Returns to Education

for American Indian and Alaskan Native Students

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This research was supported by funding from the Center for Indian Country Development (CICD) at the Minneapolis Federal Reserve. We are grateful to Dick Todd for support and advice and to Kris Shelander for excellent research assistance. We are also grateful to participants in the CICD brown bag for helpful feedback on an earlier draft. All opinions and errors are our own and do not reflect the Federal Reserve Bank of Minneapolis or the Federal Reserve System.





Introduction

- Returns to education: benefit an individual receives from investment in higher education
 - Earnings
 - Employment
 - Labor Force Participation
- Ask: If/how returns to higher education differ for American Indians and Alaskan Natives (AIAN)?
- Find: While returns are universally positive (and large),
 - For LFP and employment, returns are larger for AIAN than white
 - AIAN-white employment gap shrinks, but does not disappear, with education
 - For earnings, returns are larger for white than AIAN
 - AIAN-white earnings gap widens with education

Previous Literature

- Unique historical and socio-economic context
 - Educational system focused on assimilation, not AIAN culture and values
 - Treaties govern federal role, support for Tribal Colleges & Universities

Earnings

Returns to education for AIAN workers are lower than white workers (Kimmel, 1997). Earnings gap is larger in rural areas and for males.

Employment

 AIAN workers have higher unemployment, which improves with more education (Austin, 2013). No comparison to returns for white workers.

Occupation

 AIAN workers are overrepresented in low-skill occupations and underrepresented in high-skill occupations (Wise, Liebler & Todd, 2017). Possible occupational sorting.

Data

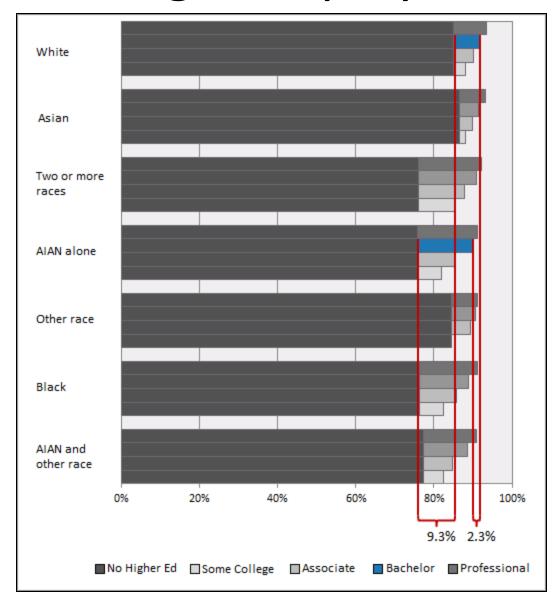
- American Community Survey Data (2009 2014)
 - Large-scale nationwide dataset (1% sample of the US Population)
 - Survey improvements since 2000 allow for greater detail in:
 - AIAN self-identification
 - Tribal selections
 - Homeland designations
 - Multiple-race self designation
 - Working age individuals, 25-55
 - Earnings analysis limited sample to individuals:
 - Employed full time
 - Earning at least \$10,000 annually
 - 7,420,632 total individuals; 118,361 AIAN individuals

Empirical Strategy

- Mincer-style Wage Regression
 - Formal model of investment in human capital
 - Models natural logarithm of earnings as a function of:
 - Education
 - Potential labor market experience
- Include controls for:
 - State and year fixed effects
 - Observable demographic characteristics
 - Occupation
 - Field of study
- Analysis remains largely descriptive, unable to address selection bias

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Findings: Employment Status

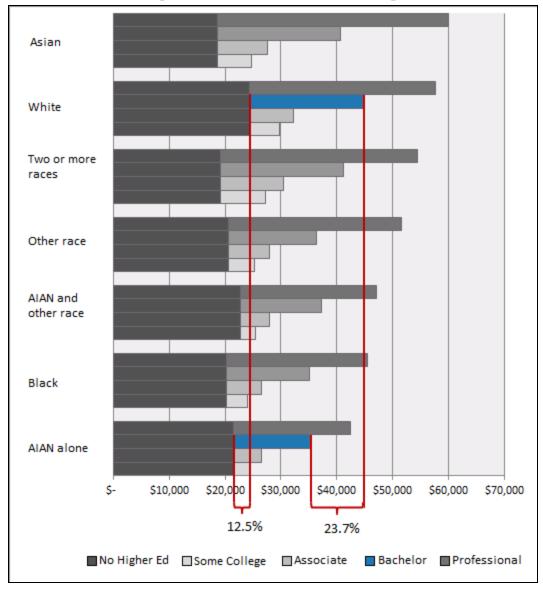


- On average, higher education increases employment for workers of all races
- Employment gap between AIAN and white workers closes with higher education:
 - No Higher Ed = -9.3 pp
 - Some College = -6.1 pp
 - Associate = -4.6 pp
 - Bachelors = -1.8 pp
 - Professional = -2.3 pp
- Similar findings for labor force participation

