

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Economics of the Family: Marriage, Children, and Human Capital

Volume Author/Editor: Theodore W. Schultz, ed.

Volume Publisher: UMI

Volume ISBN: 0-226-74085-4

Volume URL: <http://www.nber.org/books/schu74-1>

Publication Date: 1974

Chapter Title: References and Index to "Economics of the Family: Marriage, Children, and Human Capital"

Chapter Author: Theodore W. Schultz

Chapter URL: <http://www.nber.org/chapters/c2978>

Chapter pages in book: (p. 549 - 584)

## References

---

- Adelman, Irma. "An Econometric Analysis of Population Growth." *A.E.R.* 53 (June 1963): 314-39.
- Aigner, D. "An Appropriate Econometric Framework for Estimating a Labor Supply Function from the SEO File." Madison: Soc. Systems Res. Inst., Univ. Wisconsin, 1971.
- Aitchison, John, and Brown, J. A. C. *The Lognormal Distribution*. Cambridge: Cambridge Univ. Press, 1963.
- Alchian, Armen A., and Demsetz, Harold. "Production, Information Costs, and Economic Organization." *A.E.R.* 62 (December 1972): 777-95.
- Alstrom, C. H. "A Study of Inheritance of Human Intelligence." *Acta Psychiatrica et Neurologica Scandinavica* (1961).
- Andersen, Ronald, and Anderson, Odin W. *A Decade of Health Services: Social Survey Trends in Use and Expenditures*. Chicago: Univ. Chicago Press, 1967.
- Aoki, Hisao. *Selected Statistics concerning Fertility Regulation in Japan*. (In Japanese.) Tokyo: Ministry Health and Welfare, 1967.
- . "A General View of Fertility and Its Regulation in Japan." (In Japanese.) *Jinko Mondai Kenkyu* 114 (April 1970): 5-20.
- Aoki, Hisao, and Nakano, Eiko. *Summary of the Fertility Surveys in 1940, 1952, 1957, and 1962*. (In Japanese.) Tokyo: Ministry Health and Welfare, 1967.
- Arrington, Leonard J. *Great Basin Kingdom*. Lincoln: Univ. Nebraska Press, 1958.
- Ashenfelter, Orley A., and Mooney, Joseph D. "Graduate Education, Ability and Earnings." *Rev. Econ. and Statis.* 50 (February 1968): 78-86.
- Auster, Richard D.; Leveson, Irving; and Sarachek, Deborah. "The Production of Health: An Exploratory Study." *J. Human Resources* 4 (Fall 1969): 411-36.
- Bachi, R., and Matras, J. "Contraception and Induced Abortions among Jewish Maternity Cases in Israel." *Milbank Memorial Fund Q.* 40 (April 1962): 207-29.
- Bajema, C. J. "Estimation of the Direction and Intensity of Natural Selection in Relation to Human Intelligence by Means of the Intrinsic Rate of Natural Increase." *Eugenics Q.* 10 (December 1963): 175-87.
- Baumol, William J. *Economic Dynamics: An Introduction*. 3d ed. New York: Macmillan, 1970.
- Becker, Gary S. "An Economic Analysis of Fertility." In *Demographic and Economic Change in Developed Countries*. Universities-National Bureau Conference Series, no. 11. Princeton, N.J.: Princeton Univ. Press, 1960.

- Becker, Gary S. *Human Capital*. New York: Columbia Univ. Press (for Nat. Bur. Econ. Res.), 1964.
- . "A Theory of the Allocation of Time." *Econ. J.* 75 (September 1965): 493–517.
- . *Human Capital and the Personal Distribution of Income: An Analytical Approach*. Woytinsky Lecture no. 1. Ann Arbor: Inst. Public Admin., Univ. Michigan, 1967.
- . "A Theory of Social Interactions." Manuscript, Univ. Chicago, September 1969. Forthcoming in *J.P.E.*, vol. 82 (November–December 1974).
- . "A Theory of Marriage." Workshop paper, Univ. Chicago, October 1971. (a)
- . *Economic Theory*. New York: Knopf, 1971. (b)
- Becker, Gary S., and Chiswick, Barry R. "Education and the Distribution of Earnings." *A.E.R.* 56 (May 1966): 358–69.
- Ben-Porath, Yoram. "The Production of Human Capital and the Life Cycle of Earnings." *J.P.E.* 75 (August 1967): 352–65.
- . *Fertility in Israel, an Economist's Interpretation: Differentials and Trends, 1950–1970*. RM-5981-FF. Santa Monica, Calif.: RAND Corp., August 1970. (a)
- . "On the Association between Fertility and Education." Research Report no. 20. Mimeographed. Hebrew Univ. Jerusalem, 1970. (b)
- . "The Production of Human Capital over Time." In *Education, Income, and Human Capital*, edited by W. Lee Hansen. New York: Nat. Bur. Econ. Res., 1970. (c)
- . "Labor Force Participation Rates and the Supply of Labor." *J.P.E.* 81 (May/June 1973): 697–704.
- Ben-Zion, U., and Ehrlich, I. "A Model of Productive Saving." Mimeographed. Univ. Chicago, 1972.
- Berg, Alan. *The Nutrition Factor: Its Role in National Development*. Washington: Brookings Inst., 1973.
- Black, J. D. *Introduction to Production Economics*. New York: Holt, 1926.
- Blake, Judith. "Are Babies Consumer Durables? A Critique of the Economic Theory of Reproduction Motivation." *Population Studies* 22 (March 1968): 5–25.
- Blau, Peter M., and Duncan, Otis Dudley. *The American Occupational Structure*. New York: Wiley, 1967.
- Bowen, William G., and Finegan, T. A. *The Economics of Labor Force Participation*. Princeton, N.J.: Princeton Univ. Press, 1969.
- Bowles, Samuel. "Schooling and Inequality from Generation to Generation." *J.P.E.* 80, pt. 2 (May/June 1972): S219–51.
- Box, G. P., and Cox, D. "An Analysis of Transformations." *J. Royal Statis. Soc.* 26 (1964): 211–43.
- Box, G. P., and Tidewell, P. "Transformations of Independent Variables." *Technometrics* 4 (1962): 531–42.

- Broel-Plateris, Alexander. "Marriage Disruption and Divorce Law." Ph.D. dissertation, Univ. Chicago, 1961.
- Bumpass, Larry L. "Age at Marriage as a Variable in Socio-economic Differentials in Fertility." *Demography* 6 (February 1969): 45-54.
- Bumpass, Larry L., and Westoff, Charles F. *The Later Years of Child-bearing*. Princeton, N.J.: Princeton Univ. Press, 1970.
- Cain, Glen G. *Married Women in the Labor Force: An Economic Analysis*. Chicago: Univ. Chicago Press, 1966.
- Cain, Glen G., and Weininger, Adriana. "Economic Determinants of Fertility: Results Using Cross-sectional Aggregate Data." Mimeographed. Madison: Univ. Wisconsin, 1967 (rev. 1971).
- Caldwell, J. C. "Fertility Attitudes in Three Economically Contrasting Rural Regions of Ghana." *Econ. Development and Cultural Change* 15, no. 2 (January 1967): 217-38.
- . *Population Growth and Family Change in Africa*. Canberra: Australian Nat. Univ. Press, 1968.
- Cavalli-Sforza, L. L., and Bodmer, W. F. *The Genetics of Human Populations*. San Francisco: Freeman, 1971.
- Central Bureau of Statistics. *The Settlements of Israel*. Pts. 2, 3. Census Publication no. 11. Jerusalem: Central Bur. Statist., 1963.
- . "Family Expenditure Survey 1963/64." Special Series no. 200. Jerusalem: Central Bur. Statist., 1966. (a)
- . *The Settlements of Israel*. Pt. 4. Census Publication no. 28. Jerusalem: Central Bur. Statist., 1966. (b)
- . *Statistical Abstract of Israel, 1971*. No. 22. Jerusalem: Government Printer, 1971.
- Cheung, Steven N. S. "The Enforcement of Property Rights in Children, and the Marriage Contract." *Econ. J.* 82 (June 1972): 641-57.
- Chiswick, Barry R. *Income Inequality: Regional Analysis within a Human Capital Framework*. New York: Nat. Bur. Econ. Res., 1973.
- Chiswick, Barry R., and Mincer, Jacob. "Time-Series Changes in Personal Income Inequality in the United States from 1939, with Projections to 1985." *J.P.E.* 80, pt. 2 (May/June 1972): S34-66
- Chow, Gregory C. "Tests of Equality between Sets of Coefficients in Two Linear Regressions." *Econometrica* 28 (July 1960): 591-605.
- Coale, A. S., and McNeil, D. R. "The Distribution by Age of the Frequency of First Marriage in a Female Cohort." *J. American Statist. Assoc.* 67 (December 1972): 743.
- Cohen, Malcolm S.; Rea, Samuel A.; and Lerman, Robert J. "A Micro Model of Labor Supply." BLS Staff Report Paper no. 4, Dept. Labor Statist., Washington, 1970.
- Cook, William D. "The Demand for Contraceptive Goods and Services: Low-Income Families, New Orleans." Manuscript, Tulane Univ., 1972.
- Dandekar, Kumudini. "Effect of Education on Fertility." In *World*

- Population Conference, 1965*. Vol. 4. New York: United Nations, 1967.
- DaVanzo, Julie. *The Determinants of Family Formation in Chile, 1960*. R-830-AID. Santa Monica, Calif.: RAND Corp., December 1971.
- DeTray, Dennis N. *The Interaction between Parent Investment in Children and Family Size: An Economic Analysis*. R-1003-RF. Santa Monica, Calif.: RAND Corp., May 1972. (a)
- . "The Substitution between Quantity and Quality of Children in the Household." Ph.D. dissertation, Univ. Chicago, 1972. (b)
- Dorjahn, V. R. "The Factor of Polygyny in African Demography." In *Continuity and Change in African Cultures*, edited by W. R. Bascom and M. J. Huskovity. Chicago: Univ. Chicago Press, 1959.
- Duesenberry, James. Comment on "An Economic Analysis of Fertility" by Gary S. Becker. In *Demographic and Economic Change in Developed Countries*. Universities-National Bureau Conference Series, no. 11. Princeton, N.J.: Princeton Univ. Press, 1960.
- Dugan, D. J. "The Impact of Parental and Educational Investment upon School Achievement." *American Statist. Assoc., Social Statist. Sec., Proc.* (1969).
- Duncan, Otis Dudley; Featherman, David L.; and Duncan, Beverly. *Socioeconomic Background and Achievement*. New York: Seminar, 1972.
- Eads, George; Nerlove, Marc; and Raduchel, William. "A Long-Run Cost Function for the Local Service Airline Industry: An Experiment in Nonlinear Estimation." *Rev. Econ. and Statist.* 51 (August 1969): 258-70.
- Easterlin, Richard A. *Population, Labor Force, and Long Swings in Economic Growth: The American Experience*. General Series, no. 86. New York: Nat. Bur. Econ. Res., 1968.
- . "Towards a Socio-economic Theory of Fertility: A Survey of Recent Research on Economic Factors in American Fertility." In *Fertility and Family Planning: A World View*, edited by S. J. Behrman, Leslie Corsa, Jr., and Ronald Freedman. Ann Arbor: Univ. Michigan Press, 1969.
- Ehrlich, Isaac. "Participation in Illegitimate Activities: An Economic Analysis." Ph.D. dissertation, Columbia Univ., 1970.
- Fane, George. "The Productive Value of Education in Agriculture in the U.S." Ph.D. dissertation, Harvard Univ., 1972.
- Farrar, Donald E., and Glauber, R. R. "Multicollinearity in Regression Analysis: The Problem Revisited." *Rev. Econ. and Statist.* 49 (February 1967): 99-107.
- Fishelsohn, G. "Labor Force Participation of Married Women." Manuscript, Univ. Tel Aviv, 1972.
- Fisher, F. M. *A Priori Information and Time Series Analysis*. Amsterdam: North-Holland, 1962.

