

Internship Report

On

**“Overall Performance Metrics of Ahmed Impex Private Limited  
by Ratio Analysis”**

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by Ratio Analysis”**

**Prepared for:**

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## Letter of Transmittal

8<sup>th</sup> January 2019

Ms. Tanzina Hossain

Associate Professor, Department of Business Administration,  
Faculty of Business & Entrepreneurship, Daffodil International University.

**Subject: Submission of the internship report titled “Overall Performance Metrics of Ahmed Impex Private Limited by Ratio Analysis”.**

Dear Madam,

It is a great pleasure to submit the internship report titled “Overall Performance Metrics of Ahmed Impex Private Limited by Ratio Analysis”. This written report, is the outcome from the hands on work experience, which is gathered during the internship period between Oct 2017 to Dec 2017 with the organization named “Ahmed Impex Private Limited”, a growing exporter in the Bangladesh sea food industry. In writing the report all of the written provided rules from the Academic Supervisor, of the Department of Business Administration of the DIU has been maintained. Sufficient dedication and academic homework has been taken ahead by the intern to make the report’s contents as valid as possible on the academic context.

I express my heart full appreciation to you to go through this report and provide valuable comments in this regard.

Sincerely yours,

TANVIR AHMED

ID: 181-12-144; Executive MBA, Major: Finance

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## Certificate of Approval

This is to certify that Mr. Tanvir Ahmed, student ID number 181-12-144, enrolled in the Executive MBA Program of Daffodil International University has completed his internship in the organization titled “AHMED IMPEX PRIVATE LIMITED in the Fall 2018 Semester. During his tenure of the internship, the student has been taken regular mentorship, guidance and supervision in order to prepare his Internship Report. The Internship Report titled “Overall Performance Metrics of Ahmed Impex Private Limited by Ratio Analysis”, has been completed as per the detail required guidelines of the Department of Business Administration of the Daffodil International University.

I wish him all out success in his future endeavor.

Best Regards,

A handwritten signature in black ink, reading 'Tanzina Hossain', is written over a horizontal line. Below the signature, the date '21/1/19' is written.

Ms. Tanzina Hossain

Associate Professor

Department of Business Administration

Faculty of Business & Entrepreneurship

Daffodil International University



## Student's Declaration

This is Tanvir Ahmed, student ID 181-12-144, enrolled in the Executive Master of Business Administration (EMBA) program of Daffodil International University, where the Major concentration is in the discipline of Finance. I have successfully completed my internship program from Ahmed Impex Private Limited's head office division. This report has been prepared by analyzing ratio analysis of the financial statements of the Ahmed Impex Private Limited and also by other relevant on the job information. This report has been written on the basis of hands on work experience during the three month's internship period.

I hereby declared that, the entire contents of this report is original in nature and the texts are not being directly copied from other sources.

Sincerely yours,

A handwritten signature in black ink, reading 'T. Ahmed', is written over a horizontal line.

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## Acknowledgement

I am aweful the Almighty to gave me physical and mental strengths to undergo the required courses successfully and enriches my knowledgebase through accomplishment of the courses which was a pre requirements for being an eligible internee.

I am highly indebted to my supervisor Ms. Tanzina Hossain, the Academic Director of the MBA program of the DIU Uttara Campus, under whose direct supervison I had completed the internship report, I also owe for all the moral support, all time cooperation, inspirations received from her time to time in completing the internship program. It must also be noted, that in making of this internship report, various other's people effort are highly indebted.

As such, I would like to show my sincere gratitude to the authority of the Ahmed Impex Private Limited to allow me to prepare a report which is soleby based on company confidential report of the organization. Immense support had been received from the Human Resources Manager Mr. A. N. M Tawhid Anwar, Fish Hatchery Manger Mr. Surid Haldar, Procurement and Supply Chain Manager Mr. Kamrul Hossain, Advocate Jahangir Alam, who in fact handled over the most confidential financial statement reports of the AIPL and also the MFBPL, under the strict approval from the Managing Director of the AIPL Brig. General Mr. Ahmed Haider and Dr. Mahesh Patel.

Special thanks and appreciations also goes to all the administration personnel of the Daffodil International Univeristy, the Library head, the Library incharge – who had given huge acces to explore the journals and academic resources to develop the internship report's contents.



## Executive Summary

Fisheries industry in Bangladesh represents one of the most prominent, productive and dynamic sectors in Bangladesh. The fisheries industry of Bangladesh is playing an progressively critical part within the economy for the last few decades. It contributes 3.61 percent to our national GDP and around one-fourth (24.41 percent) to the agrarian GDP.

The Ahmed Impex Private Limited (AIPL) is just one of the small player, who is engaged in this fish industry for only more than one decade. This study deals a with a great deal of financial aspect analysis of the AIPL, where the ratio analysis of financial statements have been rigorously implemented. Financial Ratios are critically quantitative analysis tools in both the financial and non financial industries. Ratio analysis allows great ways to compare the financial state of one's business against other businesses activities or performances within an industry or between multiple businesses and businesses in other industries. In financial sectores, the lenders such as banks, leasings companies and potential investors often depend on the financial ratio analysis prior to make important lending or investing decisions.

The study has been segregated in seprate sections, and each section has been specified on the table of contents. A proper choronogy has been followed to make better sequencing of the topics.

Section 1 discusses introduction, origin, objective, scope, research methodology sources of the report and others. Section 2 illustrates organization overview, background, vision, mission, products of the AIPL's and others. Section 3 shares literature review in details. Section 4 discusses ratio. Section 5 provides findings, recommendations and conclusions. References, illustrations will come there by. Appendices will share the AIPL's financial statements.



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**Section 1**  
**Introduction**

## **1. Introduction:**

Bangladeshis are one of the world's most famous fish producing nation. Fish industry is contributing altogether in food safety and security by providing the most essential quality animal protein. The fisheries industry of Bangladesh is contributing as high as 3.61% to GDP and 24.41% to agriculture based GDP (DOF 2017). Fish sector constitutes to almost 60% of our daily animal protein intake value (DOF 2015). Almost higher than 11 percent of the total population of the country are engaged with this industry as of their full time and part time bases to continue their livelihoods. The company Ahmed Impex Private Limited (short acronym - AIPL), who is the center point of this study, is just one of the small player in the fish export industry sector. AIPL has been fully engaged in the arena of processing of various frozen fish, live fish and chilled fishes and exporting in various international markets such as United States, European Union, Australia, United Kingdom, middle eastern countries, and other famous Asian destinations since it's inception.

An organization's financial performance can be extracted from the financial report of the organization. The major usefulness of the financial ratios depend on the proper translations as well as interpretation of them and the intelligence level of the users. This study deals with a great deal of financial ratio analysis of the AIPL, where the financial statements have been rigorously studied prior implementation of the techniques. Financial Ratios are critically quantitative analysis tools used in both the financial and non financial industries. Ratio analysis allows great ways to compare the financial state of one's business against other businesses activities or performances within an industry or between multiple businesses and businesses in other industries. In financial sectors, the lenders such as banks, leasing companies and potential investors often depend on the financial ratio analysis prior to make important lending or investing decisions.

### **1.1 Origin of the study:**

In order to fulfill the academic degree requirements of the Master of Business Administration (MBA)/ Executive Master of Business Administration (EMBA) study from the Daffodil International University; an internship program which carries the weight of 3 (three) credit hours is a must to do prerequisites. This study has been originated to fulfill the core requirements of the degree program. Generally an internship is termed as a paid or not paid limited time periodical

hands on work experience with an organization's specific work division or department. As such, this study has been undergone during the time period from Sep 2017 to Dec 2017, with the company named "Ahmed Impex Private Limited", located at House No. 14, Road No. 1/A, Sector 13, Uttara Dhaka 1230, Bangladesh. As the major focus of this report, is to analyze the ratio analysis of the company's financial statement, the interaction of the business work flow has been limited within the Accounting and Finance division, Procurement and Supply Chain division, the Factory and Hatchery plants and with the Internatinal Sales department's personnel.

### **1.2 Objective of the Study:**

1. To have an indepth understanding of the current business problems of the AIPL, discovered by the Ratio Analysis of the Financial Statements, and to generate recommendations on how to overcome those identified problems.
2. To find out the overall efficiency and capability of the AIPL to generate cash flows from operating its business operations and the associated risks; and to give recommendations.
3. To find out how efficiently the company AIPL is performing it's day to day tasks, or operational performances; especially while dealing with the collection of receivables from the market; and how effectively the AIPL's assets are being used and inventory's are getting managed; and to give recommendations.
4. To find out how much financial ability does the AIPL possess to meet up it's short term obligations and long term obligations; and to give recommendations.
5. To find out the AIBL's ability to generate profits from its resources especially from the utilization of it's assets; and to give recommendations.

**1.3 Scope of the study:** The study of this report is to explore and analyze the overall capability and efficiency of the company Ahmed Impex Private Limited (short acronym: AIPL) based on ratio analysis of the financial statements of the company for the last three years, ranging from 2015 to 2017. Financial ratios are needed to explained in the context of other information, which are considered as the benchmarks or the industry standards. Generally, the financial ratios of one company are needed to be compared with those of its major competitors. In this report, the performance matrices of the AIPL is compared with one of the industry leader in the sea food export business, which is "Marine Fresh Bangladesh Private Limited" (short acronym: MFBPL),

and financial statement of the MFBPL for the same range of periods (2015-2017) has also been extracted do the comparisons. The report has been conducted between October 2017 to Dec 3017, a total of three month's period. All the analysis and calculations had been performed with the spreadsheet application Microsoft Excel 2016 versions, by the usage of automated financial formula packs.

**1.4 Research Methodology:** To conduct this study, analytical research methodology has been applied vastly, which is a specific category of research that engages critical thinking skills as well as the evaluation of facts and information in relation with the research being conducted. Analytical research methodology is always helpful to find out the most relevant information. It is indeed the analytical research, through which an investigator discovers critical details to add up new ideas to the material being produced.

Ratio analysis of the financial statement has been chosen as tools and techniques which has been implemented vastly in this study to discover all the broad and specific research objectives, and thus make conclusions of this analytical research methodology. The ratios are not only being just calculated, each ratios are being supported with sufficient interpretations, and interpretations are also being justified with cross sectional matching of the ratios.

## **1.5 Sources of the Report:**

### **1.5.1 Relevant primary sources:**

- ✓ Observational study has been implemented on daily work flow, which ranges the observation of the Accounting and Finance divisional work flow, and also the work flows of the Procurement and Supply Chain, Fish Purchasing agents, Fish sourcing field level labours, Credit collection officers and personnel, and other relevant authorities;
- ✓ Small scale Focus group casual meetings;
- ✓ Other Informal discussion with the Managing Directors' of the AIPL, Bank Loan officers, Leasing companies which has been provided non-current assets to the AIPL.

### **1.5.2 Relevant secondary sources are:**

- ✓ Consecutive three years (2015, 2016 and 2017) reports as the below reports from both the AIPL and the MFBPL
  - Statement of Profit or Loss and Other Comprehensive Income reports
  - Division of Net Income After Tax reports
  - Partner's Capital Statement reports
  - Balance Sheet
- ✓ Department of Fisheries (DOF) Statistics of Bangladesh three yearly reports.
- ✓ Bank and Leasing company's limited edition loan manuals, credit recoveris terms and condition articles, sells brochures, open internet sources.

### **1.6 Limitations of the study:**

- ✓ Due to data privacy, the intern faced limitations on much details on Non current assets documentations, collateral specifications, terms, conditions, limitations have also been experienced when the intern did not gather specific reading materials which relates with the notational explanation of the financial statements. Some times basic gauges or general assumption has been used up to overcome such barriers.
- ✓ The Open source databases are still not much enriched especially on fishery export, fishery business practices related databases, information, analysis.
- ✓ Lack of up to date information also causes certain limitaitons of the study.



## **Section 2**

### **Organization Overview**

## **2. Organization Overview:**

### **2.1 Background of the Ahmed Impex Private Limited:**

Ahmed Impex Private Limited, holding a short acronym of “AIPL”, was established in the year 2005 by the two Retired Brigadier General namely Mr. Ahmed Haider and Mr. Ahmed Faruq, in association with the three overseas expatriates investors Dr. Gary Yan (Citizenship-United States), Dr. James Cook (Citizenship-United States) and Dr. Mahesh Patel (Citizenship-Canada). All the three overseas investors and expatriates had vast academic qualifications in the field of Fisheries Science, Fisheries Research, Aquaculture System and International Fisheries Supply Chain Network and had vast work experience for both of their countries governmental and non-governmental organizations.

For the ease of reading conventions in this report, the short acronym of AIPL will be used repeatedly, which will always carry the meaning of Ahmed Impex Private Limited in this report.

AIPL had been formed as per the The Partnership Act 1932 of Bangladesh, with the above five mentioned legal partner’s investment resources in January 2005. In corporation of the AIPL, Foreign Private Investment (Promotion And Protection) Act, 1980 of Bangladesh had been accurately followed up. As of today, the company has not yet made any enlistment in the Securities and Exchange Commission of Bangladesh, and have been decided to operate as of Partnership Company basis. AIPL has been fully engaged in the arena of processing of various shrimp, which has ranged from tiger, fresh water, cat, gray, harina, white, brackish, and other fresh water fish, live eel fish, live crabs, most popular chilled fishes and fishery products for export in various international markets such as United States, European Union, Australia, United Kingdom, middle eastern countries, and other famous Asian destinations since its inception.

The AIPL’s fishery plant and the various hatcheries and finishing ponds are located in the various government approved fishery zones of Khulna, Bangladesh. Khulna is considered as of the prime shrimps processing zone of Bangladesh. Including the AIPL, there are other 42 Seafood Processing

company who are continuing their operation successfully, amongs those 42, only 35 are holding licenses from FDA, EU approval, HACCP certifications. Majority of them also do hold IFS, ISO, BRC and other certifications. The plant site of the AIPL is been artificially converted to be completely suitable for the entire sea food processings. The availabitliy of easy import of fish raw materials from China, Malaysia and Singapore, plus the ease of communication of facilities by highway and other route has made the fish plant and hatcheries a much attractive industry to employ the local labor force of Khulna's youth.

AIPL has already created it's own space in the international frozen, live and chilled fish market. AIPL provides sufficient facilities in order to produce high quality and safe to consume fish and fish related products, this plant has already accomplished US FDA Code Number. BK-29 & EU Approval Number. KLN-18, which gave the AIPL complete access and full cleareance to export it's full range of fish and fish relatd products in the entire United States and European Unions – live, chilled an frozen food market. The AIPL has already provided significant contribution in the fish export sector of Bangladesh for the last one decade.

At the same time, the AIPL has already advanced its present facilities to fullfil all the minimum requirements of the European Union Directives and also the US FDA's HACCP Rules and Regulations. The AIPL excels is getting much acceptance in the glbal live, chilled and sea food international markets by providing the finest seafood from Bangladesh with sound modern established processing plant which is designed and engineered under the supervision of Fish and Agricultural and Marine Experts. The AIPL's core facilities consists more than 12,000 square feet of freezing/ refrigerate warehouse space, which also includes 20,000 square feet area for Processing and a separate Factory Floor space of above 30,000 square feet which makes it an advanced capabilities in this fisheries industry.

