## Appendix

Table A1: Descriptive Sample Statistics

|  |  |  |
| --- | --- | --- |
|  | **Unemployment** | **Job-Search** |
| Family Type |  |  |  |  |
|  Single | 4695 | 33.5 | 3115 | 34.8 |
|  Couple w/o children | 1656 | 11.8 | 1070 | 12.0 |
|  Couple w. adult child(ren)  | 293 | 2.1 | 182 | 2.0 |
|  Couple w. 1 child < 18 | 2108 | 15.1 | 1301 | 14.5 |
|  Couple w. 2 children < 18 | 1729 | 12.3 | 1033 | 11.6 |
|  Couple w. 3+ children < 18 | 1263 | 9.0 | 747 | 8.4 |
|  Single parent w. 1 child < 18 | 944 | 6.7 | 610 | 6.8 |
|  Single parent w. 2 children < 18 | 566 | 4.0 | 361 | 4.0 |
|  Single parent w. 3+ children < 18 | 245 | 1.8 | 175 | 2.0 |
|  Other | 493 | 3.5 | 347 | 3.9 |
|  Missing | 18 | 0.1 | 4 | 0.0 |
| Education |  |  |  |  |
|  Low (no vocat. or tert. degree) | 2752 | 19.6 | 1751 | 19.6 |
|  Medium (voc. degree) | 9879 | 70.5 | 6332 | 70.8 |
|  High (tertiary degree) | 1233 | 8.8 | 770 | 8.6 |
|  Missing | 146 | 1.0 | 92 | 1.0 |
| Region |  |  |  |  |
|  West Germany | 10716 | 76.5 | 6871 | 76.8 |
|  East Germany | 3294 | 23.5 | 2074 | 23.2 |
| Gender |  |  |  |  |
|  Male | 7796 | 55.7 | 4698 | 52.5 |
|  Female | 6214 | 44.4 | 4247 | 47.5 |
| Nationality |  |  |  |  |
|  German | 9299 | 66.4 | 6309 | 70.5 |
|  Non-German | 4607 | 32.9 | 2573 | 28.8 |
|  Missing | 104 | 0.7 | 63 | 0.7 |
| Age |  |  |  |  |
|  25-34 years | 6338 | 45.2 | 4031 | 45.1 |
|  45-54 years | 4483 | 32.0 | 2788 | 31.2 |
|  35-44 years | 3189 | 22.8 | 2126 | 23.8 |
| Relation to requirement level of last occupation |  |  |  |  |
|  No last occupation | 2529 | 18.1 | 1746 | 19.5 |
|  Same req. level | 7679 | 54.8 | 4879 | 54.5 |
|  Last occupation higher req. level | 3802 | 27.1 | 2320 | 25.9 |
| Relation to socio-economic status of last occupation |  |  |  |  |
|  No last occupation | 2529 | 18.1 | 1746 | 19.5 |
|  Same socio-economic status | 9085 | 64.9 | 5667 | 63.4 |
|  Last occupation 10Pt. higher ISEI | 2396 | 17.1 | 1532 | 17.1 |
| Relation to average wage of last occupation |  |  |  |  |
|  No last occupation | 2529 | 18.1 | 1746 | 19.5 |
|  Same average wage | 7826 | 55.9 | 4857 | 54.3 |
|  Last occupation 350€ higher av. Wage | 3655 | 26.1 | 2342 | 26.2 |
| Relation to average wage of last occupation |  |  |  |  |
|  No last occupation | 2529 | 18.1 | 1746 | 19.5 |
|  Same average wage | 9690 | 69.2 | 6010 | 67.2 |
|  Last occupation 700€ higher av. Wage | 1791 | 12.8 | 1189 | 13.3 |
|  |  |  |  |  |
| N | 14010 |  | 8945 |  |

Source: Sample of Integrated Welfare Benefit Biographies. 5% sample.

Table A2: Survivor Functions for Making a Concession and Changing the Job Search

|  |  |  |  |
| --- | --- | --- | --- |
| **Make Concession/ Change Job Searched****Month** | **Search for different occupation** | **Requirement level** | **ISEI** |
| **All** | **Req. level of 1st occ. > 1** | **All** | **ISEI of 1st occ. > 21** |
| ***12*** | 74% | 93% | 88% | 94% | 91% |
| ***24*** | 62% | 89% | 81% | 91% | 85% |
| ***36*** | 53% | 85% | 73% | 88% | 80% |
| ***48*** | 46% | 82% | 67% | 86% | 76% |
| ***60*** | 42% | 80% | 63% | 83% | 72% |
|  |  |  |  |
| **Make Concession****Month** |  | **Av. wage of occ. - € 350** | **Av. wage of occ. - € 700** |
|  | **All** | **Av. wage of 1st occ. > € 1400** | **All** | **Av. wage of 1st occ. > € 1750** |
| ***12*** |  | 93% | 93% | 97% | 95% |
| ***24*** |  | 89% | 89% | 94% | 92% |
| ***36*** |  | 85% | 84% | 92% | 88% |
| ***48*** |  | 82% | 81% | 91% | 86% |
| ***60*** |  | 80% | 79% | 89% | 83% |

Source: Sample of Integrated Welfare Benefit Biographies. 5% sample. Kaplan-Meier survivor function.

