Time Varying BC95-AJTT-HN-short period

SFACD BC95-AJTT-HN Elasticities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ely1 | ely2 | ely3 | elY |
| Country code |  |  |  |  |
| 1.Aust | 0.375 | 0.139 | 0.480 | 0.994 |
| 2.NZ | 0.375 | 0.139 | 0.480 | 0.994 |
| 3.Ontario | 0.375 | 0.139 | 0.480 | 0.994 |
| Total | 0.375 | 0.139 | 0.480 | 0.994 |

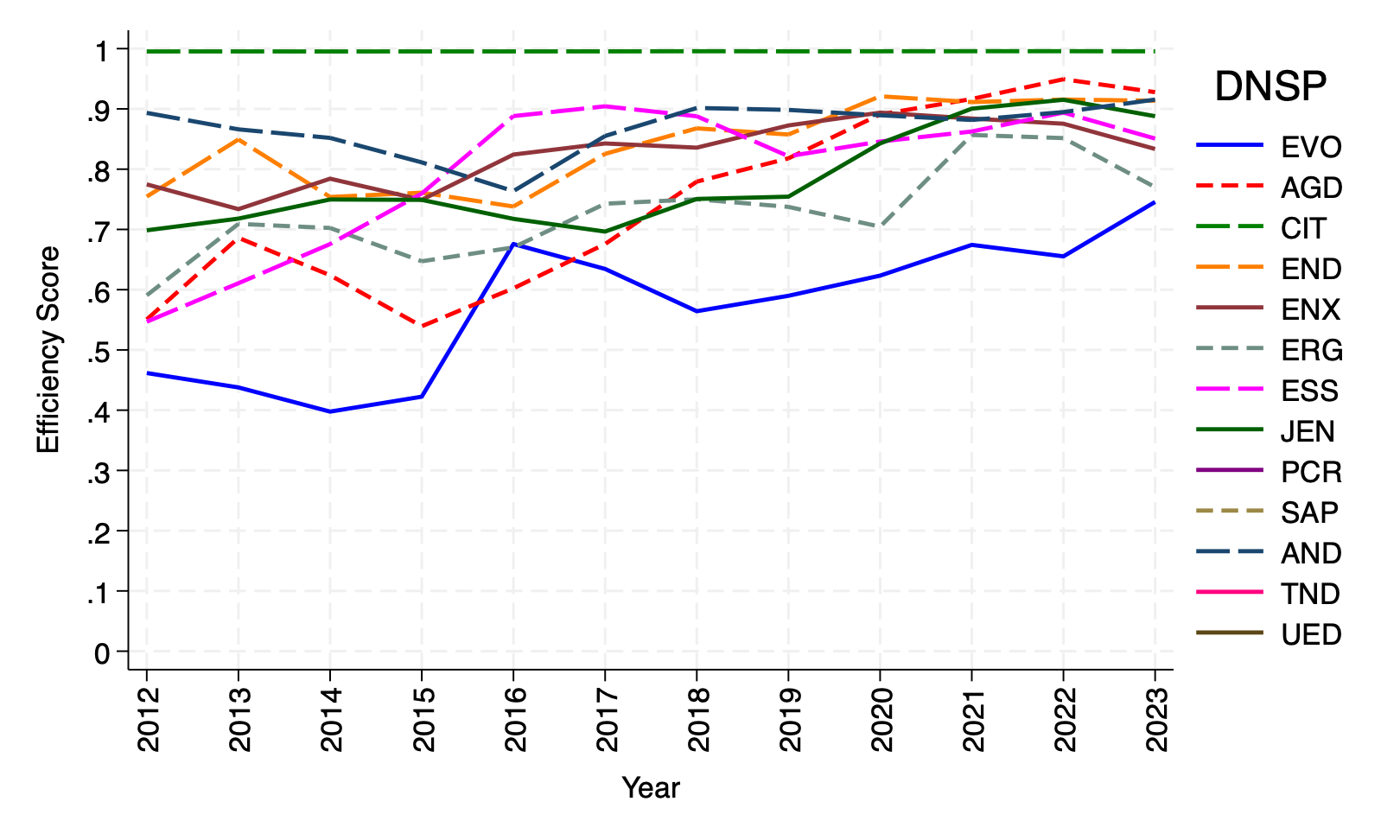
SFACD BC95-AJTT-HN Efficiency Scores

|  |  |  |  |
| --- | --- | --- | --- |
|  | 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 | .5735479 | .4690058 | .6942902 |
| 2 | .7466371 | .6252528 | .8618924 |
| 3 | .9955439 | . | . |
| 4 | .8390868 | .7008503 | .9622168 |
| 5 | .8253464 | .6826619 | .9616125 |
| 6 | .7277373 | .5967038 | .8720666 |
| 7 | .7956549 | .6606197 | .9194601 |
| 8 | .7817126 | .6465836 | .9181972 |
| 9 | . | . | . |
| 10 | . | . | . |
| 11 | .8685486 | .7269563 | .9832502 |
| 12 | . | . | . |
| 13 | . | . | . |
| Total | .7948684 | .6385793 | .8966232 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 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 | .7948684 | .6385793 | .8966232 |
| 2.NZ | .6983398 | .5777189 | .8205167 |
| 3.Ontario | .950101 | .8534945 | .9980964 |
| Total | .8416702 | .7292256 | .92335 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | |
|  | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| dnsp |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | .4617038 | .4378105 | .3976102 | .4224039 | .6757892 | .6344509 | .5642717 | .5898752 | .6233591 | .6743511 | .6553163 | .7456333 | .5735479 |
| 2 | .5505643 | .6860669 | .6239121 | .5392658 | .602344 | .6757128 | .7793417 | .8179849 | .8908437 | .9164938 | .9492856 | .9278297 | .7466371 |
| 3 | .9953454 | .9954066 | .9953212 | .9954029 | .9954188 | .9954943 | .9957113 | .9955601 | .995637 | .9958072 | .9957607 | .9956619 | .9955439 |
| 4 | .7545577 | .8492458 | .7538516 | .7610155 | .7380546 | .8254043 | .8677729 | .8575464 | .9210054 | .9113539 | .91559 | .9136439 | .8390868 |
| 5 | .7747799 | .7337249 | .784243 | .7491809 | .8242733 | .8427085 | .8357621 | .8725833 | .8938643 | .8840223 | .8754666 | .8335475 | .8253464 |
| 6 | .5906585 | .7092523 | .7024258 | .6471562 | .6701382 | .7426848 | .7500557 | .7373992 | .7046126 | .8567533 | .8515671 | .7701442 | .7277373 |
| 7 | .5468404 | .6107043 | .675711 | .7596233 | .8881083 | .9043432 | .8878362 | .8214962 | .8458971 | .8625699 | .8939663 | .8507627 | .7956549 |
