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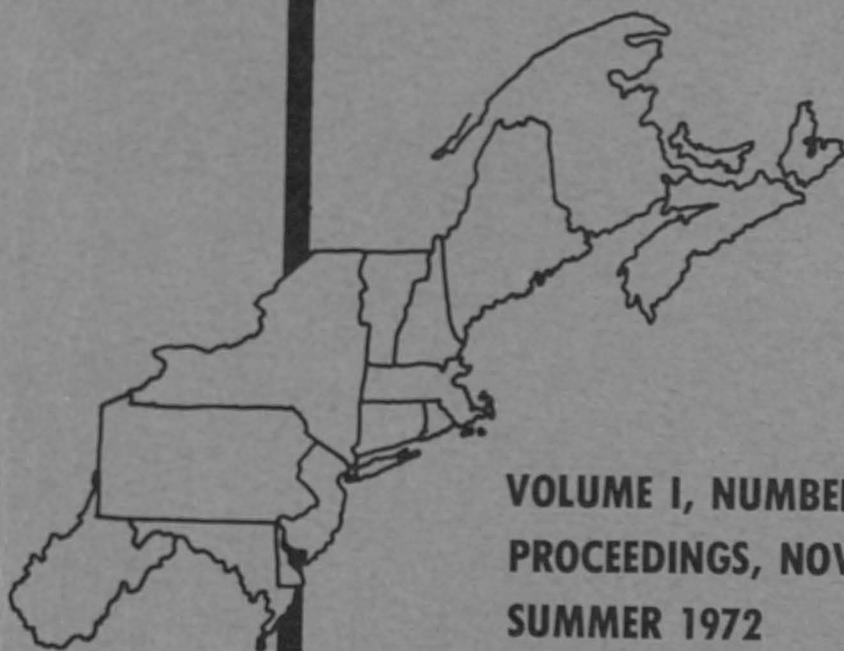
ECONOMIC CONSIDERATIONS OF EXTENDING UNEMPLOYMENT
INSURANCE TO AGRICULTURE

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Agriculture has been excluded, exempted or by-passed, depending upon one's viewpoint, from much of the social legislation extending back to the 1930's. For many years agriculture was essentially outside of workmen's compensation, minimum wage legislation, child labor laws and the social security system to identify a few. Legislation extending unemployment insurance protection to farm workers has never been enacted but we appear much closer to taking positive action to correct this situation.

I should like first to make some very brief comments on the history and current status of unemployment legislation, next sketch the methodology of the study upon which this paper is based including some of the preliminary results and finally indicate some interesting future research questions which will require answering.

History and Current Status

Unemployment insurance was made part of the Social Security Act of 1935. The Federal Act provided incentives to states to establish unemployment insurance laws permitting tax collections from employers to finance benefit payments to unemployed workers. By July of 1937 all states had passed bills taking advantage of the monetary incentives provided by the Social Security Act.

The major objectives of unemployment insurance are as follows:

1. Provide economic security to the labor force;
2. Dampen economic cycles;
3. Stabilize employment levels of individual employers;
4. Distribute costs among all employers;
5. Retain the employers labor force during short layoffs, and;
6. Shift some of the cost of relief from local government to employers.

In the 1930's the primary reason for excluding agriculture was difficulty in administering the program because of the large numbers of farms employing a small number of workers. Additionally, a high unemployment rate, particularly among seasonal workers, was expected to result in high cost rates and benefit payments sufficiently high to endanger the solvency

of the system. A major factor in continuing the agricultural exemption has been the political strength of employers and major farm organizations that have lobbied against agricultural coverage.

However the political climate has changed and as early as 1954 the Eisenhower Administration attempted to extend coverage to workers in agricultural processing industries. Serious consideration for coverage with widespread agricultural support, has only developed in recent years. The 91st Congress considered coverage as a part of the Employment Security Amendments of 1970. In fact, the Senate version of the bill would have covered agricultural employers with eight or more workers in 26 or more weeks. However, the House version prevailed in a House-Senate conference committee and the Act signed August 10, 1970 did not extend coverage to agriculture.

