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Financial Performance Analysis of Fruit Processing Firms in Manipur, North East India: A Case Study¹

RAJKUMAR ROMESANA SINGH* A. S. YARSO**

Abstract

This study is an attempt at measuring the firm's liquidity, profitability, relationship with solvency and profitability, and financial problems of the firms. The study covers all the fruit processing firms operated in Manipur undertaken for ten years from 2009-10 to 2018–19. The study found that fruit processing industry can play a greater role in the industrialization of Manipur as this industry has a less financial risk for the long term lenders and can meet its short term obligations on time and are also earning adequate profit to pay off their periodical interest charges, and therefore, has the potentiality to attract investors from within and without the state. This industry can be a growth engine for developing the economy of Manipur; provided the state government is able to under it and create a favorable climate for investors to come forward by investing into the sector.

IEL Code : L66, M41, P47

Keywords: Fruit, Processing, Firms, Financial Performance, Liquidity, Profitability, Solvency, Manipur, Farming, India

I. Introduction

WHETHER BIG, MEDIUM, small or tiny, every company needs finance to carry on its business operations. Without adequate finance, no enterprise can accelerate the expansion and development of business; thus, no enterprise can accomplish its targets. The finance function is the most important of all business functions; it is not possible to substitute or eliminate it because it is considered the business's lifeblood and nerve center. The need for finance is continuous and essential for smooth operational, expansion, and growth, and its contingency requirements. The application

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^{*} Doctoral (Ph.D.) Research Scholar, Assam University, Department of Commerce, Babupara Ward No. 5, House No. 22, Jiribam, Manipur 795116, INDIA

^{**} Assistant Professor, Assam University, Department of Commerce, H/No. 17, SMB Ward No. 17, Vivekananda Co-operative Housing Society, Meherpur Silchar, Cachar, Assam 788005, INDIA

and can be a growth engine for developing the economy of Manipur; provided the state government can undertake and create a favorable climate for investors to come forward by investing in the sector. The need of the hour is to conduct training and awareness programme on financial management by the state and provide financial assistance and loan facilities to the firms by the financial institutions.

6.1 Recommendation for Future Research

The present study will benefit many entrepreneurs, individuals, and groups who want to do something new and unique by enabling them to know their financial position and health. The outcome of the study influences future studies since the study has several limitations. A similar study can be conducted by comparing the firms with other states or regions to determine the competitiveness of the firms. The present study may be expanded by studying the reasons for inefficient use of assets by the fruit processing firms and also evaluate marketing and production performances for the extensive outlook of growth and performance of fruit processing firms in Manipur.

References

Balasubramanian, M. (1960), "The Role of Processing of Agricultural Produce in India Rural Economy, "*Indian Journal of Agricultural Economics*, Vol. XV, No. 1, pp. 70-76.

Bhattacharyya, B. (2013), "Problems and Prospects of Fruits and Vegetable Processing Industry: A Study in Kamrup District of Assam", *Asian Resonance*, Vol. 2, No. 4, pp. 38-44.

Bhunia, A., S. Mukhuti and G. Roy, (2011, April), "Financial Performance Analysis-A Case Study", *Current Research Journal of Social Sciences*, Vol. 3, No. 3, pp. 269-275.

Datta, D. (2013), "Use of Financial Ratios in Cluster Analysis of Indian Manufacturing Industries", *The Journal of Industrial Statistics*, Vol. 2, No. 1, pp. 96-107.

Debasis, R. and S. Debasish, (2001), "Profitability Analysis of Indian Food Products Industry : A Case Study of Cadbury India Ltd", *The Management Accountant. ICMAI*, Vol. 36, No. 11, pp. 845-849.

Desai, B. M. and N.V. Namboodiri, (1992), "Development of Food-Processing Industries. *Economic and Political Weekly*, Vol. 27, No. 13, pp. A37-A42.

Desai, D. and A.S. Narayanan, (1967), "Impact of Modernization of Dairy Industry on the Economy of Kaira District. *Indian Journal of Agricultural Economics*, Vol. XXII, No. 3, pp. 54-67.

Durrah, O., A.A. Rahman, S.A. Jamil and N.A. Ghafeer, (2016), "Exploring the Relationship between Liquidity Ratios and Indicators of Financial Performance: An Analytical Study on Food Industrial Companies Listed in Amman Bursa", *International Journal of Economics and Financial Issues*, Vol. 6, No. 2, pp. 435 - 441.

Dutta, S. and S. Borah, (2016), "Financial Performance of Food Processing Industries of Assam", *European Academic Research*, Vol. 3, No. 12, pp. 13090 - 13104, March 2016.

