Supplement D – Simulated scenarios controlling for travel cost differences between countries

Table 3D. Welfare measures for the current situation and the improvement scenario simulated while controlling for travel cost differences (assuming 3 levels of equal travel costs in all counties)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Denmark** | **Estonia** | | **Finland** | | **Germany** | | **Latvia** | | **Lithuania** | | **Poland** | | **Russia** | | **Sweden** | | **Total** | |
| **(coastal)** | |
|  | Adult population (millions) | 4.2668 | 1.0493 | | 4.2146 | | 67.2119 | | 1.6319 | | 2.3476 | | 30.5180 | | 6.0306 | | 7.3794 | | 124.6502 | |
| TC = 27.37 (1st quartile) | **Welfare measures – current situation** | | | | | | | | | | | | | | | | | | | | | |
| Total consumer surplus (billion EUR) | 0.6199\*\*\* | | 0.1533\*\*\* | | 1.4844\*\*\* | | 24.7267\*\*\* | | 0.1099\*\*\* | | 0.5013\*\*\* | | 8.9568\*\*\* | | 1.3412\*\*\* | | 5.3261\*\*\* | | 43.2194\*\*\* | |
| (0.530-0.479) | | (0.116-0.103) | | (1.073-0.935) | | (18.276-15.318) | | (0.081-0.069) | | (0.285-0.235) | | (6.241-5.169) | | (0.106-0.026) | | (4.175-3.667) | | (32.078-27.161) | |
| **Welfare measures – simulated scenario** | | | | | | | | | | | | | | | | | | | | | |
| Partial effect of ENVBN | 0.3468\*\*\* | 0.1469\*\*\* | | 0.3566\*\*\* | | 0.3806\*\*\* | | 0.1946\*\*\* | | 0.3788\*\*\* | | 0.3361\*\*\* | | 0.1401\*\*\* | | 0.5631\*\*\* | | 0.3625\*\*\* | |
| (0.176-0.520) | (0.079-0.215) | | (0.192-0.531) | | (0.202-0.570) | | (0.106-0.286) | | (0.207-0.576) | | (0.175-0.517) | | (0.021-0.378) | | (0.290-0.847) | | (0.192-0.541) | |
| Total simulated consumer surplus (billion EUR) | 0.6665\*\*\* | 0.1654\*\*\* | | 1.6057\*\*\* | | 26.7120\*\*\* | | 0.1189\*\*\* | | 0.5480\*\*\* | | 9.6902\*\*\* | | 1.5839\*\*\* | | 5.7329\*\*\* | | 46.8235\*\*\* | |
| (0.571-0.748) | (0.126-0.200) | | (1.171-1.888) | | (19.966-30.972) | | (0.089-0.143) | | (0.316-0.777) | | (6.821-11.828) | | (0.133-5.362) | | (4.506-6.877) | | (34.947-55.273) | |
| Absolute change of the total consumer surplus (billion EUR) | 0.0466 | 0.0121 | | 0.1213 | | 1.9853 | | 0.0090 | | 0.0468 | | 0.7334 | | 0.2428 | | 0.4068 | | 3.6041 | |
| Relative change of the total consumer surplus (%) | 7.52% | 7.89% | | 8.17% | | 8.03% | | 8.20% | | 9.33% | | 8.19% | | 18.10% | | 7.64% | | 8.34% | |
| TC = 78.02 (median) | **Welfare measures – current situation** | | | | | | | | | | | | | | | | | | | | | |
| Total consumer surplus (billion EUR) | 0.1241\*\*\* | | 0.0805\*\*\* | | 0.7932\*\*\* | | 12.8835\*\*\* | | 0.0185\*\*\* | | 0.1910\*\*\* | | 4.4157\*\*\* | | 1.1112\*\*\* | | 3.1754\*\*\* | | 22.7932\*\*\* | |
| (0.522-0.075) | | (0.112-0.079) | | (1.020-0.082) | | (16.723-0.080) | | (0.076-0.082) | | (0.264-0.093) | | (5.695-0.082) | | (0.032-0.181) | | (4.003-0.076) | | (29.899-0.083) | |
