

not a multiple of $\frac{1}{8}$ of 1 percent, the rate of interest is to be the multiple next lower than the average rate.

The interest provisions governing the investments of the unemployment trust fund have remained unchanged since the fund's establishment in 1936, and the rates for special obligations issued to it are determined in the same manner as for those issued to the old-age and survivors insurance trust fund. Investments in other issues must bear rates at least equal to those of special obligations.

Thus, the interest earnings of the unemployment trust fund and, from 1940 on, of the old-age and survivors insurance trust fund have been directly affected by Federal debt financing (table 3). During the war years, when the computed average rate on the interest-bearing Federal debt declined, the rate of earnings of the two social security trust funds also declined. In 1945 the computed average Federal interest rate began to rise, and this rate was reflected later in the interest rates earned by the social security trust funds. In the last half of the calendar year 1949, however, the average Federal interest rate declined slightly. On December 31, 1948, the average interest rate was 2.216 percent, while at the end of 1949 and 1950 it was 2.208 and 2.209 percent, respectively. During 1951, it rose to 2.310 percent and at the end of December was 2.308 percent.

During 1951, the old-age and survivors insurance trust fund acquired \$695 million of special certificates bearing $2\frac{1}{4}$ -percent interest and \$1,082 million of public issues bearing $2\frac{3}{4}$ -percent interest. At the end of 1951, the trust fund held, in addition, \$12,096 million in $2\frac{1}{8}$ -percent special certificates of indebtedness, \$4 million in $2\frac{1}{4}$ -percent Treasury bonds, \$1,135 million in $2\frac{1}{2}$ -percent Treasury bonds, and \$5 million in unamortized premiums.

The unemployment trust fund also acquired during 1951 some special certificates of indebtedness bearing $2\frac{1}{4}$ -percent interest and Treasury bonds yielding $2\frac{3}{4}$ -percent. At the end of December 1951, this fund held \$4 million in $2\frac{1}{4}$ -percent Treasury bonds, \$455 million in $2\frac{1}{2}$ -percent Treasury bonds, \$338 million in $2\frac{3}{4}$ -

Table 3.—Average interest rate on social security trust fund investments and interest-bearing public debt at end of specified period, 1936-51

At end of—	Computed average interest rate (percent)		
	Interest-bearing public debt	Old-age and survivors insurance trust fund investments	Unemployment trust fund investments
1936.....	2.570	-----	2.50
1937.....	2.568	3.00	2.50
1938.....	2.586	3.00	2.50
1939.....	2.598	3.00	2.50
1940.....	2.566	2.84	2.50
1941.....	2.409	2.66	2.49
1942.....	2.059	2.44	2.24
1943.....	1.956	2.22	1.89
1944.....	1.919	2.20	1.91
1945.....	1.965	2.14	1.93
1946.....	2.057	2.04	1.94
1947.....	2.144	2.09	2.05
1948.....	2.216	2.20	2.16
1949.....	2.208	2.20	2.16
1950.....	2.209	2.19	2.16
1951.....	2.308	2.20	2.18
1951			
January.....	2.224	2.19	2.16
February.....	2.224	2.19	2.16
March.....	2.227	2.19	2.16
April.....	2.243	2.20	2.17
May.....	2.247	2.20	2.17
June.....	2.270	2.20	2.17
July.....	2.267	2.20	2.17
August.....	2.281	2.20	2.18
September.....	2.283	2.20	2.18
October.....	2.310	2.20	2.18
November.....	2.307	2.20	2.18
December.....	2.308	2.20	2.18

Source: *Daily Statement of the U. S. Treasury.*

percent Treasury bonds, \$7,096 million in $2\frac{1}{8}$ -percent special certificates of indebtedness, \$533 million in $2\frac{1}{4}$ -percent special certificates of indebtedness, and \$1 million in unamortized premiums.

The two social security trust funds held investments totaling \$23,444 million at the end of 1951, of which \$20,420 million, or 87 percent, was in special obligations bearing $2\frac{1}{8}$ - and $2\frac{1}{4}$ -percent interest.

The Treasury also manages 10 other social insurance and related trust funds. The interest rates on most investments of these funds are higher than those for the two large social security funds.