It must also be noted that as all the fish importing countries has become much aware on all fish import activities, the Managing Partners of the AIPL along with it's present Management team has fully agreed to adopt the HACCP guided Quality Management Program in their fish processing stablishment zone.

For this reason, the AIPL has already successfully carried out Quality Assurance and Management program based on the HACCP to fillup the all the major requirements to prevent anticipated hazards by the exercising of accurate remedial measures in the different control points to assure the safety of live, chilled and frozen fish and fisheries products.

**2.2 The Vision, Mission and Strength of the AIPL:** The AIPL recruits highly talents team members who are highly enables to fulfill all the challenging requirements from the customers. The AIPL is always committed to offer industry comparative attractive prices in its full range of products. The AIPL is also committed to the highest standards and quality, to as much natural and organic as possible, the AIPL always maintain in house quality control expert to reassure highest possible standards of purity, quality and hygiene in every possible stages of processing and production. The AIPL is highly committed to fulfill the demand and needs of customer base, and always serious on customers interest. Customer satisfaction is another prime goal of the AIPL's team members.

**2.3 The AIPL's Addresses: Head Office:** House No. 14, Road No. 1/A, Sector 13, Uttara Dhaka 1230, Bangladesh.

**Dhaka Packaging Center:** 525, Noldhog, Turag, Uttara, Dhaka.

**Khulna Office:** Ahmed Impex Private Limited, Khan Aga Sadek Chamber (Second Floor), 56, New Jessore Road, Khulna – 9000, Bangladesh.

**New York Office:** 1677 W, 11th Street Brooklyn, New York – 11223, USA.

#### **2.4 The Products of the AIPL:**

The AIPL most common supplying and export list of products are as below:

- Shrimp/ *Penaeus Semisulcatus*
- Green/ Cat Tiger Shrimp (*Semisulcatus Penaeus*),
- Harina/ Gray Shrimp (*Metapenaeus Monoceros*),
- White Prawn/ Chaka (*Penaeus Indicus*),
- Rainbow Shrimp (*Parapenaeopsis Sculptilis*),
- Scampi (*Macrobrachium rosenbergii*),
- Fish like Gift *Telapia/Nilotica (Oreochromis niloticus)*,

- Asian Sea Bass (*Lates Calcarifer*),
- Ilisha (*Tenuialosa ilisha*),
- Pangasius (*Hypophthalmus*),
- Silver Pomfret (*Pampus Chinesis*)
- Crub(*Portunus sanguinolentus*),
- Gastropods,
- Pelecypods,
- Dry fish and maw,
- Live Crabs ,
- Live Eel fish/ Yellow eels, swamp eels,

### **2.5 Some of the AIPL's most selling products with description: Black Tiger Shrimp:**

This category of shrimp is the most world wide common cultured shrimps in the world. It's scientific name is *penaeus monodon*, it is also named as jumbo tiger prawn, giant tiger prawn. This kind of shrimps are much meaty, firm textured, juicy and mild in flavor. Generally, this type of shrimp is the most common farmed shrimp in the international seafood trade business.

### **Fresh Water Shrimp:**

The scientific name of such shrimp is *Macrobrachium rosenbergii*, It is popular due to it's value of food sources. It is also be named as of the giant river prawn or sampi. This kind of shrimp is mostly farm raised, contains meaty, mostly tender, light in colored and it is contains more pronounced flavor than other species.

### **Cat Tiger Shrimp:**

The Scientific Name is *Penaeus semisulcatus*, the market name is Cat Tiger shrimp, the common names are in English - Green tiger prawn, in French - Crevette tigrée verte, in Arabic – Rubian, in Japan – Kumaebi, in Iran - Maygo Movzi.

### **Harina Shrimps(Metapenaeus Monoceros):**

The Scientific name is *Metapenaeus Monoceros*, it belongs to the Family of *Penaeidae*, the market name is Harina shrimp/ Brown Shrimp, common and commercial name is Speckled shrimp, Indian name is Koraney chingri; Honye chingri, Japan name is Yoshiebi, South Africa name is Ginger prawn.

**White Prawn (Penaeus Indicus):**

The Scientific name is *Penaeus indicus*, its market name is Chaka, White Prawn, common names are in Australia - Banana prawn; Indian banana prawn; Red-legged, banana prawn; in Germany – Hauptmannsgarnele, in India - Jinga; Naran; Chapda chingri; Vella chemeen, in Japan - Indo-ebi, in Pakistan - Jaira; Jiara, in Iran - Banana Shrimp, in USA - Indian white shrimp.

**Table T2.1: A Short Review of the Total Owner’s Equity Segregation among the Managing Partner’s of the AIPL**

Amount in Taka

Period	Brig. Gen Ahmed Haider, Capital	Brig. Gen Ahmed Faruq, Capital	Dr. Gary Yan, Capital	Dr. James Cook, Capital	Dr. Mahesh Patel, Capital	Total Owner's Equity
Year 2015	16,811,630	16,811,630	8,155,815	8,155,815	4,330,543	54,265,433
Year 2016	21,527,396	21,527,396	10,151,465	10,151,465	5,459,273	68,816,995
Year 2017	24,694,799	24,694,799	11,369,400	11,369,400	5,961,272	78,089,670

**Table T2.2: A short review of category of Manpower employed by the AIPL, and the total numbers, as of Dec 2017**

Category	Total Numbers	in Percentage
Administration, Finance, International Sales, Marketing, Sales and Distribution, Supply Chain Management, Accounting, other Admin Executives, clerks	33	4.39%
Fish Hatchery Labours	150	19.97%
Fish Nursery Labours	60	7.99%
Local Fish Market Labours	110	14.65%
Fish Feeding farmers	98	13.05%
General Fish farmers	120	15.98%
Fishermen	130	17.31%
Others	50	6.66%
<b>Total</b>	<b>751</b>	<b>100.00%</b>

**Section 3**  
**Literature Review**

### 3. Literature Review

In very simple words, Ratio Analysis is a sort of quantitative analysis which can be founded from a company's financial statements. It is vastly used to judge or evaluate almost all aspects of a company's operating as well as financial performance. There can be various relationships between a single financial report's various financial accounts and between forecasted relationships from one point of time to the another. Ratios are a easy to use tool to express these relationships. Ratios basically says one measure in relation to another, normally as a quotient.

There has already been performed broad academic research which has analyzed the significane importance of ratios to forecast stock returns or credit crisis. All these researches have observed that the financial statement ratios are very much effective to choose the right investments and to gaudge in advance any upcoming financial distress. In almost all sorts of business industries, real practitioners regularly use ratios to find out the correspond value of the corporations and also for securities.

#### 3.1 Tools and Techniques of Ratio Analysis:

**3.1.1 Any comparison must needs a BASIS:** All the tools and techniques used in ratio analysis is in fact facilitate the evaluations of company data. Now, evaluations needs comparisons. It is not easy to say that a company's financial performance is "good" withtout mentioning the basis for comparison. In assessing a company's ability, the analyst draws comparisons to other companies and over time.

**3.1.2 Size of companies doesn't matter:** A financial analyst who wish to compare the liquidity or profitability of multiple companies who are competing in global industry, even if they differ significantly in size; implementing ratios (which shows one number in relation to another) and common size financial statements can easily remove the size barrier and provide a better relevant comparison.

**3.1.3 How to compare companies if report in multiple currencies?** To compare across companies which is reported in various multiple currencies, one way is to translate all reported data into a common currency using exchange rates on the ned of a period. Also the usage of average exchange rate is just an another approach. Indeed, it is true that, comparibility can also be achieved without translating the currencies, and by only using the ratios themselves.



## **3.2 Four Aspects of Ratio Analysis:**

**3.2.1 Aspect 1: Ratio is not the Final Answer, it is an Indicator of certain aspect:** There are various aspects of ratio analysis which are significant to understand. First of all, the calculated ratio is not “the Final Answer”. Rather, this calculated ratio is just an indicator of certain aspect of a company’s performance, which tells us what has happened but not why that had happened. Consider an example, where a Finance Manager wants to find the answer of a question: Which of the corporations was more profitable? To find, answer of this question, the net profit margin, which shows profit in comparison to revenue ( $\text{Net income/Revenue}$ ), can provide some clue to the Finance Manager.

Further consider that, Company X has made Tk. 100,000 of net income and Company Y made Tk. 200,000 of net income. It is clearly visible, that Company Y has generated almost double the volume of net income than Company X, does that convey more profitability? Let us consider also that the revenue made by Company X was Tk. 2,000,000, and thus made a net profit margin of 5 percent; where as Company Y made a revenue of Tk. 6,000,000, and thus net profit margin was only 3.33 percent. When we express the net income as a percentage of revenue, that clear up the relationship: for each Tk. 100 of revenue, it is Company X which makes Tk. 5 net income, whereas Company B only earns Tk. 3.33 for each Tk. 100 of revenue. At this point, it is much easier to answer the question of which company can be more profitable in percentage terms: certainly it is Company A who was more profitable, because they made higher net profit margin of 5 percent. No matter even if Company Y made much higher absolute net income and revenue, in terms of percentages, Company X stood in much better position. It must be noted that this ratio only telling us which company is in better position, but not why it is in that position. More analysis is needed to find out the reason (it can be due to higher sales prices or better cost of goods sold or operational cost)

**3.2.2 Aspect 2: Differences in accounting practices can misrepresent (distort) meaning of Ratios:** The second critical aspect of ratio analysis is that the difference in the accounting practices or policies can misrepresent (distort) ratios, and a comparison which is meaningful, may, therefore, involve adjustments to the financial data.

**3.2.3 Aspect 3: All the ratios are not necessarily relevant:** The third aspect says that not all the ratios are essentially relevant on a specific analysis. It is one’s analytical skills on which ratios he will choose to answer a certain research question.

#### **3.2.4 Aspect 4: The interpretation of the ratio is a MUST, only computation is not enough:**

The fourth aspect says that the ratio analysis does not come to an end with its computation; an interpretation of the result is the most essential. It has been seen in practice, that the difference in ratios across companies and across time can be subtle, whereas the interpretation is situation specific.

#### **3.3 No authoritative bodies can specify list of ratios or formulas:**

In the finance world, no authoritative bodies can specify any exact formulas to compute ratios or provide a certain standard, or a comprehensive list of ratios. Even the names of ratios or formulas differ from one analyst to other analyst or from one database to other database. One can in fact generate limitless number of ratios. But, in practice, there are some widely accepted ratios which have been observed to be helpful to use.

#### **3.4 How an analyst should interpret Unknown Ratios?**

An analyst may sure be face ratios with which he may not be familiar with, in cases like such, if he faces unfamiliar ratio, he can judge the underlying formula to advancing himself into what the ratio is measuring. If an analyst faces a ratio for the first time, he should judge both the numerator and denominator to evaluate what the ratio is attempting to measure and how to properly correspond the interpretation.

Consider a ratio formula,  $\frac{\text{Operating Income}}{\text{Average Total Assets}}$ , and consider an analyst, who is trying to compare two companies data, one having 12 percent and the other having 8 percent. Analyzing the numerator and denominator saying that this ratio is trying to find out the amount of operating income generated by the amount of invested average total assets. Based on this, it is much easier to say that investing Tk. 100, and then getting Tk. 12 is certainly much better than to receive Tk. 8. It can be also say that this particular ratio is trying to say something on profitability, and the efficiency of asset utilization.

#### **3.5 Confusion on Input data, Begin Balance, End Balance or average? Which one is right?**

In order to calculate many ratios, such as ROA or ROE, balance sheet data is been taken, confusion can arise regarding which input should take from the balance sheet; the beginning, ending or average value? The answer is, it all depends on what the analyst is trying to measure and

what is the trend of the company. If the level of assets is much stable, the answer will not differ much under any of the three measures (beginning, average or ending). But to calculate the ROA, if assets are growing (or contracting), operating income divided by ending assets might not make much sense as because some of the income would have been generated before some assets were in really purchased, and this will sure understate the performance of the company and vice versa. A wise general principle is that if a cash flow statement or an income statement is in the numerator of a ratio and a balance sheet number is in the denominator, then an average is needed to be used for the denominator. But it is generally not a must to use averages when nly balance sheet number are used in both the numerator and the denominator as because both of them are determined as of the same exact date. When using an average, necessary judgement is also necessary about what the average should be used. To make things easy, major ratio databases use simple average of the beginning and end of the year balance sheet amoutns. Businesses which have seasonal sales record, can sure be benefitted by the usage of average over all interim periods.

**3.6 Values of Ratio Analysis:** Ratio Analysis enables an analyst to compare past financial performance, assess the present financial position of the company, and also can also do future projections. Financial ratios provide insights into:

- microeconomic relationships inside a company which help financial analysts to project earnings and free cash flow;
- the ability of a company to obtain the cash required to grow or meet financial obligations, even in situations when unexpected circumstances can arise;
- the ability of management's;
- shifting of the industry over time and/or changes in the company;
- comparability with the comparable companies or the relevant industries.

**3.7 Limitations of Ratio Analysis:**

- **Difficulty to find comparable industry ratios, heterogeneity or homogeneity factors:** A company can have multiple divisions which is operating in many different industries, causing difficulty to find comparable industry ratios, and can not thus place comparisons.

- **Results of Ratios can show inconsistency:** It might happen that one set of ratios indicate a significant problem, where as another set might shows that the present problem is only short term in nature, and will fix up soon.
- **Massive judgement is needed to use:** Financial ratios can not be used alone to directly value a company's securities or the company itself, or to find out its creditworthiness. It is essential that the entire company operation be examined properly, and the external industry setting and macroeconomic condition must be analyzed while providing interpretation of the financial ratios.
- **The selection of alternative accounting practices:** Different companies can use different accounting methods. In such cases, ratios can not be established unless adjustments are not being made. Essential accounting considerations include the following: FIFO (first in first out), LIFO (last in last out); straight line or accelerated methods of depreciation and various others.

**3.8 Sources of Financial Ratios, Company Statement, Online Databases:** Ratios can be computed using the data directly obtained from the company's financial statements or from the most popular online databases such as Bloomberg, FactSet, Thomson Reuters, Compustat. The databases are very popular as because they provide easy access to many of the last years of historical data so that trends over time can be easily examined. Analysts must be cautious while using online subscriptions of databases as because different vendor can use different formulas to determine certain ratios. For this reason, it is a good practice to use the same source of data when to analyst tries to compare different companies or when evaluating the historical track of a single company. Analysts are needed to verify the consistency of formulas and data classifications of the source data.

**3.9 Common Size Analysis:** When an analyst expresses financial data, including the entire financial statements, with a relation to a single financial statement i.e, or a base; such expression is termed as common size analysis. Most frequently used bases are either total assets or the revenue. Actually, the common size analysis produces a ratio between each financial statement item and the base item.

### **3.9.1 Common size analysis of the Balance Sheet:**

**3.9.1.1 Vertical common size balance sheet:** Such balance sheet is prepared by dividing each component of the balance sheet item by that same period's total assets and then expressing the numbers as percentages, which basically highlights the composition of the balance sheet. It basically answers the mix of the assets being used up, or how is the financing of the company has been done and also answers on how does one company's balance sheet composition can be compare with that of a peer company; and can give answers of the reasons for any differences.

