Time Varying BC95-JTT-HN-GTC-short

SFACD BC95-JTT-HN-GTC Elasticities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ely1 | ely2 | ely3 | elY |
| Country code |  |  |  |  |
| 1.Aust | 0.454 | 0.240 | 0.262 | 0.957 |
| 2.NZ | 0.454 | 0.240 | 0.262 | 0.957 |
| 3.Ontario | 0.454 | 0.240 | 0.262 | 0.957 |
| Total | 0.454 | 0.240 | 0.262 | 0.957 |

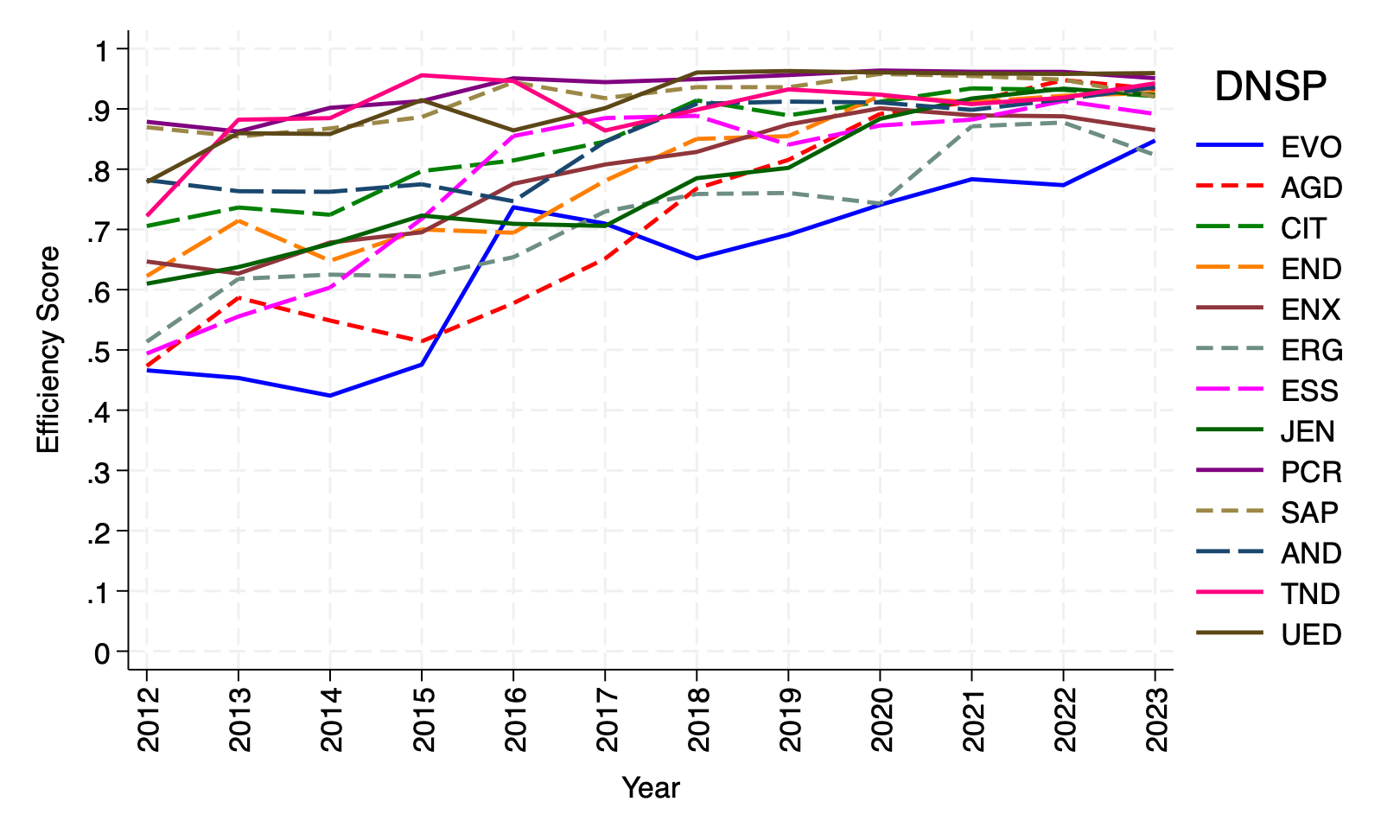
SFACD BC95-JTT-HN-GTC Efficiency Scores

|  |  |  |  |
| --- | --- | --- | --- |
|  | 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 | .6462046 | .5295428 | .7771057 |
| 2 | .7183265 | .6023363 | .8276852 |
| 3 | .8438087 | .7102345 | .9579619 |
| 4 | .7955549 | .6653935 | .9151027 |
| 5 | .7897396 | .6543981 | .9191247 |
| 6 | .7163945 | .5889677 | .8528242 |
| 7 | .7832782 | .6523948 | .8990605 |
| 8 | .7754958 | .6469133 | .8995577 |
| 9 | .9329056 | .8229092 | .9964422 |
| 10 | .9161787 | .7935858 | .9947218 |
| 11 | .8464156 | .7106847 | .9641326 |
| 12 | .8982672 | .7712175 | .984992 |
| 13 | .911436 | .7967432 | .9899632 |
| Total | .8133851 | .6881017 | .9214365 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 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 | .8133851 | .6881017 | .9214365 |
| 2.NZ | .8082773 | .6812397 | .9201365 |
| 3.Ontario | .8448784 | .7076223 | .9637279 |
| Total | .8267664 | .6952446 | .9411373 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | |
|  | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| dnsp |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | .466211 | .4535095 | .4241398 | .475644 | .7367562 | .7096902 | .6519458 | .6913264 | .7408535 | .7833267 | .7735069 | .8475446 | .6462046 |
| 2 | .4732074 | .5865959 | .548776 | .5141855 | .5776197 | .6514888 | .7679421 | .8154399 | .8917745 | .9118021 | .9478419 | .9332446 | .7183265 |
| 3 | .7056806 | .7364079 | .7243489 | .7967306 | .8145046 | .8457668 | .9141446 | .8892899 | .9118837 | .9341178 | .9316238 | .9212053 | .8438087 |
| 4 | .6225593 | .7144102 | .6479602 | .6999622 | .6944958 | .7808264 | .8502173 | .854799 | .9217861 | .9110937 | .9219147 | .9266342 | .7955549 |
| 5 | .6467844 | .626844 | .6782798 | .6952706 | .7757592 | .8077873 | .8286355 | .8741027 | .9011765 | .8895112 | .8877756 | .864949 | .7897396 |
| 6 | .5135525 | .617986 | .6250447 | .6220388 | .6539214 | .7298102 | .758788 | .7605218 | .7430008 | .8711264 | .8773805 | .8235635 | .7163945 |
| 7 | .4939248 | .5555257 | .6035371 | .7176163 | .8550101 | .8848624 | .8885548 | .8406416 | .8724867 | .8822157 | .9132742 | .8916887 | .7832782 |
