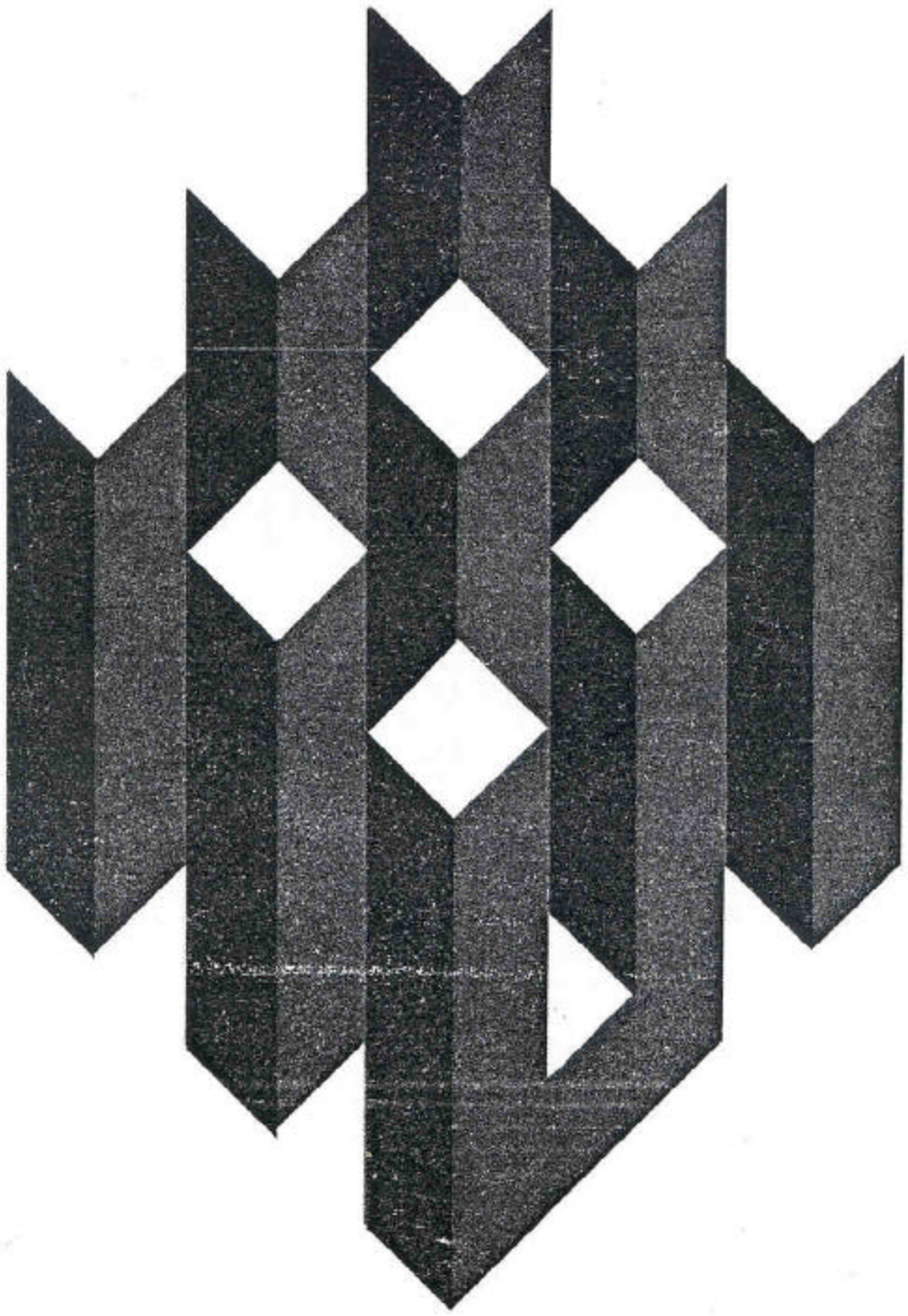
UI Research Exchange

Unemployment Insurance
Occasional Paper 83-4

U.S. Department of Labor
Employment and Training Administration



UI Research Exchange

Unemployment Insurance
Occasional Paper 83-4

U.S. Department of Labor
Raymond J. Donovan, Secretary

Employment and Training Administration
Albert Angrisani, Assistant Secretary for
Employment and Training

Unemployment Insurance Service
1983

This publication was prepared by the Division of Actuarial Services, Office of Legislation and Actuarial Services, Unemployment Insurance Service, under the direction of Stephen A. Wandner. The editor of this issue is Helen Manheimer. The material in this document was contributed by Unemployment Insurance Service and State employment security agency staff and does not necessarily represent the official position or policy of the Department of Labor.

INTRODUCTION

The UI Research Exchange is published by the Unemployment Insurance Service to increase the effectiveness of research throughout the UI program. Toward this goal, the Exchange provides a means of communication among researchers and between researchers and policymakers. The Exchange is designed to be an open forum for all UI researchers.

This fourth issue contains a variety of research information. Announcements and reports are included on seminars and recent legislative and financial developments. There are descriptions of UI research projects --both in progress and completed--conducted and sponsored by the State agencies and the Unemployment Insurance Service. Research data and information sources, methods and tools are discussed, and books and studies are summarized.

This issue includes two complete papers. The first paper presents an innovative appplication of new technology to an area of UI operations. The paper, written by Thomas Nagy, John DiSciullo and Robert Crosslin, describes the design and testing of an expert system prototype for making nonmonetary determinations relating to labor dispute issues. This interactive system can be used by clerical personnel after minimal training. The authors explain how the application of an expert system to the nonmonetary determination process can reduce costs and improve services. The second paper, prepared by the Office of the Assistant Secretary for Policy of the Department of Labor and reprinted here, presents findings of a special study of the demographic and economic characteristics of individuals in 12 States who received Federal Supplemental Compensation (FSC) during the September-December 1982 period. The study compares FSC recipients to individuals receiving regular unemployment benefits.

Thanks to those who contributed to this fourth issue. We look forward to broader based participation in the future. For a description of the format in which material should be submitted, see the Appendix.

Material for publication should be submitted to:

John Robinson
Actuarial Studies and Reports Unit
Division of Actuarial Services
Office of Legislation and Actuarial Services
Unemployment Insurance Service
Employment and Training Administration
Department of Labor
601 D Street, N.W., Room 7402
Washington, D.C. 20213

The Exchange is now published occasionally. I would appreciate your comments on the Exchange and any suggestions you have for improving its usefulness.

Stephen A. Wandner
Deputy Director
Office of Legislation and Actuarial Services
Unemployment Insurance Service

CONTENTS

I. ANNOUNCEMENTS AND REPORTS

A. Seminars

Benefit Financing Seminar

The Division of Actuarial Services of the Unemployment Insurance Service will hold a UI Benefit Financing Seminar from October 17 through October 21, 1983, in Leesburg, Virginia. The seminar will cover various aspects of benefit financing, including cost estimating, econometric and time series models, taxing structures and recent legislation. During evening lab sessions, participants will have an opportunity to utilize a computer model. Selection of participants will be limited to one per State or Region and will be based on fiscal condition of trust funds, qualifications of nominees, and attendance at previous seminars.

Quantitative Methods Seminar

The Unemployment Insurance Service is sponsoring a seminar on quantitative research methods for SESA researchers. The proposed seminar will be held for a 4 1/2 day period during Fiscal Year 1984. The objective of the seminar is to provide SESA researchers with a basic facility in the use of multiple regression and other statistical techniques and their application to UI policy research. The seminar will begin with a brief review of basic statistics, and will include instruction in the use of computer terminals and statistical software packages in UI research. Students will be provided with selected texts and references.

When the seminar date has been set, the Regional Offices will ask SESAs to recommend potential seminar participants.

B. Recent Legislative and Financial Developments

Recent Legislative Developments

This section provides information about recent Federal legislative developments pertaining to unemployment insurance and unemployment insurance-related programs. The following information is included:

1. Federal legislation enacted from 1980 through July 1983 relating to unemployment insurance and unemployment insurance-related programs.

2. Comparison of various bills relating to possible extension of the Federal Supplemental Compensation (FSC) program. There has been no committee action in either House as of August 1983.

3. Comparison of House and Senate Committee-reported bills providing health insurance for certain unemployed workers and their families. H.R. 3021 has passed the House. Senate consideration is expected after return of Congress in September.

FEDERAL LEGISLATION: 1980-1983

I FUTA Federal Tax

(2) employee taxes paid by employer are taxable for FICA and FUTA

[V] 1-YEAR EXCLUSION OF CREWS OF CERTAIN FISHING VESSELS

(5) FUTA taxable wage base increased to $7,000 (1/1/83)

(5) FUTA tax rate increased to 3.5% (1/1/83)

(5) FUTA tax rate increased to 6.2% (1/1/85)

(5) Reed Act extended additional 15 years-States may restore funds paid for benefits after loans repaid.

(5) age limitation of 22 removed from exclusion for student interns

(5) 2-year extension of exclusion for alien farm workers.

(5) 1-year extension for students working in summer camps

(5) independent contractor exclusion re-defined

(2) 2-year extension of exclusion of crews of fishing vessels

II FUTA State Laws

(1) change in pension deduction

(4) REVISION IN LOAN REPAYMENT MECHANISM

(4) INTEREST CHARGED ON NEW LOANS

(5) States may make repayment of loans in lieu of FUTA credit reduction

(3) deferral of interest in state with 7.5% TUR

(5) optional state between-terms denial for non-professional school employees extended to college level; all denials subject to retroactive benefits if not rehired

[W] DEFERRAL OF INTEREST EXTENDED; ALSO 9 MOS. DEFERRAL FOR STATE WITH 13.5% TUR

[W] SLIDING SCALE FOR CAP ON FUTA CREDIT REDUCTIONS

[W] DR.TEMEN-TEENS DENIAL MANDATORY FOR ALL EMPLOYEES IN EDUCATION

[W] STATE MAY PROVIDE FOR VOLUNTARY DEDUCTIONS FOR HEALTH INSURANCE

III FUTA General Revenues

(2) CETA/PSE not covered for UI reimbursement

IV Title III, SSA grants to States

(4) CHILD SUPPORT INTERCEPT

V EB State Laws

(2) new federal requirements on v.q. and suitable work

(2) 2 wks. limit on EB claims

(2) waiting period requirement

(4) NATIONAL TRIGGER ELIMINATED

(4) EB CLAIMANTS ELIMINATED FROM CALCULATION

(4) MODIFICATION OF STATE TRIGGERS

(4) ENTITLEMENT REDUCED BY TRA

(4) 20 WKS OF WORK REQUIRED

[W] ABLE & AVAILABLE WAIVED FOR HOSPITALIZATION AND JURY DUTY IF SO PROVIDED FOR REGULAR UI

VI UCX

[V] requires 365 days to qualify

(4) NO ELIGIBILITY FOR VOLUNTARY SEPARATIONS

[A] individual eligible if voluntary separation after a full-term of enlistment

[A] 4-week delay before payment

[A] duration limited to 13 weeks

[A] payments charged to DOD (10/1/83)

VII UCFE

(4) CHANGE TO "SUBSTANTIAL CAUSE"

(4) CHANGE IN QUALIFYING REQUIREMENTS

(4) EB SUITABLE WORK REQUIREMENT ADDED

(4) STATE WBA USED

(4) OLDER WORKER PROVISIONS DROPPED

(4) TRAINING REQUIREMENTS TIGHTENED

(4) "SECOND DOLLAR" OF PAYMENTS ELIMINATED

(4) ELIGIBILITY PERIOD TIGHTENED

(4) JOB SEARCH/RELOCATION ALLOWANCES INCREASED

(4) FRAUD AND OVERPAYMENT PROVISIONS STRENGTHENED

(4) ACT EXTENDED UNTIL 9/30/83

[A] change to "substantial cause" eliminated

VIII UCFE

(2) costs borne by each federal agency

IX FSC

(5) all-federal program of supplemental unemployment compensation for exhaustees of regular and (where payable) EB benefits; 6-10 weeks; expires 3/31/83

[T] increase to 8-16 weeks; change in triggers

[W] EXTENSION TO 9/30/83; CHANGE IN TRIGGERS TO 8-14 WEEKS

lower case - 1980
CAPITALS - 1981
lower case - 1982
CAPITALS - 1983

[V] ERISA Amendments (P.L. 96-364)
(2) 1980 Budget Reconciliation (P.L. 96-499)
[T] Tax Recovery Act (P.L. 97-34)
(4) 1981 Budget Reconciliation (P.L. 97-35)
(5) Tax Equity and Fiscal Responsibility Act (P.L. 97-248)
[A] Miscellaneous Revenue Act (P.L. 97-362)
[T] Surface Transportation Act (P.L. 97-424)
[W] Social Security Amendments (P.L. 98-21)

COMPARISON OF BILLS RELATING TO FSC

PRESENT LAW	S. 1663 (RIEGLE AND LEVIN)
1. Federal Supplemental Compensation (FSC) payable to individuals who have exhausted regular UI benefits (and, where applicable, extended benefits) on or after June 1, 1982.	1. NO CHANGE
2. Benefit Entitlement A. Effective April 1, 1983, FSC benefits are payable as follows: Basic benefits-- individuals who begin receiving FSC on or after April 1, 1983, could receive up to a maximum of (1) 14 weeks in States with IUR at 6.0% and above (2) 12 weeks in States with IUR at 5.0% to 5.9% (3) 10 weeks in States with IUR at 4.0% to 4.9% (4) 8 weeks in all other States	2. BENEFIT ENTITLEMENT A. Effective August 1, 1983 - duration as in present law. Equivalencies established as follows: IUR of 6% = Total unemployment rate (TUR) of 11% IUR of 5%-5.9% = TUR of 10%-10.9% IUR of 4%-4.9% = TUR of 9%-9.9%
B. If FSC was first payable to an individual for a week beginning before April 1, 1983, benefits will be lesser of 55% of total amount of regular benefits or the sum of: (1) entitlement under (A) plus (2) such individual's additional entitlement.	B. If FSC was first payable to an individual for a week beginning before August 1, 1983, benefits shall be the lesser of entitlement under "A" or the sum of: (1) entitlement under "A" reduced by FSC paid before August 1, 1983, plus (2) such individual's additional entitlement (under "C")
C. Additional entitlement is the lesser of (1) three-fourths of entitlement under (A) or (2) applicable limit in following table-- States with an IUR of 6.0% or more, 10 weeks States with an IUR of 4.0% to 5.9%, 8 weeks All other States, 6 weeks No 6-percent, 5-percent, 4-percent or low-unemployment period, as the case may be, shall last for a period of less than 4 weeks unless the State enters a period with a higher percentage designation	C. Additional entitlement is the lesser of (1) the entitlement under "A" or (2) applicable limit in following table-- States with IUR of 6% (or TUR of 11%) or more, 10 weeks States with an IUR of 4% (or TUR of 10%) or more, 8 weeks All other States----------6 weeks

PRESENT LAW	S. 1663 (RIEGLE AND LEVIN)
States that would lose 6 weeks or more in maximum potential benefits at the date of enactment of this bill will have the maximum number of weeks payable reduced by no more than 4 weeks. Phaseout of FSC benefits: Individuals who have not exhausted their FSC entitlement of September 30, 1983, when the program expires, would be eligible to receive up to 50% of their remaining FSC entitlement. No new claimants added to the FSC program on or after September 30, 1983.	D. If FSC was payable to individual before August 1, 1983, and such entitlement was exhausted before August 1, 1983--new entitlement shall be equal to individual's additional entitlement under "C". Phaseout of FSC benefits: substitutes March 31, 1984 for September 30, 1983.
3. Coordination with Trade Readjustment Program (A) Except as provided in (B) below, the maximum amount of FSC payable to an individual shall not be reduced by reason of any TRA to which the individual was entitled under the Trade Act of 1974. (B) If an individual received TRA in respect of any benefit year, the maximum amount of FSC payable in respect of such benefit year shall be reduced (but not below zero) so that the aggregate amount of the following payable in the benefit year does not exceed the aggregate amount which would have been payable had the individual not been entitled to any TRA. (1) regular compensation, (2) extended compensation, (3) trade readjustment allowances, and (4) Federal Supplemental Compensation.	3. NO CHANGE
4. Training. An individual in training not required to meet State law provisions with respect to availability, active search for work, and refusal of suitable work in order to collect FSC.	4. NO CHANGE

PRESENT LAW	S. 1663 (RIEGLE AND LEVIN)
EXPIRATION DATE SEPTEMBER 30, 1983, EXCEPT FOR INDIVIDUALS MEETING PHASE-OUT CONDITIONS.	EXPIRATION DATE MARCH 31, 1984, EXCEPT FOR INDIVIDUALS MEETING PHASE-OUT CONDITIONS. EFFECTIVE DATE: AUGUST 1, 1983

COMPARISON OF BILLS RELATING TO FSC

S. 1387 (LEVIN AND SPECTER)	S. 1620 (BYRD)	H.R. 3433 (MOLLOHAN)	S. 1589 (LEVIN AND OTHERS)
Extends current FSC provisions until March 31, 1984 No change in basic provisions	. Would add 6 additional weeks of FSC in all States so that number of weeks payable in States would be 20, 18, 16, and 14, instead of present 14, 12, 10, and 8 weeks payable under present law. . No change in expiration date September 30, 1983 . Effective upon enactment. . Individuals who exhausted FSC prior to date of enactment would qualify for additional weeks provided in this act.	Extends current FSC provisions until March 31, 1984 No change in basic provisions	Among other provisions, would provide TUR of 11% as alternative to present 6% IUR period in a State.

COMPARISON OF HR 3021 AND S. 951
HEALTH INSURANCE FOR THE UNEMPLOYED

ETA/OES/UIS/OLAS
July 14, 1983

	HR 3021	S. 951
FUNDING	H.R. 3021 creates a new Title to the Social Security Act which authorizes $3.75 billion between Fiscal Years 1983-1985 for block grants to States. Money would be allotted among States based on the total number of unemployed in a State, the number receiving unemployment compensation benefits, and the number who have exhausted benefits. No State matching is required in FY 83. States would be required to provide up to 20 percent matching during FY 1984 and 1985, depending on each State's total unemployment rate. The Federal grant could cover 100% of costs in States with very high unemployment.	Amends Title XX of the Social Security Act to provide $1.8 billion between FY's 1983-1985 for block grants to States. ($200M in FY 83, $900M in FY 84, $700M in FY 85.) All States would be eligible to participate, without matching funds, until October 1, 1983. After that date, only States with IUR's above 2% would be eligible to participate. Beginning October 1, States with insured unemployment rates between 2% and 3% would get half the program's cost from the Federal Government. That would rise to 65% for States with insured rates between 3% and 4%, to 80% for States between 4% and 5% and to 95% for States above 5%.
ELIGIBILITY	Those individuals receiving Unemployment Compensation benefits, those who had received such benefits within the previous two years would be eligible for the program, and others who are unemployed and meet certain financial requirements. The State may not, except with this last group, require any income testing.	Those individuals receiving regular EB or FSC unemployment benefits and their immediate families. Also, States would be required to include an income test requiring that, at the least, an individual be denied health insurance coverage if his family income exceeds 100% of the State's median income.
BENEFITS	States would be required to provide at least pregnancy-related, well-baby, inpatient and ambulatory services. States must cover all eligible individuals for at least one year.	Permits coverage of lab, x-ray, radiation therapy services, and the services of a nurse midwife. In addition, permits coverage of home health benefits where the State determines that they are cost effective. If the State provides for any benefits it must at a minimum include both ambulatory and institutional services. With the exception of this limitation, the State has discretion with respect to amount, duration, and scope.

COMPARISON OF HR 3021 AND S. 951
HEALTH INSURANCE FOR THE UNEMPLOYED

	HR 3021	S. 951
COST SHARING	States could require beneficiaries to pay premiums of no more than 5% of their weekly unemployment compensation. States would be required to mandate beneficiary copayments on all services.	Permits the States to require cost sharing on outpatient services that does not, on average, exceed 5% of the State's average monthly unemployment compensation benefit. With respect to inpatient services, the State may require cost sharing up to the limits permitted under the medicaid program. Under current regulations, this amount could equal the value of one half of the cost of the first day of care in the hospital. At a minimum, the State must require cost sharing equal to that required by the State under its own medicaid program.
PRIVATE SECTOR	Employers with 25 or more workers would be required to provide 90 days of coverage after layoff at the same premium levels, and open enrollment for laid-off spouses and family members of covered workers. Extended coverage would be either the same benefits given current workers, or 10 physician visits and 9 days in the hospital. By 1985, employers must also allow their laid-off workers to buy the same coverage they had while working. Federal tax penalties would be imposed on employers not complying with these requirements.	Employers with 10 or more workers would be required to provide a 30-day open enrollment period for employees to change from self only to family coverage or to commence coverage of both the employee and the employee's family. Failure to provide an open enrollment period would generate a penalty excise tax equal to $500 per violation.
SESAs	Role of the SESA's would be determined by the State plan developed to implement a health insurance program. Federal law includes no requirements, but does include provision for supplying administrative costs to SESA. The program is voluntary with the States.	State unemployment offices would be responsible for determining program eligibility. Program is voluntary on the part of the State and $80 million made available to the SESA's for administration. Upon initial application for unemployment compensation benefits (or after enactment for those already on the unemployment compensation rolls) a worker would be informed of his potential eligibility for health benefits under the open enrollment opportunity provided his working spouse or parent and under the State-administered program. He would then be allowed a four-week period in which to elect or decline coverage under the State program. Once covered, an individual could opt out of the program at any time. However, once out he could not reenter until he again became eligible for a new benefit year as defined under the State unemployment compensation program.

COMPARISON OF HR 3021 AND S. 951
HEALTH INSURANCE FOR THE UNEMPLOYED

	HR 3021	S. 951
SESAs		The State unemployment compensation office would inform the individual concerning the date of eligibility, and the actuarial value of the benefits provided. Premium payments, at the option of the State, would be deducted from the individual's unemployment compensation check. Alternatively, the State would be permitted to establish some other collection mechanism. The administration of the health benefits provisions under this program would be the responsibility of the State agency established or designated to administer the State's Medicaid program.
PREMIUMS	Up to 5% of the claimant's weekly unemployment compensation payment. State option on whether and how to collect from claimants.	Up to 8% of claimant's weekly unemployment compensation payment.
TERMINATION	End of FY 1985	SAME

Financial Developments - Loan Status of States

When States are unable to pay unemployment benefits due to insufficient funds in their account in the Unemployment Trust Fund, they may request Title XII advances to fund these benefits. These Title XII advances are made to States from the Federal Unemployment Account. Alaska, Michigan and Pennsylvania borrowed funds for benefits in the mid to late 1950s and all repaid before the end of the 1960s. Borrowing began again in 1972 and became heavy during 1975-76, with 23 States borrowing in 1976. Many of these loans were repaid but borrowing accelerated in the latest recession.

This Federal Unemployment Account has also had insufficient resources and has had to borrow from the general revenues of the U.S. Treasury. The Omnibus Budget Reconciliation Act of 1981 (P.L. 97-35) provided for assessing interest on advances made to States on April 1, 1982 and after. These had all been interest free prior to April 1, 1982. The interest rate is the lower of 10 percent or the rate paid by the Secretary of the Treasury in the last quarter of the preceding calendar year on the State accounts in the Unemployment Trust Fund. The 1982 and 1983 interest rate is 10 percent.