**3.9.1.2 Horizontal common size balance sheet:** Such balance sheet, which is prepared by calculating the decrease or increase in percentage terms of each balance sheet component from the previous year or prepared by dividing the quantity of each item by the base year quantity of an item; basically highlights the changes in items. The observed changes can be easily compared with the expectations.

### **3.9.2 Common size analysis of the Income Statement:**

**3.9.2.1 Vertical common size Income Statement:** This type of statement divides each component of the income statement item by the revenue, or sometimes by the total assets (in case where financial institutions are present). In cases where there are multiple revenue sources, a further decomposition of revenue in percentage terms is helpful.

**3.9.2.2 Cross Sectional Analysis or Relative Analysis:** Financial ratio analysis enables an analyst to perform necessary cross sectional analysis which is also termed as relative analysis. This sort of analysis compares a certain metric for one company with the exact same metric for a different company or a group of companies; and thus it allow comparisons even though the sizes of the companies might be significantly different or they may operate in different currencies.

**3.9.3 Trend Analysis:** While analyzing financial statements, the trends of the data, whether they are getting better or worse, are as important as the current absolute or relative levels. Trends analysis shows relevant essential information about the past performance and growth and, can be of very important assistance as a planning or forecasting tool for the management and for the analysts.

**3.10 Most Common Ratios used in Financial Analysis:** As because there exists a large number of ratios, it is useful to think about the ratios in terms of broad categories based on what aspect of performance a ratio is intending to detect. Majority of the financial analysts and the database vendors use a variety of categories to classify ratios. The names of the category and the ratios included in each of the category can be differed. Most common categories of financial ratios include activity, liquidity, solvency, profitability and valuation, their small description is been elaborated on Table T3.1.

<b>Category</b>	<b>Small description</b>
Activity	These ratios measure how efficiently a company performs it's day to day tasks, for example the collection of its receivables and the management of it's inventory
Liquidity	These ratios measure the company's ability to meet up it's shortterm obligaitons
Solvency	These ratios measure a company's ability to meet up it's long term obligations. There exists some subsets of these ratios which are also familiar as "leverage" and "long term debt" ratios.
Profitability	These ratios measure the company's ability to generate profits from its resources especially from assets.
Valuation	These ratios measure the quantity of an asset or flow associated with the ownership of a specified claim (for example a share or ownership of the enterprise),.

**Table T3.1 Categories of Financial Ratios**

**3.10.1 How an analyst should evaluate financial ratios:** Financial ratios be deciphered within the setting of other data, counting benchmarks. In common, the financial ratios of a company are compared with the ratios of their competitors (cross sectional and trend analysis) and to the company's earlier periods (trend analysis). The objective is to get the fundamental causes of dissimilarity between a company's ratios and those of the industry. Indeed ratios which stay reliable require understanding since consistency can some of the time show accounting arrangements chosen to smooth profit. An examiner should assess ratio analysis based on the below:

- ✓ Company goals and strategy. Actual ratios are needed to be compared with the company objectives to find out whether objectives are being achieved and whether the results are consistent with the company's strategy.
- ✓ Industry norms (cross sectional analysis) One company can be compared with others in the same industry by relating its financial ratios to the industry norms or to a subset of the companies in an industry.
- ✓ Economic conditions. Those who are cyclical companies, financial ratios can suddenly gets improved when the economy is in strong, and weaken at the recessionary period. Due to this, financial ratios is needed to be examined in light of the present (current) phase of the business cycle.

**3.10.2 Activity Ratios:** These ratios are moreover known as asset utilization ratios or operating efficiency ratios. This category is expecting to degree how well a company oversees different exercises (activities), especially how productively it oversees its different resources (assets). These ratios are analyzed as markers of continuous operational performance—how successfully resources are utilized by a company. These ratios reflect the proficient administration of both working capital and longer term resources. As further noted, efficiency features a direct affect on liquidity (the capacity of a company to meet its brief term commitments), so certain activity ratios are moreover valuable in surveying liquidity.

<b>Table T3.2 Most common Activity Ratios and their definitions</b>		
<b>Activity Ratios</b>	<b>Numerator</b>	<b>Denominator</b>
<b>Inventory turnover</b>	Cost of goods sold or cost of sales	Average Inventory
<b>Days of Inventory on Hand (DOH)</b>	Number of Days in a Period	Inventory Turnover
<b>Receivables Turnover</b>	Revenue	Average Receivables
<b>Days of Sales Outstanding (DSO)</b>	Number of Days in a Period	Receivable Turnover
<b>Payables Turnover</b>	Purchases	Average Trade Payables
<b>Numbe of Days of Payables</b>	Number of Days in a Period	Payables Turnover

<b>Table T3.2 Most common Activity Ratios and their definitions</b>		
<b>Working Capital Turnover</b>	Revenue	Average Working Capital
<b>Fixed Asset Turnover</b>	Revenue	Average Net Fixed Assets
<b>Total Asset Turnover</b>	Revenue	Average Total Assets

**3.10.2.1 Inventory turnover and DOH:** Inventory turnover lies at the heart of operations for numerous substances. It demonstrates the assets tied up in inventories (by the means of inventory) (i.e., the carrying costs) and can, in this manner, be utilized to demonstrate inventory administration viability. A better inventory turnover ratio infers a shorter period that stock is held, and hence a lower DOH. In common, inventory turnover and DOH ought to be seat checked against industry standards. A higher inventory turnover ratio in comparison to the industry standards might show profoundly viable inventory administration. Then again, a higher inventory turnover ratio (and commensurately low DOH) seem conceivably show the company does not carry satisfactory inventories, so deficiencies may possibly harmed sales revenue. To survey which clarification is more likely, the investigator can compare the company's revenue growth (development) with that of the industry. Slower growth combined with higher inventory turnover seem demonstrate lacking inventory levels. Revenue growth at or over the industry's development underpins the translation that the higher turnover reflects more noteworthy inventory administration effectiveness.

A lower inventory turnover ratio (and commensurately higher DOH) in comparison with the rest of the industry might be a marker of slower inventory, maybe due to mechanical out of date quality or a alter in design. Once more, comparing the sales development (growth) with the industry can offer better understanding.

**3.10.2.2 Receivables Turnover and DSO:** The number of DSO speaks to the passed time between a deal and cash collection, reflecting how quick the company collects cash from clients to whom it offers credit facilities. In spite of the fact that restricting the numerator to deals made on credit within the receivables turnover would be more appropriate, credit sales data isn't continuously available to investigators; hence, revenue from the income statement is for the most part utilized as an guess.



A generally higher receivables turnover ratio (and commensurately lower DSO) may demonstrate exceedingly proficient credit and collection. Then again, a higher receivables turnover ratio may show that the company's credit or collection approaches are as well rigid, recommending the plausibility of deals being misplaced to competitors who are offering better indulgent terms. A generally lower receivables turnover ratio would regularly raise questions approximately the productivity of the company's credit and collections strategies. In case of inventory management, comparison of the company's sales growth in relation with the industry can offer assistance the examiner evaluate whether deals are being misplaced due to rigid credit approaches. In expansion, comparing the company's gauges of uncollectible accounts receivable and real credit misfortunes with past encounter and with peer companies can offer assistance evaluate whether lower turnover reflects credit administration issues. Companies regularly give details of receivables aging (the values of the receivables which have been outstanding by age).

**3.10.2.3 Payables Turnover and the Number of Days of Payables:** The number of days of payables mirrors the normal number of days the organization takes to pay its providers, and the payables turnover ratio estimates how numerous times per year the company hypothetically satisfies every one of its lenders. For purposes of calculating these ratios, a certain suspicion is that the company makes all its buys utilizing credit. On the off chance that the sum of buys isn't specifically accessible, it can be computed as fetched of as cost of goods sold plus ending inventory less the beginning inventory. Then again, cost of products sold is now and again utilized as a guess of purchases. A payables turnover ratio which is higher (lower days payable) in relation with the industry might demonstrate that the company isn't making full utilize of accessible credit scopes; then again, it might result from a company taking advantage of early installment rebates. An unreasonably lower turnover ratio (higher days payable) seems demonstrate inconvenience making credit installments on time, or alternatively, exploitation of indulgent provider terms. This can be another case where it is valuable to see at the same time at other financial ratios to make judgemental decision.

**3.10.2.4 Working capital turnover ratios:** Working capital is characterized as current resources the current liabilities. Working capital turnover shows how productively the company produces sales revenue with their working capital. For case, a working capital turnover ratio of 5.0 shows

that the company produces Taka. 4 of sales revenue for each Taka 1 of working capital. A higher working capital turnover ratio demonstrates more noteworthy proficiency (i.e., the company is creating a higher level of sales revenues relative to working capital). For some few companies, working capital can be close to zero or negative, rendering this ratio as of unequipped for being translated. The accompanying below two ratios are progressively helpful in those conditions.

**3.10.2.5 Fixed Asset Turnover Ratio:** Fixed asset turnover ratio measures how proficiently the company produces sales revenue from its investments in non current assets (long term). For the most part, a better asset turnover ratio demonstrates more proficient utilize of fixed assets in producing revenue. A lower ratio can demonstrate wastefulness, a capital sensitive trade environment, or a unused trade not however working at full capacity—in which case the examiner will not be able to connect the ratio straightforwardly to proficiency. In expansion, asset turnover can be influenced by components other than a company's productivity. This ratio would be lower for a company whose resources are more new (and, thus, less depreciated and so reflected in the financial statements at a better carrying value) than the ratio for a company with more seasoned assets (that are in this way more deteriorated and so reflected at a lower carrying value).

**3.10.2.6 Total Asset Turnover Ratio:** The total asset turnover ratio measures a company's overall capability to generate revenues by a given level of assets. A ratio which is 1.30 would demonstrates that the company is producing Taka 1.30 of revenues for every Taka 1 of average assets. A higher total asset turnover ratio tries to speak up greater efficiency. As because this ratio includes both the fixed and current assets, wasteful working capital administration can misrepresent the interpretation. For this reason it is useful to analyze working capital and fixed asset turnover ratios separately. In cases if there is a low asset turnover ratio, this can be an sign of inefficiency or of comparatively capital intensive industry. This ratio also reflects strategic decisions of the management, for example, the decision on wheter to use a more labour intensive approach to its business or a more capital intensive (less labour intensive) manner.

**3.10.2.7 Cautiousness on using Activity Ratios:** While interpreting the activity ratios, the analysts should examine not only the individual ratios but also the collection of the relevant ratios to determine the overall efficiency of the company.

**3.10.3 Liquidity Ratios:** Liquidity ratios, which centers on cash flows, measures a company's capacity to meet its brief term commitments. Liquidity measures how rapidly resources are changed over into cash. Liquidity ratios moreover analyze the degree of the capacity to pay off brief term commitments. In day to day operations, the management of liquidity is ordinarily accomplished through proficient utilization of the resources. The level of liquidity required contrasts from one industry to another. A specific company's liquidity position may change concurring to the expected require for reserves at any given time. Judging whether a company has satisfactory liquidity requires investigation of its past historical financing necessities, current liquidity position, expected future subsidizing needs, and choices for decreasing subsidizing needs or pulling in extra funds (counting real and potential sources of such funding). Bigger companies are as a rule way better able to control the level and composition of their liabilities than littler companies. In this manner, they may have more potential subsidizing sources, counting open capital and cash markets. More noteworthy optional way to capital markets moreover decreases the measure of the liquidity buffer required relative to companies without such access.

<b>Table T3.3 Most common Liquidity Ratios and their definitions</b>		
<b>Activity Ratios</b>	<b>Numerator</b>	<b>Denominator</b>
Current Ratio	Current Assets	Current Liabilites
Quick Ratio	Cash + Short Term Marketable Investments + Receivables	Current Liabilites
Cash Ratio	Cash + Short Term Marketable Investments	Current Liabilites
Defensive Interval Ratio	Cash + Short Term Marketable Investments + Receivables	Daily Cash Expenditures
Cash Conversion Cycle (Net Operating Cycle)	DOH + DSO - Number of Days of Payables	

**3.10.3.1 Current Ratio:** This ratio communicates current resources in connection to current liabilities. A better ratio shows a better level of liquidity (i.e., a more noteworthy capacity to meet short term commitments). A current ratio of 1.0 means that the book value of the company's

current assets is exactly equals with the book value of the company's current liabilities. A lower ratio demonstrates less liquidity, inferring a more noteworthy dependence on working capital stream and exterior financing to meet short term term commitments. Liquidity influences the company's capacity to take on more debts. The current ratios verifiably accept that inventories and accounts receivable are without a doubt liquid (which is probably not the case when related turnover ratios are lower).

**3.10.3.2 Quick Ratio:** Quick ratio is more traditionalist than the current proportion since it incorporates as it were the more liquid current assets (in some cases alluded to as “quick assets”) in connection to current liabilities. As like the current ratio, a better quick ratio shows more noteworthy liquidity. This ratio reflects the truth that certain current assets—such as paid ahead of time costs, a few charges, and worker- related prepayments—represent costs of the current period that have been paid in ahead and cannot be changed over back into cash. This ratio moreover reflects the reality that inventory might not be effectively and rapidly changed over into cash, and besides, that a company would likely not be able to offer all of its inventory for a sum to its carrying value, particularly in case if it were required to sell off the inventory rapidly. In circumstances where inventories are illiquid (by lower inventory turnover ratios), this ratio may be a much improved indicator of liquidity than of the current ratio.

**3.10.3.3 Cash Ratio:** This ratio regularly speaks to a solid degree of an entity's liquidity in a emergency circumstances. As in such cases only the profoundly marketable short term securities and cash anc cash related assets are included. It must also be noted that in certain adverse scenerios this ratio might not give reliable estimates whe the fair value of marketable securities get suddenly diminished.

**3.10.3.4 Defensive Interval Ratio:** This ratio measures how long the company can proceed to pay its costs from its existing fluid resources without getting any extra cash influx. A defensive interval ratio of 60 would show that the company can proceed to pay its operating costs for 60 days before the company starts running out of quick assets, in assuming that there will be no extra cash inflows. A more high defensive interval ratio shows better liquidity. In the event that a company's defensive interval ratio is exceptionally low relative to peer companies or to the company's past history, the

examiner would want to find out whether there's adequate cash influx anticipated to mitigate the lower defensive interval ratio.

**3.10.3.5 Cash Conversion Cycle (Net Operating Cycle):** This ratio demonstrates the sum of time that slips by from the point when a company makes investment in working capital until the point at which the company collects cash. In ordinary cases, a merchandising company obtains its inventory on credit, causing accounts payable. The company later offers its products to customers on credit, generating accounts receivable. A short time later, it pays out cash to settle down its accounts payable, and then it collects cash in settlement of its generated accounts receivable. The time between the cost of cash and the collection of cash is termed as the “cash conversion cycle.” A short cash conversion cycle shows more noteworthy liquidity. A short cash conversion cycle suggests that the company should fund its inventory and accounts receivable for a small period of time. A long cash change cycle shows lower liquidity; it suggests that the company must fund its inventory and accounts receivable for a longer period of time, possibly indicating a require for a better level of capital to support current resources.

