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SPLITTING BLACKS?:
AFFIRMATIVE ACTION AND EARNINGS
INEQUALITY WITHIN AND ACROSS RACES

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ABSTRACT

Critics have said that affirmative action is at best ineffective and at worst counterproductive. In particular, it has been argued that if affirmative action helps anybody, it helps only the highly educated cream of the minority population, and may perversely work to the detriment of the unskilled and uneducated. This study finds that minority males earn higher wages in sectors where affirmative action is prevalent, indicating that it has increased the demand for minority males. I also find evidence of this effect for both the lowly and highly educated, suggesting that affirmative action under the Executive Order has not contributed to the economic bifurcation of the minority community.

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There have now been five studies of the impact of affirmative action on employment at the establishment level. All agree that the growth of black male employment share is higher among federal contractors, which are subject to affirmative action, than among non-contractors. Four of these studies find the ratio of black to white employment among males has also increased.¹ Yet it is not unusual to hear public officials claim that affirmative action has been ineffective.

There have now been five studies of the impact of affirmative action on occupational upgrading at the establishment level. Four agree that black males were not employed in significantly higher occupations among contractors compared to non-contractors before 1974. The fifth argues that with more stringent enforcement and a greater supply of skilled blacks in the late 1970s, affirmative action did contribute to the occupational upgrading of black males in the late 1970s.² Yet it is not unusual to hear two mutually contradictory criticisms of affirmative action. The first is that if it works, it only helps blacks get low level unskilled jobs. The second, which hits most proponents of affirmative action right between the eyes, is that affirmative action only helps the highly educated cream of the black population, and perversely hurts low skill blacks. To the delight of speech-makers of all stripes, the debate has been able to proceed largely without the hindrance of evidence.

Let's look at some evidence.

I. Model

In the following sections I shall look for evidence that affirmative action has shifted the demand curve for minority males by examining cross-section evidence on wages. Does this make sense? If labor is perfectly

mobile, or if affirmative action pressure is everywhere the same relative to supply, then the answer is clearly no. In the first case, workers will move across cities to equilibrate wages and presumably equalize real wages. In the second, there is no cross-sectional variation in affirmative action, so no hope of capturing its effect. Are we left then with only cross-sectional studies of employment and time-series studies of wages?

Suppose labor is imperfectly immobile between cities because of a fixed cost of obtaining information or of moving. Under this assumption, we may expect cross-section wage estimates to tell us something about affirmative action. In particular, since the supply of minorities relative to whites in each city is no longer perfectly elastic, we may expect that minority wages will increase relative to white wages, *ceteris paribus*, if affirmative action pressure increases.

The design of this study then follows a straightforward pattern. Estimate wage equations separately for whites and non-whites across major American SMSA's. Control in the usual fashion for human capital. Attempt to isolate SMSA and industry specific effects on earnings. Most critically, bring some new information to bear. In this case, the new information is contained in a count of the proportion of all employment in a given SMSA and industry that is in federal contractor establishments. Since only federal contractors are subject to affirmative action under the executive order, we expect sectors with a high proportion of contractors to pay minorities relatively more -- if labor is not perfectly mobile, and if affirmative action is effective.

II. The Impact of Affirmative Action on Earnings Inequality Across Races

Has affirmative action increased the demand for minority males? The evidence in Table 1 suggests that it has. These are cross-section regressions of the logarithm of wages on the proportion of employment in an individual's SMSA and industry that is in federal contractor establishments, along with a set of other variables that control for individual characteristics such as education and age, an indicator of city size, and a set of dichotomous variables indicating which of 42 SMSA's the individual resides in. These equations are estimated separately for non-white and white males who were reported as employed in the May 1978 Current Population Survey.

The greater the proportion of employment in an industry in an SMSA that is subject to affirmative action, the greater the wages of non-white males compared to their brothers in other cities or industries. Equation 1 indicates that a ten percentage point increase in covered employment increases minority male wages by 3.9%, and this is significant. Most of this wage increase occurs within, not across, broad occupations. Equation 2 replicates equation 1 but adds a set of occupation indicators. The wage effect is hardly changed. This suggests that to the extent that affirmative action has led to occupational advancement for minorities, as has been reported in other work, a major part of this promotion occurs within broad occupational categories. If affirmative action's only impact were to jump minorities into higher level broad occupations, then we would expect the coefficient on proportion contractor to be positive in equation 1, but zero in equation 2. The near identity of coefficients across equations suggests that relatively little of the positive impact of affirmative action on minority wages has been due to promotions across broad occupational categories.

