The Ministry of Higher
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Testing the Capability of the Model of the Three Factors to Interpret Stock Returns

An Empirical Study of the model of Fama & French applied on industrial listed companies on the Amman Stock Exchange (2001-2014)

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Abstract

This study aims to examine the three factors which are representative of (market risk premium and the size of the company and the ratio of book value to market value) according to Fama & French model, and to understand how this model is capable of interpreting changes in stock prices in Amman Stock Exchange, in an attempt to provide an interpretation helps in understanding the behaviour of stock prices in the Jordanian industrial companies. The results indicate the following insights:

1. The three factors have significantly explained the price changes of the shares, where the model of Fama & French has achieved a significant statistical explanatory capacity about 60.8%.

2. Through the synchronous input and excluding the risk premium from the model of the three factors, the explanatory capacity of the model has been substantially declined to be 0.5%, and this decrease was in line with Fama & French (1993) that was statistically significant at the level of (1%).

3. Through the synchronous input also the two factors of volume and value have been excluded, (HML, SMB, respectively) from the model of the three factors, which means that the CAPM model explains stock returns, where a magnificent drop has happened in the explanatory capability of the model to reach 13.1 %, and this result is consistent with Fama & French (1993), that was statistically meaningful at the level of 1%.

The study recommends that the model of the three factors can be used in any field of application requires an estimation of the required rate of return on investment. It also recommends investors, financial analysts and portfolio managers to consciously use the capital asset pricing models in order to avoid any sudden and unexpected changes that may have a negative impact on stock prices because each model cannot control all the variation in average returns.