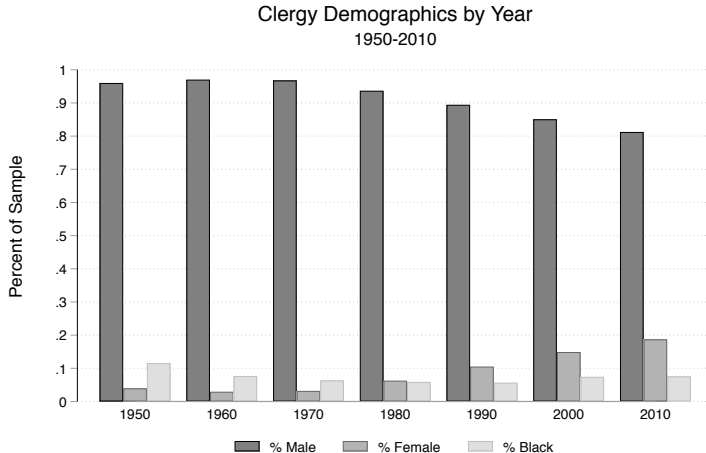
Level of School Completion (Dummy)

Levels of school completion are assigned based on a calculation for years of schooling and correspond to the existing census definitions for education. The 6 indicator variables are: (1) less than high school, (2) some high school (grades nine through eleven), (3) high school, (4) some college, (5) bachelor's degree, and (6) graduate degree.

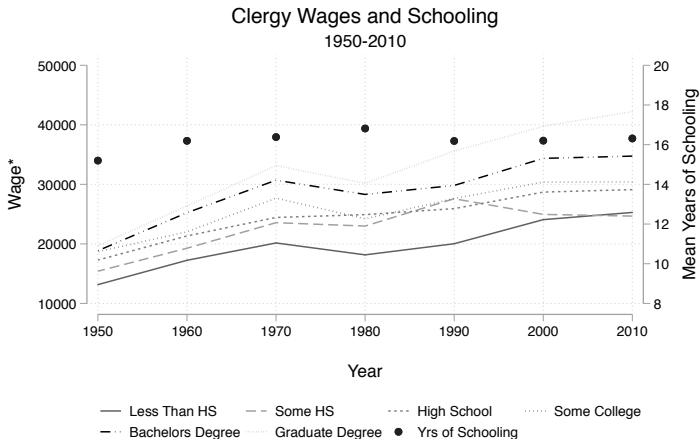
Summary Statistics: 1950-2010

Variable	1950 (1%)	1960 (5%)	1970 (2%)	1980 (5%)	1990 (5%)	2000 (5%)	2010 (5%)
Clergy							
Observations	1769	11001	4835	1551	19435	23415	28238
% of Sample	0.092	0.123	0.119	0.137	0.155	0.166	0.188
Mean Age	44.97	44.00	45.73	45.71	47.56	49.75	51.26
% Male	97.40	98.03	97.20	94.06	90.10	85.79	82.03
% Hispanic	1.04	1.13	1.43	1.82	1.69	2.17	2.88
% Black	10.13	7.07	6.03	5.52	5.49	7.26	7.64
Non-Clergy							
Observations	165481	3351411	1732419	5381382	6195914	6953466	7401067
Mean Age	37.66	38.59	37.85	36.44	37.84	39.29	41.69
% Male	66.72	63.39	59.08	55.46	52.98	52.24	51.26
% Hispanic	1.88	2.79	3.34	5.14	3.97	5.03	6.97
% Black	10.31	10.16	10.05	10.14	9.25	10.17	9.29

Clergy Demographics: 1950-2010



Change in Mean Wage (Clergy): 1950-2010



*Wages CPI inflated to 2010

Mincer Earnings Equation

I employ a modification of the human capital earnings function developed by Jacob Mincer (1974) to estimate returns to schooling.

The Mincer(1974) model specifies:

$$\ln[w(s, x)] = \beta_0 + \beta_1 s + \beta_2 x + \beta_3 x^2 + \varepsilon_i \quad (1)$$

- $w(s, x)$ is income from wages at schooling level s and age x
- β_1 is the rate of return to schooling assumed to be the same for all schooling levels
- ε_i is a residual with zero mean (i.e. $\mathbb{E}(\varepsilon_i | s, x) = 0$).