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*Excludes demographic controls

Findings: Earnings

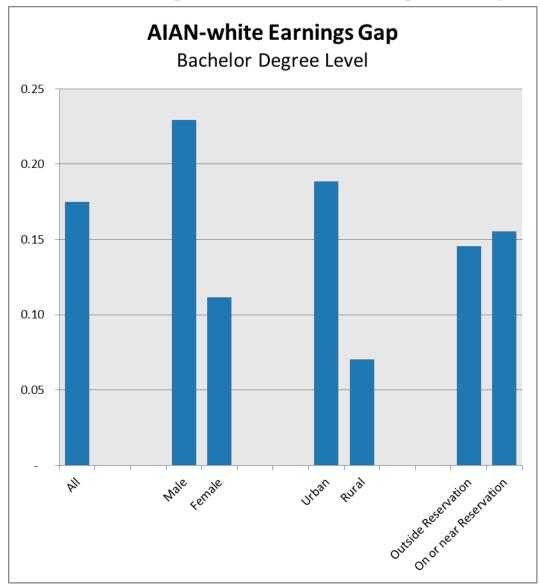


- On average, higher education increases earnings for workers of all races
- Magnitude of earnings increase varies between races
- Earnings gap between AIAN and white workers widens with higher education:
 - No Higher Ed = -12.5%
 - Some College = -19.4%
 - Associate = -19.4%
 - Bachelors = -23.7%
 - Professional = -30.5%

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*Excludes demographic controls

Findings: Earnings by Subgroup



- Earnings gaps differ by gender and urban/rural status
 - Male = -22.9%
 - Female = -11.1%
 - Urban = -18.9%
 - Rural = -7.02%
- Earnings gaps are similar on or outside of reservations
 - Outside = -14.5%
 - On/near = -15.5%
- Differential returns vary by Tribe, but samples sizes are small

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*Includes demographic controls

Findings: Summary

- Differential returns to a bachelors degree:
 - Significantly *larger* for AIAN workers in terms of employment, narrowing (but not eliminating) the AIANwhite employment gap
 - Significantly smaller for AIAN workers in terms of earnings, widening the AIAN-white earnings gap
- AIAN males and AIAN individuals working in urban areas appear to be particularly disadvantaged
- Controls for occupation and field of study do not drastically impact findings

Policy Implications

- Policies that promote higher education increase earnings; do not close earnings gaps
 - Related but not identical goals: reduce poverty, reduce inequality
- Since AIAN experience smaller earnings gains, debt burden harder to pay down
 - Support policies that provide grants rather than loans
 - Consider policies that link loan forgiveness to work AIAN communities value
- Findings consistent with (but not conclusive of):
 - Different firm preferences, i.e. labor market discrimination
 - Pre-labor market discrimination, i.e. PK-12 disparities

References

Austin, A. (2013). Native Americans and Jobs: The Challenge and the Promise. *EPI Briefing Paper #370*, Economic Policy Institute.

Kimmel, J. (1997). Rural Wages and Returns to Education: Differences Between Whites, Blacks and American Indians. *Economics of Education Review*, 16(1), 81-96.

Ruggles, S., Genadek, K., Goeken, R., Grover, J., & Sobek, M. *Integrated Public Use Microdata Series: Version 6.0* [dataset]. Minneapolis: University of Minnesota, 2015. http://doi.org/10.18128/D010.V6.0.

Wise, J., Liebler, C., & Todd, R. (2017). Dissimilarity on the Career Path: The Occupational Structure of the American Indian/Alaskan Native Workforce. (Working Paper No. 2017-01). Center for Indian Country Development.

