**Supplementary files**

Supplementary File 1A. The causal effect of EAAA on non-resting time

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Model 11** | **Model 23** | **Model 34** |
|  | RR [95% CI] | p-value | RR[95% CI] | p-value | RR [95% CI] | p-value |
| ***EAAA*** | **0.99** **[-0.91-1.09]** | **0.933** | **1.00****[0.96, 1.04]** | **0.932** | **1.00****[0.96-1.05]** | **0.882** |
| *Female* | / |  | / |  |  1.07\*\*\*[1.04-1.11] | <0.001 |
| *Age* | / |  | / |  | 1.00[0.99-1.00] | 0.056 |
| *Married* | / |  | / |  | 1.04\*\*\*[1.01-1.07] | 0.006 |
| *Education Status* | / |  | / |  | 1.01 [1.00-1.01] | 0.007 |
| N | 3019 |  | 3019 |  | 3000 |  |

1Mixed-effect regression with random intercept by healthcare facility (cluster) and a fixed effect for study period, thus assuming a homogeneous secular trend across clusters

2 Mixed-effect regression with random intercept by healthcare facility (cluster) and a random slope for study period, thus allowing for varying secular trends across clusters.

3 Same as *Model 2* but with additional control variables, including *sex, age, marital status, and education*. All control variables were grand-mean centered.

Supplementary File 1B. The causal effect of EAAA on income-generating time

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Model 11** | **Model 22** | **Model 33** |
|  | RR [95% CI] | p-value | RR [95% CI] | p-value |  RR[95% CI] | p-value |
| ***EAAA*** | **0.98****[0.76-1.26]** | **0.871** | **0.98****[0.76-1.25]** | **0.852** | **0.93****[0.73-1.19]**  | **0.559** |
| *Female* | / |  | / |  | 0.49\*\*\*[0.42-0.58] | <0.001 |
| *Age* | / |  | / |  | 1.02\*\*\*(1.01-1.02] | <0.001 |
| *Married* | / |  | / |  | 0.99[0.85-1.16] | 0.913 |
| *Education Status* | / |  | / |  |  1.00[0.98-1.03] | 0.647 |
| N | 3019 |  | 3019 |  | 3000 |  |

RR= Risk Ratios from negative binomial regression

1Mixed-effect regression with random intercept by healthcare facility (cluster) and a fixed effect for study period, thus assuming a homogeneous secular trend across clusters

2 Mixed-effect regression with random intercept by healthcare facility (cluster) and a random slope for study period, thus allowing for varying secular trends across clusters.

3 Same as *Model 2* but with additional control variables, including *sex, age, marital status, and education*. All control variables were grand-mean centered.

Supplementary File 1C. The causal effect of EAAA on employment

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Model 11** | **Model 22** | **Model 33** |
|  | RR [95% CI] | p-value | OR [95% CI] | p-value |  OR[95% CI] | p-value |
| ***EAAA*** | **0.94****[0.84, 1.06]** | **0.308** | **0.95****[0.84, 1.07]** | **0.373** | **0.93****[0.83, 1.04]** | **0.199** |
| *Female* | **/** |  | **/** |  | 0.64\*\*\*[0.58, 0.71] | <0.001 |
| *Age* | **/** |  | **/** |  | 1.00\*\*\*[1.00, 1.01] | 0.006 |
| *Married* | **/** |  | **/** |  | 1.01[0.96, 1.07] | 0.613 |
| *Education Status* | **/** |  | **/** |  | 1.02\*\*\*[1.01, 1.03] | <0.001 |
| N | 3000 |  | 3000 |  | 2990 |  |

RR= Risk Ratios from modified poisson regression model with a robust error variance

1Mixed-effect regression with random intercept by healthcare facility (cluster) and a fixed effect for study period, thus assuming a homogeneous secular trend across clusters

2 Mixed-effect regression with random intercept by healthcare facility (cluster) and a random slope for study period, thus allowing for varying secular trends across clusters.

3 Same as *Model 2* but with additional control variables, including *sex, age, marital status, and education*. All control variables were grand-mean centered.

Supplementary File 1D. The causal effect of EAAA on household expenditures (non-imputed sample)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Model 11** | **Model 22** | **Model 33** |
|  | RR [95% CI] | p-value | RR [95% CI] | p-value | RR [95% CI] | p-value |
| ***EAAA*** | **0.92****[0.79, 1.07]** | **0.286** | **0.92****[0.79, 1.08]** | **0.310** | **0.90****[0.77, 1.06]** | **0.212** |
| *Female* | / |  | / |  | 0.84\*\*\*[0.76, 0.94] | 0.001 |
| *Age* | / |  | / |  | 0.99\*\*\*[0.99, 1.00] | <0.001 |
| *Married* | / |  | / |  | 1.21\*\*\*[1.10, 1.33] | <0.001 |
| *Education Status* | / |  | / |  | 1.04\*\*\*[1.03, 1.06] | <0.001 |
| N | 1300 |  | 1300 |  | 1295 |  |

1Mixed-effect regression with random intercept by healthcare facility (cluster) and a fixed effect for study period, thus assuming a homogeneous secular trend across clusters

2 Mixed-effect regression with random intercept by healthcare facility (cluster) and a random slope for study period, thus allowing for varying secular trends across clusters.