Model Extensions

- 1 Experience is not directly observable - I utilize respondent age as a proxy for potential experience
- 2 All regressions include indicator variables for male, Hispanic white, black, and state of residence
- 3 Separate regressions control for occupation fixed-effects and top-coded income cells
- 4 Separate regressions for females and blacks with clergy indicator variable and schooling-clergy interaction term
- 5 I estimate robust standard errors

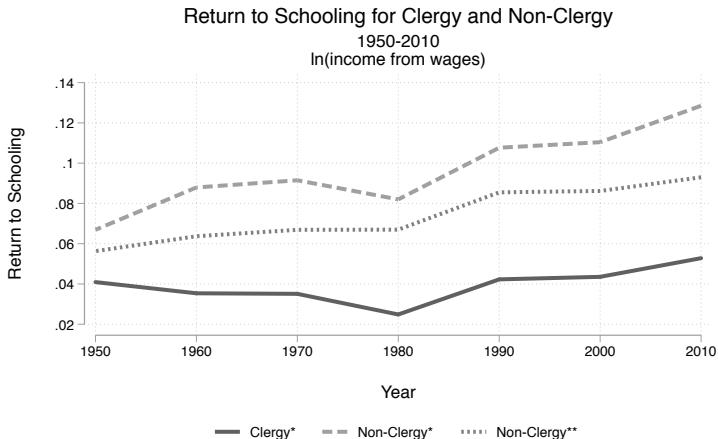
Model Assumptions & Weaknesses

- 1 Individuals have identical ability and opportunities, markets are perfect, and environment is certain
- 2 Individuals require a compensating wage differential to work in occupations that require a longer schooling period
- 3 Ignores future earnings uncertainty and non-pecuniary costs and benefits
- 4 Reduced Form: Does not account for endogeneity of schooling

Detailed Results

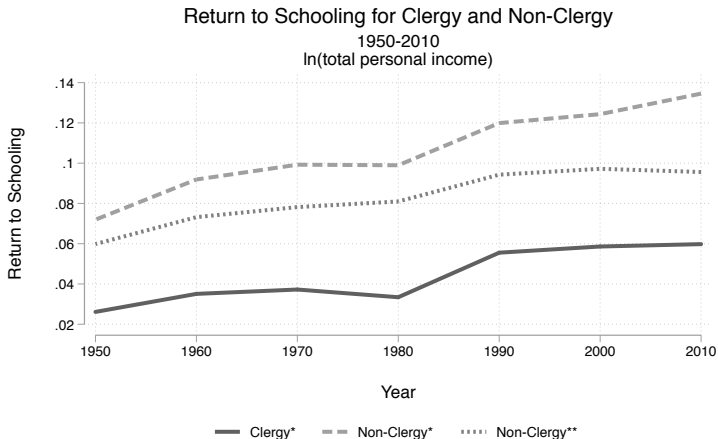
- **Higher rate of return** to schooling for non-clergy over all periods
- Gap between clergy and non-clergy returns **increases**
- Increased education is **positively correlated** with both clergy and non-clergy earnings
- Opportunity cost of joining the clergy is **increasing**

Returns to Schooling - Income from Wages



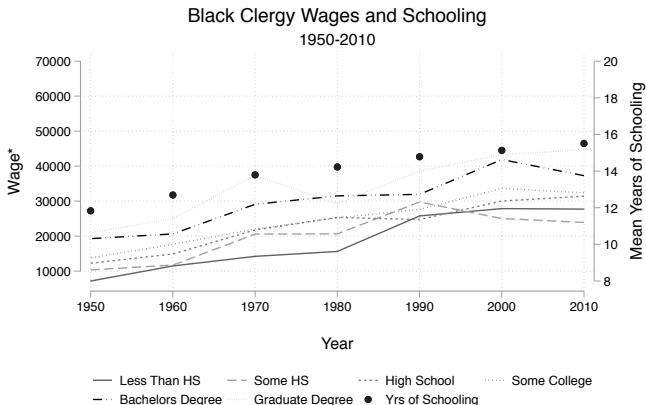
*Controlling for state fixed effects **Controlling for state and occupation fixed effects

