Time Varying BC95-JTT-HN-GTC-hY-short

SFACD BC95-JTT-HN-GTC-hY Elasticities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ely1 | ely2 | ely3 | elY |
| Country code |  |  |  |  |
| 1.Aust | 0.127 | -0.994 | 0.271 | -0.597 |
| 2.NZ | 0.127 | -0.994 | 0.271 | -0.597 |
| 3.Ontario | 0.127 | -0.994 | 0.271 | -0.597 |
| Total | 0.127 | -0.994 | 0.271 | -0.597 |

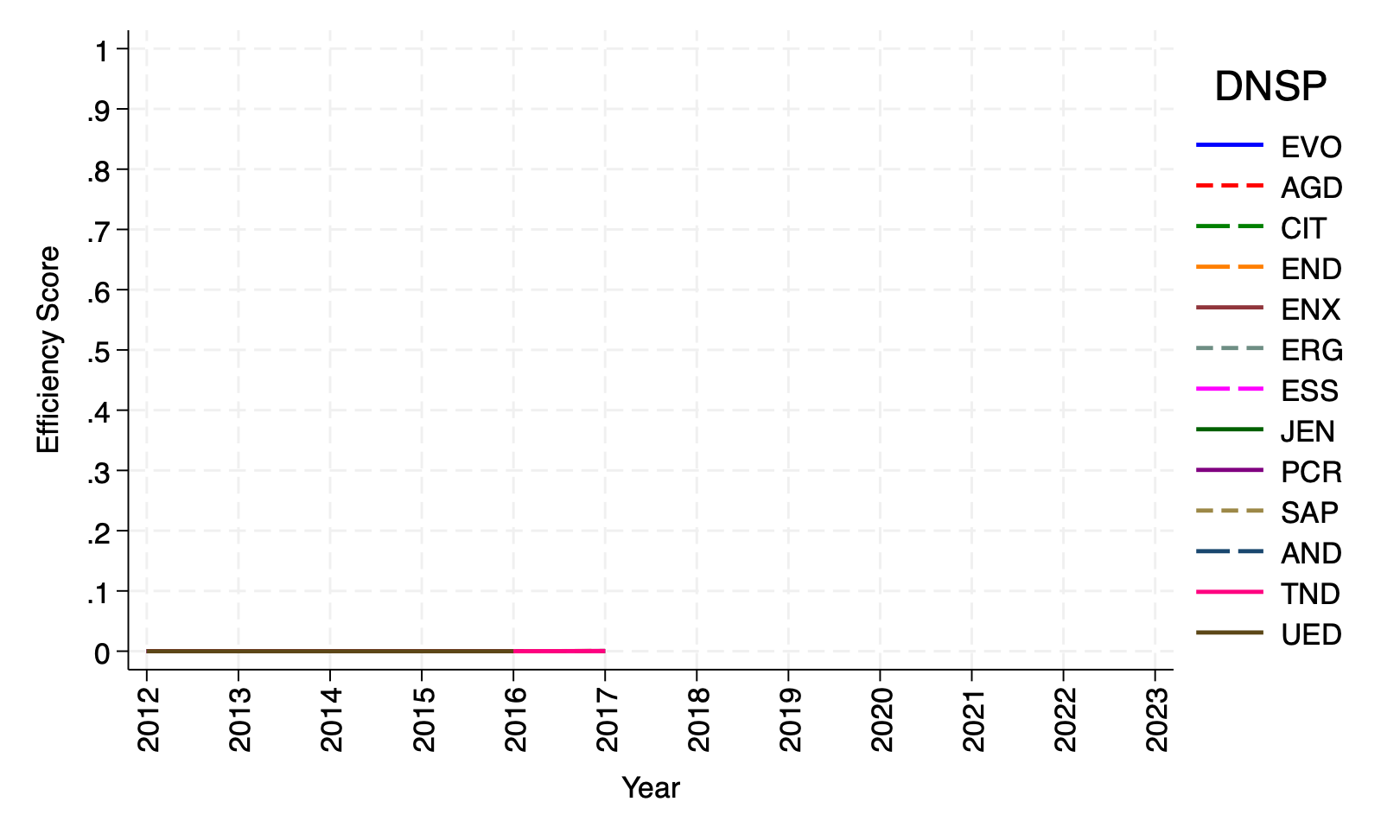
SFACD BC95-JTT-HN-GTC-hY Efficiency Scores