Twenty nine States currently (as of July 31, 1983) have outstanding Title XII advances as follows:

STATES WITH OUTSTANDING TITLE XII LOAN BALANCES AS OF JULY 31, 1983

	INTEREST FREE ADVANCES	INTEREST BEARING ADVANCES	TOTAL TITLE XII ADVANCES
ALABAMA		$56,384,830.46	$56,384,830.46
ARKANSAS	$53,694,487.54	$54,075,000.00	$107,769,487.54*
COLORADO		$81,816,456.98	$81,816,456.98
CONNECTICUT	$219,779,914.57	$63,806,407.43	$283,586,322.00*
DELAWARE	$47,513,255.47		$47,513,255.47*
DIST. OF COL.	$30,817,398.86	$33,360,723.27	$64,178,122.13*
ILLINOIS	$1,500,318,757.19	$933,198,727.97	$2,433,517,485.16*
INDIANA		$63,815,770.83	$63,815,770.83
IOWA		$176,194,000.00	$176,194,000.00
KENTUCKY	$95,721,000.00	$111,385,966.32	$207,106,966.32
LOUISIANA		$363,591,392.52	$363,591,392.52
MAINE	$4,853,483.83	$701.45	$4,854,185.28*
MICHIGAN	$1,523,925,561.77	$743,119,000.00	$2,267,044,561.77*
MINNESOTA	$169,511,569.84	$212,624,116.82	$382,135,686.66*
MISSOURI	$89,825,000.00		$89,825,000.00
MONTANA		$8,556,387.82	$8,556,387.82
NEW JERSEY	$428,146,076.39		$428,146,076.39*
NORTH DAKOTA		$6,867,093.27	$6,867,093.27
OHIO	$938,151,231.98	$1,173,086,341.39	$2,111,237,573.37*
PENNSYLVANIA	$1,472,304,638.97	$1,187,938,038.19	$2,660,242,677.16*
PUERTO RICO	$51,701,475.90		$51,701,475.90*
RHODE ISLAND	$90,361,941.03		$90,361,941.03*
TEXAS		$517,559,843.97	$517,559,843.97
UTAH		$15,937,819.78	$15,937,819.78
VERMONT	$25,858,178.68	$3,166,643.32	$29,024,822.00*
VIRGINIA		$25,607,900.49	$25,607,900.49
VIRGIN ISLANDS	$1,914,649.28	$1,996,726.60	$3,911,375.88*
WEST VIRGINIA	$96,912,979.43	$155,813,000.00	$252,725,979.43*
WISCONSIN	$126,664,000.00	$518,598,022.32	$645,262,022.32
# STATES	(19)	(24)	(29)
TOTAL OUTSTANDING LOANS (JULY 31, 1983)	$6,967,973,600.73	$6,508,500,911.20	$13,476,476,511.93

*Indicates States making repayments through reduced employer credits.

NOTE: Total for Interest Bearing Advances does not include unpaid interest

I. RESEARCH PROJECT SUMMARIES

A. Research Projects Planned and in Progress

Qualifying Requirements

Study Title

Qualifying Requirements

Problems To Be Studied

Four different aspects of the employment/earnings requirements to establish an unemployment insurance (UI) benefit year are included in this study: (1) how the requirements affect "repeaters", i.e., claimants with successive benefit years; (2) the use of the Continuous Wage and Benefit History (CWBH) data base as a data source in studies of these requirements; (3) the differential costs associated with request reporting versus required quarterly reporting of employment/earnings; and (4) updating the "Urban Model" to simulate the impact on UI program parameters of changes in employment/earnings requirements.

Methods

For problems (1) and (3), data arising from the administration of the UI program are being used as well as personal interviews of State UI officials in the States of Florida, Idaho, Iowa, Pennsylvania and Washington. For problem (2), the investigators will attempt to use the CWBH data to replicate a 1976 study by Pleatsikas et al., "Measures of Substantial Attachment to the Labor Force", which used personal interview data. For problem (4), public use tapes from the 1980 Census of the Population, the Survey of Income and Expenditures (SIE) data base, and qualifying requirements in State laws are being used for updating.

Expected Completion Date

March 1984

Contact Person

Richard L. Hayes
The Policy Research Group, Inc.
1120 19 Street, N.W., Suite 600
Washington, D.C. 20036
Tel. (202) 822-9203

Disqualifications

Study Title

A Study of Unemployment Insurance Claimants Reporting Pension Income

Problem To Be Studied

This project will examine the characteristics of unemployment insurance claimants reporting deductible pension income and determine information concerning their prior earnings, weekly benefit rates and pension size in order to estimate the cost savings attributable to the pension offset provision contained in the New Jersey Unemployment Compensation Law.

Method

The Pension Offset Study is based on a random sample of approximately 1,000 claimants who reported receiving a pension during July 1983.

The sample will be taken from the Local Office On-line Payment System (LOOPS) Data Base.

Expected Completion Date

January 1, 1984

Contact Person

Ronald Cronk, New Jersey Department of Labor, Division of Planning and Research, Office of Program Research, CN 057, Trenton, New Jersey 08625, 609-292-9465.

Disqualifications and Continuing Eligibility

Study Title

Work Test and Nonmonetary Eligibility

Problem

Initial nonmonetary qualification for UI benefits is codified in each State's laws regarding disqualifying actions. These include voluntary separation, misconduct, etc. Disqualification results in a nonentitlement period, fixed in some States and discretionary in others. Continuing eligibility for UI benefits depends on the presence of two positive conditions--ability to work and availability for work, and the absence of one negative disqualifying action--refusal to accept available (suitable) work. Mandatory minimum standards with respect to disqualification are stated in the Federal Unemployment Tax Act. Otherwise, States establish their own laws and regulations.

The wide variation in benefit denial rates among States is the subject of this study. What are the factors that influence nonmonetary denial rates and to what degree?

Method

The planned analysis combines quantitative and qualitative analysis to allow three major types of factors--external, statutory, and administrative--that influence denial rates to be isolated and examined. The first analysis component consists of an econometric time series/cross-sectional analysis of UI denial rates, using published State data over the 1964-1980 period to ascertain what "observable" factors influenced these denial rates. The second component consists of indepth studies of six State UI systems, focusing on the role played by legal and administrative factors in explaining interstate as well as instrastate differences in denial rates.

Data sources include Unemployment Insurance Statistics, Comparison of State Unemployment Insurance Laws, Employment and Earnings, Monthly Labor Review and the MPR Data File.

Expected Completion Date

March 1984

Investigators

Stuart Kerachsky and Walter Corson
Mathematica Policy Research
905 University Avenue, Room 203
Madison, Wisconsin 53715
Tel. (608) 255-1900

Benefit Entitlement

STUDY TITLE

"Impact of a Seasonal-Work Provision on UI Benefits in Washington State"

PROBLEM TO BE STUDIED

The Washington State Legislature has considered a bill that would limit the amount of UI benefits which an individual could collect in a calendar quarter to not greater than the amount of wages earned in the highest of the two corresponding calendar quarters in the previous two years. Exceptions would be made for illness in the past two years or new entrants into the labor force.

METHOD

Data Source

The Continuous Wage and Benefit History (CWBH) data files, matching wage files with benefit files.

Methods of Analysis

The longitudinal files will be used to determine what the effect of such a limitation would have had in the past. Two time periods will be used to capture the effect of this provision during different portions of the economic cycle. Characteristics of claimants will be summarized for those affected by the provision.

EXPECTED COMPLETION DATE

August 1983

CONTACT PERSON

Gary Bodeutsch
UI Research
Employment Security Department
Olympia, Washington 98504

206-753-3809

Duration of Benefits

STUDY TITLE

"Characteristics of UI Exhaustees in Washington State, 1971 and 1981"

PROBLEM TO BE STUDIED

During both 1971 and 1981 Washington State was experiencing strong economic recessions. Although the nature of the recessions were different, the unemployment insurance system responded with similar actions--extending the potential duration of beneficiaries. Those exhaustees of regular-program benefits were those affected by the extensions. This study will look at characteristics of the exhaustees from the two time periods for similarities as well as contrasts.

METHOD

Data Source

The Continuous Wage and Benefit History (CWBH) data files on UI claimants and "Characteristics and Labor Market Experience of Exhaustees," Washington Employment Security Department, December 1971.

EXPECTED COMPLETION DATA

Summer 1983

CONTACT PERSON

Mary Foley
UI Research
Employment Security Department
Olympia, Washington 98504

206-753-3809

Duration of Benefits

Study Title

The Effect of the Duration of UI Benefits on Work Incentives

Problem To Be Studied

The problem to be studied is the effect of changes in the potential duration of UI benefits on the length of unemployment spells and on reemployment wages, particularly the effects of benefit extensions on these two variables during recessionary periods. By carrying out a comprehensive empirical investigation into the magnitude of benefit duration effects, the researchers intend to narrow the range of estimates.

Method

A number of different data bases, including some used in past studies, are being assembled for analysis. The researchers are estimating a set of common models with common variable specifications and estimating techniques across the data sets. By these methods, the researchers intend to determine the extent to which the variance in the results of past studies are due to different methods of handling the data. They will attempt explanations of any remaining differences across the data sets by examining the differing characteristics of the data. Additionally, new models and estimating techniques will be developed. The effect of the business cycle on benefit extension effects will be analyzed by comparing results across data sets and by estimation on a single data set.

The effect of benefit durations on intra-household labor-force decisions will be estimated. The dependent variable will be some measure of labor-force activity and the independent variables, the level of UI benefits and the potential duration of benefits received by the household recipient.

Results will be analyzed for their policy implications and specific policy options simulated.

Expected Completion Date

March 1984

Name of Investigators

Walter Corson and Robert Moffitt
Mathematica Policy Research
P.O. Box 2393, Princeton, New Jersey 08540
Tel. (609) 799-2600

Duration of Benefits

Study Title

Examining the Impact of Recent Extended Benefit Legislation

Problem To Be Studied

The purpose of the study is to determine the impact of the recent legislative changes with respect to the EB program which include: 1) elimination of the national trigger; 2) elimination of EB claimants from IUR calculations used in the state triggers; 3) raising the trigger rate to 5 percent (or 6 percent if the 120 percent rule is waived); 4) the requirement that EB recipients accept jobs that pay an amount equal either to the minimum wage or to their UI benefit amount, whichever is higher; and 5) the additional qualifying provision for EB, requiring 20 weeks of full-time work or the equivalent in the base period.

Method

The study is modifying an existing model (developed by MPR) that predicts exhaustion rates by state. The modification updates the data base and expands the model output to include predictions of EB participation and the amount of EB benefits received. This is being performed in part by examining CWBH data with respect to regular UI exhaustees. The CWBH data are also being used to provide a more detailed description of the effects of the legislative changes on individual claimants. Data from the Employment Service Automated Reporting System (ESARS) are being used to ascertain EB claimants' job search activites before and after the changes. The quantitative analyses are being supplemented with a more qualitative analysis of the legislative changes, based on discussions with selected state officials concerning implementation of the EB qualifying and suitable work changes.

Expected Completion Date

The study is to be completed in early 1984.

Contact Persons

Walter S. Corson, MPR, Inc., P. O. Box 2393, Princeton NJ 08540, 609/799-2600.

William McGarrity, Employment and Training Administration, U.S. Department of Labor, 601 D Street N.W., Washington DC 20213, 202/376-7249.

Claimant Characteristics

Study Title

Covered Workers in Nebraska, 1972-1982

Study Description

"Covered Workers in Nebraska, 1972-1982" will be the fourth in a continuing series of reports published by the Division of Employment, Nebraska Department of Labor. This report will present information concerning Nebraska's eligible insured unemployed who draw benefits. Data sources include: Employment, Wages, and Contributions, ES 202; Characteristics of the Insured Unemployed, ES 203; Annual Earnings by High Quarter Earnings, ES 206; UI Benefit Payments by Industry, ES 217 (old); and Benefit Rights and Experience, ES 218.

Expected Completion Date

September 1983

Contact Person

Wendell O. Olson
Research and Statistics Chief
Division of Employment
Nebraska Department of Labor
Box 94600, Statehouse Station
Lincoln, Nebraska 68509
Telephone: (402) 475-8451

Study Title

Why Is Insured Unemployment So Low?

Problem

The total unemployment rate (TUR) and insured unemployment rate (IUR) are the nation's two most important measures of slack in the labor market. Although the two differ significantly in basic concept, they have historically shown very similar patterns of month-to-month movement. In recent years, there has been a sharp break in the relation beween the total and insured unemployment rates. During the 1981-82 recession, the insured rate was substantially lower than would be predicted on the basis of prior experience. In October 1982, when the TUR was 10.4 percent, the insured rate was only 5.3 percent, or 5.1 points lower. By way of contrast, in May 1976, the insured rate was only 2.2 points lower than the total rate--6.8 percent versus 9.0 percent.

This sharp decline in the ratio of insured to total unemployment rates may indicate either a deterioration in one or both measures of labor market tightness or the presence of special features in the recent recession which temporarily disturbed their relationship. It is important to distinguish between these two explanations. Both unemployment indicators are used in a wide variety of policy applications.

The purpose of this study is to examine the pattern of insured and total unemployment over the past three decades and to attempt an explanation for their recent divergence.

Method

Regression analysis of UI and Current Population Survey (CPS) data.

Expected Completion Date

September 30, 1983

Investigator

Gary Burtless
Brookings Institution
Tel. (202) 797-6130

Contact Person

Jim Van Erden
Division of Actuarial Services, UIS/ETA
601 D STreet N.W.
Washington, D.C. 20213
Tel. (202) 376-7066

Benefit Financing

Study Title

Experience Rating

Problem

The purpose of the study is to determine whether experience rating systems affect layoff patterns.

Method

The investigators intend to study firms from all industries in four States. Firms with fewer than three employees will not be considered. The data source is State employment security agency data used to experience-rate employers. To achieve the objectives of the study, the investigator will use an analysis of variance approach. They also intend to construct experience rating indices and to analyze them over time.

Expected Completion Date

March 1984

Contact Person

Paul Feldman, Director
The Public Research Institute
2000 North Beauregard Street
P.O. Box 11280
Alexandria, Virginia 22311
Tel. (703) 998-3500

Benefit Financing

Study Title

The Effects of Experience Rating in the Unemployment Insurance System

Problems

1. Investigation of the impact of UI and UI financing on optimal compensation and employment decisions.

2. Examination of the distribution betwen temporary and permanent layoff and the role of experience rating in transitions between jobs.

3. Measurement of the degreee of experience rating and adjustments to experience rating programs within States.

Method of Analysis

As the problems are, to a great extent, being addressed on a theoretical level, differential calculus is the primary analytical tool. Some regression analysis is being performed in relation to the second problem, with data requirements being satisfied by Current Population Survey (CPS) files.

Preliminary Findings

Preliminary work suggests that a fully experience-rated system may inefficiently reduce permanent layoffs.

Expected Completion Date

March 1984

Investigators

Finis Welch and Robert Topel
Unicon Research Corporation

Contact Person

Finis Welch
2116 Wilshire Boulevard, Suite 202
Santa Monica, California 90403

Benefit Financing

STUDY TITLE

Minimum Level for Collection of Underpaid Taxes

PROBLEM TO BE STUDIED

The purpose of this study is to examine the cost-effectiveness of increasing the minimum level (currently $1.00) at which agency solicitation of unpaid interest on employer contributions will commence.

METHODOLOGY

Sampling Design

Universe of Kansas firms which in calendar year 1982 failed to pay contributions when due.

Data Source

Data to be used will be collected through the Job Insurance Program administered by the Kansas Department of Human Resources.

Methods of Analysis

Evaluate the cost of determining the amount of interest owed, the cost of sending the additional billing statements to delinquent employers, and the funds which would be lost if no interest is collected.

EXPECTED COMPLETION DATE

Spring or Summer 1984

PERSON TO CONTACT

Mr. William H. Layes
Research and Analysis Section
Kansas Department of Human Resources
401 Topeka Avenue
Topeka, Kansas 66603
phone: (913) 296-5066

STUDY TITLE

Base Period Employer Minimum Charge

PROBLEM TO BE STUDIED

The purpose of this study is to examine the cost-effectiveness of establishing a minimum charge level under which base period employer accounts would not be charged.

METHODOLOGY

Sampling Design

Universe of Kansas firms which had less than $500 charged to their experience rating account during any of the last three years.

Data Source

Data to be used will be collected through the Job Insurance Program of the Kansas Department of Human Resources.

Methods of Analysis

Evaluate the cost of not charging an employer's account if a claimant receives less than a specified amount of benefits.

EXPECTED COMPLETION DATE

Spring or Summer 1984

PERSON TO CONTACT

Mr. William H. Layes
Research and Analysis Section
Kansas Department of Human Resources
401 Topeka Avenue
Topeka, Kansas 66603
phone: (913) 296-5066

Benefit Financing

Study Title

Covered Employment and Earnings (quarterly)

Study Description

"Covered Employment and Earnings" is a continuing series of quarterly reports published by the Division of Employment, Nebraska Department of Labor. These reports present information concerning Nebraska subject employers' contributions and wage reports. Data is tabulated and shown by Standard Industrial Classification industry and presented on a statewide and county basis. Payroll data represents total wages paid during the quarter and is also shown by industry for the state and publishable industry groups for each county. Data sources for the quarterly reports are the quarterly contribution and wage reports submitted by employers subject to the Nebraska Employment Security Law. These reports will be available on an ongoing basis.

Contact Person

Wendell O. Olson
Research and Statistics Chief
Division of Employment
Nebraska Department of Labor
Box 94600, Statehouse Station
Lincoln, Nebraska 68509
Telephone: (402) 475-8451

Operations

STUDY TITLE

"Summary of Errors and Claimant Characteristics Detected By a Random Audit of UI Claims in Washington State"

PROBLEM TO BE STUDIED

A small random audit is made of weeks-claimed for UI benefits. The audit is an intensive review of all aspects of the claim to determine if the claim has been properly paid. This study will look at claimant characteristics and types and causes of payment errors. A future phase of the analysis will look at time series trends.

METHOD

Data Source

The random audit activity includes summary reports with data-definition comparability with other states also involved in the random audit project. The reports will be analyzed on a quarterly basis through the end of 1982.

EXPECTED COMPLETION DATE

An initial report has been completed; additional analysis will continue through 1983.

CONTACT PERSON

Wayne McMahon
UI Research
Employment Security Department
Olympia, Washington 98504

206-753-3809

B. Research Projects Completed

STUDY TITLE

"The 1981 Extended Benefit Intensive Services Study Project"

AUTHORS

Mary Foley and Gary Bodeutsch,
Washington Employment Security Department

REPORT DATE May 1983

RESULTS

This study focused on the effect of increasing the quality and quantity of job-finding and placement services for claimants subject to the more stringent 1981 federal extended benefit eligibility provisions. The following three areas were evaluated:

1. While 36% of the test-group claimants had at least one week in which their weekly benefit amount was reduced to zero because of earnings, this was true for only 23% of the control group.
2. The total number of eligibility denials was not statistically different for the two groups.
3. There was no statistically significant difference between the two groups on benefit duration or amount of benefits drawn.

METHOD

SAMPLING DESIGN

A random sample of 350 claimants was selected from each of five Job Service Centers for the test group with an equal number for a control group.

METHODS OF ANALYSIS

The study, begun in June, 1981, and continuing through September, 1981, was designed to have qualified interviewers monitor closely those assigned to the test group. The control group received regular service. At the end of the study period, data were gathered using reports of the interviewers and UI operational files on claim histories.

AVAILABILITY: Gary Bodeutsch
UI Research, T-8
Employment Security Department
Olympia, Washington 98504

206-753-3809

Weekly Benefit Amount

Study Title

The Impact of the Inclusion of Tips as Wages for Unemployment Insurance Purposes

Author

Thomas E. Hills, Nevada Employment Security Research

Date of Publication

March 1983

Results

The intent of the proposed legislation is to include tip income in the definition of wages to increase the unemployment benefits of a sizeable portion of the Nevada labor force to an amount closer to the true replacement of foregone income.

Study results indicate that this end would be accomplished at an ongoing cost to employers of $10 to $12 million per year; that these costs would largely be borne by tip-related industries, that cost and benefit impact would be phased in over several years; and that the mechanisms to handle the financing of this change are in place within the Nevada Employment Security Department.

Method

The Continuous Wage and Benefit History (CWBH) data base was accessed to carry out the simulation study. The Nevada CWBH 20 percent sample is a random selection of intrastate and interstate claimants based on social security number. Sample claimants with benefit years beginning in the period between July 1981 and June 1982 were selected for this study. Those with tip earning potential were isolated by DOT. Based on information from the CWBH questionnaires and other sources, tip earning potential was estimated and five DOT groups with differing potential established. High quarter earnings were then augmented by one of five factors. Additionally, the maximum weekly benefit amount was adjusted in relation to the changed average weekly wage in covered employment, and weekly benefit amounts were recalculated for the sample as a whole. Original and simulated benefit data were compared for the tip earning subset as well as the claimant population as a whole.

Availability

Nevada Employment Security Department
Employment Security Research
500 East Third STreet
Carson City, Nevada 89713

Duration of Benefits

Study Title

An Analysis of UI Recipients' Unemployment Spells

Authors

Walter Corson and Walter Nicholson
Mathematica Policy Research

Date of Publication

July 1983

Findings

A. Analytical Findings

1. Initial completed unemployment spells averaged 14 weeks for sample respondents. That figure was lower than the mean value of total weeks of UI benefits received during the benefit year (16) or of total weeks of unemployment (17) during the benefit year. The 14 weeks figure for the initial completed unemployment spell exceeded average weeks of compensated unemployment in the initial spell by about 3 weeks. Hence, the various measures of individuals' unemployment during the benefit year were somewhat different on average.

2. At the time of layoff, nearly three-quarters of the respondents in the sample expected to be recalled to their jobs. For most of these workers, their expectations were met. Both those individuals expecting recall and those actually recalled had much shorter unemployment spells than other recipients. They also had significantly lower exhaustion rates for regular UI and higher subsequent wages (after controlling for prior wages) than other UI recipients.

3. For all equations estimated, the ability to predict unemployment experiences on the basis of background data was quite low. Only recall expectation proved to be a significant predictor in all equations.

4. Low wage individuals were more likely to use the ES and those expecting recall were much less likely to do so. ES use tended to increase with the duration of unemployment suggesting that individuals regarded it as a "backstop" job search technique. The close interconnection between search strategies, recall expectations, and ES use proved to be very difficult to disentangle. The investigators,

therefore, could not successfully model the effect of the ES.

B. Methodological Findingss

1. No evidence was found that indicated that non-response biased estimates of the size of the effects of various variables on labor market outcomes, such as the length of the initial unemployment spell.

2. In comparing the mail and telephone interviews, non-response was found to be significantly higher on the mail than the telephone interviews.

3. The telephone interview was more expensive to administer than the mail interview, but because of the lower mail response rate, the cost advantage of the mail interview was on the order of only 5 to 10 percent.