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Eljelly, A. (2004), "Liquidity - Profitability Trade Off: An Empirical Investigation in an Emerging Market", *International Journal of Commerce and Management*, Vol. 14, No. 2, pp. 48 - 61, May 2004.

Endri, E., A. Sumarno and H. Saragi, (2020), "Analysis of Financial Performance: Evidence from Food and Beverage Companies in Indonesia", *International Journal of Advanced Science and Technology*, Vol. 29, No. 5, pp. 4199-4208.

Gowsalya, R. S. and H. Mohammed, (2017), "Financial Performance Analysis", *International Journal for Research Trends and Innovation*, Vol. 2, No. 6, pp. 93-98.

Iqbal, H. and A. Jahangir, (2019), "The Relationship between Liquidity and Profitability in Emerging Countries: Evidence from Bangladesh", *Journal of Finance and Accounting*, Vol. 7, No. 1, pp. 22-27.

Joshi, A. (2013), "A Study Of Profitability Analysis Of Selected FMCG Companies In India", *Indian journal of Applied Research*, Vol. 3, No. 6, pp. 398-370.

Joshi, M., S. Wadkar, P. Veerkar and A. Power, (1999), "Comparative Economies of Scale of Processing Alphonso Mango into Pulp in South Konkan Region", *Bihar Journal of Agricultural Marketing*, Vol. 7, No. 2, pp. 190-194.

Katchova, A. and S.J. Enlow, (2013), "Financial Performance of Publicly -Traded Agribusiness", *Agricultural Finance Review*, Vol. 73, pp. 58-73.

Khaldun, K. I. and I. Muda, (2014), "The Influence of profitability and Liquidity Ratio on The Growth of Profit of Manufacturing Companies", *International Journal of Economics, Commerce and Management*, Vol. 2, No. 12, pp. 1 - 17, December 2014.

Khot, S. and G. Kamala, (1966), "The Role of Agricultural Processing Industries in Economic Development: A Case Study", *Indian Journal of Agricultural Economics*, Vol. XXI, No. 4, pp. 54-59.

Kontus, E. and D. Mihanovic, (2019), "Management of Liquidity and Liquid Assets in Small and Medium-Sized Enterprises", *Economic Research-Ekonomska Istraživanja*, Vol. 32, No. 1, pp. 3253 - 3271, September 2019.

Latha Mani, B. and R.S. Ramesh, (2017), "Assessment of Profitability of Small and Medium Food Processing Enterprises listed in BSE, India with reference to MSMED Act, 2006", *IOSR Journal of Business and Management*, Vol. 19, No. 11, pp. 64-77, November 2017.

Lutf, B. and E.A. Yosna, (2018), "The Impact of Liquidity, Profitability, Activity and Solvency Ratio on Change in Earnings", *Indonesian Management and Accounting Research*, Vol. 17, No. 1, pp. 1 - 17, January 2018.

Macrae, J. (1971), "The Relationship Between Agriculture and Industrial Growth, With Special Reference to the Development of the Punjab Economy from 1950-1965", *The Journal of Development Studies*, Vol. 7, No. 4, pp. 397-422.

Malini, R. and M.A. Banu, (2019), "A Study on Financial Performance Analysis of Indian Tobacco Corporation limited", *Indian Journal of Applied Research*, Vol. 9, No. 2, pp. 20-23, February 2019.

Mani, S. (1975), "Agro Based Industries", Agriculture and Agro-Industries Journal, pp. 2-8.

Misra, B. and S. Sinha, (1960), "A Study of Processing of Agricultural Products and Employment in a Bihar Village", *The Indian Journal of Agricultural Economics*, Vol. XV, No. 1, pp. 93-97.

Nobanee, H., M. Abdullatif and M. AlHajjar, (2011), "Cash Conversion Cycle and Firm's Performance of Japanese Firms", *Asian Review of Accounting*, Vol. 19, No. 2, pp. 147-156.

Padma, D. and K. Prabhakaran, (2019), "Financial Performance of Selected Indian Food Products Industry During Post-Reform Period", *International Journal of Research and Analytical Reviews*, Vol. 6, No. 2, pp. 788-790.

Pearce, J. A., K.D. Robbins and R.B. Robinson, (1987), "The Impact of Grand Strategy and Planning Formality on Financial Performance", *Strategic Management Journal*, Vol. 8, No. 2, pp. 125-134.

Ramachandran, M. and P. Kandhakumar, (2019), "A Study on Financial Performance Analysis of Alangulam Primary Agriculture Co-Operative CreditSociety, Alangulam, Tiruneli District", *Journal of Interdisciplinary Cycle Research*, Vol. 11, No. 12, pp. 595-604.

