

## Explaining qualifications in audit reports using a support vector machine methodology

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### Abstract

The verification of whether the financial statements of a firm represent its actual position is of major importance for auditors, who should provide a qualified report if they conclude that the financial statements fail to meet this requirement. This paper implements support vector machines (SVMs) to develop models that may support auditors in this task. Linear and non-linear models are developed and their performance is analysed using training samples of different size and out-of-sample/out-of-time data. The results show that all SVM models are capable of distinguishing between qualified and unqualified financial statements with satisfactory accuracy. The performance of the models over time is also explored. Copyright © 2005 John Wiley & Sons, Ltd.

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