

## Supplemental Material

Table A1. Per capita social expenditures and share of total employment in human health and social services, by country

|                                     | Per capita social expenditures (2015 USD, PPP) | Employment in human health and social services (% total) |
|-------------------------------------|--|--|
| <i>More generous welfare states</i> |  |  |
| Austria                             | 13,398   | 11.1   |
| Belgium                             | 12,822   | 13.9   |
| Denmark                             | 13,385   | 18.3   |
| France                              | 12,428   | 14.7   |
| Germany                             | 11,267   | 13.6   |
| Luxembourg                          | 22,455   | 17.2   |
| Netherlands                         | 11,149   | 18.3   |
| Sweden                              | 12,318   | 17.3   |
| Switzerland                         | 11,267   | 14.0   |
| <i>Less generous welfare states</i> |  |  |
| Croatia                             | -  | 6.6  |
| Czech Republic                      | 6,129  | 7.0  |
| Estonia                             | 4,282  | 6.0  |
| Greece                              | 6,735  | 5.1  |
| Hungary                             | 5,387  | 7.3  |
| Italy                               | 10,178   | 7.2  |
| Poland                              | 4,489  | 5.9  |
| Portugal                            | 7,134  | 8.9  |
| Slovenia                            | 6,958  | 7.0  |
| Spain                               | 8,580  | 8.1  |
| USA                                 | 10,013   | 15.0   |

Note: Data from ILO (2017) and OECD (2017); authors' calculations.

Table A2. Test of equality of coefficients for logistic regression model of living alone for unpartnered adults aged 60 and older stratified by sex and age groups.