Returns to Schooling - Total Personal Income



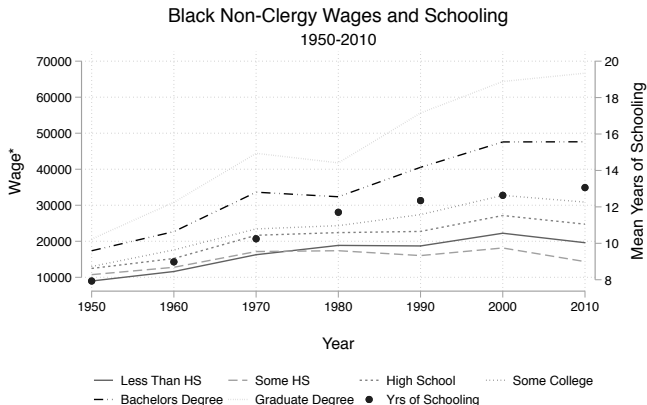
*Controlling for state fixed effects **Controlling for state and occupation fixed effects

Black Labor Market - Change in Mean Wage



*Wages CPI inflated to 2010

Black Labor Market - Change in Mean Wage

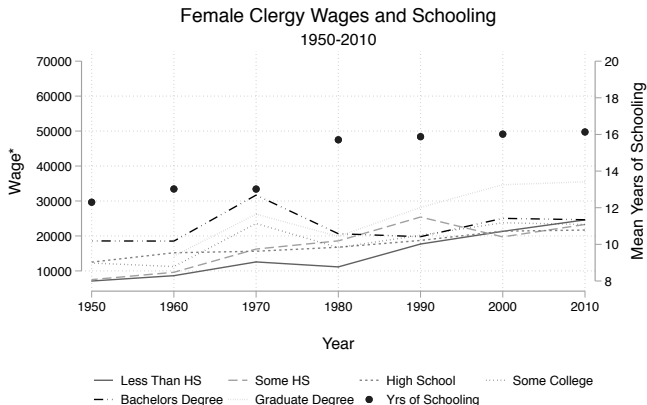


*Wages CPI inflated to 2010

Black Labor Market - Regression Results

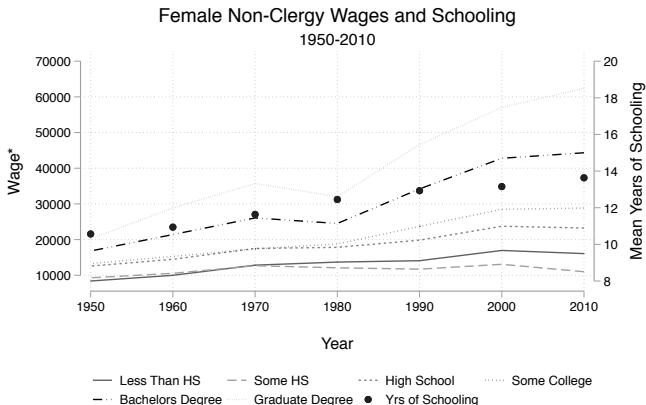
- **Clergy could be a substitute for schooling for less educated African Americans**
 - The data suggest that there exists a premium for less educated blacks to enter the clergy
- **Shrinking income and wage inequality among clergy**
 - (Black clergy receive less than white clergy)
 - (-45.1% and -33.5% in 1950 and 1960)
 - (Post 1970 the wage gap disappears or there exists a slight premium)
- In the non-clergy cohort the **inequality gap** for wages (when controlling for occupation) **falls** from -24.4% to -12.6%

Female Labor Market - Change in Mean Wage



*Wages CPI inflated to 2010

Female Labor Market - Change in Mean Wage



*Wages CPI inflated to 2010

Female Labor Market - Regression Results

In recent decades, the labor market for clergy has seen a rapid rise in feminization (from 2.6% female to nearly 18%)

- Potential Contributions:
 - Shifts in Theology and Organizational Leadership
 - (Changes in denominational acceptance of women pastors)
 - Occupational Premium for Female Clergy
 - (Avg. occupational premium of 64%; declines as schooling increases)
 - Rising Opportunity Costs for Male Clergy
 - (Return to schooling gap increase from 2.6% to 7.5% 1950-2010)

Basic Results

- **Higher rate of return** to schooling for non-clergy over all periods
- Gap between clergy and non-clergy returns **increases**
- Increased education is **positively correlated** with both clergy and non-clergy earnings
- Opportunity cost of joining the clergy is **increasing**

As a Result

As **opportunity costs increase for clergy...**

- Is overall church quality declining in the U.S.?
- Should the Church be concerned about a potential exodus of talent and leadership?
- What could be happening to church composition?
- For the African-American Church?
- For females?

