Supplementary Material for

**Hierarchy of Needs and the Measurement of Poverty and Standards of Living**

by

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Part of

**Elements in Development Economics**

Series Editor-in-Chief

Kunal Sen

*UNU-WIDER and University of Manchester*

ISBNs: 9781009485975 (HB), 9781009358170 (PB), 9781009358200 (OC)

Information on this title: www.cambridge.org/9781009485975

DOI: 10.1017/9781009358200

**APPENDIX**

**Appendix A: Code for countries**

|  |  |
| --- | --- |
| **France** | FR |
| **Belgium** | BE |
| **Netherlands** | NL |
| **West Germany** | West DE |
| **Italy** | IT |
| **Luxembourg** | LU |
| **Denmark** | DK |
| **Ireland** | IE |
| **United Kingdom** | UK |
| **Greece** | GR |
| **Spain** | ES |
| **Portugal** | PT |
| **East Germany** | East DE |
| **Finland** | FI |
| **Sweden** | SE |
| **Austria** | AT |
| **Cyprus Republic** | CY |
| **Czech Republic** | CZ |
| **Estonia** | EE |
| **Hungary** | HU |
| **Latvia** | LV |
| **Lithuania** | LT |
| **Malta** | MT |
| **Poland** | PL |
| **Slovakia** | SK |
| **Slovenia** | SI |
| **Bulgaria** | BG |
| **Romania** | RO |
| **Turkey** | TR |
| **Croatia** | HR |
| **Cyprus (Turkish Cypriot Community)** | CY (Turkish) |
| **North Macedonia** | MK |
| **Montenegro** | ME |
| **Serbia** | RS |
| **Albania** | AL |

**Appendix B**

**Table B.1: Rank correlations derived from Table 4.1. (between countries comparisons)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Countries** | FR | BE | NL | West DE | IT | LU | DK | IE | UK | GR | ES |
| FR | 1 | 0.678 | 0.895 | 0.937 | 0.811 | 0.867 | 0.678 | 0.755 | 0.804 | 0.692 | 0.993 |
| BE | 0.678 | 1 | 0.573 | 0.685 | 0.853 | 0.916 | 1 | 0.944 | 0.944 | 0.371 | 0.671 |
| NL | 0.895 | 0.573 | 1 | 0.902 | 0.678 | 0.762 | 0.573 | 0.615 | 0.734 | 0.629 | 0.867 |
| West DE | 0.937 | 0.685 | 0.902 | 1 | 0.776 | 0.86 | 0.685 | 0.776 | 0.769 | 0.741 | 0.93 |
| IT | 0.811 | 0.853 | 0.678 | 0.776 | 1 | 0.93 | 0.853 | 0.909 | 0.902 | 0.685 | 0.825 |
| LU | 0.867 | 0.916 | 0.762 | 0.86 | 0.93 | 1 | 0.916 | 0.972 | 0.923 | 0.566 | 0.86 |
| DK | 0.678 | 1 | 0.573 | 0.685 | 0.853 | 0.916 | 1 | 0.944 | 0.944 | 0.371 | 0.671 |
| IE | 0.755 | 0.944 | 0.615 | 0.776 | 0.909 | 0.972 | 0.944 | 1 | 0.895 | 0.469 | 0.762 |
| UK | 0.804 | 0.944 | 0.734 | 0.769 | 0.902 | 0.923 | 0.944 | 0.895 | 1 | 0.49 | 0.797 |
