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Title : Uncertainty and Investment Behaviour of Indian Firms

*Index Terms: Investment Sensitivity, Uncertainty, Capital Expenditure, Financial Variables*

### **ABSTRACT**

The business expenditures on plant and equipment are one of the most important components of the GDP as variations in investment expenditures have long-term consequences for the economy's productive capacity. Thus, understanding of the behaviour of investment is important as the economic growth critically depends on capital accumulation, which stems from investment. Here, an attempt is made to understand the determinants of investment patterns for Indian firms, which are a part of the top industry groups. The primary objective of the study is to examine the role of uncertainty in affecting investment behaviour.

The relevance of this study lies in the present day context of the ongoing economic reforms in an emerging economy like that of India. An omnipresent challenge for the emerging economies has been to increase the private investment while providing the right incentives to the sector. Thus, an understanding of the determinants of capital expenditure is a critical component of this challenge.

The research methodology in this study is based on collection, analysis and interpretation of secondary data. The data used in the study is for a period ranging from March 31, 2004 to March 31, 2014 (11 years) for 199 firms. The firm specific data has been collected from the financial statements of the firms and the data on Treasury bill rate and G- Sec benchmark yield comes from Database on Indian Economy, a Reserve Bank of India database. Lastly econometric models have been applied using panel data regression techniques. Panel unit root tests have been conducted to test the stationarity based on Levin, Lin and Chu (2002) procedure for all the variables of the study.

The first model that is estimated is the Pooled regression model, followed by the fixed effect and the random effect model to examine the determinants of the investment behaviour of Indian firms. The model of Easton and Zmijewski (1989) is adopted to estimate a set of

company specific ERCs and the investment sensitivity in cases where the share prices are responsive and also in cases where it is unresponsive to earning news is examined for clusters of high ERC and low ERC, firms. To assess the relationship between uncertainty and investment the generalized-method-of moments (GMM) estimators developed for dynamic panel models, by Arellano and Bond (1991), Arellano and Bover (1995) and Blundell and Bond (1998) is used. After estimating the models, the derived coefficients from the results have been interpreted.

Analysis of the determinants of investment behaviour reveals that Debt to Capital ratio is a significant internal determinant of investment decision of a firm, with a positive coefficient, which means that financial leverage does not negatively affect investment. Cash flow to capital ratio is found to be positively associated to investment, though it is not significant. Size positively affects investment which shows that the bigger the firm is higher will be the investment spending. The coefficient of age as a determinant of investment is negative indicating that older firms invest less in plant and equipment.

The study estimates an empirical model to examine the interrelationship between the concerns for valuation and investment sensitivity. The findings indicate that there is a cross sectional variation in ERC's i.e. the information content of accounting earnings varies across firms. Further, it is also observed that the sensitivity and responsiveness of share prices to earning news does not have an influence in shaping the investment decisions of the firm. Therefore it can be concluded that the investment is not sensitive to ERC.

The research findings show that firm-specific uncertainty has a negative impact on the investment decisions of Indian firms' investment behaviour. The results of the study are consistent with empirical findings in other countries. There is also evidence of a positive association between investment and macro uncertainty. This finding suggests that the main source of uncertainty that affects a firm's investment decision is macro-economic uncertainty rather than firm-specific uncertainty. Therefore, in contrast to results from the earlier literature the study show that an increase in macro-economic uncertainty stimulates investment spending, the findings are unique in light of previous studies, which have not shown such diverse and significant effects.

An important derivation from the study is that the effects of uncertainty on investment may be sensitive to model specification and the design of uncertainty proxies. The managers facing capital expenditure decisions might use different methods to predict uncertainty. The

model used in the study will be useful to the corporate managers for its simplicity and ease of understanding.

The study suggests that policy-makers should take into consideration the correlation between uncertainty and investment at the time of formulating the monetary and fiscal policies. The authorities should play an active role to intervene effectively to dampen the macroeconomic cycles caused by external shocks. A stable policy and taxation regime is an important requirement for the corporate fraternity in India. The government policies play a vital role in shaping a positive economic scenario in the country.