Conclusions

Analytical findings suggest that supplementing unemployment insurance data in the CWBH system with information on completed unemployment spells may have importance for research on the job search process.

Methodological findings suggest that either telephone or mail interviews could be used successfully in future studies of this nature, with the choice of method depending on whether the additional accuracy and higher response rates of the telephone interview are thought to justify the (relatively small) additional cost.

Method

In two States, Missouri and Pennsylvania, interviews were conducted at the end of the UI recipients' benefit year, during the period from October 1980 to March 1981, to obtain such information as length of completed unemployment spells, post-unemployment wages, and use of the ES. Three interviewing techniques were used: (1) a telephone interview; (2) a detailed mail interview; and (3) an abbreviated mail interview. The total target sample size for the study was 2,800 individuals.

Availability

This report will be available from the National Technical Information Service (NTIS).

Duration of Benefits

Study Title

A Guide to the Analysis of UI Recipients' Unemployment Spells Using a Supplemented CWBH Data Set

Authors

Lois Blanchard and Walter Corson
Mathematica Policy Research

Date of Publication

August 1983

Contents

The report is intended to be used, in conjunction with the report, "An Analysis of UI Recipients' Unemployment Spells", to provide a guide to State Employment Security Agency CWBH users for conducting UI research studies such as the analysis of UI recipients' unemployment spells. The guide provides instructions for replicating the study conducted by MPR as well as for modifying the data collection strategy to examine other questions. There are four sections to the guide. Chapter II discusses development of the study design including identifying questions to be addressed, data sources, sample sizes and choice of interviewing method. Chapter III provides a guide to fielding the supplementary interview by telephone or mail. Manual quality control methods are also discussed. Chapter IV explains the creation of an analysis file including the use of computerized quality control checks. The last chapter discusses how to proceed with the analysis, including the choice of analytic technique, explanatory variables and analysis sample, and the analysis of non-response. The appendix contains the telephone and mail interviews and an interviewer training manual.

Availability

This publication will be available from the National Technical Information Service (NTIS).

STUDY TITLE

"Additional Benefit Claimants"

AUTHOR

Gary Bodeutsch, Washington Employment Security Agency

REPORT DATE

September 1982

RESULTS

In Washington State, a state extension of unemployment insurance was in effect beginning in April 1982 until the FSC program became effective in September 1982. This study looked at the characteristics of those claiming benefits in this additional benefit (AB) program.

Of those individuals receiving at least one week of additional benefits, 44 percent exhausted their benefits available under the program . The rate would have been higher if those coming into the program in its last two months had the time to exhaust. The AB claimants were far more likely to come from the geographical areas where lumber and wood product industries predominate in the economy (when considering ratios of those collecting regular benefits to those collecting additional benefits). However, the large urban areas were the source for the large majority of AB claimants, looking at total numbers.

METHOD-DATA SOURCE

UI operational summaries of Washington Employment Security Department and the Continuous Wage and Benefit History (CWBH) data files.

AVAILABILITY

Gary Bodeutsch
UI Research, T-8
Employment Security Department
Olympia, Washington 98504

206-753-3809

Delayed and Never Filing for Benefits

PROBLEM STUDIED

Non-Filing - The purpose of this study was to identify and analyze the experiences of persons with a lapse in employment but not filing a claim for unemployment benefits and to develop a more accurate proportion of non-filers in the estimation of the total unemployment rate.

STUDY TITLE

Kansas Non-Filers 1978: A Study of Unemployment Insurance Disincentive Effects

METHODOLOGY

Sampling Design

Selection of individuals with a break in reported earnings.

Data Source

Kansas Department of Human Resources files on wage records and unemployment insurance claimants.

Methods of Analysis

1. A review of wage base files on a quarterly basis was made to identify individuals possibly without employment for a portion of a year.
2. This list was compared with the claimant file to eliminate those filing.
3. Questionnaires were mailed to a random sample of 3,000 individuals without work, but not filing a claim for U.I. benefits.
4. Usable returned questionnaires were summarized into tables from which demographic, occupational, and industrial comparisons were made.

RESULTS

Of the 3,000 individuals in the sample, 370 returned questionnaires with usable characteristic data. Another 976 respondents indicated no lapse in employment. More than 55 per cent of the individuals in the sample did not return the questionnaire, or the answers to the questionnaire returned were incomplete.

The large majority of the respondents were non-filers not because benefits were not desired, but because work was not wanted or the unemployment insurance program filing process was not known. Experience with and knowledge of unemployment insurance seemed to be the most important factor in countering the most common reason for not filing - uncertainty about eligibility and procedures -- and also to counter, to an extent, the hassle and embarrassment of filing as well. The large number of marginal workers among the non-filers suggests, contrary to other writings, this group would not be much affected

by the disincentive effects of compensation. Instead, it seems more likely unemployment insurance would, for these persons, act as an indirect incentive to job search.

AUTHOR

Stephen O. McAtee, Research Analyst
Kansas Department of Human Resources

AVAILABILITY

A copy of this report may be obtained from:

Mr. William H. Layes
Research and Analysis Section
Kansas Department of Human Resources
401 Topeka Avenue
Topeka, Kansas 66603
phone: (913) 296-5066

Claimant Characteristics

Study Title

Covered Workers in Nebraska, 1971-1981

Study Description

"Covered Workers in Nebraska, 1971-1981" is the third in a series of continuing reports published by the Division of Employment, Nebraska Department of Labor. This report presents information concerning Nebraska's eligible insured unemployed who draw benefits. Data sources include: - Employment, Wages, and Contributions, ES 202; Characteristics of the Insured Unemployed, ES 203; Annual Earnings by High Quarter Earnings, ES 206; UI Benefit Payments by Industry, ES 217 (old); and Benefit Rights and Experience, ES 218.

Contact Person

Wendell O. Olson
Research and Statistics Chief
Division of Employment
Nebraska Department of Labor
Box 94600, Statehouse Station
Lincoln, Nebraska 68509
Telephone: (402) 475-8451

Claimant Characteristics

STUDY TITLE

"White Collar Unemployment"

AUTHOR

Mary Foley, Washington Employment Security Department

REPORT DATE

September 1982

RESULTS

This study looked at the relative changes in the insured unemployment for white-collar occupations through two periods of recession (1975 and 1982) and the expansion period of 1979 in Washington State.

The results showed that since 1975 the percent of white-collar unemployment compared to all unemployment has been dropping. In 1975, the percentage was 32% white collar, in 1979, 28%, and in 1981, 27%.

White-collar occupations were further divided into two groups, those in profesional/technical/managerial occupations and those in clerical/sales occupations. The percentage of white-collar unemployed in clerical/sales decreased substantially from 1975 to 1979 (going from 71% to 57%); however, from 1979 to 1982 the rate increased, reaching 63% in May of 1982.

METHOD-DATA SOURCE

ES203, Characteristics of the Insured Unemployed, 1975 through 1982

AVAILABILITY

Mary Foley
UI Research, T-8
Employment Security Department
Olympia, Washington 98504

206-753-3809

Benefit Financing

PROBLEM STUDIED

Financing Unemployment Insurance - The purpose of this study was to determine if the Kansas Employment Security Law adequately financed unemployment insurance payments. It was prepared to assist administrators in charting the future course of the unemployment insurance financing structure.

STUDY TITLE

Financing Unemployment Insurance in Kansas, 1981-1988

METHODOLOGY

Data Source

Records and reports of the Kansas Department of Human Resources.

Methods of Analysis

1. A review of the Kansas economy from 1970 through 1980 was made.

2. The benefit and contribution aspects of the Kansas Employment Security Law were reviewed. The various goals of the program since its start in 1937 are explained. How the Law has been changed to meet these goals is also detailed.

3. Actual experience of the unemployment insurance financial structure during the 1973-1980 period is compared to that planned in an earlier publication, Financing Job Insurance in Kansas, Projections of the Seventies.

4. Projections for the 1981-1988 planning period were made based on estimates made by economists from Kansas universities, USDOL technicians, and program actuaries.

RESULTS

Four major recommendations arose out of this study. They are:

1. A target reserve fund ratio of 3.0 per cent of total wages be adopted as a goal to be reached by December 31, 1988.

2. The fund control schedule be centered at 1.00 per cent of total wages calibrated to produce a 3.00 per cent reserve ratio and the schedule be expanded. This was done by the 1983 session of the Kansas legislature.

3. A flexible wage base be adopted to eliminate stagnation.

4. Contribution rates be allowed to float. This would eliminate "stacking" at the maximum rate, have employers contribute more

in line with their benefit charges, and enhance the equitability of the experience rating system providing incentives to employers to stabilize employment.

AUTHOR

Edward R. DeSoignie, Research Analyst
Kansas Department of Human Resources

AVAILABILITY

A copy of this report may be obtained from:

Mr. William H. Layes
Research and Analysis Section
Kansas Department of Human Resources
401 Topeka Avenue
Topeka, Kansas 66603
phone: (913) 296-5066

Benefit Financing

STUDY TITLE

Covered Employment and Earnings (First, Second, and Third Quarters 1982)

STUDY DESCRIPTION

"Covered Employment and Earnings" is a continuing series of quarterly reports published by the Division of Employment, Nebraska Department of Labor. These reports present information concerning Nebraska subject employers' contributions and wage reports. Data is tabulated and shown by Standard Industrial Classification industry and presented on a statewide and county basis. Payroll data represents total wages paid during the quarter and is also shown by industry for the state and publishable industry groups for each county. Data sources for the quarterly reports are the quarterly contribution and wage reports submitted by employers subject to the Nebraska Employment Security Law.

Reports for the first, second, and third quarters of 1982 are now available.

Contact Person

Wendell O. Olson
Research and Statistics Chief
Division of Employment
Nebraska Department of Labor
Box 94600, Statehouse Station
Lincoln, Nebraska 68509
Telephone: (402) 475-8451

Operations

PROJECT TITLE: Criteria for Determining Fraud, Non-Fraud, and Nonmonetary Overpayment Determinations

PROBLEM: A lack of consistency between examiners when making the distinction between a fraud, non-fraud, and nonmonetary overpayment determination.

METHOD:

Objective of Study (Hypothesis) - The lack of consistency can be reduced by the use of a simple set of criteria, if followed by a thorough period of training for each examiner.

Sampling Design - A worksheet was designed to indicate whether an overpayment appears to be fraud or non-fraud. (See Attached). This worksheet assigns a numerical value to the criteria present in overpayment cases. A total of 40 points or greater indicates a probable fraud case.

Data Source - Overpayment determinations completed by a group of examiners.

Methods of Analysis - For 15 days determinations were reviewed using worksheet but without examiner's knowledge - 17% were inconsistent with worksheet. For 15 days that examiners used the worksheet - 4% of determinations were inconsistent.

EXPECTED COMPLETION DATE: The trial project lasted 30 days and the worksheet is now used in the decision making process.

NAME, ADDRESS, TELEPHONE OF CONTACT PERSON:

Bob Corder, UC Examiner II
Division of Unemployment Compensation
Fraud and Overpayment Section
Caldwell Building, Room 221
Tallahassee, Florida 32301
Phone: (904) 488-1592 or 487-1672

FRAUD FACTOR GUIDELINES

The factors on this worksheet may be used as general criteria for determining "intent to commit fraud". This form should not be used if the claimant has admitted an intent to commit fraud in the Fact Finding Report.

CRITERIA FOR ASSESSING POINTS	POINTS	TOTAL POINTS ASSESSED IN EACH CATEGORY
1. AMOUNT OF OVERPAYMENT		
A. 000 - $199	5	
B. $200- $399	10	
C. $400 or more	15	
2. WAGE REPORTING		
A. For each week of unreported wages over $125 per week	9	
B. For each week, $61 - $124	7	
C. For each week, less than $60	5	
3. PREVIOUS OFFENSES		
A. For each previous overpayment Prosecution & Conviction	60	
B. For each Fraud Overpayment Det.	35	
C. For any previous Non-Fraud Det.	15	
D. For each previous fault overpayment on which there remains an outstanding balance	25	

Factor Points between 35 to 40 may show intent.

SS# _____

Total Points _____

Examiner _____

FRAUD/NON-FRAUD (Circle One)

Operations

PROJECT TITLE: Address Update of Inactive Overpayment Cases (UCO-41 Program)

PROBLEM: Approximately 1/ 5 of the overpayment cases in Florida do not have a current address which prevents the agency from pursuing collection of these debts.

METHOD:

Objective of Study (Hypothesis) - It is cost effective to follow-up on undelivered overpayment statements by matching the social security number of the claimant against current wage files, contacting the current employer for a more recent address of the claimant to pursue collection.

Sampling Design - Selected all inactive claimants with last names beginning with "A" to obtain current address from their most recent employer so that we could measure the increased collection amount from this project.

Data Source - Inactive accounts in the Computerized Overpayment Control File.

Methods of Analysis - Approximately 2/3 of the claimant contacts in the experimental group resulted in a new address. Special emphasis was then placed on collection of the overpayments resulting in a 48% increase in dollars repaid as compared with the collections of the control group (same group beginning with letter "A") one year earlier.

EXPECTED COMPLETION DATE: A trial project was conducted for approximately six months and results were so effective, we initiated an on-going program about one year ago. The format of the letter has gone from a manual operation to a computer printed letter to a self-mailer packet printed by the Data Systems Department.

NAME, ADDRESS, TELEPHONE OF CONTACT PERSON:

Nora Love, UC Examiner II or Elizabeth Costello, UC Examiner I
Division of Unemployment Compensation
Fraud and Overpayment Section
Caldwell Building, Room 228
Tallahassee, Florida 32301
Phone: (904) 488-1592 or 487-1672

Operations

PROJECT TITLE: Small Claims Court Action as an Effective Tool in Recovery of Unemployment Compensation Benefits

PROBLEM: To determine if Small Claims Court Action can be used effectively to increase recovery of overpaid Unemployment Compensation benefits.

METHOD:

Objective of Study (Hypothesis) - It is cost effective to take selected cases to Small Claims Court in order to achieve recovery of overpaid benefits in which all other methods of attempting recovery have proven unsuccessful.

Sampling Design - Cases were selected on the basis of type of overpayment; source and amount; age, education, and ability to pay and unwillingness on claimant's part to refund the money owed.

Data Source - Accounts which did not respond to requests for payment by letter or phone call which were initiated by Special Collections Unit.

Methods of Analysis - A total of nine cases heard in Small Claims Court in a four month period resulted in four final judgments and five conditional judgments, and recovery thus far of $2,694. The effect of the Small Claims Court action not only recovered outstanding debts, but increased the morale of the Unit personnel because they now had an effective tool for collecting many old delinquent cases.

EXPECTED COMPLETION DATE: A trial project conducted approximately four months ago was so effective that we have initiated this method as a permanent tool to use when all other methods of recovery have failed.

NAME, ADDRESS, TELEPHONE OF CONTACT PERSON:

Mary Johnson, UC Examiner II or Helen Dillon, UC Examiner I
Division of Unemployment Compensation
Fraud and Overpayment Section
Caldwell Building, Room 233
Tallahassee, Florida 32301
Phone: (904) 488-1592 or 487-1672

Operations

PROJECT TITLE: Collection of Outstanding Overpayments by a Special Unit

PROBLEM: Claimants who fail to repay overpaid benefits within the time prescribed by law.

METHOD:

Objective of Study (Hypothesis) - It is cost effective to follow-up on unpaid overpayments by contacting claimants through personal letters and phone calls explaining the consequences of failure to repay. Each case is carefully reviewed for appropriate action (letters, phone calls, field investigations), and for determining installment payments if the total amount cannot be repaid in a lump-sum.

Sampling Design - Select cases of outstanding overpayments where no payments had been received within 6 months in order to measure the increased collection from this project.

Data Source - Outstanding overpayment accounts in the Computerized Overpayment Control File.

Methods of Analysis - In the original six month trial period this unit showed a net profit of $60,442.80. The net profit measured was less the expenses of operating the unit. Although further figures are not available, it is becoming apparent that the collections are increasing by an even greater amount as time goes by.

EXPECTED COMPLETION DATE: The six month trial project produced such effective results that we initiated the Special Collections Unit staffed by three examiners, two typists, and a part-time clerk. The payments received are now coded into the computer to determine the exact amount of monies received as a direct result of this Unit.

NAME, ADDRESS, TELEPHONE OF CONTACT PERSON:

Mary Johnson, UC Examiner II or Helen Dillon, UC Examiner I
Division of Unemployment Compensation
Fraud and Overpayment Section
Caldwell Building, Room 233
Tallahassee, Florida 32301
Phone: (904) 488-1592 or 487-1672

Effect of UI on the Economy

Study Title

The Effects of Aggregate Unemployment Insurance Benefits in the U.S. on the Operation of a Local Economy

Authors

Ronald L. Oaxaca and Carol A. Taylor
University of Arizona

Date of Publication

September 1983

Findings

The researchers estimated that the sum of local and national benefit payments generated an estimated 72 jobs per $1 million in local benefit payments. The comparable impact on the U.S. as a whole was 18 jobs per $1 million in UI benefits. Over the 1975-76 period, local wage and salary employment in Maricopa County was raised by 2.2 percent compared with an increase of 0.5 percent in the U.S. employment. Disposable personal income in Maricopa County increased by 3.2 percent and in the U.S. by 2.0 percent. UI benefits lowered the unemployment rate by 5.9 percent locally and by 2.5 percent nationally. Local sales were raised by 1.2 percent over the two year period.

A comparison of the percent distribution of UI tax contributions with the percent distribution of local employment and sales generated by local and national UI benefits shows them to be fairly close. The exceptions are construction, which gains slightly more proportionately than it contributes, and finance, insurance and real estate, which gain somewhat less than they contribute. When the impact of local benefits only is considered, there is a greater disparity between the proportions of contributions and employment and sales.

Conclusions

The findings show that UI benefits stimulate the local and national economies, but to varying degrees. The effect, however, is relatively small, since UI spending is a small portion of total spending in the economy. Some of the factors influencing the variation in impact on local areas are:

(1) differences in marginal propensities to consume UI benefits;

(2) variation in degree of independence of local community from other markets;

(3) variation in industrial mix;

(4) variation in external impact of UI benefits on local economy;

(5) variation in local multiplier effects;

(6) difference in benefit levels;

(7) variation in real value of UI benefits due to difference in price levels.

Method

The Phoenix Arizona SMSA in 1975-76 served as the local labor market in this study . The impact of UI benefits was measured for economic activity such as employment, local sales, disposable personal income, labor force and population. The Maricopa County (Phoenix Arizona SMSA) annual forecasting model developed by the University of Arizona and the Data Resources Incorporated (DRI) quarterly forecasting model were used for the simulations. A control simulation was run in which unemployment benefits nationally and locally were set equal to their historic values. Three additional simulations were conducted: (1) all UI benefits were set equal to zero; (2) UI benefits nationally were set equal to their historic values while UI benefits locally were set equal to zero; and (3) UI benefits locally were set equal to their historic values while UI benefits nationally were set equal to zero. The simulations produced estimates of the effects of the absence of benefit payments on the local and national economies, the effects of the absence of benefit payments locally on the local economy, and lastly, the effects of the absence of benefit payments nationally on the local economy.

Availability

The publication will be available from the National Technical Information Service (NTIS).

Miscellaneous

Study Title

Problems Relating to the Introduction of Unemployment Insurance Schemes in Developing Countries

Author

Stephen Wandner, Helen Manheimer and John Robinson
Unemployment Insurance Service

Date of Completion

July 1983

Abstract

The purpose of this paper is to discuss problems relating to the introduction of unemployment insurance schemes in developing countries. At its Eighteenth Meeting held in Manila in November 1980 during the XXth General Assembly of the International Social Security Association (ISSA), the Permanent Committee on Unemployment Insurance and Employment Maintenance decided to undertake a study on problems relating to the introduction of unemployment insurance schemes in developing countries. The Committee decided that a detailed analysis of the conditions necessary for the introduction of unemployment insurance in developing countries and information on the experiences of those countries that have implemented unemployment insurance would be useful to social and economic planners in developing countries. To obtain the needed information, guidelines for the preparation of national monographs were sent to developing countries with current unemployment insurance schemes and to some developing countries that have not yet introduced such a scheme.

Chapter I of this paper consists of a literature review on the problems relating to the introduction of unemployment insurance schemes in developing countries. This review attempts to summarize and synthesize the knowledge and opinions of acknowledged experts in the field of unemployment insurance as applied to developing countries. The review emphasizes topics and discussions that are generalizable to developing countries in deciding on and planning a course of action. This review first summarizes what unemployment insurance is and points out its limitations as a solution to unemployment problems. Then, employment and unemployment conditions prevailing in most developing countries are characterized, followed by a description of those conditions that are desirable for a developing country to implement unemployment insurance. General recommendations are outlined for an unemployment insurance scheme for those developing countries that are ready to implement one. Finally, some problems that may be encountered in implementing unemployment insurance in a developing country are enumerated, as well as some expected positive effects of such a scheme.

The main goal of Chapter II is to utilize the findings of the literature review in Chapter I, together with information from the national monographs and other sources, to develop an understanding of the economic and demographic characteristics in a developing country which seem to be associated with the successful adoption of an unemployment insurance scheme. The chapter first presents an analysis of the economy and the unemployment insurance programs of those developing countries with unemployment insurance schemes that submitted national monographs in response to the ISSA request for information. Briefer analyses are then presented for selected nonresponding countries with unemployment insurance schemes. The economic situation and unemployment protection schemes of selected countries that have not yet implemented unemployment insurance is also discussed.

Chapter III presents a summary and analysis of economic and demographic characteristics of developing countries with and without unemployment insurance schemes as well as a summary of major unemployment insurance provisions in ten developing countries with unemployment insurance schemes.

General conclusions about characteristics which seem to be associated with the successful introduction of an unemployment insurance scheme are the following. Those countries with unemployment insurance schemes are primarily middle income semi-industrial countries. Most of the developing countries with unemployment insurance schemes have well-defined industrial and commercial sectors. The ten countries with schemes have an estimated average of 27 percent of the labor force in the industrial sector and roughly $2500 in per capita gross national product. The $420 per capita gross national product in Ghana is the lowest among the ten countries. Based on the average per capita gross national product and the average percent of the labor force in the industrial sector among the ten countries, a conservative characterization of a developing country likely to successfully implement an unemployment insurance scheme would be one with close to 30 percent or more of its labor force in the industrial sector and a per capita gross national product exceeding $2000. The economic criterion applied here is, of course, only one among the broad spectrum of conditions that determine the readiness of a developing country to implement unemployment insurance.

Availability

Copies of the report may be obtained from:

Helen Manheimer
Room 7402
601 D Street NW
Washington, D.C. 20213
Telephone: (202) 376-6162

Miscellaneous

Study Title

The Benefit Payment and Unemployment Rate Impact of a Nationwide Program of Worksharing

Authors

Robert Crosslin, Economic Consultant
James D. Van Erden and Stephen A. Wandner, Unemployment Insurance Service

Date of Completion

July 1983

Purpose

The purpose of the paper is to examine two issues with respect to work sharing (WS). If work sharing became a nationwide program, what would be its impact on the cost of benefit payments of the UI program? Second, given the UI impact of the program, what would be the labor market impact of the program? That is, to what extent would a nationwide WS program be likely to change the total unemployment rate (TUR) as measured by the Bureau of Labor Statistics (BLS) using the Current Population Survey?