| 8 | .609918 | .6374923 | .675782 | .7229516 | .7093217 | .7057944 | .7850264 | .8021675 | .8836036 | .9173313 | .9336444 | .9229165 | .7754958 |
| 9 | .8785904 | .8624887 | .9018437 | .9130712 | .9508346 | .944396 | .9494276 | .95626 | .9637952 | .9616357 | .961544 | .9509804 | .9329056 |
| 10 | .8695791 | .8541924 | .8676096 | .8865396 | .9442642 | .9178452 | .9361264 | .9360139 | .9580688 | .9546972 | .9485487 | .9206597 | .9161787 |
| 11 | .7819666 | .7634474 | .7624614 | .7749536 | .7467711 | .8455036 | .9085436 | .9121909 | .9106864 | .8984272 | .9160618 | .9359739 | .8464156 |
| 12 | .7221632 | .8820818 | .8847073 | .9558771 | .9462987 | .8641335 | .898687 | .9324225 | .9236778 | .9079697 | .9185712 | .9426171 | .8982672 |
| 13 | .7786015 | .8597245 | .8583947 | .9146004 | .8643365 | .9012704 | .9604439 | .9628936 | .9604768 | .9589111 | .9580142 | .9595639 | .911436 |
| Total | .6586722 | .7039005 | .7079143 | .7453416 | .7899918 | .814552 | .8537295 | .8636977 | .8910208 | .9063204 | .9145924 | .9108878 | .8133851 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | | |
|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| Country code |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.Aust |  | .6586722 | .7039005 | .7079143 | .7453416 | .7899918 | .814552 | .8537295 | .8636977 | .8910208 | .9063204 | .9145924 | .9108878 | .8133851 |
| 2.NZ |  | .8761852 | .8822831 | .8563052 | .8770555 | .8511113 | .8316758 | .8168873 | .7952867 | .756101 | .7460649 | .7195807 | .6907913 | .8082773 |
| 3.Ontario | .8321508 | .8134984 | .796533 | .8263338 | .8340191 | .8270458 | .8443563 | .849815 | .8654229 | .8804104 | .8892424 | .8797129 |  | .8448784 |
| Total | .8321508 | .8000281 | .8035007 | .8104322 | .8285254 | .8266449 | .8340549 | .8403931 | .8432095 | .8439523 | .8482857 | .837269 | .7802055 | .8267664 |



SFATLG BC95-JTT-HN-GTC short Elasticities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ely1 | ely2 | ely3 | elY |
| Country code |  |  |  |  |
| 1.Aust | 0.152 | 0.257 | 0.561 | 0.971 |
| 2.NZ | 0.571 | 0.266 | 0.055 | 0.892 |
| 3.Ontario | 0.352 | 0.168 | 0.431 | 0.951 |
| Total | 0.378 | 0.218 | 0.342 | 0.937 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ely1 | ely2 | ely3 | elY |
| dnsp |  |  |  |  |
| 1 | 0.321 | 0.196 | 0.430 | 0.947 |
| 2 | 0.019 | 0.218 | 0.760 | 0.997 |
| 3 | 0.231 | 0.149 | 0.588 | 0.968 |
| 4 | -0.017 | 0.247 | 0.778 | 1.008 |
| 5 | 0.037 | 0.248 | 0.707 | 0.992 |
| 6 | -0.148 | 0.381 | 0.796 | 1.029 |
| 7 | 0.030 | 0.379 | 0.578 | 0.986 |
| 8 | 0.496 | 0.163 | 0.244 | 0.903 |