Appendix – Empirical Strategy

Mincer-style regression analysis, OLS estimates of:

$$y_{itso} = \alpha + \beta_j Educ_{ij} + \gamma Exp_i + \delta_h Race_{ih} + \vartheta_j Educ_{ij} * Race_i + \theta_k X_{ik} + \rho_t + \tau_s + \varphi_o + \varepsilon_{itso}$$

Where:

- y is a labor market outcome for person i in time t state s and occupation o
- Educ measures j categories of education in the form of indicator variables
- Exp is a linear and a quadratic of potential experience
- Race measures h racial groups in the form of indicator variables (white is omitted category)
- β coefficient measures return to a degree for white workers
- ϑ coefficients measure marginal returns to education for each non-white group
- X is a vector of k demographic controls
- ρ , τ and φ are time (year), state and occupation fixed effects

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Appendix – Control Variables

- Individual
 - Gender
 - Marital status
 - Has children
 - Number of children
 - Youngest child's age
 - Veteran Status
 - Occupation
 - Field of Study
- Household
 - Number of family members in household
 - Number of own children in household
- Geographic
 - State
 - Census Region
 - Urban/rural (Metropolitan status)
 - Homeland (PUMA is on a reservation)

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Table 1. Cell Counts by Race and Education Level, Ages 25-55

	(1)	(2) No Higher	(3)	(4) Associate's	(5) Bachelor's	(6) Advanced
	Total	Education	Some Collge	Associate s Degree	Degree	Degree Degree
White	4,961,715	1,615,445	1,090,712	493,511	1,141,455	620,592
		33%	22%	10%	23%	13%
AIAN Alone	68,057	35,136	18,692	5,948	5,768	2,513
		52%	27%	9%	8%	4%
AIAN and Other Race	50,304	19,222	15,021	5,035	7,276	3,750
		38%	30%	10%	14%	7%
AIAN and Hispanic	22,438	11,794	5,525	1,650	2,273	1,196
		53%	25%	7%	10%	5%
Black	787,391	361,252	207,215	64,682	100,682	53,560
		46%	26%	8%	13%	7%
Asian or Pacific Islander	413,773	95,577	54,945	29,689	131,965	101,597
		23%	13%	7%	32%	25%
Hispanic	1,039,902	616,193	195,500	65,061	111,482	51,666
		59%	19%	6%	11%	5%
Other race, non-white or AIAN	12,300	4,709	2,352	1,008	2,539	1,692
		38%	19%	8%	21%	14%
Two or more races, non-AIAN	64,752	17,512	15,806	6,054	16,036	9,344
		27%	24%	9%	25%	14%
Total	7,420,632	2,776,840	1,605,768	672,638	1,519,476	845,910
		37%	22%	9%	20%	11%

Table 2. Summary Statistics Ages 25-55

Log Earnings 10.39 10.02 Midwest Region 0.22 Employment 0.75 0.59 South Region 0.37 Employment 0.75 0.59 South Region 0.37 Labor Force Participation 0.81 0.69 West Region 0.24 AIAN Alone 0.0395 (0.463) (0.424) AIAN and Other Race 0.01 0.57 Married 0.69 AIAN and Other Race 0.01 0.43 Household Size 2.98 6(0.0821) (0.494) (0.642) (1.661) Black 0.11 0 Number of Children 1.02 (0.308) (0) Has Children 0.48	AIAN 0.17
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Employment 0.75 0.59 South Region 0.37 Labor Force Participation 0.81 0.69 West Region 0.24 AIAN Alone 0.01 0.57 Married 0.6 AIAN and Other Race 0.01 0.43 Household Size 2.98 Black 0.11 0 Number of Children 1.02 (0.308) (0) (1.217)	
Comparison Com	(0.376)
Labor Force Participation 0.81 0.69 West Region 0.24 AIAN Alone (0.395) (0.463) (0.424) AIAN Alone 0.01 0.57 Married 0.6 AIAN and Other Race 0.01 0.43 Household Size 2.98 (0.0821) (0.494) (1.661) Black 0.11 0 Number of Children 1.02 (0.308) (0) (1.217)	0.33
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(0.0821) (0.494) (1.661) Black 0.11 0 Number of Children 1.02 (0.308) (0) (1.217)	(0.498)
Black 0.11 0 Number of Children 1.02 (0.308) (0) (1.217)	3.01
(0.308) (0) (1.217)	(1.947)
	0.98
Asian as Pasific Islandan 0.00	(1.327)
Asian or Pacific Islander 0.06 0 Has Children 0.48	0.53
(0.229) (0)	(0.499)
Other race, non-white or AIAN 0 Has Children, youngest age 0 to 5 0.18	0.16
(0.0407) (0) (0.384)	(0.363)
Two or more races, non-AIAN 0.01 0 Has Children, youngest age 6 to 10 0.11	0.1
(0.093) (0) (0.317)	(0.304)
Some College 0.22 0.28 Has Children, youngest age 11 to 15 0.1	0.09
(0.412) (0.451) (0.306)	(0.287)
Associates Degree 0.09 Has Children, youngest age 16 to 18 0.05	0.05
(0.287) (0.29)	(0.212)
Bachelors Degree 0.2 0.11 Has Children, youngest age 19+ 0.07	0.07
(0.404) (0.313)	(0.257)
Professional Degree 0.11 0.05 Veternan Status 0.07	0.09
(0.318) (0.224)	(0.286)
Potential Experience 21.4 21.81 Rural 0.14	0.3
(9.646) (9.424) (0.35)	(0.459)
Female 0.51 Puma includes reservation 1.17	1.55
(0.5) (0.5)	(0.407)
Observations 7,420,632	(0.497)

