Index

Abowd, J. M., 8, 12-14, 26, 33, 50, 110
Abowd-Kramarz decomposition, 50 acceptable offers, $17,114,118$ acceptance probability, $18,19,37,38,56$, $67,68,84,87,102,119,120$
acceptance and search effort strategy, 45
Acemoglu, D., 64
admissible wage distribution, $72,84,86$, 87,90
Albaek, K., 130
Albrecht, J. W., 15
allocation of labor, 71, 129
assignment problem, 30, 33
assortative matching, $10,30,31,33$
asymmetric information, 99
bargaining power, $26,77,88,90$
baseline salary scale, 101, 119-122
Becker, G., 30
Bellman equation, 67, 73, 76, 101, 115
Bertrand
bidding war, 102
competition, 16, 20, 33
bilateral bargaining, 7, 16
and the Danish IDA, 95
formal definition, 25
generalized Nash, 77, 87
labor market equilibrium, 79
and wage determination, 33
wage outcome, 72
wage policy function, 88
Bontemps, C., 6, 56, 71, 84
Bronfenbrenner, M., 4
Brown, C., 2
Bulow, J., 28

Burdett, K., 5, 6, 9, 15, 33, 35, 38, 42, 47, 56, 72, 77, 95, 97-102, 109, 112-119, 121-124, 129
Burdett-Mortensen model, 6, 35, 43 and the distribution of productivity, 69 equal profit condition, 65 extensions of, 122
and fixed-wage contracts, 101
with heterogenous employers, 56 with homogenous agents, 44 and infra-firm wage dispersion, 100 and shape of the wage distribution, 47 and tenure effects, 97 and wage policy, 71 and wage-tenure contracts, 113
Butters, G. R., 5, 6, 9, 15, 33, 118
capital utilization, 67, 68
Christensen, B. J., 48, 58, 72, 80, 82, 84, 87, 88, 95
Coles, M. G., 36, 119
collective agreements, 83 compensating differentials, $10,11,26$, 28, 33
compensation strategy, 104
competitive wage, 103
complementary in production, 30
constant returns, 16, 31
contact frequency, $17,18,20,25,41,43,60$, 65, 76, 77, 127
contract offer game, 100
coordination friction, 30
cost of hiring, 93-95
cost of recruiting, $23,25,59,62,65,69,76$, 80, 93
cost of search, $73,74,80,81$
counteroffer strategy, 98, 99, 111

Danish Model of collective bargaining, 83
Davis, S. J., 2, 15, 130
Diamond, P. A., 6,16
Dickens, W. T., 3
diminishing returns, 33
distribution of contract values, 113,114 , 118
distribution of firm size, 71
distribution of productivity, $57,58,61,69$, $71,72,80,90,91,93$
distribution of starting points, 120
distribution of wage offers, 17-19, 24, 29,
30, 39, 41-43, 45, 49, 58, 59, 61, 65, 66,
$68,78,79,81,84,102$
and employer productivity, 6,57
with productive heterogeneity, 58
to worker types, 31
distribution of wages, $17,39,63,64,66,72$,
79, 84, 86-88, 90, 91, 94, 95
conditional on employer productivity, 108
contingent on employer productivity, 109
Danish median wage of, 90
in Denmark, 48 , 95
and the distribution of productivity, 90 empirical definition, 48 in equilibrium, 41,71
and its long right tail, 50
shape of, 47,69
smooth approximation to, 84
steady state, 40
steady state equilibrium, 41
Due, J., 83
duration of a job spell, 81
economic efficiency, 2
efficiency of recruiting effort, 76
efficiency wage, $10,15,28,30,33$
efficient turnover, 99
elasticity
of the acceptance probability, 88
of a firm's labor supply, 59
employer fixed effect, $3,9,13,14,23,26$,
28, 50, 52, 109
employer heterogeneity, $6,9,28,98$, 109, 123
employer productivity, $6,25,32,56,57,59$, 61, 64, 77, 78, 95, 104, 109, 129
distribution of, 6
employment protection policy, 83
employment relationship, 37, 83
endogenous productive heterogeneity, 64, 65
envelope theorem, 60, 74
equal profit condition, $27,32,41,65,101$,
102, 120
equilibrium, $16,22,118$
bilateral bargaining, 79
to the binary assignment problem, 30
Burdett-Coles, 124
in the Burdett-Mortensen model, 102
contact frequency, 65
to the contract offer game, 100
contact rate, 68
contracts, 111
counteroffer, 110, 112
distribution of utility, 27
distribution of wage offers, 19, 41, 65
closed form solution, 20, 24, 25, 41, 43
equal profit, 15
generalized Nash, 26
of imperfect wage competition, 5
investment function, 65
locus of wage and amenity
combination, 28
matching models, 72
mixed strategy, 6,100
monopsonistic, 79
noncooperative, 112
noncooperative Nash, 119
no-trade, 80
offer arrival rate, 43
offer distribution, 19
offer and wage densities, 58
perfectly competitive, 30, 109
Postel-Vinay and Robin, 124
in pure strategies, 18
pure strategy, 6
search and efficiency wage theories, 15
search theory, 16
solution to a wage posting game,
16, 35
steady state, 41
symmetric pure strategy, 18
unemployment rate, 41
value of unemployment, 122
wage contract, 113
wage distribution, $22,65,87,107$
with two employer types, 23
wage function, 58, 127
wage policy function, 128
wage and offer distributions, 42 of the wage posting game, 70 with heterogeneity in worker skills, 32 ergodic distribution of firm size, 90 exogenous turnover rate, 76 expected present value of the future utility flow, 114
expected profit per worker, $21,24,25,32$,
$37,39,41,45,56,60,64,65,76,90,119$
factor productivity, 6, 9
firm productivity, 10, 23, 59, 84, 90, 92
firm size, 2, 6, 10, 23, 24, 55, 81, 90
cumulative distribution function, 91 density, 92
differential, 2, 14
fixed-wage contract, 101, 112
flexible pay systems, 83
free entry condition, $41,43,45,59,68$
French DADs, 14, 109
friction, $9,15,16,109,129$
general capital, 66-68, 70
Gibbons, R., 3

