

## **Experiences with the Visual Analog Scale in the German Internet Business Survey**

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Qualitative questions have many desirable features and are the state of the art in business surveys. Their weakness, however, is the enormous information loss due to the high proportion of neutral responses, lack of information on the distribution of expected changes in the population and strong assumptions about the data generation process. Quantitative questions and subjective probabilities include this information, but have serious practical limitations. This presentation shows a new approach to the measurement of economic expectations, which was made possible by the recent spread of Internet surveys: the visual analog scale (VAS). Visual analog scales are rating scales on which a subject ranks the preferences along a continuous line or scale. The empirical evidence of the application of the VAS in Internet surveys on economic expectations is striking. VAS is easy to apply and does not require any quantitative information from the respondents. Delivering the direct measure of business expectations, the VAS supersedes the necessity to make assumptions about the distribution of economic expectations and indifference thresholds, as is required for the three-category based measurement. Furthermore, the VAS was found to be not only a reliable but also a highly efficient measurement instrument of business expectations that delivers a variety of valid economic indicators: The VAS produces valuable information on the dispersion and the skewness of business expectations, providing a comprehensive picture of the businesses' present state and expectations as well as the economic expectations of economists. The VAS dispersion measures also contain information on the heterogeneity of expectations and macroeconomic uncertainty. Although the time-span is too short to draw conclusions about the forecasting properties of these measures, the results show that VAS indicators explain the rate of change of the industrial production index to a considerable degree, even in the very short time-period.