| GR | 0.692 | 0.371 | 0.629 | 0.741 | 0.685 | 0.566 | 0.371 | 0.469 | 0.49 | 1 | 0.685 |
| ES | 0.993 | 0.671 | 0.867 | 0.93 | 0.825 | 0.86 | 0.671 | 0.762 | 0.797 | 0.685 | 1 |
| PT | 0.958 | 0.685 | 0.909 | 0.965 | 0.853 | 0.881 | 0.685 | 0.783 | 0.818 | 0.783 | 0.951 |
| East DE | 0.937 | 0.671 | 0.867 | 0.986 | 0.797 | 0.846 | 0.671 | 0.776 | 0.769 | 0.741 | 0.944 |
| FI | 0.643 | 0.937 | 0.483 | 0.65 | 0.832 | 0.916 | 0.937 | 0.951 | 0.839 | 0.392 | 0.629 |
| SE | 0.566 | 0.951 | 0.545 | 0.594 | 0.769 | 0.846 | 0.951 | 0.874 | 0.874 | 0.238 | 0.559 |
| AT | 0.643 | 0.93 | 0.455 | 0.664 | 0.86 | 0.902 | 0.93 | 0.965 | 0.832 | 0.42 | 0.65 |
| CY | 0.573 | 0.322 | 0.469 | 0.545 | 0.692 | 0.517 | 0.322 | 0.434 | 0.434 | 0.916 | 0.566 |
| CZ | 0.601 | 0.965 | 0.49 | 0.664 | 0.811 | 0.874 | 0.965 | 0.93 | 0.853 | 0.406 | 0.594 |
| EE | 0.371 | 0.636 | 0.182 | 0.322 | 0.671 | 0.545 | 0.636 | 0.552 | 0.566 | 0.566 | 0.357 |
| HU | 0.308 | 0.503 | 0.119 | 0.308 | 0.608 | 0.42 | 0.503 | 0.448 | 0.441 | 0.636 | 0.315 |
| LV | 0.378 | 0.643 | 0.189 | 0.329 | 0.692 | 0.552 | 0.643 | 0.566 | 0.573 | 0.573 | 0.371 |
| LT | 0.42 | 0.601 | 0.189 | 0.357 | 0.72 | 0.601 | 0.601 | 0.608 | 0.538 | 0.615 | 0.406 |
| MT | 0.671 | 0.224 | 0.58 | 0.594 | 0.622 | 0.455 | 0.224 | 0.315 | 0.406 | 0.923 | 0.664 |
| PL | 0.399 | 0.636 | 0.224 | 0.406 | 0.741 | 0.636 | 0.636 | 0.657 | 0.559 | 0.65 | 0.385 |
| SK | 0.364 | 0.538 | 0.14 | 0.294 | 0.699 | 0.538 | 0.538 | 0.552 | 0.483 | 0.615 | 0.357 |
| SI | 0.42 | 0.615 | 0.203 | 0.371 | 0.734 | 0.615 | 0.615 | 0.629 | 0.538 | 0.615 | 0.413 |
| BG | 0.357 | 0.531 | 0.112 | 0.287 | 0.713 | 0.531 | 0.531 | 0.559 | 0.476 | 0.608 | 0.364 |
| RO | 0.406 | 0.643 | 0.189 | 0.343 | 0.762 | 0.587 | 0.643 | 0.615 | 0.594 | 0.601 | 0.413 |
| TR | 0.559 | 0.867 | 0.378 | 0.51 | 0.867 | 0.783 | 0.867 | 0.811 | 0.804 | 0.503 | 0.566 |
| HR | 0.636 | 0.608 | 0.448 | 0.573 | 0.867 | 0.678 | 0.608 | 0.65 | 0.65 | 0.797 | 0.657 |
| CY (Turkish) | 0.832 | 0.65 | 0.741 | 0.769 | 0.839 | 0.748 | 0.65 | 0.65 | 0.748 | 0.825 | 0.825 |
| MK | 0.503 | 0.538 | 0.315 | 0.483 | 0.706 | 0.538 | 0.538 | 0.524 | 0.517 | 0.762 | 0.51 |
| ME | 0.643 | 0.72 | 0.49 | 0.566 | 0.895 | 0.734 | 0.72 | 0.706 | 0.755 | 0.72 | 0.65 |
| RS | 0.601 | 0.308 | 0.448 | 0.51 | 0.587 | 0.406 | 0.308 | 0.308 | 0.427 | 0.825 | 0.608 |
| AL | 0.35 | 0.462 | 0.119 | 0.399 | 0.552 | 0.427 | 0.462 | 0.49 | 0.364 | 0.594 | 0.385 |

