Modest productivity gains in State Unemployment Insurance Service

Productivity gains averaged 1.9 percent per year over the 1966–78 period; however, year-to-year changes fluctuated widely, reacting to the level of unemployment

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Productivity, as measured by output per employee, in the State-operated Unemployment Insurance Service increased at about the same rate as in the private business sector during 1966–78.[1] Output in the Unemployment Insurance Service advanced at an annual rate of 8.6 percent, while labor input grew more slowly, by 6.6 percent, resulting in a productivity increase of 1.9 percent a year.[2] (See table 1.) There were considerable variations in year-to-year movements during the period. In more than half the years, productivity changes were greater than 10 percent. For example, in 1975, productivity increased 18.8 percent, while in 1976, it decreased 12.5 percent.

There were three distinct productivity cycles between 1966 and 1978: 1966–69 and 1969–72, when productivity increased 10.4 percent before falling, and 1972–78, when it jumped 11.7 percent before dropping. Output per employee rose sharply during the early part of each cycle, as output (work) increased faster than staff were added to process the output. During the latter part of the cycle, the opposite occurred—output decreased more rapidly than staff were reduced. However, staff cutbacks were substantial on the downside of each cycle, a phenomenon common in the private sector, but unusual in public operations.

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Indexes of productivity trends and fluctuations for individual States showed greater movement than the national index. Trends for six illustrative States for 1972–79 reveal average annual rates of change ranging from 4.7 to −3.1 percent, and annual fluctuations ranging up to 25 percent.

The Unemployment Insurance Service statistics were developed as part of an investigation into the feasibility of calculating a series of State and local government productivity indexes.[3] Currently, there are no national productivity indexes for State and local governments, which employ 13.1 million persons, or about 11.9 percent of the civilian labor force. The Unemployment Insurance Service was selected because of its good base of analytic knowledge, ongoing data collection system, and heavy Federal involvement.

The programs and financing

The Unemployment Insurance Service, a joint Federal-State operation, was established by the 1935 Social Security Act to aid the temporarily unemployed. Federal laws and regulations set broad operational guidelines; State laws, regulations and procedures govern day-to-day operations. State government employees operate the system.

The Unemployment Insurance Service is a series of programs. There were three programs operating throughout the 1966–78 period: the regular State program for unemployed workers, the program for unemployed veter-

ans, and the program for unemployed Federal workers. In 1971, an Extended Benefit program was instituted which increased the weeks of benefit payments during periods of high unemployment. In addition, three special programs, the Temporary Compensation program, the Special Unemployment Assistance program, and the Federal Supplemental Benefits program operated during parts of the 1970's.

Administrative requirements and the time required to process initial claims vary by program. For example, the time to process the claim of an unemployed Federal worker is about twice that of a regular unemployed worker. For an unemployed veteran, the time is about 33 percent longer.

Employers finance most Unemployment Insurance Service operations. State governments collect taxes from employers to pay benefits to the unemployed, and the Federal Government (through the Internal Revenue Service) collects taxes from employers to pay administrative costs. General Federal revenue is used to pay the benefits to unemployed veterans and Federal workers. General Federal revenue has also been used to pay for special program benefits, such as Supplementary Unemployment Assistance and Temporary Compensation. In 1978, administrative costs exceeded $1 billion per year. Between 1966 and 1978, annual benefit payments ranged from $1.9 billion to $19.4 billion.

Eligibility requirements are set by each State and include such considerations as the reason for leaving the job, qualifying wages for unemployment insurance coverage, earnings from part-time work when drawing unemployment insurance, and length of time worked. Each State sets rules for payment of benefits to dependents, and the weekly amount paid to recipients.

Several missions—different growth

There are two basic missions of the Unemployment Insurance Service. One focuses on beneficiaries, that is, individuals applying for and drawing unemployment insurance payments. The other focuses on finances, primarily collecting funds from employers to pay beneficiaries. Providing beneficiary services accounts for about 57 percent of the Unemployment Insurance Service labor input; financial services, about 17 percent; and support and overhead, the remaining 26 percent.

Beneficiary services include screening unemployment insurance applicants, determining their eligibility, hearing appeals, calculating benefit payments, and issuing checks. As noted earlier, unit labor requirements for these services vary by program. In 1978, 20.6 million unemployment insurance claims were filed, and 129 million weeks of compensation was paid.

Increases in output for beneficiary services averaged 10.8 percent annually between 1966 and 1978. (See table 2.) However, output changes fluctuated during the period, varying with the rate of unemployment. For example, during the 1973–75 recession, output averaged increases of 48 percent annually; during the 1976–78 recovery, it averaged decreases of 24 percent annually. In 1975, output increased 98 percent and in 1977, it decreased 28 percent.

