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Bibliography

- Adams, F. G. "The Size of Individual Incomes: Socio-Economic Variables and Chance Variation." *Review of Economic Statistics*, November 1958.
- Aitchison, J., and Brown, J. A. C. *The Lognormal Distribution*. England: Cambridge University Press, 1957.
- Bates, W. D. "A Formula for Finding the Skewness of the Combination of Two or More Samples." *Journal of the American Statistical Association*, March 1935.
- Becker, G. S. *Human Capital*. New York: NBER, 1964.
- . "Human Capital and the Personal Distribution of Income." *W. S. Woytinsky Lecture No. 1*. Ann Arbor: University of Michigan, 1967.
- Becker, G. S., and Chiswick, B. R. "Education and the Distribution of Earnings." *American Economic Review*, May 1966.
- Becker, G. S., and Ghez, G. "The Allocation of Time and Goods Over the Life Cycle." Processed. New York: NBER, 1972.
- Ben-Porath, Y. "The Production of Human Capital and the Life-Cycle of Earnings." *Journal of Political Economy*, August 1967.
- . "The Production of Human Capital Over Time." In *Education, Income and Human Capital*. Studies in Income and Wealth 35. New York: NBER, 1970.
- Birren, J. E. "Psychological Aspects of Aging." In *International Encyclopedia of the Social Sciences*, Vol. 1, 1968.
- Bjerke, K. "Income and Wage Distributions." Processed. Copenhagen: May 1969.
- Blum, Z. D. "Income Changes During the First Ten Years of Occupational Experience." Report No. 122, Center for Social Organization of Schools. Baltimore: Johns Hopkins University Press, 1972.
- Bowen, W., and Finegan, T. *The Economics of Labor Force Participation*. Princeton, N.J.: Princeton University Press, 1969.
- Box, G., and Cox, D. "An Analysis of Transformations." *Journal of the Royal Statistical Society, Series B*, 1964.
- Cain, G. G. *Married Women in the Labor Force*. Chicago: University of Chicago Press, 1966.
- Chiswick, B. R. "Human Capital and Personal Income Distribution by Region." Ph.D. dissertation. Columbia University, 1967.

- . "Income Inequality: Regional Analyses Within a Human Capital Framework." Work in progress. New York: NBER, 1973.
- Chiswick, B. R., and Mincer, J. "Time-Series Changes in Personal Income Inequality." *Journal of Political Economy*, May 1972.
- Craig, C. C. "On the Frequency Function of XY." *Annals of Mathematical Statistics*, March 1936.
- Folger, J. K., and Nam, C. B. *Education of the American Population*. Census Monograph, 1967.
- Friedman, M. *A Theory of the Consumption Function*. Princeton, N.J.: Princeton University Press, 1957.
- Fuchs, V. R. *Differentials in Hourly Earnings by Region and City Size*. Occasional Paper 101. New York: NBER, 1967.
- . "Differences in Hourly Earnings Between Men and Women." *Monthly Labor Review*, May 1971.
- Goodman, L. "On the Exact Variance of Products." *Journal of the American Statistical Association*, December 1960.
- Griliches, Z., and Mason, W. "Education, Income and Ability." *Journal of Political Economy*, May 1972.
- Grossman, M. *The Demand for Health*. Occasional Paper No. 119. New York: NBER, 1972.
- Hanoch, G. "An Economic Analysis of Earnings and Schooling." *Journal of Human Resources*, Summer, 1967.
- Hansen, W. L. "Total and Private Rates of Return to Investment in Schooling." *Journal of Political Economy*, April 1963.
- Hause, J. C. "Earnings Profile: Ability and Schooling." *Journal of Political Economy*, May/June 1972, Part 2.
- Heckman, J., and Polachek, S. "The Functional Form of the Income-Schooling Relationship." Processed. New York: NBER, 1972.
- Hill, T. P. "An Analysis of the Distribution of Wages and Salaries in Great Britain." *Econometrica*, 1959.
- Jencks, C., et al. *Inequality*. New York: Basic Books, 1972.
- Johnson, T. "Returns from Investment in Schooling and On-the-Job Training." Ph.D. dissertation. North Carolina State University at Raleigh, 1969.
- Juster, F. T. *Anticipations and Purchases*. New York: NBER, 1964.
- Juster, F. T., ed. *Education, Income, and Human Behavior*. Carnegie Commission on Higher Education. New York: McGraw-Hill, 1974.
- Koeune, J. C. "The Obsolescence of Human Capital." Ph.D. dissertation. Columbia University, 1972.
- Kuratani, M. "Specific Training and Income Distribution in Japan." Ph.D. dissertation. Columbia University, 1973.
- Leibowitz, A. "Education and Allocation of Women's Time." Processed. New York: NBER, 1972.
- Lydall, H. "The Long Term Trend in the Size Distribution of Income." *Journal of The Royal Statistical Society, Series A, Part I*, 1959.
- . *The Structure of Earnings*. New York: Oxford University Press, 1968.

