Time Varying BC95-JTT-HN-hY-long period

SFACD BC95-JTT-HN-hY Elasticities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ely1 | ely2 | ely3 | elY |
| Country code |  |  |  |  |
| 1.Aust | 0.345 | -0.502 | 0.360 | 0.203 |
| 2.NZ | 0.345 | -0.502 | 0.360 | 0.203 |
| 3.Ontario | 0.345 | -0.502 | 0.360 | 0.203 |
| Total | 0.345 | -0.502 | 0.360 | 0.203 |

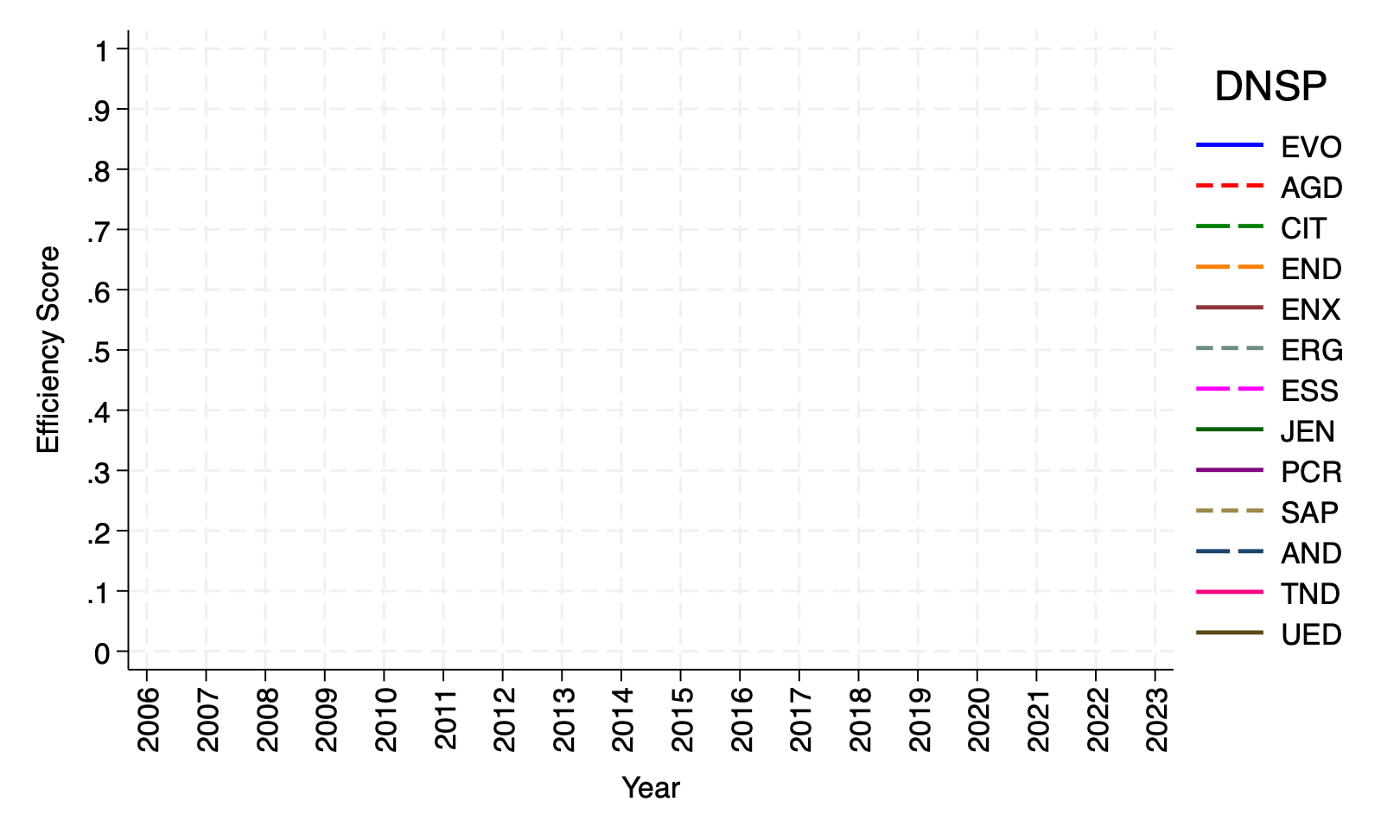
SFACD BC95-JTT-HN-hY Efficiency Scores

|  |  |  |  |
| --- | --- | --- | --- |
|  | 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 | . | . | . |
| 2 | . | . | . |
| 3 | . | . | . |
| 4 | . | . | . |
| 5 | . | . | . |
| 6 | . | . | . |
| 7 | . | . | . |
| 8 | . | . | . |
| 9 | . | . | . |
| 10 | . | . | . |
| 11 | . | . | . |
| 12 | . | . | . |
| 13 | . | . | . |
| Total | . | . | . |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 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 | . | . | . |
| 2.NZ | . | . | . |
| 3.Ontario | . | . | . |
| Total | . | . | . |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | | | | | | | |
|  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| dnsp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 2 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 3 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 4 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 5 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 6 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 7 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 8 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 9 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 10 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 11 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 12 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 13 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| Total | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | | | | | | | | |
|  | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| Country code |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.Aust |  | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 2.NZ |  | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |
| 3.Ontario | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |  | . |
| Total | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . |



