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### **Price-volume relationship in intra-day data**

Various economic time series are investigated and a quest for possible correlations between prices and volumes is undertaken. By introducing variables related to a fixed number of prices and volumes preceding a given moment, we take into account a history of values in a certain period of time, which could be regarded as an investor memory. The strength as well as range of these correlations are evaluated and compared for different data sets. An interesting problem whether the discovered effects can also be seen in daily data is analyzed. This work, although partly inspired by our previous paper [K. Karpio, P. Łukasiewicz, A. Orłowski, *Acta Physica Polonica A*, **121** (2B), B61-B66 (2012)], is much different from it, both in the aims and the tools employed.