Table 1. Indexes of output per employee, output, and full-time equivalent employees of the State Unemployment Insurance Service, 1966–78

[1977=100]

Fiscal year	Output per employee	Output	Employees
1966	83.7	43.2	51.6
1967	92.3	44.5	48.2
1968	88.4	44.0	49.8
1969	87.0	42.7	49.1
1970	96.3	49.8	51.7
1971	106.2	63.0	59.3
1972	95.6	65.5	68.5
1973	95.6	60.9	63.7
1974	110.8	65.7	59.3
1975	131.6	106.2	80.7
1976	115.1	119.6	103.9
1977	100.0	100.0	100.0
1978	91.8	80.2	87.4
Average annual percent change, 1966–78	1.9	8.6	6.6

Financial services, the other Unemployment Insurance Service mission, are a function of the employers. It includes collecting money from employers to support Unemployment Insurance Service payments, auditing employers' records, and tracking down delinquent accounts. In 1978, 4.4 million employers were covered. Output increases in financial services averaged 5.7 percent a year between 1966 and 1978. (See table 2.) Unlike beneficiary services, output trends in financial services steadily increased throughout the period, with growth in each year, except 1968. The increases were small each year, except for 1973 when Federal legislation extended coverage to groups not previously covered (the largest group being State and local governments) and the index jumped substantially.

Quality of service—such as promptness of payment, timeliness of appeals, and percent of delinquent accounts—has long been a concern of the Unemployment Insurance Service. Each State routinely collects statistics and prepares annual performance indexes for 35 quality attributes. Some indicators ("timeliness of appeals," for instance) have been calculated and summarized nationally for decades, others (such as "promptness in depositing employer taxes") have been calculated for the past 5 years but are available only by State. It is possible that more quality-based statistics are collected and published on the Unemployment Insurance Service than on any other joint Federal-State operation. Overall, the 35 quality indexes do not show any long-term trends. Some indexes show improvement, some show deterioration, but most show no change.

Table 2. Indexes of output for benefit and finance services, State Unemployment Insurance Service, 1966–78

[1977=100]

Fiscal year	Output	
	Benefit services	Finance services
1966	34.9	59.2
1967	35.4	61.4
1968	34.9	61.4
1969	32.2	62.3
1970	41.9	64.2
1971	61.5	65.0
1972	63.8	67.8
1973	49.2	88.6
1974	54.4	92.4
1975	107.9	94.7
1976	125.8	96.7
1977	100.0	100.0
1978	72.3	105.9
Average annual percent change, 1966–78	10.8	5.7

Output in the Unemployment Insurance Service showed increases of 8.6 percent a year between 1966 and 1978. However, the annual and cyclical fluctuations were dramatic and often large. In 1975, output jumped 61.6 percent, and in 1978, it dropped 19.8 percent; during the 1960's, output generally decreased, but during the 1970's it increased—at times at an extremely rapid rate.

Employment and labor costs

The labor input (employee) index, which generally trails swings in output, is based on full-time equivalent Unemployment Insurance Service staff years. Statistics are not readily available to compute a labor hours index, although such an index would probably parallel the employment-year index. Nor are statistics readily available to compute an index of the number of Unemployment Insurance Service employees. Such an index would probably differ substantially from the labor index because of the wide use of intermittent and part-time employees by the Unemployment Insurance Service during periods of heavy workload.

The employee index shown in table 1 is a reasonably good approximation of use of resources because labor accounts for about 80 percent of all Unemployment Insurance Service administrative cost. Building rents, computer leases, telephone, postage, and the like account for the remaining 20 percent. In 1978, there were about 48,000 full-time equivalent Unemployment Insurance Service personnel.

The salaries and wages (excluding fringe benefits) of Unemployment Insurance Service personnel increased at an annual rate of about 6 percent between 1966 and 1978, slightly less than the 6.8-percent average for all State and local government employees. There were increases each year, ranging from 1.7 percent to 10.2 percent.

The average annual productivity increase (1.9 percent) was not sufficient to offset the increase in salaries and wages (6 percent). Consequently, unit wage and salary (or labor) costs rose 4.1 percent per year over the 1966–78 period. (Unit costs will rise to the extent that changes in average costs are not offset by increases in productivity.)

There were marked differences in unit labor cost between the two Unemployment Insurance Service functions: beneficiary services increased at a 5.2-percent rate, finance services, at 2.4 percent. Also, the annual fluctuation in beneficiary service labor cost is approximately twice that for finance services.

State differences

Additional insights into Unemployment Insurance Service productivity can be gleaned by examining data for individual States. Productivity trends and levels were calculated for six States, selected to cover a range of institutional arrangements. Productivity trends ranged from a 4.7-percent increase to a 3.1-percent decrease, as shown in the following tabulation of average annual rates of productivity change for the six States during 1972–79:

State	*Percent*
A	4.7
B	2.6
C	1.9
D	1.2
E	-1.7
F	-3.1

High levels of productivity do not necessarily parallel high productivity trends. In State A, productivity increased rapidly (4.7 percent a year) from 1972 to 1979, but it started from a modest base. In contrast, State E had a negative trend (−1.7 percent a year), but a relatively high productivity level.

