

# Supplementary Information for the paper entitled: A comparison between TOPSIS and SAW methods.

Francesco Ciardiello<sup>1\*</sup> and Andrea Genovese<sup>2</sup>

<sup>1\*</sup>Department of Economics and Statistics, University of Salerno,  
Via Papa Paolo Giovanni II, Salerno, 84084, Campania, Italy.

<sup>2</sup>Management School, The University of Sheffield, Conduit Road,  
Sheffield, S101FL, South Yorkshire, United Kingdom.

\*Corresponding author(s). E-mail(s): [fcardiello@unisa.it](mailto:fcardiello@unisa.it);  
Contributing authors: [a.genovese@shef.ac.uk](mailto:a.genovese@shef.ac.uk);

Numerical results of similarities indices obtained after simulated experiments. The results are presented in three appendices and each of them is devoted to a specific distance utilised in TOPSIS methods. The number of tables is 27. For each appendix, similarities indices are the ones presented in the official publication. The total number of studied similarity indices is 9.

## Appendix A

The next 6 tables are calculated with TOPSIS being endowed with the Euclidean distance.

	3	6	9
25	.9752	.9482	.9401
50	.9791	.9600	.9495
75	.9810	.9626	.9599
100	.9829	.9665	.9645

**Table 1:** SPE index

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	3	6	9
25	.9467	.8733	.8867
50	.9445	.8678	.8433
75	.8933	.8155	.7989
100	.9075	.8214	.7422

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**Table 2:** KE index

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	3	6	9
25	.9793	.9701	.9697
50	.9911	.9849	.9825
75	.9944	.9895	.9896
100	.9955	.9896	.9902

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**Table 3:** RS1 index

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	3	6	9
25	.9780	.9694	.9682
50	.9909	.9829	.9797
75	.9938	.9885	.9879
100	.9940	.9868	.9873

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**Table 4:** RS2 index

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	3	6	9
25	.4800	.3600	.3600
50	.4000	.1600	.1800
75	.1733	.1467	.1733
100	.1200	.1200	.0800

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**Table 5:** RA index

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	3	6	9
25	.9791	.9545	.9497
50	.9807	.9633	.9545
75	.9821	.9654	.9619

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	3	6	9
100	.9833	.9679	.9659

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**Table 6:** WSPE index

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	3	6	9
25	.78	.76	.82
50	.92	.78	.74
75	.88	.80	.80
100	.86	.64	.70

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**Table 7:** HR index

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	3	6	9
25	.8750	.8333	.8750
50	.9796	.9184	.8367
75	.9730	.9459	.9054
100	.9394	.9293	.7172

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**Table 8:** GHR index

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	3	6	9
25	.8750	.9167	.9167
50	.9796	.9592	.9388
75	.9730	.9595	.9730
100	.9798	.9495	.9697

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**Table 9:** WGHR index

## Appendix B

The next 6 tables are calculated with TOPSIS being endowed with the Manhattan distance.

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	3	6	9
25	.9932	.9915	.9909
50	.9965	.9968	.9966

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	3	6	9
75	.9985	.9980	.9975
100	.9992	.9986	.9983

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**Table 10:** SPE index

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	3	6	9
25	.9800	.9733	.9667
50	.9886	.9510	.9673
75	.9683	.9719	.9618
100	.9842	.9693	.9798

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**Table 11:** KE index

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	3	6	9
25	.9933	.9899	.9892
50	.9961	.9968	.9971
75	.9996	.9980	.9979
100	.9995	.9987	.9987

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**Table 12:** RS1 index

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	3	6	9
25	.9939	.9896	.9894
50	.9961	.9969	.9970
75	.9996	.9979	.9980
100	.9996	.9986	.9986

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**Table 13:** RS2 index

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	3	6	9
25	.7600	.8800	.7600
50	.7400	.3600	.4800
75	.4000	.4533	.3067
100	.4800	.3300	.4933

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**Table 14:** RA index

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	3	6	9
25	.9938	.9925	.9920
50	.9968	.9969	.9970
75	.9986	.9981	.9976
100	.9992	.9986	.9984

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**Table 15:** WSPE index

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	3	6	9
25	.96	.90	.88
50	.90	.96	.96
75	1	.94	.98
100	1	.94	.96

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**Table 16:** HR index

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	3	6	9
25	.9167	.9583	.9167
50	.9592	.9592	.9796
75	1	.9730	.9865
100	1	.9798	.9865

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**Table 17:** GHR index

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	3	6	9
25	.9583	.9583	.9583
50	.9796	.9592	.9796
75	1	.9865	.9865
100	1	.9899	.9865

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**Table 18:** WGHR index

## Appendix C

The next 5 tables are calculated with TOPSIS being endowed with Tchebychev distance.

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	3	6	9
25	.9307	.7292	.5167
50	.9358	.8407	.7568
75	.9298	.8453	.7660
100	.9246	.8351	.7899

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**Table 19:** SPE index

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	3	6	9
25	.8333	.5800	.5000
50	.7714	.7127	.5853
75	.7499	.6281	.6339
100	.7741	.5705	.5244

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**Table 20:** KE index

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	3	6	9
25	.9727	.8845	.8781
50	.9841	.9587	.9313
75	.9867	.9685	.9513
100	.9896	.9753	.9672

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**Table 21:** RS1 index

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	3	6	9
25	.9740	.8565	.8179
50	.9791	.9486	.9206
75	.9838	.9654	.9404
100	.9871	.9691	.9558

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**Table 22:** RS2 index

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	3	6	9
25	.2400	.0800	.0800
50	.1200	.1400	.1000
75	.0800	.0133	.0533

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	3	6	9
100	.0700	.0200	.0200
<b>Table 23:</b> RA index			

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	3	6	9
25	.9424	.7657	.6490
50	.9417	.8538	.7758
75	.9343	.8570	.7818
100	.9277	.8408	.7973
<b>Table 24:</b> WSPE index			

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	3	6	9
25	.86	.36	.44
50	.76	.62	.36
75	.70	.44	.42
100	.70	.54	.54
<b>Table 25:</b> HR index			

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	3	6	9
25	0.875	0.25	0
50	0.8367	0.6939	0.5306
75	0.9459	0.7297	0.4459
100	0.9394	0.8586	0.6263
<b>Table 26:</b> GHR index			

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	3	6	9
25	0.875	0.7083	0.5417
50	0.9388	0.7959	0.8163
75	0.973	0.9054	0.9054
100	0.9596	0.9495	0.9192
<b>Table 27:</b> WGHR index			