Conclusions

The implementation of a work sharing program is likely to reduce total UI benefit costs--the sum of regular UI and WS costs--unless WS potential durations become very long. This conclusion, however, ignores both the possibility of induced unemployment which may be caused by the use of WS programs and any impact on the administration costs of WS.

WS will have an indeterminate but small impact on the BLS TUR unless participation rates in the WS program are high.

With respect to both the UI benefit payment and TUR impacts of WS, the analysis is limited by the lack of behavioral data in a number of key areas. Better estimates will be possible after more extensive data collection.

Method

After review of European and U.S. WS experience, a theoretical model was developed to explain the impact of a WS program on the level of weeks claimed. The model assumed no changes in regular State unemployment law or in economic activity.

Availability

Copies of the paper may be obtained from Stephen A. Wandner, UIS/ETA, Room 7422, 601 D Street N.W., Washington, D.C. 20213. Tel. (202) 376-7400.

Study Title

Extent of Health Insurance Coverage Among New Jersey Unemployment Insurance Claimants.

Author

Donald Diefenbach

Date of Publication

Expected in August 1983.

Findings and Conclusions

Approximately 53% of the New Jersey unemployment insurance claimants surveyed indicated that they did not have health insurance coverage at the time of the survey.

Approximately 35% of the survey participants reported that they did not have health coverage while they were employed.

Approximately 25% of the survey participants lost coverage after they became unemployed.

Approximately 7% of the survey participants reported that they had no coverage before unemployment, but acquired coverage after unemployment.

Implications

In addition to the conclusion that the lack of health insurance coverage is a major problem among the unemployed, this survey also indicated a widespread lack of coverage among those employed.

Method

This study was based on a survey of 1,623 unemployed workers who were claiming benefits on Monday, May 14, 1983. The data was collected statewide in 39 of 40 local unemployment insurance offices. Survey questionnaires collected information about the extent, source, and type of coverage both before and after the individual worker became unemployed, thus enabling many before-and-after comparisons.

Availability

Donald Diefenbach, New Jersey Department of Labor, Division of Planning and Research, Office of Program Research, CN 057, Trenton, New Jersey 08625, 609-985-5035.

Miscellaneous

Study Title

A Statistical Chronology of Temporary Disability Insurance in New Jersey.

Author

The data in this report was collected and organized by Ching-Hsing Lue under the direction of James Phillips.

Date of Publication

August 1983

Results

Historical data related to benefit payments, revenues and coverage from the program's inception in 1949 through 1981 is presented. Narrative descriptions and analyses of the data are also provided.

The report will be used by New Jersey as a guideline for future planning and may also prove useful to other jurisdictions considering the adoption of a similar program.

Availability

James Phillips, New Jersey Department of Labor, Division of Planning and Research, Office of Program Research, CN 057, Trenton, New Jersey 08625, 609-292-3403.

III. RESEARCH DATA AND INFORMATION; RESEARCH METHODS AND TOOLS

UI Reporting System Update

The ETA 5159 has recently been changed due to the internet double-by-pass system. This system, which became effective in April 1983, allows liable States to send information on their interstate mail liable claims back to the appropriate agent State in a timely manner. The agent State then includes these counts in the ETA 5210, ETA 539, ETA 5159, ES 203, and LAUS. As this system greatly reduced the workload involved in interstate agent claims, a change in the ETA 5159 was needed to break out actual interstate agent weeks claimed workload, that is, claims actually filed with the agent State (new item 11), from the total of weeks claimed (item 10) by individuals in the agent State, whether or not the claim was filed with the agent State. See MTL 1438 dated June 7, 1983, for specific instructions.

The internet program opens a new source of data for States to look at migratory patterns, commuting patterns, and other areas associated with interstate claims. States currently have access to both claims filed from their State against other States and claims filed against them from other States.

Another recent change in the reporting system is the revision of the ETA 227. This quarterly report has been reduced to four sections. Changes include new breakouts for types of nonfraud overpayments, reporting of write-offs of overpayments, and breakouts of recovery overpayments by cash and offset repayments. Instructions were issued in MTL 1439 dated June 7, 1983.

Benefit Financing Model Status

The Benefit Financing Model has been enhanced by Unemployment Insurance Service staff to simulate benefit ratio and benefit-wage ratio experience rating systems as well as the reserve ratio system. Operational models have been completed for twenty states -- two benefit ratio states (Texas and Virginia) and eighteen reserve ratio states (Georgia, Idaho, Indiana, Iowa, Kentucky, Louisiana, Maine, Missouri, North Dakota, Nebraska, New York, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, West Virginia, and Wisconsin). Three of these states --Georgia, Kentucky and New York -- worked closely with William Mercer, Inc. when an early version of the model was under development. Recently, the model has also been modified for Illinois to simulate the benefit-wage ratio experience rating system, and this model will become operational as soon as the state can rectify a data discrepancy.

Six states (Arkansas, Connecticut, Delaware, Michigan, North Carolina, and Tennessee) are currently in the queue with North Carolina in the final testing stages, and a substantial amount of work has been completed for Michigan. The District of Columbia, Kansas, Maryland, and Oklahoma are presently reviewing available model-related materials to assess how the model might be of use to them.

For additional information about the model, contact Ron Wilus on 202-376-7306.

UI Data Base Survey

The data obtained from each State's UI administrative records and systems are essential building blocks for Local Area Unemployment Statistics (LAUS). The Bureau of Labor Statistics (BLS) is currently planning to conduct its periodic UI Data Base Survey in State employment security agencies to evaluate these data for their suitability for estimating total unemployment. The survey will enable BLS to identify any problems in UI claimant counts with respect to completeness and lack of duplication, appropriate program identification, reference period of unemployment, residence designation, and earnings due to employment.

The survey consists of six major sections: State UI laws, UI administration and procedures, UI claims taking and procedures, ADP analysis, statistical reporting of UI, and data used in preparing the summary worksheet for estimating Handbook Unemployment. Information for each of the sections is collected through a series of personal interviews with specified State staff, using structured questionnaires.

Such in-depth analysis of claims data was last undertaken in the initial UI Data Base Survey in 1975. The current survey will continue into 1984; analysis of results is expected to be completed by the end of June, 1984. Following analysis, BLS will arrange with States to make any needed improvements in UI data or to extend automated reporting so that UI claims data will be more appropriate for use in estimating total unemployment.

Cost Information System

The Cost Information System (CIS) is an automated system designed to provide State and regional UI managers with improved administrative cost control information. CIS takes data from existing operating systems, e.g., cost accounting and federally required reports, and, through an automated system, produces customized worksheets/reports which meet the needs of UI managers. The system produces reports in the areas of budget control, staff utilization, appeals, time lapse, nonmonetary determinations, overpayments, taxation and fiscal matters. To ensure accurate and consistent data, CIS has built-in edit controls. Data are provided in decision-oriented formats designed for specific managers.

CIS permits State managers of the UI system to make the following types of cost control decisions quickly and reliably:

1. Periodic performance achievement

    a. Critique of weekly staff utilization

    b. Monthly quarter-to-date and year-to-date reviews of first benefit payment time lapse performance against the Desired Level of Achievement as established in the ETA Programs and Budget Plan

    c. Monthly and quarterly review of audit penetration rates for each State showing proportion and number of firms audited, amount of recovery and delinquent taxes

2. Periodic budget reviews

    a. Tracking of FUBA expenditures in relation to obligational authority issued to the States

    b. Review of UI accrued expenditures, resources on order and obligations in relation to obligational authority

3. Special studies and evaluations

    a. Analysis of the impact of claimant eligibility reviews on weeks claimed and benefits saved

    b. Analysis of the effectiveness of the benefit payment control function by comparing benefit payment control staff used with cases investigated and overpayments investigated and recovered

Another goal of CIS is the automation of required Federal reports. CIS is estimated to reduce work effort by at least one position in each regional office and one to one-and-a-half positions in each State once required reports are automated. The system provides a mechanism for States to submit their required report data electronically to the regional office which, in turn, telecommunicates to the national office.

Currently, regional and State CIS is operational in Regions IV and VIII, and regional CIS is operational in Region VII. Regional and State CIS is scheduled to be operational in Region III by the end of September, and regional CIS in Region X by the same date. Expansion to all other regions has been approved and scheduled for operation by the end of Fiscal Year 1985.

Further information about CIS is available from Wayne Zajac, Division of Actuarial Services, Unemployment Insurance Service. Tel. (202) 376-7291.

IV. REVIEWS OF BOOKS AND STUDIES

Employment Termination Benefits in the U.S. Economy
by Wayne Vroman
Employee Benefit Research Institute, 1983. 247 pp.

This book presents a comprehensive review of employment termination benefit programs in the U.S., and discusses related policy issues. Problems areas are identified and proposals for reforming the existing systems examined. The programs fall under three general classifications--job termination programs (of which unemployment insurance is the largest), disability insurance programs and means-tested assistance programs. Included in the overview of the programs are (1) program descriptions; (2) analyses of benefit growth, overlap, adequacy and inequities; and (3) analyses of economic effects of the programs on workers, employers, taxpayers and the overall economy. Vroman cites published economic data and theoretical and empirical literature pertaining to the areas discussed.

Some highlights of the discussion, findings and suggestions relating to the unemployment insurance program are the following.

Benefit Overlaps

.. Current knowledge of benefit overlap is fragmentary. Findings suggest that most unemployment insurance beneficiaries receive payments from the single program only and not from two or more simultaneously.

.. Vroman believes that the 1981 restructuring of the TAA program and the 1980 revision of the offset between UI and retirement benefits are examples of policy changes that will lead to more equal treatment in wage-loss replacement among UI beneficiaries.

Benefit Adequacy

.. Because replacement rates have been measured in different ways, a wide range of empirical estimates has been obtained. Decisions on three issues--the measurement of weekly economic losses due to unemployment, the treatment of uncompensated weeks of unemployment, and the method used to aggregate the experiences of individual beneficiaries--influence the average rates computed.

.. Vroman believes that there is general agreement that the appropriate replacement rate measures are ones that consider weekly net income losses. Such net income loss measure takes into account:(1) differential treatment of wages and benefits under Federal and State income taxes and payroll taxes, (2) reduced work-related expenses while unemployed, (3) loss of fringe benefits due to unemployment, and (4) growth in money wages between the base period and period of unemployment. Replacement rates measured in this way will usually be larger than those based on the weekly wage and smaller than those based on after-tax wages.

.. Emphasis on the mean replacement rates, however measured, masks the large variance in individual replacement rates.

.. Recent policy actions that have reduced the incidence of high replacement rates are the taxing of benefits under the Federal income tax for high-income households and the prohibition on simultaneously receiving UI and Trade Adjustment Assistance (TAA) benefits.

Benefit Financing

.. Employers shift most of the burden of contributions to the UI fund so that profits are reduced by much less than the actual dollar amount of the contributions. This is done by a combination of backward shifting --reducing cash wages or the costs of other production inputs--and forward shifting--raising prices.

.. To achieve better balance between revenues and expenditures, revenues must be increased, benefits must be restricted, or a combination of both must be initiated.

.. Among policy options to increase revenue, Vroman thinks that raising the taxable maximum wage base and linking it to a national wage index has particular merit because the current taxable maximums in the State UI programs are so low.

.. Among policy options for restricting benefit outlays, Vroman cites increasing the waiting period to two weeks and eliminating retroactive payment for the waiting period as a means of bringing about a major reduction in outlays. He states, "Since short-term unemployment does not cause substantial economic hardship, increasing the waiting period would seem to be a better way to restrict benefits rather than reducing eligibility among the long-term unemployed."

Economic Effects

.. After review of research, Vroman concludes that State UI increases worker turnover and occurrence of temporary layoff unemployment. The size of the effect, however, is unclear, as is the extent to which worker turnover would be reduced if all employers were fully experience rated. Further research is needed using data that match the actual degree of experience rating with employer layoff behavior.

.. Based on the average of a group of studies, the regular State UI program is estimated to increase the overall unemployment rate by about one-fifth. Additionally, emergency benefit extensions during recessions raise unemployment through the effect on unemployment duration. For both regular and extended benefit programs, research suggests "measurable but rather modest effects caused by disincentive features."

.. Suggestions to reduce these effects include subjecting employers to a greater degree of experience rating, reducing potential duration for marginal workers, and implementing policies to reduce very high replacement rates.

.. UI contributes significantly to "built-in stability" but its role is rather modest. It is particularly important in cyclical downturns, but, even then, direct personal taxes have effects at least as large. UI now compensates not more than 20 percent of the losses in labor market earnings occurring in recessions.

.. Recent policies restricting benefit payment amounts by partially taxing benefits and by restricting the scope of the EB program have weakened the potential of UI benefits as an automatic stabilizer. In considering ways of improving the stabilizing performance of UI, consideration of program costs and labor market disincentives must be kept in mind.

Reviewed by Helen Manheimer, Division of Actuarial Services, Unemployment Insurance Service

Availability

Employee Benefit Research Institute
1920 N Street N.W., Suite 520
Washington, D.C. 20036

Price $10.00

Reprinted from Monthly Labor Review April 1983

Unemployment experience in Canada: a 5-year longitudinal analysis

SUNDER MAGUN

This report presents a picture of Canadian joblessness over 5 years and reveals serious chronic unemployment. In a 1975–79 longitudinal analysis, we used three indicators: total amount of all unemployment across all spells over the period; the number of unemployment spells per person; and the average duration of such a spell. Also, we considered sex, age, province, industry, and occupation. Among our findings:

- A few bear the greatest unemployment burden;
- The people with histories of hardcore unemployment are at a relatively greater disadvantage in the labor market and risk further episodes of chronic unemployment;
- Long-term spells are relatively few but account for much greater unemployment than would be expected on the basis of probability.

We find that the long-run structure of unemployment in Canada is not consistent with the "dynamic" or the "turnover" view of the labor market. According to this view, the characteristics of the unemployment problem are rapid job turnover and brief spells of unemployment, and the burden of unemployment is not concentrated, but is widely shared among workers. This "benevolent" viewpoint of unemployment contends that unemployment is mainly frictional and voluntary. The benign view, by rejecting the existence of chronic and persistent unemployment, de-emphasizes the social and economic costs of joblessness. Our results do not support the turnover view. As noted, there are, in fact, three aspects of the real problem of unemployment in the country.

We used the linked Longitudinal Labour Force Data Base, which is composed of several administrative data files of the Canada Unemployment Insurance Commission. This data base contains microdata on the labor market experience of a 10-percent sample of all "insured" workers.[1] A sample of about 20,200 people who had at least one episode of unemployment from 1975 to 1979 was drawn from the data set. These individuals had filed regular unemployment insurance claims[2] for about 56,000 job separations over the 5-year span. The sample is a representation of Canadian workers who have relatively more difficulties in the labor market and

Sunder Magun is an economist in the Strategic Policy and Planning Division of Employment and Immigration Canada. The author alone is responsible for the content of this report, which is adapted from a larger study, *Labour Market Experience in Canada: A Longitudinal Analysis.*

who are often clients of the Commission's manpower programs.

Who are the unemployed?

The bulk of the unemployment burden falls on a small proportion of workers. About 25 percent of unemployed individuals accounted for almost half of the total time lost because of unemployment between 1975 and 1979. Each individual in this group experienced, on average, 2 years of unemployment, consisting of repeated and long spells of joblessness. This concentration of unemployment was not confined to a particular sex, age, or regional group but occurred among male, female, young, and adult workers in all regions.

There are, however, important regional differences in the distribution of unemployment burden. In a region where the unemployment rate is high, unemployment is more equally shared. In the Atlantic region, the top one-quarter of workers accounted for 45 percent of total unemployment, compared with 57 percent in the Prairie region. Therefore, the unemployment burden is somewhat more equally shared in the Atlantic region than in the Prairie provinces. This is because unemployment is more widespread in the former region than in the latter.

We define the chronically unemployed as individuals with 27 weeks or more of unemployment during a given year without regard to the number of times they were out of work. Persons with less than 27 weeks of total unemployment we consider short-term unemployed, and those with no spells of unemployment during the given year we define as not unemployed.

The chronically unemployed as a proportion of the sample, ranged from 12.5 percent in 1975 to 17.8 percent in 1978, reflecting worsening economic conditions. Of great significance are the large movements of people among the three labor force categories. For example, a worker might be chronically unemployed in 1975, not unemployed in 1976, jobless for the short term in 1977, and then chronically unemployed again.

Despite these intergroup movements, a subgroup of individuals who remained over time in a given status had little likelihood of leaving the group. This aspect of unemployment experience can be expressed in terms of conditional probability. By creating a probability tree we can track the labor market experience of certain groups of individuals. We have constructed two probabilities trees—one relates to a cohort of the long-term unemployed and the other to a cohort of the short-term unemployed during the 4-year period, 1975–78. Both trees show the influence of hardcore unemployment.

A comparison of the two probability distributions reveals an important finding: those chronically unemployed in 1975 had a much greater likelihood of repeating their experience in the following 3 years than did the short term unemployed in 1975. The probabilities of a period of prolonged joblessness (27 weeks or more) were 51 percent compared with only 27 percent for the 1975 short-term unemployed cohort. Moreover, the 1975 cohort of chronically unemployed had a five times greater probability of annual long-term unemployment than the 1975 cohort of short-term unemployed.

A sequence of chronic unemployment may have a cumulative effect by worsening job skills. If a person is chronically unemployed in 1976 as well as 1975, his or her chance of becoming so in 1978 is almost 50 percent, compared with only 15 percent for the short-term unemployed. Furthermore, if an individual is also chronically out of work in 1977, his or her risk in 1978 is 64 percent, compared with 12 percent for the short-term unemployed in 1975, 1976, and 1977.

Most of the spells of unemployment are less than 21 weeks. Longer spells are relatively fewer but account for much greater unemployment. Although this would be expected on theoretical grounds, the effect was substantially larger than would be expected on the basis of chance alone.

During 1975–79, the Canadian unemployment rate rose from 6.9 percent in 1975 to 8.4 percent in 1978. By quantifying the relationship between the unemployment rate and the unemployment experience over the 5-year period, we find that a 1-percentage-point increase in the unemployment rate reflected, on average, a rise in unemployment frequency by four-tenths of a spell, duration of a spell by 2.3 weeks, and length of total unemployment by almost 10 weeks.

A closer examination of unemployment spells shows that with increasing unemployment spell length, the probability of leaving unemployment and finding a job first decreases until the spell length reaches 26 weeks, but increases up to a length of 40 weeks, because of stricter benefit control activity of the Unemployment Insurance Program, and then drops off sharply. As noted, the majority of spells are 1 to 26 weeks. An important finding is the sharp decline in the probability of employment after 40 weeks. The individual with such a long spell of unemployment may have greater problems in finding a job, or may not be actively searching for employment in the labor market.

As mentioned, we investigated how unemployment experience—measured in total length of unemployment, spell incidence, and duration—is distributed among individuals by sex, age, province, industry, and occupation. The total duration of unemployment for men was lower than that for women; so were the number of unemployment spells per person and spell length. The main reason the male worker fared better than the female worker is that the spell length for the former is shorter, on average. This could be because men are subject to more layoffs and the length of those spells which start with layoffs is relatively shorter.

With regard to age, we find two fundamental tendencies in the labor market:

- The spell *frequency* decreases with age, first slowly and then rapidly after age 44.
- The spell *length* increases with age, first slowly and then sharply after age 40.

The offsetting influences of these two tendencies determine the variation in total duration of unemployment by age group. The duration first drops with age, then increases for the 35 to 44 age group and finally falls sharply for the older age groups (45 years and over). In general, spell frequency has a more pronounced influence than increasing spell length on total unemployment.

In keeping with the overall unemployment rates, people in the Atlantic provinces and Quebec suffered greater unemployment with more frequent and more prolonged spells. Those in Ontario and the Western provinces, however, incurred fewer and shorter spells of unemployment.

The disparity in unemployment experience by industry is not as great as the disparity by province. Greater unemployment occurred in primary industries, including farming, forestry, and fishery, mainly because of seasonal factors. Both the average number of spells and the length of each spell were substantially higher than the national averages. The workers in the construction industry had more unemployment, largely because of the frequency of joblessness, while those in finance, insurance, and real estate, and trade, experienced relatively less unemployment principally because of fewer episodes per person. In general, we found more and shorter spells of unemployment in the goods-producing industries than in the service sector. In the latter sector, the spells are longer because of relatively more quits by people who often search longer for a job in the labor market. By contrast, there are relatively more layoffs in the goods sector, and workers often find reemployment faster.

The analysis of unemployment experience by occupation indicates fairly large disparities. People working in managerial or professional positions; clerical, sales, machining, or product fabricating occupations, and other crafts experience less unemployment, whereas those whose work involves construction; processing; primary industries; transport equipment; or material handling experience more unemployment. These dissimilarities in unemployment experience by occupation come mainly from the differences in spell frequencies rather than from spell durations.

As we have suggested, most unemployment is not short term. On the contrary, the burden falls mainly on a small proportion of workers experiencing repeated and long spells of unemployment. For these workers, we would recommend intensive and carefully targeted employment and training programs. □

FOOTNOTES

[1] Unemployment, as measured by weeks on regular unemployment insurance claim, constitutes the bulk of unemployment in Canada owing to the almost universal nature of the Unemployment Insurance Program.

[2] Regular claims exclude sickness, maternity, retirement, fishing, and Adult Occupational Training Act claims.

V. CONTRIBUTED PAPERS

REDUCING COSTS AND IMPROVING SERVICES IN UNEMPLOYMENT INSURANCE NONMONETARY DETERMINATIONS USING EXPERT SYSTEMS*

By

Thomas J. Nagy**, John DiSciullo Jr.***, and Robert Crosslin****

---

*This paper was written when the authors worked for Computer Data Systems under contract to the U.S. Department of Labor. Opinions expressed are solely those of the authors and do not necessarily reflect the policies or opinions of the U.S. Department of Labor.

** Dr. Nagy is currently Visiting Associate Professor of Expert Systems, Department of Management Science, George Washington University.

*** Mr. DiSciullo is currently a supervisory management analyst in the Office of the Solicitor, U.S. Department of Labor.

**** Dr. Crosslin is currently an economic consultant.

EXECUTIVE SUMMARY

The cost of making nonmonetary determinations can be reduced by several million dollars per year and service can be improved by using new, commercially available expert system software. This claim is based on successful construction and validation of an expert system for making nonmonetary determinations relating to labor dispute issues.

The features of the expert system responsible for cost reduction and service improvement include:

- ability to explain, justify, and document the determinations;
- tailoring of questions to the individual claimant to maximize efficiency and accuracy;
- ability to document the fact-finding process;
- ability to customize the computer-generated determination to each case;
- ease of use of the system by clerks;
- very rapid construction and modification.

E.T. MEETS THE NONMONEARY DETERMINATION EXPERT SYSTEM

E.T. walks into his local unemployment insurance (UI) office at 9:00 a.m. He reports as instructed to the claims adjudication section and gives his name and social security number to the clerk behind the counter. The clerk enters E.T.'s social security number into a computer terminal on the counter. The computer advises the clerk that E.T. is there for a fact finding interview regarding the reason for his leaving his last job. According to the information provided by the computer, E.T. was last employed by the XYZ Film Company, which is currently engaged in a labor dispute. The Computer also advises the clerk that E.T.'s alien registration card (green card) is on file.