All types of special Government securities outstanding at the end of 1951 totaled \$36 billion, of which the two social security trust funds held 57 percent. Other trust funds held most of the remainder. Among them, the national service life insurance fund held 14 percent, the civil-service retirement fund 13 percent, the railroad retirement account 7 percent, and

the Government life insurance fund 4 percent.

The securities held by the two social security trust funds comprised 9.1 percent of the total interest-bearing public debt (\$257 billion) at the end of 1951 and 8.2 percent at the end of 1950. The investments of these trust funds increased proportionately more than the public debt in 1951.

Survivor Protection, West Frankfort Mine Disaster

The old-age and survivors insurance system furnishes a substantial amount of survivor protection to insured employees.¹ A striking example of the protection provided in an individual instance is furnished by an analysis of the benefits payable for surviving dependents of workers killed in the mine disaster that occurred at West Frankfort, Illinois, on December 21, 1951.²

In this disaster there were 119 deaths. All the victims had fully insured status under the old-age and survivors insurance program. An actuarial analysis has been prepared from preliminary data furnished by the claimants on the ages of the widows and surviving children. Complete information on the amounts of the benefits was not available, however, pending final adjudication.

In addition to these general data, complete and specific data are available for one particular family that can be considered as "typical." Accordingly, analysis is possible both on an approximate basis for the entire group and on a more exact basis for the "typical" case.

A brief statistical analysis of the entire group shows that, of the 119 victims of the disaster, 107—or 90 percent—left widows. Seventy-six of these widows, or about 70 percent, had at least one child under age 18. The age distribution of the widows is shown on the following page.

¹ For a general summary of the protection provided see "Survivor Protection as of January 1, 1951," *Social Security Bulletin*, January 1952.

² For an analysis of the old-age and survivors insurance protection in connection with a previous and much larger disaster see Robert J. Myers, "Insurance Payments to Survivors of the Texas City Disaster," *Social Security Bulletin*, September 1947.

Age of widow	Number of widows	
	Total	With children
Total.....	107	76
Under 30.....	27	24
30-39.....	45	37
40-49.....	27	15
50 and over.....	8	0

The average age of the widows is about 36¾ years; almost half are between the ages of 30 and 40, and only 8 are over age 50 (the oldest is age 62). As would be anticipated, the great majority of the younger widows have children, while a much smaller proportion of the older ones have children.

The total number of children orphaned as a result of the mine disaster is 171, or an average of 2¼ children per family with children. In all instances where surviving children were left, there was also a surviving widow. The age distribution of the children is as follows:

Age	Number of children
Total.....	171
Under 5.....	38
5-9.....	50
10-14.....	57
15-17.....	26

In making an actuarial analysis of the entire group, calculations have been made of the total amount of survivor benefits that will be payable as a result of the disaster and also of the present value of these benefits, discounting the payments at 2½ percent interest. The calculations take into account mortality, using the rates of the United States White Female Life Table for 1939-41 (but disregarding mortality of children). All benefits are considered, including the deferred widow's benefits at age 65. The figures do not, however, allow for possible withholding or reduction in the benefits because of the beneficiary's covered employment or because a widow receives an old-age benefit in her own right, or for termination of benefits due to the widow's remarriage or to the marriage or death of the children.

Since no data are, as yet, available

on the size of the benefits, it has been assumed that the average primary insurance amount will be \$55. This figure might at first appear to be relatively high, considering the amounts being paid to those now on the rolls, but it seems likely that this group of miners had, on the whole, relatively high pay and steady employment in recent years. Moreover, many of these miners were apparently relatively young so that the low pre-war wages would not have an important effect, and many undoubtedly received wage credits for military service.

On this basis the total amounts payable with respect to the 119 deaths and the present value of these amounts can be summarized as follows:

Type of benefit	Total payable	Present value
Total.....	\$1,463,000	\$1,034,000
Widow's (aged 65).....	503,000	201,000
Mother's.....	415,000	360,000
Child's.....	525,000	453,000
Lump-sum.....	20,000	20,000

In brief, there will be close to \$1½ million payable, the present value of which is about \$1 million or an average of about \$8,700 per death.

