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Dependence between Sugar Industry Specific Factors and Sugar Companies Share Prices : Evidence from India

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Abstract

We assess the effects of sugar industry-specific macroeconomic factors on share prices of sugar companies in India using quantile regression approach from January 2001 to December 2017. We detect grounds to affirm the dependence between sugar industry specific macroeconomic factors and sugar companies' share prices. The results indicate that the change in sugarcane cultivation area has both positive and negative effect on the share prices of sugar companies. Further, it shows that the impact of sugar production on share prices of sugar companies varies across the different quantiles except an insignificant effect on two companies for all quantiles. Moreover, most of the companies' share prices are highly and positively influenced by sugar import. The study pointed out that the risk of sugar industry specific macroeconomic factors noticed in the sugar companies' share prices is heterogenous.

JEL Code : C21, E44, G11, G12
Keywords : Sugar Industry, Sugar Companies, Macroeconomic Factors, Share Prices, Ordinary Least Squares, Quantile Regression, India

I. Introduction

THERE IS A considerable amount of research that investigates how the macroeconomic factors influence stock price behaviour. During the past few decades, there has been a growing volume of empirical research into the impact of international and national factors on the performance of share prices (Chen, Kim and Kim, 2005; Chkili and Nguyen, 2014; Jothi and Suresh, 2016; Li, Lu and Zhong, 2011; Mitra, 2018).

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4.4 *Dependence Structure between Sugar Export and Sugar Companies Share Prices*

Sugar export has a substantial positive influence on share prices of BAJAJHIND BALRAMCHIN, DHAMPURSUG, MAWANASUG and RANASUGacross thedifferent quantiles.The impact is positive and significant for thebottom and middle quantilesforBANARISUG, DHARSUGAR, RAJSREESUG and SIMBHALS. Hence, the structure of dependence is found to be asymmetric, with dependence in the bottom tail and independence in the higher tail. The effect of sugar export on DALMIASUGis significant and positive for across the quantiles except 0.3 and 0.4 quantiles. The impact on EIDPARRY share prices is not uniform across the quantiles. Regarding SAKHTISUG, the impact is noticed only for 0.6, and higher quantiles, this means the dependence is asymmetric. For UGARSUGAR, an insignificant dependence is revealed for all quantiles.

In brief, sugar export has a significant impact on BAJAJHIND, BALRAMCHIN, BANARISUG, DHAMPURSUG, MAWANASUG, RAJSREESUG, RANASUG and SIMBHALS share prices. Moreover, we observe that share prices DALMIASUG, DHARSUGAR, EIDPARRY and SAKHTISUG are insusceptible to sugar export, whereas UGARSUGAR share prices are not able to react to sugar export.

V. Conclusion

Previous studies have noted the impact of international, national and company specific factors on stock markets. In this paper, we examine this challenging issue for sugar industry specific macroeconomic factors and their impact on sugar companies' share prices in Indian context using QR method. Our results are quite interesting and useful to stock market participants.

It should be pointed out that the risk of sugar industry specific macroeconomic factors noticed in the sugar companies' share prices are not homogeneous. The reason of this heterogeneity may be on account of differences between companies, such as company size, expansion opportunities, liquidity and borrowing capacity.

Finally, this empirical analysis is presented for the first time using QR approach. However, the future studies can be conducted on the impact of other industry specific macroeconomic factors on companies' share prices from that respective industry. We take share prices for this paper;thus, another line of research would be addressing the same issue considering stock returns.

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