- Fisher, R. A. *The Genetical Theory of Natural Selection*. 2d ed. New York: Dover, 1958.
- Freedman, Deborah S. "The Relation of Economic Status to Fertility." *A.E.R.* 53 (June 1963): 414-26.
- Freedman, Ronald, and Coombs, L. "Childspacing and Family Economic Position." *American Sociological Rev.* 31 (October 1966): 631-48. (a)
- . "Economic Considerations in Family Growth Decisions." *Population Studies* 20, no. 2 (November 1966): 197-222. (b)
- Freedman, Ronald, and Slesinger, Doris P. "Fertility Differentials for the Indigenous Non-Farm Population of the United States." *Population Studies* 15 (November 1961): 161-73.
- Freedman, Ronald, and Takeshita, John Y. *Family Planning in Taiwan*. Princeton, N.J.: Princeton Univ. Press, 1969.
- Freedman, Ronald; Whelpton, Pascal K.; and Campbell, A. A. *Family Planning, Sterility, and Population Growth*. New York: McGraw-Hill, 1959.
- Freiden, Alan. "A Model of Marriage and Fertility." Ph.D. dissertation, Univ. Chicago, 1972.
- Friedlander, Stanley, and Silver, M. "A Quantitative Study of the Determinants of Fertility Behavior." *Demography* 4, no. 1 (1967): 30-70.
- Fuchs, Victor. *Differentials in Hourly Earnings by Region and City Size, 1959*. Occasional Paper no. 101. New York: Nat. Bur. Econ. Res., 1967.
- . "Differences in Hourly Earnings between Men and Women." *Monthly Labor Rev.* 94 (May 1971): 9-15.
- Gardner, Bruce. "Measuring the Income of Rural Families: A Survey of Sampson County, N.C." Econ. Res. Report, North Carolina State Univ., Raleigh, 1971.
- . "Economic Aspects of the Fertility of Rural-Farm and Urban Women." *Southern Econ. J.* 38 (April 1972): 518-24.
- Gerschenkron, Alexander. Review of *Demographic and Economic Change in Developed Countries*. *J. American Statis. Assoc.* 56 (December 1961): 1006-8.
- Ghez, Gilbert R. "A Theory of Life Cycle Consumption." Ph.D. dissertation, Columbia Univ., 1970.
- Ghez, Gilbert R., and Becker, Gary S. "The Allocation of Time and Goods over the Life Cycle." Report no. 7217, Center Math. Studies Bus. and Econ., Univ. Chicago, April 1972.
- Goldberg, David. "The Fertility of Two-Generation Urbanites." *Population Studies* 12 (July 1958): 214-22.
- Goldfeld, S., and Quandt, R. *Nonlinear Methods in Econometrics*. Amsterdam: North-Holland, 1972.
- Goode, William J. *After Divorce*. Glencoe, Ill.: Free Press, 1956.

- Goode, William J. "Marital Satisfaction and Instability: A Cross-cultural Class Analysis of Divorce Rates." *Internat. Social Sci. J.* 14, no. 3 (1962): 507-26.
- . *World Revolution and Family Patterns*. New York: Free Press, 1963.
- . *Explorations in Social Theory*. New York: Oxford, 1973.
- . *The Celebration of Heroes: Prestige as a Control System* (forthcoming).
- Gorman, W. M. "Separability and Aggregation." *Econometrica* 27 (July 1959): 469-81.
- Griliches, Zvi. "A Note on Serial Correlation Bias in Distributed Lag Models." *Econometrica* 29 (January 1961): 65-73.
- Griliches, Zvi, and Mason, William M. "Education, Income, and Ability." *J.P.E.* 80, pt. 2 (May-June 1972): S74-103.
- Gronau, Reuben. "An Economic Approach to Marriage: The Intrafamily Allocation of Time." Paper presented at the 2d World Congress of the Econometric Society, Cambridge, 1970. (a)
- . *The Value of Time in Passenger Transportation: The Demand for Air Travel*. Occasional Paper no. 109. New York: Nat. Bur. Econ. Res., 1970. (b)
- . *The Wage Rates of Women: A Selectivity Bias*. New York: Nat. Bur. Econ. Res., 1972.
- . "The Intra-Family Allocation of Time: The Value of the Housewives' Time." *A.E.R.* 63 (September 1973): 634-51.
- . "The Measurement of Output of the Non-Market Sector—the Evaluation of the Housewife's Time." In *Measurement of Economic and Social Performance*, edited by M. Moss. Studies in Income and Wealth, no. 38. New York: Nat. Bur. Econ. Res., 1974.
- Grossman, Michael. "The Demand for Health: A Theoretical and Empirical Investigation." Ph.D. dissertation, Columbia Univ., 1970.
- . "The Economics of Joint Production in the Household." Report no. 7145, Center Math. Studies Bus. and Econ., Univ. Chicago, September 1971.
- . "On the Concept of Health Capital and the Demand for Health." *J.P.E.* 80 (March/April 1972): 223-55. (a)
- . *The Demand for Health: A Theoretical and Empirical Investigation*. Occasional Paper no. 119. New York: Columbia Univ. Press (for Nat. Bur. Econ. Res.), 1972. (b)
- Hansen, W. Lee; Weisbrod, Burton A.; and Scanlon, William J. "Schooling and Earnings of Low Achievers." *A.E.R.* 60 (June 1970): 409-18.
- Harberger, Arnold. "Taxation, Resource Allocation, and Welfare." In *The Role of Direct and Indirect Taxes in the Federal Revenue System*. Princeton, N.J.: Princeton Univ. Press (for Brookings Inst. and Nat. Bur. Econ. Res.), 1964.

- Harman, A. J. *Fertility and Economic Behavior of Families in the Philippines*. RM-6385-AID. Santa Monica, Calif.: RAND Corp., September 1970.
- Hause, John. "Earnings Profile: Ability and Schooling." *J.P.E.* 80, pt. 2 (May/June 1972): S108-38.
- Heckman, James J. "Three Essays on the Supply of Labor and the Demand for Market Goods." Ph.D. dissertation, Princeton Univ., 1971.
- . "Shadow Prices, Market Wages, and Labor Supply." *Econometrica* (1974), in press.
- Hicks, J. R. *Value of Capital*. Oxford: Clarendon, 1939 (2d ed., 1946).
- . *The Theory of Wages*. New York: Peter Smith, 1948.
- Higgins, J. V.; Reed, W. E.; and Reed, S. C. "Intelligence and Family Size: A Paradox Resolved." *Eugenics Q.* 9 (March 1962): 84-90.
- Hill, C. Russell, and Stafford, Frank P. "The Allocation of Time to Children and Educational Opportunity." Discussion paper, Inst. Public Policy Studies, Univ. Michigan. Presented at the Econometric Society meetings, New Orleans, December 1971.
- . "The Allocation of Time to Preschool Children and Educational Opportunity." *J. Human Resources*, vol. 9 (Summer 1974).
- Hitotsubashi University Institute of Economic Research. "National Income Study Group Materials C1, C18." Mimeographed. (In Japanese.) Tokyo: Hitotsubashi Univ. Inst. Econ. Res., 1968.
- Honda, Tatsuo. "Summary of the Third Fertility Survey in 1957." (In Japanese.) *Jinko Mondai Kenkyu* 77 (August 1959): 1-24.
- Honjo, Eijiro. *Nihon jinko shi* [Japanese population history]. Tokyo: Nihon Hyoron-sha, 1941.
- Hotelling, Harold. "Edgeworth's Taxation Paradox and the Nature of Demand and Supply Functions." *J.P.E.* 40 (October 1932): 577-616.
- Houthakker, Hendrik S. "Compensated Changes in Quantities and Qualities Consumed." *Rev. Econ. Studies* 19, no. 3 (1952): 155-61.
- . "The Pareto Distribution and the Cobb-Douglas Production Function in Activity Analysis." *Rev. Econ. Studies* 23, no. 1 (1955): 27-31.
- Huffman, Wallace E. "The Contribution of Education and Extension to Different Rates of Change." Ph.D. dissertation, Univ. Chicago, 1972.
- Jaffe, A. J. "Urbanization and Fertility." *American J. Sociology* 48 (July 1942): 48-60.
- Japan Ministry of Education. *Yearbook of the Ministry of Education*. (In Japanese.) Tokyo: Ministry Educ., 1904 and succeeding annual issues.
- Japan Ministry of Health and Welfare. *Vital Statistics of Japan*. Tokyo: Ministry Health and Welfare, 1970.



- Japan Ministry of Health and Welfare, Institute of Population Problems. "Summary of the Fifth Mainichi Survey of Family Planning Opinion." (In Japanese.) *Jinko Mondai Kenkyu* 77 (August 1959): 60-88.
- . *Reproduction Indices for Japan, 1960-1965*. (In Japanese.) Tokyo: Ministry Health and Welfare, 1967.
- . *Report on the Fifth Fertility Survey*. (In Japanese.) Tokyo: Ministry Health and Welfare, 1968.
- Japan Prime Minister's Office. *Descriptive Materials on Japanese Vital Statistics*. (In Japanese.) Tokyo: Prime Minister's Office, 1917 and succeeding issues.
- . *Annual Statistics of Japan: 1960*. Tokyo: Prime Minister's Office, 1960. (a)
- . *Censuses of Population of Japan*. Tokyo: Prime Minister's Office, 1955, 1960 (b), 1965, 1970.
- . *Statistical Yearbook of Japan*. Tokyo: Prime Minister's Office, various annual issues.
- Johnson, George E., and Stafford, Frank P. "Social Returns to Quantity and Quality of Schooling." *J. Human Resources* 8 (Spring 1973): 139-55.
- Johnson, Harry G. "The Economic Approach to Social Questions." *Economica* 36 (February 1968): 1-21.
- Jones, R. W. "The Structure of Simple General Equilibrium Models." *J.P.E.* 73 (December 1965): 557-72.
- Kagan, Jerome S. "Inadequate Evidence and Illogical Conclusions." *Harvard Educ. Rev.* 39 (Spring 1969): 274-77.
- Kagan, Jerome S., and Moss, H. A. "Parental Correlates of Child's IQ and Height." *Child Development* 30 (September 1959): 325-32.
- Keeley, Michael C. "A Model of Marital Formation: The Determinants of the Optimal Age at First Marriage and Differences in Age at Marriage." Ph.D. dissertation, Univ. Chicago, 1974.
- Kendall, M. G. "Proof of Relations Connected with the Tetrachoric Series and Its Generalizations." *Biometrika* 32 (1941): 196-99.
- Keyfitz, Nathan. "How Birth Control Affects Births." *Social Biology* 18, no. 2 (June 1971): 109-21.
- Keynes, John Maynard. *The General Theory of Employment, Interest, and Money*. New York: Harcourt Brace, 1936.
- Khaldi, Nabil. "The Productive Value of Education in the U.S. Agriculture, 1964." Ph.D. dissertation, Southern Methodist Univ., 1972.
- King, Willford Isbell. *Employment Hours and Earnings in Prosperity and Depression: United States, 1920-1922*. New York: Nat. Bur. Econ. Res., 1923.
- Kiser, C. V. "Birth Rates among Rural Migrants to Cities." *Milbank Memorial Fund Q.* 16 (October 1938): 369-81.
- Kiser, C. V.; Grabill, W. H.; and Campbell, A. A. *Trends and Variations*