**3.10.4 Solvency Ratios:** These ratios alludes to a company’s capability to fulfill its long term obligation commitments (debt). Assessment of a company’s capacity to pay its long term commitments (i.e., to pay interest and principles) for the most part incorporates an indepth investigation of the components of its financial structure. These ratios give indications with respect to the amount of debt in the company’s capital structure and the ampleness of earnings and cash flow to cover interest costs and other non current (fixed) charges (long term lease or rentals) as they come due.

<b>Table T3.4 Most common Solvency Ratios and their definitions</b>		
<b><i>Debt Ratios</i></b>		
Debt To Assets Ratio	Total Debt	Total Assets
Debt to Capital Ratios	Total Debt	Total Debt + Total Equity
Debt to Equity Ratio	Total Debt	Total Equity
Financial Leverage Ratio	Average Total Assets	Average Total Equity
<b><i>Coverage Ratios</i></b>		

**Table T3.4 Most common Solvency Ratios and their definitions**

Interest Coverage	EBIT	Interest Payments
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Solvency ratios are primarily of two types. Debt ratios, the first type, focus on the balance sheet and measure the amount of debt capital relative to equity capital. Coverage ratios, the second type, focus on the income statement and measure the ability of a company to cover its debt payments. These ratios are useful in assessing a company's solvency and, therefore, in evaluating the quality of a company's bonds and other debt obligations.

**3.10.4.1 Debt to Assets ratios:** Debt to assets ratio measures the portion of total resources (assets) financed by debt. For illustration, a debt to assets ratio of 0.30 percent demonstrates that 30 percent of the company's assets are completely funded by debt. For the most part, the higher is the debt ratios, the higher is the financial risk and that inclined weaker solvency for the company.

**3.10.4.2 Debt to Capital Ratio:** The debt to capital ratio measures the portion of a company's capital (the sum of debt and the equity) represented by debt. Likewise the previous ratio, a higher debt to capital ratio normally means higher financial risk and so that means weaker solvency for the company.

**3.10.4.3 Debt to Equity Ratio:** This ratio measures the total sum of debt capital in relation to the equity capital. Interpretation is comparative to the prior two ratios (a better ratio demonstrates weaker solvency). A ratio of 1.0 would demonstrate that the debt and equity are just in equal values, that is equivalent with debt to capital ratio of 50 percent. It must be noted that the definitions of this ratio use stockholder's equity market value instead of their book value (or it uses the market values for both the stockholders' equity and debt).

**3.10.4.4 Financial Leverage Ratio:** This ratio which is sometimes called the "leverage ratio" measures how much total assets is going to be supported for each one money unit of equity. Consider an example, a value of 4 of such ratio means that each Taka 1 of equity supports Taka 4 of total assets. The higher the this financial leverage ratio will be, the more leveraged the company will be in the sense of utilizing debt and other liabilities to funding the company's total assets.

**3.10.4.5 Interest Coverage:** This ratio indicates how many number of times a company’s EBIT can get covered up by its interest payments. In this way, it is in some cases alluded to be as “times interest earned.” A much higher interest coverage ratio means much strong solvency, which ultimately offer much great assurance that the company can serve their debt (bonds, bank debts, notes).

**3.10.4.6 Fixed Charge Coverages:** This ratio relates fixed charges, or commitments, to the cash flow created by the company. It measures the number of times a company’s total earnings (EBITD) can cover the company’s interest and lease related payments. Comparable to the previous ratio, a better fixed coverage ratio infers more grounded solvency, offering more noteworthy confirmation that the company can benefit its obligation (i.e., bank obligation, bonds, notes, and leases) from typical profit.

**3.10.5 Profitability Ratios:** The capacity to create profit on invested capital is considered as of a key determinant of a company’s overall value and also the value of the securities in which it issues in the market. Subsequently, numerous value analysts would consider profitability to be a key center of their explanatory efforts. Profitability reflects how is the competitive position of the company is in the market which it operates and by expansion, the quality of its administration. These ratios mentions the return earned by a company during a particular period. The return on sales profitability ratios shows various subtotals of the income statement as a portion of revenue. Return on investment profitability ratios measure income in comparison with assets, equity or the company’s employed total capital.

<b>Table T3.5 Most common Profitability Ratios and their definitions</b>		
<b><i>Return On Sales</i></b>		
Gross Profit Margin	Gross Profit	Revenue
Operating Profit Margin	Operating Income	Revenue
Pretax Margin	EBT	Revenue
Net Profit Margin	Net Income	Revenue
<b><i>Return On Investment</i></b>		
Operating ROA	Operating Income	Average Total Assets

Table T3.5 Most common Profitability Ratios and their definitions		
ROA	Net Income	Average Total Assets
Return on Total Capital	EBIT	Short and Long Term Debt and Equity
ROE	Net Income	Average Total Equity

**3.10.5.1 Gross Profit Margin:** Gross profit margin clarifies the portion of the sales revenue which is available to cover up company's operating and other various expense and to be able to generate profit. A company which can make higher profit margin does that either by charging higher product prices or by lowering down their cost of goods sold. Now not all companies can charge higher product price and can sustain in the market; only those companies which does have superior brand value, better quality than others or exclusive technology, are able to charge higher price than the market and can gain high gross profit margin. On the cost of goods sold side, a company which does have higher competitive advantages than others can only gain product cost advantages.

**3.10.5.2 Operating Profit Margin:** The deduction of operating costs form the gross profit margin generates the Operating Profit Margin. In cases if analyst sees operating profit margin increases faster than the gross profit margin, that must indicates that the company has improved operating cost control systems. Conversely, a declining operating profit margin explains that the operating cost management of the company is not much improved.

**3.10.5.3 Pretax Margin:** Pretax income which is also termed as EBT ("earnings before tax"), is operating profit minus the total interest paid; and the pretax margin is the proportion of pretax income to revenue. In case if analyst sees a company's pretax margin is getting higher as a result of the increasing amounts of non operating income, the investigator should evaluate whether that rise demonstrates an intentional change on a company's business focus or not.

**3.10.5.4 Net Profit Margin:** Net profit or Net profit after tax which is terms as NPAT is calculated by deducting all expenses from the company's revenue. Net income contains both the recurring and the non recurring elements. Normally, the net income which is used for the calculation of the net profit margin is adjusted for non recurring items to give a better insights of a company's potential future profitability.



**3.10.5.5 ROA:** ROA is the measurement of how much returned is earned by a company by its total assets. The more high is the ROA, the further income is made by a given level of total assets.

**3.10.5.6 Return on total capital:** Return on total capital is the measurement of the profits a company earns on all of the capital which it employs, be that that short term debt, long term debt and also the equity. Likewise the operating ROA, the returns are measured before the deduction of interest on debt capital.

**3.10.5.7 ROE:** The ROE is the measurement of the return which a company earns on its equity capital, which includes minority equity, common equity and preferred equity. Here, the return is measured as net income. A different variation of the ROE is the return on common equity, that calculates the return earned by a company only by the utilization of a company's common equity. Just like on other ratios, the profitability ratios should be judged individually and also as a group to know what is driving the profitability of the company.

**Section 4**  
**Ratio Analysis**

#### 4. Ratio Analysis:

##### 4.1 Analyzing the Vertical/Horizontal common size balance sheet (Total Assets) of the AIPL:

In the table T4.1 the bases of comparison for the vertical common size balance sheet is the total assets on each consecutive year, for this reason, each Total Assets row is showing the digit 100%, on each consecutive period.

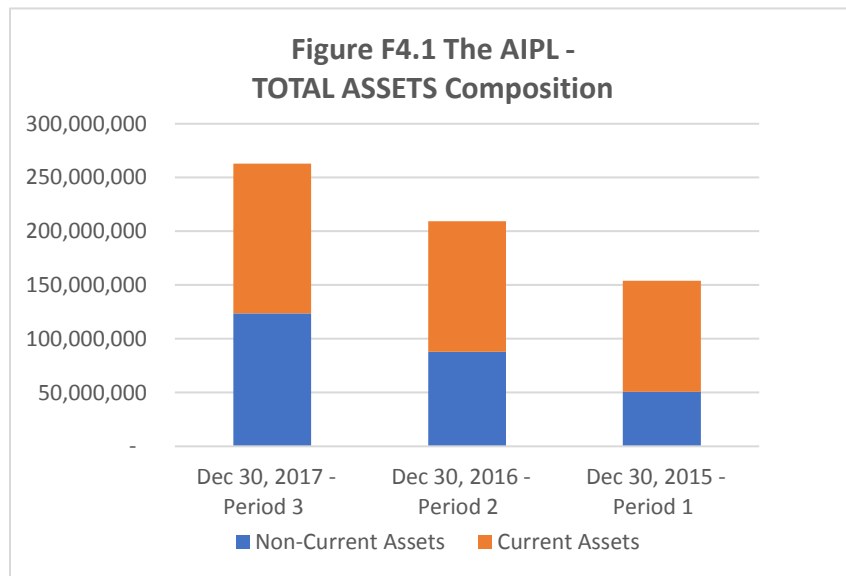
<b>Company: AIPL</b>		Amount in percentage		
	<b>Dec 30, 2017</b>	<b>Dec 30, 2016</b> Period 2	<b>Dec 30, 2015</b> Period 1	
<b>Assets</b>				
<b>Non-Current Assets</b>	<b>47.00%</b>	<b>42.00%</b>	<b>33.00%</b>	
Property	23.00%	20.00%	12.00%	
Fish Hatcheries, Fish Plants	13.00%	12.00%	11.00%	
Fish Hatcheries Heavy Equipments and Machineries	10.00%	9.00%	8.00%	
Investment in Shares	1.00%	1.00%	2.00%	
<b>Current Assets</b>	<b>53.00%</b>	<b>58.00%</b>	<b>67.00%</b>	
Inventories	7.00%	6.00%	5.00%	
Spare Parts, Fishing Cage, Aquaculture Cage, Square Cage, Other spare parts	14.00%	11.00%	8.00%	
Total Trade Receivables; includes Trade Loans, Trade Credits, Trade Advances towards FISH CATCHING LOCAL AGENTS	17.00%	14.00%	11.00%	
Short Term Bank FDRs, other Short Term Marketable Investments	5.00%	11.00%	20.00%	
Cash and Cash Equivalents	10.00%	16.00%	23.00%	
<b>TOTAL ASSETS</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	

**Table T4.1 Findings from Vertical/Horizontal common size Analysis (Total Assets) from the Balance Sheet of Company AIBL**

Period 1 (Year 2015) constituted by 33.00% Non-Current Assets; and the portion of Current Assets (67.00%) were more than double than the Non-Current Assets. Period 2 (Year 2016) shown a total different picture, in which Non current assets contained 42.00% of total assets, and current assets was 58.00% of the total assets. In period 3 (Year 2017), Non-Current Assets shown 47.00% of the

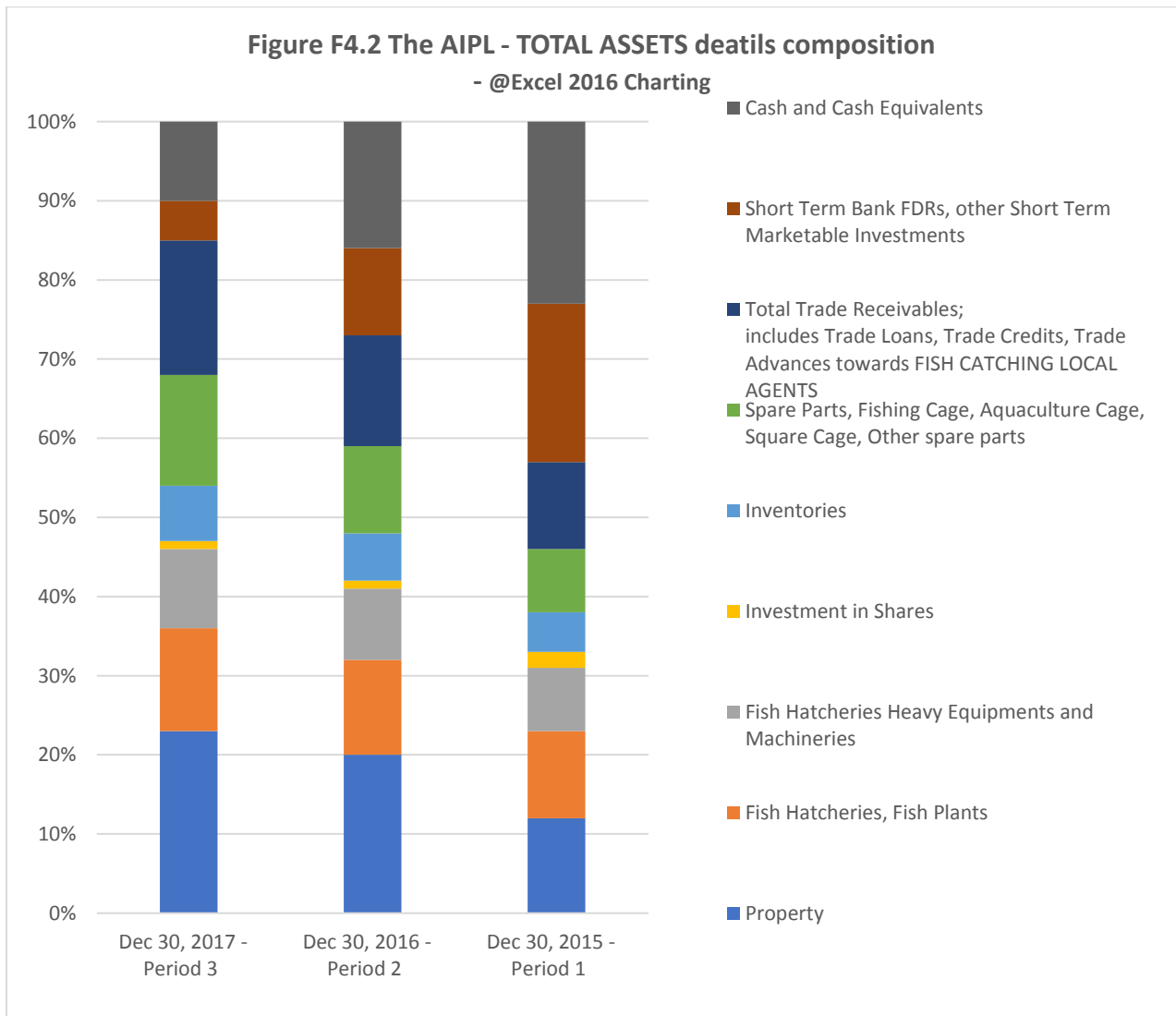
total assets, and current assets was 53.00% of the total assets. The rest of the component is pretty much self explanatory, such as, in Period 3, it was Property (23.00%) which contained the highest portion of the Total Assets. Figure F4.1 shows a quick graphical snapshot of the Total assets composition, on each consecutive year. Figure F4.2 (on next page) shows total assets' detail composition, both these figures are self explanatory to explain that non-current assets portions are getting bigger than the current assets portion of the total assets on each consecutive periods.