|   | Difference by sex |           | Difference by age groups |           |                       |           |                       |           |
|---|-------------------|-----------|--------------------------|-----------|-----------------------|-----------|-----------------------|-----------|
|   | Male vs female    |           | 60-69 vs 70-79           |           | 70-79 vs 80 and older |           | 60-69 vs 80 and older |           |
|   | chi2              | Prob>chi2 | chi2                     | Prob>chi2 | chi2                  | Prob>chi2 | chi2                  | Prob>chi2 |
| Age spline                                    |                   |           |                          |           |                       |           |                       |           |
| 60 – 70                                       | 0.15              | 0.70      |                          |           |                       |           |                       |           |
| 70 – 80                                       | 4.64              | 0.03      |                          |           |                       |           |                       |           |
| 80 and older                                  | 1.70              | 0.19      |                          |           |                       |           |                       |           |
| Female  |                   |           | 0.65                     | 0.42      | 1.52                  | 0.22      | 3.53                  | 0.06      |
| Relationship status (ref. Divorced/separated) |                   |           |                          |           |                       |           |                       |           |
| Widowed                                       | 8.58              | 0.00      | 0.10                     | 0.75      | 0.02                  | 0.89      | 0.01                  | 0.92      |
| Never married                                 | 0.51              | 0.47      | 5.10                     | 0.02      | 0.00                  | 0.96      | 2.59                  | 0.11      |
| Female X Relationship status                  |                   |           |                          |           |                       |           |                       |           |
| Female X Widowed                              |                   |           | 0.11                     | 0.74      | 0.82                  | 0.36      | 1.44                  | 0.23      |
| Female X Never married                        |                   |           | 1.26                     | 0.26      | 1.45                  | 0.23      | 0.28                  | 0.60      |
| Any living siblings                           | 0.06              | 0.81      | 0.52                     | 0.47      | 3.77                  | 0.05      | 1.16                  | 0.28      |
| Any living children                           | 7.31              | 0.01      | 2.38                     | 0.12      | 0.13                  | 0.72      | 4.10                  | 0.04      |
| Taking care of grandchildren                  | 3.90              | 0.05      | 4.98                     | 0.03      | 1.15                  | 0.28      | 6.55                  | 0.01      |
| Foreign born                                  | 0.00              | 0.95      | 1.77                     | 0.18      | 4.89                  | 0.03      | 1.01                  | 0.31      |
| Any IADL difficulties                         | 1.13              | 0.29      | 12.95                    | 0.00      | 2.48                  | 0.12      | 27.90                 | 0.00      |
| Education (ref. 8 years or less)              |                   |           |                          |           |                       |           |                       |           |
| 9 – 11  | 0.47              | 0.49      | 0.02                     | 0.89      | 1.33                  | 0.25      | 1.02                  | 0.31      |
| 12  | 0.00              | 0.99      | 0.20                     | 0.66      | 0.07                  | 0.80      | 0.49                  | 0.49      |
| 13 – 15                                       | 0.59              | 0.44      | 0.09                     | 0.76      | 0.35                  | 0.55      | 0.86                  | 0.35      |
| 16 or more                                    | 3.66              | 0.06      | 0.15                     | 0.70      | 0.00                  | 0.97      | 0.10                  | 0.75      |
| Wealth tercile (ref. Bottom)                  |                   |           |                          |           |                       |           |                       |           |
| Medium  | 0.27              | 0.61      | 2.03                     | 0.15      | 0.21                  | 0.65      | 0.90                  | 0.34      |
| Top   | 1.69              | 0.19      | 0.85                     | 0.36      | 0.00                  | 0.95      | 0.88                  | 0.35      |
| Income tercile (ref. Bottom)                  |                   |           |                          |           |                       |           |                       |           |
| Medium  | 9.45              | 0.00      | 21.62                    | 0.00      | 0.00                  | 0.94      | 19.73                 | 0.00      |
| Top   | 0.51              | 0.48      | 7.33                     | 0.01      | 0.17                  | 0.68      | 4.25                  | 0.04      |
| More generous welfare state                   | 1.42              | 0.23      | 10.83                    | 0.00      | 0.00                  | 0.95      | 11.36                 | 0.00      |
| More generous welfare state X Wealth tercile  |                   |           |                          |           |                       |           |                       |           |
| More generous welfare state X Medium          | 0.17              | 0.68      | 0.44                     | 0.51      | 0.30                  | 0.59      | 1.63                  | 0.20      |
| More generous welfare state X Top             | 1.00              | 0.32      | 0.10                     | 0.76      | 0.29                  | 0.59      | 0.09                  | 0.76      |
| More generous welfare state X Income tercile  |                   |           |                          |           |                       |           |                       |           |
| More generous welfare state X Medium          | 0.12              | 0.73      | 0.08                     | 0.77      | 0.00                  | 0.98      | 0.07                  | 0.79      |
| More generous welfare state X Top             | 3.72              | 0.05      | 2.32                     | 0.13      | 0.07                  | 0.79      | 1.54                  | 0.21      |

