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

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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.

JEL 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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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


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Annexure I

Selection of Panel Data Models

The selection of appropriate model between Pooled, 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 $H_0$: Variances of the unit specific error are all equal.
- Hypothesis $H_1$: 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 $P$-value of 0.0030 which is less than the $P$-value of 0.05 resulting in rejecting the null hypothesis.

**Table XII**

<table>
<thead>
<tr>
<th>Breusch-Pagan / Cook-Weisberg Test for Heteroskedasticity.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ho:</strong> Constant variance</td>
</tr>
<tr>
<td>Variables: Current ratio, Quick ratio, Debt equity ratio, Interest coverage ratio</td>
</tr>
<tr>
<td>Chi- square (4)</td>
</tr>
<tr>
<td>Prob &gt; chi - square</td>
</tr>
<tr>
<td><strong>Source:</strong> Self Calculated on the basis of collected data by using STATA 16.</td>
</tr>
</tbody>
</table>

**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 $H_0$: Random effect model is preferred
- Hypothesis $H_1$: Fixed effect model is preferred

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**

<table>
<thead>
<tr>
<th>Output of the Hausman Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square statistic</td>
</tr>
<tr>
<td>10.34</td>
</tr>
<tr>
<td><strong>Sources:</strong> Self Calculated on the basis of collected data by using STATA 16.</td>
</tr>
</tbody>
</table>
### Annexure II

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

<table>
<thead>
<tr>
<th>Sl no</th>
<th>Registered firm</th>
<th>Brand name</th>
<th>Address</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M/S Modern Foods</td>
<td>Sana</td>
<td>Sana Sega Road, Imphal West–795001, Manipur.</td>
<td>Pickles: bamboo shoot pickle, mango pickle, 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, spices</td>
</tr>
<tr>
<td>2</td>
<td>M/S Meira Foods</td>
<td>Meira</td>
<td>Bhramapur Aribam Leikai Harinath Rd, Imphal West–795001, Manipur</td>
<td>Pickles: instant fermented pickles, fermented fish with king chilly, salty hog plum, soya and king chilly pickle, stuffed chilly pickles, mix vegetable pickle, mushroom pickles, lemon pickle, bamboo 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 himaang powder, salty dehydrated mix fruit, salty lemon, salty dry mango. Juice: pineapple drinks, pineapple cubes in syrup, fresh pineapple ring drinks. Others: pineapple jam, dried fermented soya bean, fried rice flacks, fresh soya chunk, black rice, fermented soya beans, peas besan flour.</td>
</tr>
</tbody>
</table>

(Contd....)
### Table XV (Continued)

<table>
<thead>
<tr>
<th></th>
<th>M/S</th>
<th>Location</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>M/S Para Fruit Products Para</td>
<td>Takyel Industrial Estate, C-12, Imphal West-795001, Manipur</td>
<td>Juice: pineapple drinks, lemon drinks, orange drinks, litchi drinks, mango drinks, mixed fruit drinks.</td>
</tr>
<tr>
<td>7</td>
<td>M/S Victory Foods Victory</td>
<td>Khurai Thoidingjam Leikai, Lamlong, Imphal East – 795010, Manipur</td>
<td>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.</td>
</tr>
<tr>
<td>8</td>
<td>M/S Mumu Foods Mumu</td>
<td>Khagempali machin, Thangjambon, Imphal West-795001, Manipur</td>
<td>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.</td>
</tr>
</tbody>
</table>

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