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## REGIONAL DIFFERENTIAL ADJUSTED FOR CITY SIZE

Table 9 shows the distribution of total man-hours by city size within each region. We see that the South has a much larger share of its non-agricultural work force outside of Standard Metropolitan Statistical Areas and a much smaller share in SMSA's of 1,000,000 and over than does the non-South. This fact, plus the existence of a significant wage differential across city sizes within regions, suggests the possibility that a substantial portion of the regional wage differential observed in Table 4 is a reflection of the city size effect. Tables 10 and 11 support this hypothesis. The former shows the ratios of Table 8, converted to index number form, with the South equal to 100. The latter summarizes the results by standardizing for city size.

The method of adjustment consists of taking the ratio of actual to expected in each city size in each region and weighting it by the share of that city size in national total man-hours. The indexes shown answer the question "What would be the ratio of actual to expected for this region if it had a city size distribution the same as that of the nation as a whole?" Table 11 may be compared directly with Table 4, which shows the indexes of ratios of actual to expected without any adjustment for city size.

Whereas, after adjusting for color, age, sex, and education, the differential between the non-South and the South was of the order of 17 per cent, it is about 9 per cent after city size is also taken into account. City size does make some difference, but does not explain all of the regional differential. It makes the greatest difference in the Northeast, and the least in the North Central. The regional differential continues to be much greater for nonwhites than for whites.

With the aid of Table 9, it is also possible to recalculate the city size differentials holding region constant. Table 12 answers the question "What would be the ratio of actual to expected for this city

17 I.e., Index = 
$$\frac{\sum_{s} R_{sr} H_{su}}{H_{u}}$$

The possibility of an alternative standardization procedure arises again and, again fortunately, the other procedure gives very similar results, except for nonwhites in the individual regions of the non-South.

TABLE 9

Percentage Distribution of Man-Hours, by City Size and Region, 1959

(per cent)

		Urban Places	Places		Statisti Statisti	Statistical Areas		
R	Rural	Under 10,000	10,000-	Under 250,000	250,000- 499,999	500,000- 999,999	1,000,000 and More	Total
South 2	33.7	8.8	11.4	13.5	12.1	13.7	16.8	100.0
Non-South	12.1	5.3	6.7	7.8	8.2	10.4	48.2	100.0
	8.8	3.5	6.0	6.9	9.3	8.7	56.7	100.0
North Central 1	16.2	7.3	10.1	10.2	7.5	8.1	40.6	100.0
	10.3	4.9	7.3	5.0	7.7	17.7	47.1	100.0
Total 1	15.3	6.3	8.9	9.4	9.3	11.3	39.6	100.0

Source: See Table 2

TABLE 10

Regional Indexes of Ratio of Actual to "Expected" Hourly Earnings, by City Size, 1959 (South = 100)

Under 10,000- Rural 10,000 99,999 100 100 100 116 116 113 120 121 114			Statisti	Statistical Areas		;
100 100 100 outh 116 116 113 east 120 121 114		Under 250,000	250,000- 499,999	500,000- 999,999	1,000,000 and More	All City Sizes
116 116 113 120 121 114	100 100	100	100	100	100	100
120 121 114		112	105	109	107	117
		108	102	103	104	117
112	112 112	116	110	116	109	116
West 120 117 114 1		113	106	109	108	119

Source: Tables 4 and 8.

size if it had a regional distribution the same as that of the nation as a whole?" The effect of this adjustment proves to be relatively small, as may be seen by comparing the results with the ratios unadjusted for regional mix presented in Table 8. In general, hourly earnings in the largest urban areas are approximately 30 per cent higher than in the rural areas and small towns, and approximately 15 per cent higher than in the small Standard Metropolitan Statistical Areas.

TABLE 11

Ratio of Actual to "Expected" Hourly Earnings, by Region,
Adjusted for City Size, 1959

	South	Non-South	Northeast	North Central	West
	<u>,                                      </u>	-	(Ratio)		
White males	.95	1.02	1.00	1.04	1.03
White females	.95	1.03	1.04	1.01	1.04
Nonwhite males	.85	1.15	а	а	а
Nonwhite females	.87	1.18	а	а	а
Total	.94	1.02	1.01	1.04	1.04
		(Index of I	Ratio, South	= 100)	
White males	100	107	105	109	108
White females	100	108	109	106	109
Nonwhite males	100	135	a	а	а
Nonwhite females	100	136	а	а	а
Total	100	109	107	111	111

Source: Tables 8 and 9.

Note: The figure for each region is a weighted average of the ratios of actual to expected for each city size in the region weighted by the U.S. distribution of man-hours by city size for the color-sex group.

<sup>&</sup>lt;sup>a</sup>Detailed breakdown within the non-South for nonwhites is not shown because the small sample size makes the results sensitive to choice of standardization procedure.

TABLE 12

Ratio of Actual to "Expected" Hourly Earnings,
by City Size, Adjusted for Region, 1959

		Urban	Places	Standard Metropolitan Statistical Areas				
	Rural	Under 10,000	10,000- 99,999	Under 250,000	250,000- 499,999	500,000- 999,999	1,000,000 and More	
White males White	.85	.89	.92	.98	.98	1.02	1.11	
females Total	.87 .85	.86 .85	.90 .91	.95 .97	.97 .98	1.03 1.03	1.12 1.11	

Source: Tables 8 and 9.

Note: The figure for each city size is a weighted average of the ratios of actual to expected in each city size across the regions weighted by the U.S. distribution of man-hours by region for the colorsex group. Results for nonwhites are not shown because the small sample size in some city size-region cells makes the results sensitive to choice of standardization procedures.