- Malkiel, J., and Malkiel, B. "Sex Differentials in Earnings." Processed. Princeton University, 1971.
- Metcalf, D. "Income Distribution in the Business Cycle." *American Economic Review, Papers and Proceedings*, May 1971.
- Miller, H. P. Census Bureau Technical Paper No. 8, 1963.
- . "Education and Lifetime Income." *Current Population Survey*, 1967.
- Mincer, J. "A Study of Personal Income Distribution." Ph.D. dissertation. Columbia University, 1957.
- . "Investments in Human Capital and Personal Income Distribution." *Journal of Political Economy*, August 1958.
- . "Labor Supply, Family Income and Consumption." *American Economic Review*, May 1960.
- . "Labor Force Participation of Married Women." In *Aspects of Labor Economics*. Universities-National Bureau Conference 14. Princeton, N.J.: Princeton for NBER, 1962 (1962a).
- . "On-the-Job Training: Costs, Returns and Some Implications." *Journal of Political Economy*, Supplement, October 1962 (1962b).
- . "The Distribution of Labor Incomes: A Survey." *Journal of Economic Literature*, March 1970.
- . "Education, Experience and the Distribution of Employment and Income. In Juster, ed. (1973).
- Mincer, J., and Polachek, S. "Family Investments in Human Capital: Earnings of Women." *Journal of Political Economy*, March 1974.
- Morgan, J., et al. *Income and Welfare in the United States*. New York: McGraw-Hill, 1962.
- . "The Anatomy of Income Distribution." *Review of Economic Statistics*, August 1962.
- Polachek, S. "Post-School Investments and Sex Differentials in Earnings." Ph.D. dissertation. Columbia University, 1973.
- Reder, M. "A Partial Survey of the Theory of Income Size Distribution." In *Six Papers on the Size Distribution of Income and Wealth*. Studies in Income and Wealth 33. New York: NBER, 1969.
- Rosen, S. "Measuring the Obsolescence of Knowledge." In Juster, ed. (1974).
- Rutherford, R. S. G. "Income Distributions: A New Model." *Econometrica*, July 1955.
- Schultz, T. P., "Long Term Change in Personal Income Distributions," AEA meetings, December 1971.
- Solmon, L. "Education and Saving." In progress. New York: NBER.
- . "The Relationship Between Schooling and Savings Behavior: An Example of the Indirect Effects of Education." Processed. New York: NBER, 1972.
- Solmon, L., and Wachtel, P. "Effects of Schooling Quality on Earnings." Processed. New York: NBER, 1972.
- Stigler, G. "Information in Labor Markets." *Journal of Political Economy*, October 1962:

- . *Capital and Rates of Return in Manufacturing Industries*. New York: NBER, 1963.
- Taubman, P., and Wales, T. *Mental Ability and Higher Educational Attainment in the Twentieth Century*. New York: NBER, 1972.
- Thurow, L. *Poverty and Discrimination*. Washington, D.C.: The Brookings Institution, 1969.
- Tolles, N. A., et al. "The Structure of Economists' Employment and Salaries, 1964." *American Economic Review, Supplement*, December 1965.
- Tolles, N. A., and Melichar, É. "Studies of the Structure of Economists' Salaries and Income." *American Economic Review, Supplement*, December 1968.
- U.S. Bureau of the Census. *Current Population Reports, Consumer Income*, P-60, No. 56, August 1968.
- U.S. Department of Labor, Bureau of Labor Statistics. *Seniority in Promotions and Transfer Provisions*. Bulletin 1425. March 1970.
- U.S. Department of Labor, Bureau of Labor Statistics. *Educational Attainment of Workers*. Special Labor Force Report No. 83. March 1970.
- Weiss, Y. "Investment in Graduate Education." *American Economic Review*, December 1971.
- Welch, F. "Black-White Differences in Returns to Schooling." In "Research into Poverty Labor Markets." Processed. New York: NBER, 1972.