Table A3: Survivor Functions for Finding Employment

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Find Employment****Month** | **Ref. Model** | **Req. level of 1st occ. > 1** | **ISEI of 1st occ. > 21** | **Av. wage of 1st occ. > € 1400** | **Av. wage of 1st occ. > € 1750** |
| ***12*** | 81% | 77% | 78% | 81% | 77% |
| ***24*** | 69% | 63% | 64% | 69% | 64% |
| ***36*** | 60% | 54% | 55% | 60% | 54% |
| ***48*** | 54% | 48% | 48% | 54% | 47% |
| ***60*** | 49% | 43% | 44% | 49% | 43% |

Source: Sample of Integrated Welfare Benefit Biographies. 5% sample. Kaplan-Meier survivor function.

Table A4: Determinants of Making Concessions/Changing the Job Searched

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Concessions (Req. level)** | **Concessions (ISEI)** | **Concessions (€350)** | **Concessions (€700)** | **Diff./add. occ.** |
|  | **All** | **Req. >1** | **All** | **ISEI>21** | **All** | **W>1400** | **All** | **W>1750** |
|  | **M1** | **M2** | **M3** | **M4** | **M5** | **M6** | **M7** | **M8** | **M9** |
| Time unempl. (months, Ref. 1-3) |  |  |  |  |  |  |  |  |  |
|  4-6 months | -0.835\*\*\* | -0.769\*\*\* | -1.021\*\*\* | -0.944\*\*\* | -1.047\*\*\* | -1.046\*\*\* | -1.046\*\*\* | -1.034\*\*\* | -0.925\*\*\* |
|  7-9 months | -1.053\*\*\* | -0.946\*\*\* | -1.207\*\*\* | -1.091\*\*\* | -1.197\*\*\* | -1.195\*\*\* | -1.479\*\*\* | -1.454\*\*\* | -0.874\*\*\* |
|  10-12 months | -1.091\*\*\* | -0.945\*\*\* | -1.078\*\*\* | -0.915\*\*\* | -0.967\*\*\* | -0.964\*\*\* | -0.845\*\*\* | -0.808\*\*\* | -0.877\*\*\* |
|  13-15 months | -0.857\*\*\* | -0.666\*\*\* | -0.851\*\*\* | -0.640\*\*\* | -1.024\*\*\* | -1.021\*\*\* | -0.790\*\*\* | -0.741\*\*\* | -0.663\*\*\* |
|  16-18 months | -1.490\*\*\* | -1.264\*\*\* | -1.453\*\*\* | -1.193\*\*\* | -1.421\*\*\* | -1.418\*\*\* | -1.089\*\*\* | -1.037\*\*\* | -0.884\*\*\* |
|  19-21 months | -1.060\*\*\* | -0.793\*\*\* | -1.357\*\*\* | -1.056\*\*\* | -1.317\*\*\* | -1.314\*\*\* | -0.944\*\*\* | -0.884\*\*\* | -0.718\*\*\* |
|  22-24 months | -0.987\*\*\* | -0.684\*\* | -1.224\*\*\* | -0.893\*\* | -1.037\*\*\* | -1.032\*\*\* | -0.999\*\*\* | -0.921\*\* | -0.646\*\*\* |
|  25-30 months | -0.996\*\*\* | -0.623\*\* | -1.321\*\*\* | -0.926\*\*\* | -1.192\*\*\* | -1.188\*\*\* | -0.845\*\*\* | -0.751\*\* | -0.565\*\*\* |
|  31-36 months | -0.893\*\*\* | -0.443 | -1.101\*\*\* | -0.632\* | -1.012\*\*\* | -1.008\*\*\* | -0.754\*\* | -0.653\* | -0.569\*\*\* |
|  37-42 months | -0.961\*\*\* | -0.432 | -1.163\*\*\* | -0.614 | -1.049\*\*\* | -1.044\*\*\* | -0.826\*\* | -0.690\* | -0.639\*\* |
|  43-48 months | -1.013\*\*\* | -0.386 | -1.583\*\*\* | -0.961\* | -1.760\*\*\* | -1.756\*\*\* | -2.374\*\* | -2.204\*\* | -0.436 |
|  49+ months | -1.564\*\*\* | -0.871 | -1.389\*\*\* | -0.707 | -1.746\*\*\* | -1.741\*\*\* | -1.314\*\* | -1.112\*\* | -0.950\*\* |
| Last occ. (Ref. same characteristic/no concession) |  |  |  |  |  |  |  |  |  |