Table 2. Summary Statistics Ages 25-55, Continued

Table 3A. Earnings

	(1)	(2)	(3)	(4)	(5)	(6)
		_	Race, Educ and	with Demographic		
	Race	Race and Educ	Race * Educ	Controls	with Occupation	with Field of Study
AIAN Alone	-0.282***	-0.180***	-0.125***	-0.0657***	-0.0418***	-0.0698***
	(-57.89)	(-39.61)	(-16.39)	(-8.70)	(-5.74)	(-9.27)
MAN and Other Race	-0.187***	-0.138***	-0.0698***	-0.0490***	-0.0426***	-0.0508***
	(-34.61)	(-27.68)	(-7.63)	(-5.48)	(-5.15)	(-5.69)
Black	-0.288***	-0.209***	-0.187***	-0.141***	-0.0801***	-0.143***
	(-224.52)	(-181.02)	(-95.30)	(-72.68)	(-43.42)	(-73.72)
sian or Pacific Islander	-0.0215***	-0.104***	-0.268***	-0.250***	-0.174***	-0.252***
	(-11.23)	(-63.15)	(-78.81)	(-72.67)	(-53.60)	(-73.28)
ther race, non-white or AIAN	-0.220***	-0.164***	-0.167***	-0.159***	-0.0906***	-0.159***
	(-22.28)	(-18.58)	(-11.79)	(-10.93)	(-6.75)	(-10.96)
wo or more races, non-AIAN	-0.0941***	-0.0693***	-0.236***	-0.238***	-0.179***	-0.238***
	(-21.79)	(-18.17)	(-11.85)	(-11.55)	(-9.00)	(-11.59)
ome college	, ,	0.199***	0.200***	0.209***	0.128***	0.207***
		(209.73)	(189.80)	(206.47)	(131.23)	(204.82)
ssociates degree		0.282***	0.280***	0.304***	0.171***	0.301***
		(232.89)	(210.94)	(237.53)	(136.62)	(234.99)
achelors degree		0.605***	0.605***	0.605***	0.410***	0.529***
		(596.88)	(546.19)	(560.84)	(353.94)	(118.03)
lvanced degree		0.880***	0.862***	0.858***	0.635***	0.799***
avanced degree		(719.55)	(641.65)	(654.08)	(435.93)	(177.09)
IAN Alone * Bachelors degree		(717.55)	-0.112***	-0.109***	-0.0917***	-0.0911***
THE PROPERTY BUCHCIOIS DEGICE			(-8.13)	(-8.04)	(-7.27)	(-6.78)
IAN and other Race * Bachelors degree			-0.109***	-0.104***	-0.0668***	-0.0929***
MAY and other Race Bachelors degree			(-7.41)	(-7.31)	(-5.09)	(-6.64)
lack * Bachelors degree			-0.0530***	-0.0495***	-0.0578***	-0.0541***
ack · Dachelois degree			(-16.47)	(-15.60)	(-19.58)	(-17.12)
sian * Bachelors degree			0.177***	0.168***	0.0699***	0.111***
stati · Bactietots degree			(40.47)	(38.60)	(17.31)	(25.63)
then made man white on AIAN * Deahalons deamed			-0.0381	-0.0332	(17.31) -0.0750***	(25.03) -0.0551*
ther race, non-white or AIAN * Bachelors degree						
ATANI * D. 1 1 1			(-1.65) 0.159***	(-1.44) 0.175***	(-3.56) 0.119***	(-2.40) 0.163***
wo or more races, non-AIAN * Bachelors degree						
			(7.52)	(8.05)	(5.68)	(7.53)
ate Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
ear Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
emographic Controls	No	No	No	Yes	Yes	Yes
ccupation	No	No	No	No	Yes	No
ollege Major	No	No	No	No	No	Yes
Observations	4,336,350	4,336,350	4,336,350	4,336,350	4,336,350	4,336,350

