Economic Policy Uncertainty and Capital Expenditure Decisions: a Quantile Regression Approach

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Literature suggests that economic policy uncertainty negatively affects corporate investments but doesn't provide evidence of this effect across capital expenditure distributions. This paper explores the impact of economic policy uncertainty across capital expenditure distributions using the quantile regression approach and shows that the effect is varied with a higher negative impact in the 25th quantile than in the 50th quantile which further declines in the 75th quantile. Further, we investigate and show that the market-to-book value ratio (an indicator of growth opportunity) has also varied and negative impact across capital expenditure distributions with lesser impact in higher quantiles. We included a panel of data from 2003 to 2020 consisting of 8214 Indian manufacturing firms and a data sample of 96,045 firm-year collected from the Center for Monitoring Indian Economy and economic policy uncertainty data from the index developed by Baker, Bloom, and Davis (2013). The sample period is from 2003 as policy uncertainty data for India is available from this period only. The manufacturing sector has remained of high importance for the Indian economy in recent years as India is aggressively marketing its Make in India' campaign to increase contribution to the gross domestic product by this sector. Hence, this study has selected a sample that is of high significance for researchers, Indian investors, policymakers as well as the government. To achieve the objective of examining the impact of economic policy uncertainty across capital expenditure distributions, we estimate and compare the estimates from the least square model, with capital expenditure ratio (capital expenditure to book value of assets) as the dependent variable and economic policy uncertainty as to the independent variable of interest (holding other control variables constant), to those produced from the quantile regression functions. We estimate 25th, 50th, and 75th quantile regression functions and plotted the regression coefficients from the quantile regression at an interval of 5%. Quantile regression coefficients are negative, varied, and significant at a 1% level of significance suggesting a heterogeneous effect of economic policy uncertainty across capital expenditure distributions. Next, we estimate and compare the estimates from quantile regression functions with the dependent variable as capital expenditure and the independent variable of interest as market-to-book value ratio. The findings suggest that the market-to-book value ratio also has negative, varied, and significant impacts at a 1% level of significance. The negative relationship between growth opportunity and capital expenditure raises a question and leaves scope for future study about has Indian manufacturing firms entered into a phase where marginal profits are not justified enough for extra capital expenditures and hence, can principle of acceleration through corporate tax deduction be a feasible option to attract new investment?

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