|  Better characteristic/concession | -2.199\*\*\* | -0.085 | -1.263\*\*\* | -0.760\*\*\* | -1.011\*\*\* | -0.995\*\*\* | -1.498\*\*\* | -1.314\*\*\* |  |
|  No last occupation | -0.498\*\*\* | 0.181 | -0.163 | 0.253 | -0.261\* | -0.248\* | -0.172 | -0.013 | -0.344\*\*\* |
| Family Type (Ref. Single) |  |  |  |  |  |  |  |  |  |
|  Couple w/o children | -0.156 | -0.146 | -0.085 | -0.093 | -0.259 | -0.262 | -0.299 | -0.269 | 0.006 |
|  Couple w. adult child(ren)  | -0.697\* | -0.726 | -0.772 | -0.798 | -0.655\* | -0.656\* | -0.605 | -0.569 | -0.303 |
|  Couple w. 1 child < 18 | -0.362\*\* | -0.446\*\* | -0.150 | -0.218 | -0.189 | -0.184 | -0.215 | -0.207 | -0.161 |
|  Couple w. 2 children < 18 | -0.160 | -0.209 | -0.183 | -0.258 | -0.058 | -0.054 | -0.181 | -0.135 | -0.193\* |
|  Couple w. 3+ children < 18 | -0.445\* | -0.367 | -0.583\*\* | -0.479\* | -0.131 | -0.139 | -0.161 | -0.047 | -0.177 |
|  Single parent w. 1 child < 18 | -0.104 | -0.193 | -0.328 | -0.474\* | -0.282 | -0.262 | -0.379 | -0.332 | 0.019 |
|  Single parent w. 2 children < 18 | -0.560\* | -0.531 | -0.302 | -0.340 | -0.416 | -0.394 | -0.781\* | -0.752 | 0.024 |
|  Single parent w. 3+ children < 18 | -0.198 | 0.027 | -0.113 | -0.069 | -0.051 | -0.050 | 0.141 | 0.259 | 0.015 |
|  Other | 0.029 | 0.069 | 0.282 | 0.310 | 0.125 | 0.125 | -0.034 | -0.042 | 0.195 |
| Education (Ref. voc. degree) |  |  |  |  |  |  |  |  |  |
|  Low (no vocat. or tert. degree) | -0.114 | 0.234 | -0.266\* | 0.278 | -0.279\*\* | -0.285\*\* | -0.928\*\*\* | -0.829\*\*\* | 0.075 |
|  High (tertiary degree) | 0.140 | -0.228 | 0.303\* | -0.077 | 0.278\* | 0.256\* | 0.772\*\*\* | 0.495\*\* | 0.181 |
| Region: East Germany (Ref. West) | 0.246\*\* | 0.170 | 0.119 | 0.040 | 0.095 | 0.095 | 0.021 | -0.005 | 0.258\*\*\* |
| Gender: Female (Ref.: Male) | -0.122 | 0.153 | 0.071 | 0.262\* | -0.158 | -0.129 | -0.297\* | 0.214 | -0.366\*\*\* |
| Foreign Nationality (Ref. German) | -0.270\*\* | 0.117 | -0.381\*\*\* | 0.021 | -0.301\*\* | -0.302\*\* | -0.596\*\*\* | -0.282 | -0.175\*\* |
| Age (Ref. 45-54 years) |  |  |  |  |  |  |  |  |  |
|  25-34 years of age | -0.127 | -0.157 | 0.031 | -0.013 | -0.091 | -0.080 | -0.368\*\* | -0.396\*\* | 0.294\*\*\* |
|  35-44 years of age | -0.039 | -0.069 | 0.067 | 0.037 | -0.083 | -0.080 | -0.207 | -0.266 | 0.092 |
| Constant | -7.162\*\*\* | -7.081\*\*\* | -7.667\*\*\* | -7.420\*\*\* | -7.191\*\*\* | -7.195\*\*\* | -7.751\*\*\* | -7.689\*\*\* | -6.174\*\*\* |
| /lntheta | -0.523 | 0.633 | -0.855 | 0.828 | -1.523 | -1.500 | -0.221 | -0.101 | 0.350\* |
|  |  |  |  |  |  |  |  |  |  |
| N (spells) | 194271 | 99871 | 197536 | 112960 | 193459 | 188766 | 203050 | 131626 | 150589 |
| N (episodes) | 8786 | 5109 | 8786 | 5544 | 8786 | 8601 | 8786 | 6089 | 8786 |
| N (subjects) | 6944 | 4184 | 6944 | 4519 | 6944 | 6800 | 6944 | 4850 | 6944 |
| N (events) | 734 | 734 | 603 | 603 | 755 | 755 | 373 | 373 | 2498 |
| Log likelihood | -3325.11 | -3020.00 | -2940.38 | -2662.93 | -3502.39 | -3488.06 | -1912.48 | -1791.57 | -8677.04 |