The horizontal common size balance sheet analysis discovers some very interesting findings; if see the table (T4.1) carefully, it shows that, Non-current Assets had a gradual increment, from period 1 (33.00%) it went as high as 47.00% (14.00% is the difference (47.00%-33.00%)); where as during that same period, Current Assets had faced a steady decline, from 67.00% on period 1, it dropped at 53.00% (-14.00% decline, 53.00% - 67.00%). In short, it can be said that, the AIPL has invested more of it's total assets towards the Non-current portions, where as the AIPL continued to shrink the investment on it's current assets. Figure F4.1 says the same thing, but, it says it through bar chart.

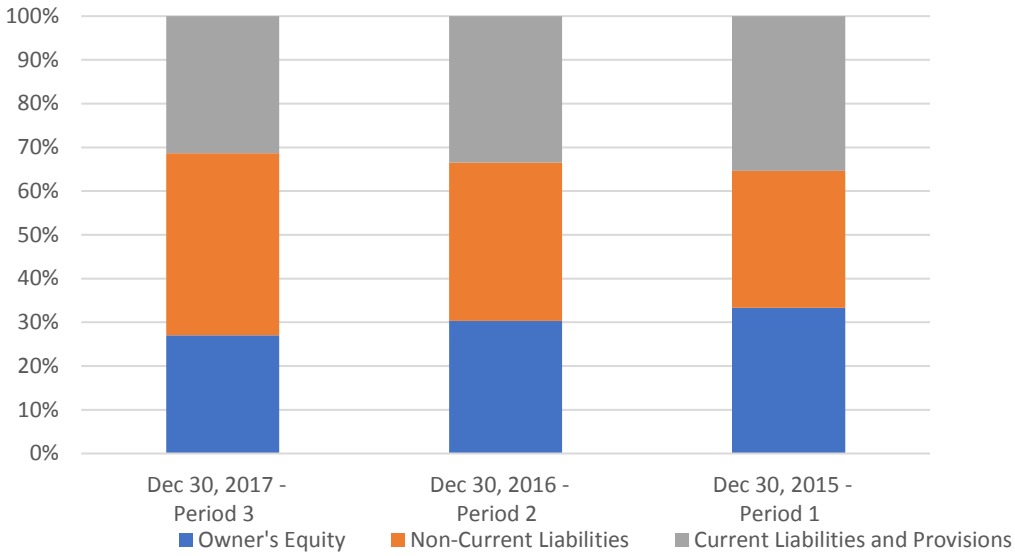


Of the various components of the Total Assets on the Balance sheet, the findings of the cash and cash equivalents is pretty alarming, as because, it is showing a significant decline from period 1 to period 3, which is a -13.00% decline (10.00% from period 1 minus 23.00% on period 3). At the same side, the Trade Receivables is showing not a very good sign, as it can be seen that, there had been a radical increase of that percentages from as low as 11.00% (on period 1) to as high as

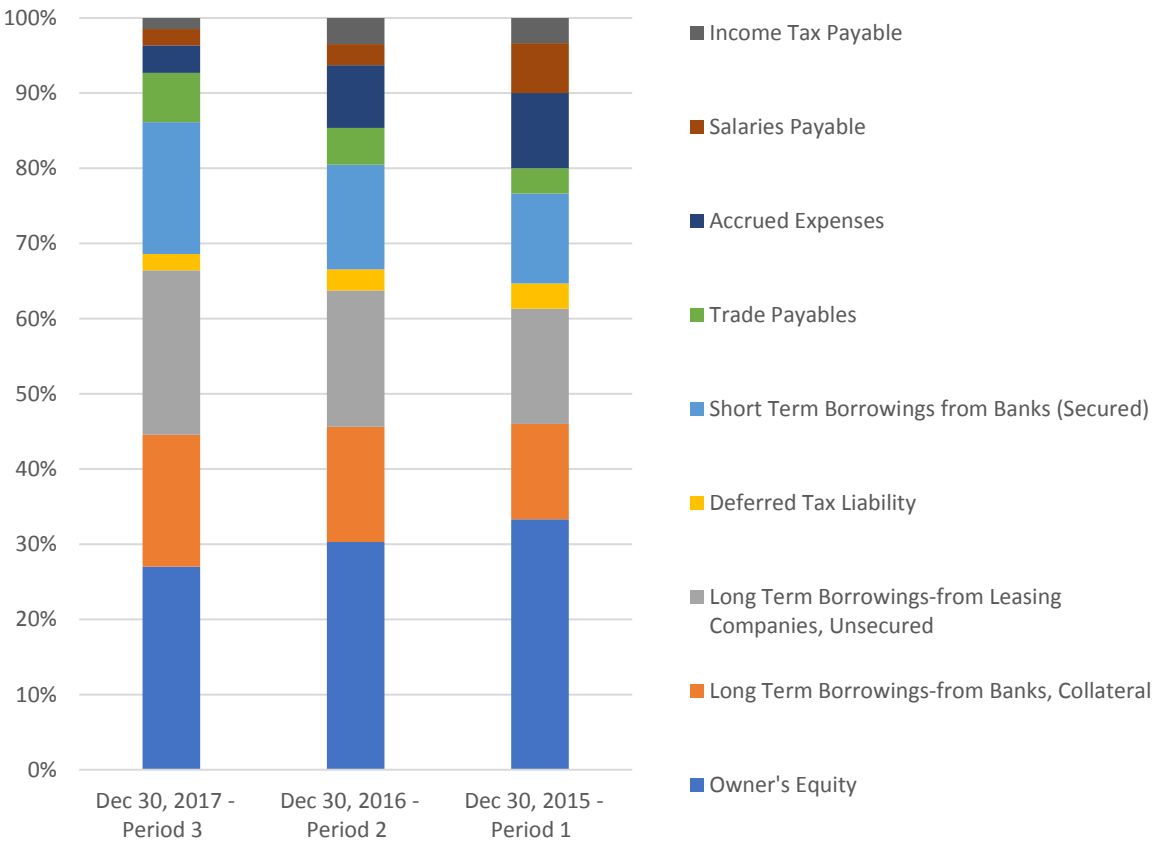
17.00% (on period 3), an almost 6.00% increment (17.00% - 11.00%). These findings raise further question on the credit policy, credit standards, credit collection procedures of the Accounting and Finance Department's of the AIPL. Sharp criticisms are also awaiting to receive from the Procurement departments who are responsible to purchase of Inventories, as Inventories had also faced a gradual increment from 5.00% (period 1) to 7.00% (period 3) (a 2.00% increase).



**Figure F4.3 The AIPL - EQUITY AND TOTAL LIABILITIES composition**



**Figure F4.4 The AIPL - EQUITY AND TOTAL LIABILITIES details composition**



#### **4.2 Analyzing the Vertical/Horizontal common size analysis of the Income Statement of the**

**AIPL:** The Table T4.2 clearly portrays that for the Company AIPL, the Revenue is coming from multiple revenue sources or categories – frozen fish, live fish and chilled fish. It is the Frozen fish category which is in fact contributing more revenues towards the company AIPL amongst all of the total revenues. It shows that the selling of frozen fish, has increased from 66.67% from period 1 to 74.07% ( $74.07\% - 66.67\% = 7.41\%$ ), a 7.41% increment, and on the other hand, sales revenue from other categories had faced a decline, both the live fish and chilled fish revenue faced a gradual decline. Apparently, such sales revenue increase of one category might seem lucrative and as a good sign; but some deep analysis, is stating indeed a different findings. Consider, what is happening on Period 3, which shows a gross profit percentages of as high as 53.00%, which is received from the deduction of the sales revenue from the COGS. Such higher gross profit margin of 53.00% of period 3, has faced another decline of -26.56% for the Operating expenses's contribution on that same period 3, and resulted an EBITDA of 26.50%. This EBITDA is trying to give a not so happy messages, if it is compared with period 2 and also with period 1. In period 1, the EBITDA had a high score of 37.20%, which gradually dropped down to 26.50% in period 3, an approximately -10.70% ( $26.50\% - 37.20\%$ ) drops.

A further analysis, on the cost of goods sold, discover interesting findings, that the COGS which was in period 1 constituted only 38.00%, had risen to 47.00% in the period 3, almost a 9.00% ( $47.00\% - 38.00\%$ ) growth, which had without doubt contributed towards a much lower EBITDA in period 3. In line with the COGS, the operating expenses are also showing that from 24.80% in period 1, it went as high as 26.50% in period 3, helping to low down the EBITDA. The rest of the components of the income statement, namely, Consolidated depreciation and amortization expenses, interest expenses, income tax expenses; all are causing the EBITDA to low down much further; though interest revenue tried to give slight positive boost up; and finally the Net Profit after tax has been generated, which is only 13.99% in period 3. This NPAT of 13.99% of period 3, is by far a lot more of a decline value, if compare the NPAT of period 1 which was as high as 22.74%. Thus the findings, is once again cautiously saying that, from period 1 to period 3, NPAT of the company AIPL had faced a decline by -8.74% (calculated as  $13.99\% - 22.74\%$ ) and reached at 13.99%.

**Company: AIPL**

Amount in percentages

	Jan 2017 - Dec 2017 Period 3	Jan 2016 - Dec 2016 Period 2	Jan 2015 - Dec 2015 Period 1
Net Sales Revenue: Category - Frozen Fish	74.07%	71.43%	66.67%
Net Sales Revenue: Category - Live Fish	18.52%	21.43%	26.67%
Net Sales Revenue: Category - Chilled Fish	7.41%	7.14%	6.67%
<b>Total Net Sales Revenue</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Cost of Goods Sold	-47.00%	-42.00%	-38.00%
<b>Gross Profit</b>	<b>53.00%</b>	<b>58.00%</b>	<b>62.00%</b>
<b>Operating Expenses (excluding Depreciation)</b>	<b>-26.50%</b>	<b>-29.00%</b>	<b>-24.80%</b>
Salary & allowances (excluding Fish Labours)	-6.36%	-7.83%	-7.44%
Fish Labours Salaries expenses	-0.80%	-0.87%	-0.74%
Office Rental, taxes, insurance, utilities	-6.36%	-7.83%	-7.44%
Expenses on Fishing Cage, Floating Hatchery Utensils, Aquaculture Cage, Square Cage, other Fish Farming Equipments	-6.36%	-7.83%	-7.44%
Frozen fish warehouse, rental expenses	-0.80%	-0.29%	-0.25%
Legal & professional expenses	-0.80%	-0.29%	-0.25%
Mobile telecommunication expenses	-0.80%	-0.29%	-0.12%
Postage, stamp, Stationery, printing, advertisements	-0.80%	-0.29%	-0.12%
Auditors' fees	-0.80%	-0.58%	-0.25%
General and Administrative Expenses	-0.80%	-0.87%	-0.25%
Selling, Marketing and Distribution, Supply Chain Expenses	-0.80%	-0.87%	-0.25%
Other expenses	-1.06%	-1.16%	-0.25%
<b>EBITDA/ OPERATING INCOME</b>	<b>26.50%</b>	<b>29.00%</b>	<b>37.20%</b>
Consolidated Depreciation and Amorization Expenses	-5.30%	-5.80%	-7.44%
<b>EBIT</b>	<b>21.20%</b>	<b>23.20%</b>	<b>29.76%</b>
Interest Revenue	1.27%	1.39%	1.79%
Interest Expense	-5.09%	-3.71%	-3.27%
Other financial/ non financial Revenue (Expense)	0.11%	0.12%	0.15%
<b>EBT/ Net Profit Before Tax</b>	<b>17.49%</b>	<b>21.00%</b>	<b>28.42%</b>
<b>Income Tax Expenses</b>	<b>-3.50%</b>	<b>-4.20%</b>	<b>-5.68%</b>
Current Tax	-2.62%	-3.15%	-4.26%
Deferred Tax Income/ (Expense)	-0.87%	-1.05%	-1.42%
<b>Net Profit After Tax</b>	<b>13.99%</b>	<b>16.80%</b>	<b>22.74%</b>

**Table T4.2 Findings from the Vertical/Horizontal common size Analysis of the Income Statement of the AIPL**



#### **4.3 The cross sectional analysis between company AIPL and MFBPL:**

From the table T4.3 it is easier to judge the most recent compositions of the company AIPL's total assets; in relation with that of the company MFBPL (Marine Fresh Bangladesh Private Limited), the company to whom this study has considered as of the industry leader or the benchmark. Most remarkable three findings in the cross sectional analysis (also termed as relative analysis), are three metrics between the company AIPL and the MFBPL; which are Inventories, Trade Receivables and Cash and cash equivalents. In the same reporting period of 2017, the industry leader MFBPL is observed to hold as high as 19.00% cash and cash equivalents of the total assets, where as that same metric for the AIPL is only at 10.00%, almost 9.00% (19.00% - 10.00%) down comparing with the industry leader, an evidence that in comparing with the industry leader or the benchmark, the AIPL is holding much lower volume of cash. In the metric of Total Trade Receivables, the industry leader MFBPL has ensured a much safe position, by holding only 7.00% of the total assets; which certainly indicates the leader is providing strict or short credit policy towards its customers, and also least volume of advances are being made towards the fish catching local agents. In case of the AIPL, trade receivables number as discussed before is as high as 17.00% on that same period, an almost 10.00% (17.00% - 7.00%) higher than the MFBPL, which proves the AIPL must needed to practice much better credit recovery policy. And, another fact can be made from this low receivable number, that it is the lowest level of credit recovery which keeps the cash and cash equivalents position of the AIPL in much lower (10.00%) in comparison with that of the competitor. Finally, on the Inventory metric, the MFBPL is observed to hold a very least volume which is 3.00% of the total assets, in comparison with the AIPL, which is as high as 7.00% of the same.

**Company: AIPL      Company: MFBPL**

**Dec 30, 2017      Dec 30, 2017**

**Assets**

<b>Non-Current Assets</b>	<b>47.00%</b>	<b>54.00%</b>
Property	23.00%	28.00%
Fish Hatcheries, Fish Plants	13.00%	11.00%
Fish Hatcheries Heavy Equipments and Machineries	10.00%	14.00%
Investment in Shares	1.00%	1.00%
<b>Current Assets</b>	<b>53.00%</b>	<b>46.00%</b>
Inventories	7.00%	3.00%
Spare Parts, Fishing Cage, Aquaculture Cage, Square Cage, Other spare parts	14.00%	12.00%
Total Trade Receivables; includes Trade Loans, Trade Credits, Trade Advances towards FISH CATCHING LOCAL AGENTS	17.00%	7.00%
Short Term Bank FDRs, other Short Term Marketable Investments	5.00%	5.00%
Cash and Cash Equivalents	10.00%	19.00%
<b>TOTAL ASSETS</b>	<b>100.00%</b>	<b>100.00%</b>

**Table T4.3 Cross Sectional Analysis (Balance Sheet - Total Assets items)  
between the company AIPL and MFBPL**

**4.4 The Trend Analysis of AIPL’s Balance Sheet (Total assets portion) measured in absolute terms and percentages:** The Table T4.4 analyzes the trend analysis of the AIPL’s balance sheet, especially the total assets’s various components, from period 2 (Year 2016) to period 3 (year 2017). First, consider what kind of trend had the total assets been faced between that two period. Total assets had increased from period 2 (Taka 209,411,932) to period 3 (Taka 262,803,433); which resulted as 53,391,501.50 in absolute terms; in percentages it is 25.50 % (calculated as  $\frac{(262,803,433-209,411,932)}{209,411,932} = 25.50\%$ ). In cases of cash and cash equivalents and short term bank FDRs, both the absolute terms have shown a negative value, which means a decrement value from period 2 to period 3; which was (7,225,565.76 Taka. For cash and cahs equivalanet) and

((9,895,140.83 Taka. For short term bank FDRs.) consecutively; in percentages these were - 21.57% (cash), and -42.96% (short term bank FDRs). On the other hands, both the inventories (46.41%) and the Trade Receivables (52.39%) had faced much higher increase from period 2 to period 3, which certainly had result a pretty bad signal, based on the trend analysis.

