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Racial Wealth Divergence In The United States

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Wealth Divergence in The United States

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Research Overview:

Research Questions:
- How is wealth disparity along racial lines explained by homeownership rates?
- When considering differences in net worth, how much is explained by unfavorable treatment based on race?

Hypotheses:
- African Americans will be less likely to be homeowners and, therefore, will be seen with substantially less accumulated wealth when analysis is performed.
- Unfavorable treatment on the basis of race will be the primary causation of the lack of familial/ individual wealth.

Data:
(For my Thesis I utilized the Panel Study of Income Dynamics. Details about this data repository are listed below. I focused on two years 2001 and 2017)

Panel Study Income Dynamics:
- Panel data set spanning from 1968-2017
- Published by the University of Michigan
- Highly credible and widely used in academia.

Variable List:
Dependent Variables:
- LNWealth: Log (Wealth)
- YHome: Homeowner Binary Variable

Regular Variables:
- Race-H: Refers to race of head of household.
- Ed-H: Years of education for the head of household.
- Ed-S: Years of education for the spouse.
- Work-H: Years past the age of 18 worked for the head of household.
- Work-S: Years past the age of 18 worked for the spouse.

Binaries Generated:
Homeownership:
- YHome: homeowner binary a 1 entry means the individual owns a home or is paying a mortgage.

Race/ Ethnicity:
- White-H: White respondent (Control group)
- Black-H: Black respondent

Region:
- South: Region response: South (Control Group)
- NE: Region response Northeast

Analysis:

Regression Analysis:
Utilized Regression Analysis (Models Detailed Below):
- Primary Regression (With LNWealth as dependent variable) : $Y(LNWealth) = BlackH*X1 +U$
- Secondary Regression (With LNWealth as dependent variable): $Y(LNWealth)= BlackH*X1 + EDH*X2 + EDS*X3 +WorkH*X4+ WorkS*X5+ NE*X6 +U$
- Primary Regression(With Yhome as dependent variable): $Y(YHome) = BlackH*X1 + EDH*X2 + EDS*X3 +WorkH*X4 + NE*X5+ WorkS* X6 +U$

Blinder Oaxaca Analysis:

A Blinder- Oaxaca Decomposition examines the differences between two sample groups (Black and White in this piece). The final product of this equation gives a result that explains the impact of between- group differences and the differential not explained by these differences. The equation for this decomposition is written below.

1) $LNWealthW =XW*BW + UW$
2) $LNWealthB – XB*BB +UB$

X is the vector of explanatory variables—work experience, education, and homeownership. BW and BB are the vectors of coefficients for the black and white sample groups. UW and UB are error terms. Assuming bW and bB are the regression estimates for BW and BB the following section will detail the subsequent equation.

1) Mean(LNWealthW) – Mean (LNWealthB)
   $=bW* Mean(XW) – BB *Mean (XB)$
   $= bW*(Mean(XW) – Mean(XB)) + mean(XB)(bW-bB)$
   This last equation allows one to sum the between-group differences and the differential not explained by differences in observed characteristics.

Regressions Summary:

(LNWealth 2001) (Yhome 2001) (LNWealth 2017) (Yhome 2017)

Blinder-Oaxaca Summary:

LNWealth	Coef.	Robust Std. Err.	z	P>|z|
overall				
group_1	11.2821	.0316952	355.96	0.000
group_2	9.781984	.0523109	187.00	0.000
difference	1.500112	.0611639	24.53	0.000
explained	.5871576	.0337086	17.42	0.000
unexplained	.9129546	.0574866	15.88	0.000
explained				
EdH	.2213465	.0185729	11.92	0.000
EdS	.2555573	.0227879	11.21	0.000
WorkH	.0895014	.0189866	4.71	0.000
WorkS	.0181568	.009922	1.83	0.067
NE	.0025955	.0068119	0.38	0.703
unexplained				
EdH	.60669	.2947997	2.06	0.040
EdS	-.0529687	.073102	-0.72	0.469
WorkH	-.0625961	.0902802	-0.69	0.488
WorkS	.0621412	.0475371	1.31	0.191
NE	.0207009	.0189397	1.09	0.274
_cons	.3389872	.3322857	1.02	0.308

(Blinder Oaxaca 2001)

LNWealth	Coef.	Robust Std. Err.	z	P>|z|
overall				
group_1	11.47815	.0323215	355.12	0.000
group_2	9.900554	.0471742	209.87	0.000
difference	1.577597	.0571847	27.59	0.000
explained	.6922521	.0312308	22.17	0.000
unexplained	.8853444	.0536711	16.50	0.000
explained				
EDH	.2151924	.0170742	12.60	0.000
EDS	.3884166	.0251019	15.47	0.000
WorkH	.0607536	.0117716	5.16	0.000
WorkS	.0273407	.0122605	2.23	0.026
NE	.0005488	.005397	0.10	0.919
unexplained				
EDH	.0313404	.3354388	0.09	0.926
EDS	-.0261039	.0567782	-0.46	0.646
WorkH	-.0292495	.0706994	-0.41	0.679
WorkS	.0318859	.0359262	0.89	0.375
NE	.0472991	.0183976	2.57	0.010
_cons	.8301724	.3513114	2.36	0.018

(Blinder Oaxaca 2017)

Concluding Sentiments:

There are several key takeaways from this study. From the preliminary regressions there is shown to be substantial racial wealth disparity. This is shown through the BlackH coefficient which bears a magnitude of -0.853 and -0.818 in 2001 and 2017 respectively. This means that Blacks can expect an 85.3 and 81.8% decrease in overall net worth due to their ethnicity.

However, from the preliminary regressions one is unable to discern what portion of the net worth divergence is due to overt racism or unfavorable treatment. This is where the blinder Oaxaca decomposition plays a major role. In both the 2001 and 2017 study the Oaxaca equation found that differences in net worth were far more likely to stem from differences in education levels and tenure than from unfavorable racial bias.

Regarding minority homeownership– explored in the Yhome 2001 and 2017 regressions– it is shown that being black decreases the probability of homeownership by 12 and 13.3% respectively. This finding supports one of the two central hypotheses of this piece and showcases a primary factor in the lack of Black wealth accumulation.

In conclusion, while Black individuals were found less likely to be homeowners– therefore having less overall wealth– the causation of this problem stemmed less from unfavorable racial treatment and more from differences in the independent variables studied.

This is a crucial takeaway because it showcases the detriment of historical precedents that created this divergence in education and work experience.