

Question 7.1

Describe a situation or problem from your job, everyday life, current events, etc., for which exponential smoothing would be appropriate. What data would you need? Would you expect the value of α (the first smoothing parameter) to be closer to 0 or 1, and why?

We use a type of exponential smoothing model very frequently at my job. Looking at the historical value of an asset, the moving average of that asset is a smoothed graph of this asset's price action. Necessary data would be the asset's price history, historical buying/selling volume, implied volatility, and significant event (earnings reports) dates. We would expect the value of α to be closer to 1 as there is not a lot of expected randomness in this model. An estimated value of α might be .7 for this model.