| 8 | .6985343 | .7179826 | .7497486 | .7490308 | .7175248 | .6964302 | .7506062 | .7543467 | .8427876 | .9004538 | .915186 | .8879198 | .7817126 |
| 9 | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 10 | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 11 | .893402 | .8660561 | .8518701 | .8112783 | .7636214 | .8550616 | .9015839 | .8982981 | .8894811 | .881687 | .8947492 | .9154941 | .8685486 |
| 12 | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 13 | . | . | . | . | . | . | . | . | . | . | . | . | . |
| Total | .6962651 | .7340278 | .7260771 | .7149286 | .7639192 | .7969212 | .8147713 | .8161211 | .8452764 | .8759436 | .8829875 | .8711819 | .7948684 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | | |
|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| Country code |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.Aust |  | .6962651 | .7340278 | .7260771 | .7149286 | .7639192 | .7969212 | .8147713 | .8161211 | .8452764 | .8759436 | .8829875 | .8711819 | .7948684 |
| 2.NZ |  | .7745654 | .7858887 | .7561779 | .758546 | .7282655 | .7101894 | .6873748 | .6678872 | .6347536 | .6461371 | .6262519 | .6040407 | .6983398 |
| 3.Ontario | .9546976 | .9529814 | .9448326 | .9443198 | .9469327 | .9426836 | .9441108 | .9448618 | .9500095 | .9587719 | .9605227 | .9564871 |  | .950101 |
| Total | .9546976 | .8529753 | .8585663 | .8471465 | .8475049 | .8429849 | .8428965 | .8384922 | .8348284 | .8328455 | .8423729 | .8348035 | .6899075 | .8416702 |



SFATLG BC95-AJTT-HN Elasticities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ely1 | ely2 | ely3 | elY |
| Country code |  |  |  |  |
| 1.Aust | 0.097 | 0.199 | 0.668 | 0.964 |
| 2.NZ | 0.683 | 0.134 | 0.106 | 0.923 |
| 3.Ontario | 0.342 | 0.125 | 0.500 | 0.967 |
| Total | 0.396 | 0.144 | 0.413 | 0.953 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ely1 | ely2 | ely3 | elY |
| dnsp |  |  |  |  |
| 1 | 0.323 | 0.144 | 0.481 | 0.948 |
| 2 | -0.087 | 0.205 | 0.851 | 0.969 |
| 3 | 0.195 | 0.138 | 0.618 | 0.952 |
| 4 | -0.156 | 0.222 | 0.931 | 0.997 |
| 5 | -0.061 | 0.215 | 0.818 | 0.971 |
| 6 | -0.359 | 0.301 | 1.112 | 1.054 |
| 7 | -0.079 | 0.273 | 0.806 | 1.000 |
| 8 | 0.609 | 0.104 | 0.168 | 0.880 |
| 9 | 0.106 | 0.222 | 0.634 | 0.962 |
| 10 | -0.076 | 0.246 | 0.823 | 0.994 |
| 11 | 0.365 | 0.178 | 0.372 | 0.915 |
