

Developing Models to Predict the Stock Prices of Indian Automobile Giant Tata Motors Company Limited : An Empirical Analysis

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Abstract

Tata Motors Limited is one the India's largest automobile company with overall revenue of around ₹ 1,88, 818 crores (\$ 34.7 bn) in 2012-13. It has monopoly specifically in commercial vehicles in each segment and among the top in passenger vehicles, midsize car and utility vehicle segments. This paper attempts to identify the various financial indicators which can be used to predict the stock returns of this company. Initially, multiple regressions has been used to predict the stock returns of this company with seven fundamental variables, viz., Sales, trading volume, earning per share, net profit, price earnings ratio , net profit & price to book value ratio. Further, for developing effective models for the predicting future stock price of company stepwise regression has been used. This paper concludes with the finding the important fundamental variables which can be used to predict stock returns of Tata Motors Limited and to design effective model for prediction.

I. Introduction

THE INDIAN AUTOMOBILE industry is fully equipped to deliver compelling value to the world in design, engineering and component manufacture. The opportunity for India is to plug into all aspects of the global value chain. It has also the opportunity and the potential to dramatically increase its share of global automobile market. There are about 700 million vehicles on the road in the world. It is estimated that this vehicle population would grow to about 1.3 billion in the year 2030. Most of this increase of 600 million will come from developing countries. These markets will look for low-cost automobiles. India has the opportunity to meet this need. And, in the process create a huge export market. Companies like Tata Motors, Maruti Suzuki and Mahindra and Mahindra have demonstrated their ability to address this opportunity. They have proven India's enormous capabilities in this sector. (SIAM-2004). The automobile industry can play a major role in enabling India to attain global leadership. It is the largest industry in the world with revenues of about 1.8 trillion US dollars.

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