How would just applying the random walk model result in?

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Random Walk Model

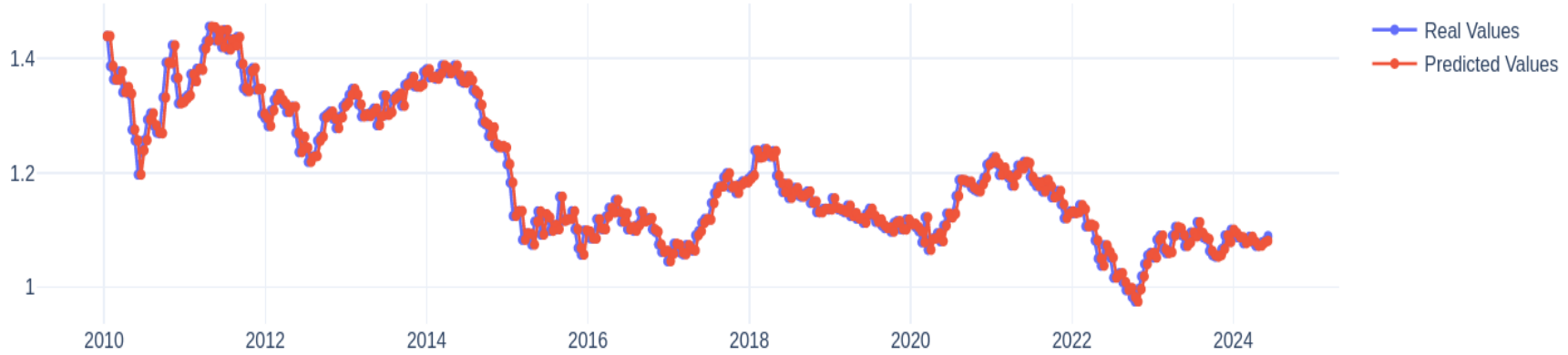
- In simple terms this model predicts that tomorrow will be the same as today. So the prediction coincides with the last available observation we had on the process.

- While arguably the most simple model one can conceive, sometimes it happens not to be easy to beat by more sophisticated methods due to the intrinsic unpredictable nature of some time series.

Prediction metrics

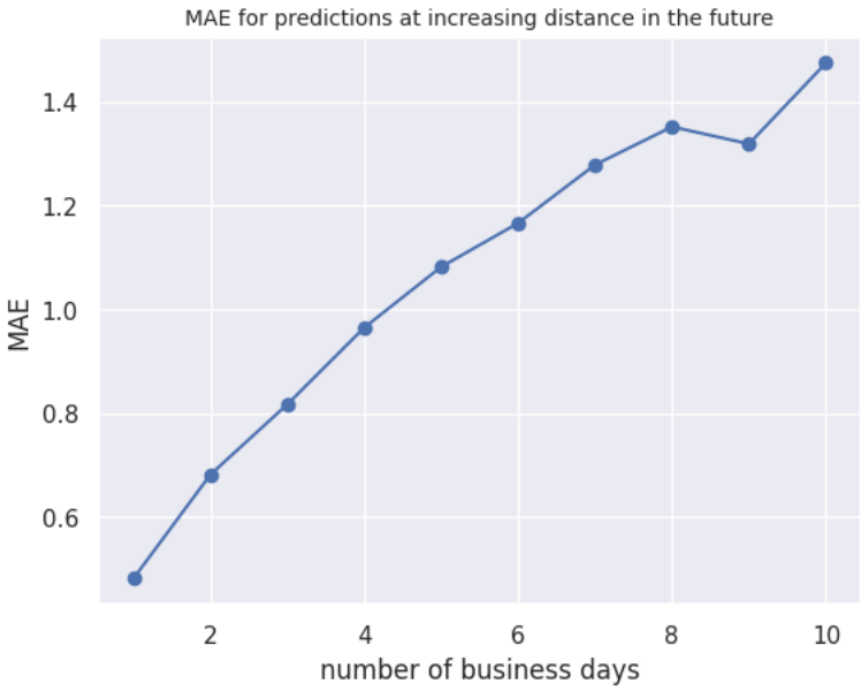
- Mean absolute error (MAE)
- Percentage of correct sign predictions. For this we will use as a sign of the prediction, the sign of consecutive predictions. If we would use the previous past observation we would always have a no sign prediction because the difference between the next prediction and the past observation will always be 0.

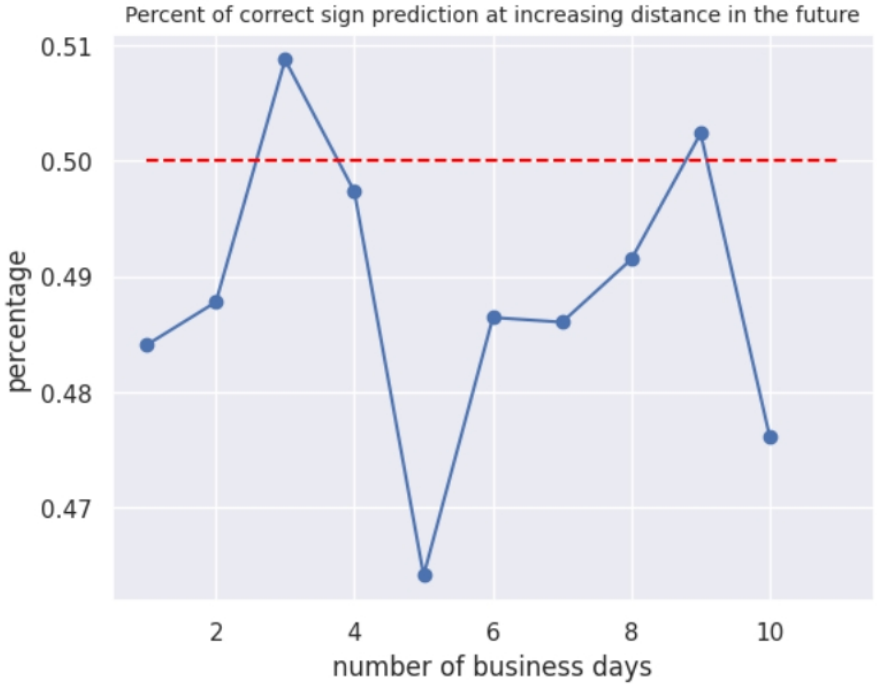
Maybe it is actually not a so bad model?



Does it really work?

No, but interestingly MAE is less than the prophet model





Thanks for the attention!