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Volume Author/Editor: Victor R. Fuchs

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Chapter Author: Victor R. Fuchs

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CONCLUSION

This paper describes and analyzes regional and city-size differentials in hourly earnings. Through the use of a 1/1,000 sample of the 1960 population it has been possible to estimate hourly earnings for all nonagricultural employed persons, including salaried employees and the self-employed. It has also been possible to examine earnings differentials by color, age, sex, and education. Thus, the estimates presented here are more comprehensive than those previously available from establishment data and small sample surveys.

The regional differential was examined first and an attempt was made to estimate how much of the observed differential could be explained by differences in labor quality as measured by color, age, sex, and education and how much of the regional differential could be explained by city-size differences. Putting together the results of the analyses presented in Tables 2, 3, 4, and 11, the following approximate breakdown of the South/non-South differential emerges. The observed average hourly earnings in the non-South are about 25 per cent higher than in the South. About one-third of this differential is attributable to regional differences in the labor force as measured by color, age, sex, and education; about one-third is related to regional differences in city size; and about one-third of the differential remains, after adjusting for labor force composition and city size.[23]

These estimates cannot be precise, partly because of the limitations of the data, and partly because the standardization techniques are necessarily imperfect. Some experimentation with alternative standardizations produced similar results; these estimates therefore are probably reasonably good guides to the order of magnitude of the various factors that contribute to the regional wage differential.

For white males alone, the gross non-South/South differential is approximately 18 per cent. Differences in education and age explain less than one-fourth of the differential; city-size differences explain more than one-third; and the regional differential, after adjusting for all these factors, is slightly more than one-third the gross differential. In the case of white females, education and age do not explain any of

[23] Attempts to estimate cross-sectional production functions based on gross observed differentials in earnings should give some consideration to the sources of the differential reported in this paper. Also, the possible role played by regional differences in the cost of living should be explored.

the 17 per cent regional differential, but city size explains about one-half of it. For nonwhites, the gross differential is of the order of 60 per cent. Differences in education and age explain about one-fourth of the differential for males, but only one-tenth for females. The reverse is true for city size, so that both nonwhite groups show the same net differential, approximately 35 per cent.

An attempt to explain interindustry differences in average hourly earnings through multiple regression analysis offers some confirmation of these findings. The percentage of employment in the South, the percentage of employment in large cities, "expected" hourly earnings, extent of unionization, and size of employer were used as explanatory variables. Taken alone, the regional variable is significantly related (inversely) to hourly earnings. The significance of the relationship is sharply reduced when account is taken of "expected" earnings and is further reduced when account is also taken of the percentage of employment in large cities. The remaining relation between earnings and percentage in the South is entirely explained by industry differences in extent of unionization.

One of the important conclusions of the paper is the findings of a substantial difference in hourly earnings across city size as reported in Table 5. Furthermore, these differences are relatively unaffected by standardization for labor force composition and regional mix (see Tables 8 and 12). Standardized hourly earnings in the SMSA's of 1,000,000 and over are typically 25 to 35 per cent higher than in the areas outside SMSA's within the same region, and about 15 per cent higher than in SMSA's of less than 1,000,000. The city-size gradient is steeper in the South than in the rest of the country. Multiple regression analysis across industries again tends to confirm these findings. Furthermore, the regression analysis rejects the hypotheses that the higher earnings in the large cities can be attributed to unionization or size of employer.

The non-South/South differential is found to be inversely related to skill level as measured by education, sex and color. The fact that the regional differential varies with education within each color may help to shed new light on an old problem—the reason for the large regional wage variation for nonwhites compared with whites. This has usually been explained in terms of greater market discrimination against nonwhites in the South than in the non-South. But there is an alternative explanation. It may reflect, at least in part, the fact that nonwhites are disproportionately of low skill, both in the South and the non-South, and that the regional differential is greater the lower the skill level regardless of color. This hypothesis appears worthy of

further study. An alternative way of interpreting the data would be to say that there is more economic segregation in the South than in the non-South. This depresses the price of nonwhite unskilled labor but raises the relative price of nonwhite skilled labor because of its relative scarcity.

The city-size differential in hourly earnings appears to be about the same at all levels of education. One possible explanation of this differential is differences in cost of living. Adequate data are not available for a thorough check of this hypothesis. Fragmentary information provided by the Bureau of Labor Statistics on the cost of living in different cities suggests some slight correlation between hourly earnings and prices,[24] but intercity differences in cost of living appear to be small relative to differences in hourly earnings. However, it should be noted that conventional measures of cost of living do not include items like length of time needed to get to work which may vary systematically with city size.

One of the most promising hypotheses to explain the city-size differential is that it reflects differences in labor quality not captured by standardization for color, age, sex, and education. This might take the form of better-quality schooling, more on-the-job training, selective in-migration to the big cities of more ambitious and hard working persons, or other forms. I have not tested this hypothesis in this paper, but plan to look at occupational differences by city size to get some insight into this question.

Another possible explanation is the existence of a disequilibrium in the supply of labor and capital. Surplus labor from agriculture may tend to move first to the small towns, and then later to the larger cities. Capital may be more readily available in the large cities. If there is disequilibrium, we should observe a tendency for labor to migrate from small to large cities, and for industry to move in the reverse direction.

Possible explanations of the city-size differential such as unmeasured labor quality, cost of living, and disequilibrium are not mutually exclusive. Since the differential to be explained is quite large, it is possible that all of them are valid and significant, with each explaining a part. The existence of these differentials raises many other questions which merit further investigation. For instance, how do rates of return to investment in education vary by city size? How strong an incentive exists for migration from small to large

[24] See "City Workers Family Budget for October 1951," *Monthly Labor Review*, May 1952, pp. 520–522, and "The Interim City Worker's Family Budget," *Monthly Labor Review*, August 1960, pp. 785–808.

cities and what are its implications for manpower policy? How does the effect of minimum wages differ from place to place? Just as the regional differential has been put to good use in the testing of economic theories, it would appear that the large city-size differentials in hourly earnings revealed in this paper could provide a fruitful basis for considerable new economic analysis.