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Abstract
This paper is to evaluate the management efficiencies of 37 Proprietary Funds management performance owned by town administrative divisions of Yun-Lin, Chiayi and Tainan in year 2001 and 2005. It also discusses individually the relationship and changes between external variables and parts of each input in above years. Besides, we divide external variables between Environmental variables and management characteristics. Because managerial characteristics are firm's internal factors, the management efficiency will be removed the influence uncontrolled environmental variables and statistical noise through Three-Stage Data Envelopment Analysis. In addition, we test the difference of management efficiencies between before and after removing environmental variables and statistical noise. The empirical results are as follows:

1.Except negative relationship in Operation Fund type and positive relationship in financial dependent ratio of Town Administrative Division, other variables haven't significant influence with inefficient parts of sales(/business)cost and expense input、out-sales(/out-business) cost input、and asset input in both years.
2.After removing environmental variables and statistical noise, the average of Pure Technical Efficiencies (PTE) is higher, but most of Scale Efficiencies (SE) are lower than PTE and finally cause the result average of Total Efficiencies (TE) is lower.
3.The results of Wilcoxon test indicate the various efficient averages don't be all improved from year 2001 to 2005 both Operation Fund type and Profit Fund type. The Mann-Whitney U tests in each year indicate that the various efficient averages of Profit Fund type are not all better than Operation Fund type after removing environmental variables and statistical noise, but before removing aspect the tests are just opposite. The results of M-W U tests in year 2001 indicate that the SE's and TE's averages of including funeral iterm Funds are better than excluding Funds after removing aspect. Finally, the Spearman tests indicate that remove the influence of environmental variables and statistical noise in TE to be necessary except the rankings of Profit Funds in 2001.
4.The influence of environmental variables and statistical noise is beneficial to SEs and TEs in most of Operation Funds and Profit Funds, but no advantage to PTE in most of Operation Funds.
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