- in *Fertility in the United States*. Cambridge, Mass.: Harvard Univ. Press, 1968.
- Knight, Frank H. *Risk, Uncertainty, and Profit*. Boston: Houghton-Mifflin, 1921.
- . "Diminishing Returns from Investment." *J.P.E.* 52 (March 1944): 26-47.
- . *The Economic Organization*. New York: Harper & Row, 1965. (Originally published by the College of the University of Chicago, 1933.)
- Kogut, E. L. "An Economic Analysis of Demographic Phenomena: A Case Study of Brazil." Ph.D. dissertation, Univ. Chicago, 1972.
- Koopmans, Tjalling C. "Intertemporal Distribution and 'Optima' Aggregate Economic Growth." In *Ten Economic Studies in the Tradition of Irving Fisher*, by W. Fellner et al. New York: Wiley, 1967.
- Koopmans, Tjalling C., and Beckman, M. "Assignment Problems and the Location of Economic Activities." *Econometrica* 25 (January 1957): 53-76.
- Kosters, M. "Income and Substitution Effects in a Family Labor Supply Model." P-3339. Santa Monica, Calif.: RAND Corp., 1966.
- Kuratani, M. "Earnings Distribution and Specific Training: The Case of Japan." Mimeographed. Univ. Chicago, 1972.
- Kuznets, Simon. *Modern Economic Growth: Rate, Structure, and Spread*. New Haven, Conn.: Yale Univ. Press, 1966.
- . *Economic Growth and Nations*. Cambridge, Mass.: Harvard Univ. Press, 1971.
- . "Modern Economic Growth: Findings and Reflections." (Nobel Prize lecture, December 1971.) *A.E.R.* 63 (June 1973): 247-58.
- Lancaster, Kelvin J. "A New Approach to Consumer Theory." *J.P.E.* 74 (April 1966): 132-57.
- Landsberger, Michael. "An Integrated Model of Consumption and Market Activity: The Children Effect." *American Statis. Assoc., Social Statis. Sec., Proc.* (1971), pp. 137-42.
- Leibenstein, Harvey. *Economic Backwardness and Economic Growth: Studies in the Theory of Economic Development*. New York: Wiley, 1957.
- . "The Impact of Population Growth on Economic Welfare — Non-traditional Elements." In *Rapid Population Growth*. Baltimore: Johns Hopkins Press (for Nat. Acad. Sci.), 1971.
- Leibowitz, Arleen S. "Women's Allocation of Time to Market and Nonmarket Activities: Differences by Education." Ph.D. dissertation, Columbia Univ., 1972.
- . "Education and the Allocation of Women's Time." In *Education, Income, and Human Behavior*, edited by F. Thomas Juster. New York: McGraw-Hill (for Carnegie Commission Higher Educ. and Nat. Bur. Econ. Res.), 1974, in press.
- Leontief, W. "Introduction to a Theory of the Internal Structure of

- Functional Relationships." *Econometrica* 15 (October 1947): 361-73.
- Lewis, H. Gregg. "On Income and Substitution Effect in Labor Force Participation." Mimeographed. Dept. Econ., Univ. Chicago, 1971.
- Linder, Staffan B. *The Harried Leisure Class*. New York: Columbia Univ. Press, 1970.
- Lindsay, C. M. "Measuring Human Capital Returns." *J.P.E.* 79 (November/December 1971): 1195-1215.
- Low, S., and Spindler, A. *The Child Care Arrangements of Working Mothers*. Children's Bureau Publication no. 461. Washington: Government Printing Office, 1968.
- McCall, J. J. "Economics of Information and Job Search." *Q.J.E.* 84 (February 1970): 113-26.
- MacLeod, John, and Gold, Ruth Z. "The Male Factor in Fertility and Infertility." *Fertility and Sterility* 4, no. 1 (1953): 10-33.
- Mainichi Newspaper Company. *Family Planning Survey*. (In Japanese.) Tokyo: Mainichi Newspaper Co., 1950 and succeeding years.
- . *Nihon no Jinko Kakumei* [Japan's population revolution]. (In Japanese.) Tokyo: Mainichi Newspaper Co., 1970.
- Malinvaud, E. *Statistical Methods of Econometrics*. Chicago: Rand McNally; Amsterdam: North-Holland, 1966. 2d ed. Amsterdam: North-Holland, 1970.
- Malthus, T. R. *An Essay on the Principle of Population and a Summary View of the Principle of Population*. Baltimore: Penguin, 1970. (Originally published in 1798 and 1830.)
- Marshall, Alfred. *Principles of Economics*. 8th ed. (1st ed., 1890.) London: Macmillan, 1930.
- Matras, J., and Auerbach, C. "On Rationalizations of Family Formation in Israel." *Milbank Memorial Fund Q.* 40 (October 1962): 453-80.
- Matsumoto, Y. Scott; Koizumi, Akira; and Nohara, Tadahiro. "Condom Use in Japan." *Studies in Family Planning* 3 (October 1972): 251-55.
- Matsunaga, Ei. "Measures Affecting Population Trends and Possible Genetic Consequences." In *World Population Conference, 1965*. Vol. 2. New York: United Nations, 1967.
- Maurer, K. M.; Ratajczak, R.; and Schultz, T. Paul. *Marriage, Fertility, and Labor Force Participation of Thai Women: An Econometric Study*. R-829-AID. Santa Monica, Calif.: RAND Corp., May 1972.
- Michael, Robert T. "The Effect of Education on Efficiency in Consumption." Ph.D. dissertation, Columbia Univ., 1969.
- . "Education and the Derived Demand for Children." Mimeographed. Univ. California, Los Angeles, October 1970.
- . "Dimensions of Household Fertility: An Economic Analysis." *American Statis. Assoc., Social Statis. Sec., Proc.* (1971), pp. 126-36.
- . *The Effect of Education on Efficiency in Consumption*. Occasional Paper no. 116. New York: Nat. Bur. Econ. Res., 1972.

- . "Education in Nonmarket Production." *J.P.E.* 81, pt. 1 (March/April 1973): 306–27.
- . "Education and Fertility." In *Education, Income, and Human Behavior*, edited by F. Thomas Juster. New York: McGraw-Hill (for Carnegie Commission Higher Educ. and Nat. Bur. Econ. Res.), 1974, in press.
- Michael, Robert T., and Becker, Gary S. "On the New Theory of Consumer Behavior." *Swedish J. Econ.* 75 (1973): 378–96.
- Michael, Robert T., with Edward P. Lazear. "On the Shadow Price of Children." Mimeographed. Nat. Bur. Econ. Res., December 1971. (Presented at the meeting of the Econometric Society, New Orleans, December 1971.)
- Mincer, Jacob. "Labor Force Participation of Married Women." In *Aspects of Labor Economics*, edited by H. Gregg Lewis. Universities–National Bureau Conference Series no. 14. Princeton, N.J.: Princeton Univ. Press, 1962. (a)
- . "On-the-Job Training: Costs, Returns, and Some Implications." *J.P.E.* 70, pt. 2 (October 1962): 50–79. (b)
- . "Market Prices, Opportunity Costs, and Income Effects." In *Measurement in Economics: Studies in Mathematical Economics and Econometrics in Memory of Yehuda Grunfeld*, edited by Carl Christ et al. Stanford, Calif.: Stanford Univ. Press, 1963.
- . "The Distribution of Labor Incomes: A Survey with Special Reference to the Human Capital Approach." *J. Econ. Literature* 8 (March 1970): 1–26. (a)
- . Comment on "The Production of Human Capital over Time" by Yoram Ben-Porath. In *Education, Income, and Human Capital*, edited by W. Lee Hansen. New York: Nat. Bur. Econ. Res., 1970. (b)
- . "Education, Experience, and the Distribution of Earnings and of Employment." In *Education, Income, and Human Behavior*, edited by F. Thomas Juster. New York: McGraw-Hill (for Carnegie Commission Higher Educ. and Nat. Bur. Econ. Res.), 1974, in press. (a)
- . *Schooling, Experience, and Earnings*. New York: Nat. Bur. Econ. Res., 1974. (b)
- Mitchell, Wesley C. "The Backward Art of Spending Money." *A.E.R.* 2 (June 1912): 269–81.
- . *The Backward Art of Spending Money and Other Essays*. New York: McGraw-Hill, 1937.
- Moeller, John Francis. "Household Budget Responses to Negative-Tax Simulations." Ph.D. dissertation, Univ. Wisconsin, 1970.
- Morgan, James N.; Sirageldin, Ismail; and Baerwaldt, Nancy. *Productive Americans: A Study of How Individuals Contribute to Economic Progress*. Ann Arbor: Univ. Michigan Inst. Social Res., 1966.
- Morishima, Michio. *Theory of Economic Growth*. 2d rev. ed. Oxford: Clarendon, 1970.

- Morrison, William A. "Attitudes of Females toward Family Planning in a Maharashtrian Village." *Milbank Memorial Fund Q.* 35 (January 1957): 67-81.
- Mortensen, D. T. "Job Search, the Duration of Unemployment and the Phillips Curve." *A.E.R.* 60 (December 1970): 847-62.
- Mosteller, Frederick. *On Equality of Educational Opportunity*. New York: Vintage, 1972.
- Muramatsu, M. "Effect of Induced Abortions on the Reduction of Birth in Japan." *Milbank Memorial Fund Q.* 38 (April 1960): 153-66.
- . "Problems in Procuring Contraceptive Materials in Rural Areas in Japan." In *Research in Family Planning*, edited by Clyde V. Kiser. Princeton, N.J.: Princeton Univ. Press, 1962.
- . "Policy Measures and Social Changes for Fertility Decline in Japan." In *World Population Conference, 1965*. Vol. 2. New York: United Nations, 1967.
- Muth, Richard F. "Household Production and Consumer Demand Functions." *Econometrica* 34 (July 1966): 699-708.
- National Council of Churches, Bureau of Research and Survey. *Churches and Church Membership in the U.S.* Ser. A, no. 3. New York: Nat. Council Churches, 1956.
- Nelson, P. J. "Information and Consumer Behavior." *J.P.E.* 78 (March/April 1970): 311-29.
- Nelson, R., and Krashinsky, S. "The Organization and Planning of Day Care for Children." Washington: Urban Inst., August 1972.
- Nerlove, Marc. "A Note on Error-Components Models." *Econometrica* 39 (March 1971): 383-96. (a)
- . "Further Evidence on the Estimation of Dynamic Economic Relations from a Time Series of Cross Sections." *Econometrica* 39 (March 1971): 359-82. (b)
- . "Lags in Economic Behavior." *Econometrica* 40 (March 1972): 221-52. (a)
- . "Tuition and the Costs of Higher Education: Prolegomena to a Conceptual Framework." *J.P.E.* 80, pt. 2 (May/June 1972): S178-218. (b)
- Nerlove, Marc, and Schultz, T. Paul. *Love and Life between the Censuses: A Model of Family Decision Making in Puerto Rico, 1950-1960*. RM-6322-AID. Santa Monica, Calif.: RAND Corp., September 1970.
- Oaxaca, Ronald L. "Male-Female Wage Differentials in Urban Labor Markets." Ph.D. dissertation, Princeton Univ., 1971.
- Ofek, H. "Allocation of Time and Goods in a Family Context." Ph.D. dissertation, Columbia Univ., 1972.
- O'Hara, Donald J. *Changes in Mortality Levels and Family Decisions regarding Children*. R-914-RF. Santa Monica, Calif.: RAND Corp., February 1972.