|  |  |  |  |
| --- | --- | --- | --- |
|  | Cost efficiency via E(exp(-u)|e) | 95% lower bound of E(exp(-u)|e) | 95% upper bound of E(exp(-u)|e) |
| dnsp |  |  |  |
| 1 | .0000482 | .0000482 | .0000482 |
| 2 | .0000482 | .0000482 | .0000482 |
| 3 | 3.48e-13 | 3.48e-13 | 3.48e-13 |
| 4 | .0000482 | .0000482 | .0000482 |
| 5 | .0000482 | .0000482 | .0000482 |
| 6 | .0000482 | .0000482 | .0000482 |
| 7 | .0000482 | .0000482 | .0000482 |
| 8 | 3.48e-13 | 3.48e-13 | 3.48e-13 |
| 9 | 3.48e-13 | 3.48e-13 | 3.48e-13 |
| 10 | .0000482 | .0000482 | .0000482 |
| 11 | 3.48e-13 | 3.48e-13 | 3.48e-13 |
| 12 | .0000482 | .0000482 | .0000482 |
| 13 | 3.48e-13 | 3.48e-13 | 3.48e-13 |
| Total | .0000317 | .0000317 | .0000317 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Cost efficiency via E(exp(-u)|e) | 95% lower bound of E(exp(-u)|e) | 95% upper bound of E(exp(-u)|e) |
| Country code |  |  |  |
| 1.Aust | .0000317 | .0000317 | .0000317 |
| 2.NZ | .0005438 | .0005438 | .0005438 |
| 3.Ontario | .0000673 | .0000673 | .0000673 |
| Total | .0002106 | .0002106 | .0002106 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | |
|  | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| dnsp |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 0 | 0 | 0 | 3.79e-37 | 1.05e-20 | .0002895 | . | . | . | . | . | . | .0000482 |
| 2 | 0 | 0 | 0 | 3.79e-37 | 1.05e-20 | .0002895 | . | . | . | . | . | . | .0000482 |
| 3 | 0 | 0 | 0 | 6.30e-29 | 1.74e-12 | . | . | . | . | . | . | . | 3.48e-13 |
| 4 | 0 | 0 | 0 | 3.79e-37 | 1.05e-20 | .0002895 | . | . | . | . | . | . | .0000482 |
| 5 | 0 | 0 | 0 | 3.79e-37 | 1.05e-20 | .0002895 | . | . | . | . | . | . | .0000482 |
| 6 | 0 | 0 | 0 | 3.79e-37 | 1.05e-20 | .0002895 | . | . | . | . | . | . | .0000482 |
| 7 | 0 | 0 | 0 | 3.79e-37 | 1.05e-20 | .0002895 | . | . | . | . | . | . | .0000482 |
| 8 | 0 | 0 | 0 | 6.30e-29 | 1.74e-12 | . | . | . | . | . | . | . | 3.48e-13 |
| 9 | 0 | 0 | 0 | 6.30e-29 | 1.74e-12 | . | . | . | . | . | . | . | 3.48e-13 |
| 10 | 0 | 0 | 0 | 3.79e-37 | 1.05e-20 | .0002895 | . | . | . | . | . | . | .0000482 |
| 11 | 0 | 0 | 0 | 6.30e-29 | 1.74e-12 | . | . | . | . | . | . | . | 3.48e-13 |
| 12 | 0 | 0 | 0 | 3.79e-37 | 1.05e-20 | .0002895 | . | . | . | . | . | . | .0000482 |
| 13 | 0 | 0 | 0 | 6.30e-29 | 1.74e-12 | . | . | . | . | . | . | . | 3.48e-13 |
| Total | 0 | 0 | 0 | 2.42e-29 | 6.70e-13 | .0002895 | . | . | . | . | . | . | .0000317 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | | |
|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| Country code |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.Aust |  | 0 | 0 | 0 | 2.42e-29 | 6.70e-13 | .0002895 | . | . | . | . | . | . | .0000317 |
| 2.NZ |  | . | . | . | . | . | . | .0032625 | 7.31e-08 | 1.64e-12 | 3.68e-17 | 8.24e-22 | 1.85e-26 | .0005438 |
| 3.Ontario | . | . | . | . | . | . | .0004037 | 4.89e-16 | 5.91e-28 | 0 | 0 | 0 |  | .0000673 |
| Total | . | 0 | 0 | 0 | 2.42e-29 | 6.70e-13 | .000379 | .0012914 | 2.90e-08 | 6.49e-13 | 1.46e-17 | 3.26e-22 | 1.85e-26 | .0002106 |