SFATLG BC95-JTT-HN-hY Elasticities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ely1 | ely2 | ely3 | elY |
| Country code |  |  |  |  |
| 1.Aust | 0.098 | 0.240 | 0.643 | 0.981 |
| 2.NZ | 0.676 | 0.161 | 0.075 | 0.913 |
| 3.Ontario | 0.336 | 0.149 | 0.470 | 0.955 |
| Total | 0.391 | 0.172 | 0.384 | 0.947 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ely1 | ely2 | ely3 | elY |
| dnsp |  |  |  |  |
| 1 | 0.269 | 0.191 | 0.486 | 0.945 |
| 2 | -0.157 | 0.268 | 0.883 | 0.994 |
| 3 | 0.060 | 0.204 | 0.692 | 0.956 |
| 4 | -0.084 | 0.250 | 0.849 | 1.015 |
| 5 | -0.080 | 0.266 | 0.810 | 0.996 |
| 6 | 0.046 | 0.251 | 0.775 | 1.073 |
| 7 | 0.168 | 0.265 | 0.586 | 1.020 |
| 8 | 0.270 | 0.215 | 0.410 | 0.895 |
| 9 | 0.149 | 0.255 | 0.583 | 0.987 |
| 10 | 0.073 | 0.257 | 0.686 | 1.015 |
| 11 | 0.227 | 0.252 | 0.463 | 0.941 |
| 12 | 0.222 | 0.213 | 0.563 | 0.998 |
| 13 | 0.117 | 0.239 | 0.566 | 0.922 |
| Total | 0.098 | 0.240 | 0.643 | 0.981 |

SFATLG BC95-JTT-HN-hY Monotonicity Violations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | mon1 | mon2 | mon3 | montot |
| Country code |  |  |  |  |
| 1.Aust | 0.231 | 0.000 | 0.000 | 0.231 |
| 2.NZ | 0.000 | 0.000 | 0.374 | 0.374 |
| 3.Ontario | 0.103 | 0.000 | 0.000 | 0.103 |
| Total | 0.098 | 0.000 | 0.117 | 0.215 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 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 | 0.000 | 0.000 | 0.000 | 0.000 |
| 7 | 0.000 | 0.000 | 0.000 | 0.000 |
| 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 | 0.231 | 0.000 | 0.000 | 0.231 |