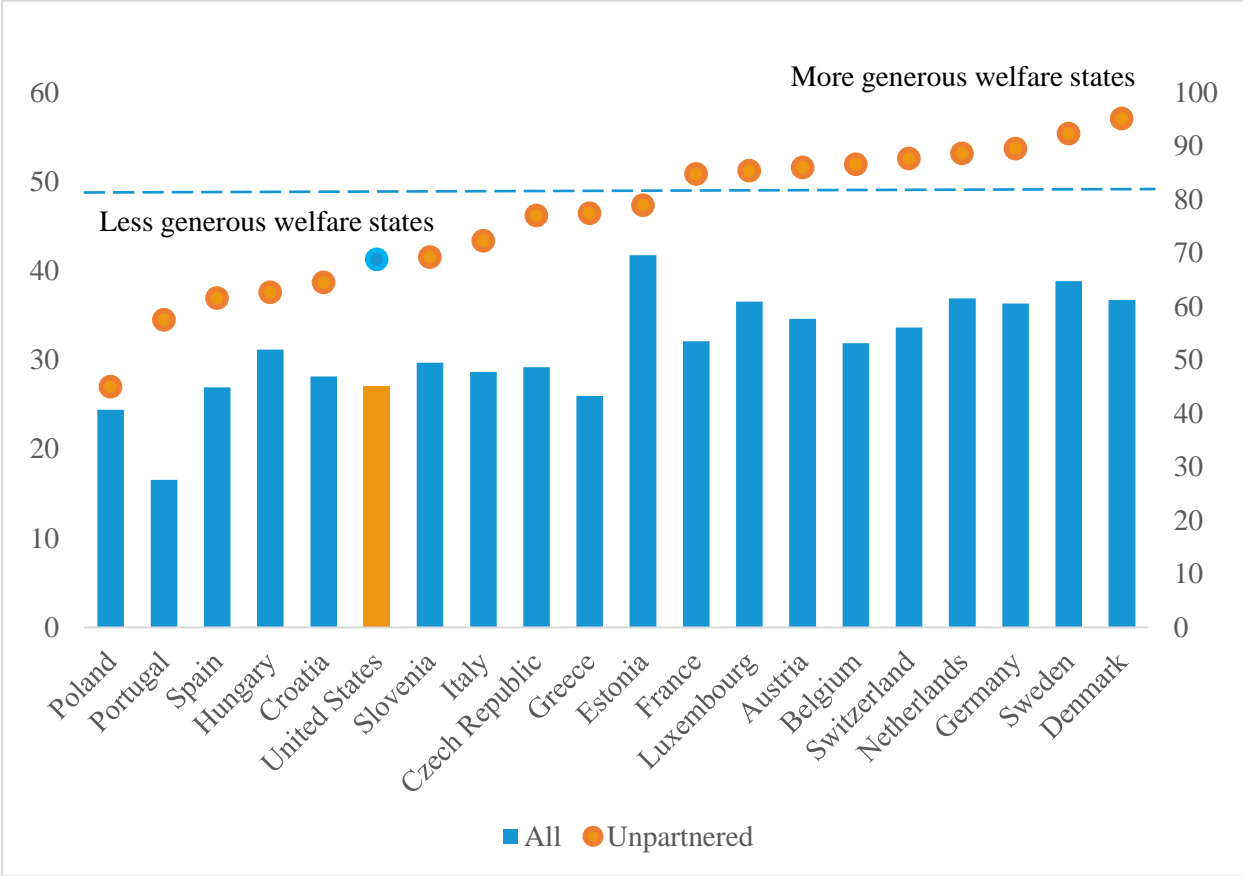
Table A3. Test of equality of coefficients for multilevel logistic regression model of living alone for unpartnered adults aged 60 and older stratified by sex and age groups.

|  | Social services employment |           |                          |           |                       |           |                       |           |
|--|----------------------------|-----------|--------------------------|-----------|-----------------------|-----------|-----------------------|-----------|
|  | Difference by sex          |           | Difference by age groups |           |                       |           |                       |           |
|  | Male vs female             |           | 60-69 vs 70-79           |           | 70-79 vs 80 and older |           | 60-69 vs 80 and older |           |
|  | chi2                       | Prob>chi2 | chi2                     | Prob>chi2 | chi2                  | Prob>chi2 | chi2                  | Prob>chi2 |
| Social services employment                   | 2.72                       | 0.10      | 24.60                    | 0.00      | 0.52                  | 0.47      | 10.01                 | 0.00      |
| Wealth tercile (ref. Bottom)                 |                            |           |                          |           |                       |           |                       |           |
| Medium                                       | 0.04                       | 0.84      | 0.16                     | 0.69      | 2.97                  | 0.08      | 0.56                  | 0.46      |
| Top  | 0.15                       | 0.70      | 0.38                     | 0.54      | 0.07                  | 0.79      | 0.92                  | 0.34      |
| Income tercile (ref. Bottom)                 |                            |           |                          |           |                       |           |                       |           |
| Medium                                       | 4.88                       | 0.03      | 14.58                    | 0.00      | 0.86                  | 0.36      | 3.97                  | 0.05      |
| Top  | 3.86                       | 0.05      | 6.05                     | 0.01      | 0.01                  | 0.94      | 7.02                  | 0.01      |
| Social services employment X Wealth terciles |                            |           |                          |           |                       |           |                       |           |
| Social services employment X Medium          | 0.32                       | 0.57      | 1.91                     | 0.17      | 5.15                  | 0.02      | 0.15                  | 0.70      |
| Social services employment X Top             | 2.45                       | 0.12      | 0.00                     | 0.97      | 0.03                  | 0.86      | 0.03                  | 0.87      |
| Social services employment X Income terciles |                            |           |                          |           |                       |           |                       |           |
| Social services employment X Medium          | 1.93                       | 0.16      | 11.28                    | 0.00      | 1.51                  | 0.22      | 2.46                  | 0.12      |
| Social services employment X Top             | 8.56                       | 0.00      | 1.53                     | 0.22      | 0.07                  | 0.79      | 3.50                  | 0.06      |