Alternative Theories

Q: Should the Church be concerned about a potential exodus of talent and leadership?

Traditional Labor Market Theory

- Suggests rising opportunity cost leads to a decline in talent

Club-Good Theory of Religious Organization

- Suggests rising opportunity cost leads to a more devoted clergy

Superstar Literature

- Considers the role of more entrepreneurial clergy

Alternative Theories

Traditional Labor Market Theory

- **Suggests rising opportunity cost leads to a decline in talent**
- Potential clergy make earnings maximizing decisions when faced with a vocational choice
- Practical concerns over financial security and fair wages remain salient for many clergy
- The potential highest-quality clergy choose other occupations with more lucrative income benefits

Alternative Theories

Club-Good Theory of Religious Organization

- **Suggests that only the most devoted and highest-quality enter**
- Churches are clubs that produce a public good for their members
- Such clubs are prone to abuse by free-riders, people who consume the church's product without contributing to it.
- To combat free-riding, churches require (or at least use strong social pressure to expect) sacrifices from their members.
- Church members willing to incur the cost of the sacrifice are those who participate most vigorously ("faithful remnant")

Alternative Theories

Superstars & Entrepreneurial Clergy

- **Suggests that potential ministers respond to higher opportunity cost with entrepreneurial behavior**
- Clergy take advantage of the opportunity afforded by new A/V and other technologies to build bigger churches
- Larger congregations are able to pay more and somewhat make up the pay gap incurred by entering the ministry.
- A select minority of pastors with unique ability are able to scale their religious good and amass a large following (Superstars*)

Broad Implications

- **How much should we pay the pastor?**
- Smaller churches lacking the resources to pay more might change to women ministers, especially those whose spouses also are able to earn high salaries
- African American congregations may place a higher (relative) value on their clergy
- Entrepreneurial pastors may rely on appeals to secular goods in order to attract new congregants
- A decline in the quality of clergy could help explain the increasing lack of identification with religion among Americans

Questions

Questions

*I thank Charles M. North and Scott Cunningham of Baylor University for their invaluable guidance and encouragement. Additionally, I thank the Values & Capitalism initiative at the American Enterprise Institute for support. The views expressed are those of the author and do not necessarily reflect the views of the American Enterprise Institute. All remaining errors are the responsibility of the author. For questions or comments please contact Grant M. Seiter at Grant_Seiter@baylor.edu

Data Appendix

Table: Years of schooling coefficients from regressions on natural log of wages

Year	Clergy*	Non-Clergy*	Gap	Non-Clergy**	Gap
1950	0.041*** (0.014)	0.067*** (0.001)	0.026 (.)	0.056*** (0.001)	0.015 (.)
1960	0.035*** (0.003)	0.088*** (0.000)	0.053 (.)	0.064*** (0.000)	0.026 (.)
1970	0.035*** (0.004)	0.092*** (0.000)	0.057 (.)	0.067*** (0.000)	0.032 (.)
1980	0.025*** (0.003)	0.082*** (0.000)	0.057 (.)	0.067*** (0.000)	0.042 (.)
1990	0.042*** (0.003)	0.108*** (0.000)	0.066 (.)	0.085*** (0.000)	0.043 (.)
2000	0.044*** (0.002)	0.110*** (0.000)	0.066 (.)	0.086*** (0.000)	0.042 (.)
2010	0.053*** (0.002)	0.128*** (0.000)	0.075 (.)	0.093*** (0.000)	0.040 (.)

We estimated the effect of education on the natural log of wages using OLS. Heteroskedastic robust standard errors in parenthesis.
 *Models include state level fixed effects. **Models include indicator variables for 25 census defined occupation groups * p<0.10, **
 p<0.05, *** p<0.01

Data Appendix

Table: Years of schooling coefficients from regressions on natural log of total personal income

Year	Clergy*	Non-Clergy*	Gap	Non-Clergy**	Gap
1950	0.026*** (0.010)	0.072*** (0.001)	0.046 (.)	0.060*** (0.001)	0.034 (.)
1960	0.035*** (0.002)	0.092*** (0.000)	0.057 (.)	0.073*** (0.000)	0.038 (.)
1970	0.037*** (0.003)	0.099*** (0.000)	0.062 (.)	0.078*** (0.000)	0.041 (.)
1980	0.033*** (0.002)	0.099*** (0.000)	0.066 (.)	0.081*** (0.000)	0.048 (.)
1990	0.056*** (0.002)	0.120*** (0.000)	0.064 (.)	0.094*** (0.000)	0.038 (.)
2000	0.059*** (0.002)	0.124*** (0.000)	0.065 (.)	0.097*** (0.000)	0.038 (.)
2010	0.060*** (0.002)	0.135*** (0.000)	0.075 (.)	0.096*** (0.000)	0.036 (.)

