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Measuring Underemployment in Rural Areas

By the measures used in this article, nearly a third of the rural labor force is underemployed, whether through being out of a job, or working for low pay, or working too few hours. Yet only about a third of them are counted as unemployed. Besides its direct economic effect, underemployment also exerts an indirect effect, hindering remedial efforts. Federal jobs programs, for example, often base their funding on the unemployment rate, inadvertently directing benefits away from rural areas.

Rural areas may not be receiving their fair share of funding to solve rural employment problems. Federal funding allocation formulas often rely on the unemployment rate as an indicator of employment-related distress. Yet the unemployment rate may not accurately reflect market conditions, urban or rural. It does not, for example, measure employment inadequacy. This category includes discouraged workers (those out of work but no longer looking for a job because jobs are not available), the part-time employed (because they cannot find a full-time job), and workers whose earnings are below poverty thresholds. All of these types of workers are found disproportionately in rural areas. The apparent insensitivity of the unemployment rate to rural labor market conditions is unfortunate in light of the slow growth in rural employment since 1980 and the current conditions in the farm sector.

Some different ways of measuring underemployment, to reflect more accurately rural employment-related hardship, are presented in this article. Using these measures, I also compare changes in un-

employment and underemployment for metro and nonmetro areas during the 1970-82 period. Indicators of rural underemployment, like those presented here, provide a considerably more troubled portrait of changing employment conditions in rural America.

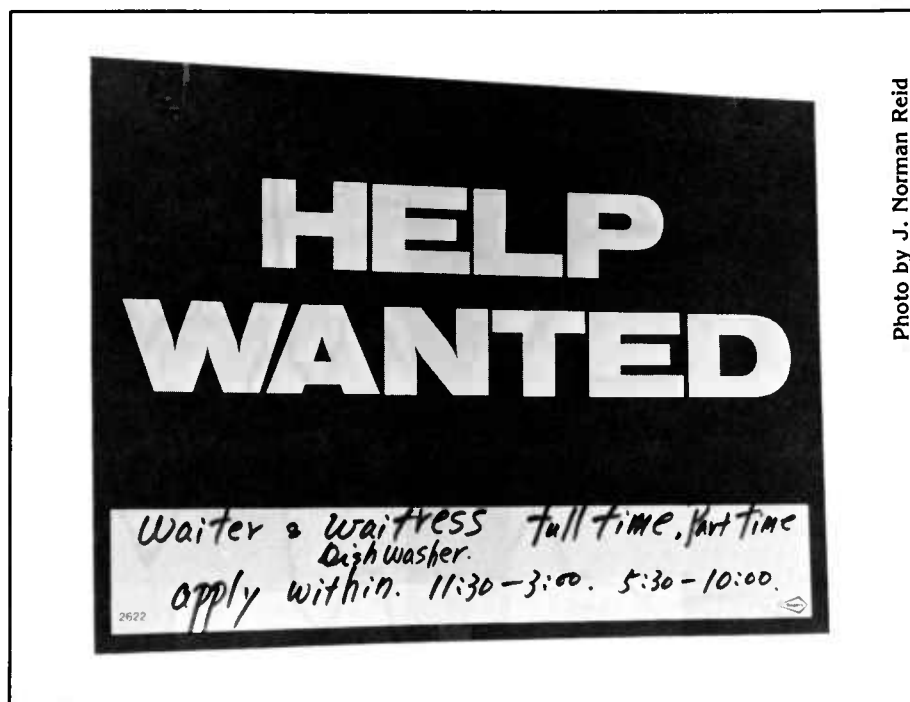
Measuring Rural Labor Market Distress

Most recent attempts to measure rural underemployment seem insensitive to its many forms. Rural labor markets are fundamentally different from urban labor markets. The isolation of rural workers limits their employment options and opportunities. Not only are spells of unemployment longer but the lack of rural employment opportunities also contrib-

utes to the large number of discouraged workers. Moreover, the nonmetro industrial structure remains disproportionately dependent on extractive and other low-wage, labor-intensive industries. Many of these industries, such as agriculture and construction, have unstable seasonal labor requirements.

I have devised a potentially promising scheme for measuring underemployment, which is sensitive to the rural labor market conditions; I call it the Labor Utilization Framework (LUF). It provides several mutually exclusive categories of underemployed workers (see box):

1. The sub-unemployed, a proxy for discouraged workers,
2. The unemployed,
3. The underemployed by low hours (involuntary part-time-workers),
4. The underemployed by low income (the "working poor"),
5. The occupational mismatched (workers whose levels of education greatly exceed the average education of all workers with a similar occupation; that is, the "overeducated").



