

# Evaluating the Efficiency of Selected Sugar Enterprises in Tamil Nadu : An Empirical Study

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## Abstract

Ratio analysis is an essential and foundational instrument in financial analysis, offering a comprehensive lens through which to gauge an enterprise's financial health. This study delves into the significance of ratio analysis, its methodology, and its application to evaluate the financial efficiency of a few private sugar mills in the Tamil Nadu Sugar Industry during a period of twelve years from 2011 to 2022. Two groups of variables were considered in evaluating financial performance, yardsticks like return on equity (ROE) and return on assets (ROA) were employed and to denote turnover ratios, debtors turnover ratio (DTR), creditors turnover ratio (CTR), stock turnover ratio (STR), working capital turnover ratio (WCTR), total assets turnover ratio (TATR) were used. The findings suggest that while DTR has no significant link with ROE, STR has no significant link with both ROE and ROA. The other ratios namely CTR, WCTR and TATR demonstrate a significant correlation with financial performance.

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**JEL Code :** C1, D22, F32, L66, M41

**Keywords :** Efficiency; Turnover Ratio; Return; Assets; Equity; Sugar; Enterprises; PLS SEM Model; Tamil Nadu; India.

## I Introduction

GENERATING PROFIT IS an indispensable goal of any business organisation. Profits are the lifeblood of any business, serving as a vital measure of its success and sustainability. Firstly, profits are essential for covering operational expenses, such as salaries, rent and raw materials, without which a business cannot function effectively. Secondly, they provide a return on investment for shareholders and investors, incentivizing them to support and fund the business Finishtya (2019).

Profits in a firm are directly influenced by a multitude of activities conducted throughout the organization. The activities that generate revenue,

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with profitability metrics: return on assets (ROA) and return on equity (ROE) through rigorous investigation utilizing the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach and regression analysis. The outcomes suggest that while DTR has no significant link with ROE Samiloglu and Akgün (2016), Gorondutse, Ali and Ali (2016), STR has no significant link with both ROE and ROA Farooq (2019). The other ratios namely CTR, WCTR and TATR demonstrate a significant correlation with financial performance Almomani, Almomani and Obeidat (2021). Based on the results, it is suggested that the sugar enterprises should focus on implementing proactive measures such as stricter credit policies, streamlined collection processes and monitoring customer creditworthiness to expedite debt turnover, reduce bad debt expenses and bolster cash flow. These improvements, along with refined stock management and optimized working capital, can mitigate liquidity challenges and decrease the reliance on debt.

### References

Agarwal, Aman, Yamini Agarwal and Saurabh Agarwal, (2014), "Enterprising Entrepreneurship and Startup Models for Growth and Financing of Micro, Small and Medium Enterprises (MSMEs) in times of Recession", *Finance India*, Vol. XXXII No. 4, December 20165, pp. 1125-1208.

Agarwal, J.D., (1993), "Accounting for Financial Analysis", IIF Publications, Delhi, pp. 435

Abraham, R., J. Harris and J. Auerbach, (2017), "Earnings yield as a predictor of return on assets, return on equity, economic value added and the equity multiplier.", *Modern Economy*, Vol. 8, No. 1, pp. 10-24.

Abubakar, Y. and G.J. Olowe, (2019), "Accounts receivable management and financial performance of selected quoted firms in Nigeria.", *International Journal of Research and Scientific Innovation (IJRSI)*, Vol. 6, No. 4, pp.141-145.

Aghera, S. M., C.D. Lakhlani and S.M. Trivedi, (2018), "A study on working capital management through ratio analysis"

Akbar, J. S., (2021), "The effect of return on assets and return on equity on price to book value on banking companies listed on the Indonesia Stock Exchange.", *International Journal of Economics, Business and Accounting Research (IJEBAAR)*, Vol. 5, No. 3, pp.1677-1688.

Almomani, T. M., M.A. Almomani and M.I. Obeidat, (2021), "The relationship between working capital management and financial performance: Evidence from Jordan.", *The Journal of Asian Finance, Economics and Business*, Vol. 8, No. 6, pp.713-720.

Amalia, S., N.E. Fadjriah and N.M. Nugraha, (2020), "The influence of amacompanies sub sector.", *Solid State Technology*, Vol. 63, No. 3, pp. 4173-4182.

Amanda, R. I., (2019), "The impact of cash turnover, receivable turnover, inventory turnover, current ratio and debt to equity ratio on profitability", *Journal of Research in Management*, Vol. 2, No. 2, pp.14-22.

Chakraborty, N., (2013), "Working capital performance: A case study on Dabur India Ltd.", *International Journal of Research in Commerce and Management*, Vol. 4, No. 10, pp.93-97.

Chowdhury, A. Y., M.Z. Alam, S. Sultana and M.K. Hamid, (2018), "Impact of working capital management on profitability: A case study on pharmaceutical companies of Bangladesh.", *Journal of Economics, Business and Management*, Vol. 6, No. 1, pp.27-35.

