Non-linearity in debt and return relationship: evidence from dynamic panel threshold method

ABSTRACT

Background and objective: Moderate debt usage increases returns during economic boom, but high debt could decreases returns during economic recession. This study examines if there is a threshold debt level in the debt-returns relationship. Methodology: This study applies dynamic panel-threshold method to determine optimal debt level beyond which further increases in debt decreases returns. This study finds a threshold effect of 20.570% between debt ratio and return on equity. If the debt ratio is lower than 20.570%, a 1% increases in debt ratio increase return on equity by 0.128%. But, when the debt ratio is higher than 20.570%, a 1% increase in debt ratio decreases return on equity by 0.050%. Results: The results suggest that there is an optimal debt ratio of 20.570% at which point further increase in debt decreases return on equity. Conclusion: These results support the tradeoff theory, which suggests that there is an optimum debt level that maximizes returns.

Keyword: Returns; Debt; Tradeoff theory; Dynamic panel-threshold analysis