- Okazaki, Yoichi. "Meiji Period Population." (In Japanese.) *Keizai Kenkyu* 16 (July 1965): 207-13.
- . "An Analysis of the Socio-economic Factors Affecting Fertility in Japan." (In Japanese.) *Jinko Mondai Kenkyu* 114 (April 1970): 21-34.
- Okun, Bernard. *Trends in Birth Rates in the United States since 1870*. Studies in Historical and Political Science, ser. 77. Baltimore: Johns Hopkins Press, 1958.
- . Comment on "An Economic Analysis of Fertility" by Gary S. Becker. In *Demographic and Economic Change in Developed Countries*. Universities-National Bureau Conference Series, no. 11. Princeton, N.J.: Princeton Univ. Press, 1960.
- Parnes, Herbert S.; Shea, John R.; Spitz, Ruth S.; and Zeller, Frederick A. *Dual Careers*. Vol. 1. Manpower Research Monograph no. 21. Washington: Dept. Labor, 1970.
- Peled, Z. "Problems and Attitudes in Family Planning." (In Hebrew.) Mimeographed. Jerusalem: Israel Inst. Appl. Social Res., March 1969.
- Pennock, Jean L. "Cost of Raising a Child." *Family Econ. Rev.* (ARS 62-5) (March 1970), pp. 13-17.
- Petersen, William. *Population*. 2d ed. London: Macmillan, 1969.
- Pitchford, J. D. "Population in Economic Growth." Mimeographed. Canberra: Australian Nat. Univ., 1973.
- Polachek, Solomon. "Work Experience and the Difference between Male and Female Wages." Ph.D. dissertation, Columbia Univ., 1973.
- Potter, Robert G., Jr. "Birth Intervals: Structure and Change." *Population Studies* 17 (November 1963): 152-62.
- Potter, Robert G.; McCann, Barbara; and Sakoda, James M. "Selective Fecundability and Contraceptive Effectiveness." *Milbank Memorial Fund Q.* 48 (January 1970): 91-102.
- Potter, Robert G.; Sagi, Philip C.; and Westoff, Charles F. "Knowledge of the Ovulatory Cycle and Coital Frequency as Factors Affecting Conception and Contraception." *Milbank Memorial Fund Q.* 40 (January 1962): 46-58.
- Rahm, M. "The Occupational Wage Structure." Ph.D. dissertation, Columbia Univ., 1971.
- Razin, Assaf. "Investment in Human Capital and Economic Growth: A Theoretical Study." Ph.D. dissertation, Univ. Chicago, 1969.
- . "Investment in Human Capital and Economic Growth." *Metroeconomica* 24 (May/August 1972): 101-16.
- Reid, Margaret G. *Economics of Household Production*. New York: Wiley, 1934.
- . "Effect of Income Concept upon Expenditure Curves of Farm Families." In *Studies in Income and Wealth*, no. 15. New York: Nat. Bur. Econ. Res., 1952.

- Reid, Margaret G. *Housing and Income*. Chicago: Univ. Chicago Press, 1962.
- Reischauer, R. "The Impact of the Welfare System on Black Migration and Marital Stability." Ph.D. dissertation, Columbia Univ., 1970.
- Research Triangle Institute. "An Index of Economic Status of Individual Rural Families." Mimeographed. Research Triangle Park, N.C.: Res. Triangle Inst., 1971.
- Rheinstein, Max. *Marriage Stability, Divorce, and the Law*. Chicago: Univ. Chicago Press, 1972.
- Rivers, W. H. *The Todas*. London: Macmillan, 1906.
- Roberts, G. W.; Cummins, G. T.; Bryne, J.; Alleyne, C. "Knowledge and Use of Birth Control in Barbados." *Demography* 4, no. 2 (1967): 576-600.
- Rogers, Daniel C. "Private Rates of Return to Education in the U.S.: A Case Study." *Yale Econ. Essays* 9 (Spring 1969): 89-134.
- Rosen, Sherwin. "Short-Run Employment Variation on Class-I Railroads in the U.S., 1947-63." *Econometrica* 36 (July/October 1968): 511-29.
- Ross, Sue. "The Effect of Economic Variables on the Timing and Spacing of Births." Ph.D. dissertation, Columbia Univ., 1974.
- Ruderman, F. *Child Care and Working Mothers*. New York: Child Welfare League America, 1968.
- Rybczynski, T. N. "Factor Endowments and Relative Commodity Prices." *Economica*, n.s. 22 (November 1955): 336-41.
- Ryder, Norman B. "The Emergence of a Modern Fertility Pattern: U.S., 1917-1966." In *Fertility and Family Planning: A World View*, edited by S. J. Behrman, Leslie Corsa, Jr., and Ronald Freedman. Ann Arbor: Univ. Michigan Press, 1969.
- Ryder, Norman B., and Westoff, Charles F. *Reproduction in the United States, 1965*. Princeton, N.J.: Princeton Univ. Press, 1971.
- Salzano, F. M.; Neel, J. V.; and Maybury-Lewis, D. "Further Studies on the Xavante Indians." *American J. Human Genetics* 19 (July 1967): 463-89.
- Samuelson, Paul A. "International Price Equalization Once Again." *Econ. J.* 59, no. 2 (June 1949): 181-97.
- . "Social Indifference Curves." *Q.J.E.* 70 (February 1956): 1-22.
- Sanderson, Warren, and Willis, Robert J. "Economic Models of Fertility: Some Examples and Implications." In *New Directions in Economic Research*. 51st Annual Report of the National Bureau of Economic Research. New York: Nat. Bur. Econ. Res., September 1971.
- Santos, F. P. "Marital Instability and Male-Female Complementarity." Ph.D. dissertation, Columbia Univ., 1970.
- Scarr-Salapatek, Sandra. "Race, Social Class and IQ." *Science*, December 24, 1971, pp. 1285-95.

- Schoggen, P. H., and Schoggen, Maxine F. "Behavior Units in Observational Research." Paper presented at the symposium on Methodological Issues in Observational Research, American Psychological Association, San Francisco, 1968.
- Schultz, T. Paul. *A Family Planning Hypothesis: Some Empirical Evidence from Puerto Rico*. RM-5405-RC/AID. Santa Monica, Calif.: RAND Corp., December 1967.
- . "An Economic Model of Family Planning and Fertility." *J.P.E.* 77, no. 2 (March/April 1969): 153–80.
- . *Fertility Patterns and Their Determinants in the Arab Middle East*. RM-5978-FF. Santa Monica, Calif.: RAND Corp., May 1970.
- . *Evaluation of Population Policies: A Framework for Analysis and Its Application to Taiwan's Family Planning Program*. R-643-AID. Santa Monica, Calif.: RAND Corp., June 1971. (a)
- . "The Effectiveness of Population Policies: Alternative Methods of Statistical Inference." P-4663. Santa Monica, Calif.: RAND Corp., July 1971. (b)
- . "An Economic Perspective on Population Growth." In *Rapid Population Growth*. Baltimore: Johns Hopkins Press (for Nat. Acad. Sci.), 1971. (c)
- . "Economics of Fertility and Household Behavior: United States 1967." Mimeographed. Santa Monica, Calif.: RAND Corp., 1972. (a)
- . "Education, Wages and Fertility in Bogota, Colombia." Mimeographed. RAND Corp., 1972. (b)
- Schultz, T. Paul, and DaVanzo, Julie. *Analysis of Demographic Change in East Pakistan: Retrospective Survey Data*. R-564-AID. Santa Monica, Calif.: RAND Corp., September 1970.
- Schultz, Theodore W. "Education and Economic Growth." In *Social Forces Influencing American Education, 1961*, edited by Nelson B. Henry. 60th Yearbook of the National Society for the Study of Education, pt. 2. Chicago: Univ. Chicago Press, 1961.
- . *Transforming Traditional Agriculture*. New Haven, Conn.: Yale Univ. Press, 1964.
- . *Investment in Human Capital*. New York: Free Press, 1971.
- . *Human Resources: Fiftieth Anniversary Colloquium 6*. New York: Nat. Bur. Econ. Res., 1972. (a)
- . "The Increasing Economic Value of Human Time." *American J. Agricultural Econ.* 54 (December 1972): 843–50. (b)
- . "Explanation and Interpretations of the Increasing Value of Human Time." Mimeographed. Woody Thompson lecture, Midwest Economics Association, Chicago, April 5, 1973.
- Schwartz, Aba. "Migration and Lifespan Earnings in the U.S." Ph.D. dissertation, Univ. Chicago, 1968.
- Shaw, George Bernard. *Man and Superman*. In *The Collected Works of*



- Bernard Shaw*. Vol. 10. Ayot St. Lawrence ed. New York: Wise, 1930.
- Shell, K. *Essays on Theory of Optimal Economic Growth*. Cambridge, Mass.: M.I.T. Press, 1967.
- Shinozaki, Nobuo. "Regional Problem of Population in Japan from the Viewpoint of Fertility." (In Japanese.) *Jinko Mondai Kenkyu* 118 (April 1971): 5-20.
- Silver, Morris. "Births, Marriages, and Business Cycles in the United States." *J.P.E.* 73 (June 1965): 237-55.
- . "Births, Marriages, and Income Fluctuations in the United Kingdom and Japan." *Econ. Development and Cultural Change* 14 (April 1966): 302-15.
- Simon, Julian. "The Effect of Income on Fertility." *Population Studies* 23 (November 1969): 327-41.
- Sloan, F. "Survival of Progeny in Developing Countries: An Analysis of Evidence from Costa Rica, Mexico, East Pakistan, and Puerto Rico." R-773-AID. Santa Monica, Calif.: RAND Corp., July 1971.
- Smith, James P. "The Life Cycle Allocation of Time in a Family Context." Ph.D. dissertation, Univ. Chicago, 1972. (a)
- . "Life Cycle Patterns." Mimeographed. Univ. Chicago, 1972. (b)
- Solmon, Lewis C. "The Relationship between Schooling and Savings Behavior." In *Education, Income, and Human Behavior*, edited by F. Thomas Juster. New York: McGraw-Hill (for Carnegie Commission Higher Educ. and Nat. Bur. Econ. Res.), 1974, in press.
- Solow, Robert M. "A Contribution to the Theory of Economic Growth." *Q.J.E.* 70 (February 1956): 65-94.
- Sontag, Lester W.; Baker, Charles T.; and Nelson, Virginia L. *Mental Growth and Personality Development: A Longitudinal Study*. In *Monographs of the Society for Research in Child Development*, vol. 23, no. 68. Lafayette, Ind.: Child Development Publications, 1958.
- Stigler, George J. "The Economics of Information." *J.P.E.* 69 (June 1961): 213-25.
- Stolper, Wolfgang F., and Samuelson, Paul A. "Protection and Real Wages." *Rev. Econ. Studies* 9 (1941): 58-73.
- Strotz, R. "The Empirical Implications of a Utility Tree." *Econometrica* 25 (April 1957): 269-80.
- . "The Utility Tree—Correction and Further Appraisal." *Econometrica* 27 (July 1959): 482-88.
- Stycos, J. Mayone. "Education and Fertility in Puerto Rico." In *World Population Conference, 1965*. Vol. 4. New York: United Nations, 1967.
- Suter, Larry E., and Miller, Herman P. "Components of Income Differences between Men and Women in the United States." Paper presented at the American Sociological Association meetings, Denver, 1971.