Cooksey, R. W. and R.W. Cooksey, (2020), "Descriptive statistics for summarising data", *Illustrating statistical procedures: Finding meaning in quantitative data*, pp.61-139.

Dash, M., (2020), "Determinants of working capital in the Indian sugar industry.", *Journal of Commerce and Accounting Research*, Vol. 9, No. 2, p.41.

Dirman, A., (2020), "Financial distress: the impacts of profitability, liquidity, leverage, firm size and free cash flow.", *International Journal of Business, Economics and Law*, Vol. 22, No. 1, pp.17-25.

Eryatna, E. N., N. Eltivia and K.U. Handayawati, (2021, July), "The Effect of Cash Turnover, Receivable Turnover and Inventory Turnover Towards Profitability of Consumer Goods Companies in Indonesia", In 2nd Annual Management, Business and Economic Conference (AMBEC 2020), Atlantis Press, pp. 191-197.

Finishtya, F. C., (2019), "The role of cash flow of operational, profitability and financial leverage in predicting financial distress on manufacturing company in Indonesia.", *Jurnal Aplikasi Manajemen*, Vol. 17, No. 1, pp.110-117.

Farooq, U., (2019), "Impact of inventory turnover on the profitability of non-financial sector firms in Pakistan.", *Journal of Finance and Accounting Research*, Vol. 1, No. 1, pp.34-51.

Gorondutse, A., R. Ali and A. Ali, (2016), "Effect of trade receivables and inventory management on SMEs performance.", *British Journal of Economics, Management and Trade*, Vol. 12, No. 4, pp.1-8.

Hasangapon, M., D. Iskandar, E.D. Purnama and L.D. Tampubolon, (2021), "The effect of firm size and total assets turnover (Tato) on firm value mediated by profitability in wholesale and retail sector companies.", *Primanomics: Jurnal Ekonomi and Bisnis*, Vol. 19, No. 3, pp.49-63.

Hasanudin, H., D.T. Awaloedin and D.D. Arviany, (2022), "The impact of cash turnover, accounts receivable turnover and inventory turnover on return on assets (ROA) for agribusiness companies listed on the Indonesia stock exchange (IDX) during the period 2016-2020.", *Jurnal Info Sains: Informatika dan Sains*, Vol. 12, No. 02, pp.37-44.

Hasby, Y. N. S. S. A., M.Y. Anshori and N.S. Primasari, (2018), "The Impact of Current Ratio, Receivable Turnover and Total Assets Turnover on Roa at Telecommunication Sub-Sector Companies Registered in Bei Year 2009-2017.", In Proceedings of International Conference Technopreneur and Education 2018, Vol. 1, No. 1.

Heikal, M., M. Khaddafi and A. Ummah, (2014), "Influence analysis of return on assets (ROA), return on equity (ROE), net profit margin (NPM), debt to equity ratio (DER) and current ratio (CR), against corporate profit growth in automotive in Indonesia Stock Exchange.", *International Journal of Academic Research in Business and Social Sciences*, Vol. 4, No. 12, p.101.

Jasmani, J., (2019), "The Effect of Liquidity and Working Capital Turnover on Profitability at PT. Sumber Cipta Multiniaga, South Jakarta.", *PINISI Discretion Review*, Vol. 3, No. 1, pp.29-38.

Kurniawan, A., (2021), "Analysis of the effect of return on asset, debt to equity ratio and total asset turnover on share return.", *Journal of Industrial Engineering and Management Research*, Vol. 2, No. 1, pp.64-72.

Manullang, A. E. A., D. Togatorop, P.R.D. Purba, E.A.Y. Manik, E.N. Simorangkir and R.K. Lase, (2020), "The significance of accounts receivable turnover, debt to equity ratio, current ratio to the probability of manufacturing companies.", *International Journal of Social Science and Business*, Vol. 4, No. 3, pp.464-471.

Nurlaela, S., B. Mursito, E. Kustiyah, I. Istiqomah and S. Hartono, (2019), "Asset turnover, capital structure and financial performance consumption industry company in indonesia stock exchange.", *International Journal of Economics and Financial Issues*, Vol. 9, No. 3, p.297.

Nworie, G. O., V.O. Moedu and C.I. Onyali, (2023), "Contribution of Current Assets Management to the Financial Performance of Listed Consumer Goods Firms in Nigeria.", *International Journal of Trend in Scientific Research and Development*, Vol. 7, No. 1, pp.77-87.

Oranefo, P. C. and C.F. Egbunike, (2023), "Accounts Payable Turnover and Firm Performance of Quoted Manufacturing Firms in Nigeria.", *International Journal of Accounting and Management Information Systems*, Vol. 1, No. 1, pp.45-65.

Pandey, I. M., (1992), "Entrepreneurial Development: The Indian Experience", Working Paper WP 1992-06-01-D1108, IIM Ahmedabad, India

Pinches, C.E. and K.A. Mingo, (1973), "A Multivariate Analysis of Industrial Bond Ratings", *Journal of Finance*, March 1973, pp. 1-18

Praveena, S., K. Mahendran and T. Samsai, (2015), "An analysis of financial performance of sugar industry in India.", *International Journal of Business and General Management (IJBGM)*, Vol. 4, No. 3, pp.11-20.