The impact of affirmative action on minority male wages must be judged

by comparing it with the impact on white males. In particular, the federal contractor industries might be high wage industries for reasons that have nothing to do with affirmative action. The estimates for white males in Table 1 (equations 3 and 4) show strong indications of this industry effect: white males' wages are also higher in contractor intensive sectors than in sectors with relatively few contractors. If we take the impact of proportion contractor on white males as a measure of the industry effect, then the difference between the impact on non-whites and whites gives us a measure of the true impact of affirmative action on non-whites correcting for the industry effect. A ten percentage point increase in employment subject to affirmative action then results in a significant one percent increase in non-whites wages relative to those of whites. This reduces the average 75 cents per hour wage gap between minorities and whites by more than two percent. Small potatoes? The contribution affirmative action may have made reducing racial inequality, and so perhaps discrimination, should be considered in light of the historical reduction in racial inequality since 1965. In 1967 (the earliest year of available data) the median weekly earnings of full-time minority males was \$90, compared to \$130 for white males. In 1967 dollars, these earnings have increased by 1978 to \$114.6 for non-whites and \$146.1 for whites. In other words, in constant dollars the racial wage gap declined from \$40 to \$31.5, as the wage ratio increased from 69% to 78%. During about the same period, the proportion of employment covered by affirmative action increased from zero to roughly fifty percent. According to our estimates, this should increase minority earnings by 5 percent relative to those of whites. Affirmative action then could account for roughly half the reduction in the racial wage gap, or about a third of the increase in the racial wage ratio.

Table 1 indicates that the returns to human capital, as measured by years of schooling age, and occupational attainment, are lower for minorities than for whites.³ However effective affirmative action has been, a non-white would still earn more were he white.

Comparison with Earlier Effects

Recent work on the impact of affirmative action on employment and occupational advance (Leonard, 1983) suggests that affirmative action became more effective during the late 1970s. One might suspect the strength of these results, arguing that they may be overstated because of the self selection of employers into contractor status, or because of biased reporting on EEO-1 forms.⁴ This paper seeks to determine the validity of such criticisms by stepping away from total reliance on EEO-1 forms for reported data and by looking at wages for evidence corroborating or contradicting of a demand shift.

The last section showed significant evidence that affirmative action does significantly increase the wages of minority males relative to those of white males. While firms may have an incentive to overstate minority employment in reporting to the OFCCP, no individual has the same incentive to dissemble when reporting race, gender, or occupation. The finding that affirmative action has significantly increased minority male wages is then strong support for the interpretation that reported employment shifts represent real demand shifts rather than lies, or more politely - strategic reporting.

Similarly, if the observed employment shifts were explained by the self-selection into contractor status of minority intensive firms, we would not expect to find higher wages for minorities.

Given a sceptical nature, one might of course still question the wage results. Perhaps the coefficient on proportion contractor is picking up the effect of some omitted variable. The impact on white males suggests there is at least an element of truth to this, although it is difficult to think of an industry specific effect that increases minority wages more than those of whites. The effect I interpret as an affirmative action effect is strongly correlated with an industry effect - adding industry dummies substantially reduces the impact of proportion contractor on relative racial wages -- often to insignificance, perhaps because there is little independent variation left in the measure of proportion contractor by industry by SMSA once both industry and SMSA are otherwise controlled for.

Another approach to judging the strength of the wage results for 1978 is to compare them with similar estimates for an earlier year: 1973. Since most employment estimates and historical anecdotes suggest a weaker affirmative action program, we expect to observe a smaller wage effect in the earlier year. The best test of course would take us back before affirmative action as we know it was instituted in 1965, but appropriate cross section data is simply not available that far back.

Table 2 replicates the specification of Table 1 for 1973, with the exception of not controlling for central city residence, which was not available. In general, the estimates are roughly similar across years. For non-whites the estimated coefficient on proportion contractor increases as we would expect, but not significantly, from .36 to .39 over the years. For whites the increase from .21 to .29 is significant. Since the impact on non-whites is greater than that on whites in 1973, and more so than in 1978, these results suggest that affirmative action may have had a slightly greater impact in the earlier period. This is more consistent with the large

employment effects estimated by Heckman and Wolpin than with the smaller effects reported by Goldstein and Smith. An alternative interpretation is that the industry specific effects have become stronger (judging by the impact on white males) but that labor supply is approaching the new post-affirmative action equilibrium. Recall that if labor is perfectly mobile across sectors, a cross-section analysis of wages cannot reveal a demand shift and we are thrown back to time series analysis.