- Sutton, Gordon F., and Wunderlich, Gooloo S. "Estimating Marital Fertility Rates by Educational Attainment Using a Survey of New Mothers." *Demography* 4, no. 1 (1967): 135-42.
- Swan, T. W. "Economic Growth and Capital Accumulation." *Econ. Rec.* 32 (November 1956): 334-61.
- Sweet, James A. "Family Composition and the Labor Force Activity of Married Women in the United States." Ph.D. dissertation, Univ. Michigan, 1968.
- Tachi, Minoru. "The Relationship between Production Increase and Population Growth among Japanese Prefectures, 1925-1935." (In Japanese.) *Jinko Mondai Kenkyu* 5 (February 1946): 15-44.
- Tachi, Minoru, and Arao, M. "Marriage Rate and Business Cycle in Japan." *Jinko Mondai* 2 (October 1935): 205-20.
- Tauber, Irene. *The Population of Japan*. Princeton, N.J.: Princeton Univ. Press, 1958.
- Taiwan Department of Civil Affairs. *The Taiwan Demographic Fact Book*. Nantou: Taiwan Provincial Government, 1961, 1963, and subsequent years.
- Taiwan Population Studies Center. *The Demographic Reference: Taiwan*. Taichung: Taiwan Population Studies Center, 1965 and subsequent years.
- Taiwan Provincial Institute of Family Planning (formerly Taiwan Population Studies Center). *Family Planning Reference Book*. Vol. 1. Taichung: Taiwan Provincial Inst. Family Planning, 1969.
- Taubman, Paul J., and Wales, Terence J. "Higher Education, Mental Ability, and Screening." *J.P.E.* 81 (January/February 1973): 28-55.
- Terman, Lewis M. *Mental and Physical Traits of a Thousand Gifted Children*. Genetic Studies of Genius, vol. 1. Stanford, Calif.: Stanford Univ. Press, 1925.
- Terman, Lewis M.; Burks, Barbara S.; and Jensen, Dortha W. *The Promise of Youth*. Genetic Studies of Genius, vol. 3. Stanford, Calif.: Stanford Univ. Press, 1930.
- Terman, Lewis M., and Oden, Melita H. *The Gifted Group at Mid-Life*. Genetic Studies of Genius, vol. 5. Stanford, Calif.: Stanford Univ. Press, 1959.
- Theil, Henri. "Qualities, Prices and Budget Inquiries." *Rev. Econ. Studies* 19, no. 3 (1952): 129-47.
- . *Principles of Econometrics*. New York: Wiley, 1971.
- Tietze, Christopher. "Differential Fecundity and Effectiveness of Contraception." *Eugenics Rev.* 50 (January 1959): 231-37. (a)
- . "The Clinical Effectiveness of Contraceptive Methods." *American J. Obstetrics and Gynecology* 78 (September 1959): 650-56. (b)
- . "The Use-Effectiveness of Contraceptive Methods." In *Research in Family Planning*, edited by Clyde V. Kiser. Princeton, N.J.: Princeton Univ. Press, 1962.

- Tietze, Christopher. "Relative Effectiveness." In *Manual of Family Planning and Contraceptive Practices*, edited by Mary Steichen Calderone. Baltimore: Williams & Wilkins, 1970.
- Tobin, James. "The Application of Multivariate Probit Analysis to Economic Survey Data." Discussion Paper no. 1, Cowles Foundation, 1955.
- Umemura, Mataji. "Meiji Period Population Growth." In *Keizaishi ni okeru jinko* [Population in economic history], edited by H. Komatsu. Tokyo: Keio tsushin, 1969.
- U.S., Bureau of the Census. *County and City Data Book, 1962: Statistical Abstract*. Suppl. Washington: Government Printing Office, 1962.
- . *U.S. Census of Housing, 1960*. Vol. 1. *States and Small Areas*. Pt. 1. *United States Summary*. Washington: Government Printing Office, 1963. (a)
- . *U.S. Census of Population: 1960*. Vol. 1. *Characteristics of the Population*. Pts. 1–52. Washington: Government Printing Office, 1963. (b)
- . *Employment Status and Work Experience*. Washington: Government Printing Office, 1963. (c)
- . *U.S. Censuses of Population and Housing, 1960. 1/1000, 1/10,000: Two National Samples of the Population of the United States, Description and Technical Documentation*. Washington: Government Printing Office, 1964.
- . *U.S. Census of Agriculture: 1964*. Washington: Government Printing Office, 1967.
- . *U.S. Census of Population: 1960. Childspacing*. PC(Z)3B. Washington: Government Printing Office, 1968.
- . *Social and Economic Variations in Marriage, Divorce, and Remarriage: 1967*. Current Population Reports, ser. P-20, no. 223. Washington: Government Printing Office, 1971.
- . *Statistical Abstract of the United States*. Washington: Government Printing Office, various issues.
- U.S., Department of Health, Education and Welfare. *Vital Statistics of the United States*. Vol. 1. Washington: Government Printing Office, 1968. (a)
- U.S., Department of Health, Education and Welfare. Social Security Administration, Office of Research and Statistics. *Workers under Social Security, 1960*. Washington: Government Printing Office, 1968. (b)
- U.S., Office of Economic Opportunity, Day Care Policy Studies Group, Institute for Interdisciplinary Studies. "Child Care Programs: Estimation of Impacts and Evaluation of Alternative Federal Strategies." Report B00-5121. Washington: Office of Economic Opportunity, December 1971.
- Wachtel, Paul. "The Returns to Investments in Higher Education Revisited." In *Education, Income, and Human Behavior*, edited by F.

- Thomas Juster. New York: McGraw-Hill (for Carnegie Commission Higher Educ. and Nat. Bur. Econ. Res.), 1974, in press.
- Wald, A. "The Approximate Determination of Indifference Surfaces by Means of Engel Curves." *Econometrica* 8 (April 1940): 144-75.
- Wales, T. "Estimation of a Labor Supply Curve for Self-employed Business Proprietors." *Internat. Econ. Rev.* 14 (February 1973): 69-80.
- Walker, Kathryn E. "Time Spent in Household Work by Homemakers." *Family Econ. Rev.* (ARS 62-5) (September 1969), pp. 5-6.
- Walsh, B. M. "Trends in Age at Marriage in Postwar Ireland." *Demography* 9 (May 1972): 187-202.
- Watts, H., and Tobin, J. "Consumer Expenditures and the Capital Account." In *Studies in Portfolio Behavior*, edited by D. Hester and J. Tobin. New York: Wiley, 1969.
- Weisbrod, Burton A., and Karpoff, Peter. "Monetary Returns to College Education, Student Ability, and College Quality." *Rev. Econ. and Statis.* 50 (November 1968): 491-97.
- Welch, Finis. "Measuring the Quality of Schooling." *A.E.R.* 56 (suppl.; May 1966): 379-92.
- . "Education in Production." *J.P.E.* 78 (January/February 1970): 35-59.
- Westoff, Charles F.; Potter, Robert G., Jr.; and Sagi, Philip C. *The Third Child*. Princeton, N.J.: Princeton Univ. Press, 1963.
- Whelpton, Pascal K.; Campbell, Arthur A.; and Patterson, John E. *Fertility and Family Planning in the United States*. Princeton, N.J.: Princeton Univ. Press, 1966.
- Willis, Robert J. "A New Approach to the Economic Theory of Fertility Behavior." Mimeographed. Nat. Bur. Econ. Res., 1969 (rev. 1971).
- . "The Economic Determinants of Fertility Behavior." Ph.D. dissertation, Univ. Washington, 1971.
- Wilson, Frances. *Labour in the South African Gold Mines, 1911-1969*. Cambridge: Cambridge Univ. Press, 1972.
- Winch, R. F. *Mate Selection*. New York: Harper, 1958.
- . "Another Look at the Theory of Complementarity Needs in Mate Selection." *J. Marriage and Family* 29 (November 1967): 756-62.
- Wray, Joe D. "Population Pressure on Families: Family Size and Child Spacing." *Population/Family Planning*, no. 9 (August 1971).
- Yaukey, David. *Fertility Differences in a Modernizing Country*. Princeton, N.J.: Princeton Univ. Press, 1961.
- Young, Kimball. *Isn't One Wife Enough?* New York: Holt, 1954.
- Zellner, Arnold. "An Efficient Method of Estimating Seemingly Unrelated Regressions and Tests for Aggregation Bias." *J. American Statis. Assoc.* 57 (June 1962): 348-68.



# INDEX

- Ability, studies of effects of, among: American Telephone and Telegraph Company employees, 449; California school children (Terman sample), 435–36, 535; Connecticut school boys, 449; Minnesota high school graduates, 449; Project Talent participants, 449; recipients of Woodrow Wilson fellowships, 449; U.S. Air Force volunteers (NBER-Thorndike sample), 390–91, 449; U.S. military veterans, 449
- Abortion in Japan, 225, 227, 229, 234–39, 246–47, 250–52
- Adelman, Irma, 25 n., 190 n.
- Age-specific birth rates, 160 n., 245, 293; for Taiwan, 257–58, 262, 268, 276–78, 286–87
- Aigner, D., 496
- Aitchison, John, 471
- Akasako, Keiko, 253 n.
- Alchian, Armen A., 329 n.
- Alstrom, C. H., 318
- Andersen, Ronald, 378
- Anderson, Odin W., 378
- Aoki, Hisao, 226 n., 229, 230, 239, 251 n., 252 n.
- Arao, M., 250 n.
- Arrington, Leonard J., 334 n.
- Ashenfelter, Orley, 104 n., 449, 491 n.
- Auerbach, C., 219
- 
- Bachi, R., 191 n., 219
- Baerwaldt, Nancy, 487
- Bajema, C. J., 308 n.
- Baker, Charles T., 440
- Baumol, William J., 528
- Becker, Gary S., 3, 7, 9, 25 n., 28, 29, 30, 32 n., 34 n., 35, 37, 81, 82, 83, 91 n., 93 n., 117, 120 n., 121, 127, 128, 131, 153, 189, 193, 217, 218, 224, 225 n., 231, 232 n., 250 n., 300 n., 328 n., 329 n., 331 n., 336 n., 338 n.,