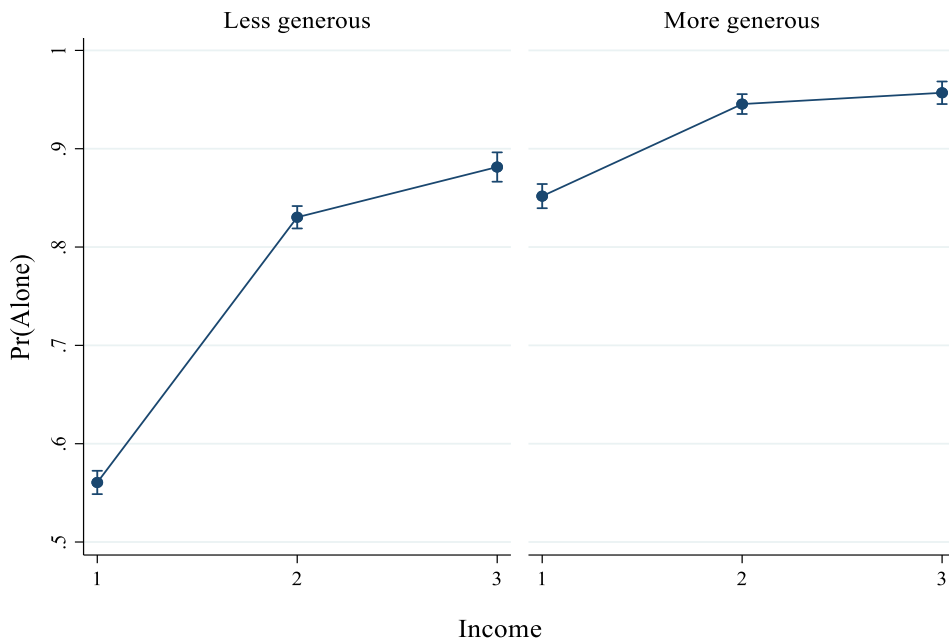
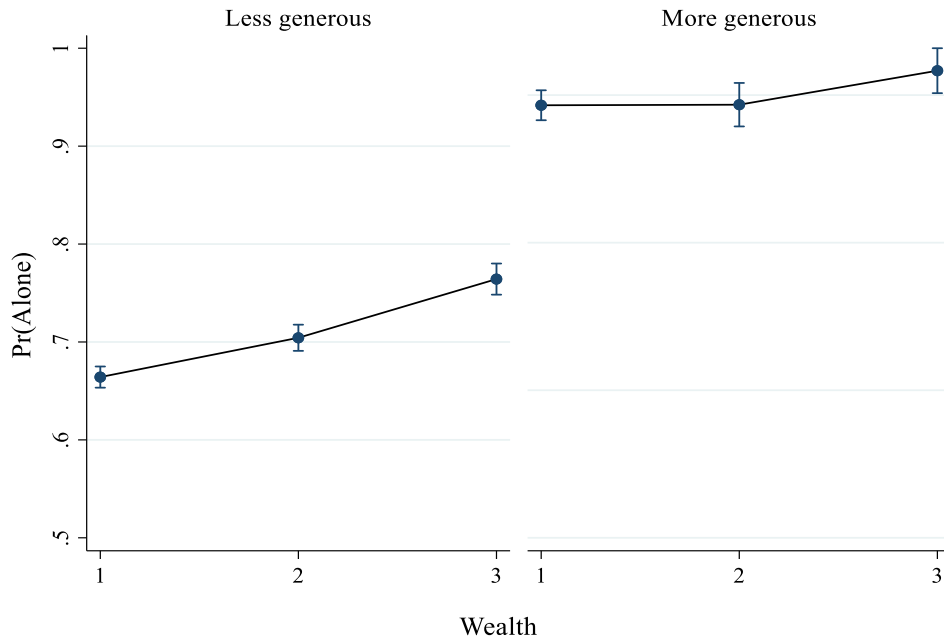
|                                       | Social expenditures |           |                          |           |                       |           |                       |           |
|---------------------------------------|---------------------|-----------|--------------------------|-----------|-----------------------|-----------|-----------------------|-----------|
|                                       | Difference by sex   |           | Difference by age groups |           |                       |           |                       |           |
|                                       | Male vs female      |           | 60-69 vs 70-79           |           | 70-79 vs 80 and older |           | 60-69 vs 80 and older |           |
|                                       | chi2                | Prob>chi2 | chi2                     | Prob>chi2 | chi2                  | Prob>chi2 | chi2                  | Prob>chi2 |
| Social expenditures                   | 0.03                | 0.87      | 12.34                    | 0.00      | 0.03                  | 0.86      | 9.56                  | 0.00      |
| Wealth tercile (ref. Bottom)          |                     |           |                          |           |                       |           |                       |           |
| Medium                                | 0.02                | 0.90      | 0.29                     | 0.59      | 2.50                  | 0.11      | 0.64                  | 0.42      |
| Top                                   | 0.80                | 0.37      | 0.08                     | 0.78      | 1.57                  | 0.21      | 2.07                  | 0.15      |
| Income tercile (ref. Bottom)          |                     |           |                          |           |                       |           |                       |           |