The clerk uses the computer to interview E.T. regarding the labor dispute in order to determine whether E.T. will be eligible for UI benefits. The computer provides the clerk with questions to ask the claimant on the basis of his responses to the previous questions. The clerk enters each response into the computer. The computer records and analyzes E.T.'s responses, makes a decision, and prints a "nonmonetary" determination concerning his eligibility for UI benefits. Included on the determination is information regarding E.T.'s UI benefit rights, filing instructions, and appeal rights. (The computer has automatically updated all of E.T.'s pertinent UI files.) The clerk hands E.T. his copy of the determination and E.T. is on his way home at 9:04 a.m. The dialogue between the clerk and the computer which produces the non-monetary determination is shown below in Table 1.

Table 1: Dialogue between UI Clerk and Nonmonetary Determinations Expert System.

(Computer types:)

Welcome to the LABOR ISSUE EXPERT SYSTEM!

This expert system will assist you with one portion of non-monetary determination - - deciding if a claimant is eligible with respect to labor dispute issues.

You will be asked to describe the claimant's situation. The expert system will make a decision on the claimant's eligibility. If necessary, the expert system will decide whether the claimant is participating or has an active interest in the labor dispute. If you wish, the expert system will justify its conclusions.

Do you wish to begin
(1) yes
(2) no

(Clerk enters:) 1

(Computer types:)

Was a labor dispute in progress during the week claimed
(1) yes
(2) no

(Clerk enters:) 1

(Computer types:)

Claimant and employer agree that a lockout is
(1) present
(2) absent

(Clerk enters:) 2

(Computer types:)

Was claimant last employed by employer involved in the labor dispute
(1) yes
(2) no

(Clerk enters:) 1

(Computer types:)

Claimant belongs to local on strike

(1) yes
(2) no

(Clerk enters:) 1

(Computer types:)

Picket line
(1) present
(2) absent

(Clerk enters:)
1

(Computer types:)

Is claimant willing to work given the present labor dispute
(1) yes
(2) no

(Clerk enters:) 2

(Computer types:)

Based on your description, the expert system concludes that:

Claimant is not eligible for benefits based on the labor issue

According to Section 46-111(f) of the District Columbia Unemployment Compensation Act, the claimant is not eligible because he/she is participating or interested in an ongoing labor dispute.

What do you want to do now
(1) Get a justification of the conclustion reached by the expert system
(2) Determine whether another claimant is eligible on a labor issue
(3) Stop - I am finished

(Clerk enters:) 1

(Computer types:)

for eligible on labor issue =
Claimant is not eligible for benefits based on the labor issues ...

```
reasons for this statement:
    Labor dispute in progress during the week claimed =
      present

    Claimant and employer agree that a lockout is =
      absent

    Was claimant last employed by employer involved in the labor dispute =
      yes

    Participating or interested =
      yes

  (by rule: en1)

What do you want to do now
     (1) Determine whether another claimant is eligible on a labor issue
     (2) Stop - I am finished

(Clerk enters:)     2
```

While such a short visit would be disastrous for the movie industry, it would be a godsend to the beleaguered UI system. Anyone who has ever filed a UI claim, or even visited a UI local office may find this scenario pure fantasy. Those thoroughly familiar with UI operations may be even more skeptical. After all, the average amount of staff time required to accomplish a nonmonetary determination is about 62 minutes. This does not include the time the claimant spends waiting for an adjudicator to be assigned the case, nor the time the claimant spends waiting for the interview and the decision. Under the best of circumstances, the claimant will spend 30 minutes in the local office, often longer if an inexperienced claims examiner handles the case or if the workload is heavy. Generally, when the claimant leaves the office he/she does not know the disposition of the case. The decision must be typed (or generated by the computer in the more advanced states) and mailed to the claimant.

How then can a clerk (rather than an experienced, high salaried claims adjudicator) using a computer terminal handle the entire nonmonetary determination process in four minutes? The answer is an "expert system". How long until such a system can be designed, programmed,

tested, and put into use? One year? Five years? Such a system has already been built and tested for the U.S. Department of Labor to handle the very situation described above. Certainly, much needs to be done before an expert system can be implemented in a UI local office, but the technology, the software, and a prototype are available for testing today.

EXPERT SYSTEMS

What exactly is an expert system? What makes it special? An expert system is a computer program with two very special characteristics:

1) It can perform as well as a human expert in some specialized area such as making nonmonetary determinations.

2) It can be used by non experts with minimal training.

The easiest way to understand an expert computer system is to consider what distinguishes a human expert UI claims adjudicator from a non-expert adjudicator.

The human UI expert is thoroughly familiar with all of the laws, regulations, policies, and procedures that affect the nonmonetary determination process. This knowledge allows the human expert who has the facts of a particular case to quickly identify the salient issues and pursue a line of questioning that elicits all of the information necessary to make a proper decision. The human expert does not get sidetracked by spurious issues, nor does he/she overlook important information or relevant issues. Put more succinctly, the expert must be able to reason accurately and efficiently.

Once the fact-finding process is finished, the human expert "digests" the information and reaches a conclusion regarding the claimant's eligibility for UI benefits. This conclusion must be supported by the "facts" of the case, and must be consistent with state law, regulation, and policy. The written determination should explain why the claimant is (or is not) eligible for UI benefits in a clear fashion so that all parties can understand how the decision was reached.

The computer "expert" must possess similar attributes, including the ability to "reason".. The expert system must:

1) Determine what questions to ask the claimant.

2) Ask the least number of questions required to make the determination accurately. This requires the intelligence to ask the proper questions in the best sequence and to change the questions asked based on the claimant's responses.

3) Realize when a claimant's case exceeds the ability of the expert.

4) Combine the answers with the pertinent rules and regulations.

5) Make the actual determination.

6) Justify any conclusion that the expert is asked about.

7) Provide written determinations.

For an expert system to be useable by a nonexpert without training requires:

1) minimizing the number of commands that the user (in this case, a clerk in the local office) needs to learn.
2) detecting and helping the clerk correct his mistakes.

In the expert system to be described below, the clerk needs only to select items from a menu. Clerks' errors are detected and the system makes suggestions for correcting the errors.

An expert system differs from a traditional computer application not only in power and ease of use but in its origin and method of implementation.

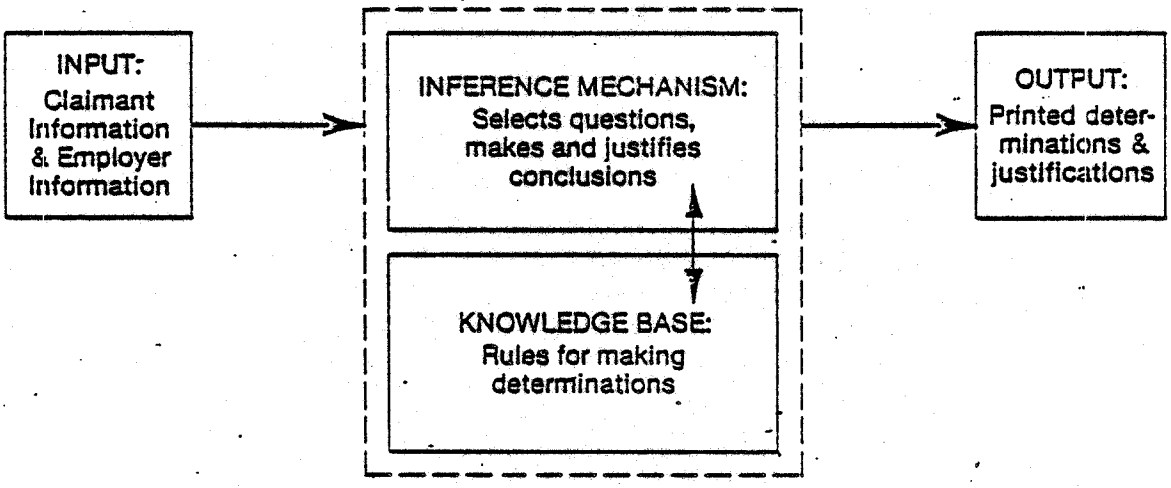
Expert systems have evolved out of two decades of research in the branch of computer science called artificial intelligence (AI). The ability of some AI systems to equal the performance of human experts in such difficult tasks as medical diagnosis and configuring computers is widely known to management because of feature articles in the leading business publications such as Fortune, Business Week, and Wall Street Journal. What is news is the ease and speed of constructing and modifying expert systems. This advance is due to the recent arrival of high level expert system software.

Conventional computer applications require great care in specifying exactly what the system is to produce and how the system will produce it. Any changes to these specifications are very costly and time consuming. On the other hand, expert systems built with the new, off-the-shelf software permit the user and designer to experiment. They can

try out ideas freely very quickly and build several versions of the same system until they are satisfied.

We have described expert systems by comparing their actions with those of human experts and by contrasting expert systems with traditional computer systems. Now let's turn to the skeleton of the expert system. If we were to x-ray the computer expert system, we would find these elements:

Figure 1: Block Diagram Showing the Major Elements of An Expert System. (Based on Reggia, 1981)



Like all computer systems, the expert system has inputs and outputs. The inputs are the clerks' response to questions about the claimant. These questions and answers constitute the fact-finding process. Again like all computer systems, the expert system has output, a determination. But in addition to a determination, the output of an expert system can include an explanation or justification of how it reached the conclusion. This feature is very important for assisting human verification of the system's performance. Justification also greatly assists in debugging the expert system as well as enabling the expert system to serve as a training tool and for increasing the clerk's confidence in and acceptance of the results of the expert system.

The two middle elements of the skeleton, the INFERENCE MECHANISM and the KNOWLEDGE BASE, separate expert systems from usual computer

systems. The inference mechanism selects the best questions to ask based on the clerk's earlier responses. Instead of asking the same questions about each case, the expert system's INFERENCE MECHANISM is smart enough to ask the most appropriate questions in light of the clerk's earlier responses. Again, this behavior is the same as that of a human expert. The source of the questions is the KNOWLEDGE BASE which consists of rules for making the determination itself and any necessary intermediate steps -- such as determining if the claimant is directly participating in or has a direct interest in the labor dispute. The rules themselves are easy to read and write and change. This is another feature which distinguishes expert systems from traditional systems. The only feature of the expert system not shown in Figure 1 above is the USER INTERFACE, a computer program that actually writes out questions to the clerk and writes out responses from the system to the clerk. The USER INTERFACE handles the communication from the system to the clerk and from the clerk to the system.

This description of the expert system and its elements shows that the expert system is the next evolutionary step in computer systems:

==> The ordinary computer system could handle numbers very well but fell down in handling verbal rules. The expert system handles verbal rules as easily as the older systems could handle numerical equations.

==> The traditional computer system is hard to understand, hard to change, and requires intensive training to use and exhibits little common sense. The expert system's behavior is easy to understand because it can explain the way it reaches its conclusions. Also the expert system is easy to change and requires minimal or no training to use. Finally, the expert system demonstrates common sense by asking only necessary questions.

Because the expert system is relatively easy to build and to modify, both the level of staffing needed to build expert systems and the method of building expert systems is different from traditional computer systems.

Traditional computer systems require the formation of a team consisting of:

- the user of the system
- one or more systems analysts
- one or more systems designers
- several programmers.

The user explains the application and its goals to the systems analyst who produces a feasibility assessment and an information analysis. The information analysis is then used by the system designer to produce a systems design and program development plan and a procedure development product. Finally, programmers use the products of the systems designer to write code which the computer can understand and execute. In summary, besides the user, the team requires systems analysts to translate the requirements into formal specifications for programmers. The programmers then translate the specifications into code.

With traditional computer systems, it is necessary to conduct very extensive studies to specify in great detail exactly what the system will produce and exactly what the users will input to the system. The great care and detail are necessary because the system takes a long time to build and once built is very expensive and difficult to modify.

In contrast to traditional systems, expert systems need only a two-person team:

- an expert user (in our case an expert in nonmonetary determinations)
- a systems designer and builder proficient in a high level expert system language.

Unlike traditional systems, expert systems built from high level languages do not require exact specification of the inputs to the system or the exact specification of the finished system because decisions can be changed easily and quickly. Experimentation is not only feasible but also cheap and quick.

Let's take a closer look at the high level language needed to produce the expert system.

The earliest traditional computer applications were built using a low level programming language called assembler. Assembler did not resemble English at all. It was hard to read and write. Even worse, assembler was a low level language in which procedures had to be described in great detail. Consequently, long and difficult assembler programs were required to accomplish even small tasks. Also assember required so much time and effort to master that only programmers could use it.

The earliest expert systems were constructed from a low level, assembler-like language called LISP which not only does not resemble English but looks very intimidating, e.g.,

```
(t (plus (ca (car s)) (ca (cdr s)))).
```

LISP requires even more time and effort to master than assembler. As long as LISP was the only language available to build expert systems, they were limited to projects where millions of dollars were available to hire AI technicians and subject-area specialists.

Standard computer applications proliferated explosively as soon as high level languages supplanted assembler. We are now witnessing the same proliferation of commercially successful expert systems because high level programming languages are now available for generating expert systems. The best of these expert system generating languages such as the Knowledge Engineering System (KES) provide a whole programming environment in addition to a high level language (Reggia, 1981; Artificial Intelligence Center, 1982).

The programming environment of KES has a built-in USER INTERFACE and built-in INFERENCE MECHANISM so the only programming that is required is constructing the KNOWLEDGE BASE. Writing the KNOWLEDGE BASE is easy and fast compared with other alternatives because the KES language is very high level and English-like (Nagy, Nagy, & Reggia, 1982). A typical rule expressed in KES is shown below:

```
if claimant belongs to local on strike = yes,
& picket line = absent,
& Is claimant willing to work given the present labor dispute = no
then claimant is participating or has active interest = yes.
```

Since the only proof is in the pudding (or in a prototype pudding), the next section will relate our experiences in using KES to build the nonmonetary determination expert system.

HOW WE BUILT THE PROTOTYPE NONMONETARY DETERMINATION EXPERT SYSTEM

In order to estimate the feasibility of constructing an expert system for nonmonetary determinations, we decided to build a working prototype for adjudicating a relatively simple section of a UI law. While this section of law is modest in scope, developing an expert system that would properly adjudicate issues relative to labor disputes required all of the critical steps of construction that would be required to adjudicate more complex issues.

We began by securing the use of KES and assembling a two-person team:

==>A subject area expert who had coauthored amendments to the unemployment compensation law for the District of Columbia.

==> A system designer/developer who had already built an expert sytem using the Knowledge Engineering System.

We followed a four-step procedure in building the expert system:

1. We organized the problem specific information into a graph (to be described below) which showed which facts determined eligiblity on labor issues.

2. We selected an approach for representing and processing the method for making nonmnonetary determinations of labor disputes. This amounted to selecting an INFERENCE METHOD.

3. We coded the KNOWLEDGE BASE consisting of the rules for determination of labor issues.

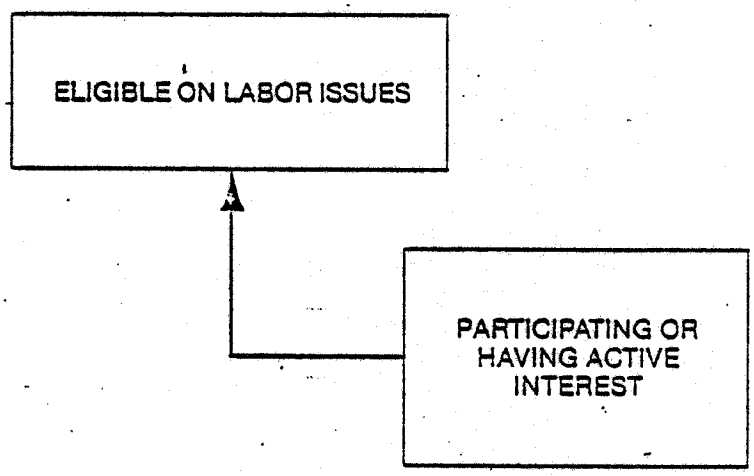
4. We tested the resulting expert system.

Before explaining the four steps, it is interesting to note that we developed the expert system iteratively. Because we were using a high level AI language, we did not have to know all the design answers in advance. We exploited the ability to modify the system to handle any unanticipated needs. We were freed from having to anticipate and prespecify all the necessary design decisions and user responses.

Rather than writing specifications and then writing code once or twice, we went through the entire four-step cycle several times in the space of a single week. The ability to progress from idea to testing in a single day--a very exhilarating feeling--was critical in meeting our one-week deadline.

The first step in building the expert system was to construct a hierarchical graph (Reggia, 1981) showing the goal of the system at the top. In our case, the goal is to figure out whether or not the particular claimant is eligible with respect to labor disputes. Below the goal of determining eligibility was listed any other goal that the system needed to achieve before being able to determine eligibility status. After several iterations of designing, implementing, and testing, we decided that the system would have to infer whether or not the claimant was participating directly or had an active interest in the labor dispute. At this point our hierarchy looked like this:

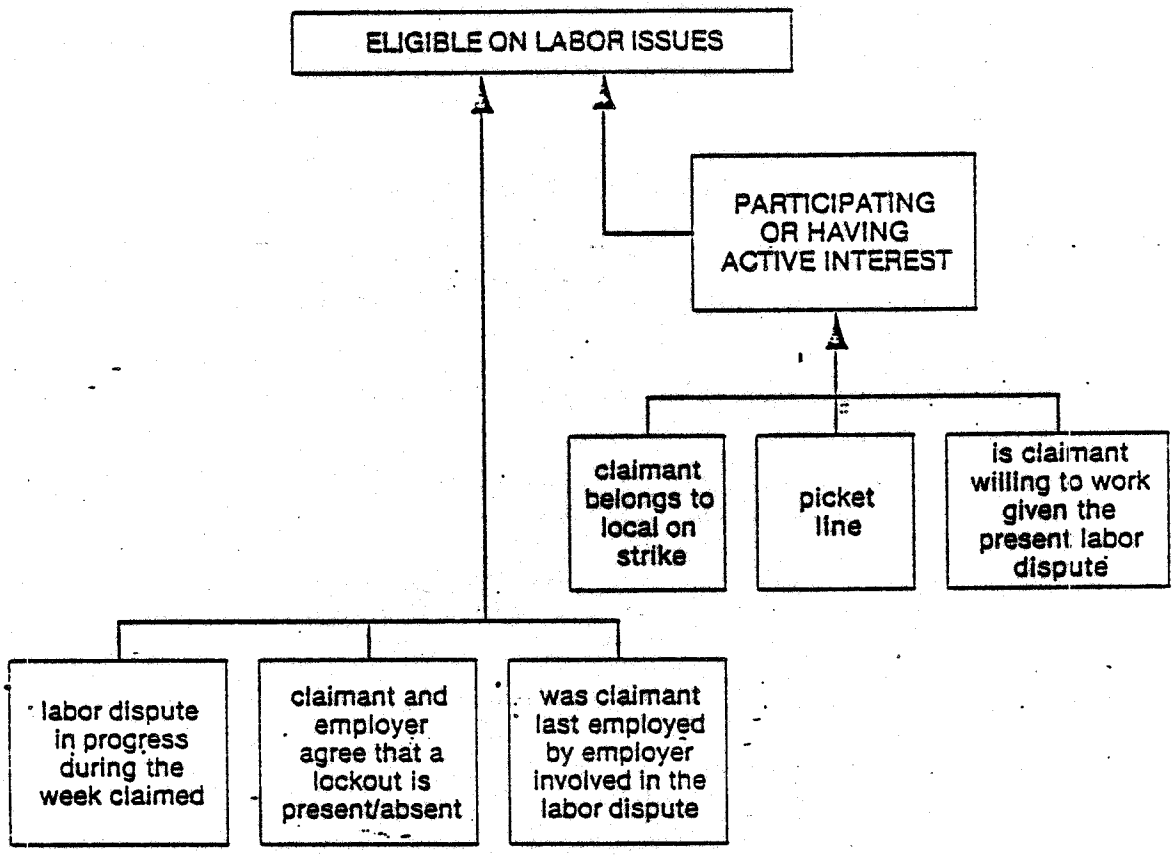
Figure 2: Partial Hierarchical Graph Showing Final Goal (Eligible) and the Intermediate Goal (Participating).



The arrow from PARTICIPATING to ELIGIBLE indicates that the value of ELIGIBLE (i.e., whether eligible equals "yes, claimant is eligible" or "no, the claimant is not eligible" depends on the value of PARTICIPATING (i.e., whether or not the claimant is participating).

The hierarchical graph is completed when the input variables (those supplied by the user) are inserted at the bottom of the graph. Arrows are drawn showing which input variables determine which higher level or inferred variables. The completed hierarchical graph is shown below as Figure 3.

Figure 3: The Final Hierarchical Graph Showing the Final Goal (Determining if the Claimant is ELIGIBLE ON LABOR ISSUES), the Intermediate Goal (Determining if the Claimant is PARTICIPATING OR HAVING AN ACTIVE INTEREST), and the Input Variables of the Two Goals.



The next step in constructing the expert system is to select an INFERENCE METHOD. Recall from Figure 1 that the inference method is the progam that combines the case description supplied by the user with the knowledge in the knowledge base to make a determination about the case (here, whether or not the claimant is eligible). In addition, the INFERENCE METHOD justifies its answers and selects questions to ask the user and decides on the sequence of the questions.

Deciding on the inference method was the single step we did only once. We decided on a rule-based inference method. The rule-based expert systems allow the subject area expert to express his expertise in a series of rules that have:

1. An "if" part (called an antecedent)

2. a "then" part (called a consequent).

The rules are very much like English and are therefore easy to write and change and understand. Here's a rule that KES can operate on:

If x

& y

then eligible = yes.

which means that if x is true and y is true then the claimant is eligible.

We have actually anticipated the third step in constructing a KES expert system by showing a rule. The third step consists of coding the subject area expert's knowledge into rules that KES can work with. Step 3 consists of writing rules which put meat on the bones of the arrows showing that certain variables are determined by other variables which are in turn determined by still other variables.

The last step in building the expert system consists of feeding the code from step three to the KES interpreter and then testing the resulting system by answering the system's questions and noting the systems conclusions and justifications. In the first several cycles, we found that either the subject area expert had written an erroneous rule (or more frequently had erred by leaving out a rule) or that the designer/developer had miscoded a rule. Trying out different cases and having different people test the system caused these errors to surface.

By testing the system, we discovered some excessive demands on the user. These were rectified by a few additional lines of code. The most dramatic instance of fixing-up on the fly occurred when the CWBH project manager, Pat Skees, first tested the system. Although he was favorably impressed by the accuracy and ease of use of the system and the power of the system, he did identify both an error and some areas for potential improvements. Instead of postponing the next day's demonstration, we spent a couple of hours implementing and testing Pat's suggestions and corrections. We were able to show the system on schedule with all improvements and corrections in place the next day.