Employment does not necessarily mean a full-time job. Although not unemployed, many part-time workers want full-time work. They are one category of the underemployed.

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Figure 1
Sub-unemployment

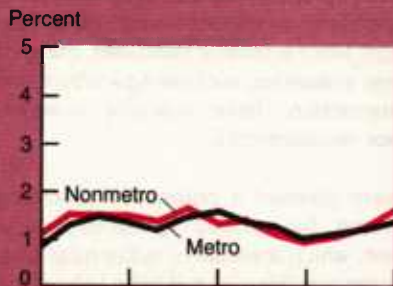


Figure 2
Unemployment

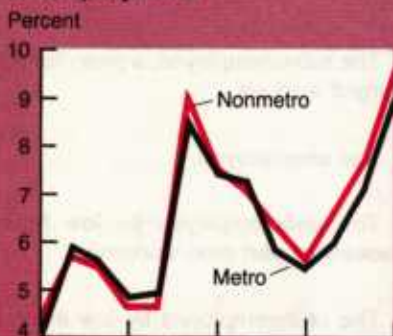


Figure 3
Underemployment by low hours

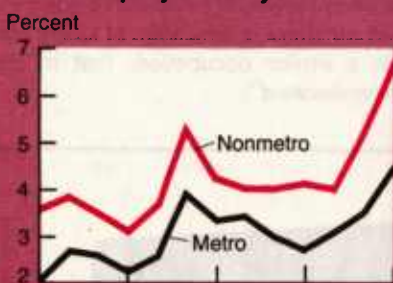
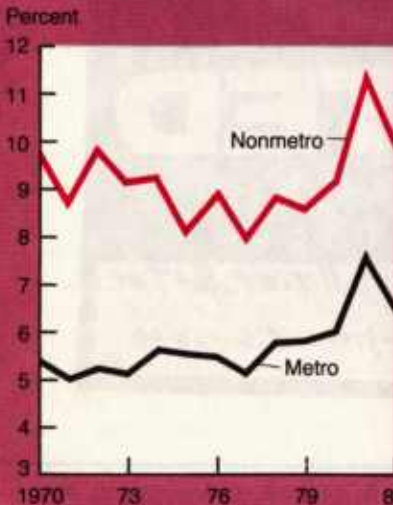


Figure 4
Underemployment by low income



Groups 1-4 above can be regarded as a composite measure of economic underemployment because of their direct link with labor market earnings. In this hierarchy, each labor force participant is counted only once.

Each underemployment indicator for metro and nonmetro areas can be obtained from the annual March demographic file of the Census Bureau's Current Population Survey (CPS). The survey samples nearly 60,000 households and is the most widely used source of labor market information in the United States.

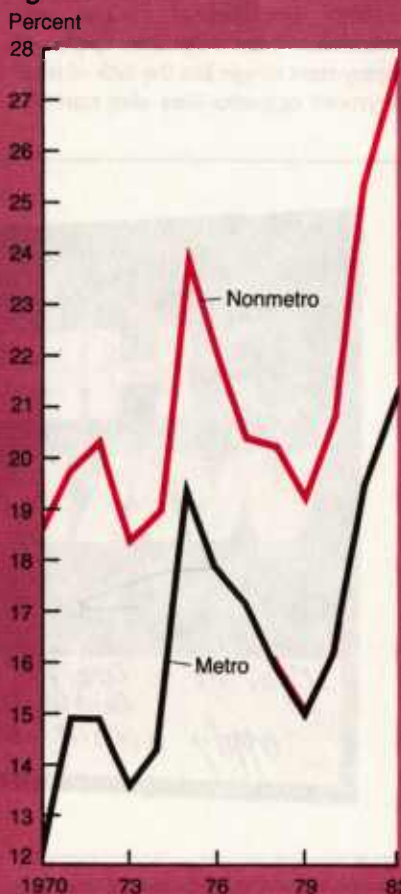
Rural Underemployment Much Greater Than Unemployment

Does the unemployment rate underestimate the extent of employment hardship in rural areas? The CPS data indicate that, in 1982, a fourth of the nonmetro labor force aged 18-64 was underemployed (table 1). And, if the mismatched or "over-

educated" were included, nearly 40 percent of the nonmetro labor force experienced some form of underemployment. The unemployment rate, in contrast, was about 10 percent. Thus, the unemployment rate captures only about a third to a quarter of the employment-related hardship in nonmetro areas.

