## Index

69,88

Accessions rate, 46 Delay time, 17, 19 Demand curve, 1, 21, 24, 30, 37 Aggregation, 47, 51, 55 Arbitrator, in game theory, 7-8 Demand pressure, 43, 45 Ashenfelter, Orley A., 20n, 88, 89 Density function, 74 Atonement, 16 Dunlop, John T., 21, 22–23, 30 Bargaining, Eckstein, Otto, 2n, 46-48, 62, 86, 88, 90.92 atonement in, 16 government intervention in, 50 Eckstein-Wyss index, 90, 92 risk in, 15, 16n, 19 Efficiency axiom, 8, 14 stalemate in, 15 Elasticity, two-person, 4, 5, 8 of output, 44n, 62, 63, 68 Bargaining equations, 77-84 of utility functions, 13-14, 26, 41 Bargaining models, 1 of utility increments, 12-14, 24, 27, Bargaining theories, 1, 4-20 33 - 36Bargaining variables, 1-3, 20, 77 of wage rate, 36, 38, 50, 79, 80, 81 Behman, Sara A., 46 Employment, 1, 21, 24-25, 28, 31-32, Bishop, Robert L., 6, 9n, 10n, 14-15, 45; see also Job turnover, Job upgrading, Layoffs, Quit Rate Enzler, Jared J., 64n, 91 Bowen, William G., 31n Bureau of Labor Statistics, 44, 54, 56, Equilibrium, 57, 62, 71, 73, 80, 90, 93 strategies of, 8 of wage rate, 48-49, 86-87 Capacity utilization, 64, 65, 68, 69–70, Expectations, 90, 91, 92 in bargaining games, 8 Capital costs, 30, 40 static, 48-49 Capital expansion, 25 Expected earnings, 42-43 Capital plans, 28 Expected profits, 23, 42–43 Capital stock, 1, 21, 24-25 Expected utility, 15 Capital supply, 1, 21, 44 Expected wage surplus, 23 Chamberlain, Neil W., 16n Expected wages, 48-49 Coddington, Alan, 18 Federal Reserve Board, 64-65, 90, 91, Cohen, Malcolm S., 46 Coleman, John, 93 Competition, perfect, 30, 87 Fellner, William, 26n Contract curve, 4, 7, 8, 12, 24–26, 33 Foldes, Lucien, 17–18 Cost of living, 37, 38, 49, 73, 77, 82– 84, 93, 94 Games. Cross, J. G., 18, 20 cooperative, 5 Cyclical variation, 42-43, 44, 45, 53, minimax theorem of, 8

nonzero sum, 5, 28

Games (continued)
rational players in, 7–8, 19
strategies of, 8
symmetric, 5
theory of, 4–8, 19, 86
threat concept of, 5–7
two-person, 5
zero sum, 8
Gordon, Robert J., 31n
Government intervention,
in bargaining, 50
in monopolies, 10
Growth trends, 69–70, 74

Hamermesh, Daniel S., 2n Hansen, Bent, 36 Harsanyi, John C., 7n, 9n, 15, 16 Hicks, John R., 6, 16–17, 18, 19–20 Hourly carnings, average, 2, 52–55, 59, 61, 70, 73, 76, 78, 81, 87n, 90, 91 Hours worked, 56–59, 60, 62, 92; see also Man hours

Income distribution, 27, 29–30, 39
Industries,
concentrated, 87
three-digit, 54–55
two-digit, 2, 45, 46–48, 51, 53–54, 57, 62, 71, 87n
Irrelevant alternatives axiom, 9–10, 11, 14, 19

Job turnover, 45–46, 70–72, 92 Job upgrading, 49, 52 Johnson, George E., 20n, 88, 89 Johnson, President Lyndon B., 50

Kennedy, President John F., 50 Klein, L. R., 65n, 92 Kryzaniak, Marian, 31n Kuh, Edwin, 2n, 48–49, 86–87, 88 Labor supply, by unions, 1, 21, 30, 42, 44, 87, 89

Late-shift work, 52–53

Layoffs, 45, 71–72, 73, 75–77, 82, 83, 92

de Leeuw, Frank, 64n, 91

Levinson, Harold M., 31n

Lewis, Harold Gregg, 44n, 88

Limitations of study, 84

Lipsey, Richard G., 36

Luce, R. Duncan, 7n, 13, 14n

Machlup, F., 4n Man hours, 52, 61, 62-63, 65, 67, 68, 70, 87n, 91, 92, 93; see also Hours worked Mark, Jerome, 93 Massachusetts Institute of Technology (M.I.T.), 93 Maximization, joint, 25-26 of profits, 22, 24, 25, 87 of rents, 23n of utility, 87 of wages, 23, 25 McGuire, Timothy W., 2n McKensie, Robert B., 16n Membership function, 21 Minimax theorem, 8 Models, 1, 16n, 21, 84, 89; see also Monopoly, Nash model Modigliani, Franco, 62 Monopoly, bilateral model, 1, 10, 21-28, 29-31, 85, 86 simple (standard) model, 1, 27n, 29-Morgenstern, Oskar, 4, 6 Musgrave, Richard A., 31n

Nash, John F., Jr., 1, 4, 6, 8-14,

Nash, John F., Jr. (continued)
18-20, 23, 26, 27
Nash model,
comparative statics of, 29-39
derivation of, 21-28
derivation of wage equation in,
40-50
empirical validation of, 51-74, 75-85
general characteristics of, 29-31
implications of, 86-89
New hire rate, 46