	Dec 30, 2017 Period 3	Dec 30, 2016 Period 2	Dec 30, 2015 Period 1	Company: AIPL	
				Change from 2016 to 2017 (Taka)	Change from 2016 to 2017 (Percent)
<b>Assets</b>					
<b>Non-Current Assets</b>	<b>123,517,614</b>	<b>87,953,011</b>	<b>50,866,606</b>		
Property	60,444,790	41,882,386	18,496,947	18,562,403.30	44.32%
Fish Hatcheries, Fish Plants	34,164,446	25,129,432	16,955,535	9,035,014.51	35.95%
Fish Hatcheries Heavy Equipments and Machineries	26,280,343	18,847,074	12,331,298	7,433,269.47	39.44%
Investment in Shares	2,628,034	2,094,119	3,082,825	533,915.01	25.50%
<b>Current Assets</b>	<b>139,285,820</b>	<b>121,458,920</b>	<b>103,274,623</b>		
Inventories	18,396,240	12,564,716	7,707,061	5,831,524.42	46.41%
Spare Parts, Fishing Cage, Aquaculture Cage, Square Cage, Other spare parts	36,792,481	23,035,312	12,331,298	13,757,168.16	59.72%
Total Trade Receivables; includes Trade Loans, Trade Credits, Trade Advances towards FISH CATCHING LOCAL AGENTS	44,676,584	29,317,670	16,955,535	15,358,913.21	52.39%
Short Term Bank FDRs, other Short Term	13,140,172	23,035,312	30,828,246	(9,895,140.83)	-42.96%
Marketable Investments					
Cash and Cash Equivalents	26,280,343	33,505,909	35,452,483	(7,225,565.76)	-21.57%
<b>TOTAL ASSETS</b>	<b>262,803,433</b>	<b>209,411,932</b>	<b>154,141,229</b>	53,391,501.50	25.50%

**Table T4.4 Trend Analysis of AIPL's Balance sheet over Three year periods, measured in Absolute Terms and Percentages**

#### 4.5 More trend analysis (with each item expressed relative to the Same Item in Period 1):

Further interesting trends has been explained in the Table T4.5 (this table has been generated from the date of Table T4.4) in which case, period 1 (year 2015) has been considered as of the base year (that's why the Period 1 column is being holding the digit 1); and then it tried to dictate which kinds of trend each of the total asset's components from the balance sheet's had faced in the following two periods. The total assets had been observed to increase as high as 1.36 times (calculated as  $\frac{(209,411,932-154,141,229)}{154,141,229} = 1.36$ ) in period 2; and then it faced another increment of in the following period. In period 3, the total assets had reached to 1.70 (calculated as  $\frac{(262,803,433-154,141,229)}{154,141,229} = 1.70$ ) times higher than that of the period 1. Of the various components

of the total assets, comparing to the current assets, the non current assets had faced the highest uptrend in period 3, which reached to 2.43 times (calculated as  $\frac{(123,517,614-50,866,606)}{50,866,606} = 2.43$ ) if compared with the period 1, in which case, but on that same period, the current assets had faced only a 1.35 times rise.

<b>Company: AIPL</b>			
	<b>Dec 30, 2017 Period 3</b>	<b>Dec 30, 2016 Period 2</b>	<b>Dec 30, 2015 Period 1 Base Year</b>
<b>Assets</b>			
<b>Non-Current Assets</b>	<b>2.43</b>	<b>0.73</b>	<b>1</b>
Property	3.27	2.26	1
Fish Hatcheries, Fish Plants	2.01	1.48	1
Fish Hatcheries Heavy Equipments and Machineries	2.13	1.53	1
Investment in Shares	0.85	0.68	1
<b>Current Assets</b>	<b>1.35</b>	<b>0.18</b>	<b>1</b>
Inventories	2.39	1.63	1
Spare Parts, Fishing Cage, Aquaculture Cage, Square Cage, Other spare parts	2.98	1.87	1
Total Trade Receivables; includes Trade Loans, Trade Credits, Trade Advances towards FISH CATCHING LOCAL AGENTS	2.63	1.73	1
Short Term Bank FDRs, other Short Term Marketable Investments	0.43	0.75	1
Cash and Cash Equivalents	0.74	0.95	1
<b>TOTAL ASSETS</b>	<b>1.70</b>	<b>1.36</b>	<b>1</b>

**Table T4.5 Horizontal Common Size (Partial) Balance Sheet of AIPL over Three year periods, with each item expressed relative to the Same Item in Period 1**

And as per the Table T4.6 (on the next page), it brings a different aspect of trend analysis, from horizontal common size (total assets) balance sheet of the AIPL over three year period, with percentage change in each item relative to the exact prior period; which is based on the data of Table T4.4. Based on this findings, it shows that, from period 1 to period 2, cash and cash equivalents had faced a -5.49% decline (calculated as  $\frac{33,505,909}{35,452,483} - 1 = -5.49\%$ ); and then in period 3, a farther radical declined had been observed in comparison of the just prior period, which

is period 2. In period 3, cash and cash equivalents had declined to -21.57% in comparison with period 2 (calculated as  $\frac{26,280,343}{33,505,909} - 1 = -21.57\%$ ).

<b>Company: AIPL</b>			
	<b>Dec 30, 2017 Period 3 %</b>	<b>Dec 30, 2016 Period 2 %</b>	<b>Dec 30, 2015 Period 1</b>
<b>Assets</b>			
<b>Non-Current Assets</b>	<b>40.44%</b>	<b>72.91%</b>	
Property	44.32%	126.43%	
Fish Hatcheries, Fish Plants	35.95%	48.21%	
Fish Hatcheries Heavy Equipments and Machineries	39.44%	52.84%	
Investment in Shares	25.50%	-32.07%	
<b>Current Assets</b>	<b>14.68%</b>	<b>17.61%</b>	
Inventories	46.41%	63.03%	
Spare Parts, Fishing Cage, Aquaculture Cage, Square Cage, Other spare parts	59.72%	86.80%	
Total Trade Receivables; includes Trade Loans, Trade Credits, Trade Advances towards FISH CATCHING LOCAL AGENTS	52.39%	72.91%	
Short Term Bank FDRs, other Short Term Marketable Investments	-42.96%	-25.28%	
Cash and Cash Equivalents	-21.57%	-5.49%	
<b>TOTAL ASSETS</b>	<b>25.50%</b>	<b>35.86%</b>	

**Table T4.6: Horizontal Common Size (Partial) Balance Sheet of AIPL over Three year periods, with percentage change in each item Relative to prior period**

**4.6 Analysis from the overall Activity Ratios:** The table T4.7 is displaying all the most common Activity ratios, which had been discussed in details in the Literature review section including their respective formulas. The first column is named as of various activity ratios names in a sequence, which has begun with “Inventory turnover”. In the second column, all the activity ratios for the company AIPL is being calculated for three consecutive years, starting from Year 2015 (period 1), then to the Year 2016 (period 2) , to the Year 2017 (period 3). And in the third column, Company MFBPL’s activity ratios are also calculated, as because it will help to do the analysis, as the

Company MFBPL has been considered as of the benchmark or industry standard in this study.

Activity Ratios	Numerator	Denominator	Company : AIPL			Company : MFBPL		
			Dec 30, 2017 Period 3	Dec 30, 2016 Period 2	Dec 30, 2015 Period 1	Dec 30, 2017 Period 3	Dec 30, 2016 Period 2	Dec 30, 2015 Period 1
Inventory turnover	Cost of goods sold or cost of sales	Average Inventory	1.24	2.25	4.07	9.10	5.86	5.03
Days of Inventory on Hand (DOH)	Number of Days in a Period	Inventory Turnover	293.96	162.49	89.73	40.10	62.27	72.55
Receivables Turnover	Revenue	Average Receivables	1.09	2.81	4.87	7.36	4.49	3.81
Days of Sales Outstanding (DSO)	Number of Days in a Period	Receivable Turnover	335.53	129.71	75.02	49.59	81.37	95.89
Payables Turnover	Purchases	Average Trade Payables	1.32	2.76	6.10	5.12	3.76	2.97
Number of Days of Payables	Number of Days in a Period	Payables Turnover	275.80	132.13	59.82	71.29	97.08	122.88
Fixed Asset Turnover	Revenue	Average Net Fixed Assets	0.39	0.76	1.62	0.95	1.05	1.12
Total Asset Turnover	Revenue	Average Total Assets	0.18	0.32	0.54	0.52	0.52	0.49

**Table T4.7 Activity Ratios of AIPL and the MFBPL, MFBPL is considered as the Benchmark in the industry**

Now, based on the trend of the last two years, and also based on the MFBPL's industry benchmark, the AIPL's inventory is not turning over much rapidly. The inventory turnover was 4.07 times in period 1, which has drastically dropped down at only 1.24 times; whereas the company MFBPL, which is considered as of the industry benchmark; is showing that their inventory turnover had faced a much more high turnover, from 5.03 times (in period 1), that ratio went as high as 9.10 times. Ultimately, this inventory turnover, had caused the DOH of the AIPL to reached up as high as 293.96 days in period 3, which was only at 89.73 days in period 1; in cases of MFBPL they just faced the total opposite direction, and the MFBPL is showing in deed a much faster DOH in period 3 (only 40.10 days). Observations from the warehouse and logistics divisions, and general interviews and team discussions also had witnessed the fact the inventory is getting piled up much more in the entire year 2017. And that is mostly happening due to the delay of the frozen fish shipment; resulting much higher carrying cost on the cold storage facilities.

The receivables turnover is also a deteriorating sign for the AIPL, from 4.87 times (period 1), it went down to 1.09 times in period 3; where as industry benchmark the MFBPL is showing a strengthful credit collection picture; and that causing the DSO of the AIPL to much more delayed, 335.53 days in period 3. Payables turnover is also showing a not so good sign for the AIPL, 1.32

times in period 3; that also causing Number of days payables for the AIPL to much more longer, 275.80 days in period 3. The lower performances on both receivables and credit management is causing disturbances to the fixed assets turnover ratios, fixed assets are turning over less and less, from period 1 to period 3. It was at 1.62 times in period 1, and went down to 0.39 times in period 3. In cases of the total assets turnover, the digits had fallen from 0.54 times (period 1) to 0.18 times (period 3). The overall picture is alarming indeed.

**4.7 Analysis from the overall Liquidity Ratios:** The table T4.8 displays the calculations of the liquidity ratios of the AIPL for the last 3 periods, along with the same ratios of the MFBPL. The look of the current ratio alone looks much strong with its 1.69 times figure (period 3) for the AIPL, which says that the AIPL has good strength of liquidity to cover up its short term obligations with its current assets; but excluding the inventories and trade receivables; caused the Quick Ratio to fall on much down on that same period for the AIPL, which is only 1.02 times; certainly indicates the volume of receivables as well as inventory is keeping by the AIPL is much higher portion. While calculating the cash ratios, that caused the most terrible picture; in period 3, the cash ratio of the AIPL is showing only 0.48 times; which expresses the fact that the company AIPL doesn't have sufficient amount of cash or cash equivalents at hand to cover up their short term obligations with the company's cash flow. In cases of the MFBPL, the digits are not that much alarming. The overall scenario of the liquidity makes much higher delay on the cash conversion cycle of the AIPL, which caused the cycle to reach as high as 353.69 times (period 3), from period 1 (that time it was only at 104.93 times).

Liquidity Ratios	Numerator	Denominator	Company : AIPL			Company : MFBPL		
			Dec 30, 2017 Period 3	Dec 30, 2016 Period 2	Dec 30, 2015 Period 1	Dec 30, 2017 Period 3	Dec 30, 2016 Period 2	Dec 30, 2015 Period 1
Current Ratio	Current Assets	Current Liabilities	1.69	1.73	1.90	1.82	2.14	2.23
Quick Ratio	Cash + Short Term Marketable	Current Liabilities	1.02	1.23	1.53	1.22	1.50	1.67
Cash Ratio	Cash + Short Term Marketable	Current Liabilities	0.48	0.81	1.22	0.95	1.07	1.15
Defensive Interval Ratio	Cash + Short Term Marketable	Daily Cash Expenditures	1,343.82	1,110.35	969.10	414.36	435.89	507.85
Cash Conversion Cycle (Net Operating Cycle)	DOH + DSO - Number of Days of Payables		353.69	160.07	104.93	18.40	46.56	45.55

**Table T4.8 Liquidity Ratios of AIPL and the MFBPL, MFBPL is considered as the Benchmark in the industry**

**4.8 Analysis from the overall Solvency Ratios:** The table T4.9 displays the calculations of the solvency ratios of the AIPL for the last 3 periods, along with the same ratios of the MFBPL. The AIPL has faced that comparing to its total assets, the AIPL's both short and long term debts are getting increased day by day. The AIPL's debt to assets ratio was only at 0.67 times in period 1, which turned to as high as 0.73 times in period 3 due to the AIPL's more and more required of loans – both short and long term – which can never be a very good sign. As because outside loans can be the most essentials commitments of a company in which cases ontime payment of interest and well as principles are a must for the company AIPL. The AIPL's debt to equity is also showing a not so good signal, in period 1 the debt to equity was only at 2.00 times; where as in period 3 that ratio went to as high as 2.70 times, which means in comparison with the owner's (partners' equity); the debts of the company AIPL is growing much faster. Financial Leverage is also showing that least amount of equity is generating largest portion of assets. Finally, the interest coverage is showing, that the AIPL's capability to cover up their interest payments is getting much lower on each consecutive periods, it went down to 4.17 times in period 3.



			Company : AIPL			Company : MFBPL		
<b>Solvency Ratios</b>	Numerator	Denominator	Dec 30, 2017 Period 3	Dec 30, 2016 Period 2	Dec 30, 2015 Period 1	Dec 30, 2017 Period 3	Dec 30, 2016 Period 2	Dec 30, 2015 Period 1
<i>Debt Ratios</i>								
Debt To Assets Ratio	Total Debt	Total Assets	0.73	0.70	0.67	0.44	0.49	0.53
Debt to Capital Ratios	Total Debt	Total Debt + Total Equity	0.73	0.70	0.67	0.44	0.49	0.53
Debt to Equity Ratio	Total Debt	Total Equity	2.70	2.30	2.00	0.80	0.95	1.15
Financial Leverage Ratio	Average Total Assets	Average Total Equity	3.70	3.30	3.00	1.80	1.95	2.15
<i>Coverage Ratios</i>								
Interest Coverage	EBIT	Interest Payments	4.17	6.25	9.09	9.09	7.14	5.88

Table T4.9 Solvency Ratios of AIPL and the MFBPL, MFBPL is considered as the Benchmark in the industry

**4.9 Analysis from the overall Profitability Ratios:** The table T4.10 displays the calculations of the profitability ratios of the AIPL for the last 3 periods, along with the same ratios of the MFBPL. The AIPL is showing a nice gross profit margin, as high as 0.53 times in period 3, which looks like their cost of goods sold is much in management's control; as the gross profit margin gradually keeps covering up the operating expenses, and finally it shows off the net profit margin, that margin shows only as low as 0.14 times in period 3, in compare with as high 0.23 times in period 1. The result is, it must have been agreed from all the concerned divisional staff that, the AIPL's generation of profit is destroying day by day. If that same metric of net profit margin is to be compared with the same metric of the MFBPL, it shows an excellent upward trend. The MFBPL's net profit margin was only at 0.03 times in period 1, which gradually reached as high as 0.20 times in period 3. This rise sharply indicates the capability of the MFBPL's in terms of controlling the entire range of cost functions while running the business operations.