In regressions not shown here, similar estimates are made for 1969. It is reassuring that the contractor effect is insignificant for white males in 1969, but significant for non-white males. This may perhaps reflect a peculiar omitted variable bias in the wage equations that differentially affects blacks and that has grown since 1969. Alternatively these wage equations considered together may indicate an affirmative action program that since 1969 has helped reduce racial wage inequality.

III. Race or Class: Has Affirmative Action Hurt Low Skill Blacks?

Even if you were a strong proponent of affirmative action, you might stop dead in your tracks at the news that affirmative action helps only the cream of the minority population and, with the perversity one might come to expect from government intervention in competitive markets, has actually hurt those most in need of help -- low skilled blacks. That is the argument advanced by Finis Welch, although he means both Title VII and affirmative action under the Executive Order rolled together with similar programs when he says "affirmative action." The argument may have merit on the margin in the case of Title VII, if an employer must choose between potential hiring and promotion/discharge litigation. And it is certainly

tempting to resort to such a split effect argument in trying to reconcile effective government anti-bias programs with conflicting evidence of a degradation in the earnings and employment of unskilled blacks. Is there empirical support for this bifurcation argument in the case of affirmative action proper?

To shed some light on this issue, I estimate the impact of affirmative action on wages by race as a function of the level of education. In other words, I augment the previous specification by adding the interaction of proportion contractor with years of schooling and its square. The results are presented in Table 3 for 1978 and in Table 4 for 1973. Consider 1978 first. There is no evidence here to support the bifurcation argument. For non-whites the interaction terms are of marginal significance at best, and indicate a stronger, not weaker, impact of affirmative action on those with little education. If anything, affirmative action has reduced racial wage inequality more among the lowly than the highly educated. Among college graduates, these cross-sections suggest no narrowing of racial inequality -- perhaps because of greater mobility among highly educated workers. Not only does affirmative action appear to reduce racial wage inequality in general, it also appears to reduce inequality among non-whites across education level by pushing the lowly educated more than the highly educated -- just the opposite of the bifurcation argument. But perhaps the true home of the bifurcation argument is in Title VII cases.

Table 4 shows that these estimated interactions vary over time. Here the impact on whites is U-shaped while that on non-whites rises as part of the bifurcation argument requires. However, the interaction terms are only significant in the case of whites. For non-whites we cannot reject the null hypothesis that the impact of affirmative action depends not at all on the

level of education. Moreover, we cannot reject the stability of the effect of affirmative action on non-whites between 1973 and 1978, though the estimated effect does change significantly for whites. Again, there is no significant evidence here that affirmative action has hurt lowly educated blacks. It still increases their wages relative to whites.

IV. Conclusion

This paper presents evidence that brings us to two main conclusions. First, affirmative action under the Executive Order program does appear to have increased the demand for minority males relative to white males, judging from the relatively higher wages paid minority than white males in cities and industries with many federal contractors subject to affirmative action. Second, affirmative action under the Executive Order program does not appear to have contributed to the bifurcation of the non-white community. Affirmative action appears to increase the demand for lowly educated minority males as well as for the high educated.

NOTES

1. Burman (1973), Ashenfelter and Heckman (1976), Heckman and Wolpin (1976), and Leonard (1973) all find that black males' share of male and of total employment increases faster among contractors. Goldstein and Smith (1976) is the exception. Differences in specifications, sample, and time period make it difficult to isolate reasons for differences in the various estimates.
2. Of the five studies previously mentioned, only Leonard (1983) finds evidence of occupational upgrading of black males under affirmative action. This is attributed to more stringent enforcement and a greater supply of skilled blacks in the later period (1974-1980) studied.
3. Part of the racial wage disparity has been attributed to residential segregation rather than employment discrimination (Straszheim, Price and Mills). However, in this sample the picture is not so clear. There is no significant evidence here that minority men suffer a wage loss from living in the central city -- although, peculiarly, whites do.
4. For careful and provocative discussion of these issues, see the recent and important work by Smith and Welch (1983).