Interest in agricultural coverage prompted the U. S. Department of Labor to inaugurate a series of studies in Arizona, New York, Connecticut and California during the late 1950's and early 1960's and has culminated in the present regional study covering 13 states in the Northeast plus Florida and Texas. Results of this study will have a substantial impact on whether Congress passes legislation extending unemployment insurance to agriculture, and if so the type of legislation passed.

Objectives of the Study

One of the key objectives of our regional study is to estimate the cost rate which would prevail if agriculture became a covered industry. Since employers pay taxes into the UI fund as a percentage of their payroll, the ratio of benefits paid to agricultural payroll is an important measure of the system's performance. Two types of cost rates are of particular importance. One is the Industry Rate. The Industry Rate is computed by charging benefits to industries according to the SIC code of the claimants' employer. If a worker is employed in multiple industries in his base year, each industry is charged a portion of his benefits equal to its proportion of the worker's base period wages.

The Added Cost Rate is the second type of cost rate. It tells how the additional benefits paid out would be related to the increase in aggregate taxable payroll if coverage were extended to agriculture. For example, no benefits are paid a worker at present, hence no industry charged for benefits, if he has less than minimum qualifying wages from non-agricultural employment, but with agricultural wages sufficient to exceed qualifying requirements. If coverage were extended to agriculture the Industry Rate would charge benefits to agricultural and other industries according to their share of the individual's base period earnings. However, the Added Cost Rate would attribute the entire increase in benefits to agriculture. The Industry Rate and the Added Cost Rate are equal if there is no inter-industry movement of labor.

Methodology

This study determines individual contributions and benefits for a sample of agricultural employers and workers and uses these to estimate contributions and benefits for the employer and worker populations. The data are actual employment and work histories. These are analyzed to determine taxes and benefits which would have been paid or received assuming: (1) agriculture became a covered industry, but (2) the employment and work histories were unaffected by such coverage. Under these assumptions, the estimated cost rates will reflect only the direct effects of extension, therefore be short run in nature.

Data were generated via two surveys. In the first, information necessary to determine whether each employer would be covered under alternative provisions was obtained by a mail survey of a stratified random sample of agricultural employers. The calendar year 1969 was the employer survey year.

In the second survey, information necessary to determine whether workers would have been eligible for benefits was obtained through personal interviews with a sample of workers. Workers were contacted through their employers, because a universe listing of agricultural workers was not available. Incidentally a total of approximately 10,000 worker interviews were taken. The major item of information collected from workers was a weekly work history from the week ending July 5, 1969 to the week ending June 27, 1970.

All calculations of benefits paid to workers are made under the assumption of a repetitive employment history. An applicant for unemployment benefits is required to provide data for his base period in order to calculate potential benefits. Therefore each claimant has a particular base and benefit year. Confronted with the increased difficulty and inaccuracy of collecting data for two years from workers, it was decided to collect a 52 work week history and assume it was both a typical base and benefit year. We shall comment later upon this assumption as a limitation of the results.

Population values are estimated from the employer and worker samples by simple expansion factors. The items estimated from the employer phase include (1) the total payroll; (2) the total number of employers; (3) the total number of man weeks of employment; (4) the total number of worker items; (5) total taxable payroll; and (6) the total contributions of employers into the UI fund.

Items estimated from the worker sample are (1) the number of potential beneficiaries; (2) the number of actual beneficiaries; (3) the number of benefit exhaustees; (4) total covered earnings; (5) total potential benefits; and (6) total actual benefits. The industry cost rate or ratio of actual benefits to total payroll is estimated by dividing total actual benefits by total taxable covered earnings, where both earnings and benefits are worker sample estimates and earnings have been allocated to

the industry of the worker's employer. The added cost rate is calculated from the worker survey also.

Results

A. The employer phase

The study included an original sample of 14,568 employers, of which about 65 percent responded to the questionnaire.

Table 1 shows the universe estimates for covered gross payroll, contributions paid-in, total number of employers, man weeks, wage items, and short-term wage items for the 15 states included in the study.