We estimated the effect of education on the natural log of total personal income using OLS. Heteroskedastic robust standard errors in parenthesis. *Models include state level fixed effects. **Models include indicator variables for 25 census defined occupation groups * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Data Appendix

Table: Estimated effect of schooling on natural log of wages, OLS

	Census						ACS
Clergy w/State Controls	1950	1960	1970	1980	1990	2000	2010
Years of Schooling	0.041*** (0.014)	0.035*** (0.003)	0.035*** (0.004)	0.025*** (0.003)	0.042*** (0.003)	0.044*** (0.002)	0.053*** (0.002)
Age	0.076*** (0.020)	0.109*** (0.005)	0.115*** (0.008)	0.131*** (0.005)	0.126*** (0.004)	0.110*** (0.003)	0.119*** (0.003)
Squared Age	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)
Male	0.481* (0.264)	0.654*** (0.078)	0.430*** (0.101)	0.411*** (0.040)	0.390*** (0.024)	0.339*** (0.019)	0.383*** (0.016)
Hispanic White	-0.492 (0.530)	-0.146** (0.059)	0.022 (0.106)	-0.089 (0.060)	-0.137*** (0.050)	-0.143*** (0.036)	-0.156*** (0.031)
Black	-0.451*** (0.171)	-0.335*** (0.037)	-0.086 (0.055)	0.068* (0.037)	0.056* (0.029)	0.073*** (0.024)	-0.025 (0.022)
R-squared	0.24	0.17	0.19	0.13	0.17	0.16	0.18
N	385	8600	3928	12221	18106	21586	26271
Peak of age-earnings parabola	50.63	46.99	46.47	46.10	45.87	46.06	46.95
Mean of dependent variable	7.51	8.00	8.46	8.98	9.60	9.95	10.22

We estimated the effect of education on the natural log of wages using OLS. Heteroskedastic robust standard errors in parenthesis. All models include Census division fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Data Appendix

Table: Estimated effect of schooling on natural log of wages, OLS

Non-Clergy w/State Controls	Census						ACS
	1950	1960	1970	1980	1990	2000	2010
Years of Schooling	0.067*** (0.001)	0.088*** (0.000)	0.092*** (0.000)	0.082*** (0.000)	0.108*** (0.000)	0.110*** (0.000)	0.128*** (0.000)
Age	0.134*** (0.001)	0.174*** (0.000)	0.168*** (0.000)	0.171*** (0.000)	0.182*** (0.000)	0.174*** (0.000)	0.200*** (0.000)
Squared Age	-0.001*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
Male	0.712*** (0.005)	0.946*** (0.001)	0.845*** (0.002)	0.733*** (0.001)	0.600*** (0.001)	0.507*** (0.001)	0.460*** (0.001)
Hispanic White	-0.075*** (0.017)	-0.050*** (0.003)	-0.019*** (0.004)	-0.039*** (0.002)	-0.036*** (0.002)	-0.028*** (0.002)	-0.021*** (0.002)
Black	-0.376*** (0.008)	-0.413*** (0.002)	-0.201*** (0.003)	-0.150*** (0.002)	-0.156*** (0.001)	-0.135*** (0.001)	-0.177*** (0.001)
R-squared	0.30	0.38	0.39	0.33	0.34	0.34	0.36
N	165481	3351411	1732419	5381382	6195914	6953466	7401067
Peak of age-earnings parabola	46.52	47.41	48.18	46.74	47.10	47.36	48.21
Mean of dependent variable	7.25	7.66	8.11	8.83	9.40	9.82	10.06

We estimated the effect of education on the natural log of wages using OLS. Heteroskedastic robust standard errors in parenthesis. All models include Census division fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Data Appendix