Index

- Ability: and distribution of human capital, 138–140; and earnings function, 140; measures of, 2–3, 22*n*, 138–139, 140; and promotion, 81; and schooling, 132
- Adams, F. G., 105*n*
- Adaptation, 22*n*
- Age: and biopsychological development, 76, 80; and depreciation of human capital stock, 47, 129; and earnings profiles, 28–30, 76–80, 84, 132; and growth of individual earnings, 129, 132; and income inequality, 107–109; and weeks worked, 121. *See also* Age profiles
- Age profiles: defined, 64; of earnings, 30, 65–70, 101, 110; and income by schooling cohorts, 78; and investment behavior, 64–65
- Aitchison, J., 111*n*
- Apprenticeship, 20, 81, 82
- Becker, G. S., 12–14, 19*n*, 23*n*, 27*n*, 43*n*, 44, 50*n*, 54, 55, 65*n*, 73*n*, 75*n*, 120, 137–138, 140*n*
- Ben-Porath, Y., 14–16, 43*n*, 75*n*
- Biopsychological development, 76, 80, 132
- Birren, J. E., 22*n*
- Bjerke, K., 113
- Blum, Z. D., 59
- Bowen, W., 124
- Box, G., 89*n*
- Brown, J. A. C., 111*n*
- Cain, G. G., 124
- Chiswick, B. R., 19*n*, 43*n*, 44, 60–61, 63*n*, 121*n*
- Collective bargaining agreements, 80–82
- College graduates: earning capacity of, 103–109; earnings of, 110–113, 136; and post-school investments, 74; rates of return to, 53, 55
- Competition, 132
- Consumer, "planning horizon" of, 120*n*
- Consumers Union Panel, 117–118, 136–137
- Consumption, 120, 123–125, 136
- Cox, D., 89*n*
- Craig, C. C., 111
- Depreciation of human capital stock, 20–22, 129, 142
- Earning capacity: and hours of work, 22–23; and increase in investment, 28–29; initial, 12, 17, 33–34, 90, 103–106; peak of, 20–22
- Earning life. *See* Working life
- Earnings: age profiles of, 12–13, 30, 101, 110; analysis of log variances of, 103–109; annual, 22–23, 48, 70*n*, 106, 114, 123, 131; changes in, 8; as constant for individual, 8; cost of deferral of, 7, 9–11; determinants of dispersion of, 27, 35–36; distribution of, 36–37; of economists, 77–80; and experience, 13, 45, 47, 65, 77–80, 132; family, 123–125; formation of, 89–90; hourly, 71, 131; and human capital investment, 138–140; of husbands, 126; of individuals, 24–25, 89–92, 115–116; intergroup differentials in, 75; observed, 12*n*; of omitted groups, 125–127; at overtaking age, 108–109, 113, 118, 133; in overtaking sets, 53–55; of post-school investors vs. noninvestors, 32–33; rate of growth of variances in, 98–102; and schooling, 11, 44, 70, 88–89, 92; of scientists, 77–80; skewness in marginal distributions of, 112; "skill" structure of,