Not only does the unemployment rate underestimate hardship but it also inaccurately portrays regional differences in employment distress. The unemployment rate, for example, is lowest in the nonmetro South (table 1). However, when the composite measure of economic underemployment (groups 1-4 above) is used, the extent of marginal employment is greater in the South than in any other region. Nearly 30 percent of the nonmetro labor force in the South was economically underemployed in 1982. In particular, the South suffered unusually high rates of sub-unemployment (discouraged workers) and low-income employment (working poor).

Figure 5
Economic underemployment—The sum of the categories in figures 1-4



These results provide empirical confirmation of the view that unemployment figures do not adequately tap local or regional labor market conditions. From a rural policy standpoint, this may hinder the accurate targeting of programs to economically distressed areas and labor force subgroups.

Higher Nonmetro Than Metro Underemployment

The inability of the unemployment rate to measure geographic differences accurately in employment hardship is a political issue of great importance to many rural governments that must compete with urban areas for Federal funds. The current statistics-gathering system does not provide the same variety of labor market information in rural areas as in urban areas. The movement to formula funding thus raises questions about the access of rural jurisdictions to Federal resources and about potential inequities in the current system of funding.

While a consistent pattern of higher nonmetro than metro unemployment has been observed since 1978, the difference was generally small from 1970-82 (fig. 2). By contrast, nonmetro workers were considerably more likely than metro workers to be working part-time involuntarily or to

Table 1—Unemployment is a small part of underemployment in nonmetro areas

	Nonmetro	North-east	North Central	South	West	More than 12 years of schooling Nonmetro	Metro
	<i>Percent</i>						
Underemployment	27.7	21.4	28.8	28.9	26.9	17.2	13.7
Sub-unemployment	1.6	.7	1.6	2.0	1.1	1.1	.8
Unemployed	9.6	8.8	10.9	8.8	10.8	5.5	5.5
Low hours	6.7	5.2	7.0	5.9	6.8	3.8	2.7
Low income	9.8	6.7	9.4	11.2	8.2	6.8	4.7
Mismatch	11.3	15.8	10.2	10.3	16.6	30.7	34.6

Source: age 16-64, 1982, data from annual March demographic supplement of the Current Population Survey. Data restricted to age group 16-64.

be working at jobs that provided only marginal earnings (fig. 4). Thus the different character of rural from urban labor market distress extends well beyond the unemployed.

More significant, however, the unemployment rate tends to minimize the relative

extent of employment-related hardship in nonmetro areas. For example, in 1982, economic underemployment affected 28 percent of the nonmetro labor force and 21 percent of the metro labor force (fig. 5). In other words, economic underemployment was 30 percent higher in nonmetro than metro areas. In contrast, the

nonmetro unemployment rate was only 6 percent higher in 1982. A similar pattern of unemployment and underemployment rates was apparent for the other years as well. The implication: underemployment rates more accurately gauge the relative extent of economic disadvantage in the nonmetro labor force.

Although economic underemployment was higher in nonmetro areas than in metro areas, occupational mismatch was actually lower in nonmetro areas (fig. 6). The lower mismatch in nonmetro areas probably reflects two factors. First, nonmetro workers generally have less schooling and to be considered overeducated one needs a relatively high level of education. Second, the formation of the LUF means that some nonmetro workers, who otherwise would be classified as mismatched, are counted already in one of the other underemployment categories. Indeed, when education was held constant by restricting the analysis to those whose education extended beyond high

Measuring Rural Underemployment

Despite widespread agreement about the need for measures of "underemployment," research on underemployment indicators has languished. This is due in part to inadequate data, particularly for rural areas, and to conceptual ambiguities about what constitutes underemployment.

The Labor Utilization Framework represents a potentially useful scheme for measuring several forms of rural underemployment:

- (1) The sub-unemployed, a proxy for discouraged workers, includes (a) persons not currently working because they are unable to find work and (b) part-year workers who are currently out of the labor force but looking for full-time work.
- (2) The unemployed, which is measured using the official definition of the Bureau of Labor Statistics, includes those without work but who have been searching for employment during the

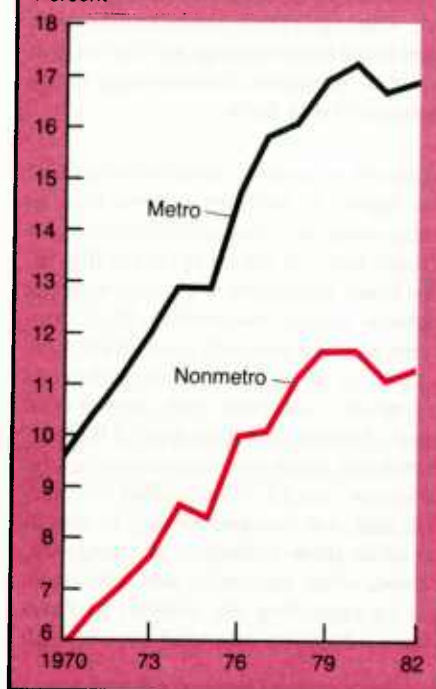
previous 4-week period, and employed persons in the process of a job transition or lay-off.