**Table B.1 (cont.)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Countries | PT | East DE | FI | SE | AT | CY | CZ | EE | HU | LV | LT | MT |
| FR | 0.958 | 0.937 | 0.643 | 0.566 | 0.643 | 0.573 | 0.601 | 0.371 | 0.308 | 0.378 | 0.42 | 0.671 |
| BE | 0.685 | 0.671 | 0.937 | 0.951 | 0.93 | 0.322 | 0.965 | 0.636 | 0.503 | 0.643 | 0.601 | 0.224 |
| NL | 0.909 | 0.867 | 0.483 | 0.545 | 0.455 | 0.469 | 0.49 | 0.182 | 0.119 | 0.189 | 0.189 | 0.58 |
| West DE | 0.965 | 0.986 | 0.65 | 0.594 | 0.664 | 0.545 | 0.664 | 0.322 | 0.308 | 0.329 | 0.357 | 0.594 |
| IT | 0.853 | 0.797 | 0.832 | 0.769 | 0.86 | 0.692 | 0.811 | 0.671 | 0.608 | 0.692 | 0.72 | 0.622 |
| LU | 0.881 | 0.846 | 0.916 | 0.846 | 0.902 | 0.517 | 0.874 | 0.545 | 0.42 | 0.552 | 0.601 | 0.455 |
| DK | 0.685 | 0.671 | 0.937 | 0.951 | 0.93 | 0.322 | 0.965 | 0.636 | 0.503 | 0.643 | 0.601 | 0.224 |
| IE | 0.783 | 0.776 | 0.951 | 0.874 | 0.965 | 0.434 | 0.93 | 0.552 | 0.448 | 0.566 | 0.608 | 0.315 |
| UK | 0.818 | 0.769 | 0.839 | 0.874 | 0.832 | 0.434 | 0.853 | 0.566 | 0.441 | 0.573 | 0.538 | 0.406 |
| GR | 0.783 | 0.741 | 0.392 | 0.238 | 0.42 | 0.916 | 0.406 | 0.566 | 0.636 | 0.573 | 0.615 | 0.923 |
| ES | 0.951 | 0.944 | 0.629 | 0.559 | 0.65 | 0.566 | 0.594 | 0.357 | 0.315 | 0.371 | 0.406 | 0.664 |
| PT | 1 | 0.965 | 0.657 | 0.573 | 0.664 | 0.664 | 0.629 | 0.371 | 0.329 | 0.378 | 0.441 | 0.699 |
| East DE | 0.965 | 1 | 0.629 | 0.559 | 0.678 | 0.552 | 0.65 | 0.301 | 0.329 | 0.315 | 0.35 | 0.608 |
| FI | 0.657 | 0.629 | 1 | 0.881 | 0.951 | 0.406 | 0.937 | 0.657 | 0.503 | 0.65 | 0.72 | 0.245 |
| SE | 0.573 | 0.559 | 0.881 | 1 | 0.832 | 0.196 | 0.909 | 0.566 | 0.413 | 0.573 | 0.503 | 0.091 |
| AT | 0.664 | 0.678 | 0.951 | 0.832 | 1 | 0.399 | 0.958 | 0.629 | 0.566 | 0.643 | 0.678 | 0.259 |
| CY | 0.664 | 0.552 | 0.406 | 0.196 | 0.399 | 1 | 0.343 | 0.636 | 0.65 | 0.65 | 0.755 | 0.923 |