| Medium                                | 5.18                | 0.02      | 10.24                    | 0.00      | 0.50                  | 0.48      | 3.95                  | 0.05      |
| Top                                   | 3.00                | 0.08      | 4.75                     | 0.03      | 0.36                  | 0.55      | 12.04                 | 0.00      |
| Social expenditures X Wealth terciles |                     |           |                          |           |                       |           |                       |           |
| Social expenditures X Medium          | 0.04                | 0.85      | 1.37                     | 0.24      | 3.12                  | 0.08      | 0.33                  | 0.57      |
| Social expenditures X Top             | 3.77                | 0.05      | 1.06                     | 0.30      | 1.65                  | 0.20      | 0.60                  | 0.44      |
| Social expenditures X Income terciles |                     |           |                          |           |                       |           |                       |           |
| Social expenditures X Medium          | 1.92                | 0.17      | 5.98                     | 0.01      | 0.90                  | 0.34      | 2.47                  | 0.12      |
| Social expenditures X Top             | 5.63                | 0.02      | 1.58                     | 0.21      | 0.26                  | 0.61      | 8.36                  | 0.00      |

Figure A1. Percentage of all (left axis) and unpartnered (right axis) adults aged 60 and older living alone, by country.



Note: Data from SHARE, 2011-2015, and HRS, 2014; authors' calculations.

Figure A2. Predictive margins of probability to live alone for unpartnered adults aged 60 and older, by wealth and income, and welfare state generosity. (95% confidence interval)



Note: Data from SHARE, 2011-2015, and HRS, 2014; authors' calculations.