- (3) The underemployed by low hours parallels the official definition of part-time for economic reasons, and includes employed persons working less than 35 hours per week due to inability to find full-time employment.
- (4) The underemployed by low income consists of persons whose earnings are less than 1.25 times the poverty threshold devised by the Social Security Administration. This represents a measure of income adequacy.
- (5) The underemployed by occupational mismatch, or the overeducated, measures the extent to which a worker's schooling exceeds the educational level typical of a person in such an occupation. If a worker's educational level is higher than the mean plus one standard deviation of the educational attainment of persons with a similar 3-digit occupation (using 1970 as a benchmark), this person is classified as mismatched.

Underemployment refers to one or more of these conditions.

The LUF has a number of advantages over earlier attempts to measure rural underemployment. First, the LUF is perhaps the most comprehensive scheme yet for measuring various forms of underemployment. In particular, it seems most sensitive to labor force conditions that have, at least in the past, differentiated metro and nonmetro labor markets. Second, LUF uses current measures easily obtained from the Census Bureau's annual March demographic supplement of the Current Population Survey. Third, underemployment can be measured as a composite index or as a series of separate indicators. A composite measure has the advantage of simplicity. Yet, composite indicators may conceal the forms in which underemployment expresses itself. This is problematic because policy responses may differ depending upon which form of underemployment is most prevalent. Programs that address the problems of the unemployed will undoubtedly be less effective in reducing the prevalence of the working poor.

Figure 6
Underemployment by mismatch
Percent



school, nonmetro workers suffered higher levels of sub-unemployment, involuntary part-time employment, and low income than metro workers (table 1). In 1982, 17.2 percent were economically underemployed in nonmetro areas compared with 13.7 percent in metro areas.

By contrast, unemployment rates revealed little difference in economic hardship between comparably educated segments of the metro and nonmetro labor forces. Again, the unemployment rate, as a barometer of labor market hardship and labor underutilization, provides only a crude portrait of rural conditions.

Implications for Rural Policy

The findings reported here lead to several conclusions pertaining to rural policy.

First, the unemployment rate seriously underestimates the extent of economic hardship in rural areas. Formulas for the allocation of Federal funds should be re-evaluated, particularly those that measure human resource needs on the basis of the unemployment rate alone.

Second, indicators of underemployment may prove useful in designing cost-effi-

State Differences in Underemployment

State variation in unemployment and underemployment may be considerable (see table below). The unemployed often represent only a small portion of workers experiencing employment-related problems. In nonmetro Texas, for example, nearly 1 in 4 workers experienced some form of economic underemployment in

1982, even though only 4.2 percent of the rural labor force was unemployed. Furthermore, in half of the States below with large rural populations, the nonmetro unemployment rate was lower than the rate in metro areas. All 10 of these States nevertheless experienced rates of nonmetro underemployment exceeding those in metro areas. The unemployment rate appears to camouflage the extent of employment hardship in rural areas.

Unemployment and economic underemployment rates for 10 States with largest rural populations

Rank in 1980 nonmetro Population	Unemployment		Economic underemployment	
	Metro	Nonmetro	Metro	Nonmetro
Percent				
1. Pennsylvania	9.2	14.6	22.9	27.6
2. North Carolina	4.5	10.5	23.9	30.7
3. Texas	5.7	4.2	17.4	22.6
4. Ohio	12.0	9.9	25.6	27.3
5. Michigan	16.1	16.0	29.6	33.3
6. New York	8.7	7.3	19.9	24.5
7. California	8.8	15.1	20.6	32.9
8. Georgia	8.1	6.4	20.9	25.5
9. Indiana	12.5	14.8	28.6	32.4
10. Illinois	9.8	10.5	21.5	24.7

Source: Annual March demographic supplement of 1982 Current Population Survey. Data restricted to age group 16-64.

cient strategies for rural development (for example, manpower training programs). Both resources and programs can be directed to areas or labor force subgroups with the greatest need.

Finally, these results reinforce the view that more accurate and reliable information on rural labor market conditions is needed. The current statistics-gathering system in the United States appears insensitive to the unique economic conditions of rural areas.

RDP

For Additional Reading...

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