As indicated previously, the above figures represent, in effect, the maximum potential benefits payable. If allowances were made for possible withholding or reduction of benefits, which would affect particularly widow's benefits and mother's benefits (with a reduction of perhaps 50 percent) and to a lesser extent child's benefits (with a reduction of perhaps 5 percent), the total amount payable would drop to about \$1 million, with a present value of about \$750,000. It should be mentioned that in some instances the withholding of mother's benefits because of the widow's employment or the termination of benefits because of her remarriage would be partially offset because the child's benefits might be increased in instances where the maximum benefit provisions had originally applied.

The illustrative "typical" case is the family of John D. Thomas, Sr., whose widow has given permission for

publication of the facts concerning her claim. Mrs. Thomas is 29 years old and has a daughter Brenda, aged 9, and a son John, aged 5. The primary insurance amount is \$60.30, so that Mrs. Thomas' benefit is \$45.30 a month, while each of the children receives \$37.70 a month, making the total family benefit \$120.70. As long as the three beneficiaries do not engage in substantial covered employment and until Brenda attains age 18, this amount will be continued. When Brenda is 18, her benefit will be discontinued and John's benefit will be increased to \$45.30, making a total family benefit of \$90.60. When John attains age 18, monthly benefits will cease, but when Mrs. Thomas reaches age 65 she will again receive her benefit of \$45.30, assuming that she has not remarried or earned an old-age benefit in her own right through her own covered employment (in which case she receives, in effect, the larger of the two benefits). If Mrs. Thomas were to remarry before her children attained age 18, the monthly benefit described above would no longer be payable to her, but the children would continue to receive the amounts described. In addition to the monthly benefits, a lump-sum death payment of \$180.90 is immediately available to Mrs. Thomas.

The total benefits payable, as well as their present value based on a 2½-percent interest rate, may be calculated for Mrs. Thomas and her two children just as it was for the entire group. These calculations have been made on the "gross" basis indicated previously, taking into account mortality but disregarding the other factors—such as the withholding or reduction of benefits because of employment, the termination of benefits because of remarriage of the widow, and the mortality or marriage of the children. The resulting figures are as follows:

Type of benefit	Total payable	Present value
Total.....	\$22,211	\$16,410
Widow's (aged 65).....	5,479	1,853
Mother's.....	6,686	5,762
Child's.....	9,865	8,614
Lump-sum.....	181	181

The maximum potential benefits payable, considering mortality, are thus somewhat in excess of \$22,000 in this particular case; the present value of the benefits is about \$16,000.

This brief and crude actuarial

analysis indicates vividly the manner in which old-age and survivors insurance furnishes an appreciable measure of protection for the workers of the country against wage loss due to death. A disaster such as the

West Frankfort mine explosion is, fortunately, rare. It gives, however, a striking illustration of the protection that is available and is being furnished currently for roughly 62 million insured workers.

Recent Publications*

Social Security Administration

CHILDREN'S BUREAU. *Motion Pictures on Child Life—A List of 16mm Films*. Compiled by Inez D. Lohr. Washington: U. S. Govt. Print. Off., 1952. 61 pp.

Includes films on adolescence, child care and development, handicapped children, juvenile delinquency, maternity care, nutrition, and related subjects. Limited free distribution; apply to the Children's Bureau, Social Security Administration, Washington 25, D. C.

General

ASCH, SIDNEY H. *Social Security: Federal and State Laws*. (Legal Almanac Series, No. 26.) New York: Oceana Publications, 1952. 80 pp. \$1.

BUELL, BRADLEY, AND ASSOCIATES. *Community Planning for Human Services*. New York: Columbia University Press, 1952. 464 pp. \$5.50.

Discusses the four major areas with which community services are concerned—dependency, ill health, maladjustment, recreational need—and considers the best methods of protecting the community against the consequences of these hazards.

FEDERAL SECURITY AGENCY. LIBRARY. *Selected Readings in the Field of Social Welfare Published in the United States of America in 1951*. Washington: The Library, December 1951. 30 pp. Processed. Limited free distribution; apply to the Federal Security Agency Library, Washington 25, D. C.

INTERNATIONAL LABOR OFFICE. *Year Book of Labour Statistics, 1949-1950*. (11th issue.) Geneva: The Office, 1951. 431 pp. \$5.

MARSH, DAVID C. *National Insurance*

* Prepared in the Library, Federal Security Agency. Orders for the publications listed should be directed to publishers or booksellers; Federal publications for which prices are listed should be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

and Assistance in Great Britain. London: Sir Isaac Pitman & Sons, Ltd., 1950. 187 pp. 12s.