SFATLG BC95-JTT-HN-GTC-hY short Elasticities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ely1 | ely2 | ely3 | elY |
| Country code |  |  |  |  |
| 1.Aust | -4.3e+03 | -4.5e+03 | -4.3e+03 | -1.3e+04 |
| 2.NZ | 905.326 | 1196.145 | 819.978 | 2921.449 |
| 3.Ontario | 1356.273 | 1238.017 | 1371.500 | 3965.790 |
| Total | 0.362 | -0.281 | 0.591 | 0.672 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ely1 | ely2 | ely3 | elY |
| dnsp |  |  |  |  |
| 1 | -1.1e+03 | -1.3e+03 | -1.1e+03 | -3.4e+03 |
| 2 | -6.0e+03 | -6.5e+03 | -5.9e+03 | -1.8e+04 |
| 3 | -1.8e+03 | -2.2e+03 | -1.7e+03 | -5.7e+03 |
| 4 | -5.2e+03 | -5.5e+03 | -5.1e+03 | -1.6e+04 |
| 5 | -6.0e+03 | -6.3e+03 | -5.8e+03 | -1.8e+04 |
| 6 | -6.2e+03 | -5.9e+03 | -5.9e+03 | -1.8e+04 |
| 7 | -6.4e+03 | -6.2e+03 | -6.2e+03 | -1.9e+04 |
| 8 | -1.8e+03 | -2.2e+03 | -1.9e+03 | -5.9e+03 |
| 9 | -5.4e+03 | -5.4e+03 | -5.3e+03 | -1.6e+04 |
| 10 | -5.7e+03 | -5.7e+03 | -5.6e+03 | -1.7e+04 |
| 11 | -4.6e+03 | -4.7e+03 | -4.6e+03 | -1.4e+04 |
| 12 | -3.0e+03 | -2.9e+03 | -2.9e+03 | -8.7e+03 |
| 13 | -3.4e+03 | -3.9e+03 | -3.5e+03 | -1.1e+04 |
| Total | -4.3e+03 | -4.5e+03 | -4.3e+03 | -1.3e+04 |

SFATLG BC95-JTT-HN-GTC-hY short Monotonicity Violations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | mon1 | mon2 | mon3 | montot |
| Country code |  |  |  |  |
| 1.Aust | 1.000 | 1.000 | 1.000 | 1.000 |
| 2.NZ | 0.215 | 0.211 | 0.241 | 0.241 |
| 3.Ontario | 0.241 | 0.241 | 0.241 | 0.241 |
| Total | 0.395 | 0.393 | 0.403 | 0.403 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | mon1 | mon2 | mon3 | montot |
| dnsp |  |  |  |  |
| 1 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2 | 1.000 | 1.000 | 1.000 | 1.000 |
| 3 | 1.000 | 1.000 | 1.000 | 1.000 |
| 4 | 1.000 | 1.000 | 1.000 | 1.000 |
| 5 | 1.000 | 1.000 | 1.000 | 1.000 |
| 6 | 1.000 | 1.000 | 1.000 | 1.000 |
| 7 | 1.000 | 1.000 | 1.000 | 1.000 |
| 8 | 1.000 | 1.000 | 1.000 | 1.000 |
| 9 | 1.000 | 1.000 | 1.000 | 1.000 |
| 10 | 1.000 | 1.000 | 1.000 | 1.000 |
| 11 | 1.000 | 1.000 | 1.000 | 1.000 |
| 12 | 1.000 | 1.000 | 1.000 | 1.000 |
| 13 | 1.000 | 1.000 | 1.000 | 1.000 |
| Total | 1.000 | 1.000 | 1.000 | 1.000 |