WHAT WE LEARNED

Building and demonstrating the prototype nonmonetary determinations expert system has enabled us to make an informed judgement on the merits of building a full scale nonmonetary determination expert system.

For the demonstrations John DiSciullo played the role of a claimant. Robert Crosslin, who had never before seen the expert system nor processed an unemployment claim, played the role of the claims clerk.

By demonstrating the system to UI staff members Steve Wandner, John Robinson, Pat Skees and Wayne Zajac, we have learned that the system is easy to use and meets its objectives. By demonstrating the system to UI program area specialists such as Dave Balducchi and Leslie Thompson, we have learned that the system functions accurately.

While we have succeeded in designing and testing the nonmonetary determination expert system prototype, questions remain regarding its necessity/feasibility and its ability to improve UI local office operations. When consideration is given to automating any process, the critical questions are:

1) Can the process be automated?

2) Is there a need to automate this process?

3) What efficiencies can be realized by automating this process?

Our success in building the prototype answered the first question. In order to answer the second question, a look at automation's effect on UI operations is useful. During the past ten years, the UI system has benefited greatly from automation. The major improvements in UI ADP systems began in 1976. During the last calender quarter of 1975, 77% of the 1.67 million intrastate UI first payments were made within 14 days. For the corresponding period of 1982, 86% of the 2.44 million first payments were made within 14 days. Not only were more first payments made during the recent recession, but even with record level workloads, more first payments were made sooner.

The nonmonetary determination process is an essential and expensive component of the UI system. Nationally, nearly nine million determinations were made in 1982, at a cost exceeding $80 million. During high volume periods, the nonmonetary determination process is often the first casualty, as staff is diverted to paying benefits, rather than monitoring those payments. Any efficiencies that can be brought to the process, therefore, will have the dual virtues of saving administrative dollars by reducing the per unit time of accomplishing the nonmonetary determination, and saving trust fund dollars by allowing for more careful scrutiny of difficult cases. The total effect of an expert system can yield another benefit: as staff time can be utilized more efficiently, the computer will allow for <u>more</u>, rather than less, personalized service to claimants and employers. The answer to the second question:

Is there a need to automate this process?" then is a qualified "yes". An expert system may benefit the nondetermination process. However, these efficiencies must not be achieved at the expense of quality of service.

In order to ensure quality service, the UI nonmonetary determination expert system must meet several objectives. First, the expert system must make fair, objective, and consistent nonmonetary determinations. These determinations must be consistent with state UI laws and regulations in order to ensure that the rights of the claimants and employers are observed. If the expert system is to meet this objective, it must be designed and implemented by individuals thoroughly familiar with the state's UI law, regulations and procedures. After all, the expert system can only be as good as the "experts" who design it.

Next, the expert system must be designed so that nonmonetary determinations are made expeditiously, within the criteria for timeliness specified by the Secretary of Labor. In order to ensure this, the expert system must be properly integrated with all UI local functions. The objectives are to minimize redundant procedures, clerical operations, and data entry. A comprehensive systems analysis is imperative in order for the expert system to function efficiently in a UI local office environment.

The best way to illustrate how an expert system would fulfill the objectives described above is to describe how such a system would operate in a local office. This "blueprint" details how the expert system would function, the system requirements of the expert system, its integration into the local office environment, the utilization of personnel resources, and the limitations of the system.

The expert system for making nonmonetary determinations described above would function efficiently only in a highly automated local office. In such an on-line environment, the expert system would be but one component, albeit an important one, in a highly automated UI claims processing system. Such highly automated systems, absent the expert system, are now operational in several states and are described below:

At the time an initial claim is filed, certain information is entered into the "on-line benefit payment system", including:

- the claimant's name
- social security number
- address
- reason for leaving last job.

All of this information would be available to the adjudication clerk who would use the information during the nonmonetary determination process. As noted above, the claimant would report to the adjudication section in order to resolve any issues that could affect his eligibility for UI benefits. Local office personnel would be aware of any potential issues because the claim would be "flagged" any time an issue is detected. In the present case, the presence of the labor dispute issue would have been entered when the initial claim was filed. Information obtained from the employer would also have been entered into the system prior to the interview. Therefore, unless additional information is required as a result of the claimant's statement, a decision can be made on the spot by the expert system and a written determination can be generated and given to the claimant.

The results of this nonmonetary determination will also be entered into the system. For example, if the claimant is disqualified indefinitely because of his participation in a labor dispute, a "stop payment" would be entered into the system to preclude payments until the claimant is certified as eligible. Similarly, if the claimant was determined to be eligible for benefits, the expert system would "instruct" the benefit payment system to pay benefits to the claimant.

MERITS OF UTILIZING AN EXPERT SYSTEM FOR NONMONETARY DETERMINATIONS

If the expert system is properly integrated with the benefit system, then the following advantages can be realized:

==> cost savings

==> productivity improvement

==> increased timeliness

==> increased consistency in determinations and justifications

==> increased flexibility in implementing new regulations and policies.

Cost savings come from two basic sources and are intertwined with productivity improvement. First, an expert system requires less operator (clerk) training and re-training. Staff are more productive sooner, and their skills are automatically updated as the expert system is updated. Second, a clerk utilizing the expert system will be able to

handle a significantly larger caseload than otherwise -- output per dollar spent on adjudications will increase. We do not mean to imply that the expert system will be able to handle all nonmonetary determinations faster. In fact, the expert system may not be able to handle some particular subset of cases.

However, we believe that the expert system could reliably handle between 50 to 80 percent of nonmonetary adjudications; and the system would be smart enough to realize when it could not handle an individual case and would inform the adjudicator. (Some pre-defined subsets of issues could bypass the expert system altogether.) The savings generated could be used to concentrate on the tougher cases the expert system cannot handle, and/or to reduce administrative costs in the nonmonetary area.

Based on calendar year 1983 nonmonetary determination workloads and fiscal year 1983 cost factors, major savings are achievable by implementing the expert system. First we will make the conservative assumptions that the expert system could:

- handle only 50 percent of all nonmonetary determiantions nationally, and
- reduce the staff time required to complete these determinations by 30 percent.

Even these conservative assumptions yield a national cost-reduction of nearly $12 million in making nonmonetary determinations. Now let's make the less conservative assumption that the expert system could:

- handle 80 percent of all nonmonetary determinations nationally, and
- reduce the staff time required to complete these determinations by 50 percent.

Using these less conservative assumptions, the gross anticipated cost reduction per year exceeds $32 million.

On the average, reductions of 30 to 50 percent in the amount of staff time required to complete a nonmonetary determination are expected. These estimates are modest compared to the ones in the "E.T." scenario above. The amount of time required to process many nonmonetary determinations will be reduced by as much as 80 percent. Nevertheless, the average savings will be less pronounced.

The following features of the UI expert system are expected to produce savings in time:

- First, written fact-finding statements will be replaced by computer-generated statements. The computer can document the fact-finding process much faster than even the best stenographer.

- Second, the expert system will follow an efficient line of inquiry, thereby reducing the amount of spurious information and the time required to gather necessary information.

- Third, since the computer will automatically produce the written determination, there will be no additional writing, data entry, or typing.

In addition, the expert system will also reduce expenditures for postage, because most determinations will be given to the claimant in the local office. If approximately 8 million nonmonetary determinations are now mailed annually, and 80 per cent of these will eventually be handled by the expert system, then savings on postage alone would approach $1.3 million each year.

Increased timeliness in making nonmonetary determinations would occur, also as the result of improvements in productivity. A higher caseload could be handled in a given time period, with the increased timeliness boosting the UI program's quality of service delivery. The marginal improvement in timeliness is not estimable from our prototype; however, we believe the improvement will be significant.

An expert system will increase the consistency of nonmonetary decisions since all adjudicators will be using the same knowledge base and inference mechanism built into the expert system. All local offices would be brought to the same level of knowledge. No local office would be isolated from changes in policy or regulations. This does not mean that all adjudicator understanding and interpretation of claimant situations is lost or unnecessary. In fact the adjudicator could concentrate on harder cases. It does mean that there will be less chance for human error in relating claimant circumstances and responses together to form the basis for a nonmonetary determination. And all claimants will receive more similar treatment. A corollary is increased consistency of justifications for nonmonetary determinations. The expert system can immediately churn out the logic (and optionally, supporting legal code references) that led to the decision. This ability also serves as an immediate check on the questions asked by the adjudicators, and the responses given by the claimants thereby further reducing errors and redeterminations.

The expert system can be modified to reflect changes in regulations or policies much faster than the traditional method of notification and retraining of staff. Several hours (or days) of one designer's time can

effectively implement new regulations. With the changes in place, the expert system can serve as a hands-on, self-teaching tool for immediate use.

Our prototype system did not allow us to quantify precisely the savings that could be achieved by these features of the expert system. A more intensive pilot test of the system in an actual adjudication environment (possibly parallel to a conventional operation) would be desirable. However, we believe that the 50 to 80 percent estimate for the caseload which can be reliably handled by the expert nonmonetary determination system is realistic and achievable in the near future.

ACKNOWLEDGEMENTS

We wish to thank Barry Perricone for technical assistance with KES and Andy Ferrentino of Software A & E for access to KES.

Pat Skees and the Continuous Wage and Benefit History (CWBH) Project of DOL supported this effort.

REFERENCES

Alexander, T. "Computers on the road to self improvement" Fortune, June 14, 1982.

_____. Artificial Intelligence: the second computer age begins," Business Week, March 8, 1982.

_____. Knowledge engineering system user's manual. Artificial Intelligence Center, Software A & E, 1401 Wilson Boulevard, Arlington, VA 22209, 1982.

Chace, S. "Can Roger Shank Turn a Yale computer into a Football Coach?" Wall Street Journal, March 30, 1983.

Nagy, T.J., Nagy, L. L., and Reggia, J.A. "A Prototype Decision Support System for Predicting Effects of Alternative Policies: A Case Study Using the Knowledge Management System." In G. L. Whiteleather (Ed.) Computing and Government: Interactions and Achievements. Washington, D.C.: Association for Computing Machinery, June, 1982.

Reggia, J.A. Knowledge-based decision support systems: development through KMS. University of Maryland Computer Science Center, Technical Report TR-1121, College Park, Maryland, 1981.

CHARACTERISTICS OF RECIPIENTS OF FEDERAL SUPPLEMENTAL COMPENSATION

Office of Policy
U.S. Department of Labor

May 4, 1983

EXECUTIVE SUMMARY

The Federal Supplemental Compensation (FSC) Program, enacted in September 1982 as a temporary program, provides additional weeks of unemployment benefits to individuals who have exhausted regular unemployment benefits and, where applicable, extended benefits. This study examines characteristics of 28,000 individuals who received FSC benefits during the period September-December 1982 in twelve states for which data were available. Although the data do not constitute a random sample of the nation as a whole, the twelve states included in the study closely resemble the nation in their insured unemployment rates, industrial mix and demographic characteristics.

Demographic Characteristics

- The age and sex distributions of FSC beneficiaries are quite similar to those of regular unemployment insurance (UI) recipients who did not receive FSC benefits.
  - Two-thirds of FSC recipients were between the age of 25 and 54.
  - 20 percent of FSC recipients were under the age of 25.
  - 40 percent of FSC recipients were female.
- FSC recipients were disproportionately nonwhite (27 percent) relative to regular UI beneficiaries (18 percent).
- The majority of FSC recipients had not provided the sole support for household dependents.
  - 40 percent of all FSC recipients had no dependents at all.
  - 38 percent of all FSC recipients had a working spouse.
  - 63 percent of all FSC recipients had either no dependents or a working spouse.

Industrial Distribution

- FSC recipients relative to regular UI recipients were less likely to be from the cyclically sensitive manufacturing industries and more likely to be from the services producing industries.
  - 43 percent of FSC recipients were unemployed workers from manufacturing.
  - 45 percent of FSC recipients were unemployed workers from service producing industries.

Reasons for Unemployment

- o A significant portion (17 percent) of all FSC recipients were unemployed for reasons other than layoff.
  - 13 percent of regular UI beneficiaries were unemployed for reasons other than layoff.
  - Over 10 percent of FSC recipients had been fired from their last job.
  - 4 percent of FSC recipients had quit their last job because they were unsatisfied with work arrangements, had retired, or were not working because they were involved in a labor dispute.

Characteristics of Recipients under Reachback Provisions

- o The FSC program provided benefits not only to individuals who exhausted benefits subsequent to passage of the legislation, but also "reached back" to provide benefits to many who had exhausted earlier. Those who had exhausted prior to enactment constituted about 43 percent of all FSC beneficiaries and had similar characteristics. Those who had exhausted much earlier, however, prior to June 1982 (termed extended reachbacks), had some important differences.
  - One-third of all extended reachbacks were nonwhite compared to 27 percent among all FSC recipients.
  - Extended reachbacks were 14 percent less likely to be unemployed from the cyclically sensitive manufacturing industries than other FSC recipients.
  - More than one-half of all extended reachbacks (54 percent) were from service producing industries.
  - Extended reachbacks were 45 percent more likely to be without work because they had been fired, quit work due to unsatisfactory work arrangements, were involved in a labor dispute, or had retired.

CHARACTERISTICS OF RECIPIENTS OF FEDERAL SUPPLEMENTAL COMPENSATION

The Department of Labor has carried out a special study of Federal Supplemental Compensation (FSC) recipients to provide information on their demographic and economic characteristics. The study examines FSC recipients, distinguishing between those who received extended benefits (EB) and those who did not, and compares them with beneficiaries of regular unemployment compensation (UI).

The FSC program was enacted in September 1982 as a temporary program of extended unemployment compensation, entirely funded from general revenues. FSC became effective on September 12, 1982. It provides benefits for individuals who have exhausted all of their rights to benefits under the regular and extended benefit programs. In states where EB is not in effect, exhaustees of regular UI are immediately eligible for FSC. In states on EB, an individual must exhaust EB before collecting FSC. The program originally provided 6 to 10 additional weeks of benefits, depending on the insured unemployment rate and the EB status of each state. In January of 1983, the duration of benefits was further extended to a total of 8 to 16 weeks.

The data for the study come from the Continuous Wage and Benefit History (CWBH) project of the Unemployment Insurance Service. This longitudinal data base combines information from state administrative records with information from a questionnaire administered at the time of initial filing for UI. Tabulations are for the most part based on data for twelve states (Georgia, Idaho, Missouri, Nevada, New Mexico, New York, North Carolina, Pennsylvania, South Carolina, Utah, Washington, and Wisconsin) and cover a sample of about 28,000 recipients.* These states account for about 28 percent of all FSC weeks claimed in the nation. Some limited data were also available for three additional states: California, Michigan, and Texas. The data cover FSC recipients from the beginning of the program in September 1982, through (in most cases) December 31, 1982.

Although the data do not constitute a random sample of the nation as a whole, the twelve states combined resemble the nation in their insured unemployment rates, industrial mix, and demographic characteristics. The average annual insured unemployment rate for the CWBH states taken together was 4.9 percent in calendar year 1982 compared with 4.6 percent for

---

* Although the sample from these states is large, estimates are subject to sampling variability. It is possible that some of the differences in the report are not statistically significant.

the nation, as shown in Table 1. The industrial composition of the twelve CWBH states is also very similar to that of the nation (Table 2), except that they have a higher proportion of employment in manufacturing and somewhat lower proportions in trade, mining and construction. The median age, population distribution by sex, and the racial composition of individuals in the twelve states (Table 3) are very similar to those of the nation as a whole. In light of these strong similarities between the twelve states and the nation, the tabulations presented are likely to reflect the national situation.

According to CWBH data for the 12 states, relatively few UI recipients go on to receive FSC benefits. Of all the regular UI beneficiaries who received one or more payments during the year before the beginning of the FSC program, about 25% exhausted their regular benefits. In the CWBH states that were steadily triggered on for EB, 85% of exhaustees of regular benefits received EB. About 40% of these EB recipients went on to receive FSC. Thus, where EB was triggered on, about a third of UI exhaustees eventually received FSC. In the CWBH states that were not triggered on for EB, over 70% of persons exhausting UI received FSC. Altogether, about 10% of regular UI recipients received FSC; 55% of them had never received EB. Chart 1 shows EB and FSC duration status for the states participating in the study.

OVERVIEW OF FINDINGS

The study finds that 67% of FSC recipients are prime age, 25 to 54 years; 40% are female; and 27% are non-white. In age and sex, FSC recipients are similar to recipients of regular UI, but the proportion of non-whites is higher among those receiving FSC.*

Forty-three percent of FSC recipients are from manufacturing and 17% are from services; 45% are from the service producing industries combined. Although FSC was enacted to provide assistance to those who suffered unemployment and benefit exhaustion due to the current recession, recipients are disproportionately from less cyclical industries such as services, in which employment has grown during the recession. Moreover, FSC recipients are less likely to have been laid off from their previous job, but are more likely than UI recipients to have quit or to have been fired. Thus, FSC benefits are more often received by individuals whose joblessness is due to factors other than the current recession.

Fifty-seven percent of FSC recipients are married and about 40% have no dependents. The proportion married is lower than that for UI recipients, but numbers of dependents are similar. FSC recipients had lower earnings prior to their unemployment than did regular UI recipients.

---

* Comparisons are made with regular UI beneficiaries not receiving FSC.

FSC beneficiaries who were eligible for compensation under the program due to its extended reachback provisions (those who had exhausted their regular and EB benefits more than three months before FSC became effective) are even less likely than other FSC beneficiaries to have separated from cyclical industries such as durable manufacturing. Those eligible due to extended reachback also have lower proportions on layoff than other FSC beneficiaries and higher proportions who were fired or quit their previous job.

Close to 40% of FSC beneficiaries had an interruption in the continuity of their regular UI benefit receipt; as many as 13% may have been at work for a fourth of the time span over which they drew regular UI benefits.

FSC recipients had less work experience in the year previous to their unemployment than did regular UI recipients. These recipients with less work attachment also tend to be young. The proportion of FSC recipients under age 22 is more than double for those with under 30 weeks of work than for those with 30 or more weeks.

Those FSC recipients who first receive EB differ from those who do not with respect to sex, race, and industry: more are men, more are white, and more come from manufacturing. Differences arise between these groups because (1) the states that triggered on to EB had higher unemployment rates, and relatively more concentration in durable manufacturing and (2) EB recipients going on to receive FSC have longer durations of unemployment.

AGE

Age distributions of both FSC beneficiaries and regular UI beneficiaries are shown in Table 4, and Chart 2. Twenty percent of FSC beneficiaries are under the age of 25; 67% are of prime age, 25 to 54, and 13% are 55 years or older. The age distributions of the two groups of beneficiaries are quite similar. This contrasts with the age distribution of recipients under the earlier program of Federal Supplemental Benefits (FSB) of 1975-1977. In that program, claimants were more likely to be in older age groups. The difference is explained in part by a change in eligibility: claimants who receive social security or other pension income cannot generally receive unemployment compensation now, including supplemental benefits, but they could in 1975.

SEX

Sex and race distributions are shown in Table 5 and Charts 3 and 4. Among both FSC and UI recipients, about 40% are female. Among those who received EB, however, females account for 34% of recipients, while among those who did not receive EB, they account for 44%. This is probably due to differences in industrial mix in the states that triggered on EB. The EB states have relatively more concentration in durable manufacturing industries, which employ relatively few females. In the earlier FSB program, almost half of the recipients were female.

RACE

Twenty-seven percent of FSC beneficiaries in the sample are non-white, compared to 18% among the regular UI comparison group. Among FSC beneficiaries who did not receive EB, 32% are non-white, and among those who did receive EB, 19% are non-white. This latter difference is only partially accounted for by higher non-white populations in non-EB states, such as Georgia. Indeed, within each CWBH state, non-white proportions are higher among FSC recipients than among recipients of regular UI.

INDUSTRY

UI recipients who had worked in manufacturing industries prior to their unemployment are less likely to go on to become FSC recipients. In contrast, UI recipients from the service producing industries (services; wholesale and retail trade; finance, insurance and real estate; public administration; and transportation and public utilities) are more likely to become FSC recipients. The distribution by industry of all FSC recipients is shown in Table 6 and Chart 5, and separately for males and females in Tables 7 and 8.

About 43% of FSC recipients worked in manufacturing industries prior to their unemployment. The share of workers from manufacturing among UI recipients who did not receive FSC, however, is higher: it is 53%. (For female UI recipients, the share from manufacturing is 58%; it is 50% for males.) The proportion of FSC recipients accounted for by the service producing industries is 45%, almost 40% greater than the comparable proportion for recipients of regular UI. This is despite the fact that the unemployment rate in those industry groups is about half of that for manufacturing. Employment in services has grown during the current recession.*

---

* Bureau of Labor Statistics, Employment and Earnings, household and establishment data.

Among FSC recipients, the industrial distribution of those who received EB is quite different from those who did not. Among those who received EB, 49% are from manufacturing, compared with 40% from manufacturing for those who did not receive EB. Differences are particularly striking for durable manufacturing: 34% of FSC recipients who received EB are from durable manufacturing industries, compared with 19% for those who did not receive EB. Part of the explanation for this is that states eligible for extended benefits had relatively more concentration in durable manufacturing than states not on EB.

MARITAL STATUS AND DEPENDENTS

About 57% of all FSC recipients are married, as shown in Table 9, with similar percentages for females and males. Approximately 38% of all FSC recipients reported that they had a spouse working prior to their unemployment. This was true for almost half of the females and about a third of the males.

FSC recipients have 1.2 dependents, on average, about the same number as recipients of regular UI. About 40% of FSC recipients have no dependents at all. Sixty-three percent of all FSC recipients have either no dependents or a working spouse.

INCOME

The data on income apply to the twelve-month period prior to filing the initial UI claim. Measures of income may not be accurate, since the non-response rate on the income questions was nearly 70%. Since non-response rates were higher for those with lower earnings in the base period, moreover, average household incomes are likely to be somewhat overstated.

FSC claimants reported annual household incomes of $18,000, on average, compared with $20,500 for UI claimants. FSC recipients also reported slightly lower usual weekly earnings than UI recipients, $283 contrasted with $296, and were more likely to fall below the poverty line. Slightly under 18% of FSC claimants were below the poverty line; about a third had incomes more than three times the poverty line. Among FSC recipients, those who had received EB reported $298 for usual weekly earnings.

REASON FOR JOB SEPARATION

Eighty-three percent of FSC beneficiaries reported layoff from their previous job as the reason for job separation, compared with 88% among regular UI recipients as shown in Table 10. Seventeen percent of FSC beneficiaries were unemployed for reasons other than layoff. FSC beneficiaries

were more likely to have been fired (11%) or to have quit their previous job (over 4%). An additional one percent had been involved in a labor dispute or had retired. An assessment of the validity of reasons for job separation in the CWBH data base, comparing responses to the questionnaire with UI administrative records, concluded that the proportion of job leavers, as opposed to job losers, is understated.*

REACHBACK

FSC became effective on September 12, 1982, but eligibility for benefits was extended back in time to individuals who had exhausted their rights to regular and extended benefits during the summer, and even earlier. An unemployed worker was eligible for FSC, provided that he was entitled to EB for a week after June 1, or if his benefit year ended after June 1. Forty-three percent of FSC beneficiaries qualified under these reachback provisions. Their demographic characteristics and industries are generally similar to these of all FSC recipients, as shown in Table 11.

