Computing Disposition Effect on Financial Market Data

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In recent years, an irrational phenomenon in financial markets is grabbing the attention of behavioral economists: the **disposition effect**. Firstly discovered by H. Shefrin and M. Statman (1985), the disposition effect consists in the realization that investors are more likely to sell an asset when it is gaining value compared to when it is losing value. A phenomenon which is closely related to sunk costs' bias, diminishing sensitivity, and loss aversion.

From 1985 until now, the disposition effect has been documented in US retail stock investors as well as in foreign retail investors and even among professionals and institutions. By the time, it is a well-established fact that the disposition effect is a real behavioral anomaly that strongly influences the final profits (or losses) of investors. Furthermore, being able to correctly capture these irrational behaviors timely is even more important in periods of high financial volatility as nowadays.

The presentation focuses on the new **dispositionEffect R package** that allows to quickly evaluate the presence of disposition effect's behaviors of an investor based solely on his transactions and the market prices of the traded assets. A simple step-by-step practical guide is presented to understand how to effectively use all the implemented functionalities. Finally, since financial data may be potentially huge in size, efficiency concerns are discussed and the parallelized versions of the functions are shown.

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