Table: Estimated effect of schooling on natural log of wages, OLS

Non-Clergy w/St and Occ Controls	Census						ACS
	1950	1960	1970	1980	1990	2000	2010
Years of Schooling	0.056*** (0.001)	0.064*** (0.000)	0.067*** (0.000)	0.067*** (0.000)	0.085*** (0.000)	0.086*** (0.000)	0.093*** (0.000)
Age	0.102*** (0.001)	0.157*** (0.000)	0.152*** (0.000)	0.156*** (0.000)	0.169*** (0.000)	0.161*** (0.000)	0.182*** (0.000)
Squared Age	-0.001*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
Male	0.540*** (0.006)	0.889*** (0.001)	0.790*** (0.002)	0.669*** (0.001)	0.554*** (0.001)	0.440*** (0.001)	0.395*** (0.001)
Hispanic White	-0.018 (0.016)	0.015*** (0.003)	0.007* (0.004)	-0.022*** (0.002)	-0.009*** (0.002)	-0.002 (0.002)	0.020*** (0.001)
Black	-0.244*** (0.008)	-0.193*** (0.002)	-0.091*** (0.003)	-0.097*** (0.002)	-0.103*** (0.001)	-0.096*** (0.001)	-0.126*** (0.001)
R-squared	0.41	0.44	0.43	0.37	0.38	0.38	0.41
N	165481	3351411	1732419	5381382	6195914	6953466	7401067
Peak of age-earnings parabola	47.72	47.64	48.44	46.79	47.04	47.33	48.18
Mean of dependent variable	7.25	7.66	8.11	8.83	9.40	9.82	10.06

We estimated the effect of education on the natural log of wages using OLS. Heteroskedastic robust standard errors in parenthesis. All models include Census division fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Data Appendix

Table: Estimated effect of schooling on natural log of wages, OLS

	Census					ACS	
Black w/State Controls	1950 (1%)	1960 (5%)	1970 (2%)	1980 (5%)	1990 (5%)	2000 (5%)	2010 (5%)
Years of Schooling	0.054*** (0.003)	0.082*** (0.001)	0.099*** (0.001)	0.095*** (0.001)	0.118*** (0.001)	0.125*** (0.001)	0.137*** (0.001)
Clergy	-0.737 (0.492)	0.120 (0.115)	0.396** (0.183)	0.714*** (0.131)	1.234*** (0.140)	1.066*** (0.119)	1.335*** (0.122)
Schooling x Clergy	0.053 (0.037)	-0.021*** (0.008)	-0.049*** (0.012)	-0.069*** (0.008)	-0.099*** (0.009)	-0.084*** (0.008)	-0.097*** (0.008)
Age	0.109*** (0.003)	0.148*** (0.001)	0.142*** (0.001)	0.178*** (0.001)	0.184*** (0.001)	0.160*** (0.001)	0.187*** (0.001)
Squared Age	-0.001*** (0.000)	-0.002*** (0.000)	-0.001*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
Male	0.821*** (0.015)	0.973*** (0.004)	0.711*** (0.005)	0.457*** (0.003)	0.324*** (0.003)	0.257*** (0.002)	0.179*** (0.003)
R-squared	0.34	0.37	0.31	0.27	0.31	0.28	0.32
N	17108	341130	174425	546213	574277	708636	689325
Peak of age-earnings parabola	44.98	46.39	47.30	46.82	48.26	48.64	48.84
Mean of dependent variable	6.65	7.06	7.78	8.61	9.17	9.62	9.82

We estimated the effect of education on the natural log of wages using OLS. Heteroskedastic robust standard errors in parenthesis. All models include Census division fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Data Appendix