| CZ | 0.629 | 0.65 | 0.937 | 0.909 | 0.958 | 0.343 | 1 | 0.664 | 0.594 | 0.678 | 0.643 | 0.203 |
| EE | 0.371 | 0.301 | 0.657 | 0.566 | 0.629 | 0.636 | 0.664 | 1 | 0.916 | 0.993 | 0.937 | 0.531 |
| HU | 0.329 | 0.329 | 0.503 | 0.413 | 0.566 | 0.65 | 0.594 | 0.916 | 1 | 0.93 | 0.853 | 0.573 |
| LV | 0.378 | 0.315 | 0.65 | 0.573 | 0.643 | 0.65 | 0.678 | 0.993 | 0.93 | 1 | 0.93 | 0.538 |
| LT | 0.441 | 0.35 | 0.72 | 0.503 | 0.678 | 0.755 | 0.643 | 0.937 | 0.853 | 0.93 | 1 | 0.594 |
| MT | 0.699 | 0.608 | 0.245 | 0.091 | 0.259 | 0.923 | 0.203 | 0.531 | 0.573 | 0.538 | 0.594 | 1 |
| PL | 0.476 | 0.385 | 0.741 | 0.545 | 0.713 | 0.755 | 0.692 | 0.916 | 0.825 | 0.909 | 0.965 | 0.559 |
| SK | 0.392 | 0.301 | 0.636 | 0.427 | 0.643 | 0.769 | 0.594 | 0.923 | 0.881 | 0.93 | 0.979 | 0.615 |
| SI | 0.441 | 0.357 | 0.72 | 0.538 | 0.685 | 0.755 | 0.664 | 0.937 | 0.853 | 0.944 | 0.986 | 0.58 |
| BG | 0.385 | 0.308 | 0.622 | 0.42 | 0.65 | 0.762 | 0.587 | 0.909 | 0.888 | 0.923 | 0.965 | 0.608 |
| RO | 0.427 | 0.357 | 0.664 | 0.545 | 0.692 | 0.72 | 0.678 | 0.951 | 0.916 | 0.972 | 0.944 | 0.58 |
| TR | 0.552 | 0.51 | 0.839 | 0.818 | 0.846 | 0.545 | 0.86 | 0.902 | 0.811 | 0.916 | 0.853 | 0.441 |
| HR | 0.657 | 0.601 | 0.608 | 0.51 | 0.657 | 0.846 | 0.615 | 0.839 | 0.853 | 0.867 | 0.853 | 0.797 |
| CY (Turkish) | 0.811 | 0.769 | 0.58 | 0.559 | 0.608 | 0.769 | 0.629 | 0.699 | 0.706 | 0.727 | 0.671 | 0.825 |
| MK | 0.503 | 0.497 | 0.538 | 0.441 | 0.594 | 0.755 | 0.608 | 0.895 | 0.965 | 0.916 | 0.853 | 0.72 |
| ME | 0.657 | 0.58 | 0.685 | 0.636 | 0.713 | 0.783 | 0.706 | 0.874 | 0.839 | 0.902 | 0.86 | 0.72 |
| RS | 0.566 | 0.524 | 0.252 | 0.182 | 0.294 | 0.804 | 0.301 | 0.678 | 0.734 | 0.706 | 0.629 | 0.888 |
| AL | 0.357 | 0.427 | 0.434 | 0.322 | 0.594 | 0.524 | 0.58 | 0.713 | 0.832 | 0.755 | 0.643 | 0.469 |