Table 1.
Covered Gross Payroll, Contributions Paid-In, Number
of Covered Employers, Number of Covered Man Weeks
of Employment, Covered Wage Items and Covered
Short-Term Wage Items for 15 States Under
Two Alternative Coverage Provisions

| | Coverage Provision | |
Item	1 or more workers in 1 or more weeks	1 or more workers in 20 weeks or $1,500 high quarter payroll
Gross Payroll	$855,438,785	$849,937,803
Contributions	23,042,002	22,889,568
No. covered employers	72,104	64,398
No. covered man weeks	12,629,087	12,477,704
No. covered wage items	990,888	954,115
No. covered short-term wage items	786,914	750,761

Only two of many possible coverage provisions are being contrasted here. The study included over 100 other possible coverage provisions based on combinations of workers and weeks and quarterly or annual payroll. One of the provisions being seriously considered as the basis of legislation is 4 or more workers for 20 or more weeks and $5,000 high quarterly payroll. However, such a provision only covered 21 percent of the employers and 69.5 percent of the wage items. We seriously doubt if Congress will approve a provision which covers less than 70 percent of the workers.

Table 1 brings out two important results. First there is little dif-
ference in the coverage provided workers under the two provisions. One
worker in one or more weeks would provide coverage for 100 percent of the
workers, while a 1 in 20 or $1,500 high quarter payroll provision would
cover 96.3 percent of the wage items. The latter would provide virtually
complete coverage of workers and yet administratively be much preferable
to a one worker in one week provision, since approximately 8,000 fewer em-
ployers would be included in the program.

Second, the short-term nature of employment for much of the agricul-
tural work force in the Northeast comes somewhat as a surprise for most
of us. We have always thought of our agricultural labor force as contain-
ing a large share of year-round workers yet approximately 80 percent of
the wage items were employed for less than 150 days out of the year. This
however, should not be confused with a necessarily high degree of seasonal-
ity. A great deal of short-term employment, if distributed evenly during
the year, does not necessarily give rise to major seasonal peaks and
troughs in total farm employment.

In order to give some estimates of cost rates, the results must be
based on twelve states since the employee phase of the study was not com-
pleted for all 15 states at the time this paper was prepared.

As indicated previously total potential benefits, total actual ben-
efits, total covered earnings, taxable covered earnings and the cost rate
as a percent of taxable covered earnings are generated from the worker sur-
vey. Table 2 gives the results for the twelve states.

The large difference between total potential benefits and total ac-
tual benefits requires a brief explanation. Total potential benefits are
the amount the UI fund would be obligated to pay out under the assumption
that all workers covered by the system become unemployed and remain un-
employed for six months. Actual benefits, on the other hand, are the amount
the UI fund pays based upon the actual employment history of workers. Ac-
tual benefits always will be much less than potential benefits. Many
workers who are eligible for benefits do not draw the full amount for which
they are eligible, simply because they do not become unemployed.

Taxable covered earnings are based upon the first $4,200 of earnings
and are therefore less than total covered earnings.

The cost rates shown in Table 2 are weighted averages for the 12
states included in the analysis. This is of value only as an indication
of the general level of breakeven rates in the Northeast. The actual
breakeven rate will depend upon the specific provisions of each state's
UI law and upon the extent of the seasonality of agricultural labor.
Those states for which breakeven rates are available show considerable var-
iation around the 3.0 percent average. For example, the Connecticut cost
rates are about 6.6 percent for each of the two provisions while the
current maximum legal tax rate is 2.7 percent. For New Hampshire the cost

rates are about 2.5 percent and for Vermont 0.75 percent for each of the two provisions respectively, which in all cases are less than the maximum legal tax rates (3.2 percent in New Hampshire and 2.7 percent in Vermont). The low rates for Vermont are largely due to the absence of any great amount of seasonal employment of agricultural workers.