| 9 | 0.153 | 0.307 | 0.504 | 0.964 |
| 10 | 0.034 | 0.320 | 0.636 | 0.990 |
| 11 | 0.322 | 0.268 | 0.338 | 0.928 |
| 12 | 0.163 | 0.286 | 0.524 | 0.973 |
| 13 | 0.340 | 0.178 | 0.414 | 0.933 |
| Total | 0.152 | 0.257 | 0.561 | 0.971 |

SFATLG BC95-JTT-HN-GTC short Monotonicity Violations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | mon1 | mon2 | mon3 | montot |
| Country code |  |  |  |  |
| 1.Aust | 0.179 | 0.000 | 0.000 | 0.179 |
| 2.NZ | 0.000 | 0.000 | 0.364 | 0.364 |
| 3.Ontario | 0.103 | 0.000 | 0.000 | 0.103 |
| Total | 0.087 | 0.000 | 0.113 | 0.201 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | mon1 | mon2 | mon3 | montot |
| dnsp |  |  |  |  |
| 1 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2 | 0.250 | 0.000 | 0.000 | 0.250 |
| 3 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4 | 0.750 | 0.000 | 0.000 | 0.750 |
| 5 | 0.167 | 0.000 | 0.000 | 0.167 |
| 6 | 1.000 | 0.000 | 0.000 | 1.000 |
| 7 | 0.167 | 0.000 | 0.000 | 0.167 |
| 8 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10 | 0.000 | 0.000 | 0.000 | 0.000 |
| 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 | 0.179 | 0.000 | 0.000 | 0.179 |

SFATLG BC95-JTT-HN-GTC 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 | .7044121 | .5832877 | .8309905 |
| 2 | .7654853 | .6504926 | .8695866 |
| 3 | .8950828 | .7752743 | .9838882 |
| 4 | .8481101 | .72311 | .953786 |
| 5 | .8225253 | .6899543 | .9405032 |
| 6 | .8221041 | .6914434 | .9399355 |
| 7 | .8242079 | .7004611 | .9215979 |
| 8 | .804786 | .6790513 | .9216808 |
| 9 | .9280448 | .8171796 | .9954076 |
| 10 | .9276127 | .8135186 | .9960598 |
| 11 | .8354446 | .702613 | .9529343 |
| 12 | .9074513 | .7865098 | .9867025 |
| 13 | .9106168 | .7982805 | .9886243 |
| Total | .8458372 | .7239366 | .9447459 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 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 | .8458372 | .7239366 | .9447459 |
| 2.NZ | .8400512 | .714947 | .9452296 |
| 3.Ontario | .8727674 | .7380571 | .9803854 |
| Total | .8568379 | .7278496 | .96184 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | |
|  | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| dnsp |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | .5071943 | .4980452 | .4731097 | .5297836 | .7827139 | .7621301 | .7185817 | .7601542 | .8098338 | .8486156 | .847527 | .9152563 | .7044121 |
| 2 | .5285985 | .6421635 | .6086695 | .5782527 | .6436289 | .7189116 | .8284349 | .8692775 | .9229044 | .9352449 | .9587303 | .9510069 | .7654853 |