Hamermesh, D. S., 95
IDA, 48, 50, 63, 69, 72, 80, 81, 92, 95
imperfect competition, 3,4
incentive constraint, 29, 30
industry differential, $2,3,10,12,14,20,28$,

$$
33,87,110,111
$$

industry and size differentials, $3,9,12,26$, 33, 69
Integrated Database for Labour Market Research. See IDA
inverse wage policy function, 88,94 investment function, 65, 68
job amenities, 26-28
job destruction rate, 38, 40, 42-44, 101
job offer, $28,35,36,40,47,73,74$
job search, 5, 6, 97, 98
job separation rate, 65, 101
job separations model, 95
job-to-job mobility, 71
jointly efficient, 98
labor market equilibrium, 43, 104 in the Burdett-Mortensen model, 45 definition, 122
with endogenous general capital investment, 68
with endogenous recruiting effort, 61 with endogenous specific capital investment, 65
existence, 122
existence and uniqueness of, 80 formal definitions, 79
with offer matching, 107
with productive heterogeneity, 71
and its relation to a competitive
equilibrium, 109
with wage-tenure contracts, 114, 118
labor productivity, $1,6,16,20,21,23,26$,
$28,58,60,72,87,104,130$
Lang, K., 26
law of one price, 9
lognormal, 47, 48, 50
long right tail, $6,48,50,58,59,64,69$, 72, 92
lower support, $19,29,32,41,57,77,101$, 109, 125
lowest wage, $1,19,22,29,30,77$
marginal productivity, $2,86,99,109$
market friction, $4,6,25,42,55,71,73,109$
market friction parameter, 42,43
market power, 3
match productivity, 31, 33, 42, 90
match rent, 2, 6, 30, 94, 111, 123
matched employer-employee data, 3,14
matching, $6,30,36,78,79,90,98,99$,
118, 124
matching function, 78,79
minimum wage, 83
monitoring problem, 30
monopsonistic, 4,57
labor market equilibrium, 79
monopsony, $3,4,9,25,72,84,88,90,97$, 126, 127
power, 86
rents, 87
wage, 84
wage outcome, 72
moral hazard, 99, 100
Mortensen, D. T., 4-6, 16, 25, 35, 38, 43, 44,
47, 56, 64, 79
Murphy, K. M., 3, 30
Nash bargaining, 72, 127
noncooperative game, 17
observable worker characteristics, $1,2,11$

## 12, 14

ODE, $57,62,80,117,121,122$
offer and wage densities, $58,59,62,64$
shapes of, $55,56,60,66$
Oi, W. Y., 2, 11, 13, 20
optimal wage choices, $21,22,39,57,87$, 88, 126
optimal wage strategy, 19
ordinary differential equation. See ODE

