

# The Impact of Research and Development Investment on Stock Performance of Auto Industry Company in China

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## Abstract

This article mainly studies whether the stocks of Chinese auto companies will be affected by changes in company R&D (R&D) investments. The company's innovation can be used in many aspects of the automotive industry, such as the production of various parts, and R&D investment is the company's innovation has an important role in innovation. Innovation can enable companies to obtain higher production efficiency and profits, thereby affecting the company's stock. So we study the direct impact of innovation on stock returns. Our research uses four different independent variables to express stock returns: annual stock returns, annual stock excess returns, the intercept in the market model, and the intercept in the Fama-French three-factor model. Multiple regression models are used to analyze the relationship between R&D investment and stock returns of 61 listed companies in the automotive industry in my country from 2011 to 2020. Including the main regression, non-linear relationship, group comparison study, interaction effect, time period study and endogeneity test. The results show that when the company's R&D investment increases, the company has a larger stock performance and excess stock in annual stock returns. Return. Companies with higher total assets and leverage have a greater impact on stock returns than companies with lower R&D investment. And there is a certain lag in the impact of R&D investment on stock returns.

**Keywords:** R&D investment, Stock performance, auto company