\* = p<.05; \*\* = p<.01; \*\*\* = p<.001

Source: Sample of Integrated Welfare Benefit Biographies. 5% sample.

Event history analysis, piecewise constant exponential model with gamma frailty, multiple episodes

Table A5: Determinants of Finding Employment

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Concessions (Req. level)** | **Concessions (ISEI)** | **Concessions (€350)** | **Concessions (€700)** | **Diff./add. occ.** |
|  | **All** | **Req. >1** | **All** | **ISEI>21** |  | **W>1400** | **All** | **W>1750** |
|  | **M1** | **M2** | **M3** | **M4** | **M5** | **M6** | **M7** | **M8** | **M9** |
| Time unempl. (months, Ref. 1-3) |  |  |  |  |  |  |  |  |  |
|  4-6 months | 0.568\*\*\* | 0.685\*\*\* | 0.569\*\*\* | 0.618\*\*\* | 0.567\*\*\* | 0.566\*\*\* | 0.568\*\*\* | 0.609\*\*\* | 0.540\*\*\* |
|  7-9 months | 0.530\*\*\* | 0.581\*\*\* | 0.530\*\*\* | 0.553\*\*\* | 0.528\*\*\* | 0.535\*\*\* | 0.529\*\*\* | 0.567\*\*\* | 0.479\*\*\* |
|  10-12 months | 0.553\*\*\* | 0.698\*\*\* | 0.554\*\*\* | 0.685\*\*\* | 0.549\*\*\* | 0.557\*\*\* | 0.552\*\*\* | 0.582\*\*\* | 0.483\*\*\* |
|  13-15 months | 0.535\*\*\* | 0.607\*\*\* | 0.537\*\*\* | 0.576\*\*\* | 0.531\*\*\* | 0.528\*\*\* | 0.534\*\*\* | 0.527\*\*\* | 0.446\*\*\* |
|  16-18 months | 0.318\*\* | 0.297 | 0.320\*\* | 0.308\* | 0.314\*\* | 0.311\* | 0.317\*\* | 0.341\* | 0.211 |
|  19-21 months | 0.481\*\*\* | 0.455\*\* | 0.483\*\*\* | 0.494\*\* | 0.476\*\*\* | 0.474\*\*\* | 0.480\*\*\* | 0.499\*\*\* | 0.361\*\* |
|  22-24 months | 0.481\*\*\* | 0.439\* | 0.484\*\*\* | 0.573\*\*\* | 0.476\*\*\* | 0.452\*\*\* | 0.480\*\*\* | 0.454\*\* | 0.348\*\* |
|  25-30 months | 0.388\*\* | 0.383\* | 0.391\*\* | 0.375\* | 0.382\*\* | 0.366\*\* | 0.386\*\* | 0.406\*\* | 0.236 |
|  31-36 months | 0.524\*\*\* | 0.505\*\* | 0.527\*\*\* | 0.538\*\* | 0.517\*\*\* | 0.511\*\*\* | 0.520\*\*\* | 0.575\*\*\* | 0.357\* |
|  37-42 months | 0.400\* | 0.304 | 0.404\* | 0.431\* | 0.392\* | 0.407\* | 0.396\* | 0.314 | 0.218 |
|  43-48 months | 0.409\* | 0.380 | 0.414\* | 0.379 | 0.402\* | 0.372 | 0.407\* | 0.385 | 0.217 |
|  49+ months | 0.363 | 0.151 | 0.370 | 0.236 | 0.357 | 0.311 | 0.365 | 0.177 | 0.159 |
| Concession  | 0.055 | 0.004 | 0.059 | -0.019 | 0.116 | 0.115 | 0.254 | 0.168 |  |
| Change of job searched |  |  |  |  |  |  |  |  | 0.245\*\*\* |
| Last occ. (Ref. same characteristic/no concession) |  |  |  |  |  |  |  |  |  |
|  Better characteristic/concession | -0.120 | 0.032 | -0.109 | -0.078 | -0.080 | -0.077 | -0.064 | -0.095 |  |
|  No last occupation | -1.141\*\*\* | -1.020\*\*\* | -1.127\*\*\* | -0.935\*\*\* | -1.127\*\*\* | -1.133\*\*\* | -1.115\*\*\* | -0.985\*\*\* |  |
| Family Type (Ref. Single) |  |  |  |  |  |  |  |  |  |
|  Couple w/o children | 0.119 | 0.118 | 0.118 | 0.083 | 0.121 | 0.120 | 0.122 | 0.112 | 0.051 |
|  Couple w. adult child(ren)  | 0.094 | 0.334 | 0.088 | 0.206 | 0.099 | 0.080 | 0.097 | 0.279 | 0.030 |