Rangarajan, C. (1982), "Industrial Growth: Another Look", *Economic and Political Weekly*, Vol. 17 No. 14-16, pp. 589-604.

Saigeetha, S. and S.T. Surulivel, (2017), "A Study on Financial Performance Unsing Ratio Analysis of BHEL, Trichy", *International Journal of Innovative Research in Management Studies*, Vol. 2, No. 3, pp. 31-39.

Sengottaiyan, A. and A.S. Nandhini, (2016), "Liquidity Analysis of Selected Food Processing Companies in India", *International Journal of Scientific Engineering and Applied Science*, Vol. 2 No. 5, pp. 280-293, May 2016.

Sidhu, M. S. (2005), "Fruit and Vegetable Processing Industry in India: An Appraisal of the Post-Reform Period", *Economic and Political Weekly*, Vol. 40, No. 8, pp. 3056-3061.

Sinha, S. and S. Sinha, (1992), "Small-Scale Fruit and Vegetable Processing: Dynamics of Development", *Economic and Political Weekly*, Vol. 27, No. 26, pp. A93-A99.

Smith, M. B. and E. Begemann, (1997), "Measuring Associations Between Working capital and Return on Investment", *South African Journal of Business Management*, Vol. 28, No. 1, pp. 1-5.

Sultan, A. S. (2014), "Financial Statements Analysis - Measurement of Performance and Profitability: Applied Study of Baghdad Soft Drink Industry", *Research Journal of Finance and Accounting*, Vol. 5, No. 4, pp. 49-56.

Teruel, P. J. and P.M. Solano, (2007), "Effects of Working Capital Management on SME Profitability", *International Journal of Managerial Finance*, Vol. 3, No. 2, pp. 164-177.

Venkatraman, N. and V Ramanujam, (1986), "Measurement of Business Performance in Strategy Research: A Comparison of", *The Academy of Management Review*, Vol. 11, No. 4, pp. 801-804.

Yarso, A.S. (2019), "Entrepreneurial Financial Performance of Fruit Processing Units in Manipur", *International Journal of Multidisciplinary Studies*, Vol. 4, No. 1, pp. 15-27.

Yarso, A.S. (2002), "*Performance Evaluation of Fruit Processing Industry in N.E. India*", Working Paper, Manipur University, Imphal.

Zariyawati, M. A., M.N. Annuar, H. Taufiq and A.A. Rahim, (2009), "Working Capital Management and Corporate Performance:Case of Malaysia", *Journal of Modern Accounting and Auditing*, Vol. 5, No. 2, pp. 47-54.

Annexure I

Selection of Panel Data Models

The selection of appropriate model between Polled, Random and Fixed model is done with the help of the following steps:

Step 1: The Breusch – Pagan test is used for the selection of an appropriate model between Pooled and fixed/random effect model with the help of STATA 16 software. The null hypothesis and alternate hypothesis are as follows:

Hypothesis H₀: *Variances of the unit specific error are all equal.* Hypothesis H₁, *Variances of the unit specific error are not equal.*

The P-value less than 0.05 means rejecting the null hypothesis and accepting the alternate hypothesis which means that the error variances are not equal and the effects are random and accepting the fixed/random effect model for analyzing panel data.

The Table XII (Breusch-Pagan test) verifies that the fixed/random effect model is the best fit model to examine the impact of liquidity ratio and solvency ratio on the profitability of the firms measured by Return on assets, as the result found that the Pvalue of 0.0030 which is less than the P-value of 0.05 resulting in rejecting the null hypothesis.

Table XII Breusch-Pagan / Cook-Weisberg Test for Heteroskedasticity.				
Ho: Constant variance				
Variables: Current ratio, Quick rati	o, Debt equity ratio, Interest coverage ratio			
Chi- square (4)	16.0300			
Prob > chi - square	0.0030			

Source: Self Calculated on the basis of collected data by using STATA 16.

Step 2: Application of Hausman test for selecting the appropriate model between the random effect model and fixed-effect model. The null hypothesis and alternate hypothesis are as follows:

Hypothesis H_o: *Random effect model is preferred* Hypothesis H_o. *Fixed effect model is preferred*

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The P-value less than 0.05 mean rejecting the null hypothesis and accepting the alternate hypothesis which means that the fixed effect model is adequate and preferred for the study.

The Table XIII (Hausman test), verifies that the fixed effect model is the best fit model to examine the impact of liquidity ratio and solvency ratio on the profitability of the firms measured by return on assets (ROA), as the result found that the P-value of 0.0351 which is less than the P-value of 0.05 resulting in rejecting the null hypothesis.