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Table 1: The Impact of Affirmative Action on Male Wages, 1978

Group: Equation:	<u>Non-Whites</u>		<u>Whites</u>	
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Percent Contractor	.392 (.069)	.387 (.068)	.290 (.023)	.302 (.023)
Education	.016 (.019)	.030 (.019)	.042 (.009)	.046 (.009)
Education ²	.0015 (.0008)	.00054 (.0008)	.00054 (.0003)	-.00017 (.0003)
Age	.055 (.006)	.051 (.006)	.073 (.002)	.066 (.002)
Age ²	-.00059 (.00008)	-.00055 (.00008)	-.00079 (.00003)	-.00079 (.00003)
Central City	-.0022 (.030)	-.0027 (.029)	-.084 (.011)	-.078 (.011)
City Size	-.107 (.114)	-.091 (.113)	.103 (.051)	.118 (.049)
Married	.087 (.029)	.086 (.028)	.167 (.012)	.151 (.012)
Veteran	.036 (.030)	.029 (.030)	.024 (.011)	.026 (.011)
Privately Employed	-.053 (.040)	-.047 (.039)	.056 (.018)	.062 (.018)
Professional	-	.206 (.048)	-	.235 (.017)
Manager	-	.129 (.051)	-	.239 (.017)
Sales	-	-.116 (.076)	-	.074 (.020)
Clerical	-	.007 (.042)	-	.009 (.019)
Craft	-	.139 (.037)	-	.189 (.013)

R ²	.359	.382	.442	.469
N	1034	1034	7378	7378
M.S.E.	.152	.147	.167	.160
Mean of the Dependent	1.306	1.306	1.491	1.491

Note: Standard Errors in parentheses. All equations include dichotomous variables for 41 SMSAs.

Table 2: The Impact of Affirmative Action on Male Wages, 1973

Group: Equation:	<u>Non-White</u>		<u>White</u>	
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Percent Contractor	.361 (.071)	.365 (.072)	.208 (.023)	.213 (.023)
Education	.059 (.021)	.067 (.022)	.029 (.008)	.029 (.008)
Education ²	-.0009 (.0009)	-.0016 (.0009)	.0010 (.0003)	.00055 (.0003)
Age	.049 (.007)	.044 (.007)	.072 (.0020)	.066 (.002)
Age ²	-.00053 (.00008)	-.00048 (.00008)	-.00078 (.00003)	-.00071 (.00003)
City Size	.416 (.172)	.446 (.170)	.181 (.056)	.224 (.055)
Married	.120 (.033)	.105 (.033)	.209 (.012)	.187 (.012)
Veteran	.007 (.032)	-.001 (.032)	.032 (.011)	.029 (.010)
Privately Employed	-.099 (.045)	-.103 (.045)	.035 (.018)	.032 (.018)
Professional	-	.132 (.067)	-	.198 (.018)
Manager	-	.259 (.072)	-	.241 (.016)
Sales	-	-.059 (.087)	-	.052 (.020)
Clerical	-	-.0034 (.050)	-	.039 (.019)
Craft	-	.169 (.041)	-	.209 (.013)
R ²	.307	.329	.403	.430
N	1004	1004	8440	8440
M.S.E.	.182	.187	.184	.176
Mean of the Dependent	1.314	1.314	1.506	1.506

Table 3: Bifurcating Blacks, The Impact of Affirmative Action on Male Wages by Education Level, 1978

<u>Years of Schooling</u> <u>Completed</u>	$\frac{\partial \ln \text{ Wage}}{\partial \text{ Percent Contractor}}$			
	<u>Non-Whites</u>		<u>White</u>	
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
8	.53	.50	.33	.34
10	.52	.49	.31	.31
12	.47	.45	.29	.29
14	.37	.38	.28	.29
16	.24	.27	.28	.29

Note: These are estimated on samples of 1034 Non-Whites and 7378 Whites, controlling for all the variables in Table 1 with the addition of interaction terms between percent contractor and education and its square.

Columns 2 and 4 also include 5 dichotomous variables for occupation.

Table 4: Bifurcating Blacks, The Impact of Affirmative Action on Male Wages by Education Level, 1973

<u>Years of School</u> <u>Completed</u>	<u>∂ In Wage</u> ∂ Percent Contractor			
	<u>1</u>	<u>Non-White</u> <u>2</u>	<u>3</u>	<u>White</u> <u>4</u>
8	.32	.32	.27	.27
10	.34	.35	.19	.18
12	.36	.37	.15	.15
14	.39	.39	.17	.17
16	.41	.41	.23	.25

Note: These are estimated on samples of 1004 Non-Whites and 8440 Whites, controlling for all the variables in Table 2, with the addition of interaction terms between percent contractor and education and its square.

Columns 2 and 4 also include 5 dichotomous variables for occupation.