3 Same as *Model 2* but with additional control variables, including *sex, age, marital status, and education*. All control variables were grand-mean centered.

Supplementary File 1E. The causal effect of EAAA on household expenditures: Imputed sample

|  |  |
| --- | --- |
|  | **Main Model** |
|  | β [95% CI] | ppar |
| ***EAAA*** | 0.91[0.78, 1.04] | 0.167 |
| N | **1475 (Imputed)** |  |

*Notes: The estimation is based on the Hussey & Hughes model with control variables.*

Supplementary File 1F. The causal effect of EAAA on asset and living standard index

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Model 11** | **Model 22** | **Model 33** |
|  | β [95% CI] | p-value |  β[95% CI] | p-value |  β[95% CI] | p-value |
| ***EAAA*** | **1.08****[0.96, 1.22]** | **0.187** | **0.96****[0.90, 1.03]** | **0.250** | **0.97****[0.91,1.02]** | **0.241** |
| *Female* | / |  | / |  | 0.97 [0.93, 1.01] | 0.186 |
| *Age* | / |  | / |  | 1.00[1.00,1.01] | 0.27 |
| *Married* | / |  | / |  | 1.02[0.98, 1.06] | 0.273 |
| *Education Status* | / |  | / |  | 0.02\*\*\*[1.02, 1.03] | <0.001 |
| N | 1485 |  | 1485 |  | 1475 |   |

 1Mixed-effect regression with random intercept by healthcare facility (cluster) and a fixed effect for study period, thus assuming a homogeneous secular trend across clusters

2 Mixed-effect regression with random intercept by healthcare facility (cluster) and a random slope for study period, thus allowing for varying secular trends across clusters.

3 Same as *Model 2* but with additional control variables, including *sex, age, marital status, and education*. All control variables were grand-mean centered.

Supplementary File 1G. OLS Specifications

|  |  |  |
| --- | --- | --- |
|  | **Income-generating Time** | **Household Living Standards** |
|  | β[95% CI] | ppar | pperm | β[95% CI] | ppar | pperm |
| ***EAAA*** | 0.02[-0.36, 0.39] | 0.933 | 0.908 | -0.63[-1.62, 0.37] | 0.220 | 0.279 |
| *Female* | 0.61\*\*\*[0.33-0.90] | <0.001 |  | -0.49[-1.25, 0.29] | 0.220 |  |
| *Age* | 0.01[-0.00-0.02] | 0.111 |  | -0.02[-0.05, 0.01] | 0.316 |  |
| *Married* | 0.37\*\*\*[0.12-0.62]  | 0.004 |  | 0.35[-0.31, 1.02] | 0.306 |  |
| *Education Status* | 0.04\*\*\*[0.01-0.08] | 0.010 |  | 0.40[0.31, 0.48] | <0.001 |  |
| N | 3000 |   |  | 1475 |  |  |

*Notes: The estimation is based on the Hussey & Hughes model with control variables.*

Supplementary File 1H. The causal effect of EAAA on a principal component weighted asset and living standard index

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Model 11** | **Model 22** | **Model 33** | **Model 44** |
|  | β [95% CI] | p-value | β [95% CI] | p-value |  β[95% CI] | p-value |  β[95% CI] | p-value |
| ***EAAA*** | **-0.15****[-0.57, 0.26]** | **0.469** | **-0.15****[-0.55, 0.24]** | **0.450** | **-0.16****[-0.58, 0.26]** | **0.465** | **-0.15****[-0.55, 0.24]**  | **0.455** |
| *Female* | / |  | -0.02[-0.30, 0.25]  | 0.877 | / |  | -0.02[-0.30, 0.25]  | 0.883 |
| *Age* | / |  | -0.01[-0.02, 0.00]  | 0.290 | / |  | -0.01[-0.02, 0.01]  | 0.283 |
| *Married* | / |  | 0.01[-0.23, 0.24] | 0.955 | / |  | 0.01[-0.23, 0.24] | 0.952 |
| *Education Status* | / |  | 0.19[0.16, 0.22] | <0.001 | / |  | 0.19[0.16, 0.29] | <0.001 |
| N | 1485 |  |  |  | 1485 |  | 1475 |   |

Index centered around 0.

1Mixed-effect regression with random intercept by healthcare facility (cluster) and a fixed effect for study period, thus assuming a homogeneous secular trend across clusters

2Same as *Model 1* but with additional control variables, including *sex, age, marital status, and education*. All control variables were grand-mean centered.

3Mixed-effect regression with random intercept by healthcare facility (cluster) and a random slope for study period, thus allowing for varying secular trends across clusters.

4Same as *Model 3* but with additional control variables.