**Table B.1 (end)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Countries | PL | SK | SI | BG | RO | TR | HR | CY(TR) | MK | ME | RS | AL |
| FR | 0.399 | 0.364 | 0.42 | 0.357 | 0.406 | 0.559 | 0.636 | 0.832 | 0.503 | 0.643 | 0.601 | 0.35 |
| BE | 0.636 | 0.538 | 0.615 | 0.531 | 0.643 | 0.867 | 0.608 | 0.65 | 0.538 | 0.72 | 0308 | 0.462 |
| NL | 0.224 | 0.14 | 0.203 | 0.112 | 0.189 | 0.378 | 0.448 | 0.741 | 0.315 | 0.49 | 0.448 | 0.119 |
| West DE | 0.406 | 0.294 | 0.371 | 0.287 | 0.343 | 0.51 | 0.573 | 0.769 | 0.483 | 0.566 | 0.51 | 0.399 |
| IT | 0.741 | 0.699 | 0.734 | 0.713 | 0.762 | 0.867 | 0.867 | 0.839 | 0.706 | 0.895 | 0.587 | 0.552 |
| LU | 0.636 | 0.538 | 0.615 | 0.531 | 0.587 | 0.783 | 0.678 | 0.748 | 0.538 | 0.734 | 0.406 | 0.427 |
| DK | 0.636 | 0.538 | 0.615 | 0.531 | 0.643 | 0.867 | 0.608 | 0.65 | 0.538 | 0.72 | 0.308 | 0.462 |
| IE | 0.657 | 0.552 | 0.629 | 0.559 | 0.615 | 0.811 | 0.65 | 0.65 | 0.524 | 0.706 | 0.308 | 0.49 |
| UK | 0.559 | 0.483 | 0.538 | 0.476 | 0.594 | 0.804 | 0.65 | 0.748 | 0.517 | 0.755 | 0.427 | 0.364 |
| GR | 0.65 | 0.615 | 0.615 | 0.608 | 0.601 | 0.503 | 0.797 | 0.825 | 0.762 | 0.72 | 0.825 | 0.594 |
| ES | 0.385 | 0.357 | 0.413 | 0.364 | 0.413 | 0.566 | 0.657 | 0.825 | 0.51 | 0.65 | 0.608 | 0.385 |
| PT | 0.476 | 0.392 | 0.441 | 0.385 | 0.427 | 0.552 | 0.657 | 0.811 | 0.503 | 0.657 | 0.566 | 0.357 |
| East DE | 0.385 | 0.301 | 0.357 | 0.308 | 0.357 | 0.51 | 0.601 | 0.769 | 0.497 | 0.58 | 0.524 | 0.427 |
| FI | 0.741 | 0.636 | 0.72 | 0.622 | 0.664 | 0.839 | 0.608 | 0.58 | 0.538 | 0.685 | 0.252 | 0.434 |
| SE | 0.545 | 0.427 | 0.538 | 0.42 | 0.545 | 0.818 | 0.51 | 0.559 | 0.441 | 0.636 | 0.182 | 0.322 |
| AT | 0.713 | 0.643 | 0.685 | 0.65 | 0.692 | 0.846 | 0.657 | 0.608 | 0.594 | 0.713 | 0.294 | 0.594 |
| CY | 0.755 | 0.769 | 0.755 | 0.762 | 0.72 | 0.545 | 0.846 | 0.769 | 0.755 | 0.783 | 0.804 | 0.524 |
| CZ | 0.692 | 0.594 | 0.664 | 0.587 | 0.678 | 0.86 | 0.615 | 0.629 | 0.608 | 0.706 | 0.301 | 0.58 |
| EE | 0.916 | 0.923 | 0.937 | 0.909 | 0.951 | 0.902 | 0.839 | 0.699 | 0.895 | 0.874 | 0.678 | 0.713 |
| HU | 0.825 | 0.881 | 0.853 | 0.888 | 0.916 | 0.811 | 0.853 | 0.706 | 0.965 | 0.839 | 0.734 | 0.832 |
| LV | 0.909 | 0.93 | 0.944 | 0.923 | 0.972 | 0.916 | 0.867 | 0.727 | 0.916 | 0.902 | 0.706 | 0.755 |
| LT | 0.965 | 0.979 | 0.986 | 0.965 | 0.944 | 0.853 | 0.853 | 0.671 | 0.853 | 0.86 | 0.629 | 0.643 |
| MT | 0.559 | 0.615 | 0.58 | 0.608 | 0.58 | 0.441 | 0.797 | 0.825 | 0.72 | 0.72 | 0.888 | 0.469 |
| PL | 1 | 0.951 | 0.965 | 0.937 | 0.923 | 0.846 | 0.832 | 0.636 | 0.818 | 0.839 | 0.566 | 0.678 |
| SK | 0.951 | 1 | 0.972 | 0.993 | 0.965 | 0.832 | 0.874 | 0.671 | 0.874 | 0.874 | 0.657 | 0.706 |
| SI | 0.965 | 0.972 | 1 | 0.965 | 0.958 | 0.874 | 0.874 | 0.692 | 0.867 | 0.881 | 0.65 | 0.692 |
| BG | 0.937 | 0.993 | 0.965 | 1 | 0.972 | 0.839 | 0.895 | 0.664 | 0.881 | 0.881 | 0.664 | 0.741 |
| RO | 0.923 | 0.965 | 0.958 | 0.972 | 1 | 0.916 | 0.916 | 0.734 | 0.909 | 0.937 | 0.706 | 0.769 |
| TR | 0.846 | 0.832 | 0.874 | 0.839 | 0.916 | 1 | 0.86 | 0.762 | 0.825 | 0.923 | 0.58 | 0.685 |
| HR | 0.832 | 0.874 | 0.874 | 0.895 | 0.916 | 0.86 | 1 | 0.888 | 0.93 | 0.972 | 0.846 | 0.755 |
| CY (Turkish) | 0.636 | 0.671 | 0.692 | 0.664 | 0.734 | 0.762 | 0.888 | 1 | 0.846 | 0.902 | 0.874 | 0.622 |
| MK | 0.818 | 0.874 | 0.867 | 0.881 | 0.909 | 0.825 | 0.93 | 0.846 | 1 | 0.902 | 0.853 | 0.846 |
| ME | 0.839 | 0.874 | 0.881 | 0.881 | 0.937 | 0.923 | 0.972 | 0.902 | 0.902 | 1 | 0.797 | 0.699 |
| RS | 0.566 | 0.657 | 0.65 | 0.664 | 0.706 | 0.58 | 0.846 | 0.874 | 0.853 | 0.797 | 1 | 0.678 |
| AL | 0.678 | 0.706 | 0.692 | 0.741 | 0.769 | 0.685 | 0.755 | 0.622 | 0.846 | 0.699 | 0.678 | 1 |