|  Couple w. 1 child < 18 | 0.026 | 0.053 | 0.025 | 0.004 | 0.029 | 0.041 | 0.030 | 0.041 | -0.027 |
|  Couple w. 2 children < 18 | -0.193\* | -0.230\* | -0.193\* | -0.231\* | -0.190\* | -0.171\* | -0.190\* | -0.048 | -0.205\* |
|  Couple w. 3+ children < 18 | -0.302\*\* | -0.270\* | -0.305\*\* | -0.288\* | -0.301\*\* | -0.291\*\* | -0.301\*\* | -0.123 | -0.316\*\* |
|  Single parent w. 1 child < 18 | -0.237\* | -0.303\* | -0.238\* | -0.316\* | -0.233\* | -0.219 | -0.235\* | -0.191 | -0.190 |
|  Single parent w. 2 children < 18 | -0.368\*\* | -0.300 | -0.375\*\* | -0.275 | -0.371\*\* | -0.365\* | -0.370\*\* | -0.325 | -0.307\* |
|  Single parent w. 3+ children < 18 | -0.882\*\*\* | -0.966\*\* | -0.886\*\*\* | -1.288\*\*\* | -0.879\*\*\* | -0.918\*\*\* | -0.884\*\*\* | -1.218\*\*\* | -0.898\*\*\* |
|  Other | 0.053 | -0.025 | 0.047 | -0.054 | 0.054 | 0.010 | 0.055 | 0.081 | 0.026 |
| Education (Ref. voc. degree) |  |  |  |  |  |  |  |  |  |
|  Low (no vocat. or tert. degree) | -0.360\*\*\* | -0.426\*\*\* | -0.374\*\*\* | -0.469\*\*\* | -0.373\*\*\* | -0.374\*\*\* | -0.376\*\*\* | -0.376\*\*\* | -0.291\*\*\* |
|  High (tertiary degree) | 0.615\*\*\* | 0.582\*\*\* | 0.624\*\*\* | 0.573\*\*\* | 0.620\*\*\* | 0.617\*\*\* | 0.621\*\*\* | 0.553\*\*\* | 0.566\*\*\* |
| Region: East Germany (Ref. West) | -0.243\*\*\* | -0.248\*\*\* | -0.239\*\*\* | -0.269\*\*\* | -0.240\*\*\* | -0.243\*\*\* | -0.240\*\*\* | -0.292\*\*\* | -0.271\*\*\* |
| Gender: Female (Ref.: Male) | -0.455\*\*\* | -0.236\*\* | -0.456\*\*\* | -0.262\*\*\* | -0.453\*\*\* | -0.439\*\*\* | -0.454\*\*\* | -0.239\*\*\* | -0.496\*\*\* |
| Foreign Nationality (Ref. German) | -0.386\*\*\* | -0.291\*\* | -0.396\*\*\* | -0.340\*\*\* | -0.399\*\*\* | -0.399\*\*\* | -0.398\*\*\* | -0.294\*\*\* | -0.680\*\*\* |
| Age (Ref. 45-54 years) |  |  |  |  |  |  |  |  |  |
|  25-34 years of age | 0.802\*\*\* | 0.796\*\*\* | 0.805\*\*\* | 0.836\*\*\* | 0.805\*\*\* | 0.802\*\*\* | 0.809\*\*\* | 0.826\*\*\* | 0.790\*\*\* |
|  35-44 years of age | 0.579\*\*\* | 0.492\*\*\* | 0.583\*\*\* | 0.563\*\*\* | 0.582\*\*\* | 0.576\*\*\* | 0.585\*\*\* | 0.542\*\*\* | 0.566\*\*\* |
| Constant | -7.734\*\*\* | -7.867\*\*\* | -7.746\*\*\* | -7.826\*\*\* | -7.747\*\*\* | -7.743\*\*\* | -7.763\*\*\* | -7.809\*\*\* | -7.816\*\*\* |
| /lntheta | -0.098 | -0.446 | -0.089 | -0.285 | -0.095 | -0.091 | -0.087 | -0.199 | -0.097 |
|  |  |  |  |  |  |  |  |  |  |
| N (spells) | 211715 | 117315 | 211715 | 127139 | 211715 | 207022 | 211715 | 140291 | 211715 |
| N (episodes) | 8786 | 5109 | 8786 | 5544 | 8786 | 8601 | 8786 | 6089 | 8786 |
| N (subjects) | 6944 | 4184 | 6944 | 4519 | 6944 | 6800 | 6944 | 4850 | 6944 |
| N (events) | 2227 | 1498 | 2227 | 1585 | 2227 | 2197 | 2227 | 1782 | 2227 |
| Log likelihood | -6395.56 | -4090.48 | -6396.27 | -4362.48 | -6395.96 | -6301.66 | -6395.92 | -4917.75 | -6482.48 |

