Referee report on “Sentiment Indices on Financial Markets: What do they measure?”, by Sven-Kristjan Bormann

General comment: Acceptable after relevant revision

The paper proposes an interpretation of the Sentix index of investor sentiment using the theoretical framework of psychological literature and behavioral economics. It also proposes a strategy for testing wether the theoretical hypotheses that have been laid out are capable of adequately fitting the data. In this sense, it provides a relevant contribution to the existing literature, which currently lacks a proper interpretation for investor sentiment. However, the paper shows some weakness regarding: 1) relevant literature which is largely missing at the current stage; 2) the description of the dataset it uses; 3) the interpretation of the sentiment index.

Missing literature. Concerning the literature involved, in the introduction the author makes reference to the literature concerning investor sentiment and its interpretation in financial economics, but does not make any reference whatsoever to the more standard literature of sentiment in consumers business cycle analysis. However, in those fields references to Sentiment indicators are quite common and in my opinion they should be acknowledged in the paper: albeit they are not crucial to the discussion about the influence of sentiment in financial markets, they however provide insightful information about how the concept of “sentiment” is currently discussed in the economic literature. Suggested literature include the original contributions by George Katona on the role of Sentiment for consumption decision and some of the subsequent literature stemming from it, and the European Commission work for producing both Business and Consumers sentiment indicators. In this respect, indeed, reference to the German indexes in session 1.4 may well be substituted or integrated with the reference to the Harmonised EU survey, of which both the IFO and GfK surveys are only the “national branch”.

Description of the data. I have found the description of the Sentix survey in session 3 rather poor. There are no information about: 1) the questionnaire; 2) how sample is selected; 3) how individual information are aggregated to obtain the sentiment indicators. A graphical analysis comparing the 12 sentiment indicators discussed in the analysis and the actual 6 indexes they are referred to would also be most useful: how those indicators actually correlate with the stock market indexes they are supposed to proxy? Which brings me to the third issue:

Interpretation of the Sentiment index In the literature concerning consumers sentiment, it is typical to ask whether survey data are capable of fitting well consumers decisions. This kind of problem is usually addressed studying the relationship among sentiment and a reference variable, either consumption expenditures or the GDP. However, to find some relationship among sentiment and expenditures it is not surprising: it may well be the case that some common “latent” variable may “cause” both, and that hence the correlation among consumer expenditures and sentiment is just spurious. Think for instance in the simplest version of any consumption theory about the role of income, that may be well be thought to influence both consumption and sentiment. In the consumption-sentiment literature, typically one may want to estimate some form of consumption equation in which “standard” economic determinants of consumption (income, wealth) and sentiment both appear: if sentiment is still significant when the role of income (and other variables) is taken into account, then it is possible to conclude that sentiment is rather influential in explaining consumption patterns.

Something similar may in principle be tried with regard to financial markets: even if you suppose to find some relationship among sentiment and the stock market indexes (an analysis that is altogether is missing from the paper in the current version), one still may want to be sure if this relationship really tells that sentiment as an influence on stock market indicators independently from that of the

market fundamentals. In other words, how can we be sure that sentiment as measured by the sentix survey is not just a proxy of market fundamentals??

Conclusions and recommendation. A proper analysis of the stock market indexes-sentiment relationship is probably beyond the scope of the current paper. However, the paper would greatly benefit from a more thorough discussion of relevant literature, a more comprehensive description of the data and some reference to the sentiment vs. economic fundamentals debate along the lines discussed above.

In the opinion of this referee the paper may be accepted for publication only after relevant revisions following the above suggestions.