Table: Estimated effect of schooling on natural log of wages, OLS

	Census						ACS
	1950 (1%)	1960 (5%)	1970 (2%)	1980 (5%)	1990 (5%)	2000 (5%)	2010 (5%)
Black w/State and Occ Controls							
Years of Schooling	0.032*** (0.003)	0.042*** (0.001)	0.065*** (0.001)	0.072*** (0.001)	0.088*** (0.001)	0.094*** (0.001)	0.095*** (0.001)
Clergy	-0.156 (0.478)	-0.423*** (0.113)	-0.162 (0.180)	0.276** (0.128)	0.723*** (0.137)	0.571*** (0.118)	0.664*** (0.120)
Schooling x Clergy	0.077** (0.035)	0.025*** (0.008)	-0.008 (0.012)	-0.041*** (0.008)	-0.064*** (0.009)	-0.052*** (0.008)	-0.053*** (0.008)
Age	0.081*** (0.003)	0.130*** (0.001)	0.136*** (0.001)	0.165*** (0.001)	0.170*** (0.001)	0.147*** (0.001)	0.171*** (0.001)
Squared Age	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
Male	0.661*** (0.018)	0.835*** (0.004)	0.647*** (0.006)	0.429*** (0.003)	0.320*** (0.003)	0.238*** (0.003)	0.172*** (0.003)
R-squared	0.45	0.43	0.37	0.31	0.35	0.32	0.36
N	17108	341130	174425	546213	574277	708636	689325
Peak of age-earnings parabola	45.36	46.52	48.25	47.61	48.73	48.98	49.04
Mean of dependent variable	6.65	7.06	7.78	8.61	9.17	9.62	9.82

We estimated the effect of education on the natural log of wages using OLS. Heteroskedastic robust standard errors in parenthesis. All models include Census division fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Table: Estimated effect of schooling on natural log of wages, OLS

	Census						ACS
Female w/State Controls	1950 (1%)	1960 (5%)	1970 (2%)	1980 (5%)	1990 (5%)	2000 (5%)	2010 (5%)
Years of Schooling	0.097*** (0.002)	0.115*** (0.000)	0.105*** (0.001)	0.094*** (0.000)	0.120*** (0.000)	0.121*** (0.000)	0.135*** (0.000)
Clergy	0.034 (0.906)	0.680*** (0.263)	0.179 (0.322)	0.625*** (0.197)	0.614*** (0.148)	0.570*** (0.119)	0.751*** (0.102)
Schooling x Clergy	-0.014 (0.080)	-0.068*** (0.020)	-0.016 (0.021)	-0.060*** (0.012)	-0.059*** (0.009)	-0.057*** (0.007)	-0.068*** (0.006)
Age	0.093*** (0.002)	0.119*** (0.000)	0.114*** (0.001)	0.126*** (0.000)	0.148*** (0.000)	0.154*** (0.000)	0.181*** (0.000)
Squared Age	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
R-squared	0.17	0.18	0.18	0.16	0.22	0.26	0.30
N	55074	1226993	708872	2397591	2915125	3324383	3611709
Peak of age-earnings parabola	46.42	49.37	49.90	47.09	46.76	47.16	48.08
Mean of dependent variable	6.77	7.06	7.60	8.41	9.09	9.57	9.84

We estimated the effect of education on the natural log of wages using OLS. Heteroskedastic robust standard errors in parenthesis. All models include Census division fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Data Appendix

Table: Estimated effect of schooling on natural log of wages, OLS

	Census						ACS
	1950 (1%)	1960 (5%)	1970 (2%)	1980 (5%)	1990 (5%)	2000 (5%)	2010 (5%)
Female w/State and Occ Controls							
Years of Schooling	0.058*** (0.002)	0.054*** (0.000)	0.058*** (0.001)	0.067*** (0.000)	0.092*** (0.000)	0.093*** (0.000)	0.096*** (0.000)
Clergy	0.376 (0.880)	-0.222 (0.263)	-0.746** (0.323)	0.182 (0.195)	0.174 (0.148)	0.132 (0.118)	0.136 (0.101)
Schooling x Clergy	0.026 (0.078)	-0.001 (0.019)	0.035 (0.021)	-0.031** (0.012)	-0.029*** (0.009)	-0.027*** (0.007)	-0.027*** (0.006)
Age	0.069*** (0.002)	0.105*** (0.000)	0.100*** (0.001)	0.110*** (0.000)	0.133*** (0.000)	0.139*** (0.000)	0.161*** (0.000)
Squared Age	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.002*** (0.000)
R-squared	0.36	0.29	0.26	0.22	0.28	0.32	0.36
N	55074	1226993	708872	2397591	2915125	3324383	3611709
Peak of age-earnings parabola	47.39	50.38	50.84	47.39	46.86	47.20	48.01
Mean of dependent variable	6.77	7.06	7.60	8.41	9.09	9.57	9.84

We estimated the effect of education on the natural log of wages using OLS. Heteroskedastic robust standard errors in parenthesis. All models include Census division fixed effects. * p<0.10, ** p<0.05, *** p<0.01