All the return on investment metrics are also not supporting much for the AIPL. The operating ROA, had slumped from 0.20 times (period 1) to as low as 0.05 times in period 2. The ROA, the return on assets ratios, had also follow the same trend, from as high as 0.12 times, it fell down to as low as 0.03 times in period 3. Lastly the ROE, showed that it faced a severe decline, from 0.37 times in period 1, it went down to 0.10 times in period 3.

Profitability Ratios	Numerator	Denominator	Company : AIPL			Company : MFBPL		
			Dec 30, 2017 Period 3	Dec 30, 2016 Period 2	Dec 30, 2015 Period 1	Dec 30, 2017 Period 3	Dec 30, 2016 Period 2	Dec 30, 2015 Period 1
<i>Return On Sales</i>								
Gross Profit Margin	Gross Profit	Revenue	0.53	0.58	0.62	0.47	0.44	0.39
Operating Profit Margin	Operating Income	Revenue	0.27	0.29	0.37	0.32	0.23	0.15
Pretax Margin	EBT	Revenue	0.17	0.21	0.28	0.24	0.17	0.11
Net Profit Margin	Net Income	Revenue	0.14	0.17	0.23	0.20	0.14	0.08
<i>Return On Investment</i>								
Operating ROA	Operating Income	Average Total Assets	0.05	0.09	0.20	0.16	0.12	0.07
ROA	Net Income	Average Total Assets	0.03	0.05	0.12	<b>0.10</b>	<b>0.07</b>	<b>0.04</b>
Return on Total Capital	EBIT	Short and Long Term Debt and Equity						
ROE	Net Income	Average Total Equity	0.10	0.18	0.37	<b>0.18</b>	<b>0.14</b>	<b>0.09</b>

**Table 4.10 Profitability Ratios of AIPL and the MFBPL, MFBPL is considered as the Benchmark in the industry**

The overall profitability ratios, are indicating that the cost controlling capability of the AIPL is without doubt in a very much weak position, the AIPL is incurring a much higher percentage cost in terms of the COGS, simultaneously, the AIPL's entire range of operating expenses, such as salaries allowances, fish labour salaries, official rental, taxes, expenses on Fishing Cage, Floating Hatchery Utensils, Aquaculture Cage, Square Cage, other Fish Farming Equipments; Frozen fish warehouse, rental expenses; and all other operating expenses are not controlling much strongly. All these are causing a much lower operating profit margin. Finally, the AIPL's interest expenses and current tax plus deferred tax expenses; causing the Net profit margin much devastating figure. On the Return on investment side, the volume of total assets and their increment is really much much higher in comparison of the generated net income, which is without doubt, a cause of serious alarm.

**Section 5**  
**Findings, Recommendations, Conclusion**

## 5.1 Findings:

1. It has been observed that in comparison with the MFBPL, the AIPL's product selling prices are kept at much lower to get attract new customer base. Due to this reason, selling of a certain number of products are not giving a higher sales revenue to the AIPL, where as industry leader the MFBPL, is creating a better higher sales revenue while seeling the same number of products, the result is negative for the AIPL, which is a lower total sales revenue. The AIPL's total lower sales revenue will ultimately face problems to cover up hugh COGS, all operating expenses, and the rest of the cost.
2. It has been proven that at present the AIPL is facing a higher COGS as a percentage of the total net sales revenue. In period 3 (Year 2017) the COGS is observed to be -47.00% of the total net sales revenue, which was only at -38.00% in period 2 and -42.00% in period 1. In short, the COGS faced a gradual rise of 9.00% (47.00% - 38.00%) in these 2 periods. At the same time, another problem is been observed on the Operating expenses, which also faced a gradual increase from -24.80% (period 1 ) to -26.50% (period 3). Similar problem is observed on the higher interest expenses, which has increased from -3.27% (period 1) to -5.09% (period 3).
3. Significant risks were found in the composition of non-current and current assets of the AIPL. The portion of non-current assets were observed to getting higher on each consecutive periods, the total non-current assets were only at 33.00% of the total assets in period 1 (Year 2015), which rose as high as 47.00% in period 3 (Year 2017), which means a total rise of 14.00% (47.00%-33.00%) is observed in the non-current assets portion of the AIPL. On the other hand, it is observed that the portion of current assets of the total assets is shrinking on each periods, which was 67.00% (in period 1), has fell down to 53.00% (in period 3).
4. Severe problem is also been found in the Total Trade Receivables portion, which includes all the varous trade loans, trade credits, trade advances towards fish catching local agents. The AIPL's total trade receivables size was only at 11.00% of the total assets in period 3 (year 2015), which grew as high as 17.00% of the total assets in period 1 (year 2017), a sharp 7.00% (17.00%-10.00%) increment between these periods. A higher trade receivable can certainly be

a big problem to keep running the present business as because a higher portion of hard cash is being stucked at the end of the customers pocket which the company AIPL is owe to receive from them, the earlier or the faster the AIPL could get back the receivables the better it is for the customers liquidity position and also it is a sign to remain less risky for the AIPL.

5. The AIPL has also been observed to practice a bad inventory management policy or practices. The balance sheet of the AIPL is clearly mentioning that the total inventory portion in compare with the total assets of the AIPL has increased from as low as only 5.00% to 7.00% ( a 2.00% increment). The ratio analysis has also proven that the AIPL's inventory is turning over at a very low pace, which was as high as 4.07 in period 1, became as low as only 1.24 times in period 3; where as the MFBPL is observed to show a rapid increment of the inventory turnover ratio, which went from 5.03 to 9.10 times in period 3. At the same time, big problem is been observed for the AIPL' DOH, which went as high as 293.96 days in period 3, from 89.73 days in period 1.
  
6. Another alarming problem is the massive increment of the non-current liabilities of the total liabilities, especially the long term borrowings from banks and the long term borrowings from the leasing companies. Long term borrowings or loans from the banks was only at 12.67% in period 1, which has drastically grown to as high as 17.51% in period 3, long term borrowings from the leasing company was only at 15.33% in period 1, which grew to 21.89% in period 3. That means, non-current liabilities which was only at 31.33%, had faced a rapid increase to 41.59% in period 3. The majority of the assets had been contributed by the non-current liabilities of the total liabilities; where as Owner's equity had faced a severe reduction from 33.33% (period 1) to 27.03% (period 3).

## 5.2 Recommendations:

1. The AIPL has to come with a revised selling prices of its product ranges which should be based in comparison with the industry benchmark. Most of the AIPL's customer base are located in the international fish selling markets. Only the increment of sales volume in the international fish selling market will not provide the AIPL good volume of revenue, but those sales are needed to be done at higher price; to make the revenue figure more strong. To do such, the AIPL also has to keep work on creation of better brand value, keep focus on advertising campaign, and all the possible means through which the brand image of the AIPL becomes more lucrative and attractive in the international market.
2. The AIPL needs lots of development on the cost management part – both on the COGS and on the operating expenses. The AIPL is needed to source high quality frozen, live and chilled fish from the local fish market at best affordable prices. On the COGS – cost of goods sold segment, the AIPL must have to initiate goal oriented actions, in cases if required, procurement managers, or procurement executives can be given incentive based sourcing bonuses, which may generate better lower COGS. No matter at which ever way be possible, unless a beatable COGS not getting established from the end of Procurement or Purchasing managers, the AIPL won't be able to stand strategically from its present weak positions. At the same time, severe attention is needed to provide on the controlling of the full range of operating expenses to overcome this barrier on a permanent basis.
3. The AIPL has to implement new policies to make serious reduction on the non-current assets portion of the total assets, especially the permanent non-current assets which has always been undertaken on performing various daily activities such as on Fishing Cage, Floating Hatchery Utensils, Aquaculture Cage, Square Cage, other Fish Farming Equipments; all these investments on non-current assets are needed to be re think on whether some variable approaches of can solve this issue or not. Fixed cost can only be beneficial while sales volume getting much higher within the relevant range. In such scenerios, variable cost helps minimize a company's overall operating cost a lot; so the overall other operating expenses all must be needed to be controlled with much cautiously.

4. The AIPL has become to be strict on it's present credit management policies to solve total trade receivables issue. The total trade receivables such as trade loans, trade credits and full range of trade advances which has become a worst business practices to the local fish collection Managers must needed to be change immediately without hampering present fish collection from the market. The amount of trade advances which is being given on a regular weekly basis toward the fish catching local agents must also needed to be done with much cautiously and close daily/ weekly monitoring is being needed so that credit misuses can be stopped before massive upcoming business disaster can ever take place.
  
5. The AIPL has to develop a much better inventory management systems, the present ongoing system has much lackings. The local people start fish sourcing and preserving to the cold storages much ahead of any new shipment orders. Some influential buyers also cause great amount of delay to provide new orders, training is required to explain the buyers that the earlier they could place new orders the better it would be for the local man power to arrange shipments in a much organized manner, and if such new practices can be properly and routinely maintained, that will low down huge piling up of inventory to a much low volume, and also the DOH.
  
6. The AIPL is needed to immediately start practicing the low down of non current liabilities, long term borrowings from the banks and from the leasing companies, with high amount of monthly interest rates; has already increased a lot on the last 3 consecutive years. No more new loans should be taken to fill up any of ongoing requirements. More new loans will certainly force the company towards a more vulnerable position, and may even cause to become bankruptcy in the near future time.

### **5.3 Conclusion:**

To conclude, once again it is important to mention that it is the ratio analysis, which always provide an early warning of an upcoming disaster or financial distress or deterioration of a company's financial situation or performances. The deep three month's engagement with the AIPL, has gained access to the intern to understand, calculate and interpret the financial statement report for the last 3 year period. The gathered findings are not proclaiming a very solid figure in activity, liquidity, solvency and also on the profitability scenerios. All the recoomendaitons are carefully been designed and been deliverd to the management of the AIPL, who had cordially been received the opnions from the intern. The AIPL is hope to receive step by step actions to implement the provided recommendations, by having further investigaitons with relevant organizational divisions and departments.

It takes a great amount of time to at first understand, realize and grasp the breadth of the financial statements, how they are prepared and finally how they could be interpreted. The real life practice of ratios seem to be much more interesting which especially can disvoer good and as well as bad truth, which the management can't hide from the public, which is in deed a fantastic financial tools and techniques not only for those resources who considered as of finance professionals. Indeed, it is believed that, the prime population who are getting further benefitted form the ratio analysis are those who are from non finance backgroudns. Overall, it was a great learning for the intern to be able to successfully completed the conclusion, which was once begin with much well preparation.



**References:**

- Abarbanell, J.S., and B.J. Bushee. 1998. "Abnormal Returns to a Fundamental Analysis Strategy." *Journal of Finance*, vol. 23, no. 4:589–609.
- Altman, E. 1968. "Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy." *Journal of Finance*, vol. 23, no. 4:589–609.
- Beaver, W. 1967. "Financial Ratios as Predictors of Failures." *Empirical Research in Accounting, selected studies supplement to Journal of Accounting Research*, 4 (1).
- Benninga, Simon Z., and Oded H. Sarig. 1997. *Corporate Finance: A Valuation Approach*. New York: McGraw-Hill Publishing.
- Lev, B., and S.R. Thiagarajan. 1993. "Fundamental Information Analysis." *Journal of Accounting Research*, vol. 31, no. 2:190–215.
- Beaver, W. 1967. "Financial Ratios as Predictors of Failures." *Empirical Research in Accounting, selected studies supplement to Journal of Accounting Research*, 4 (1).
- Benninga, Simon Z., and Oded H. Sarig. 1997. *Corporate Finance: A Valuation Approach*. New York: McGraw-Hill Publishing.
- CFA program curriculum 2017 Level 1 volumes 3.
- Lev, B., and S.R. Thiagarajan. 1993. "Fundamental Information Analysis." *Journal of Accounting Research*, vol. 31, no. 2:190–215.
- Ou, J.A., and S.H. Penman. 1989a. "Financial Statement Analysis and the Prediction of Stock Returns." *Journal of Accounting and Economics*, vol. 11, no. 4:295–329.
- Piotroski, J.D. 2000. "Value Investing: The Use of Historical Financial Statement Information to Separate Winners from Losers." *Journal of Accounting Research*, vol. 38.
- Stowe, J.D., T.R. Robinson, J.E. Pinto, and D.W. McLeavey. 2002. *Analysis of Equity Investments: Valuation*. Charlottesville, VA: CFA Institute.
- Yearbook of Fisheries Statistics of Bangladesh 2016-2017, Department of Fisheries Bangladesh.

