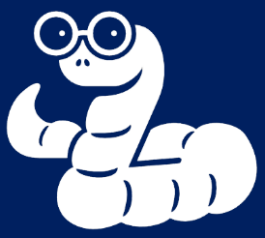

WORKing papers in Management Science

WORMS/21/12

Erratum to "Forecasting day-ahead electricity prices: A review of state-of-the-art algorithms, best practices and an open-access benchmark" [Appl. Energy 293 (2021) 116983]

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Erratum to "Forecasting day-ahead electricity prices: A review of state-of-the-art algorithms, best practices and an open-access benchmark" [Appl. Energy 293 (2021) 116983]

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Abstract

This Erratum corrects the error metrics of the LEAR models for the German (EPEX DE) market reported in Tables 2 and 3 of Lago et al. (2021) Applied Energy 293, 116983.

We would like to rectify the error metrics of the LEAR models for the German (EPEX DE) market reported in Tables 2 and 3 of [1]. The correct values can be found in the tables below and in the GitHub repository `https://github.com/jeslago/epftoolbox`, which includes the correct results for all datasets considered. The conclusions in [1] are not affected by this correction. We apologize for any inconvenience caused.

Table 2: Comparison between the two individual state-of-the-art open-source methods in terms of rMAE, MAE, MAPE, sMAPE, and RMSE. Each of the two methods is listed for four different configurations. The gray cells represent the best model for a given metric.

		$\mathbf{DNN}_1$	$\mathbf{DNN}_2$	$\mathbf{DNN}_3$	$\mathbf{DNN}_4$	$\mathbf{LEAR}_{56}$	$\mathbf{LEAR}_{84}$	$\mathbf{LEAR}_{1092}$	$\mathbf{LEAR}_{1456}$
EPEX DE	**rMAE**	0.407	0.422	0.406	0.394	0.469	0.458	0.431	0.437
	MAE	3.716	3.850	3.706	3.592	4.283	4.180	3.930	3.988
	MAPE [%]	77.145	137.449	100.214	90.578	133.377	115.612	123.391	120.242
	sMAPE [%]	14.970	15.356	15.508	14.680	16.544	16.272	16.795	17.148
	RMSE	6.796	7.304	6.271	6.080	7.713	7.397	6.526	6.502

Table 3: Comparison between the ensembles of the state-of-the-art open-source methods in terms of rMAE, MAE, MAPE, and sMAPE. The comparison also includes, for each market, the best individual performing DNN and LEAR model in terms of rMAE and MAE, i.e. the two most reliable metrics. The gray cells represent the best model for a given metric.

		DNN Ensemble	**LEAR Ensemble**	**Best[1] DNN**	**Best LEAR**
EPEX DE	**rMAE**	0.374	0.395	0.394	0.431
	MAE	3.413	3.609	3.592	3.930
	MAPE [%]	94.434	113.979	90.578	123.391
	sMAPE [%]	14.078	14.744	14.680	16.795
	RMSE	5.927	6.508	6.080	6.526

References

[1] J. Lago, G. Marcjasz, B. De Schutter, R. Weron, Forecasting day-ahead electricity prices: A review of state-of-the-art algorithms, best practices and an open-access benchmark, Applied Energy 293 (2021) 116983. `doi:10.1016/j.apenergy.2021.116983`.

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