**Table B.2: Rank correlations derived from Table 4.2 (between countries comparisons)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | FR | BE | NL | West DE | IT | LU | DK | IE | UK | GR | ES |
| FR | 1 | 0.888 | 0.846 | 0.923 | 0.888 | 0.986 | 0.874 | 0.888 | 0.965 | 0.839 | 0.874 |
| BE | 0.888 | 1 | 0.65 | 0.734 | 0.86 | 0.881 | 0.972 | 0.986 | 0.881 | 0.65 | 0.797 |
| NL | 0.846 | 0.65 | 1 | 0.888 | 0.692 | 0.832 | 0.58 | 0.615 | 0.874 | 0.783 | 0.734 |
| West DE | 0.923 | 0.734 | 0.888 | 1 | 0.79 | 0.916 | 0.706 | 0.734 | 0.916 | 0.86 | 0.811 |
| IT | 0.888 | 0.86 | 0.692 | 0.79 | 1 | 0.888 | 0.804 | 0.881 | 0.909 | 0.874 | 0.965 |
| LU | 0.986 | 0.881 | 0.832 | 0.916 | 0.888 | 1 | 0.867 | 0.888 | 0.937 | 0.839 | 0.86 |
| DK | 0.874 | 0.972 | 0.58 | 0.706 | 0.804 | 0.867 | 1 | 0.972 | 0.832 | 0.559 | 0.762 |
| IE | 0.888 | 0.986 | 0.615 | 0.734 | 0.881 | 0.888 | 0.972 | 1 | 0.881 | 0.65 | 0.811 |
| UK | 0.965 | 0.881 | 0.874 | 0.916 | 0.909 | 0.937 | 0.832 | 0.881 | 1 | 0.853 | 0.909 |
| GR | 0.839 | 0.65 | 0.783 | 0.86 | 0.874 | 0.839 | 0.559 | 0.65 | 0.853 | 1 | 0.867 |
| ES | 0.874 | 0.797 | 0.734 | 0.811 | 0.965 | 0.86 | 0.762 | 0.811 | 0.909 | 0.867 | 1 |
| PT | 0.944 | 0.874 | 0.818 | 0.839 | 0.958 | 0.93 | 0.818 | 0.867 | 0.958 | 0.895 | 0.951 |
| East DE | 0.881 | 0.657 | 0.783 | 0.958 | 0.797 | 0.881 | 0.629 | 0.685 | 0.86 | 0.888 | 0.797 |
| FI | 0.818 | 0.951 | 0.49 | 0.65 | 0.79 | 0.818 | 0.944 | 0.93 | 0.755 | 0.594 | 0.706 |
| SE | 0.818 | 0.958 | 0.58 | 0.692 | 0.741 | 0.804 | 0.965 | 0.93 | 0.79 | 0.503 | 0.699 |
| AT | 0.818 | 0.888 | 0.413 | 0.636 | 0.769 | 0.825 | 0.923 | 0.909 | 0.72 | 0.566 | 0.678 |
| CY | 0.811 | 0.79 | 0.657 | 0.685 | 0.923 | 0.811 | 0.706 | 0.776 | 0.832 | 0.881 | 0.909 |
| CZ | 0.79 | 0.902 | 0.427 | 0.636 | 0.832 | 0.783 | 0.902 | 0.909 | 0.748 | 0.636 | 0.762 |
| EE | 0.545 | 0.629 | 0.322 | 0.448 | 0.769 | 0.538 | 0.601 | 0.615 | 0.58 | 0.636 | 0.811 |
| HU | 0.692 | 0.699 | 0.364 | 0.615 | 0.839 | 0.671 | 0.699 | 0.727 | 0.685 | 0.72 | 0.839 |
| LV | 0.608 | 0.741 | 0.294 | 0.476 | 0.769 | 0.587 | 0.755 | 0.741 | 0.622 | 0.545 | 0.79 |
| LT | 0.538 | 0.671 | 0.28 | 0.392 | 0.769 | 0.517 | 0.629 | 0.65 | 0.58 | 0.601 | 0.783 |
| MT | 0.699 | 0.517 | 0.671 | 0.699 | 0.818 | 0.706 | 0.441 | 0.517 | 0.734 | 0.923 | 0.86 |
| PL | 0.762 | 0.867 | 0.406 | 0.587 | 0.853 | 0.755 | 0.881 | 0.881 | 0.734 | 0.629 | 0.818 |
| SK | 0.524 | 0.615 | 0.175 | 0.35 | 0.734 | 0.524 | 0.615 | 0.615 | 0.497 | 0.58 | 0.727 |
| SI | 0.769 | 0.748 | 0.587 | 0.678 | 0.902 | 0.783 | 0.713 | 0.734 | 0.755 | 0.818 | 0.923 |
| BG | 0.552 | 0.587 | 0.266 | 0.42 | 0.797 | 0.559 | 0.573 | 0.601 | 0.552 | 0.664 | 0.811 |
| RO | 0.566 | 0.643 | 0.301 | 0.434 | 0.818 | 0.552 | 0.615 | 0.657 | 0.615 | 0.65 | 0.839 |
| TR | 0.748 | 0.86 | 0.455 | 0.587 | 0.867 | 0.741 | 0.881 | 0.881 | 0.762 | 0.58 | 0.867 |
| HR | 0.769 | 0.734 | 0.538 | 0.678 | 0.937 | 0.769 | 0.713 | 0.755 | 0.776 | 0.811 | 0.958 |
| CY (Turkish) | 0.839 | 0.734 | 0.706 | 0.79 | 0.916 | 0.818 | 0.706 | 0.734 | 0.86 | 0.874 | 0.979 |
| MK | 0.657 | 0.629 | 0.392 | 0.615 | 0.804 | 0.636 | 0.636 | 0.643 | 0.657 | 0.713 | 0.86 |
| ME | 0.713 | 0.762 | 0.483 | 0.587 | 0.909 | 0.692 | 0.727 | 0.776 | 0.769 | 0.734 | 0.93 |
| RS | 0.573 | 0.448 | 0.51 | 0.615 | 0.776 | 0.559 | 0.378 | 0.462 | 0.657 | 0.839 | 0.846 |
| AL | 0.497 | 0.531 | 0.105 | 0.441 | 0.65 | 0.517 | 0.545 | 0.58 | 0.455 | 0.58 | 0.622 |