---

* Richard Strouse, "An Assessment of Alternative Questions to Measure Household Income on the CWBH Questionnaire and Validation of Claimant Reason for Job Separation," Mathematica, November 1980.

Under these reachback provisions, individuals who had received no recent UI payments since June, including some who had not received benefits since 1981, could also qualify for FSC. This extension of coverage to individuals who had exhausted benefits prior to June, or provision allowing extended reachback, accounted for about 18% of FSC recipients between September and December.

Characteristics of these recipients who were eligible for FSC through the extended reachback provisions of the law are generally similar to those of FSC recipients as a whole, but there are some important disparities in race, industry, and reasons for job separation. As shown in Table 12, the proportion of non-white recipients is higher among extended reachbacks in the CWBH states as a group; 33% of FSC recipients who were extended reachbacks are non-white, compared with 25% non-white among other FSC recipients. For the individual CWBH states, however, the proportion non-white is higher among extended reachbacks in some states, and lower in others.

Among extended reachbacks, the proportion from manufacturing, particularly durable manufacturing, is lower than the proportion for other FSC recipients (Table 13). The proportion of extended reachbacks with previous employment in services is 38% higher than the comparable proportion for other FSC recipients.

were more likely to have been fired (11%) or to have quit their previous job (over 4%). An additional one percent had been involved in a labor dispute or had retired. An assessment of the validity of reasons for job separation in the CWBH data base, comparing responses to the questionnaire with UI administrative records, concluded that the proportion of job leavers, as opposed to job losers, is understated.*

REACHBACK

FSC became effective on September 12, 1982, but eligibility for benefits was extended back in time to individuals who had exhausted their rights to regular and extended benefits during the summer, and even earlier. An unemployed worker was eligible for FSC, provided that he was entitled to EB for a week after June 1, or if his benefit year ended after June 1. Forty-three percent of FSC beneficiaries qualified under these reachback provisions. Their demographic characteristics and industries are generally similar to these of all FSC recipients, as shown in Table 11.

---

* Richard Strouse, "An Assessment of Alternative Questions to Measure Household Income on the CWBH Questionnaire and Validation of Claimant Reason for Job Separation," Mathematica, November 1980.

Under these reachback provisions, individuals who had received no recent UI payments since June, including some who had not received benefits since 1981, could also qualify for FSC. This extension of coverage to individuals who had exhausted benefits prior to June, or provision allowing extended reachback, accounted for about 18% of FSC recipients between September and December.

Characteristics of these recipients who were eligible for FSC through the extended reachback provisions of the law are generally similar to those of FSC recipients as a whole, but there are some important disparities in race, industry, and reasons for job separation. As shown in Table 12, the proportion of non-white recipients is higher among extended reachbacks in the CWBH states as a group; 33% of FSC recipients who were extended reachbacks are non-white, compared with 25% non-white among other FSC recipients. For the individual CWBH states, however, the proportion non-white is higher among extended reachbacks in some states, and lower in others.

Among extended reachbacks, the proportion from manufacturing, particularly durable manufacturing, is lower than the proportion for other FSC recipients (Table 13). The proportion of extended reachbacks with previous employment in services is 38% higher than the comparable proportion for other FSC recipients.

Extended reachbacks were 45% more likely to have separated from their previous job because they had been fired, quit due to unsatisfactory work arrangements, were involved in a labor dispute, or had retired (Table 14). Extended reachbacks were less likely to have been laid off, 78%, than other FSC recipients, 84%.

INTERRUPTION OF BENEFIT RECEIPT

Weeks of unemployment often occur in several spells during the year rather than in one continuous spell.* For UI recipients, and even exhaustees, periods of compensated unemployment are interspersed with periods of work or time spent out of the labor force. UI program data indicate that, on average, recipients experience about two spells of unemployment during the year.

Estimates of the extent of interruption in receipt of regular UI benefits are shown in Table 15. Approximately 60% of FSC beneficiaries received regular UI compensation without apparent interruption, and 40% had more than one spell of regular UI benefit receipt. As many as 13% may have been at work for a fourth of the time span over which they drew regular UI benefits.

---

* George A. Akerlof and Brian G.M. Main, "Unemployment Spells and Unemployment Experience," American Economic Review, December 1980.

UI beneficiaries as a group were less likely to be unemployed continuously than those who continued on to draw FSC. About 30% of UI beneficiaries drew their regular UI payments without apparent interruption, and about 70% had more than one spell. Up to 45% may have been at work for a fourth of the time span over which they collected UI payments.

The pattern of interruption of benefit weeks for exhaustees of regular UI fell between those for all regular UI recipients and FSC recipients. About half of the exhaustees of regular UI received their benefit payments continuously. Approximately a fourth may have spent one week at work for every three weeks of compensated unemployment.

WEEKS OF WORK

Twenty weeks of work or the equivalent are required for FSC eligibility, but FSC recipients nevertheless had fewer weeks of work experience in the year previous to their unemployment than did UI recipients. This is consistent with earlier studies that found more recent work experience associated with shorter durations of unemployment.* As shown in Table 16, about 24% of FSC beneficiaries had fewer than 30 weeks of work, compared with 18% percent of UI recipients not receiving FSC.

---

* Kathleen P. Classen, "The Effect of Unemployment Insurance on the Duration of Unemployment and Subsequent Earnings," and Arlene Holen, "Effects of Unemployment Insurance Entitlement on Duration and Job Search Outcome," Industrial and Labor Relations Review, July 1977.

As shown in Table 17, FSC beneficiaries with short durations of work (less than 30 weeks) in the base period contain higher proportions of females, workers under age 25, and higher proportions of workers with no dependents than the group of FSC recipients who had 30 or more weeks of work. The proportion of non-whites in both groups is about the same, as is the average number of dependents per worker. Those with fewer weeks of work are less likely to be married.

Table 1

Insured Unemployment Rates for 1982 CWBH States and U.S.	
New York	3.81
Pennsylvania	6.59
Wisconsin	5.83
Missouri	4.29
North Carolina	4.56
South Carolina	5.46
Georgia	3.42
Idaho	7.06
New Mexico	3.82
Utah	4.66
Nevada	4.57
Washington	6.54
CWBH Average	4.89
U.S. Average	4.59

Source: Unemployment Insurance Service, DOL.

Table 2

Industrial Distribution for Twelve CWBH states and U.S.

	CWBH States %	U.S. Average %
Mining	.5	1.3
Construction	3.9	4.4
Manufacturing	22.7	21.1
Trans.,Comm.,Public Util.	5.7	5.6
Trade	21.6	22.9
F.I.R.E.	6.3	6.0
Services	21.4	21.1
Government	17.9	17.6
TOTAL	100.0	100.0

Source: Bureau of Labor Statistics, Labstat, employees on nonagricultural payrolls, twelve-month average for December 1981 to November 1982.

Table 3

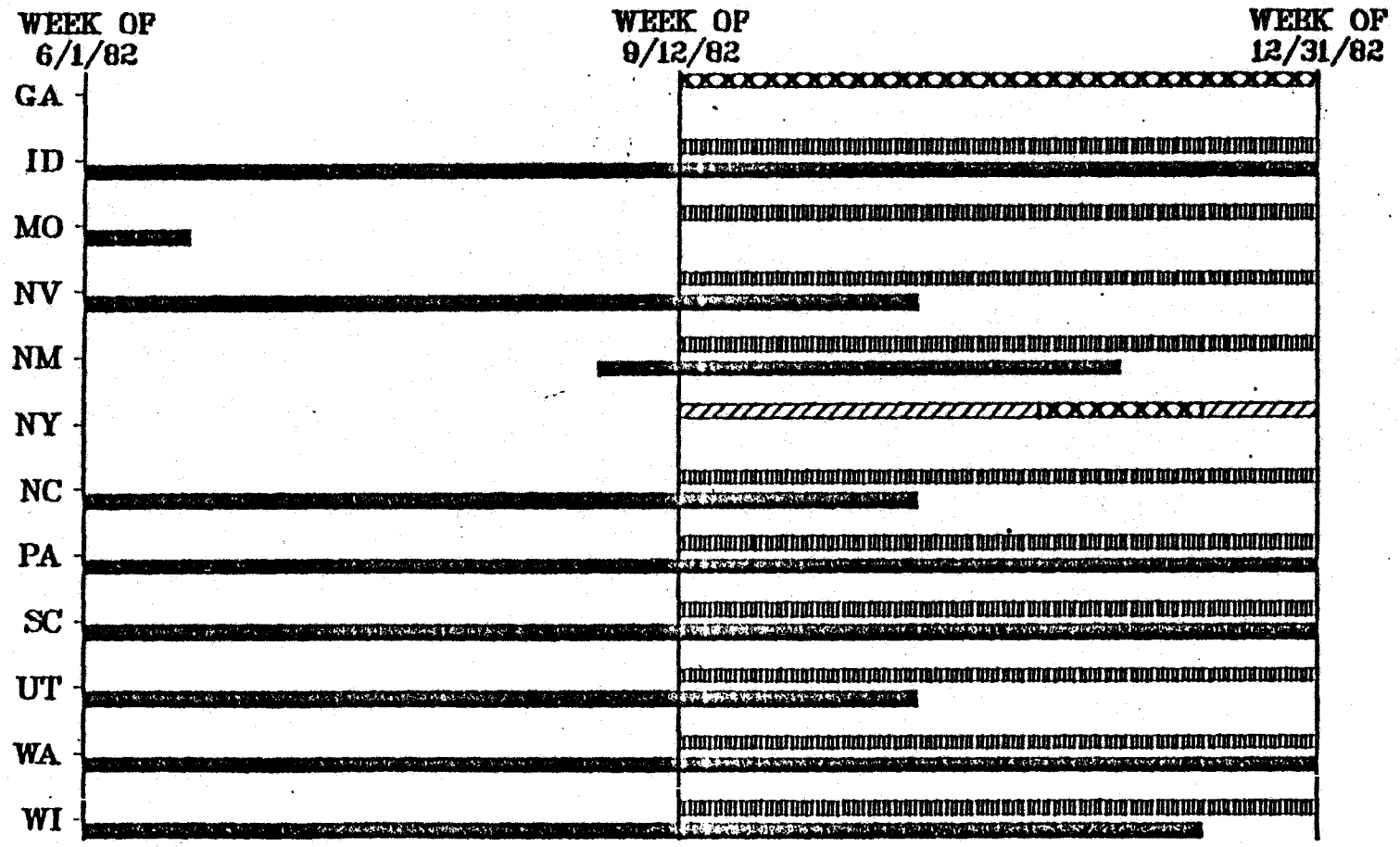
Demographic Comparisons, Twelve CWBH States and U.S.

	CWBH Average	U.S. Average
Median Age, in years	30.5	30.0
Percent Male	48.3	48.6
Percent White	83.2	83.2

Source: Statistical Abstract of the United States, data for 1980.

CHART 1

CWBH STATES
EB & FSC TRIGGER ON PERIODS



Source: Unemployment Insurance Service, DOL.

Table 4

Age

	Regular UI Beneficiaries Not Receiving FSC*	FSC Beneficiaries		
	Percent	Total %	Received EB %	Received no EB %
Total	100.0	100.0	100.0	100.0
Age				
<22	10.9	8.3	8.3	8.3
22-24	11.3	11.7	12.0	11.4
25-54	65.6	67.2	68.4	66.3
55-64	10.3	11.3	9.7	12.3
65+	1.9	1.6	1.5	1.7

* Comparison group of regular UI beneficiaries not receiving FSC includes those who received one or more payments for regular UI benefits in the last quarter of 1981 or the first three quarters of 1982, and who did not file a claim for FSC benefits as of December 31, 1982. These regular UI beneficiaries became unemployed at the same time as most of the FSC beneficiaries.

CHART 2

AGE

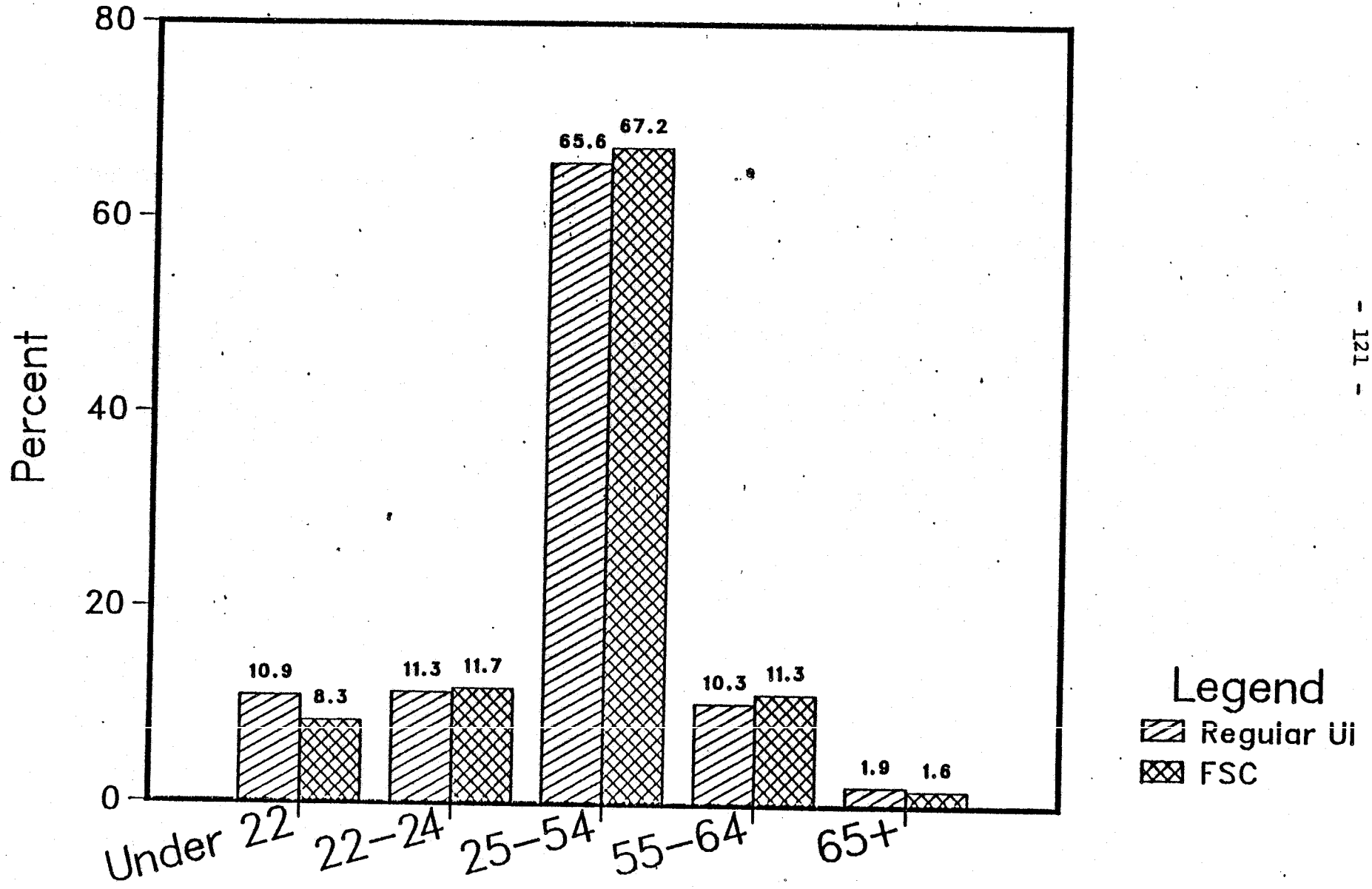

80
60
40
20
0
Percent
10.9
8.3
11.3
11.7
65.6
67.2
10.3
11.3
1.9
1.6
Under 22
22–24
25–54
55–64
65+
Legend
Reguiar Ui
FSC

Table 5

Sex and Race

	Regular UI Beneficiaries Not Receiving FSC	FSC Beneficiaries		
	Percent	Total %	Received EB %	Received no EB %
Male	61.4	59.9	65.9	56.2
Female	38.6	40.1	34.1	43.8
White	82.0	73.3	80.9	68.5
Nonwhite	18.0	26.7	19.1	31.5
Total	100.0	100.0	100.0	100.0

CHART 3

Sex

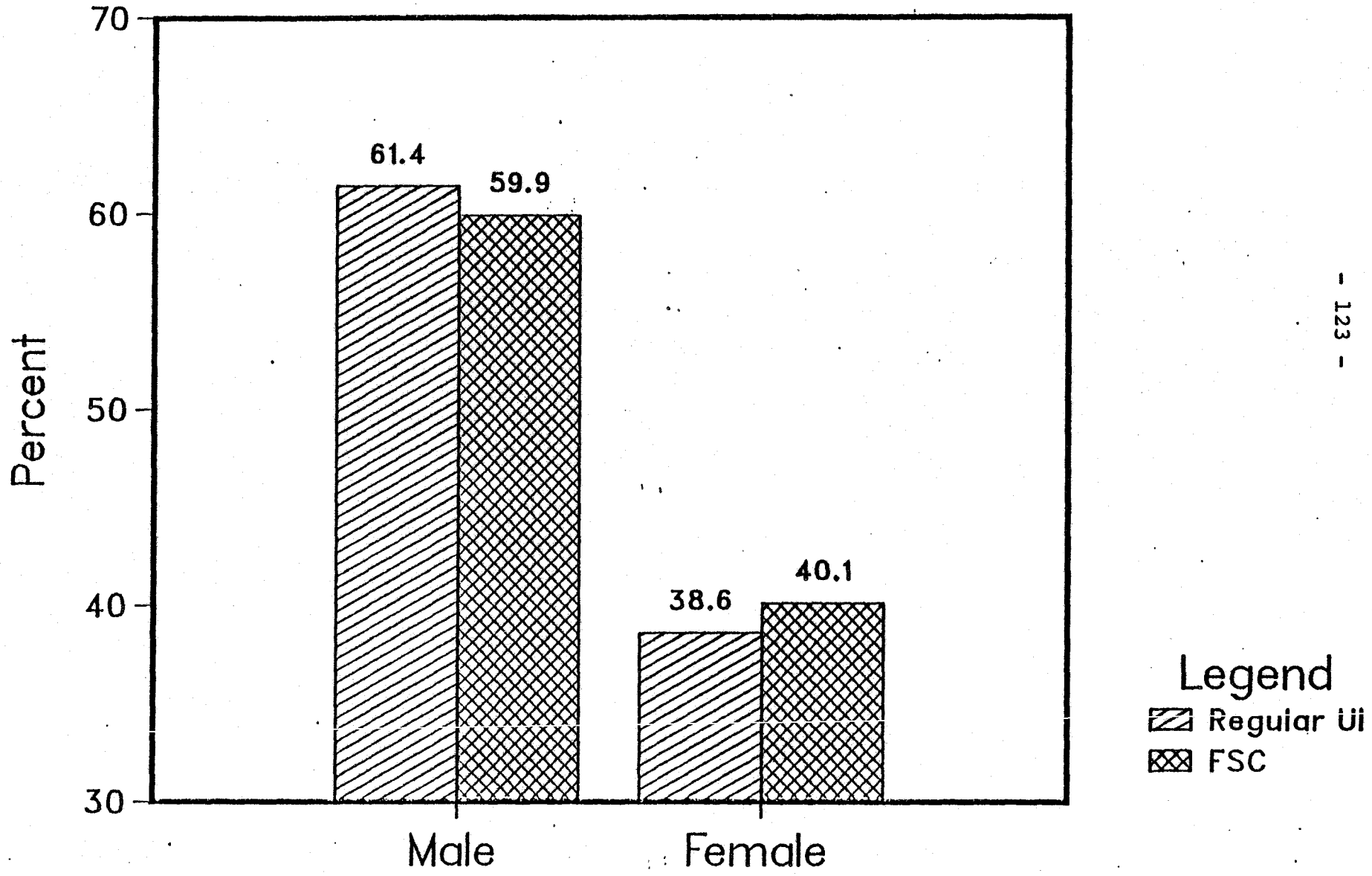

70
60
50
40
30
Percent
61.4
59.9
38.6
40.1
Male
Female
Legend
Regular UI
FSC

Table 6

Industry

	Regular UI Beneficiaries Not Receiving FSC	FSC Beneficiaries		
	Percent	Total %	Received EB %	Received no EB %
Agr,For,Fish	1.1	.9	1.0	.8
Mining	1.2	1.0	1.9	.3
Constr	12.0	9.5	12.8	7.3
Mfg-Total	53.0	43.2	48.6	39.5
Mfg-Dur	26.8	25.4	34.3	19.3
Mfg-Nondur	24.9	16.3	13.3	18.4
Mfg-Misc	1.2	1.5	1.0	1.9
Trans,Comm,Elec	3.5	3.7	3.5	3.8
Wholesale Trade	4.2	6.4	5.1	7.3
Retail Trade	9.1	11.6	10.2	12.6
Fin,Ins,R.E.	1.8	4.0	2.1	5.3
Services	12.4	17.3	12.3	20.7
Pub Adm	1.5	2.1	1.7	2.3
Not Cov	.3	.3	.7	.1
Total	100.0	100.0	100.0	100.0