Table 2.
Total Potential and Actual Benefits, Total and Taxable
Covered Earnings, and Industry and Added Cost Rates
Under Two Alternative Coverage Provisions

Industry Rates: 1/	1 or more workers in 1 or more weeks	1 or more workers in 20 weeks or $1500 high quarter payroll
Potential Benefits ($)	134,057,462	131,407,491
Actual Benefits ($)	13,290,443	13,145,448
Total Covered Earnings ($)	516,570,088	507,158,044
Taxable Covered Earnings ($)	442,064,563	433,520,354
Industry Cost Rate (%)	3.006	3.032
Added Rates: 2/		
Potential Benefits ($)	134,210,457	131,527,726
Actual Benefits ($)	13,408,779	13,279,453
Total Covered Earnings ($)	516,570,088	507,158,044
Taxable Covered Earnings ($)	442,064,563	433,520,354
Added Cost Rate (%)	3.033	3.063

1/ Based upon allocating benefits and earnings to the industry of the worker's employer.
2/ Based upon the change in aggregate benefits and taxable payroll as a result of extending UI to agriculture.

When cost rates are below the maximum legal tax rate, the extension of UI to agriculture is in the realm of feasibility. Actually, however, even in this case we cannot be sure that agricultural coverage would be self-financing, since in most states experience rating provisions allow some employers to pay less than maximum tax rates. We will comment more on this later. It is certain, on the other hand, that where cost rates exceed the maximum legal tax rate, then the policy issue of whether employers in other industries should subsidize agriculture is introduced.

Type of Farm

A regional study includes an analysis of coverage provisions by type
of farm. This was done mainly to determine whether the two provisions
differed significantly in their effects on the various types of farms. In
all there were 13 different types of farms identified. Tables 3 and 4 give
the results for each of the two coverage provisions for number and percent
of employers covered, wage items, and number of short-term items. Only
the results for six of the most important types of farms are presented.

Table 3.
Characteristics by Type of Farm for 15 States for a
Coverage Provision of 1 or More Workers
in 1 or More Weeks

Type of Farm	Employers		Wage Items		Short-term Wage Items		Short-term Wage Items as % of Wage Items
	No.	%	No.	%	No.	%	
Tobacco	805	100	35,666	100	31,807	100	89.2
Vegetable	3,747	100	127,488	100	109,610	100	86.0
Fruit & Nuts	4,928	100	203,378	100	176,019	100	86.5
Poultry	2,623	100	25,875	100	15,200	100	58.7
Dairy	17,992	100	83,424	100	51,156	100	61.3
General	1,528	100	29,895	100	25,042	100	83.8

Table 4.
Characteristics by Type of Farm for 15 States for a
Coverage Provision of 1 or More Workers
in 20 or More Weeks or $1,500 High
Quarterly Payroll

Type of Farm	Employers		Wage Items		Short-term Wage Items		Short-term Wage Items as % of Wage Items
	No.	%	No.	%	No.	%	
Tobacco	689	85.6	35,053	98.3	31,242	98.2	89.1
Vegetables	3,402	90.8	125,780	98.7	107,902	98.4	85.8
Fruit & Nuts	4,332	87.9	197,368	97.0	170,052	96.6	86.2
Poultry	2,520	96.1	25,421	98.3	14,755	97.1	58.0
Dairy	15,944	88.6	76,752	92.0	44,698	87.4	58.2
General	1,308	85.6	28,887	96.6	24,034	96.0	83.2

Some important results of the type of farm analysis require emphasis. First a coverage provision of one or more workers in 20 or more weeks or $1,500 high quarterly payroll would cover over 90 percent of the wage items on _any_ type of farm. Such a provision or a similar alternative fits well all types of farm if the most important criteria is the number of wage items covered while at the same time reducing the number of employers so as to reduce the administrative load.

Second, the one or more workers in 20 or more weeks or $1,500 high quarterly payroll covers almost equally well the short-term and hence probably the seasonal wage items. Only dairy at 87.4 falls below 96.0 percent coverage of short-term wage items.

Third, a surprisingly large percentage of the total wage items are short-term except on poultry and dairy farms. The latter is not surprising but for all other farms approximately 85.0 percent or more of the wage items are short-term.

The same type of data as presented for type of farm are available by economic class and by ownership characteristics.

Total Farm Employment

One important aspect of the study is that it permits comparison with some of the major data series on farm employment published by government agencies. One example will suffice. The Statistical Reporting Service publishes a monthly series on farm employment by state. Since the series is based on a non-probability sample of voluntary reporters, statistical measures such as standard errors, confidence limits, etc., have not been available. The SRS series is based on employment during a selected week of the month, and the employer survey from this study also includes weekly data on employment.

