In our thesis we carry out an empirical data set analysis and a thorough case study of statistical classi cation techniques in credit scoring. For our data set the logistic regression model appears to be the most suitable classi cation method in comparison with classi cation trees and knearest neighbours method. Moreover, only the logistic regression allows us to use similarity measures for comparison of classi ers. Further we show that the usage of standardized costs is inappropriate in the case of credit scoring and might lead to acceptance of all applicants for a credit. We also gure out that for strongly unbalanced data the classi cation trees might be lacking in discrimination power.