**Table B.2 (cont.)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | PT | East DE | FI | SE | AT | CY | CZ | EE | HU | LV | LT | MT |
| FR | 0.944 | 0.881 | 0.818 | 0.818 | 0.818 | 0.811 | 0.79 | 0.545 | 0.692 | 0.608 | 0.538 | 0.699 |
| BE | 0.874 | 0.657 | 0.951 | 0.958 | 0.888 | 0.79 | 0.902 | 0.629 | 0.699 | 0.741 | 0.671 | 0.517 |
| NL | 0.818 | 0.783 | 0.49 | 0.58 | 0.413 | 0.657 | 0.427 | 0.322 | 0.364 | 0.294 | 0.28 | 0.671 |
| West DE | 0.839 | 0.958 | 0.65 | 0.692 | 0.636 | 0.685 | 0.636 | 0.448 | 0.615 | 0.476 | 0.392 | 0.699 |
| IT | 0.958 | 0.797 | 0.79 | 0.741 | 0.769 | 0.923 | 0.832 | 0.769 | 0.839 | 0.769 | 0.769 | 0.818 |
| LU | 0.93 | 0.881 | 0.818 | 0.804 | 0.825 | 0.811 | 0.783 | 0.538 | 0.671 | 0.587 | 0.517 | 0.706 |
| DK | 0.818 | 0.629 | 0.944 | 0.965 | 0.923 | 0.706 | 0.902 | 0.601 | 0.699 | 0.755 | 0.629 | 0.441 |
| IE | 0.867 | 0.685 | 0.93 | 0.93 | 0.909 | 0.776 | 0.909 | 0.615 | 0.727 | 0.741 | 0.65 | 0.517 |
| UK | 0.958 | 0.86 | 0.755 | 0.79 | 0.72 | 0.832 | 0.748 | 0.58 | 0.685 | 0.622 | 0.58 | 0.734 |
| GR | 0.895 | 0.888 | 0.594 | 0.503 | 0.566 | 0.881 | 0.636 | 0.636 | 0.72 | 0.545 | 0.601 | 0.923 |
| ES | 0.951 | 0.797 | 0.706 | 0.699 | 0.678 | 0.909 | 0.762 | 0.811 | 0.839 | 0.79 | 0.783 | 0.86 |
| PT | 1 | 0.797 | 0.783 | 0.755 | 0.734 | 0.937 | 0.79 | 0.72 | 0.755 | 0.713 | 0.72 | 0.839 |
| East DE | 0.797 | 1 | 0.601 | 0.58 | 0.657 | 0.692 | 0.615 | 0.427 | 0.657 | 0.434 | 0.378 | 0.72 |
| FI | 0.783 | 0.601 | 1 | 0.944 | 0.944 | 0.741 | 0.958 | 0.65 | 0.755 | 0.776 | 0.692 | 0.441 |
| SE | 0.755 | 0.58 | 0.944 | 1 | 0.86 | 0.636 | 0.881 | 0.573 | 0.657 | 0.734 | 0.601 | 0.35 |
| AT | 0.734 | 0.657 | 0.944 | 0.86 | 1 | 0.685 | 0.916 | 0.545 | 0.741 | 0.692 | 0.587 | 0.406 |
| CY | 0.937 | 0.692 | 0.741 | 0.636 | 0.685 | 1 | 0.762 | 0.818 | 0.783 | 0.741 | 0.832 | 0.874 |
| CZ | 0.79 | 0.615 | 0.958 | 0.881 | 0.916 | 0.762 | 1 | 0.748 | 0.888 | 0.874 | 0.769 | 0.503 |
| EE | 0.72 | 0.427 | 0.65 | 0.573 | 0.545 | 0.818 | 0.748 | 1 | 0.874 | 0.944 | 0.979 | 0.741 |
| HU | 0.755 | 0.657 | 0.755 | 0.657 | 0.741 | 0.783 | 0.888 | 0.874 | 1 | 0.916 | 0.853 | 0.671 |
| LV | 0.713 | 0.434 | 0.776 | 0.734 | 0.692 | 0.741 | 0.874 | 0.944 | 0.916 | 1 | 0.937 | 0.58 |
| LT | 0.72 | 0.378 | 0.692 | 0.601 | 0.587 | 0.832 | 0.769 | 0.979 | 0.853 | 0.937 | 1 | 0.692 |
| MT | 0.839 | 0.72 | 0.441 | 0.35 | 0.406 | 0.874 | 0.503 | 0.741 | 0.671 | 0.58 | 0.692 | 1 |
| PL | 0.811 | 0.559 | 0.902 | 0.832 | 0.86 | 0.797 | 0.972 | 0.846 | 0.916 | 0.944 | 0.853 | 0.58 |
| SK | 0.671 | 0.378 | 0.699 | 0.545 | 0.657 | 0.79 | 0.79 | 0.944 | 0.874 | 0.916 | 0.951 | 0.671 |
| SI | 0.881 | 0.664 | 0.748 | 0.671 | 0.678 | 0.923 | 0.79 | 0.916 | 0.86 | 0.853 | 0.881 | 0.853 |
| BG | 0.72 | 0.462 | 0.622 | 0.49 | 0.594 | 0.832 | 0.727 | 0.958 | 0.874 | 0.888 | 0.944 | 0.783 |
| RO | 0.748 | 0.448 | 0.636 | 0.545 | 0.58 | 0.839 | 0.755 | 0.972 | 0.888 | 0.93 | 0.972 | 0.755 |
| TR | 0.818 | 0.531 | 0.818 | 0.825 | 0.776 | 0.769 | 0.874 | 0.846 | 0.839 | 0.93 | 0.846 | 0.601 |
| HR | 0.874 | 0.706 | 0.713 | 0.643 | 0.699 | 0.902 | 0.797 | 0.902 | 0.916 | 0.867 | 0.874 | 0.839 |
| CY (Turkish) | 0.923 | 0.776 | 0.678 | 0.65 | 0.636 | 0.909 | 0.748 | 0.853 | 0.867 | 0.811 | 0.811 | 0.881 |
| MK | 0.734 | 0.65 | 0.671 | 0.601 | 0.65 | 0.783 | 0.79 | 0.909 | 0.965 | 0.902 | 0.867 | 0.72 |
| ME | 0.86 | 0.58 | 0.713 | 0.664 | 0.657 | 0.895 | 0.811 | 0.937 | 0.902 | 0.923 | 0.937 | 0.783 |
| RS | 0.741 | 0.65 | 0.385 | 0.315 | 0.336 | 0.804 | 0.517 | 0.832 | 0.776 | 0.692 | 0.776 | 0.93 |
| AL | 0.531 | 0.559 | 0.65 | 0.476 | 0.706 | 0.657 | 0.776 | 0.741 | 0.888 | 0.762 | 0.72 | 0.524 |