Note: The reported coefficients are the estimated percentage change in wages associated with a discrete change in the independent variable, calculated at the mean of the sample. Robust standard errors are reported in the parenthesis. *p<.10; **p<.05; ***p<.01

Table 3B. Earnings by Demographic

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All	Male	Female	Urban	Rural	Outside Reservation	On or near Reservation
AIAN Alone	-0.0657***	-0.112***	0.00381	-0.0675***	-0.109***	-0.0600***	-0.111***
III I V I HONC	(-8.70)	(-11.41)	(0.33)	(-7.10)	(-9.00)	(-4.36)	(-12.24)
MAN and Other Race	-0.0490***	-0.0820***	0.00181	-0.0457***	-0.0760***	-0.0533***	-0.0673***
MAIN and Other Race	(-5.48)	(-7.28)	(0.12)	(-4.51)	(-4.15)	(-4.77)	(-4.54)
Black	-0.141***	-0.188***	-0.0742***	-0.135***	-0.171***	-0.136***	-0.172***
HICK	(-72.68)	(-69.82)	(-27.24)	(-66.08)	(-27.94)	(-66.29)	(-29.35)
asian or Pacific Islander	-0.250***	-0.305***	-0.166***	-0.248***	-0.142***	-0.266***	-0.161***
islan of 1 active islander	(-72.67)	(-63.46)	(-34.38)	(-70.67)	(-8.05)	(-71.56)	(-17.74)
Other race, non-white or AIAN	-0.159***	-0.211***	-0.0705**	-0.156***	-0.108	-0.162***	-0.0947*
duel face, non-write of AfAin							
V ATANI	(-10.93) -0.238***	(-11.47) -0.309***	(-3.03) -0.101**	(-10.45) -0.242***	(-1.59)	(-10.60) -0.260***	(-2.09) -0.154**
wo or more races, non-AIAN		*****			-0.0570		
	(-11.55)	(-12.84)	(-2.75)	(-11.36)	(-1.11)	(-11.66)	(-2.90)
ome college	0.209***	0.212***	0.200***	0.221***	0.136***	0.217***	0.166***
	(206.47)	(157.09)	(133.32)	(201.05)	(54.56)	(195.76)	(67.63)
Associates degree	0.304***	0.284***	0.326***	0.313***	0.258***	0.309***	0.277***
	(237.53)	(157.68)	(179.91)	(223.68)	(83.27)	(219.97)	(89.67)
achelors degree	0.605***	0.602***	0.597***	0.622***	0.463***	0.620***	0.515***
	(560.84)	(410.81)	(379.83)	(537.86)	(156.15)	(527.95)	(187.15)
dvanced degree	0.858***	0.866***	0.837***	0.874***	0.717***	0.874***	0.750***
	(654.08)	(457.08)	(468.22)	(627.40)	(184.06)	(617.80)	(212.83)
AIAN Alone * Bachelors degree	-0.109***	-0.117***	-0.115***	-0.121***	0.0388	-0.0852***	-0.0443**
	(-8.04)	(-5.73)	(-6.30)	(-7.41)	(1.62)	(-3.74)	(-2.64)
MAN and other Race * Bachelors degree	-0.104***	-0.0885***	-0.129***	-0.108***	-0.0671	-0.0963***	-0.0698**
	(-7.31)	(-4.30)	(-6.37)	(-6.98)	(-1.83)	(-5.58)	(-2.80)
Black * Bachelors degree	-0.0495***	-0.0926***	-0.0384***	-0.0618***	-0.00538	-0.0613***	0.0142
•	(-15.60)	(-18.67)	(-9.40)	(-18.76)	(-0.42)	(-18.33)	(1.38)
Asian * Bachelors degree	0.168***	0.182***	0.139***	0.159***	0.0323	0.181***	0.0528***
, and the second	(38.60)	(29.61)	(22.78)	(35.80)	(1.23)	(38.85)	(4.25)
Other race, non-white or AIAN * Bachelors degree	-0.0332	-0.0298	-0.0658*	-0.0448	-0.00921	-0.0402	-0.0508
	(-1.44)	(-0.93)	(-1.98)	(-1.89)	(-0.10)	(-1.67)	(-0.64)
Wo or more races, non-AIAN * Bachelors degree	0.175***	0.207***	0.0802*	0.173***	0.0152	0.197***	0.0966
The of more faces, non-1202.	(8.05)	(7.93)	(2.12)	(7.73)	(0.25)	(8.36)	(1.74)
state Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vear Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Occupation	No	No	No	No	No	No	No
College Major	No	No	No	No	No	No	No
Observations	4,336,350	2,419,430	1,916,920	3,761,113	575,237	3,644,473	691,877

