

Table 1

Point and Bootstrap Estimates, Educational Spending (x) and Wages (w), Black/White (BW) typology, Average Spending per Pupil R=\$ 2,500 and Minimum Spending per Pupil x_{\min} =\$2500 With No Limit on Average Spending R

	Average Spending per Pupil R	Spending per Pupil, Blacks x^B	Spending per Pupil, Whites x^W	Ratio x^B / x^W	Weekly Wages, Blacks w^B	Weekly Wages, Whites w^W	Average Wages under Equal Resources w^{ER}	Average Wages under Equal Opportu- nity w^{EOp}	Efficiency Ratio v
Average Spending R=2.5									
Point estimate	2.50	14.76	0.828	17.82	0.584	0.604	0.631	0.602	.953
.025 estimate	2.50	10.71	0.241	7.76	0.462	0.586	0.625	0.571	.905
.975 estimate	2.50	19.07	1.381	79.17	0.688	0.622	0.636	0.628	.944

Minimum Spending per Type $X_{\min}=2.5$									
Point estimate	4.85	22.18	2.49	8.92	0.709	0.653	0.701	0.660	.942
.025 estimate	3.85	13.58	2.45	5.39	0.642	0.647	0.668	0.651	0.807
.975 estimate	8.55	53.12	2.55	21.49	1.039	0.659	0.832	0.699	1.000

Note: All dollar amounts are expressed in thousands of 1990 dollars.

Table 2

Point Estimates and Bootstrap Estimates, Educational Spending x and Wages w , Four-Type Parental Education Typology, Average Spending per Pupil $R= \$2,500$ and Minimum Spending per Type $x_{\min}=\$2500$ With No Limit on Average Spending R .

		Spending per Pupil (1=Lowest Parental Education)				Weekly Wages (1= Lowest Parental Education)				Average Wages		Efficiency Ratio v
		x_{E1}	x_{E2}	x_{E3}	x_{E4}	w_{E1}	w_{E2}	w_{E3}	w_{E4}	Equal Re-sources w^{ER}	Eqal Oppor-tunity w^{EOp}	
Average Spending per Pupil R												
Average Spending per Pupil $R=2.5$												
Point estimate	2.50	5.36	3.62	1.88	1.10	0.656	0.653	0.638	0.659	0.633	0.649	1.026

.025 estimate	2.50	4.47	2.87	1.34	0.22	0.605	0.616	0.620	0.641	0.627	0.635	1.007
.975 estimate	2.50	6.28	4.20	2.21	1.14	0.670	0.674	0.647	0.692	0.638	0.655	1.034
Minimum Spending per Type $x_{\min}=2.5$												
Point estimate	4.33	7.31	4.75	3.61	2.51	0.749	0.714	0.698	0.694	0.695	0.710	1.023
.025 estimate	3.58	5.44	3.69	2.60	2.45	0.657	0.663	0.662	0.682	0.665	0.675	1.004
.975 estimate	4.93	9.69	6.34	4.53	2.55	0.821	0.790	0.716	0.706	0.714	0.730	1.031

Note: All dollar amounts are expressed in thousands of 1990 dollars.

E_1 = parental education less than or equal to eight years

E_2 = $8 <$ parental education < 12

E_3 = parental education = 12

E_4 = parental education > 12

Table 3

The Percentage of Black Workers in Each Earnings Quintile in Raw Data and After Various Types of Reallocation of Educational Expenditure

Description of Allocation	Earnings Quintile (5=Bottom)				
	5	4	3	2	1
Raw Data	46.73	20.5	15.67	11.66	5.44
Average Spending R = 2.5 for All Workers	46.44	21.59	16.77	10.38	4.82
Equal Opportunity Black/White (EOp B/W), Average Spending R=2.5	25.43	21.99	16.11	20.09	16.37
Equal Opportunity Black/White (EOp B/W), Minimum Spending per Type $x_{\min}=2.5$, Average Spending R=4.85	34.27	14.91	8.95	13.85	28.02
Equal Opportunity (4-type parental education), Average Spending R=2.5	38.29	21.56	21.67	12.31	6.17
Equal Opportunity (4-type parental education), Minimum Spending per Type $x_{\min}=2.5$, Average Spending R=4.33	37.96	27.37	24.19	7.38	3.11

Note: Earnings data are adjusted for variations in earnings by age using regression coefficients from the B/W typology. Quintile 5 refers to the fifth of the population with the lowest earnings. Calculations are based on spending under various equalization and EOp policies and regression coefficients from the B/W typology.

Table 4**Estimated Gains in the Objective Function and Costs per Student of Various Interventions Using the Black-White Typology**

Note: Estimated cost per person is calculated as total program cost divided by the number of persons in the sample, where costs are calculated as a present value in the year in which the person reaches age 18. The “value of objective function” is derived from the average value of the lower envelope in log weekly wage:q space, re-expressed in average earnings per week for workers on the envelope. N/A: “not applicable”.

Policy Description	Value of Objective Function (\$)	Change Relative to Base Case	P.D.V of Estimated Cost per Student
Base Case, Unequal Resources, Mean Spending=2.5	\$464.58	N/A	N/A
Equal Resources, Mean Spending=2.5	\$465.68	\$1.10	0
Equal Opportunity, Mean Spending=2.5	\$510.91	\$46.33	0
Equal Opportunity, Minimum Spending per Type=2.5	\$530.37	\$65.79	\$34,597.83