**Table B.2 (end)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | PL | SK | SI | BG | RO | TR | HR | CY(TR) | MK | ME | RS | AL |
| FR | 0.762 | 0.524 | 0.769 | 0.552 | 0.566 | 0.748 | 0.769 | 0.839 | 0.657 | 0.713 | 0.573 | 0.497 |
| BE | 0.867 | 0.615 | 0.748 | 0.587 | 0.643 | 0.86 | 0.734 | 0.734 | 0.629 | 0.762 | 0.448 | 0.531 |
| NL | 0.406 | 0.175 | 0.587 | 0.266 | 0.301 | 0.455 | 0.538 | 0.706 | 0.392 | 0.483 | 0.51 | 0.105 |
| West DE | 0.587 | 0.35 | 0.678 | 0.42 | 0.434 | 0.587 | 0.678 | 0.79 | 0.615 | 0.587 | 0.615 | 0.441 |
| IT | 0.853 | 0.734 | 0.902 | 0.797 | 0.818 | 0.867 | 0.937 | 0.916 | 0.804 | 0.909 | 0.776 | 0.65 |
| LU | 0.755 | 0.524 | 0.783 | 0.559 | 0.552 | 0.741 | 0.769 | 0.818 | 0.636 | 0.692 | 0.559 | 0.517 |
| DK | 0.881 | 0.615 | 0.713 | 0.573 | 0.615 | 0.881 | 0.713 | 0.706 | 0.636 | 0.727 | 0.378 | 0.545 |
| IE | 0.881 | 0.615 | 0.734 | 0.601 | 0.657 | 0.881 | 0.755 | 0.734 | 0.643 | 0.776 | 0.462 | 0.58 |
| UK | 0.734 | 0.497 | 0.755 | 0.552 | 0.615 | 0.762 | 0.776 | 0.86 | 0.657 | 0.769 | 0.657 | 0.455 |
| GR | 0.629 | 0.58 | 0.818 | 0.664 | 0.65 | 0.58 | 0.811 | 0.874 | 0.713 | 0.734 | 0.839 | 0.58 |
| ES | 0.818 | 0.727 | 0.923 | 0.811 | 0.839 | 0.867 | 0.958 | 0.979 | 0.86 | 0.93 | 0.846 | 0.622 |
| PT | 0.811 | 0.671 | 0.881 | 0.72 | 0.748 | 0.818 | 0.874 | 0.923 | 0.734 | 0.86 | 0.741 | 0.531 |
| East DE | 0.559 | 0.378 | 0.664 | 0.462 | 0.448 | 0.531 | 0.706 | 0.776 | 0.65 | 0.58 | 0.65 | 0.559 |
| FI | 0.902 | 0.699 | 0.748 | 0.622 | 0.636 | 0.818 | 0.713 | 0.678 | 0.671 | 0.713 | 0.385 | 0.65 |
| SE | 0.832 | 0.545 | 0.671 | 0.49 | 0.545 | 0.825 | 0.643 | 0.65 | 0.601 | 0.664 | 0.315 | 0.476 |
| AT | 0.86 | 0.657 | 0.678 | 0.594 | 0.58 | 0.776 | 0.699 | 0.636 | 0.65 | 0.657 | 0.336 | 0.706 |
| CY | 0.797 | 0.79 | 0.923 | 0.832 | 0.839 | 0.769 | 0.902 | 0.909 | 0.783 | 0.895 | 0.804 | 0.657 |
| CZ | 0.972 | 0.79 | 0.79 | 0.727 | 0.755 | 0.874 | 0.797 | 0.748 | 0.79 | 0.811 | 0.517 | 0.776 |
| EE | 0.846 | 0.944 | 0.916 | 0.958 | 0.972 | 0.846 | 0.902 | 0.853 | 0.909 | 0.937 | 0.832 | 0.741 |
| HU | 0.916 | 0.874 | 0.86 | 0.874 | 0.888 | 0.839 | 0.916 | 0.867 | 0.965 | 0.902 | 0.776 | 0.888 |
| LV | 0.944 | 0.916 | 0.853 | 0.888 | 0.93 | 0.93 | 0.867 | 0.811 | 0.902 | 0.923 | 0.692 | 0.762 |
| LT | 0.853 | 0.951 | 0.881 | 0.944 | 0.972 | 0.846 | 0.874 | 0.811 | 0.867 | 0.937 | 0.776 | 0.72 |
| MT | 0.58 | 0.671 | 0.853 | 0.783 | 0.755 | 0.601 | 0.839 | 0.881 | 0.72 | 0.783 | 0.93 | 0.524 |
| PL | 1 | 0.874 | 0.853 | 0.832 | 0.86 | 0.944 | 0.867 | 0.811 | 0.846 | 0.895 | 0.608 | 0.776 |
| SK | 0.874 | 1 | 0.874 | 0.972 | 0.944 | 0.818 | 0.867 | 0.769 | 0.867 | 0.881 | 0.72 | 0.804 |
| SI | 0.853 | 0.874 | 1 | 0.916 | 0.888 | 0.846 | 0.965 | 0.944 | 0.895 | 0.916 | 0.825 | 0.706 |
| BG | 0.832 | 0.972 | 0.916 | 1 | 0.972 | 0.825 | 0.93 | 0.839 | 0.895 | 0.923 | 0.832 | 0.783 |
| RO | 0.86 | 0.944 | 0.888 | 0.972 | 1 | 0.874 | 0.923 | 0.853 | 0.895 | 0.972 | 0.846 | 0.755 |
| TR | 0.944 | 0.818 | 0.846 | 0.825 | 0.874 | 1 | 0.881 | 0.825 | 0.811 | 0.923 | 0.636 | 0.643 |
| HR | 0.867 | 0.867 | 0.965 | 0.93 | 0.923 | 0.881 | 1 | 0.958 | 0.937 | 0.958 | 0.86 | 0.762 |
| CY (Turkish) | 0.811 | 0.769 | 0.944 | 0.839 | 0.853 | 0.825 | 0.958 | 1 | 0.909 | 0.923 | 0.881 | 0.664 |
| MK | 0.846 | 0.867 | 0.895 | 0.895 | 0.895 | 0.811 | 0.937 | 0.909 | 1 | 0.902 | 0.832 | 0.853 |
| ME | 0.895 | 0.881 | 0.916 | 0.923 | 0.972 | 0.923 | 0.958 | 0.923 | 0.902 | 1 | 0.846 | 0.72 |
| RS | 0.608 | 0.72 | 0.825 | 0.832 | 0.846 | 0.636 | 0.86 | 0.881 | 0.832 | 0.846 | 1 | 0.636 |
| AL | 0.776 | 0.804 | 0.706 | 0.783 | 0.755 | 0.643 | 0.762 | 0.664 | 0.853 | 0.72 | 0.636 | 1 |