| 3 | .7757028 | .8079681 | .8007317 | .8663586 | .8813176 | .906554 | .94628 | .9362282 | .9486419 | .9581733 | .9581484 | .9548889 | .8950828 |
| 4 | .6904896 | .7801334 | .7174122 | .7703856 | .7683952 | .8576018 | .9044837 | .9078684 | .9458001 | .9392632 | .9461008 | .9493866 | .8481101 |
| 5 | .6829046 | .6674489 | .7185177 | .7380153 | .812992 | .8421705 | .8603051 | .8975616 | .920078 | .9114375 | .9164147 | .9024578 | .8225253 |
| 6 | .6207252 | .7301852 | .7388294 | .7409525 | .7749062 | .8486289 | .8718219 | .8762736 | .8675297 | .9366559 | .9401326 | .9186074 | .8221041 |
| 7 | .5340068 | .5963395 | .6642799 | .7767544 | .8921431 | .9143711 | .9176696 | .8908839 | .9137189 | .9195369 | .9401638 | .9306264 | .8242079 |
| 8 | .6325961 | .6630999 | .7038997 | .7537959 | .7476743 | .7507069 | .8262811 | .8465676 | .9111822 | .9334245 | .9465821 | .9416223 | .804786 |
| 9 | .8611798 | .8491874 | .8930886 | .9073308 | .9461976 | .9407387 | .9469431 | .9546397 | .9632604 | .9606509 | .9610282 | .9522919 | .9280448 |
| 10 | .8792964 | .8706966 | .8855391 | .9046228 | .9502409 | .9309749 | .9447393 | .9456084 | .9627158 | .9603034 | .9568026 | .9398127 | .9276127 |
| 11 | .7490947 | .7377903 | .7431433 | .7592643 | .7407256 | .8336983 | .8986601 | .9061138 | .9087188 | .8962995 | .9156659 | .9361606 | .8354446 |
| 12 | .7344642 | .8815983 | .8882989 | .9549608 | .9474611 | .8828456 | .9129685 | .9406835 | .9357969 | .9245266 | .9338213 | .9519894 | .9074513 |
| 13 | .7707509 | .8494189 | .853883 | .9110123 | .8696036 | .9054632 | .9597546 | .9628922 | .9616717 | .9600575 | .9603235 | .9625698 | .9106168 |
| Total | .6897695 | .7364673 | .7453387 | .7839607 | .8275385 | .8534458 | .8874557 | .8995964 | .9209117 | .9295531 | .9370339 | .9389752 | .8458372 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | | |
|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| Country code |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.Aust |  | .6897695 | .7364673 | .7453387 | .7839607 | .8275385 | .8534458 | .8874557 | .8995964 | .9209117 | .9295531 | .9370339 | .9389752 | .8458372 |
| 2.NZ |  | .9133007 | .9183659 | .8959801 | .9100983 | .8880419 | .8674732 | .8518921 | .8277646 | .7890821 | .7701441 | .7398243 | .7086465 | .8400512 |
| 3.Ontario | .855348 | .8448981 | .8312169 | .8577004 | .8656657 | .8604056 | .8751402 | .8793006 | .8919629 | .9018448 | .9080598 | .9016666 |  | .8727674 |
| Total | .855348 | .8331436 | .8381691 | .8456777 | .8620928 | .8620091 | .8681287 | .8725015 | .8735935 | .8707854 | .869683 | .858794 | .8022175 | .8568379 |