\* = p<.05; \*\* = p<.01; \*\*\* = p<.001

Source: Sample of Integrated Welfare Benefit Biographies. 5% sample.

Event history analysis, piecewise constant exponential model with gamma frailty, multiple episodes

Table A6: Determinants of Making Concessions/Changing the Job Searched and of Finding Employment

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Concessions (Req. level)** | **Concessions (ISEI)** | **Concessions (€350)** | **Concessions (€700)** | **Diff./add. occ.** |
|  | **All** | **Req. >1** | **All** | **ISEI>21** | **All** | **W>1400** | **All** | **W>1750** |  |
|  | **M1** | **M2** | **M3** | **M4** | **M5** | **M6** | **M7** | **M8** | **M9** |
| **Dependent: concession/ Changing the Job Searched** |
| Time unempl. (months, Ref. 1-3) |  |  |  |  |  |  |  |  |  |
|  4-6 months | -0.927\*\*\* | -0.916\*\*\* | -0.871\*\*\* | -0.804\*\*\* | -0.924\*\*\* | -0.925\*\*\* | -1.496\*\*\* | -1.498\*\*\* | -0.719\*\*\* |
|  7-9 months | -0.985\*\*\* | -0.969\*\*\* | -1.012\*\*\* | -0.907\*\*\* | -1.098\*\*\* | -1.099\*\*\* | -2.206\*\*\* | -2.210\*\*\* | -0.753\*\*\* |
|  10-12 months | -1.024\*\*\* | -1.009\*\*\* | -0.916\*\*\* | -0.780\*\*\* | -0.961\*\*\* | -0.963\*\*\* | -1.244\*\*\* | -1.253\*\*\* | -0.722\*\*\* |
|  13-18 months | -0.949\*\*\* | -0.931\*\*\* | -1.014\*\*\* | -0.836\*\*\* | -0.972\*\*\* | -0.977\*\*\* | -1.509\*\*\* | -1.523\*\*\* | -0.732\*\*\* |
|  19-24 months | -1.336\*\*\* | -1.301\*\*\* | -1.352\*\*\* | -1.102\*\*\* | -1.204\*\*\* | -1.210\*\*\* | -1.385\*\*\* | -1.396\*\*\* | -0.757\*\*\* |
|  25-36 months | -1.248\*\*\* | -1.198\*\*\* | -1.192\*\*\* | -0.871\*\*\* | -1.131\*\*\* | -1.139\*\*\* | -2.022\*\*\* | -2.038\*\*\* | -0.799\*\*\* |
|  37+ months | -1.376\*\*\* | -1.279\*\*\* | -1.449\*\*\* | -1.008\*\* | -1.404\*\*\* | -1.409\*\*\* | -2.007\*\*\* | -1.996\*\*\* | -1.143\*\*\* |
| Last occupation (Ref. same characteristic/no concession) |  |  |  |  |  |  |  |  |  |
|  Better characteristic/concession | -2.303\*\*\* | -0.083 | -1.084\*\*\* | -0.410\* | -1.122\*\*\* | -1.113\*\*\* | -1.281\*\*\* | -1.086\*\*\* |  |
|  No previous occupation | -0.575\*\*\* | 0.134 | -0.282\* | 0.110 | -0.345\*\*\* | -0.340\*\* | -0.198 | -0.023 | -0.298\*\*\* |
| Family Type (Ref. Single) |  |  |  |  |  |  |  |  |  |
|  Couple w/o children | -0.017 | 0.025 | 0.141 | 0.199 | -0.149 | -0.154 | -0.265 | -0.224 | -0.068 |
|  Couple w. adult child(ren)  | -0.524 | -0.394 | -0.232 | -0.081 | -0.344 | -0.336 | -0.315 | -0.215 | -0.087 |
|  Other | 0.339 | 0.328 | 0.686\*\*\* | 0.654\*\*\* | 0.393\* | 0.412\* | 0.386 | 0.415 | 0.193 |
|  Couple w. 1 child < 18 | -0.159 | -0.135 | 0.041 | 0.080 | -0.189 | -0.188 | -0.488\*\* | -0.437\* | -0.037 |
|  Couple w. 2 children < 18 | -0.148 | -0.161 | -0.113 | -0.131 | -0.008 | -0.002 | -0.203 | -0.149 | -0.105 |
|  Couple w. 3+ children < 18 | -0.247 | -0.052 | -0.280 | -0.081 | -0.178 | -0.180 | -0.266 | -0.137 | -0.137 |
|  Single parent w. 1 child < 18 | 0.150 | 0.094 | 0.058 | 0.020 | 0.008 | 0.015 | 0.021 | 0.143 | 0.146 |
|  Single parent w. 2 children < 18 | -0.232 | -0.182 | 0.140 | 0.206 | -0.043 | -0.027 | -0.246 | -0.109 | 0.067 |
|  Single parent w. 3+ children < 18 | -0.216 | 0.071 | 0.059 | 0.192 | 0.067 | 0.079 | -0.073 | 0.156 | 0.075 |
| Education (Ref. voc. degree) |  |  |  |  |  |  |  |  |  |
|  Low (no vocat. or tert. degree) | -0.007 | 0.240\* | -0.235\* | 0.231 | -0.258\*\* | -0.266\*\* | -0.766\*\*\* | -0.682\*\*\* | -0.001 |
|  High (tertiary degree) | 0.171 | -0.057 | 0.455\*\*\* | 0.142 | 0.414\*\*\* | 0.394\*\*\* | 0.815\*\*\* | 0.533\*\*\* | 0.107 |
| Region: East Germany (Ref. West) | 0.139 | 0.077 | 0.049 | -0.005 | 0.054 | 0.056 | -0.062 | -0.061 | 0.297\*\*\* |
| Gender: Female (Ref.: Male) | -0.195\* | 0.044 | -0.124 | 0.012 | -0.245\*\* | -0.217\*\* | -0.313\*\* | 0.137 | -0.301\*\*\* |
|  |  |  |  |  |  |  |  |  |  |
| Foreign Nationality (Ref. German) | -0.370\*\*\* | -0.073 | -0.385\*\*\* | -0.013 | -0.278\*\* | -0.278\*\* | -0.585\*\*\* | -0.255 | -0.208\*\*\* |
| Age (Ref. 45-54 years) |  |  |  |  |  |  |  |  |  |
