Variance-covariance matrix estimation in double multivariate data with symmetric monotone missing values

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Abstract

In [1] a list of missing data patterns for variance-covariance matrices is given. These are believed to be the ones of most practical interest and they have been tackled in the literature by different approaches. For us, the one of most interest is the monotone missing value problem, also known as the *staircase* missing data. There is some literature on the subject, of which [2] and [3] we cite as examples.

We introduce a new case of missing data, a bit more general then the monotone missing value problem but of immense interest in financial markets. In this case the covariance-variance matrix has symmetric monotone missing values, *i.e.*, missing values in both triangular parts of the variance-covariance matrix.

Keywords

Variance-covariance matrix; Multivariate statistics; Missing data.

References

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