- Earnings (*continued*)
 134–135; of students, 7–8, 49*n*, 52*n*, 125; value of lifetime, 10; weekly, 65, 68–70, 131; and weeks worked, 134; of women, 121–125. *See also* Earnings profiles; Gross earnings; Income inequality; Net earnings
- Earnings inequality. *See* Income inequality
- Earnings profiles: and age, 5–51, 70–73, 76–80, 84; of cohorts, 76–80; and consumption, 120; defined, 11; and experience, 47, 70–73; human capital analysis of, 12–20; of individuals, 2; instability in, 65*n*; intragroup dispersion in, 75–76; and investment model, 64–65; and investment profile, 17, 32–33, 74–76, 129–130; non-neutrality in growth of, 77; and schooling, 122; of women, 122. *See also* Earnings; Income inequality
- Economists, earnings of, 77–80
- Economy, secular trends in, 76–77
- Education: expenditures on, in New York State, 55; growth of public subsidies to, 75; parental, 139*n*, 140; preschool, 140–141; and promotion, 81–82; quality of, 133; rates of return to, 50; and schooling, 1. *See also* Schooling
- Elementary-school graduates: earning capacity of, 103–109; earnings of, 110–113, 136; and post-school investments, 74; rates of return to, 53, 55
- Employers, 136, 142
- Employment: distribution of, 121–125, 141–142; seasonal, 54, 81; sex differences in, 123; stability of, 107, 111, 119–121; turnover in, 54, 81, 119–121
- Experience: as chronological time, 28; continuous, 84; and earnings, 29–30, 47, 67–69, 92, 100, 104, 105, 107–109, 132; first decade of, 58–59; information on, 129–130; initial, 12, 98–99; measuring years of, 47; overtaking year of, 49, 51, 98–99; and peak earnings stage, 98–99; second decade of, 107
- Family, earnings of, 123–125
- Farm workers, 125–127
- Financing, access to, 75
- Finegan, T., 124
- Folger, J. K., 61*n*
- Friedman, M., 119
- Fuchs, V. R., 122*n*
- Ghez, G., 23*n*
- Goodman, L., 27*n*
- Griliches, Z., 140*n*
- Gross earnings, 16, 32, 86, 87–88, 130–131, 133
- Gross investment, 20–22
- Grossman, M., 142*n*
- Hanoch, G., 8*n*, 44, 47, 48*n*, 49*n*, 54
- Hansen, W. L., 44, 54
- Hause, J. C., 140*n*
- Health: and distribution of employment, 142; and earnings, 54, 142; investments in, 7, 22*n*, 142; and limitations of work activities, 22*n*; and schooling, 54
- Heckman, J., 89
- High-school graduates: earning capacity of, 103–109; earnings of, 110–113, 136; and post-school investments, 74; rates of return to, 53, 55
- Hill, T. P., 105*n*, 112*n*
- Home environment, 2, 140–141
- Human capital: and ability measures, 2–3; accumulation of, 13–16, 82, 112, 140; depreciation of, 22–23, 47, 64*n*, 142; distribution of, 138; employer investments in, 137; gross investments in, 15–16; net investments in, 2; production of, 15; relevance of analysis of, 44–45; and schooling model, 64; theories of, 3, 74–75, 120–121, 144; unmeasured quantities of, 2. *See also* Human capital investments; Human capital models
- Human capital investments: and earnings, 138–140; and employment stability, 120; and home environment, 140–141; and hours worked, 23; and income inequality, 43–44, 90, 91–92, 97–98; information on, 2; and labor supply, 120, 122–124; and marginal cost, 15–16; and marginal revenue,

- 15–16; measured distribution of, 131; and productivity, 120*n*; rates of return on, 7–9; restricted to schooling, 24; sex differences in, 123; theory of optimal, 13–14, 85; total cost of, 7; and weeks worked, 120–121. See also Human capital; Human capital models; Post-school investments; Schooling
- Human capital models: and economic variables, 101–102; expanded, 44–45; explanation of skewness in, 38; explanatory power of, 116–119; as qualitative analyses of income distributions, 43; as quantitative analyses of income distribution, 43–45; and schooling, 1–3. See also Human capital; Human capital investments
- Illness. See Health
- Income: annual growth rate of, 79; family, 126; nonemployment, 123–125, 126–127, 144; property, 119*n*; self-employment, 119. See also Earnings; Income distribution; Income inequality
- Income distribution: analysis of, 2, 143–144; of households, 144; and skewness, 37–38; stochastic theories of, 35, 111–112, 115–116; theories of, 111–112. See also Earnings; Income; Income inequality
- Income inequality: absolute, 130; and age, 107–109; accounting for, 133–134; cohort and cross-sectional changes in, 62; in cohorts, 32–34; contribution of "transitory" component to, 119–121; and employment dispersion, 119–121, 122–125; and experience, 107–109; among families, 125; and human capital investments, 43–44, 90, 91–92, 97–98; marginal distributions of, 112; at overtaking age, 133–134; and post-school investments, 83, 95–96; regional comparisons of, 60–61; relative, 130; reversal of profiles of, 108–109; and schooling, 25–26, 27–28, 95–96; and schooling model, 44–45, 57–59; study of, 18
- Income maintenance programs, 142
- Individuals, as firms, 14–16
- Investment: and age profiles, 28–29; and earnings profiles, 64–65, 129–130; income elasticity of, 31–32; propensity to, 99, 106–107; stability in behavior, 107; time measures of, 130. See also Human capital investments; Post-school investments; Schooling
- Jencks, C., 134*n*
- Johnson, T., 22*n*
- Juster, F. T., 55*n*, 118*n*
- Koeune, J. C., 22*n*, 73*n*, 142*n*
- Kuratani, M., 137
- Labor force: attachment to, 121–122, 129–130; growth of female, 125; mobility of, 65
- Labor supply, 120, 142
- "Learning by doing," 65, 132
- Learning capacity, 22*n*, 31
- Leibowitz, A., 141*n*
- Leisure, 72*n*
- Lydall, H., 43*n*, 50*n*, 61*n*, 105*n*, 113, 125*n*
- Malkiel, J., 143*n*
- Mason, W., 140*n*
- Melichar, E., 77*n*, 79
- Metcalf, D., 125*n*
- Migration, 7
- Miller, H. P., 63*n*, 76–77
- Mincer, J., 20*n*, 22*n*, 43*n*, 50*n*, 63*n*, 74, 76*n*, 105*n*, 111*n*, 121, 124, 125*n*, 141*n*, 142*n*, 143*n*
- Minimum wages, 142
- Mobility, 65, 141
- Morgan, J., 105*n*, 107*n*
- Nam, C. B., 61*n*
- National Bureau of Economic Research–Thorndike sample, 55
- Net concept, 8
- Net earnings, 16–18, 32–33, 86, 88, 130–131, 133
- Obsolescence, 73*n*, 142
- On-the-job training, 7, 122–123, 132. See also Post-school investments
- Opportunity, 138–140, 141

