

We know that total earnings for workers in this part of the distribution is

$$T(y) = \int_x^{\infty} x dy \\ = \frac{k}{\alpha-2} x^{2-\alpha}$$

Then the average wage paid to workers with at least x_4 dollars is

$$\text{Average} = \frac{\text{Total wages}}{\text{Total workers}} = \frac{\frac{k}{\alpha-2} x_4^{2-\alpha}}{\frac{k}{\alpha-1} x_4^{1-\alpha}} = \frac{\alpha-1}{\alpha-2} x_4$$

Note, then, that we may calculate the average wage using only known quantities.

Then the total wages for Y_4 workers may be expressed as:

$$\text{Total wages} = Y_4 \left(\frac{\alpha-1}{\alpha-2} \right) x_4$$

Federal Coal Mine Health and Safety Act of 1969*

On December 30, 1969, President Nixon signed the Federal Coal Mine Health and Safety Act of 1969 (P.L. 91-173). The law is primarily designed to establish nationwide health and safety standards for the coal-mining industry. It also includes an income-maintenance provision that is of unusual interest since it gives the Federal Government a temporary responsibility in the area of workmen's compensation. Under title IV of the new law, monthly cash benefits are provided for coal miners who are "totally disabled" because of pneumoconiosis ("black lung" disease) and for their dependents and survivors.

Two Federal agencies—the Department of Health, Education, and Welfare and the Department of Labor—will be involved in administering the cash benefit provisions. As the result of modifications made by the House-Senate conference committee in the bills originally passed by each House, the Department of Health, Education, and Welfare (through the Social Security Administration) will be responsible for the payment and administration of benefit claims filed before January 1, 1973. The Department of Labor will have the responsibility for claims filed after December 31, 1972.

The monthly benefits payable by the Social

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Security Administration to a miner disabled by pneumoconiosis or to the widow of a miner who died with the disease will be a flat amount—about \$136 at the present. (The amount of the benefit will be equal to 50 percent of the minimum monthly payment to which a totally disabled Federal Government employee in the first step of grade GS-2 would be entitled under the Federal Employees' Compensation Act.) For one dependent (wife or child¹) an additional 50 percent of the miner's benefit will be payable and the total payment will thus be about \$204. For two dependents, the additional amount will be 75 percent of the benefit (a total of \$238), and for three or more it will be 100 percent (a total of \$272). If the deceased miner does not leave an eligible widow, however, no survivor benefits are payable (even when there are surviving children who were paid the supplemental benefits while the miner was alive).

Benefit payments to a miner or his widow will be reduced if the beneficiary is also receiving payments under the workmen's compensation, unemployment insurance, or disability insurance² programs of a State on account of the disability of the miner. Benefits paid to miners (but not widows) will also be subject to an earnings test, the provisions of which will be the same as the retirement test provisions under the Social Security Act. The law specifies that benefit payments will not be subject to Federal income tax.

To be eligible for the benefits paid by the Social Security Administration, the disabled miner must file his claim before January 1, 1973. A widow's claim must be filed within 6 months after the death of her husband or by December 31, 1972, whichever is later. Benefits are payable to a widow of a miner if he was receiving "black lung" benefits before his death or if he died from the disease.

In addition, the program provides that if a claim is filed after December 31, 1971, but before January 1, 1973, the claimant can receive benefits from the Social Security Administration only through December 31, 1972. The benefits will con-

¹ The definition of child follows that in the Federal Employees' Compensation Act. Thus, benefits are payable to an unmarried child who is under age 18, totally disabled, or a full-time student under age 23.

² Temporary disability insurance laws are in operation in California, Hawaii, New Jersey, New York, Rhode Island, and Puerto Rico.

tinue indefinitely for claimants who filed for benefits before 1972, as well as for widows on the death of a miner who was a beneficiary under the program.

The benefits are not retroactive--that is, no benefits will be paid for any period before the date on which a claim for them is filed. In order to assure that all persons get the full benefits to which they are entitled, the Social Security Administration began immediately to accept protective applications. Those who qualify will thus be able to draw benefits from the date of filing even if some of the legal questions regarding the law are not resolved.