| 12 | 0.094 | 0.209 | 0.685 | 0.988 |
| 13 | 0.385 | 0.136 | 0.384 | 0.905 |
| Total | 0.097 | 0.199 | 0.668 | 0.964 |

SFATLG BC95-AJTT-HN Monotonicity Violations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | mon1 | mon2 | mon3 | montot |
| Country code |  |  |  |  |
| 1.Aust | 0.455 | 0.000 | 0.000 | 0.455 |
| 2.NZ | 0.000 | 0.000 | 0.298 | 0.298 |
| 3.Ontario | 0.138 | 0.000 | 0.023 | 0.161 |
| Total | 0.163 | 0.000 | 0.104 | 0.266 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | mon1 | mon2 | mon3 | montot |
| dnsp |  |  |  |  |
| 1 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2 | 1.000 | 0.000 | 0.000 | 1.000 |
| 3 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4 | 1.000 | 0.000 | 0.000 | 1.000 |
| 5 | 1.000 | 0.000 | 0.000 | 1.000 |
| 6 | 1.000 | 0.000 | 0.000 | 1.000 |
| 7 | 0.917 | 0.000 | 0.000 | 0.917 |
| 8 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10 | 1.000 | 0.000 | 0.000 | 1.000 |
| 11 | 0.000 | 0.000 | 0.000 | 0.000 |
| 12 | 0.000 | 0.000 | 0.000 | 0.000 |
| 13 | 0.000 | 0.000 | 0.000 | 0.000 |
| Total | 0.455 | 0.000 | 0.000 | 0.455 |

SFATLG BC95-AJTT-HN 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 | .6005997 | .4881921 | .7298997 |
| 2 | .709626 | .5864538 | .8310869 |
| 3 | .9574406 | .8666737 | .9986542 |
| 4 | .8613199 | .7215752 | .976601 |
| 5 | .7836677 | .639957 | .9352931 |
| 6 | .8668584 | .7258858 | .9812771 |
| 7 | .8208899 | .6857492 | .932822 |
| 8 | .8043107 | .6671329 | .9373233 |
| 9 | . | . | . |
| 10 | .9859527 | .9481021 | .999492 |
| 11 | .8303092 | .68361 | .966852 |
| 12 | .9794741 | .9281703 | .9994465 |
| 13 | . | . | . |
| Total | .8364045 | .7184756 | .9353407 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 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 | .8364045 | .7184756 | .9353407 |
| 2.NZ | .7755182 | .644997 | .8970734 |
| 3.Ontario | .9587534 | .8714606 | .9986229 |
| Total | .8769346 | .770155 | .9541221 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | |
|  | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| dnsp |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | .4725338 | .4487458 | .4078985 | .4350044 | .7071848 | .6647733 | .5894867 | .6180816 | .6559187 | .7123826 | .693305 | .8018817 | .6005997 |
| 2 | .5136449 | .6441414 | .5837702 | .501503 | .5610492 | .6306589 | .7302928 | .769075 | .8534657 | .8880039 | .9348797 | .9050279 | .709626 |