Note: The reported coefficients are the estimated percentage change in wages associated with a discrete change in the independent variable, calculated at the mean of the sample. Robust standard errors are reported in the parenthesis.

^{*}p<.10; **p<.05; ***p<.01

Table 3C. Earnings by Year

	(1)	(2)	(3)	(4)	(5)	(6)
	2009	2010	2011	2012	2013	2014
AN Alone	-0.0624**	-0.0771***	-0.0873***	-0.0485*	-0.0482*	-0.0719***
	(-3.15)	(-4.28)	(-5.00)	(-2.56)	(-2.46)	(-4.31)
IAN and Other Race	-0.0622***	-0.0660**	-0.0611**	-0.0637**	-0.0285	-0.0130
	(-3.34)	(-3.17)	(-2.84)	(-2.87)	(-1.07)	(-0.61)
lack	-0.146***	-0.142***	-0.136***	-0.134***	-0.145***	-0.142***
	(-33.22)	(-31.64)	(-28.08)	(-28.21)	(-29.08)	(-28.48)
sian or Pacific Islander	-0.247***	-0.254***	-0.261***	-0.254***	-0.241***	-0.245***
	(-30.20)	(-31.91)	(-30.49)	(-30.36)	(-27.44)	(-28.44)
ther race, non-white or AIAN	-0.188***	-0.116***	-0.182***	-0.136***	-0.155***	-0.173***
	(-5.72)	(-3.50)	(-4.38)	(-3.62)	(-4.92)	(-4.51)
vo or more races, non-AIAN	-0.182	-0.230***	-0.259***	-0.345***	-0.207***	-0.200***
	(-1.86)	(-6.14)	(-5.50)	(-8.91)	(-5.09)	(-3.84)
ome college	0.211***	0.210***	0.211***	0.210***	0.203***	0.209***
	(92.06)	(90.62)	(80.93)	(82.83)	(79.41)	(81.27)
ssociates degree	0.308***	0.310***	0.306***	0.305***	0.295***	0.300***
C	(105.92)	(105.22)	(91.41)	(96.19)	(92.30)	(93.34)
achelors degree	0.601***	0.601***	0.603***	0.607***	0.608***	0.611***
	(244.50)	(243.24)	(214.56)	(226.13)	(224.51)	(224.72)
dvanced degree	0.856***	0.853***	0.857***	0.868***	0.859***	0.857***
	(283.17)	(281.26)	(250.04)	(267.56)	(262.77)	(261.92)
IAN Alone * Bachelors degree	-0.0800*	-0.0789*	-0.0424	-0.131***	-0.160***	-0.161***
θ	(-2.28)	(-2.45)	(-1.32)	(-3.80)	(-4.78)	(-5.12)
IAN and other Race * Bachelors degree	-0.0517	-0.113***	-0.0992**	-0.0884**	-0.141***	-0.125***
and since race Duenerous degree	(-1.52)	(-3.30)	(-2.80)	(-2.63)	(-3.79)	(-3.65)
lack * Bachelors degree	-0.0502***	-0.0333***	-0.0470***	-0.0555***	-0.0519***	-0.0581***
and Butherons degree	(-6.90)	(-4.59)	(-5.75)	(-7.02)	(-6.49)	(-7.26)
sian * Bachelors degree	0.136***	0.151***	0.161***	0.189***	0.174***	0.194***
sian Bachelois degree	(13.14)	(14.87)	(14.43)	(17.67)	(15.78)	(18.17)
ther race, non-white or AIAN * Bachelors degree	-0.0483	-0.0823	-0.0324	-0.00170	-0.0509	0.00848
dier race, non white of rar at a Bachelors degree	(-0.93)	(-1.61)	(-0.45)	(-0.03)	(-0.99)	(0.15)
wo or more races, non-AIAN * Bachelors degree	0.103	0.134**	0.217***	0.297***	0.140**	0.150**
wo of more faces, non final value business degree	(1.03)	(3.25)	(4.27)	(7.07)	(3.20)	(2.76)
ate Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
ear Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
emographic Controls	Yes	Yes	Yes	Yes	Yes	Yes
ccupation	No	No	No	No	No	No
ollege Major	No	No	No	No	No	No
bservations	743,787	728,835	701,965	710,533	725,277	725,95