The law provides that, to the extent feasible, personnel and procedures used in processing disability insurance claims under the Social Security Act will be used in processing claims for "black lung" benefits. The Secretary of Health, Education, and Welfare is authorized to prescribe the standards for determining whether a miner is totally disabled or died as a result of pneumoconiosis, but such standards must not be more restrictive than the criteria applicable in making disability determinations under the Social Security Act. The new law also provides that claimants may be reimbursed for reasonable medical expenses incurred by them in establishing their claims.

"Pneumoconiosis," for the purpose of these benefits, is defined as a chronic dust disease of the lung arising out of employment in an underground coal mine. If a miner who is suffering or has suffered from the disease was employed in one or more underground coal mines for 10 or more years, there is a rebuttable presumption that his disease arose out of such employment. If a deceased miner was so employed and died from a respiratory disease, there is also a rebuttable presumption that death was the result of the disease. If a miner is suffering from or dies having an advanced irreversible state of pneumoconiosis, it will be irrebuttably presumed that he is totally disabled or his death was caused by the disease.

The benefits and costs of administration will be borne through the general funds of the Treasury and will require special appropriations. Benefit costs of the program are roughly estimated at \$200 million for the first full fiscal year of operation, which ends June 30, 1971.

The law includes a "maintenance of effort"

provision under which any reduction by a State in its workmen's compensation, unemployment insurance, or disability benefits for persons eligible to receive the "black lung" benefits will result in a stoppage of the Federal payments to residents of that State. An exception is to be made where the State program is funded through general revenues (in contrast to funding by employer contributions). Pennsylvania appears to be the only State that provides benefits to victims of the disease through a program funded in some instances through general revenues.

One of the questions that had to be resolved is whether the "black lung" benefits are to be considered workmen's compensation payments for purposes of applying the workmen's compensation offset provisions contained in the disability insurance provisions of the Social Security Act. The workmen's compensation offset provides that a disabled worker under age 62 who is also receiving periodic workmen's compensation benefit may have his disability insurance benefit under the Social Security Act reduced so that the total benefits payable to him and his dependents under both programs will not exceed 80 percent of his average monthly earnings before he became disabled.

For benefit claims filed after 1972, overall responsibility for the program will shift to the Department of Labor. Such claims will be processed under State workmen's compensation laws in those States with laws that are approved by the Secretary of Labor as providing adequate coverage for pneumoconiosis. Generally speaking, a State law will be determined to have adequate coverage for pneumoconiosis if the cash benefits under such law and the criteria for determining eligibility are not less favorable to the claimant than those applicable to claims filed before January 1, 1973.

Where a State workmen's compensation law does not have the approval of the Secretary of Labor, coal mine operators will be liable for payment of benefits that are to be secured through self-insurance or purchase of an insurance policy. In such cases, the benefit levels are to be the same as those provided under the federally financed part of the program and are to be made under the same conditions that would apply if the claim were subject to the provisions of the Federal Longshoremen's and Harbor Workers' Comp-

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TABLE M-4.—Selected social insurance and related programs: Contributions and taxes collected, 1939-69

[In thousands]

