A study on the nanotechnology and nanocompanies of Korea

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The aim of this study is to review the development of the nanotechnology (NT) of Korea and to compare financial performances of nanocompanies (NCs) with those of traditional companies (TCs) and find some economical meanings from the results.

USA gets the lead in nanotechnology and Japan, EU are in pursuit now. Korean government has begun to support the NT based R&D programs since 2001. Korean government supported many research institutions and companies financially to develop nanotechnology. There are much intensive competition to get the governmental fund among many nanocompanies such as SAMSUNG, LG, HYNIX, and many ventures. Korea has got remarkable performance in NT. The 1st half of this study reviews Korean governmental and industrial efforts for NT and evaluates Korean NT by comparing with other countries.

Not only the type of financial support but technological characteristic of NT can affect NCs' financial features such as safety, leverage, profitability, activity, and growth. Consequently, it is natural that NCs have some different financial features from the TCs. The 2nd half of this study focuses on the difference between NCs and TCs in financial features. The samples are paired samples of NCs and TCs, and the financial analysis of them are carried out for the period 2005-2010. The analysis shows that NCs are growing more rapidly than TCs in sales or assets. But NCs are not as profitable as TCs because of high financial leverage. This result implies that the government needs to change its financial support and the CFOs of NCs need to change their capital structure for a constant growth based on the profitability.

Biography
Eui-Kyung Lee has completed his Ph.D at the age of 33 years from Seoul National University of Korea. He worked as a CPA of Samil PricewaterhouseCoopers (PwC) before becoming a professor. He has published 8 books on finance and accounting. And he has published more than 20 papers in reputed journals and serving as an editorial board member.