The major conclusion which arises from comparing the two data sources, is that farm employment may be considerably less seasonal in nature than we have traditionally assumed, and less seasonal than the previously available data have led us to believe.

In Maine, for example, the SRS data indicate that farm employment varied from a low of 4,000 in January to a high of 26,000 in September--a range of 22,000 workers. Our study indicates employment varied from about 3,700 to 16,300 during the same months, for a range of only 12,600 workers. In Florida, on the other hand, where farm employment is traditionally high during the winter months, the SRS data indicate that farm employment varied from a high of 103,000 in February to a low of 51,000 in August, or a range of 52,000 workers. This study, however, yields estimates of agricultural employment of about 63,400 in February versus 37,500 in August, a range of only 25,900 during these months. Further, our study indicates the peak employment in Florida was in March at 62,900 and the low at 35,500 in September, a range of 27,400 from high to low. Similar results hold for other states.

Confidence limits, standard errors, etc., have not yet been computed
for the employment estimates from this study. However, in one instance
where data have been available, namely in New Jersey, the estimate of
total agricultural payroll from this study was within one percent of the
total payroll reported in the 1969 Census of Agriculture.

The seasonality of farm employment has been a traditional argument
against extending unemployment insurance to agriculture. Results of this
study limit the validity of such an argument. Further analyses will pro-
vide a more complete description of variations among types of farms in
the seasonality of employment. In any event, the distinction between
short-term versus seasonal employment, certainly has important implica-
tions in policy formation.

Future Research Issues

As previously indicated, the cost rates derived in this study are
based upon at least one very important assumption, namely, a single year
as both a typical base and benefit year. After the introduction of unem-
ployment insurance, workers are assumed to react exactly the same as they
did without unemployment insurance coverage. From the standpoint of es-
timating breakeven rates for the total agricultural industry such an
assumption may not greatly distort the results. However, any change in
the employment pattern resulting from the introduction of unemployment
insurance may have significant effects upon individual states and communi-
ties within states.

We recognize of course that worker behavior undoubtedly will change
if unemployment insurance is extended to agriculture. The 64 dollar ques-
tion is how much will it change and in what direction. Although such a
question cannot be answered within the confines of this study, it is pos-
sible to formulate alternative assumptions about workers' behavior after
the introduction of UI and to examine the impact of alternative assumptions
on cost rates. For example, results to date assume migrant workers will
continue their normal migration patterns. Another line of analysis is to
assume migrants cease migrating, and to estimate cost rates under such an
assumption.

Some research on this issue is now underway at the University of Flor-
ida. But we invite assistance on various aspects of this crucial issue
if the reader's research interests run in this direction. Incidentally,
if proper requests are made to the regional committee and assurance given
of protecting the confidentiality of the information, a wealth of data is
available.

In addition to the effect of unemployment insurance on mobility of
labor, another question is what impact will coverage have upon the supply
of labor? While the answer to such a question will require data going
beyond that available from this study, nevertheless much is available which
will contribute to answering the supply question.

The effect of experience rating upon the actual tax rates paid by employers, especially as this is related to type of farm, certainly should be investigated. In many states, each covered employer receives an experience rating after some period of time. If his workers have been fully employed throughout the rating period, his tax rate is reduced. Further analysis in this study will estimate the effect of experience ratings on the ratio of benefits to contributions.

The foregoing examples by no means exhaust the list of research questions needing investigation and probably are not even the most important. They are given to encourage those who might be interested in various farm labor issues to make use of a wealth of data which previously has not been available. We should hasten to add that all the study data is not purely economic but includes such things as ethnic groups, country of origin, school achievement, past and present marital status and other similar information.

Conclusion

In conclusion, whether unemployment insurance should be extended to agriculture depends not only on whether agricultural contributions will finance agricultural benefits but also upon values and moral beliefs. Nevertheless, the results of the study advance our knowledge considerably as to the probable short-run impact of extending coverage to agriculture. This together with the results of the longer-run studies yet to be completed, should be useful to legislators and other groups in determining the provisions of any legislation extending coverage.

ACKNOWLEDGMENTS