Pareto distribution, 48, 58, 62
perfectly competitive, $1,3,4,30,33$
Phelps, E. S., 5
Pissarides, C. A., 6, 16, 25, 33, 43, 72, 78, 90
Postel-Vinay, F., 98, 100, 102, 104, 109, 110,
123, 124
probability of acceptance, 17-19, 22, 24, 68
production function, 64-66,68
productive heterogeneity, $6,20,33,47,56$,
59, 63, 64, 70-73, 104
productivity
density, 59, 61, 92, 95
differences, 1, 23, 47, 129, 130
dispersion, 7, 70, 129-131
distribution of, $57,58,125,127,128$
quit probability, 38, 113, 116
quit rate, $38,59,64$
reallocation of workers, 2,129
recruiting cost, $60,65,68,76,77,94$
recruiting effort, $23-26,60,61,63,64,71$,
$76,78,79,90,93,95,126,127,129$
recruiting policy, 32, 59, 76, 87
rent sharing, 16,25
replication, 121, 122
reservation utility, 27
reservation wage, $22,29,31,36,40,58,60$, $75,101,103,105,111,112,123,125$
conditional on the employer's productivity, 105
formal definition, 39, 74
risk aversion, 100, 112, 116, 123
Rosholm, 82, 130
Rothschild, M., 4
Roy, A. D., 49
Roy model, 50, 51
Samuelson, P. A., 3, 4
search and recruiting efficiency parameters, 78
search contact parameter, 75
search cost function, $75,81,88$
search effort, $45,56,71-75,78,80,81,84$,
125, 127
choice problem, 73
strategy, 74
search equilibrium, 20, 25, 39, 78
search friction, $5,6,29,33,71,109,110$,
118, 129
search strategy, 73, 79
second price auctions, 104
separation rate, $38,56,60,61,65,67,68,70$, $76,81,84,87,88,115$
Shapiro, C., 28
Shimer, R., 30
size and industry, 2,12
size and industry dummies, 11
specific capital, 64-66, 69, 70, 130
stationary wage policy, 36
steady state, $39,40,43,56,61,65,66$, 68, 69, 75, 79, 80, 82, 94, 108, 111, 118, 129
condition, $41,58,62,66,69,82,84,126$
equations, 41
unemployment rate, $42,75,79,102,108$
Stevens, M., 99, 100, 111, 113, 123
surplus value of employment, 72,74 ,
88, 90
tenure effect, 97, 104, 113
unemployment benefit, $75,80,100,102$, $103,105,107,114$
unemployment compensation, 83 unemployment rate, $36,37,39,41,42,82$ unobserved worker ability, 2, 14, 33, 99 upper support, $19,77,80,87$
of the productivity distribution, 58 utility of income, 114
value of employment, $39,73,74,79,100$, 103-105, 111
value of hiring a worker, $37,38,88,101$ value of marginal product, 5, 100, 123 value of unemployment, $39,73,100,103$, $105,114,115,119$
wage density, $49,55,58,59,65,66$
in Denmark, 48, 49
wage determination, $2,7,9,16,17,21$, $25,33,44,71,72,77,78,82,83,99$, 123, 126
wage differences
inter-firm and intra-firm, 98
wage dispersion, $1,2,5-7,9,10,15$
across and within firms, 98
in the Burdett-Mortensen model, 35
and compensating differentials, 26
in Denmark, 83
in France, 99
and differences in employer productivity, 95, 129
and efficiency wages, 28
and the employer effect, 14
and employer heterogeneity, 9
and endogenous productive
heterogeneity, 64
equilibrium, 9,42
evidence for, 10
explanations of, 10
and firm size, 15
and firm size differentials, 14
and industry differentials, 14
intra-firm, 100, 104, 123
and job-to-job mobility, 72
and market friction, 43
with offer matching, 98
persistence of, 129
pure, 47
and search friction, 110
search theories of, 15
shape of, 6,47
with skill category, 130
and strategic wage competition, 15
structural models of, 73
theory of, 9,33
and worker ability, 110
and worker flows, 71
wage equation
Abowd and Kramarz model, 12
coefficients estimated with CPS
data, 11
and employer fixed effect, 3
human capital, 1, 33
industry and size effects, 69
job tenure, 97
tenure effect and sample selection, 97 wage variation explained by, 2
wage function, 57,58
wage inequality, 1
wage offer arrival rate, 38-40, 42-44, 61, 75, 101
wage offer density, $55,58,65,66,118,122$
in Denmark, 49
wage policy, $3-5,7,9,10,15,20,32,33,36$, $39,45,47,61,63,64,71,77,79,84,86$, $88,90,115,122$
in the Burdett-Mortensen model, 71 wage policy function, $88,92,125,126$ wage posting game, $6,9,16,35,56,57,70$ wage-tenure contract, $99,100,110-118,122$ wage-tenure contract offer game, 112,118 wage-tenure relation, 97,123
worker characteristics, 1, 2, 12
worker effect, $3,52,98,109,110$
worker fixed effects, $9,13,14,50,110$
worker flows, $6,39,44,48,71,72,118$
worker flows data, 72,73