- Pareto, V., 111
- Polachek, S., 89, 121*n*, 141*n*, 143*n*
- Positive discount rate, 7-9
- Post-school investments: costs of, 18, 73, 74; differences among individuals, 29, 32-33, 108, 133; and earnings, 45-47; elasticity of, 103-106, 136; and human capital models, 44-45; identifying parameters of, 94; incentives for, 75; and income inequality, 52, 95-96; information on individual, 95-96; and initial earning capacity, 103-106; and level of schooling, 16, 30-31, 72, 75, 131-132; measuring time units of, 18-20; and net investments, 29; opportunities for, 75; rates of return to, 18, 48, 72-73; staggering of, 98-102, 107, 129; in time equivalents, 73-75; total time devoted to, 20. *See also* On-the-job training
- Productivity, 1, 65, 80, 82, 120*n*, 142
- Promotion, 80-82
- Random shock models, 116-119
- Rates of return: individual differences in, 2, 7-9, 34-36, 108; to schooling, 48, 50. *See also* Human capital investments; Post-school investments; Schooling
- Retirement, 8-9, 30
- Rosen, S., 22*n*, 142*n*
- Rutherford, R. S. G., 113
- Schooling: costs of, 7-9, 10, 12-14, 49*n*, 52*n*, 99, 133; as "credential," 59*n*; and earnings, 24-25, 46, 48, 57-59, 92; and education, 1, 55-56; high level of, 59; incentives for, 75; investments in, 8-9, 52; length of, 11, 32-33, 54-56, 60, 61-63; low level of, 59, 72*n*, 99; opportunities for, 75, 132; and post-school investments, 72, 75, 131-132; and random shock, 116-118; rates of return to, 10, 26-27, 48, 50-51, 56, 93, 95, 131; secular trends in, 37, 38, 45, 102-103, 108-109; symmetric distribution of, 25-26; time-equivalent measures of investment in, 73-75; United States level of, 60-61; "vintage" hypothesis of effectiveness, 58; and weeks worked, 121. *See also* College graduates; Education; Elementary-school graduates; High-school graduates; Schooling model
- Schooling model: and earnings, 24-28, 59-63, 142; expansion of, 95-96, 129-130; inadequacy of, 44-45, 129; and overtaking age, 57-58; and ungrouped data, 51-59; use for quantitative analysis, 59; validity of, 64; and variation in rates of return, 56-59
- Schultz, T. P., 62-63, 123*n*
- Scientists, earnings of, 77-80
- Self-employed, 119*n*, 125-127
- Seniority, 81-82
- Skills: cost of increasing, 12; as factor in promotion, 81; measuring, 70; and schooling, 31, 135-136
- Solmon, L., 55, 99*n*, 136, 143*n*
- Stigler, G., 32*n*, 33*n*, 56
- Taubman, P., 140*n*
- Thorndike, E. L., 22*n*
- Thurow, L., 89
- Tolles, N. A., 77-80, 89*n*
- Training programs, formal, 20
- Turnover. *See* Employment
- Underemployment, 120
- Unemployment, 54, 72*n*, 120, 142
- United States Department of Labor, Bureau of Labor Statistics, 80-82
- Wachtel, P., 55, 143*n*
- Wales, F., 140*n*
- Weiss, Y., 52*n*, 55*n*
- Welch, F., 58*n*, 140*n*
- Women, 121-125
- Work experience. *See* Experience
- Working life: cost of reduction of, 7; decline of investments over, 14-16; length of, 8-9, 10-11; variation of earnings over, 12-13