| **Welfare measures – simulated scenario** | | | | | | | | | | | | | | | | | | | | | |
| Partial effect of ENVBN | 0.0695\*\*\* | 0.0774\*\*\* | | 0.1905\*\*\* | | 0.1984\*\*\* | | 0.0327\*\*\* | | 0.1444\*\*\* | | 0.1655\*\*\* | | 0.1165\*\*\* | | 0.3355\*\*\* | | 0.1856\*\*\* | |
| (0.036-0.105) | (0.040-0.116) | | (0.103-0.282) | | (0.106-0.296) | | (0.018-0.049) | | (0.081-0.217) | | (0.086-0.252) | | (0.019-0.304) | | (0.177-0.495) | | (0.100-0.276) | |
| Total simulated consumer surplus (billion EUR) | 0.1335\*\*\* | 0.0869\*\*\* | | 0.8580\*\*\* | | 13.9185\*\*\* | | 0.0200\*\*\* | | 0.2088\*\*\* | | 4.7770\*\*\* | | 1.3137\*\*\* | | 3.4180\*\*\* | | 24.7344\*\*\* | |
| (0.114-0.152) | (0.066-0.106) | | (0.621-1.011) | | (10.477-15.996) | | (0.014-0.025) | | (0.124-0.285) | | (3.404-5.793) | | (0.119-4.385) | | (2.752-4.033) | | (18.479-29.922) | |
| Absolute change of the total consumer surplus (billion EUR) | 0.0093 | 0.0064 | | 0.0648 | | 1.0349 | | 0.0015 | | 0.0178 | | 0.3612 | | 0.2026 | | 0.2425 | | 1.9411 | |
| Relative change of the total consumer surplus (%) | 7.52% | 7.92% | | 8.17% | | 8.03% | | 8.20% | | 9.34% | | 8.18% | | 18.23% | | 7.64% | | 8.52% | |
| TC = 149.74 (3th quartile) | **Welfare measures – current situation** | | | | | | | | | | | | | | | | | | | | | |
| Total consumer surplus (billion EUR) | 0.0128\*\*\* | | 0.0325\*\*\* | | 0.3271\*\*\* | | 5.1170\*\*\* | | 0.0015\*\*\* | | 0.0489\*\*\* | | 1.6219\*\*\* | | 0.8667\*\*\* | | 1.5297\*\*\* | | 9.5581\*\*\* | |
| (0.010-0.016) | | (0.023-0.043) | | (0.235-0.394) | | (3.798-5.782) | | (0.001-0.002) | | (0.028-0.068) | | (1.115-1.995) | | (0.067-2.838) | | (1.207-1.837) | | (6.848-12.232) | |
| **Welfare measures – simulated scenario** | | | | | | | | | | | | | | | | | | | | | |
| Partial effect of ENVBN | 0.0072\*\*\* | 0.0313\*\*\* | | 0.0785\*\*\* | | 0.0787\*\*\* | | 0.0026\*\*\* | | 0.0371\*\*\* | | 0.0607\*\*\* | | 0.0911\*\*\* | | 0.1614\*\*\* | | 0.0752\*\*\* | |
| (0.004-0.011) | (0.016-0.050) | | (0.042-0.118) | | (0.042-0.119) | | (0.001-0.004) | | (0.020-0.057) | | (0.032-0.093) | | (0.014-0.231) | | (0.087-0.241) | | (0.041-0.113) | |
| Total simulated consumer surplus (billion EUR) | 0.0137\*\*\* | 0.0350\*\*\* | | 0.3538\*\*\* | | 5.5278\*\*\* | | 0.0016\*\*\* | | 0.0534\*\*\* | | 1.7544\*\*\* | | 1.0245\*\*\* | | 1.6464\*\*\* | | 10.4106\*\*\* | |
| (0.011-0.017) | (0.025-0.046) | | (0.256-0.427) | | (4.163-6.289) | | (0.001-0.002) | | (0.031-0.074) | | (1.225-2.167) | | (0.084-3.271) | | (1.306-1.976) | | (7.499-13.382) | |
| Absolute change of the total consumer surplus (billion EUR) | 0.0010 | 0.0026 | | 0.0267 | | 0.4108 | | 0.0001 | | 0.0046 | | 0.1324 | | 0.1577 | | 0.1167 | | 0.8525 | |
| Relative change of the total consumer surplus (%) | 7.52% | 7.95% | | 8.17% | | 8.03% | | 8.20% | | 9.36% | | 8.17% | | 18.20% | | 7.63% | | 8.92% | |