SFATLG BC95-JTT-HN-GTC-hY short Efficiency Scores

|  |  |  |  |
| --- | --- | --- | --- |
|  | Cost efficiency via E(exp(-u)|e) | 95% lower bound of E(exp(-u)|e) | 95% upper bound of E(exp(-u)|e) |
| dnsp |  |  |  |
| 1 | .0019648 | .0019648 | .0019648 |
| 2 | .0019648 | .0019648 | .0019648 |
| 3 | 7.80e-08 | 7.80e-08 | 7.80e-08 |
| 4 | .0019648 | .0019648 | .0019648 |
| 5 | .0019648 | .0019648 | .0019648 |
| 6 | .0019648 | .0019648 | .0019648 |
| 7 | .0019648 | .0019648 | .0019648 |
| 8 | 7.80e-08 | 7.80e-08 | 7.80e-08 |
| 9 | 7.80e-08 | 7.80e-08 | 7.80e-08 |
| 10 | .0019648 | .0019648 | .0019648 |
| 11 | 7.80e-08 | 7.80e-08 | 7.80e-08 |
| 12 | .0019648 | .0019648 | .0019648 |
| 13 | 7.80e-08 | 7.80e-08 | 7.80e-08 |
| Total | .001292 | .001292 | .001292 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Cost efficiency via E(exp(-u)|e) | 95% lower bound of E(exp(-u)|e) | 95% upper bound of E(exp(-u)|e) |
| Country code |  |  |  |
| 1.Aust | .001292 | .001292 | .001292 |
| 2.NZ | .008048 | .008048 | .008048 |
| 3.Ontario | .0021669 | .0021669 | .0021669 |
| Total | .0038472 | .0038472 | .0038472 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | |
|  | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| dnsp |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 0 | 1.69e-38 | 1.54e-29 | 1.41e-20 | 1.29e-11 | .0117888 | . | . | . | . | . | . | .0019648 |
| 2 | 0 | 1.69e-38 | 1.54e-29 | 1.41e-20 | 1.29e-11 | .0117888 | . | . | . | . | . | . | .0019648 |
| 3 | 0 | 5.10e-34 | 4.66e-25 | 4.26e-16 | 3.90e-07 | . | . | . | . | . | . | . | 7.80e-08 |
| 4 | 0 | 1.69e-38 | 1.54e-29 | 1.41e-20 | 1.29e-11 | .0117888 | . | . | . | . | . | . | .0019648 |
| 5 | 0 | 1.69e-38 | 1.54e-29 | 1.41e-20 | 1.29e-11 | .0117888 | . | . | . | . | . | . | .0019648 |
| 6 | 0 | 1.69e-38 | 1.54e-29 | 1.41e-20 | 1.29e-11 | .0117888 | . | . | . | . | . | . | .0019648 |
| 7 | 0 | 1.69e-38 | 1.54e-29 | 1.41e-20 | 1.29e-11 | .0117888 | . | . | . | . | . | . | .0019648 |
| 8 | 0 | 5.10e-34 | 4.66e-25 | 4.26e-16 | 3.90e-07 | . | . | . | . | . | . | . | 7.80e-08 |
| 9 | 0 | 5.10e-34 | 4.66e-25 | 4.26e-16 | 3.90e-07 | . | . | . | . | . | . | . | 7.80e-08 |
| 10 | 0 | 1.69e-38 | 1.54e-29 | 1.41e-20 | 1.29e-11 | .0117888 | . | . | . | . | . | . | .0019648 |
| 11 | 0 | 5.10e-34 | 4.66e-25 | 4.26e-16 | 3.90e-07 | . | . | . | . | . | . | . | 7.80e-08 |
| 12 | 0 | 1.69e-38 | 1.54e-29 | 1.41e-20 | 1.29e-11 | .0117888 | . | . | . | . | . | . | .0019648 |
| 13 | 0 | 5.10e-34 | 4.66e-25 | 4.26e-16 | 3.90e-07 | . | . | . | . | . | . | . | 7.80e-08 |
| Total | 0 | 1.96e-34 | 1.79e-25 | 1.64e-16 | 1.50e-07 | .0117888 | . | . | . | . | . | . | .001292 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | | |
|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| Country code |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.Aust |  | 0 | 1.96e-34 | 1.79e-25 | 1.64e-16 | 1.50e-07 | .0117888 | . | . | . | . | . | . | .001292 |
| 2.NZ |  | . | . | . | . | . | . | .0481219 | .0001654 | 5.68e-07 | 1.95e-09 | 6.71e-12 | 2.31e-14 | .008048 |
| 3.Ontario | . | . | . | . | . | . | .0130014 | 3.10e-09 | 7.40e-16 | 1.76e-22 | 4.21e-29 | 1.00e-35 |  | .0021669 |
| Total | . | 0 | 1.96e-34 | 1.79e-25 | 1.64e-16 | 1.50e-07 | .0127393 | .0190482 | .0000655 | 2.25e-07 | 7.73e-10 | 2.66e-12 | 2.31e-14 | .0038472 |