- 346, 347, 352 n., 353 n., 369, 372, 373, 374, 375 n., 398, 400, 443, 444 n., 457 n., 459, 463, 469, 527 n., 528, 529, 530, 533, 535, 542, 546
- Beckman, M., 310 n.
- Benham, Alexandra, 375 n.
- Benham, Lee, 319, 335, 342 n., 428 n.
- Ben-Porath, Yoram, 3 n., 10 n., 25 n., 34 n., 63 n., 64, 91 n., 128, 130 n., 181, 192, 195, 217, 218 n., 219, 231, 232, 233, 244 n., 250, 255 n., 265 n., 288, 400, 433, 453, 457 n., 465, 470, 535, 537, 538, 539
- Ben-Zion, U., 314 n.
- Berg, Alan, 534
- Betsey, Charles, 432 n., 491 n.
- Biological attributes, 5, 56, 77
- Birth control. *See* Contraception, Family planning, and Fertility
- Birth rates, 271, 350, 370; among teenage mothers, 270, 271, 285; in Japan, 226, 227, 228, 248, 251; in low-income countries, 21, 256; in Taiwan, 257-58, 261, 266, 271, 275, 279-80, 284-86; study of, in Puerto Rico, 274; U.S., 26 n., 225 n., 248
- Blake, Judith, 39, 218
- Blau, Peter M., 217, 386
- Bodmer, W. F., 319, 335, 336 n.
- Bogue, Donald, 366 n.
- Borjas, George, 397 n.
- Borrowing by families, 12, 502-3
- Bowen, William G., 49, 499 n., 506, 507
- Bowles, Samuel, 448, 455
- Box, G. P., 498 n.
- Brock, William, 299 n., 339 n.
- Broel-Plateris, Alexander, 360 n., 361
- Brown, J. A. C., 471
- Bumpass, Larry L., 201
- Burks, Barbara S., 440 n.
- Butz, William, 255 n.
- Cain, Glen G., 49, 91 n., 99 n., 195, 290, 428 n., 458, 527 n., 538
- Caldwell, J. C., 132, 217 n.
- Campbell, Arthur A., 132 n., 153, 178 n.
- Capital formation, 540, 544
- Capital stocks, 540, 541, 543-44
- Catholics, 135 n., 142, 319, 346, 359, 360, 362, 366
- Cavalli-Sforza, L. L., 319, 335, 336 n.
- Celibacy, 335 n.
- Central Bureau of Statistics, Jerusalem, 189 n., 192, 193, 198, 199
- Cheung, Steven N. S., 352 n.
- Child care: costs of, 497, 499-504, 507; federal income tax deductions for, 492; informal arrangements for, 495, 499-500, 506, 508-13, 514;

- in Israel, 216; and Nixon administration "workfare" proposals, 492, 494, 495
- Childbearing. *See* Family planning, and Fertility
- Child-death adjustment, 263, 266, 270, 276-78, 281-84; in Bangladesh, 270 n.; by teenage mothers, 270
- Child quality, 30-32, 92, 95, 102, 114, 179, 218, 223-24, 434, 477, 483, 539, 542-43; and father's education, 111; and influence of mother's education, 98, 109, 112, 114; and investment in schooling, 111; measures of, 113; and quantity, 81-82, 85-86, 128, 217
- Child rearing. *See* Child quality, Costs, and Time, value of
- Children, demand for, 9, 36, 52, 110, 118, 141, 220, 267, 369, 539, 547; and education, 232-33; effect of rising price of mother's time on, 537; and mother's education, 113, 127; and women's earnings, 104, 110, 113
- Children, demand for, in Japan; 230, 234-35, 245; income effects on, 248-49; quality versus quantity, 81-90, 248-49
- Children's earnings, 33 n., 171, 315 n.
- Childspacing, 154, 428. *See also* Fertility
- China: rights of concubines in, 334 n., 350; property rights in marriage in, 352 n.
- Chiswick, Barry R., 120 n., 399 n., 432 n., 444 n., 457 n.
- Chow, Gregory C., 244
- Coale, A. S., 336
- Cohen, Malcolm S., 97
- Coleman Report, 432 n.
- Consumer demand, 530; for health, 131; for housing, 361
- Consumer preferences, 494 n., 496, 517, 519, 531, 536 n. *See also* Preferences, variations in
- Consumption, 546; theory of life-cycle, 476
- Contraception, 179-180; economic incentives for, 147; studies of, in Barbados, Ghana, India, Japan, Lebanon, and Puerto Rico, 132. *See also* Fertility
- Contraception in Japan, 132, 233 n., 234-39; diffusion of techniques for, 237-39, 247, 250-52
- Contraception techniques, 11, 120, 134, 135-36; diffusion of, 152; effects of education on choice of, 120, 140, 143, 152; use effectiveness of, 134, 143. *See also* Family planning
- Contraceptive efficiency, 132-41, 144-46, 153, 154, 158, 159, 180; and education, 152
- Coombs, L., 25 n.
- Costs: of children, 76, 81-82, 129, 130 n., 162, 175, 426, 547; in earnings foregone, 425-26, 522; of fertility control, 142, 151; opportunity costs, 41-42, 44, 79, 295, 425-28, 444
- Cox, D., 498 n.
- Crayne, Susan, 435 n.



- Cross-section evidence, 13, 63, 111, 161, 174, 189, 199, 225 n., 241, 247, 260 n., 267-72
- Dagli, C. Ates, 25 n.
- Dandekar, Kumudini, 132
- Data, inadequacy of, 9, 59, 62, 78, 79, 102, 103, 104, 114, 118-19, 133, 152, 161, 164, 165, 168, 172, 174, 184, 185, 188, 240, 245, 259, 358, 360, 454, 468, 505
- Data surveys: Current Population Survey, 424; National Longitudinal Survey of Work Experience, 398, 399, 402, 421, 422, 423, 428 n., 429, 505, 506, 510; Ohio Survey, 487; *Productive American* Survey, 487; Survey of Economic Opportunity, 59 n., 96 n., 291, 318, 378, 379, 382, 383, 384, 422, 423, 424 n., 486
- Da Vanzo, Julie, 255 n., 270 n., 288
- Demographic Center, Prime Minister's Office, Jerusalem, 189 n.
- Demographic transition, 5-6, 40, 110-11, 117, 160, 193, 220, 250 n., 528, 539, 540, 544; in Israel, 191 n., 193; in Japan, 225, 247, 253; in low-income countries, 256
- Demsetz, Harold, 329 n.
- Determinants of ability, 432-36, 454-55
- De Tray, Dennis N., 3 n., 31 n., 81, 85, 91 n., 96, 97, 101 n., 102 n., 104 n., 105, 106 n., 130 n., 161, 162, 170, 179, 217, 231 n., 255 n., 265 n., 290, 291, 457 n., 533, 537
- Diller, Stanley, 457 n.
- Discrimination in labor markets, 424-25, 430, 535
- Disequilibrium, 284-87, 541, 548
- Divorce, 300, 307, 337, 338, 346, 352, 357; by teenagers, 366
- Divorce, cost of, 357, 360, 362, 370, 374
- Divorce laws, ease of, by states, 361
- Dorjahn, V. R., 333 n., 334
- Duesenberry, James, 39, 81, 128 n., 218
- Dugan, D. J., 375
- Duncan, Beverly, 386
- Duncan, Otis Dudley, 217, 386, 387 n., 397 n.
- Eads, George, 534 n.
- Earnings, 104, 110, 113, 397-430; effect of ability on, 448-49; effects of parents' education and income on children's, 447, 450, 455; life-cycle, 34, 453; women's, 119
- Earnings functions, 399-401, 407-9, 411-14, 418-22, 424, 432, 444-49
- Easterlin, Richard A., 5 n., 25 n., 189
- Economic growth, 17-19, 226, 231, 248, 527-28; and decline in marriages, 370; in Japan, 226, 248; in Taiwan, 257; and value of human time, 544
- Economic models: desired family size, 91-96, 119, 160-83; fertility de-

- termination, 260; household-family, 12-14, 20, 157, 161; marriage and fertility, 50 n., 64, 124, 188
- Economic theory: allocation of time, 7, 25 n., 287; consumer choice, 118, 259; family household behavior, 7, 26, 77-78, 120, 121, 225, 287, 528; population, 12, 527-28
- Economies of scale, 99 n., 112, 162 n., 304
- Ehrlich, Isaac, 299 n., 314 n., 331 n.
- Elasticity of substitution, 38-39, 43-44, 74, 95, 115, 191, 215-16, 231, 462-63, 477, 483, 519, 542, 544
- Employment. *See* Earnings, Information, Labor-force participation by women, and women's work effort
- England, fluctuations of births in, 225 n.
- Falk Institute of Economic Research, Jerusalem, 189 n.
- Family budget constraints, 86 n., 87, 89, 125, 162-63, 259, 489, 536; in Israel, 221, 222
- Family home investments in human capital, 397-431, 432-452, 453-56
- Family housing, 105, 109, 361
- Family planning, 219, 293; programs in Japan, 225, 229; programs in Taiwan, 259, 261-65, 268-89, 271-72, 281-85
- Family size effects, 113, 161, 187, 416, 450; and schooling, race, income, and wages, 167-69, 173, 177-83
- Fane, George, 19 n.
- Farm-operator families, 98, 105 n., 111-12, 174-77, 182
- Farrar, Donald E., 109 n.
- Featherman, David L., 386
- Fertility, 63, 64, 231, 547; birth intervals, 265, 266; birth probabilities, 123, 144-46, 148-49, 150, 151; changes in over time, 8, 256, 284, 428; control, 40, 124-25; economic influences on, 27, 60, 113, 195; effects of education on, 78-79, 113, 120, 126, 131-32, 140, 144-46, 147, 148-49, 150-51, 153, 154, 157, 159, 190-91, 209 n., 231; and lifetime income, U.S. and Europe, 63; U.S. rural-urban differentials, 16, 160. *See also* Age-specific birth rates; Children, demand for; Childspacing; Contraception; Costs, of fertility control; and Rural women, fertility of
- Fertility, summary results of studies of economic determinants of fertility in Bogota, Colombia, Chile, Egypt, Israel, Philippines, Puerto Rico, Taiwan, Thailand, and U.S., 288-91
- Fertility in Israel, 192-93, 203; differentials among immigrant groups, 192-93, 199-205, 220, 221-22; effects of education on, 195-98, 200, 202, 209, 219, 221-23; effects of husband's earnings on, 200, 202, 203, 206
- Fertility in Japan, 225, 235-37, 247-49; decline in, 226, 229, 234-39, 248-49; effects of earnings on, 243, 246, 247; effects of education on,

- 232, 233, 239–247; effects of female labor-force participation on, 246; rural compared with urban, 237, 245–46; studies of, 250 n.
- Fertility trends, comparative (post–World War II) for U.S. and Japan, 248
- Finegan, T. A., 49, 499 n., 506, 507
- Fishelsohn, G., 210, 211 n.
- Fisher, R. A., 336 n.
- Floyd, John, 25 n.
- Foundations: Ford, 25 n., 120 n., 299 n.; National Science, 189 n., 397 n., 432 n., 491 n.; Rockefeller, 91 n., 255 n., 352 n., 457 n., 527 n.
- Freedman, Deborah S., 25 n., 190 n.
- Freedman, Ronald, 25 n., 132 n., 163 n., 164, 259
- Freeman, Richard B., 527 n.
- Freiden, Alan, 299 n., 308, 319, 324 n., 337, 362 n.
- Friedlander, Stanley, 25 n.
- Friendlander, Dov, 191 n.
- Fuchs, Victor, 34 n., 120 n., 419
- Full income, 194, 355–56, 372–73
- Gardner, Bruce, 110 n., 165, 169 n., 170, 232, 265 n., 290
- Gerschenkron, Alexander, 190
- Ghez, Gilbert R., 463, 535
- Glauber, R. R., 109 n.
- Gold, Ruth Z., 123 n.
- Goldberg, David, 163 n., 164
- Goldfeld, S., 517 n.
- Goode, William J., 300 n., 305, 334, 346, 350 n.
- Gorman, W. M., 530, 532
- Grabill, W. H., 178 n.
- Griliches, Zvi, 189 n., 273, 449, 455
- Gronau, Reuben, 120 n., 163, 179, 214 n., 220, 233 n., 264, 299 n., 318 n., 360 n., 457, 458, 462, 465, 470, 491, 496, 499 n., 505, 506, 538
- Grossman, Michael, 28 n., 32 n., 93 n., 120 n., 125 n., 126 n., 131, 302 n., 320 n., 533 n.
- Halevi, Abner, 189 n.
- Hall, Robert E., 457 n., 539
- Hansen, W. Lee, 432
- Harberger, Arnold, 491
- Harman, A. J., 288
- Hashimoto, Margaret L., 225 n.
- Hause, John, 432 n., 449
- Head Start program, 442 n.
- Health: capital, 126 n.; care, 28, 542–43; levels, 418, 419