| 3 | .942238 | .948137 | .9398169 | .9481344 | .9492604 | .9557275 | .9686822 | .960833 | .9654348 | .9728633 | .9711779 | .9669822 | .9574406 |
| 4 | .7920591 | .8778722 | .782768 | .7873921 | .7624921 | .8590353 | .8919652 | .8806376 | .9313971 | .9223009 | .925211 | .9227082 | .8613199 |
| 5 | .7359695 | .6942845 | .7430619 | .7063401 | .7805702 | .7981813 | .7884657 | .8297722 | .8571551 | .8440101 | .8385364 | .7876649 | .7836677 |
| 6 | .748363 | .8713276 | .8613788 | .8042409 | .824675 | .8878385 | .8903819 | .8807317 | .8533204 | .9419444 | .9392315 | .8988666 | .8668584 |
| 7 | .5500677 | .6172787 | .7122174 | .7985324 | .9115082 | .9231461 | .909313 | .8567755 | .8776298 | .8913311 | .9174892 | .8853899 | .8208899 |
| 8 | .6997568 | .7245821 | .7623654 | .7667534 | .7397043 | .7235599 | .7861906 | .7945321 | .8769489 | .923081 | .9354944 | .9187595 | .8043107 |
| 9 | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 10 | .986292 | .9854534 | .9855874 | .9849444 | .9877684 | .9856242 | .9860032 | .9856099 | .9874415 | .9871979 | .9862238 | .9832865 | .9859527 |
| 11 | .8480068 | .8151498 | .8012291 | .7593332 | .714137 | .8134893 | .873051 | .8689865 | .8575615 | .8492637 | .8676502 | .8958526 | .8303092 |
| 12 | .9708415 | .9820256 | .9816843 | .9860792 | .9844912 | .9758099 | .9774827 | .9807379 | .9788703 | .9772277 | .9777917 | .9806468 | .9794741 |
| 13 | . | . | . | . | . | . | . | . | . | . | . | . | . |
| Total | .7508885 | .7826362 | .7783434 | .7707507 | .8111673 | .8379858 | .8537559 | .8568885 | .8813767 | .9008733 | .9079083 | .9042788 | .8364045 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | | |
|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| Country code |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.Aust |  | .7508885 | .7826362 | .7783434 | .7707507 | .8111673 | .8379858 | .8537559 | .8568885 | .8813767 | .9008733 | .9079083 | .9042788 | .8364045 |
| 2.NZ |  | .8362117 | .8533562 | .8264224 | .8305229 | .8041961 | .7890952 | .7696622 | .7533709 | .7191165 | .7316761 | .7080032 | .684585 | .7755182 |
| 3.Ontario | .959144 | .9599425 | .9542751 | .9537947 | .9558013 | .9529884 | .9547589 | .9557688 | .9597731 | .9661711 | .9675196 | .9651027 |  | .9587534 |
| Total | .959144 | .8811208 | .8897753 | .8800652 | .8809565 | .8786311 | .8796383 | .8768168 | .8741227 | .870802 | .8791444 | .8716446 | .7651394 | .8769346 |