Purnama, O., V. Hanitha and T.A. Angreni, (2020), "Financial Statement Analysis to Assess Company Financial Performance.", *eCo-Fin*, Vol. 2, No. 3, pp.168-174.

Rahayu, M. and R.N., Ilham, (2023), "The influence of cash turnover, receivables turnover and inventory turnover on the economic profitability of registered pharmaceutical companies on the Indonesian stock exchange period 2017-2021.", *Journal of Accounting Research, Utility Finance and Digital Assets*, Vol. 1, No. 4, pp.336-341.

Rajak, N., (2022), "Financing of Working Capital in Select Public Sector Oil and Gas Companies in India: A Comparative Study.", *Finance India*, Vol. 36, No. 1, pp.331-342.

Rajan, C. R. and N. Chandrasekaran, (2015), "Drivers of financial performance of sugar industry in India.", *ICTACT Journal on Management Studies*, Vol. 1, No. 4, pp.183-189.

Samiloglu, F. and A.I. Akgün, (2016), "The relationship between working capital management and profitability: Evidence from Turkey.", *Business and Economics Research Journal*, Vol. 7, No. 2, p.1.

Sari, I. A. G. D. M. and I.B.P. Sedana, (2020), "Profitability and liquidity on firm value and capital structure as intervening variable.", *International research journal of management, IT and Social Sciences*, Vol. 7, No. 1, pp.116-127.

Sarwat, S., D. Iqbal, B.A. Durrani, K.H. Shaikh and F. Liaquat, (2017), "Impact of working capital management on the profitability of firms: Case of Pakistan's cement sector.", *Journal of Advanced Management Science*, Vol. 5, No. 3.

Supriati, D., R. Kananto and A. Kusriananda, (2019, February), "The effects of intellectual disclosures capital, debt to assets ratio, debt equity ratio, company size and assets turnover on company profitability.", In 5th Annual International Conference on Accounting Research (AICAR February 2018) (pp. 104-109). Atlantis Press.

Syafrizal, A., R.N. Ilham and D. Muchtar, (2023), "Effect of Capital Adequacy Ratio, Non Performing Financing, Financing To Deposit Ratio, Operating Expenses And Operational Income On Profitability At PT. Bank Aceh Syariah.", *Journal of Accounting Research, Utility Finance and Digital Assets*, Vol. 1, No. 4, pp.312-322.

Warrad, L., (2013), "The impact of working capital turnover on jordanian chemical industries' profitability.", *American Journal of Economics and Business Administration*, Vol. 5, No. 3, p.116.

Weaver, S. C. and J.F. Waston, (2007), "Finance and Accounting for Nonfinancial Manager: Memahami Laporan Keuangan dan Akuntansi Sekelas" MBA PT, Bhuana Ilmu Populer, Jakarta.

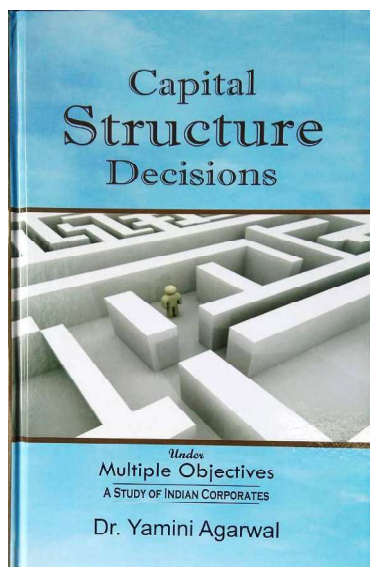
Whittington, G., (1980), "Some Basic Properties of Accounting Ratios", *Journal of Business Finance and Accounting*, Summer 1980, pp. 219-223

Wibowo, S. S. A. and E. Rohyati, (2018), "The effect of working capital turnover and profitability of inventory turnover manufacturing companies listed in Indonesia stock exchange.", *Journal of Applied Accounting and Taxation*, Vol. 3, No. 1, pp.95-98.

Wijaya, L. V. and L.T. Tjun, (2017), "Pengaruh Cash Turnover, Receivable Turnover, dan Inventory Turnover Terhadap Return On Asset Perusahaan Sektor Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia Periode 2013-2015.", *Jurnal Akuntansi*, Vol. 9, No.1.

Wulandari, N. and I. Lubis, (2021), "Influence of Receivables Turnover and Inventory Turnover to Profitability PT Kimia Farma (Persero) Tbk.", *Indonesian Financial Review*, Vol. 1, No. 2, pp. 114-132.

Yusup, W. E. and S. Hariani, (2023), "The effect of receivables turnover, inventory turnover and current ratio on profitability.", *Journal of Risk Management and Business*, Vol. 8, No. 1, pp. 23-32.



## Capital Structure Decisions under Multiple Objectives : A Study of India Corporates

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