- Heckman, James J., 318 n., 397 n., 457 n., 496, 503 n., 510, 511, 514-15, 535
- Hicks, J. R., 312 n., 494, 497, 534
- Higgins, J. V., 308 n.
- High price of human time, 15-16
- Hill, C. Russell, 215 n., 454, 458, 487
- Hinoeuma*, 226 n.
- Hitotsubashi University Institute of Economic Research, 253 n.
- Honda, Tatsuo, 228 n.
- Honjo, Eijiro, 251 n.
- Hotelling, Harold, 521 n.
- Household production, 130, 534-35, 539
- Household production function, 6, 12, 30-32, 45-48, 91, 114, 121-22, 126, 157, 301-3, 312, 341-42, 355-57, 373, 463, 533-34, 547
- Household work, 458, 487; and hired domestic help, 43 n., 172, 174, 179, 182, 210, 212-13, 216, 483
- Houthakker, Hendrik S., 82
- Howard, Elayne, 375 n.
- Huffman, Wallace E., 19 n.
- Human capital, 4, 6, 7, 10, 17, 34, 126, 129, 264 n., 376-77, 432-33, 433-34, 540, 541, 543, 548; influence of wife's on husband's market productivity, 377, 378-82, 384-89, 390-93
- Income effects (on demand), 9, 82-85, 128, 182-83, 223, 231, 247-249, 462, 542
- India: schooling of girls in Punjab, 21; marriage, fertility and divorce in, 132, 332, 346, 350
- Infant mortality, 4, 21, 99-100, 110, 113, 158, 227, 258-59, 539, 542, 544
- Infanticide, 333
- Information, 375-76; job search, 465; theory, 158
- Intergenerational transfers, 532, 535-36, 543
- Investment opportunities, 17-19
- Investments by families, 10, 11; in homes, 105; in wife's education, 51
- IQ: and achievement, 434-44, 448, 450, 455; tests, 436-37
- Ireland, age at marriage in, 324 n., 346
- Israel, 63, 189-224 n., 250, 288; immigration and sources, 192-93. *See also* Demographic transition, Fertility in Israel, Labor-force participation by women, Social security, and Women's work effort
- Israel population, 192, 200; Christians in, 198; foreign-born in, 192, 200, 201; Jews in, 192, 197-98; Moslems in, 198; non-Jews in, 198
- Jaffe, A. J., 160
- Japan, 132, 225-54, 312 n., 350; rights of concubines in, 334 n.; schooling in, 249, 252, 253. *See also* Abortion in Japan; Birth rates;

- Children, demand for, in Japan; Contraception in Japan; Demographic transition; Economic growth; Family planning; Fertility in Japan; Labor-force participation by women; Mortality rates; Population; and Women's work effort
- Japan Institute of Population Problems, 226 n., 239
- Japan Ministry of Education, 252 n.
- Japan Ministry of Health and Welfare, 227, 228, 229, 238, 239, 251 n., 252 n.
- Japan Prime Minister's Office, 228, 236, 242, 243, 248, 252 n.
- Japanese Eugenics Law of 1948, 234
- Jensen, Dortha W., 440 n.
- Johnson, George E., 399 n., 455
- Johnson, Harry G., 6 n.
- Johnson, P. R., 160 n.
- Joint production, 32, 93 n., 125 n., 128, 218, 219, 302 n., 320, 373, 374, 533
- Jones, R. W., 55 n.
- Jorgensen, Dale, 293
- Kagan, Jerome S., 432 n., 438
- Karpoff, Peter, 449
- Keeley, Michael C., 299 n., 306 n., 307, 337 n., 353 n.
- Kendall, M. G., 517
- Keyfitz, Nathan, 123 n., 133 n., 265
- Keynes, John Maynard, 129 n.
- Khaldi, Nabil, 19 n.
- Kibbutzim, 196-98, 222, 288
- King, Willford Isbell, 450
- Kiser, C. V., 163 n., 178 n.
- Knight, Frank H., 527, 532, 536, 540
- Knight, Frederick, 349
- Kogut, E. L., 306, 337, 352 n.
- Kohjima, Sachio, 225 n.
- Koizumi, Akira, 233 n.
- Koopmans, Tjalling C., 310 n., 532
- Kosters, M., 496
- Krashinsky, S., 500 n.
- Kuratani, M., 225 n., 312 n.
- Kuznets, Simon, 17 n., 189 n., 218 n., 540
- Labor-force participation by women, 47-51, 52-58, 97, 98, 119, 161 n., 314, 377 n., 401-7, 414-15, 428, 458-59, 465-71, 473, 481, 486, 490, 535, 538-39; with children, 212-15, 402, 404, 414-15, 425, 506-8, 519; effect of tied child-care payments to mothers on welfare on, 508-13; in Israel, 210-16, 539; in Japan, 226, 243, 249

- Labor markets, 171; depreciation of women's skills in, 264 n., 404, 415–16, 423, 426; and married women, 170, 401; women in, 431. *See also* Discrimination in labor markets, and Productivity
- Labor-supply functions, 419, 420, 431, 464, 468, 495–98
- Lancaster, Kelvin J., 28, 91 n., 189, 217, 529, 530
- Landes, William, 457 n.
- Landsberger, Michael, 50 n.
- Latin America, divorce and marriage in, 337, 350, 352
- Lazear, Edward P., 34 n., 120 n., 129 n., 206 n., 264 n., 425, 457, 469, 473 n.
- Leibenstein, Harvey, 189, 217
- Leibowitz, Arleen, 50 n., 97, 130 n., 215 n., 253, 319, 335, 428 n., 434, 437, 454, 457 n., 458, 474 n., 477, 486, 535, 538, 542
- Leontief, W., 529–30
- Lerman, Robert J., 97
- Lewis, H. Gregg, 3 n., 9, 25 n., 37 n., 40 n., 114 n., 153, 189 n., 201 n., 220, 225 n., 299 n., 318, 336 n., 340, 352 n., 457 n., 465 n., 468, 519, 542
- Life-cycle marital patterns, 336–38
- Life-cycle patterns, 264 n., 270, 381–82, 398, 399, 401–2, 404, 407, 409–10, 447, 450, 476–77, 502–3
- Life expectancy, 21, 131, 542
- Lifetime marital fertility, 26, 273
- Lindauer, David L., 432 n.
- Linder, Staffan B., 541
- Lindsay, C. M., 34 n.
- Love, caring, and marriage, 327–32, 350
- Low, S., 495, 507
- Low-income countries, 7, 11, 19, 21, 133, 255 n., 256, 259, 263, 287, 288–89, 534
- McCall, J. J., 337 n., 465 n.
- McCann, Barbara, 134 n.
- MacLeod, John, 123 n.
- McNeil, D. R., 336 n.
- Mainichi Newspaper Company, 227, 248, 252 n.
- Makinen, Gail, 225 n.
- Malinvaud, E., 62 n., 267 n.
- Malthusian approach, 3, 5, 15, 21, 26, 527–28, 544
- Market goods, 93, 111–12, 263–64
- Marriage, 299–351, 352, 376; age at, 131, 140, 153, 184, 201, 252, 263, 270, 304, 306, 307, 323–24, 336, 346, 383; and assortive mating, 311–22, 335–36, 393, 538; and business cycles, 362; effects of divorce laws on, 337; forms recognized in Brazil, 352 n.; of teenagers, 365–66; and women's wage rates, 308, 319. *See also* Selective mating

- Marriage market, 300, 310, 318, 320, 326, 329, 337-38, 352-71, 391; and teenagers, 370
- Marshall, Alfred, 18, 540
- Mason, William M., 449, 455
- Matras, J., 191 n., 219
- Matsumoto, Y. Scott, 233 n.
- Matsunaga, Ei, 132
- Maurer, K. M., 255 n., 288
- Maybury-Lewis, D., 334
- Michael, Robert T., 34 n., 93 n., 129 n., 130, 161, 162, 179, 206 n., 218 n., 231, 264 n., 290, 291, 299 n., 300 n., 375 n., 425, 457, 469, 473 n., 483, 506, 529, 530 n.
- Migration, 188, 370, 375 n.; in Taiwan, 265 n.
- Miller, Herman P., 399 n., 424
- Mincer, Jacob, 25 n., 26 n., 28, 34 n., 49, 59, 108, 117, 120 n., 121, 130 n., 189, 195, 207 n., 225 n., 255 n., 264 n., 377, 399 n., 422, 428 n., 432 n., 444, 457 n., 458, 491 n., 506 n., 522-23, 529 n., 535, 537
- Mitchell, Wesley C., 153, 528
- Moeller, John Francis, 105
- Mooney, Joseph D., 449
- Morgan, James N., 487
- Morishima, Michio, 531
- Mormons, 333, 334, 335 n.
- Morrison, William A., 132
- Mortality rates, 11, 185 n.; in Japan, 227; in Taiwan, 257-58. *See also* Infant mortality
- Mortensen, D. T., 337 n., 465 n.
- Moshavim, 197-98
- Moss, H. A., 438
- Mosteller, Frederick, 432 n.
- Muhsam, Helmut, 191 n.
- Mukhopadhyay, Arun K., 432 n.
- Muramatsu, M., 233 n., 234, 235 n.
- Muth, Richard F., 529, 530
- 
- Nakano, Eiko, 229, 230, 239
- National Bureau of Economic Research, 25 n., 120 n., 153, 299 n., 397 n., 432 n., 435 n., 491 n.
- National Council of Churches, 359
- National Opinion Research Center, 378, 379
- Neel, J. V., 334
- Negroes (blacks), 165; age at marriage of, 324 n.; earnings of, 319; and fertility, 135, 137, 138-39, 141, 144-46, 148-49, 291; wage rates and schooling of, 318, 368; women and labor market, 419, 507, 508, 509-

- 10; women's earning functions, 418; work histories of women, 403, 417; workers in South Africa, 335
- Nelson, P. J., 337 n.
- Nelson, R., 500 n.
- Nelson, Virginia L., 440
- Nerlove, Marc, 3 n., 14, 19 n., 26 n., 91 n., 93 n., 161 n., 196, 225 n., 259, 273, 274, 288, 299 n., 324 n., 352 n., 369 n., 457 n., 491 n., 529, 534 n., 535 n., 537, 539
- Nohara, Tadahiro, 233 n.
- Nonwhites: and contraception, 132; and fertility, 105, 106, 107, 108, 110, 135 n., 167, 173, 176-78, 180, 182, 290, 359, 368
- Nutrition, 21, 542-43
- Oaxaca, Ronald L., 118 n.
- Oden, Melita H., 435 n.
- Ofek, H., 314, 317 n.
- O'Hara, Donald J., 100, 263, 539
- Okazaki, Yoichi, 247 n., 253 n.
- Okun, Bernard, 128 n., 160, 218
- Olsen, Randall, 457 n.
- On-the-job training, 129, 264 n., 360, 374, 375, 376, 381, 389, 419
- Paauw, Douglas S., 225 n.
- Parnes, Herbert S., 399 n., 431, 510
- Parshley, Elizabeth, 491 n.
- Patterson, John E., 132 n., 153
- Peled, Z., 191 n., 219
- Pennock, Jean L., 175
- Petersen, William, 160
- Phelps, Charles, 255 n.
- Pitchford, J. D., 528
- Polachek, Solomon, 375 n., 399 n., 401, 506 n., 522-23
- Polygamy, 305-6, 320, 327, 332-35, 339, 347-51
- Polygyny: geographic incidence of, 333-34; movement away from in Sub-Saharan Africa, 350 n.
- Population: equilibrium, 14-15; genetics, 185, 319; growth, 527-28, 544; of Japan, 253 n.; of Taiwan, 257-58; research, 120 n.; of U.S., 255 n. *See also* Economic theory, Demographic transition, Fertility, and Israel population
- Population Council, 299 n.
- Posner, Richard, 299 n.
- Potter, Robert G., Jr., 123 n., 134 n., 136 n., 266
- Preferences, variations in, 4, 126, 196, 489-90
- Price effects (on demand), 85-86, 128, 129