As with the national indexes, the productivity, output, and labor indexes of the six States show large annual fluctuations. In some years, productivity changes were as large as 25 percent. Yearly output changes fluctuated between 145 percent and −42 percent, and labor change ranged from 62 percent to −31 percent.

Time required to process claims varied dramatically by State. One study found that the time to process an initial claim varied by almost 370 percent among all States. Another study found a 200-percent difference in unit labor requirements among Unemployment Insurance Service offices in the same State. There are a number of reasons for these differences, some directly attributable to State action and some attributable to conditions outside the control of State authorities. The latter includes the volume of claims, the turnover of private sector employers, population scatter, the size of State operations, and client language differences. How-

ever, most studies suggest that the majority of the productivity variance among the States is attributable to conditions within the control of State authorities, such as automation, audit procedures, claim processing procedures, frequency of benefit payments, check distribution processes, and rigor with which work standards are set and monitored.

Future trends

Future productivity changes will depend on the rate of unemployment and the introduction of new techniques and technology. In the short run, Unemployment Insurance Service productivity will increase as the rate of unemployment increases, and will drop as unemployment drops, as it has in the past. Long-run changes will depend on the use of new techniques and technology. Several reports have identified actions that could improve productivity, for instance, the standardization of procedures, streamlining operations, and increased use of automated equipment.[4] Many of these improvements can be made through simple changes in operating procedures; some require additional funds and changes in State and Federal laws.

The Federal Government's cutbacks have forced States to economize on their administrative operations. How far these economies extend will depend on the pressure that the Federal Government exerts, the type of pressure, and the reaction of State authorities. □

——*FOOTNOTES*——

[1] This study includes States, the District of Columbia, and trust territories that operate unemployment insurance services. The industry is included as SIC 7361 and 9441 in the *Standard Industrial Classification Manual, 1972.*

[2] All average annual rates of change are based on the linear least squares trend of the logarithms of the index numbers.

[3] For the results of an earlier study see Donald M. Fisk, "Pilot study measures productivity of State, local electric utilities," *Monthly Labor Review*, December, 1981, pp. 45–47.

[4] "Millions Can be Saved by Improving the Productivity of State and Local Governments Administering Federal Income Maintenance Assistance Programs" (Washington, D.C., General Accounting Office, 1981), pp. 13, 15, 18–21, and National Commission on Unemployment Compensation, *Unemployment Compensation: Final Report* (Washington, D.C., Government Printing Office, 1980), pp. 113, 124, 127, and 128.

APPENDIX: Measurement techniques

The productivity indexes in this study are output per employee measures which show changes in the relationship between the output of a function and the labor input associated with the production of the output. The output per employee index is derived by dividing the output index by the functional employment index.

The Unemployment Insurance Service programs included in the analysis are the Regular State, Veterans, Federal, Extended Benefits, Supplementary Benefits, Special Unemployment Assistance, and Temporary Compensation. Not included are the special programs such as National Redwood Park, Disaster Relief, and Trade Adjustment.

The output index used in the calculations is a program benefit and finance measure. The program benefit measure is an index comprised of initial claims (number of claims) and an index of weeks compensated (number of weeks of compensation paid). The initial claims index is further divided by type of program because the unit labor requirements vary by program; the weeks compensated is not divided. The finance operation index reflects the number of covered employers. The indexes are combined with labor weights. All indexes are calculated from data provided by the U.S. Unemployment Insurance Service.

Seven measures were considered before selecting the program benefit and finance index as the preferred measure of output. Measures considered but rejected included the number of beneficiaries, number of employees covered, number of employers covered, number of compensation weeks, benefit and finance (without program weights), and function/activity. Indexes were computed for the last three measures as well as the program index. Trends moved in the same general direction for the four indexes with little difference between the program and benefit and finance indexes. The program index was selected because of conceptual arguments.

The labor input index was derived from U.S. Unemployment Insurance Service data. Cost data were taken from Bureau of Census Public Employment Statistics. All data are considered homogeneous and additive, and thus do not reflect changes in the qualitative aspects of labor such as skill and experience.

The U.S. Government fiscal year is the reference year for all data and indexes. Through fiscal 1976, the fiscal year was July 1–June 30; beginning with fiscal 1977, the period was shifted to October 1–September 30. Data for the "transition quarter," July 1–September 30, 1976, are excluded from all indexes and statistics.

The indexes of output per employee do not measure any specific contribution, such as that of labor or capital. Rather, they reflect the joint effect of factors, for example, changes in technology, capital investment, capacity utilization, office design and layout, skill and effort of the work force, managerial ability, labor-management relations, and State and Federal law.