CHART 5

Industry

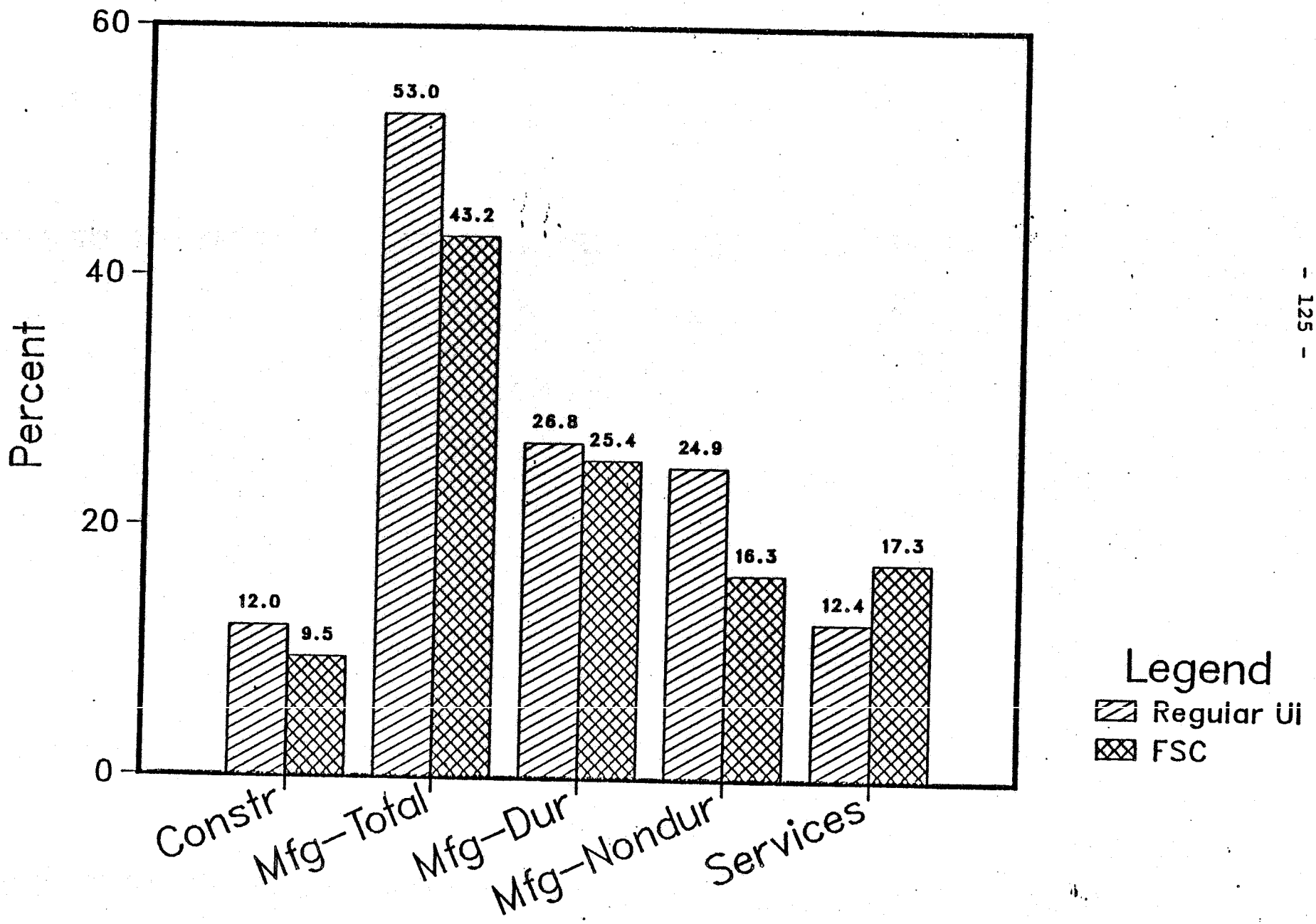


CHART 4

Race

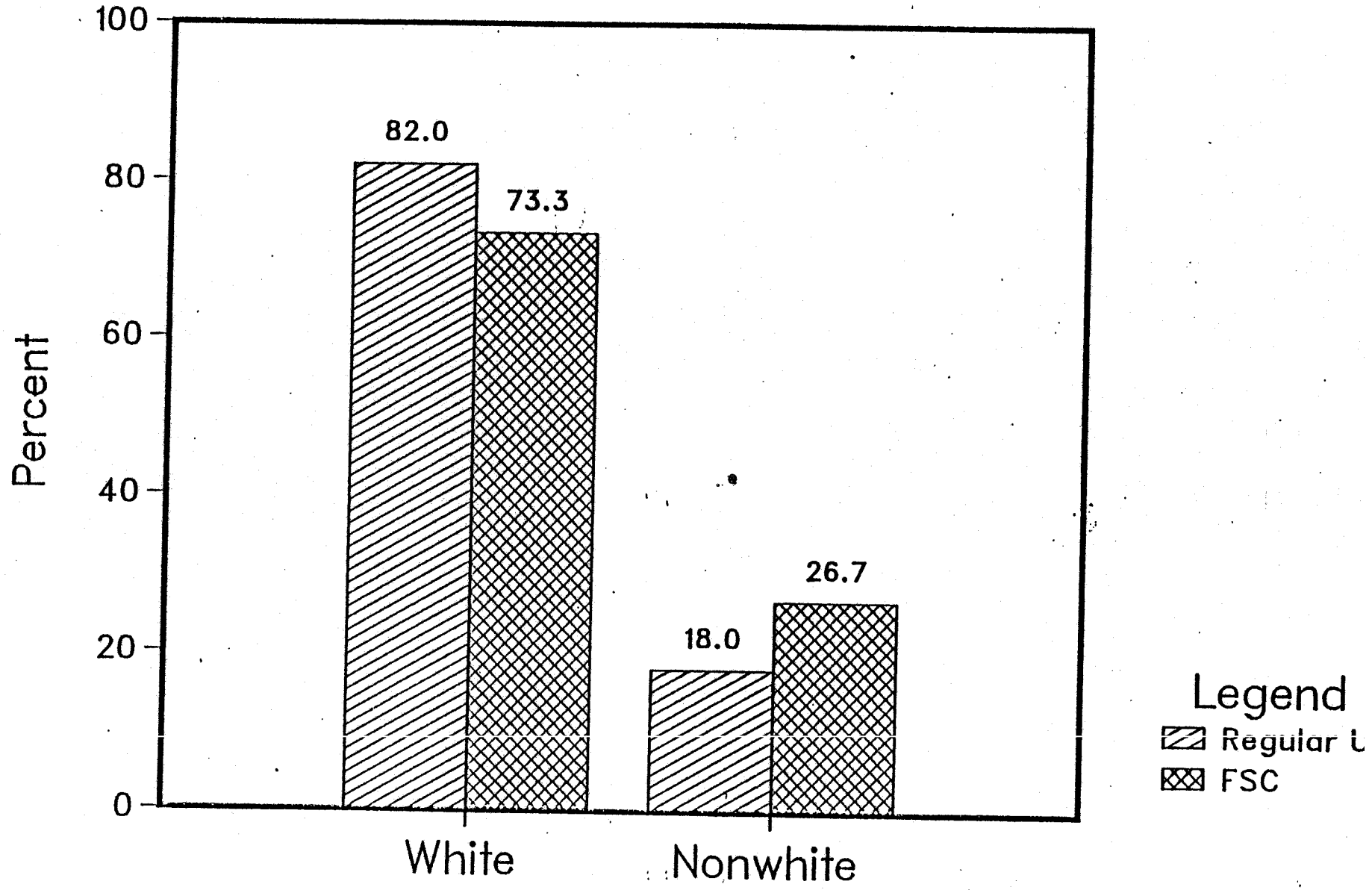

100
80
60
40
20
0
Percent
82.0
73.3
18.0
26.7
White
Nonwhite
Legend
Regular t
FSC

Table 7

Industry (Male)

	Regular UI Beneficiaries Not Receiving FSC	FSC Beneficiaries		
	Percent	Total %	Received EB %	Received no EB %
Male				
Agr,For,Fish	1.4	1.1	1.2	1.1
Mining	1.8	1.3	2.3	.6
Constr	18.6	14.1	17.5	11.3
Mfg-Total	49.9	44.4	49.9	39.9
Mfg-Dur	33.3	30.9	40.1	23.5
Mfg-Nondur	15.6	12.4	9.4	14.7
Mfg-Misc	1.0	1.1	.4	1.6
Trans,Comm,Elec	4.2	4.6	3.8	5.2
Wholesale Trade	4.5	5.9	5.2	6.5
Retail Trade	7.6	9.3	7.5	10.7
Fin,Ins,R.E.	1.4	3.3	1.3	5.0
Services	9.1	13.6	8.9	17.3
Pub Adm	1.2	1.9	1.4	2.3
Not Cov	.3	.5	.9	.1
Total	100.0	100.0	100.0	100.0

Table 8

Industry (Female)

	Regular UI Beneficiaries Not Receiving FSC	FSC Beneficiaries		
	Percent	Total %	Received EB %	Received no EB %
Female				
Agr,For,Fish	.7	.6	.8	.5
Mining	.2	.4	1.2	.1
Constr	1.5	2.5	3.3	2.1
Mfg-Total	57.8	41.4	46.0	39.0
Mfg-Dur	16.7	16.9	22.8	13.8
Mfg-Nondur	39.6	22.4	21.1	23.1
Mfg-Misc	1.6	2.1	2.1	2.1
Trans,Comm,Elec	2.4	2.3	2.7	2.1
Wholesale Trade	3.7	7.1	4.8	8.2
Retail Trade	11.5	15.3	15.8	15.0
Fin,Ins,R.E.	2.3	5.0	3.8	5.6
Services	17.5	23.0	19.0	25.1
Pub Adm	2.1	2.3	2.3	2.3
Not Cov	.2	.1	.4	—
Total	100.0	100.0	100.0	100.0

Table 9

Marital Status and Dependents

	Regular UI Beneficiaries Not Receiving FSC	FSC Beneficiaries
Married (except separated)	61.4%	56.5%
Spouse working (% of total)	42.4%	38.2%
No dependents	40.5%	40.5%
Average number of dependents including spouse not working	1.2	1.2

Table 10

Reason for Job Separation

	Regular UI Beneficiaries Not Receiving FSC	FSC Beneficiaries		
	Percent	Total %	Received EB %	Received no EB %
Layoff	87.5	83.3	85.0	81.6
Quit-unsat work arr	2.2	3.0	2.2	3.8
Quit-health/personal	1.2	1.2	1.2	1.1
Fired	6.9	10.6	8.9	12.3
Labor dispute	.4	.8	.9	.7
Retired	.4	.2	.4	.0
Other	1.6	.9	1.3	.5
Total	100.0	100.0	100.0	100.0

Table 11

Characteristics of FSC Beneficiaries and Reachbacks

	FSC Beneficiaries	
	Total %	Reachbacks %
Total	100.0	100.0
Age		
<22	8.3	8.3
22-24	11.7	12.6
25-54	67.2	67.1
55-64	11.3	10.8
65+	1.6	1.2
Sex		
Male	59.9	58.6
Female	40.1	41.5
Race		
White	73.3	69.0
Nonwhite	26.7	31.0
Industry		
Mfg-total	43.1	42.0
Mfg-Dur	25.4	24.0
Mfg-Nondur	16.3	15.9
Trans,Comm,Elec	3.8	4.1
Trade	17.9	16.7
Fin,Ins,R.E.	4.0	3.2
Services	17.3	16.5

Table 12

Age, Sex and Race for Extended Reachbacks

	FSC Beneficiaries		
	Total %	Extended Reachbacks %	Others %
Total	100.0	100.0	100.0
Age			
<22	8.3	6.8	8.6
22-24	11.7	12.3	11.6
25-54	67.2	69.0	66.8
55-64	11.3	9.9	11.6
65+	1.6	2.0	1.5
Sex			
Male	59.9	58.1	60.3
Female	40.1	41.9	39.7
Race			
White	73.3	66.6	74.7
Nonwhite	26.7	33.4	25.3

Table 13

Industry for Extended Reachbacks

	FSC Beneficiaries		
	Total %	Extended Reachbacks %	Others %
Agr,For,Fish	.9	.8	.9
Mining	1.0	.2	1.2
Constr	9.5	7.1	10.0
Mfg-Total	43.1	37.8	44.2
Mfg-Dur	25.4	20.6	26.4
Mfg-Nondur	16.3	16.0	16.4
Mfg-Misc	1.6	1.2	1.7
Trans,Comm,Elec	3.8	2.9	4.0
Wholesale Trade	6.3	7.5	6.0
Retail Trade	11.6	12.8	11.3
Fin,Ins,R.E.	4.0	5.5	3.7
Services	17.3	22.3	16.2
Pub Adm	2.1	2.6	2.0
Not Cov	.4	.4	.4
Total	100.0	100.0	100.0

Table 14

Reasons for Job Separation for Extended Reachbacks

	FSC Beneficiaries		
	Total %	Extended Reachbacks %	Others %
Layoff	83.3	78.4	84.3
Quit-unsat work arr	3.0	5.8	2.4
Quit-health/personal	1.2	.2	1.4
Fired	10.6	12.8	10.1
Labor dispute	.8	.7	.8
Retired	.2	.2	.2
Other	.9	1.8	.7
Total	100.0	100.0	100.0

Table 15

Interruption in Receipt of Regular UI Benefits*

	All Regular UI Beneficiaries	Exhaustees of Regular UI	FSC Beneficiaries
	Percent	Percent	Percent
One spell, no interruption	29.6	49.0	61.4
More than one spell	70.4	51.0	38.6
Total	100.0	100.0	100.0
Interruption of up to 25% in benefit receipt period	45.5	24.4	12.8

* The number of spells of unemployment cannot be measured directly using the data available for this study. An indirect measure of continuity of benefit receipt is used, the ratio of the number of benefit weeks paid under regular UI to the number of weeks elapsed during which benefits are received. This measure emcompasses both the likelihood and the duration of interruption in benefits. A ratio of 1 for this measure would indicate that unemployment occurred in a single spell, and a ratio of less than 1 would indicate more than one spell. A ratio of .75 would indicate both that benefit weeks were paid in more than one spell, and that benefit weeks comprised 75 percent of the elapsed time over which they occurred. The other quarter of elapsed time over which benefit weeks were paid would have been either weeks of work or weeks of non-labor force activity. The measure is applied to UI recipients with benefit years ending December 1981 through November 1982.

Table 16

Weeks of Work in Year Previous to Unemployment*

	Regular UI Beneficiaries Not Receiving FSC	FSC Beneficiaries		
	Percent	Total %	Received EB %	Received No EB %
1-19	2.7	0.0	0.0	0.0
20-29	15.6	24.4	27.3	23.0
30-39	22.7	21.1	24.6	18.6
40-49	40.2	28.1	39.2	20.8
50+	18.8	26.4	8.8	37.6
Total	100.0	100.0	100.0	100.0

* Weeks of work were estimated using one of the following formulas, corresponding with state regular program eligibility requirements:

(1) $\frac{\text{earnings in base period} \times 13}{\text{high quarter earnings}}$

(2) $\frac{1/2 \text{ earnings in base period}}{\text{weekly benefit amount}}$

Adjustments were made as necessary to reflect actual eligibility requirements.

Table 17

Characteristics of FSC Beneficiaries
With 20-29 Weeks of Work

	Total %	20-29 Weeks Worked %	30 or more Weeks Worked %
Total	100.0	100.0	100.0
Sex			
Male	59.9	57.0	60.8
Female	40.1	43.0	39.2
Race			
White	73.3	72.7	73.5
Nonwhite	26.7	27.3	26.5
Age			
<22	8.3	15.4	6.0
20-24	11.7	13.0	11.3
25-54	67.2	62.6	68.7
55-64	11.3	6.5	12.8
65+	1.6	2.3	1.4
Marital Status and Dependents			
Married (except separated)	56.5	51.1	58.2
Spouse Working (% of total)	38.2	36.0	38.9
No Dependents	40.5	44.2	39.3
Average number of dependents including spouse not working	1.2	1.2	1.2

VI. UI OCCASIONAL PAPER SERIES

The Unemployment Insurance Occasional Paper Series presents research findings and analyses dealing with unemployment insurance issues. Papers are prepared by research contractors, staff members of the unemployment insurance system, or individual researchers. Manuscripts and comments from interested individuals are welcomed. All correspondence should be sent to:

UI Occasional Paper Series
UIS, ETA, Department of Labor
601 D Street, N.W., Room 7422
Washington, D.C. 20213

Arrangements have been made for the sale of most of the reports in the series through a Federal information and retrieval system, the National Technical Information Service (NTIS). Copies of the reports are available from NTIS in paper or microfiche. The NTIS accession number and the price for the paper copy are listed after the title of each paper. The price for a microfiche copy of a paper is $4.50. To obtain the papers from NTIS, the remittance must accompany the order and be made payable to:

National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, Virginia 22161 Telephone: (703) 557-4650

Papers which are currently not available are indicated with an asterisk.

1978

Joachim Elterich and Linda Graham, 77-1
Impact of Extension of Coverage to Agricultural Workers Under P.L. 94-566, Their Characteristics and Economic Welfare,
University of Delaware.
NTIS PB83-147819. Price: $11.50

Joachim Elterich and Linda Graham, 77-2
Impact of P.L. 94-566 on Agricultural Employers and Unemployment Insurance Trust Funds in Selected States,
University of Delaware.
NTIS PB83-147827. Price: $8.50

*David Stevens, Unemployment Insurance Beneficiary Job Search Behavior: What Is Known and What Should Be Known for Administrative Planning Purposes, 77-3
University of Missouri.

*Michael Klausner, Unemployment Insurance and the Work Disincentive Effect: An Examination of Recent Research, 77-4
Unemployment Insurance Service.

*Gary Solon, Weekly Benefit Amounts and Normal Weekly Wages of Unemployment Insurance Claimants, Unemployment Insurance Service. 77-5

*Ruth Entes, Family Support and Expenditures Survey of Unemployment Insurance Claimants in New York State, September 1972-February 1974, New York State Department of Labor. 77-6

*Saul Blaustein and Paul Mackin, Development of the Weekly Benefit Amount in Unemployment Insurance, Upjohn Institute. 77-7

*Saul Blaustein and Paul Mackin, Job Loss, Family Living Standards, and the Adequacy of Weekly Unemployment Benefits, Upjohn Institute. 77-8

1978

Henry Felder and Richard West, The Federal Supplemental Benefits Program: National Experience and the Impact of P.L. 95-19, SRI International. 78-1
NTIS PB83-149633. Price: $11.50.

Paul Burgess, Jerry Kingston and Chris Walters, The Adequacy of Unemployment Insurance Benefits: An Analysis of Weekly Benefits Relative to Preunemployment Expenditure Levels, Arizona Department of Economic Security and Arizona State University. 78-2
NTIS PB83-148528. Price: $17.50.

Christopher Pleatsikas, Lawrence Bailis and Judith Dernburg, A Study of Measures of Substantial Attachment to the Labor Force, Volumes I and II, Urban Systems Research and Engineering, Inc. 78-3
Vol I: NTIS PB83-147561. Price $13.00
Vol. II: NTIS PB83-147579. Price: $14.50

Henry Felder and Randall Pozdena, The Federal Supplemental Benefits Program: Impact of P.L. 95-19 on Individual Recipients, SRI International. 78-4
NTIS PB83-149179. Price: $13.00

*Peter Kauffman, Margaret Kauffman, Michael Werner and Christine Jennison, An Analysis of Some of the Effects of Increasing the Duration of Regular Unemployment Insurance Benefits, Management Engineers, Inc. 78-5

Jerry Kingston, Paul Burgess, and Chris Walters, The Adequacy of Unemployment Insurance Benefits: An Analysis of Adjustments Undertaken Through Thirteen and Twenty-Five Weeks of Unemployment, Arizona Department of Economic Security and Arizona State University. 78-6
NTIS PB83-149823. Price: $19.00

Walter Corson and Walter Nicholson, The Effect of State Laws and Economic Factors on Exhaustion Rates for Regular Unemployment Insurance Benefits: A Statistical Model, Mathematica Policy Research. 78-7
NTIS PB83-149468. Price $14.50

Louis Benenson, Incidence of Federal Retirees Drawing UCFE Benefits, 1974-75, Unemployment Insurance Service. 78-8
NTIS PB83-161927. Price: $7.00

1979

Henry Felder, A Statistical Evaluation of the Impact of Disqualification Provisions of State Unemployment Insurance Laws, SRI International. 79-1
NTIS PB83-152272. Price: $17.50

Arthur Denzau, Ronald Oaxaca and Carol Taylor, The Impact of Unemployment Insurance Benefits on Local Economies--Tucson, University of Arizona. 79-2
NTIS PB83-169912. Price: $11.50

Paul Burgess, Jerry Kingston and the Research and Reports Section of the Unemployment Insurance Bureau, Arizona Department of Economic Security. Labor Market Experiences of Unemployment Insurance Exhaustees, Arizona Department of Economic Security and Arizona State University. 79-3
NTIS PB83-224162. Price: $22.00

Carolyn Sperber, An Evaluation of Current and Alternative Methods of Determining Exhaustion Ratios, Unemployment Insurance Service. 79-4
NTIS PB83-148866. Price: $8.50

Mamoru Ishikawa, Unemployment Compensation in Varying Phases of Joblessness, Unemployment Insurance Service. 79-5
NTIS PB83-150581. Price: $8.50

Nicholas Kiefer and George Neumann, The Effect of Alternative Partial Benefit Formulas on Beneficiary Part-Time Work Behavior, National Opinion Research Center. 79-6
NTIS PB83-146811. Price: $11.50

1980

Mamoru Iskikawa, Unemployment Insurance and Proliferation of Other Income Protection Programs for Experienced Workers, Unemployment Insurance Service. 80-1
NTIS PB83-140657. Price: $10.00

UI Research Exchange (semiannual). Information on unemployment insurance research. First issue: 1980, Unemployment Insurance Service. 80-2
NTIS PB83-148411. Price: $17.50.

Raymond P.F. Fishe and G.S. Maddala, Effect of Unemployment Insurance on Duration of Unemployment: A Study Based on CWBH Data for Florida, Florida State University and University of Florida. (Available from DOL/ETA, Patrick Henry Building, Room 7402, 601 D Street NW, Washington, D.C. 20213, while supply lasts.) 80-3

*Jerry Kingston, Paul Burgess, Robert St. Louis and Joseph Sloane, Benefit Adequacy and UI Program Costs: Simulations with Alternative Weekly Benefit Formulas, Arizona Department of Economic Security and Arizona State University. 80-4

1981

UI Research Exchange (semiannual). Information on unemployment insurance research. First issue: 1981, Unemployment Insurance Service. 81-1
NTIS PB83-152587. Price: $19.00

Jerry Kingston, Paul Burgess, Robert St. Louis and Joseph Sloane, Can Benefit Adequacy Be Predicted on the Basis of UI Claims and CWBH Data? Arizona Department of Economic Security and Arizona State University. 81-2
NTIS PB83-140566. Price: $8.50

Paul Burgess, Jerry Kingston, Robert St. Louis and Joseph Sloane, Changes in Spending Patterns Following Unemployment, Arizona Department of Economic Security and Arizona State University. 81-3
NTIS PB83-148833. Price: $8.50

UI Research Exchange (semiannual). Information on unemployment insurance research. Second issue: 1981, Unemployment Insurance Service. 81-4
NTIS PB83-148429. Price: $14.50

Walter Corson and Walter Nicholson, An Analysis of UI Recipients' Unemployment Spells, Mathematica Policy Research. 83-1
(Will be available from NTIS)

Lois Blanchard and Walter Corson, A Guide to the Analysis of UI Recipients' Unemployment Spells Using a Supplemented CWBH Data Set, Mathematica Policy Research. 83-2
(Will be available from NTIS)

Ronald L. Oaxaca and Carol A. Taylor, The Effects of Aggregate Unemployment Insurance Benefits in the U.S. on the Operation of a Local Economy, University of Arizona. 83-3
(Will be available from NTIS)

APPENDIX

Instructions for Submittal of Items for UI Research Exchange

Items for inclusion should be camera-ready, on heavy-weight 8 by 10 1/2 inch bond paper. Margins should be one inch all around. Typing should be single spaced with double spaces between paragraphs and before headings.

For research projects planned or in progress, the descriptions should include the following (not exceeding one single-spaced typewritten page):

Study title
Problem to be studied
Method

- Any hypotheses to be tested
- Sampling design
- Data sources
- Method of analysis

Expected completion date
Name, address and telephone number of investigator/ contact person for project

For completed research projects, the description should include the following (not exceeding two single-spaced typewritten pages):

Study title
Author
Date of report or publication (if published)
Results, including findings and any conclusions and policy implications
Method

- Any hypotheses tested
- Sampling design
- Data sources
- Methods of analysis

Availability (name, address, phone number of provider)

Items should be mailed to:

John Robinson
Division of Actuarial Services
Office of Legislation and Actuarial Services
Unemployment Insurance Service
Employment and Training Administration
Department of Labor
601 D Street, N.W., Room 7402
Washington, D.C. 20213