U. S. PRESIDENT. *The Economic Report . . .* (H. Doc. 303, 82d Cong., 2d sess.) Washington: U. S. Govt. Print. Off., 1952. 220 pp.

Summarizes economic developments in 1951 and outlines the most important issues that must be met in 1952. Includes the Annual Economic Review, prepared for the President by the Council of Economic Advisers.

U. S. WAGE STABILIZATION BOARD. *Health, Welfare and Pension Programs Under Wage Stabilization: Report to the Wage Stabilization Board by the Tripartite Panel on Health, Welfare and Pension Plans*. Washington: The Board, Oct. 22, 1951. 60 pp. Processed.

WHELPTON, P. K., and GRAUMAN, JOHN V. "Population: Prospects and Problems in 1960." *Dun's Review*, New York, Jan. 1952, pp. 13-16 ff. 35 cents.

Retirement and Old Age

Conference on Problems of Aging. Transactions of the Thirteenth Conference February 5-6, 1951, New York, N. Y. Nathan W. Shock, editor. New York: Josiah Macy, Jr. Foundation, 1951. 194 pp. \$4.

Considers certain medical aspects of the aging process.

ILLINOIS. UNIVERSITY. INSTITUTE OF LABOR AND INDUSTRIAL RELATIONS. *Collective Bargaining for Pensions*. Champaign, Ill.: The Institute, 1951. 52 pp. \$2.

NEW YORK (STATE). JOINT LEGISLATIVE COMMITTEE ON PROBLEMS OF THE AGING. *No Time to Grow Old*. (Legislative Document No. 12, 1951.) Albany: The Committee, 1951. 316 pp. Free copies may be obtained from State Senator Thomas C. Desmond, Chairman, 94 Broadway, Newburgh, N. Y.

Includes Local Community Planning for the Aging, by the Community Chests and Councils of America; The States and the Aged, by Albert J. Abrams; The Role of Old-Age and Survivors Insurance in a Defense Economy, by Robert M. Ball; Older Workers and Older Women, by Frieda S. Miller; Workshop on Recreation for

Older Persons, by Ollie A. Randall; and Trends in Old Age Homes and Housing for the Aged in Various Parts of the World, by Albert J. Abrams.

PRINCETON. UNIVERSITY. DEPARTMENT OF ECONOMICS AND SOCIAL INSTITUTIONS. INDUSTRIAL RELATIONS SECTION. *Timing Retirement*. (Selected References, No. 43.) Princeton: The Section, Jan. 1952. 4 pp.

SALOMON, IRVING. *Retire and Be Happy*. New York: Greenberg Publishers, 1951. 205 pp. \$2.95.

A study of the experiences and viewpoints of 405 retired men.

"Social Contributions by the Aging." *Annals of the American Academy of Political and Social Science*, Philadelphia, Vol. 279, Jan. 1952, entire issue.

Includes a Philosophy of Aging, by Clark Tibbitts and Henry D. Sheldon; Social and Psychological Needs of the Aging, by Robert J. Havighurst; Barriers to the Employment of the Older Workers, by Albert J. Abrams; Family Living in the Later Decades, by Ernest W. Burgess; and Income Maintenance for the Aged, by Wilbur J. Cohen.

Employment

BACKMAN, JULES. *Multi-Employer Bargaining*. New York: New York University, Institute of Labor Relations and Social Security, 1951. 80 pp. \$1.75.

Surveys the economic characteristics of industries with various types of multi-employer bargaining.

CAMPBELL, JEAN. "Retirement and Employment Problems of the Older Worker." *Monthly Labor Review*, Washington, Vol. 73, Dec. 1951, pp. 695-699.

CHAMBERLAIN, NEIL W. *Collective Bargaining*. New York: McGraw-Hill Book Co., Inc., 1951. 534 pp. \$6.

ODELL, CHARLES E. "Employment Problems of the Older Worker." *Journal of Rehabilitation*, Washington, Vol. 18, Jan.-Feb. 1952, pp. 3-6 ff. \$2 a year.

Public Welfare and Relief

AMERICAN ASSOCIATION OF SOCIAL WORKERS. *Social Work Fellowships* (Continued on page 27)