O'Donnell, Edward T., 57
Office of Business Economics, 44, 93
Okun's Law, 62, 63
Output, 1, 21, 24, 30, 31–32, 44n, 62–64, 68, 91
Output price index, 62, 90, 92
Overtime, 52–53, 55–59, 70–71, 73–74, 90–91, 93, 94
compositional effects on, 59–62
positive vs. negative, 56
quarterly equations, 58
scasonal effects on, 59–62

Pen Jan, 16n Pencavel, John H., 88, 89 Perry, George L., 2n, 31, 32, 47-48, 86,88 Phillips, A. W., 36 Phillips curve, 2-3, 36, 75-76, 84, 85, 86 Piece-rate workers, 52 Pierson, G., 2n, 47n, 86 Preston, R. S., 65n Prices, 1, 21, 24, 29, 49 effect of profits tax on, 31-32, 39 effect of wages on, 36-38, 39 labor demand-vs.-supply price, 82 markup price equation, 84 Pricing policy, 25, 27

Product-market force, 30-31 Production function, 1, 21, 30, 44n, 65n Production index, 65 Productivity, long-run, 62 of piece-rate workers, 52 real, 73-74 trend rates of, 63–64, 68–69, 74 value, 44, 73, 80, 81, 83, 84, 88, 92 and variable construction, 62-70 and wages, 78 Productivity equations, 67 Profit identity, 27, 29, 37-38, 40 Profit maximization, 22, 24, 25, 87 Profit sharing, 87 Profits, 1, 21, 22, 27, 31, 87, 88 Profits tax, 29, 31-36, 39, 41 Public opinion, 10

Quit rate, 45-46

Raiffa, Howard, 7n, 13, 14, 19
Rapping, Leonard A., 2n, 87n
Rees, Albert, 23n, 30n, 87n
Rehire rate, 46
Rent maximization, 23n
Resources, allocation of, 29–30
Revenue, 26, 30, 40, 44n
Risk, 14, 16n, 19
Rosen, Sherwin, 23n, 88, 89
Ross, Arthur M., 22

Saraydar, Edward, 16n Sargan, J. D., 48–49, 86, 88 Schackle, George L. S., 16n Schelling, Thomas C., 5, 8n Simler, N. J., 47n Slowdowns, 6 Solow, Robert M., 46 Stalemate, 15 Steel agreement of 1962, 25 Stevens, Carl M., 16n Strikes, 6, 17, 20, 24, 27, 43, 61, 67, 76, 78 Summers, R., 65n, 92 Sutch Richard, 62 Symmetry axiom, 9, 14

Taber, Martha, 4n Taxes, corporate income, 31-32, 34 linear, 32, 34, 36, 39, 41 nonproportional, 34–35 profits, 29, 31-36, 39, 41 progressive, 36 proportional, 38 social security, 70, 93 uhemployment, 70, 93 Tella, A., 47n Threat. fixed vs. variable, 5-7, 8, 14, 23, 85 in game theory, 5-7 instruments of, 6 Threat point, 7, 10, 12, 16 Throop, A. W., 2n Time discount rates, 18 Time trends, 65, 66, 72 Transformation invariance axiom, 9-10, 14-15 Transformation, linear, 4, 9, 14, 21–

Unemployment, 45–46, 62n, 75, 88
Unions,
demand for information on operations, 25
as economic institution, 22–23
influence on wages, 86–88
labor supply by, 1, 21, 30, 42, 44, 87, 89
as political institution, 22

University of Pennsylvania, 65n, 93 Utility frontier, 7, 8, 9, 10, 14, 15, 20 Utility function, 1, 4–5, 9, 12–14, 16– 17, 21–22, 23, 24, 33, 35–36, 38, 80, 81–82 Utility increments, 7, 9, 10, 12, 14, 24, 27, 33–36 Utility maximization, 87

Variables, bargaining, 1-3, 20, 29, 75, 84 construction of, 2, 52-70 dependent, 50, 51, 58, 61, 67, 76, 78, 79, 81, 83, 84, 91 dummy, 50, 57, 59, 61, 65, 67, 76–77, 78, 82, 83, 92 independent, 42, 51, 83, 88, 92 lagged wage, 80 nuisance, 54, 62 seasonal and compositional, 59-62, 72, 76–77, 78, 92, 93 specification of, 43–46 time-trend, 65, 66, 92 trend-dominated, 50 Violence, 6 Von Neumann, John, 4, 6

Wachter, Michael L., 2n
Wage adjustments, 46–50, 82, 86n, 87
Wage-bill hypothesis, 23
Wage equations, 1–2, 21, 27, 29–39, 40–50, 75–85, 86–89
Wage guideposts, 50
Wage maximization, 23, 25
Wage rates, 1, 23, 24, 30, 46, 47
and average hourly earnings, 52–55, 70, 73
and earnings, 80
elasticity of, 36, 38, 50, 79, 80, 81
equilibrium level of, 48–49
influence of unions on, 86–88

Wage rates (continued) nonunion, 21, 35, 40, 42, 44, 48, 70-72, 73, 80, 81, 83, 88-89, 93 and variable construction, 52-55 and prices, 34, 36-38 and productivity, 78 and profits tax, 31, 32-36 Wage rounds, 46-47 Wage surplus, 22-23, 27 Wages, lagged, 80, 82, 86n, 87 Wagner, Harvey M., 7n Walton, Richard E., 16n Weiss, Leonard W., 31n Wharton School utilization index, 65, 90, 92 Wilson, Thomas A., 2n, 46-48, 86, 88 Withdrawal from industry, 6, 23 Wyss, David, 62, 90, 92

Zeuthen, F., 15, 16, 19-20