

Swen Beyer

International Corporate Finance - Impact of financial ratios on long term credit ratings

Using the automotive examples of BMW Group, Daimler Group and Ford Motor Company

Master's Thesis

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International Corporate Finance

Impact of financial ratios on long term credit ratings using the automotive examples of BMW Group, Daimler Group and Ford Motor Company

Master Thesis

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MSc

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I. SUMMARY

The global financial and economic crises resulted for many corporations in a downgraded credit rating within the last 2 to 3 years. Even a large percentage of them defaulted on their credit obligations due to inherent operational factors. The importance of credit ratings will play an even more central role under the currently discussed New Basel Capital Accord (Basel III) (Standard & Poor's 2010; Basel III For Global Banks).

The purpose of this research is to explore the relationship between long term credit ratings and selected financial ratios that can be derived by public information. Such information can be very valuable for companies in order to have a slight control over their credit rating obtained by rating agencies as well as in negotiations with banks and other outside creditors.

The research design is based on three automotive manufacturers and involves their credit rating over the last decade. The data for the financial ratios was collected from respective financial statements.

The study is based on a correlation and multiple regression analysis using the MINITAB (Minitab Data Analysis Software, Pennsylvania USA) software as a statistical platform. A step wise approach determined the regression equation with the highest significance. The equations were used to detect those variables that have the strongest impact on the credit rating.

The results for automotive companies with a solid statistical data set are surprisingly high in significance with an adjusted coefficient of determination of over 90%. Overall it is not feasible to mention which one of the seventeen financial ratios explains the variation in credit rating most reliable, because such a statement depends always on the individual company. For example to explain the changes in the rating for the Ford Motor Company, the following six ratios turned out to be the most significant ones: total equity to total assets; sales to fixed

assets; sales to inventory; net income to total equity; total equity to long term liabilities and EBIT to sales.

Each regression equation consisted mostly of different financial ratios. Apart from the fact that financial information is only one aspect of the credit rating determination process, the attained results are valid and valuable insights for all external and internal rating analysts.

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