	Table XIII Output of the Hausman Test	
Chi-Square statistic	Chi-Square d.f.	Prob.
0.34	4	0.0351

Sources: Self Calculated on the basis of collected data by using STATA 16.

Annexure II Table XV Showing Sample Firms of the Fruit Processing Units and Their Major Products in Manipur

<u>S1</u> 1	no Registered firm	Brand name	Address	Products
1	M/S Modern Foods	Sana	Sega Road, Imphal	Pickles: bamboo shoot
			West-795001,	pickle, mango pickle,
			Manipur.	king chilly pickle, fish
				pickle, chicken pickles,
				pork pickles, garlic
				pickle.Juice: pineapple
				drinks, lemon drinks,
				litchi drinks.Candy:
				amla, wild apple, ginger
				candy, etc.Others:
				pineapple jam, chow
				mien, turmeric powder,
			D1 4 1	spices
2	M/S Meira Foods	Meira	Bhramapur Aribam	Pickles: instant
			Leikai Harinath Rd,	fermented pickles,
			imphai west-795001	, rermented fish with king
			Manipur	chilly, salty nog plum,
				soya and king chilly
				pickles mix vogetable
				pickle, mushroom
				pickles lemon pickle
				hamboo shoot pickle
				mango pickle king chilly
				pickle, fish pickle, garlic
				pickle.Candied fruit:
				salty wild apple, salty
				amla, salty mix fruit,
				ginger candy, plum
				candy, pineapple candy,
				sweet wild apple candy,
				olive candy, mango
				candy, star fruit candy,
				tamarind candy, plum
				candy, sweet amla
				candy, plum delight
				candy.Dried fruits:
				salty heimang powder,
				salty dehydrated mix
				fruit, salty lemon, salty
				dry mango.Juice:
				pineapple drinks,
				pineappie cubes in
				syrup, tresn pineapple
				ning arinks. Others:
				formanted save base
				fried rice flecks freeb
				sova chunk black rice
				formented source hours
				neas besan flour
				peas besan nour.

(Contd....)

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3	M/S Ihangam Agro	L1KIA	Chingmeirong East, Imphal East – 795001, Manipur Squash: lemon, orange, passion fruit, pineapple.Juice: pineapple drinks, nimbu pani (lemon drinks), orange drinks, litchi drinks, mango drinks.Jam: pineapple jam, mixed jam.Sauce: tomato saucePickles: mixed pickle, garlic pickle.Others: pineapple cubes, bamboo shoot, packaged drinking water, bread, cookies, etc.
4	M/S Ratna Fruit	Ratna	Takyel Industrial Estate, C-19, Imphal West- 795001, Manipur Juice: pineapple drinks, lemon drinks, orange drinks, litchi drinks, mango drinks.Squash: lemon, orange, pineapple.
5	M/S Khudol Foods	Khudol	Takyel Industrial Estate, C-25, Imphal West- 795001, Manipur Pickles: garlic pickle, sougri pickle (roselle), fermented fish pickle, lemon pickle, fish pickle, king chilly pickle, fermented bamboo shoot pickle, hog plum pickle,Dried fruits: salty wild apple, salty lemon, salty dry mango, bitter bean mixed, plum candy, salty amla,Candy: papaya candy, star fruit candy, mixed fruit candy
6	M/S Para Fruit Produc	cts Para	Takyel Industrial Estate, C-12, Imphal West- 795001, Manipur Juice: pineapple drinks, lemon drinks, orange drinks, litchi drinks, mango drinks, mixed fruit drinks.
7	M/S Victory Foods	Victory	Khurai Thoidingjam Leikai, Lamlong, Imphal East – 795010, Manipur Pickles: fish pickle, chicken pickle, dry fish pickle, prawn pickle, fermented soya bean pickle, garlic pickle, wild apple pickle, mushroom pickle, mango pickle, chilly pickle, etc.Candied fruit: amla, wild apple, elephant apple, pineapple, mango, olive, plum. tamarind. heibung. etc.
8	M/S Mumu Foods	Mumu	Khagempali machin, Thangjambon, Imphal West- 795001, Manipur Pickles: chicken pickle, pork pickle, fish pickle, prawn pickle, fermented fish pickle, fermented bamboo shoot pickle, fermented soya bean pickle, king chilly pickle, bitter bean pickle, hilsha chilly pickle, garlic pickle.Fry: pawn dry fry, hilsha dry fry, fermented soya bean dry fry.

Table XV (Continued)

Source: Self Compiled by researcher on the basis of data obtained from Department of Commerce and Industries (2008-2015)

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