- Price of purchased time, 172, 174, 182, 210, 212-13
- Productivity, 390, 393; in the household, 10, 93, 388-89, 458, 462-63, 476, 477, 478, 483, 544; in the labor market, 375, 388-89
- Public goods, 128, 320
- Puerto Rico, studies of marriage and fertility in, 132, 274, 288-89, 324 n.
- Quandt, R., 517 n.
- Raduchel, William, 534 n.
- Rahm, M., 399 n.
- RAND Corporation, 91 n., 255 n.
- Rasmussen, Jon, 25 n.
- Ratajczak, R., 288
- Rates of return, 18, 126 n., 263, 540, 541, 543, 544, 546, 547, 548; diminishing, to schooling, 444, 448, 476, 548
- Razin, Assaf, 531, 541
- Rea, Samuel A., 97
- Reder, Melvin, 397 n., 491 n.
- Reed, S. C., 308 n.
- Reed, W. E., 308 n.
- Reid, Margaret G., 3 n., 7, 105, 109, 120 n., 169, 352 n., 361, 527 n., 528
- Reischauer, R., 319, 324 n.
- Research Triangle Institute of North Carolina, 165, 167 n., 169, 172, 177, 185
- Rheinstein, Max, 360 n.
- Rivers, W. H., 333 n.
- Roberts, G. W., 132
- Rogers, Daniel C., 449
- Rosen, Sherwin, 505
- Ross, Sue, 428
- Rothschild, M., 189 n.
- Ruderman, F., 495, 506, 507
- Rural women, fertility of, 98-99, 160, 161 n., 162, 163, 182, 228, 251, 263; in Japan, 228, 251
- Rybczynski, T. N., 55 n.
- Ryder, Norman B., 5, 11, 120 n., 132 n., 135 n., 136, 142 n., 143 n., 152 n., 157, 256
- Sagi, Philip C., 123 n., 136 n.
- Sakoda, James M., 134
- Salzano, F. M., 334
- Samuelson, Paul A., 29-30, 42, 43, 531
- Sanderson, Warren, 25 n., 26 n., 32 n., 50 n., 59, 60, 62 n., 63, 290
- Santos, F. P., 308, 319, 324 n.

- Savings, 126 n., 187 n., 502-4
- Saxonhouse, Gary R., 225 n.
- Scanlon, William J., 432
- Scarr-Salapatek, Sandra, 218
- Schmeltz, Oscar, 191 n.
- Schoggen, Maxine F., 434
- Schoggen, P. H., 434
- Schooling: effect of mother's education on child's schooling attainment, 444; inequality of opportunity for, 450; quality of, 112. *See also* Rates of return, and Japan, schooling in
- Schrimper, R. A., 160 n.
- Schultz, T. Paul, 3 n., 14, 26 n., 91 n., 94 n., 120 n., 161 n., 189, 196, 225 n., 231 n., 247 n., 250, 259, 260, 263, 265, 266, 270, 271, 272, 274, 288, 290, 324 n., 369 n., 537, 539
- Schultz, Theodore W., 14, 16, 17, 18 n., 20, 25 n., 28 n., 91 n., 120 n., 126 n., 189 n., 225 n., 255 n., 299 n., 333 n., 352 n., 375 n., 377 n., 382 n., 397 n., 400 n., 457 n., 527 n., 531, 538, 539, 540, 541
- Schwartz, Aba, 375 n.
- Selective mating, 382-88, 390, 393
- Services of children, 32, 41-52, 91, 92, 97, 100, 113, 193, 217, 463-64, 487; women's inputs in production of, 458
- Shadow (nonmarket) prices, 35, 41-42, 124 n.; of time, 459-64
- Shaw, George Bernard, 335 n., 349
- Shea, John R., 399 n., 431, 510
- Shell, K., 502 n.
- Shinozaki, Nobuo, 236
- Shnelvar, Ralph, 491 n.
- Silver, Morris, 25 n., 225 n., 362
- Simon, Julian, 189 n., 190
- Simultaneity problems, 94 n., 97 n., 109, 111, 113, 187, 188, 419-20, 430
- Sirageldin, Ismail, 487
- Slesinger, Doris P., 163 n., 164
- Sloan, F., 534
- Smith, James P., 50 n., 97, 104, 314, 317 n., 458, 486, 487, 491 n., 538
- Social institutions, 11, 26, 29-30
- Social security, 160, 218; in Israel, 216
- Sociological approach, 5, 11, 77, 78, 110, 120, 132, 153, 164, 219, 247, 305, 311, 312, 345-46, 430, 431
- Solmon, Lewis C., 126 n.
- Solow, Robert M., 528
- Song, Haeng-Ja, 225 n.
- Sontag, Lester W., 440
- South, the: fertility in, 178 n., 180; investments by farmers in child quality in, 175; women's education in, 368 n.
- Spindler, A., 495, 507

- Spitz, Ruth S., 399 n., 431, 510  
 Stafford, Frank P., 215 n., 399 n., 454, 455, 458, 487, 535  
 Stano, Miron, 225 n.  
 Stevens, Anne O., 120 n.  
 Stigler, George J., 299 n., 337 n.  
 Stolper, Wolfgang F., 42  
 Strotz, R., 502 n., 530, 532  
 Stycos, J. Mayone, 132  
 Substitution effects, 12, 55–56, 58, 66–67, 72–75, 86  
 Surveys of fertility of U.S. women (Princeton Fertility Studies): Growth of American Families, 132, 135 n.; National Fertility Study, 79, 80, 120–21, 132, 135, 136, 142, 152, 157  
 Suter, Larry E., 399 n., 424  
 Sutton, Gordon F., 102 n.  
 Swan, T. W., 528  
 Sweet, James A., 539
- Tachi, Minoru, 250 n.  
 Taeuber, Irene, 252 n., 253 n.  
 Taiwan, 250, 255–95; schooling in, 265 n. *See also* Age-specific birth rates, Birth rates, Economic growth, Family planning, Migration, Mortality rates, Population, and Women's work effort  
 Taiwan Department of Civil Affairs, 258, 261  
 Taiwan Population Studies Center, 261  
 Taiwan Provincial Institute of Family Planning, 261  
 Takeshita, John Y., 259  
 Taubman, Paul J., 449  
 Taxation, 374, 466, 469, 491, 494, 496, 505  
 Teenagers. *See* Child-death adjustment, Divorce, Marriage, and Marriage market  
 Temporal analysis, 265–67, 503–4, 532  
 Terman, Lewis M., 435, 440  
 Theil, Henri, 32 n., 39 n., 59 n., 82, 211  
 Tidewell, P., 498 n.  
 Tietze, Christopher, 134 n., 152  
 Time, value of, 127, 129, 169–72, 263–64, 541; as costs, 193–95, 220; and economic growth, 544; effects of, on fertility, 457; housewife's, 457–88. *See also* High price of human time  
 Time allocation, 6, 14, 41–52, 232, 264, 314–17; by fathers, 97; by mothers, 97, 215, 454  
 Time-series evidence, 219, 222, 256, 270, 273–74  
 Tobin, James, 187 n., 255 n.  
 Todas, polyandry among, 332–33
- Umemura, Mataji, 253 n.

- United States: changes in economy of, 60; child mortality in, 11; post-World War II "baby boom" in, 26 n.; rent on farmland in, 16 n.
- United States government: Agency for International Development, 255 n.; Bureau of the Census, 58, 59, 60, 80, 101-2, 103, 104, 135 n., 153, 165, 171, 248, 290, 291, 352, 358, 359, 366, 370, 377, 378, 379, 380, 382, 383, 384, 385, 386 n., 391, 450, 458, 464, 471, 472, 473, 474, 486, 538; Department of Agriculture, 165, 167 n., 169, 172, 177, 185; Department of Health, Education and Welfare, 248, 359; National Center for Health Services Research and Development, 375 n.; National Institutes of Health, 92 n., 352 n., 432 n.; Office of Economic Opportunity, 379, 397 n., 432 n., 491; Social Security Administration, 104 n., 358
- Universities, 25 n., 91 n., 120, 189 n., 225 n., 299 n., 352 n., 378, 379, 435, 447, 457 n., 487, 527 n.
- Utility functions, 11, 27-29, 36, 77, 82, 92, 125-26, 162, 218, 223-24, 342-43, 463, 529-33, 543, 546, 547
- Veblen, Thorstein, 455
- Wachtel, Paul, 447
- Wage differentials, 96 n., 319, 399 n.; and education, 108 n., 419
- Wage gap, 422-25, 430
- Wald, A., 492
- Wales, Terence J., 449, 496
- Wallace, T. Dudley, 352 n.
- Walsh, B. M., 324 n.
- Watts, H., 187 n.
- Wealth effects, 52, 55, 57, 66, 72-75, 101, 111, 127, 129, 130
- Weininger, Adriana, 195, 290
- Weisbrod, Burton A., 432, 449
- Welch, Finis, 19 n., 91 n., 99 n., 103, 126 n., 130, 255 n., 375 n., 432 n., 442 n., 491 n., 548
- Western countries: divorce and marriage in, 300, 346, 350; labor's share of national income in, 540; per capita stock of capital in, 543; rural-urban fertility differentials in, 160
- Westoff, Charles F., 5, 79, 120 n., 123 n., 132 n., 135 n., 136, 142 n., 143 n., 152 n., 157
- Whelpton, Pascal K., 132 n., 153
- Willis, Robert J., 3 n., 9 n., 10 n., 26 n., 32 n., 40, 50 n., 59, 60, 62 n., 63, 81, 82, 85 n., 91 n., 96, 97 n., 120 n., 121, 128, 161, 163, 181, 189 n., 205, 206, 207, 209, 217, 218, 223, 231 n., 264, 265 n., 290, 397 n., 426 n., 457, 462, 491 n., 533, 537
- Wilson, Frances, 335
- Winch, R. F., 305, 311 n., 317, 318 n.
- Wolfe, Dael, 449

- Women. *See* Labor-force participation of women, and Labor market
- Women's work effort, 419, 457-58, 492-95, 520-24; in Africa, 264 n., 348; effect of child-care programs on, 491-518; in Israel, 210; in Japan, 249; in Muslim Middle East, 264 n.; in Taiwan, 257; in South-east Asia, 264 n.
- Wray, Joe D., 31 n.
- Wunderlich, Gooloo S., 102 n.
- Yamamura, Kozo, 225 n.
- Yaukey, David, 132
- Young, Kimball, 333 n., 334 n.
- Zeller, Frederick A., 399 n., 431, 510
- Zellner, Arnold, 366
- Zimmerman, Dennis, 225 n.