Note: The reported coefficients are the estimated percentage change in wages associated with a discrete change in the independent variable, calculated at the mean of the sample. Robust standard errors are reported in the parenthesis. *p<.10; **p<.05; ***p<.01

Table 3D. Earnings by High School Graduation Year Cohorts

	(1)	(2)	(3)	(4)	
	1970 to 1979	1980 to 1989	1990 to 1999	2000 to 2009	
JAN Alone	-0.102***	-0.0812***	-0.0358*	-0.0439*	
	(-5.71)	(-6.79)	(-2.53)	(-2.27)	
JAN and Other Race	-0.0573**	-0.0697***	-0.0307	-0.0344	
	(-3.27)	(-4.73)	(-1.71)	(-1.55)	
lack	-0.186***	-0.157***	-0.120***	-0.0922***	
	(-45.56)	(-48.97)	(-32.51)	(-17.89)	
sian or Pacific Islander	-0.305***	-0.297***	-0.187***	-0.0721***	
	(-42.66)	(-54.08)	(-27.94)	(-7.52)	
ther race, non-white or AIAN	-0.106**	-0.206***	-0.141***	-0.0687	
	(-2.69)	(-8.82)	(-5.76)	(-1.83)	
wo or more races, non-AIAN	-0.214***	-0.274***	-0.149***	-0.135**	
	(-5.45)	(-7.36)	(-4.06)	(-2.71)	
ome college	0.186***	0.208***	0.206***	0.135***	
•	(84.10)	(117.88)	(106.23)	(53.16)	
ssociates degree	0.252***	0.287***	0.303***	0.254***	
•	(86.45)	(128.11)	(124.68)	(78.90)	
achelors degree	0.513***	0.600***	0.602***	0.510***	
· ·	(177.29)	(290.96)	(280.85)	(168.95)	
dvanced degree	0.730***	0.848***	0.849***	0.729***	
-	(186.03)	(322.29)	(315.89)	(170.99)	
IAN Alone * Bachelors degree	-0.0895**	-0.0531*	-0.196***	-0.0717*	
, and the second	(-2.82)	(-2.15)	(-8.53)	(-2.24)	
IAN and other Race * Bachelors degree	-0.0727*	-0.134***	-0.0987***	-0.0822**	
·	(-2.11)	(-5.59)	(-3.59)	(-2.63)	
lack * Bachelors degree	-0.0284***	-0.0591***	-0.0719***	-0.0199**	
	(-3.65)	(-10.67)	(-12.69)	(-2.63)	
sian * Bachelors degree	0.0331**	0.110***	0.176***	0.139***	
•	(3.11)	(14.61)	(22.30)	(12.56)	
ther race, non-white or AIAN * Bachelors degree	-0.156*	-0.140**	-0.00625	0.0268	
•	(-2.23)	(-3.07)	(-0.17)	(0.56)	
wo or more races, non-AIAN * Bachelors degree	0.0806	0.187***	0.110**	0.105*	
· ·	(1.77)	(4.56)	(2.88)	(2.07)	
ate Fixed Effects	Yes	Yes	Yes	Yes	
ear Fixed Effects	Yes	Yes	Yes	Yes	
emographic Controls	Yes	Yes	Yes	Yes	
ccupation	No	No	No	No	
ollege Major	No	No	No	No	
Observations	894,215	1,512,293	1,273,428	656,414	

Note: The reported coefficients are the estimated percentage change in wages associated with a discrete change in the independent variable, calculated at the mean of the sample. Robust standard errors are reported in the parenthesis. *p<.10; **p<.05; ***p<.01