SFATLG BC95-JTT-HN-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 | .674954 | .4823786 | .8823677 |
| 2 | .7339343 | .5382225 | .9286637 |
| 3 | .8937407 | .7110913 | .9956905 |
| 4 | .851397 | .6485287 | .9908653 |
| 5 | .8403911 | .6292392 | .9903455 |
| 6 | .829903 | .6210638 | .9872231 |
| 7 | .8249996 | .6258851 | .9788305 |
| 8 | .8224934 | .6159649 | .9846267 |
| 9 | .9289136 | .7799535 | .9977464 |
| 10 | .924809 | .7714357 | .9975421 |
| 11 | .8678798 | .6688513 | .9933871 |
| 12 | .9084018 | .7382695 | .9966291 |
| 13 | .9007666 | .7241085 | .9961478 |
| Total | .8463526 | .6580764 | .9784666 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 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 | .8463526 | .6580764 | .9784666 |
| 2.NZ | .9445704 | .8263423 | .9980938 |
| 3.Ontario | .9938306 | . | . |
| Total | .9470575 | .7579842 | .9901203 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | | | | | | | |
|  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| dnsp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | .6799846 | .6844178 | .6566179 | .6641669 | .5917193 | .5452638 | .5441563 | .519877 | .4756314 | .511749 | .7994667 | .7686405 | .7017367 | .7343119 | .77289 | .8186784 | .8089709 | .8708933 | .674954 |
| 2 | .6772146 | .7734765 | .5936058 | .6638511 | .594855 | .6403003 | .5904497 | .7331857 | .6773918 | .5888903 | .6609997 | .736834 | .8179891 | .8429847 | .8841416 | .9003633 | .9238264 | .9104584 | .7339343 |
| 3 | .9104477 | .9110304 | .9208344 | .8962265 | .8874011 | .8985927 | .8491355 | .8619842 | .8503016 | .8667553 | .8700972 | .8841144 | .9127828 | .8975237 | .9083095 | .9250993 | .9222157 | .9144805 | .8937407 |
| 4 | .8533809 | .8337039 | .7455578 | .8235809 | .8382027 | .8418771 | .808797 | .8648743 | .8119763 | .8191004 | .8074241 | .864983 | .8854586 | .8820331 | .9124615 | .9084443 | .9116427 | .9116478 | .851397 |
| 5 | .8570878 | .834005 | .8253124 | .8340467 | .859303 | .8273469 | .7983814 | .7718118 | .8105349 | .7890972 | .8394578 | .851485 | .8492693 | .8712186 | .8851297 | .8814029 | .8810595 | .8610893 | .8403911 |
| 6 | .7552273 | .806925 | .7966696 | .8110291 | .8316515 | .7553273 | .7345509 | .8342485 | .8329843 | .799014 | .8190429 | .8636531 | .8683804 | .8654898 | .8524144 | .9118474 | .9117126 | .8880863 | .829903 |
| 7 | .8691927 | .8048831 | .738104 | .7913765 | .7506469 | .7447184 | .6275449 | .7043197 | .7778041 | .8387981 | .9004887 | .9093227 | .9039212 | .880631 | .8923995 | .9006174 | .9139802 | .9012439 | .8249996 |
| 8 | .8298588 | .8252783 | .9018825 | .8913833 | .848115 | .8163855 | .722586 | .7450393 | .7759151 | .7808835 | .7613593 | .749917 | .7988443 | .8062425 | .8616892 | .893378 | .9039264 | .8921965 | .8224934 |
| 9 | .9175355 | .9363952 | .939755 | .9335104 | .9350745 | .9371336 | .9170315 | .908953 | .9219711 | .9155874 | .9348859 | .9282554 | .9275515 | .9315266 | .9381247 | .9377726 | .9358567 | .9235249 | .9289136 |
| 10 | .9408515 | .9474539 | .9432066 | .9410754 | .9419598 | .9176026 | .9140176 | .9068764 | .9096643 | .9046665 | .93218 | .9145409 | .9194753 | .9173604 | .933643 | .9326128 | .9259481 | .9034271 | .924809 |
| 11 | .9215183 | .8984157 | .8884914 | .8674226 | .8782123 | .8755031 | .8576184 | .8418266 | .8371248 | .8141102 | .7869446 | .8498638 | .8817104 | .8819384 | .8791264 | .8760663 | .8859002 | .900043 | .8678798 |
| 12 | .9127923 | .9224539 | .9235778 | .9084087 | .8702915 | .8831906 | .8544756 | .9183099 | .9176284 | .9423512 | .93492 | .8916694 | .9015665 | .919089 | .9115593 | .905587 | .9096618 | .9237003 | .9084018 |
| 13 | .8682308 | .894039 | .9034009 | .9116442 | .9057962 | .855737 | .8579132 | .8928586 | .8900172 | .9037124 | .8710621 | .888687 | .9305298 | .9316782 | .9273129 | .9285608 | .9261357 | .9264827 | .9007666 |
| Total | .8456402 | .8517291 | .8290012 | .8413633 | .825633 | .8106907 | .7751275 | .8080127 | .806842 | .8057473 | .8398715 | .8539974 | .8691705 | .8740021 | .8891693 | .9015716 | .9046798 | .902098 | .8463526 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reporting year | | | | | | | | | | | | | | | | | | | |
|  | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Total |
| Country code |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.Aust |  | .8456402 | .8517291 | .8290012 | .8413633 | .825633 | .8106907 | .7751275 | .8080127 | .806842 | .8057473 | .8398715 | .8539974 | .8691705 | .8740021 | .8891693 | .9015716 | .9046798 | .902098 | .8463526 |
| 2.NZ |  | .9518192 | .9495642 | .9476802 | .9483082 | .9446327 | .9436939 | .9482894 | .9528991 | .9496535 | .9511227 | .9480683 | .9450734 | .9436754 | .940638 | .9328699 | .9382058 | .9354667 | .9306074 | .9445704 |
| 3.Ontario | .9937942 | .9937867 | .9937755 | .99381 | .9938334 | .9938628 | .9938208 | .9937894 | .9937571 | .993764 | .9937896 | .9937801 | .9938041 | .9938251 | .9938683 | .9939515 | .9939797 | .9939586 |  | .9938306 |
| Total | .9937942 | .9491427 | .9497326 | .9443185 | .9471598 | .9426766 | .9391798 | .9330172 | .941446 | .9401888 | .9404253 | .9467418 | .9488308 | .951639 | .9517431 | .9525955 | .956914 | .9567132 | .9190255 | .9470575 |

