THE ABSENCE OF THE BOOK-TO-MARKET EFFECT IN THE TAIWAN STOCK MARKET: A DECOMPOSITION APPROACH

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ABSTRACT

This paper examines the absence of the BM (Book-to-Market) effect in the Taiwan stock market, applying the BM decomposition proposed by [1]. First, we observe a negative correlation between future stock return and intangible return only on non-R&D-intensive firms and non-electronics firms in Taiwan, which is substantially different from the U.S. evidence documented by [1]. Second, the R&D intensity can explain stock returns better than BM can. Third, undervaluation of R&D-intensive firms and electronics firms seems to be the driving force of the absence of the BM effect. These undervalued firms with relatively low BM perform well in the past and in the future, thereby obscuring the BM effect.

INTRODUCTION

The objective of this paper is three-fold. First, it corroborates the absence of the BM (book-to-market) effect in the Taiwan stock market. Second, it studies whether R&D investments contribute to this absence. Third, it investigates the role played by electronics firms whose importance has been dramatically rising over recent decades.

Employing the path-breaking BM decomposition of [1], we present evidence that R&D-intensive stocks persistently outperform stocks with little R&D although the R&D-intensive stocks are positively valued in the Taiwan stock market. The market obviously undervalues the future payoffs associated with firms' current R&D investments. In this case, the linkages are weak not only between the future return and the past return, but also between the intangible return and the BM effect. Hence, the sharp difference between firms spending heavily and only a little on R&D activities suggests that R&D be a key to the absence of the BM effect. On the other hand, first, the return and characteristic patterns of electronics firms are closely similar to those of R&D-intensive firms and exhibit no BM effect. Second, the undervaluation of electronics firms is well pronounced as well. Third, the intangible return of electronics firms plays no role in explaining future returns, but that of non-electronics firms plays a significantly negative role. Again, this notable contrast confirms our belief that the undervalued returns on the fast emerging electronics firms, besides the R&D-intensive firms, have obscured the BM effect as well.

REFERENCES

[1] Daniel, K. and Titman, S. Market reaction to tangible and intangible information, *Journal of Finance*, 2005, forthcoming.