Period	Retirement, disability, and survivor				Hospital insurance under OASDHI ^{1,2,3}	Unemployment		
	Old-age and survivors insurance ^{1,2}	Disability insurance ^{1,2}	Federal civil service ³	Railroad retirement ^{2,4}		State unemployment insurance ⁶	Federal unemployment taxes ⁷	Railroad unemployment insurance ⁸
Fiscal year:								
1939-40.....	\$604,694		\$131,880	\$120,967		\$853,955	\$107,523	\$49,167
1944-45.....	1,509,919		486,719	285,038		1,251,958	184,544	131,993
1949-50.....	2,106,388		662,262	550,172		1,094,406	226,306	18,855
1954-55.....	5,087,154		469,856	600,106		1,142,009	279,986	23,720
1959-60.....	9,842,685	\$987,079	1,509,695	606,865		2,164,757	341,108	161,912
1960-61.....	11,292,676	1,022,002	1,745,833	570,713		2,361,279	345,356	161,308
1961-62.....	11,454,643	1,020,866	1,759,409	564,218		2,709,253	452,638	155,259
1962-63.....	13,327,762	1,076,621	1,884,796	571,534		3,005,409	945,367	157,682
1963-64.....	15,502,726	1,143,161	2,036,419	593,477		3,043,408	846,567	156,057
1964-65.....	15,867,212	1,175,244	2,182,203	635,545		3,046,428	614,891	152,300
1965-66.....	17,865,947	1,556,652	2,277,013	683,458	\$908,797	2,961,878	561,014	148,411
1966-67.....	22,567,002	2,249,397	2,469,071	776,493	2,704,884	2,911,247	596,773	145,665
1967-68.....	22,662,430	2,699,368	2,724,981	814,399	3,557,662	2,597,675	600,960	139,591
1968-69.....	25,962,737	3,832,434	2,818,825	884,746	4,477,012	2,555,110	633,178	134,401
1968								
November.....	2,417,957	269,593	226,494	145,281	339,644	299,201	568	8,987
December.....	1,347,238	217,824	255,942	71,543	268,419	14,048	88	24,629
1969								
January.....	1,382,610	198,689	266,515	11,354	246,744	100,265	100,836	444
February.....	2,966,019	387,941	221,089	143,235	492,186	237,492	505,489	8,984
March.....	1,982,203	257,153	236,824	83,074	337,877	15,365	9,751	24,065
April.....	2,774,957	366,544	247,554	8,101	418,377	288,236	4,860	709
May.....	3,637,913	442,640	230,121	138,607	568,545	684,773	5,888	5,885
June.....	1,960,690	208,746	194,181	73,925	345,374	16,705	964	25,076
July.....	1,974,809	250,940	349,774	12,283	318,187	238,906	854	549
August.....	3,431,296	383,176	265,706	93,359	545,002	487,728	971	5,645
September.....	2,026,639	313,506	254,512	82,791	389,955	15,339	903	26,917
October.....	1,622,782	205,697	263,876	15,512	252,331	144,703	946	523
November.....	2,688,816	334,080	225,715	151,449	421,732	298,626	607	6,478

¹ Represents contributions of employees, employers, and the self-employed in employments covered by OASDHI under the Social Security Act, on an estimated basis, with suitable subsequent adjustments. Data for earlier years reflect former appropriation bases. Includes deposits by States under voluntary coverage agreements. Employee-tax refunds deducted. Excludes transfers from general revenues.

² Excludes transfers between OASDHI system and railroad retirement account under the financial interchange provisions of the Railroad Retirement Act.

³ Represents employee and employing agency (Government) contributions. Employee share includes voluntary contributions to purchase additional annuity. Data reported by Federal Civil Service Commission.

⁴ Beginning 1959, net of tax refunds. Excludes contributions for hospital insurance coverage of railroad workers.

⁵ Excludes reimbursement from Treasury general funds for cost of benefits for persons not insured for cash benefits under OASDHI or railroad retire-

ment. Includes contributions for hospital insurance coverage of railroad workers under the Social Security Amendments of 1965; excludes interest thereon.

⁶ Represents deposits in State clearing accounts of contributions plus penalties and interest collected from employers and contributions from employees (3 States in recent years). Excludes contributions collected for deposit in State temporary disability insurance funds. Data reported by State agencies.

⁷ Represents taxes paid by employers under the Federal Unemployment Tax Act. Beginning 1961, net of tax refunds. Includes tax proceeds for financing temporary extended unemployment compensation programs for 1958 and 1961.

⁸ Beginning 1947, also covers railroad temporary disability insurance.

Source: *Monthly and Final Statement of Receipts and Expenditures of the U.S. Government* and other Treasury reports, unless otherwise noted.

COAL MINE LEGISLATION

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sation Act. Benefit payments will be reduced by the amount of any Federal or State workmen's compensation cash payments made for the same disease. Where payment from a coal mine operator or his insurer cannot be obtained, the Secretary of Labor will make the payments to which a totally disabled miner or his widow is entitled under the Federal Coal Mine Health and Safety Act. For such claims filed later than December

31, 1972, no payment of benefits by coal mine operators or their insurers may be required after 7 years following the date of enactment.

The new legislation requires that an approved State workmen's compensation law must contain provisions governing the liability of successor coal operators. These provisions are intended to prevent any operator from escaping liability for paying compensation by the expedient of transferring ownership of the mine before January 1, 1973.