|  25-34 years of age | -0.078 | -0.099 | -0.039 | -0.051 | -0.056 | -0.042 | -0.299\* | -0.315\* | 0.191\*\* |
|  35-44 years of age | 0.050 | 0.017 | 0.037 | 0.017 | 0.015 | 0.022 | -0.138 | -0.185 | 0.060 |
| Year of entry into unemployment (Ref.: 2007) |  |  |  |  |  |  |  |  |  |
| 2008 | 0.315\* | 0.328\* | 0.090 | 0.103 | -0.055 | -0.058 | 0.289 | 0.302 | 0.138 |
| 2009 | -0.002 | 0.088 | -0.305 | -0.188 | -0.283\* | -0.291\* | -0.152 | -0.087 | 0.092 |
| 2010 | 0.091 | 0.190 | -0.168 | -0.112 | -0.248 | -0.246 | -0.189 | -0.157 | -0.050 |
| 2011 | -0.015 | 0.079 | -0.168 | -0.047 | -0.187 | -0.187 | -0.077 | -0.061 | -0.087 |
| 2012 | -0.293 | -0.093 | -0.430\* | -0.293 | -0.552\*\*\* | -0.555\*\*\* | -0.373 | -0.309 | -0.486\*\*\* |
| Regional rate of sanction | 0.444\* | 0.550\*\* | 0.498\* | 0.643\*\* | 0.369\* | 0.374\* | 0.540 | 0.632\* | 0.511\*\*\* |
| Regional rate of sanction squared | -0.037 | -0.051\* | -0.056 | -0.072\* | -0.031 | -0.031 | -0.060 | -0.073 | -0.040\* |
| Regional share of long-term unemployed | 0.026 | 0.026 | 0.061\* | 0.063\* | 0.044 | 0.043 | 0.072 | 0.082\* | 0.058\*\*\* |
| Regional share of long-term unemployed squared | 0.000 | 0.000 | -0.001\* | -0.001\* | -0.001 | -0.001 | -0.001 | -0.001\* | -0.001\*\*\* |
| Constant | -8.656\*\*\* | -8.888\*\*\* | -9.338\*\*\* | -9.923\*\*\* | -8.607\*\*\* | -8.605\*\*\* | -9.830\*\*\* | -10.039\*\*\* | -8.663\*\*\* |
| Variance of random effect | 0.027 | 0.023 | 0.033 | 0.909 | 0.095 | 0.091 | 0.264 | 0.129\*\*\* | 0.966\*\*\* |
|  |
| **Dependent: unemployment** |
| Time unempl. (months, Ref. 1-3) |  |  |  |  |  |  |  |  |  |
|  4-6 months | -0.066 | 0.005 | -0.068 | -0.036 | -0.068 | -0.074 | -0.775\*\*\* | -0.829\*\*\* | -0.801\*\*\* |
|  7-9 months | -0.117\* | -0.081 | -0.120\* | -0.115 | -0.119\* | -0.121\* | -1.275\*\*\* | -1.267\*\*\* | -1.313\*\*\* |
|  10-12 months | -0.179\*\* | -0.117 | -0.182\*\* | -0.082 | -0.182\*\* | -0.174\*\* | -0.543\*\*\* | -0.616\*\*\* | -0.590\*\*\* |
|  13-18 months | -0.240\*\*\* | -0.172\* | -0.244\*\*\* | -0.192\* | -0.244\*\*\* | -0.251\*\*\* | -1.257\*\*\* | -1.372\*\*\* | -1.318\*\*\* |
|  19-24 months | -0.355\*\*\* | -0.374\*\*\* | -0.361\*\*\* | -0.355\*\*\* | -0.362\*\*\* | -0.373\*\*\* | -0.890\*\*\* | -0.974\*\*\* | -0.966\*\*\* |
|  25-36 months | -0.479\*\*\* | -0.344\*\* | -0.487\*\*\* | -0.383\*\* | -0.487\*\*\* | -0.492\*\*\* | -1.454\*\*\* | -1.520\*\*\* | -1.545\*\*\* |
|  37+ months | -0.493\*\*\* | -0.468\*\* | -0.503\*\*\* | -0.486\*\* | -0.504\*\*\* | -0.505\*\*\* | -1.304\*\*\* | -1.406\*\*\* | -1.417\*\*\* |
| Concession  | -0.079 | -0.129 | -0.012 | -0.129 | 0.016 | 0.026 | 0.336\* | 0.383\*\*\* |  |
| Change of job searched |  |  |  |  |  |  |  |  | 0.269\*\*\* |
| Last occupation (Ref. same characteristic/no concession) |  |  |  |  |  |  |  |  |  |
|  Better characteristic/concession | -0.139\*\* | 0.067 | -0.078 | 0.018 | -0.074 | -0.072 | -0.042 | 0.003 |  |
|  No previous occupation | -1.113\*\*\* | -0.983\*\*\* | -1.082\*\*\* | -0.978\*\*\* | -1.090\*\*\* | -1.089\*\*\* | -0.989\*\*\* | -0.814\*\*\* | -0.979\*\*\* |
| Family Type (Ref. Single) |  |  |  |  |  |  |  |  |  |
|  Couple w/o children | 0.196\*\* | 0.200\* | 0.195\*\* | 0.178\* | 0.198\*\* | 0.208\*\* | 0.172\*\* | 0.142\* | 0.166\*\* |
|  Couple w. adult child(ren)  | 0.293\* | 0.280 | 0.288\* | 0.273 | 0.299\* | 0.289\* | 0.333\*\* | 0.460\*\*\* | 0.322\*\* |
|  Other | 0.290\*\* | 0.206 | 0.288\*\* | 0.193 | 0.287\*\* | 0.295\*\* | 0.288\*\* | 0.225\* | 0.277\*\* |
|  Couple w. 1 child < 18 | 0.231\*\*\* | 0.214\*\* | 0.231\*\*\* | 0.190\*\* | 0.232\*\*\* | 0.241\*\*\* | 0.230\*\*\* | 0.269\*\*\* | 0.226\*\*\* |
|  Couple w. 2 children < 18 | 0.186\*\* | 0.162\* | 0.183\*\* | 0.157\* | 0.187\*\* | 0.196\*\* | 0.197\*\*\* | 0.294\*\*\* | 0.198\*\*\* |
|  Couple w. 3+ children < 18 | 0.094 | 0.219\* | 0.091 | 0.229\* | 0.095 | 0.106 | 0.108 | 0.241\*\*\* | 0.109 |
|  Single parent w. 1 child < 18 | 0.010 | -0.050 | 0.009 | -0.039 | 0.012 | 0.000 | 0.071 | 0.100 | 0.063 |