**Websites:**

- <https://www.investopedia.com/terms/r/ratioanalysis.asp>
- [www.zenwealth.com/BusinessFinanceOnline/RA/RatioAnalysis.html](http://www.zenwealth.com/BusinessFinanceOnline/RA/RatioAnalysis.html)
- <https://www.accountingtools.com/articles/ratio-analysis.html>

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## Appendices A:

### AHMED IMPEX PRIVATE LIMITED

#### Statement of Profit or Loss and Other Comprehensive Income

For the Year ended Dec 31, 2017

		Amount in Taka		
		Jan 2017 - Dec 2017	Jan 2016 - Dec 2016	Jan 2015 - Dec 2015
		(12 Months)	(12 Months)	(12 Months)
	Notes			
Net Sales Revenue: Category - Frozen Fish	11.10	36,000,000	48,000,000	55,000,000
Net Sales Revenue: Category - Live Fish	11.20	9,000,000	14,400,000	22,000,000
Net Sales Revenue: Category - Chilled Fish	11.30	3,600,000	4,800,000	5,500,000
<b>Total Net Sales Revenue</b>	11.40	<b>48,600,000</b>	<b>67,200,000</b>	<b>82,500,000</b>
Cost of Goods Sold	12.10	(22,842,000)	(28,224,000)	(31,350,000)
<b>Gross Profit</b>		<b>25,758,000</b>	<b>38,976,000</b>	<b>51,150,000</b>
<b>Operating Expenses (excluding Depreciation)</b>	13.10	<b>(12,879,000)</b>	<b>(19,488,000)</b>	<b>(20,460,000)</b>
Salary & allowances (excluding Fish Labours)	13.20	(3,090,960)	(5,261,760)	(6,138,000)
Fish Labours Salaries expenses	13.30	(386,370)	(584,640)	(613,800)
Office Rental, taxes, insurance, utilities	13.40	(3,090,960)	(5,261,760)	(6,138,000)
Expenses on Fishing Cage, Floating Hatchery Utensils, Aquaculture Cage, Square Cage, other Fish Farming Equipments	13.50	(3,090,960)	(5,261,760)	(6,138,000)
Frozen fish warehouse, rental expenses	13.60	(386,370)	(194,880)	(204,600)
Legal & professional expenses	13.70	(386,370)	(194,880)	(204,600)
Mobile telecommunication expenses	13.80	(386,370)	(194,880)	(102,300)
Postage, stamp, Stationery, printing, advertisements	13.90	(386,370)	(194,880)	(102,300)
Auditors' fees	13.10	(386,370)	(389,760)	(204,600)
General and Administrative Expenses	13.11	(386,370)	(584,640)	(204,600)
Selling, Marketing and Distribution, Supply Chain Expenses	13.12	(386,370)	(584,640)	(204,600)
Other expenses		(515,160)	(779,520)	(204,600)
<b>EBITDA/ OPERATING INCOME</b>		<b>12,879,000</b>	<b>19,488,000</b>	<b>30,690,000</b>
Consolidated Depreciation and Amorization Expenses	14.10	(2,575,800)	(3,897,600)	(6,138,000)
<b>EBIT</b>		<b>10,303,200</b>	<b>15,590,400</b>	<b>24,552,000</b>
Interest Revenue	15.10	618,192,000	935,424,000	1,473,120,000
Interest Expense	15.20	(2,472,768)	(2,494,464)	(2,700,720)
Other financial/ non financial Revenue (Expense)	15.30	51,516	77,952	122,760
<b>EBT/ Net Profit Before Tax</b>	16.10	<b>8,500,140</b>	<b>14,109,312</b>	<b>23,447,160</b>
<b>Income Tax Expenses</b>		<b>(1,700,028)</b>	<b>(2,821,862)</b>	<b>(4,689,432)</b>
Current Tax	17.10	(1,275,021)	(2,116,397)	(3,517,074)
Deferred Tax Income/ (Expense)	17.20	(425,007)	(705,466)	(1,172,358)
<b>Net Profit After Tax</b>	17.30	<b>6,800,112</b>	<b>11,287,450</b>	<b>18,757,728</b>

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TANVIR AHMED, National ID: 325 045 6419, Employee of AHMED IMPEX PRIVATE LIMITED

*Jahangir Alam*

On behalf of AUDITOR

ADVOCATE JAHANGIR ALAM

Details of Income Tax, Civil, Criminal and all Company Matters

**Appendices B:**

**AHMED IMPEX PRIVATE LIMITED**

**Division of Net Income After Tax**

For the Year ended Dec 31, 2015

**NPAT (Net Profit After Tax), Dec 31, 18,757,728**

Amount in Taka

	<b>Brig. Gen Ahmed Haider, Capital</b>	<b>Brig. Gen Ahmed Faruq, Capital</b>	<b>Dr. Gary Yan, Capital</b>	<b>Dr. James Cook, Capital</b>	<b>Dr. Mahesh Patel, Capital</b>
Fixed Salary Allowance, Yearly	1,200,000	1,200,000	600,000	600,000	400,000
Partner's Capital, Jan 01, 2015	10,000,000	10,000,000	5,000,000	5,000,000	2,500,000
Interest Allowance on Partner's Capital, @4%	400,000	400,000	200,000	200,000	100,000
<b>Total, Salary + Interest Allowance</b>	<b>1,600,000</b>	<b>1,600,000</b>	<b>800,000</b>	<b>800,000</b>	<b>500,000</b>
Remaining Income, (NPAT - (Total Salary Allowance + Interest Allowance Interest))	13,457,728				
Remaining Income Distribution					
Brig. Gen Ahmed Haider, 30% of Remaining Income	4,037,318	4,037,318	2,018,659	2,018,659	1,345,773
Brig. Gen Ahmed Faruq, 30% of Remaining Income					
Maj. Gen Raihan Gafur, 15% of Remaining Income;					
Dr. James Cook, 15% of Remaining Income;					
Dr. Mahesh Patel, 10% of Remaining Income					
<b>Total Division of Net Income, Dec 31 2017</b>	<b>5,637,318</b>	<b>5,637,318</b>	<b>2,818,659</b>	<b>2,818,659</b>	<b>1,845,773</b>

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*Jahangir Alam*

On behalf of AUDITOR

ADVOCATE JAHANGIR ALAM

Details of Income Tax, Civil, Criminal and all Company Matters

**Appendices B (continue):**

<b>AHMED IMPEX PRIVATE LIMITED</b>					
<b>Division of Net Income After Tax</b>					
For the Year ended Dec 31, 2016					
<b>NPAT (Net Profit After Tax)</b>	<b>11,287,450</b>				
	Amount in Taka				
	<b>Brig. Gen Ahmed Haider, Capital</b>	<b>Brig. Gen Ahmed Faruq, Capital</b>	<b>Dr. Gary Yan, Capital</b>	<b>Dr. James Cook, Capital</b>	<b>Dr. Mahesh Patel, Capital</b>
Fixed Salary Allowance, Yearly	1,200,000	1,200,000	600,000	600,000	400,000
Partner's Capital, Jan 01, 2016	15,946,123	15,946,123	7,723,061	7,723,061	4,042,041
Interest Allowance on Partner's Capital, @4%	637,845	637,845	308,922	308,922	161,682
<b>Total, Salary + Interest Allowance</b>	<b>1,837,845</b>	<b>1,837,845</b>	<b>908,922</b>	<b>908,922</b>	<b>561,682</b>
Remaining Income, (NPAT - (Total Salary Allowance + Interest Allowance Interest))	5,232,233				
Remaining Income Distribution					
Brig. Gen Ahmed Haider, 30% of Remaining Income	1,569,670	1,569,670	784,835	784,835	523,223
Brig. Gen Ahmed Faruq, 30% of Remaining Income					
Maj. Gen Raihan Gafur, 15% of Remaining Income;					
Dr. James Cook, 15% of Remaining Income;					
Dr. Mahesh Patel, 10% of Remaining Income					
<b>Total Division of Net Income, Dec 31 2017</b>	<b>3,407,515</b>	<b>3,407,515</b>	<b>1,693,757</b>	<b>1,693,757</b>	<b>1,084,905</b>

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Details of Income Tax, Civil, Criminal and all Company Matters

**Appendices B (continue):**

**AHMED IMPEX PRIVATE LIMITED**

**Division of Net Income After Tax**

For the Year ended Dec 31, 2017

NPAT (Net Profit After Tax)	Amount in Taka				
	Brig. Gen Ahmed Haider, Capital	Brig. Gen Ahmed Faruq, Capital	Dr. Gary Yan, Capital	Dr. James Cook, Capital	Dr. Mahesh Patel, Capital
Fixed Salary Allowance, Yearly	1,200,000	1,200,000	600,000	600,000	400,000
Partner's Capital, Jan 01, 2017	19,904,167	19,904,167	9,357,161	9,357,161	4,935,506
Interest Allowance on Partner's Capital, @4%	796,167	796,167	374,286	374,286	197,420
Total, Salary + Interest Allowance	1,996,167	1,996,167	974,286	974,286	597,420
Remaining Income, ( NPAT - (Total Salary + Interest Allowance) )	261,786				
Remaining Income Distribution					
Brig. Gen Ahmed Haider, 30% of Remaining Income	78,536	78,536	39,268	39,268	26,179
Brig. Gen Ahmed Faruq, 30% of Remaining Income					
Maj. Gen Raihan Gafur, 15% of Remaining Income;					
Dr. James Cook, 15% of Remaining Income;					
Dr. Mahesh Patel, 10% of Remaining Income					
<b>Total Division of Net Income, Dec 31 2017</b>	<b>2,074,702</b>	<b>2,074,702</b>	<b>1,013,554</b>	<b>1,013,554</b>	<b>623,599</b>

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The below signing authority has been issued this DOCUMENT, as per the request from the AHMED IMPEX PRIVATE LIMITED.

*Jahangir Alam*

On behalf of AUDITOR  
ADVOCATE JAHANGIR ALAM

Details of Income Tax, Civil, Criminal and all Company Matters

## Appendices C:

<b>AHMED IMPEX PRIVATE LIMITED</b>						
<b>Partner's Capital Statement</b>						
For the Year ended Dec 31, 2015						
Amount in Taka						
Note	Brig. Gen Ahmed Haider, Capital	Brig. Gen Ahmed Faruq, Capital	Dr. Gary Yan, Capital	Dr. James Cook, Capital	Dr. Mahesh Patel, Capital	
Capital, 01 January, 2015	23.1	10,000,000	10,000,000	5,000,000	5,000,000	2,500,000
Add: Additional Investment	23.2	2,000,000	2,000,000	750,000	750,000	250,000
Add: Net Income	23.3	5,637,318	5,637,318	2,818,659	2,818,659	1,845,773
Less: Drawings	23.4	(1,691,196)	(1,691,196)	(845,598)	(845,598)	(553,732)
<b>Capital, 31 December, 2015</b>		<b>15,946,123</b>	<b>15,946,123</b>	<b>7,723,061</b>	<b>7,723,061</b>	<b>4,042,041</b>

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<b>AHMED IMPEX PRIVATE LIMITED</b>						
<b>Partner's Capital Statement</b>						
For the Year ended Dec 31, 2016						
Amount in Taka						
Note	Brig. Gen Ahmed Haider, Capital	Brig. Gen Ahmed Faruq, Capital	Dr. Gary Yan, Capital	Dr. James Cook, Capital	Dr. Mahesh Patel, Capital	
Capital, 01 January, 2016	22.1	15,946,123	15,946,123	7,723,061	7,723,061	4,042,041
Add: Additional Investment	22.2	1,913,535	1,913,535	617,845	617,845	242,522
Add: Net Income	22.3	3,407,515	3,407,515	1,693,757	1,693,757	1,084,905
Less: Drawings	22.4	(1,363,006)	(1,363,006)	(677,503)	(677,503)	(433,962)
<b>Capital, 31 December, 2016</b>		<b>19,904,167</b>	<b>19,904,167</b>	<b>9,357,161</b>	<b>9,357,161</b>	<b>4,935,506</b>

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Details of Income Tax, Civil, Criminal and all Company Matters



**Appendices C (continue):**

**AHMED IMPEX PRIVATE LIMITED**

**Partner's Capital Statement**

For the Year ended Dec 31, 2017

		Amount in Taka				
	Note	Brig. Gen Ahmed Haider, Capital	Brig. Gen Ahmed Faruq, Capital	Dr. Gary Yan, Capital	Dr. James Cook, Capital	Dr. Mahesh Patel, Capital
Capital, 1 January, 2017	21.1	19,904,167	19,904,167	9,357,161	9,357,161	4,935,506
Add: Additional Investment	21.2	1,592,333	1,592,333	467,858	467,858	49,355
Add: Net Income	21.3	2,074,702	2,074,702	1,013,554	1,013,554	623,599
Less: Drawings	21.4	(1,037,351)	(1,037,351)	(506,777)	(506,777)	(311,799)
<b>Capital, 31 December, 2017</b>		<b>22,533,851</b>	<b>22,533,851</b>	<b>10,331,796</b>	<b>10,331,796</b>	<b>5,296,661</b>

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On behalf of AUDITOR

ADVOCATE JAHANGIR ALAM

Details of Income Tax, Civil, Criminal and all Company Matters

## Appendices D:

### AHMED IMPEX PRIVATE LIMITED

#### BALANCE SHEET

as at 31 Dec, 2017

	Notes	Amount in Taka		
		Dec 30, 2017	Dec 30, 2016	Dec 30, 2015
<b>Assets</b>				
<b>Non-Current Assets</b>		<b>123,517,614</b>	<b>87,953,011</b>	<b>50,866,606</b>
Property	25.1	60,444,790	41,882,386	18,496,947
Fish Hatcheries, Fish Plants	25.2	34,164,446	25,129,432	16,955,535
Fish Hatcheries Heavy Equipments and Machineries	25.3	26,280,343	18,847,074	12,331,298
Investment in Shares	25.4	2,628,034	2,094,119	3,082,825
<b>Current Assets</b>		<b>139,285,820</b>	<b>121,458,920</b>	<b>103,274,623</b>
Inventories	26.1	18,396,240	12,564,716	7,707,061
Spare Parts, Fishing Cage, Aquaculture Cage, Square Cage, Other spare parts	26.2	36,792,481	23,035,312	12,331,298
Total Trade Receivables; includes Trade Loans, Trade Credits, Trade Advances towards FISH CATCHING LOCAL AGENTS	26.3	44,676,584	29,317,670	16,955,535
Short Term Bank FDRs, other Short Term Marketable Investments	26.4	13,140,172	23,035,312	30,828,246
Cash and Cash Equivalents	26.5	26,280,343	33,505,909	35,452,483
<b>TOTAL ASSETS</b>		<b>262,803,433</b>	<b>209,411,932</b>	<b>154,141,229</b>
<b>EQUITY AND LIABILITIES</b>				
<b>Owner's Equity</b>		<b>71,027,955</b>	<b>63,458,161</b>	<b>51,380,410</b>
Brig. Gen Ahmed Haider, Capital	27.1	22,533,851	19,904,167	15,946,123
Brig. Gen Ahmed Faruq, Capital	27.2	22,533,851	19,904,167	15,946,123
Dr. Gary Yan, Capital	27.3	10,331,796	9,357,161	7,723,061
Dr. James Cook, Capital	27.4	10,331,796	9,357,161	7,723,061
Dr. Mahesh Patel, Capital	27.5	5,296,661	4,935,506	4,042,041
<b>Non-Current Liabilities</b>		<b>109,312,023</b>	<b>75,895,961</b>	<b>48,297,585</b>
Long Term Borrowings-from Banks, Collateral	28.1	46,026,115	32,109,830	19,524,556
Long Term Borrowings-from Leasing Companies, Unsecured	28.2	57,532,643	37,947,980	23,634,988
Deferred Tax Liability	28.3	5,753,264	5,838,151	5,138,041
<b>Current Liabilities and Provisions</b>		<b>82,463,456</b>	<b>70,057,810</b>	<b>54,463,234</b>
Short Term Borrowings from Banks (Secured)	29.1	46,026,115	29,190,754	18,496,947
Trade Payables	29.2	17,259,793	10,216,764	5,138,041
Accrued Expenses	29.3	9,588,774	17,514,452	15,414,123
Salaries Payable	29.4	5,753,264	5,838,151	10,276,082
Income Tax Payable	29.5	3,835,510	7,297,689	5,138,041
<b>Total Liabilities (Non-Current + Current Liabilities)</b>		<b>191,775,478</b>	<b>145,953,771</b>	<b>102,760,819</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>262,803,433</b>	<b>209,411,932</b>	<b>154,141,229</b>

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The below signing authority has been issued this DOCUMENT, as per the request from:  
TANVIR AHMED, National ID: 325 045 6419, Employee of AHMED IMPEX PRIVATE LIMITED

*Jahangir Alam*

On behalf of AUDITOR

ADVOCATE JAHANGIR ALAM

Details of Income Tax, Civil, Criminal and all Company Matters