|  Single parent w. 2 children < 18 | -0.237\* | -0.168 | -0.242\* | -0.142 | -0.243\* | -0.228\* | -0.159 | -0.094 | -0.171 |
|  Single parent w. 3+ children < 18 | -0.655\*\*\* | -0.730\*\* | -0.658\*\*\* | -0.924\*\*\* | -0.654\*\*\* | -0.689\*\*\* | -0.530\*\*\* | -0.748\*\* | -0.544\*\*\* |
| Education (Ref. voc. degree) |  |  |  |  |  |  |  |  |  |
|  Low (no vocat. or tert. degree) | -0.277\*\*\* | -0.349\*\*\* | -0.293\*\*\* | -0.333\*\*\* | -0.293\*\*\* | -0.285\*\*\* | -0.243\*\*\* | -0.238\*\*\* | -0.250\*\*\* |
|  High (tertiary degree) | 0.341\*\*\* | 0.335\*\*\* | 0.352\*\*\* | 0.305\*\*\* | 0.350\*\*\* | 0.355\*\*\* | 0.308\*\*\* | 0.250\*\*\* | 0.310\*\*\* |
| Region: East Germany (Ref. West) | 0.293\*\*\* | 0.256\*\*\* | 0.292\*\*\* | 0.270\*\*\* | 0.296\*\*\* | 0.283\*\*\* | 0.269\*\*\* | 0.175\*\* | 0.253\*\*\* |
| Gender: Female (Ref.: Male) | -0.425\*\*\* | -0.190\*\*\* | -0.423\*\*\* | -0.195\*\*\* | -0.424\*\*\* | -0.421\*\*\* | -0.381\*\*\* | -0.197\*\*\* | -0.374\*\*\* |
|  |  |  |  |  |  |  |  |  |  |
| Foreign Nationality (Ref. German) | -0.238\*\*\* | -0.268\*\*\* | -0.248\*\*\* | -0.241\*\*\* | -0.252\*\*\* | -0.255\*\*\* | -0.207\*\*\* | -0.126\*\* | -0.205\*\*\* |
| Age (Ref. 45-54 years) |  |  |  |  |  |  |  |  |  |
|  25-34 years of age | 0.624\*\*\* | 0.628\*\*\* | 0.625\*\*\* | 0.649\*\*\* | 0.627\*\*\* | 0.625\*\*\* | 0.544\*\*\* | 0.578\*\*\* | 0.536\*\*\* |
|  35-44 years of age | 0.497\*\*\* | 0.439\*\*\* | 0.500\*\*\* | 0.462\*\*\* | 0.500\*\*\* | 0.497\*\*\* | 0.431\*\*\* | 0.392\*\*\* | 0.427\*\*\* |
|  |  |  |  |  |  |  |  |  |  |
| Year of entry into unemployment (Ref.: 2007) |  |  |  |  |  |  |  |  |  |
| 2008 | -0.054 | -0.078 | -0.056 | -0.070 | -0.055 | -0.047 | -0.067 | -0.110 | -0.072 |
| 2009 | -0.050 | 0.005 | -0.052 | 0.022 | -0.052 | -0.053 | -0.041 | -0.041 | -0.048 |
| 2010 | 0.214\*\* | 0.195\* | 0.210\*\* | 0.212\* | 0.212\*\* | 0.219\*\* | 0.149\* | 0.131 | 0.145\* |
| 2011 | 0.123 | 0.100 | 0.118 | 0.134 | 0.118 | 0.131 | 0.038 | -0.004 | 0.038 |
| 2012 | -0.016 | 0.066 | -0.013 | 0.044 | -0.016 | -0.009 | -0.073 | -0.095 | -0.062 |
| Regional unemployment rate | -0.251\*\*\* | -0.216\* | -0.249\*\*\* | -0.164 | -0.252\*\*\* | -0.253\*\*\* | -0.240\*\*\* | -0.182\* | -0.241\*\*\* |
| Regional unemployment rate squared | 0.008\*\* | 0.007 | 0.008\* | 0.005 | 0.008\* | 0.008\* | 0.007\* | 0.004 | 0.007\* |
| Regional UB-II-rate | 0.096\* | 0.089 | 0.095\* | 0.066 | 0.096\* | 0.099\* | 0.111\*\* | 0.086 | 0.110\*\* |
| Regional UB-II-rate squared | -0.003 | -0.003 | -0.003 | -0.002 | -0.003 | -0.003 | -0.003\* | -0.002 | -0.003\* |
| Regional rate of sanction | 0.070\*\* | 0.090\*\*\* | 0.068\*\* | 0.084\*\* | 0.068\*\* | 0.067\*\* | 0.061\*\* | 0.062\*\* | 0.052\*\* |
| Constant | -6.348\*\*\* | -6.614\*\*\* | -6.374\*\*\* | -6.727\*\*\* | -6.357\*\*\* | -6.373\*\*\* | -5.907\*\*\* | -6.028\*\*\* | -5.893\*\*\* |
| Variance of random effect | 0.833\*\*\* | 0.743\*\*\* | 0.834\*\*\* | 0.749\*\*\* | 0.836\*\*\* | 0.836\*\*\* | 0.341\*\*\* | 0.225 | 0.340\*\*\* |
| Covariance of random effects | 0.139 | 0.125 | 0.141 | 0.210 | 0.244\*\* | 0.232\* | -0.055 | -0.171\*\*\* | 0.071 |
|  |  |  |  |  |  |  |  |  |  |
| N (spells unemployment) | 88962 | 48427 | 88962 | 52788 | 88962 | 87411 | 88962 | 59447 | 88962 |
| N (spells concession) | 83540 | 44211 | 83532 | 47736 | 82221 | 80720 | 83737 | 55953 | 66750 |
| N (episodes) | 13441 | 7420 | 13441 | 8066 | 13441 | 13194 | 13441 | 9268 | 13441 |
| N (subjects) | 7966 | 4702 | 7966 | 5073 | 7966 | 7808 | 7966 | 5590 | 7966 |
| N (events concession) | 794 | 794 | 623 | 623 | 813 | 813 | 400 | 400 | 2839 |
| N (events unemployment) | 4563 | 2864 | 4563 | 3042 | 4563 | 4496 | 4563 | 3533 | 4563 |
| Log likelihood | -25515,9 | -17225,1 | -24657,1 | -17255,1 | -25696,4 | -25367,6 | -22095,6 | -17202,9 | -33433,7 |

\* = p<.05; \*\* = p<.01; \*\*\* = p<.001

Source: Sample of Integrated Welfare Benefit Biographies. 5% sample.

Multilevel multi-process model, piecewise constant exponential model, multiple episodes