CFC Project
Dar Al Dawa Development and Investment

COMPANY PERFORMANCE ANALYSIS BY LINKING FINANCE WITH SUPPLY CHAIN

PRESENTED BY:

MOHAMMAD SALAMAH

MOHAMMADSALAMEH79@YAHOO.COM

CONTENTS

SUMMARY

We will focus in the three most important areas in analysis and as the followings:

Liquidity:
Despite the enhancement in ratio from 2011 to 2014, the quick ratio silently decreased but in general the company still able to fill full its outstanding Debt as they become due.

Market Sensitivity (RISK)
The B indicates that the company like less sensitive to market returns fluctuations, example if the market go-down by 2 return degree the company stock return will go down by 0.4 return degree only and vice versa.

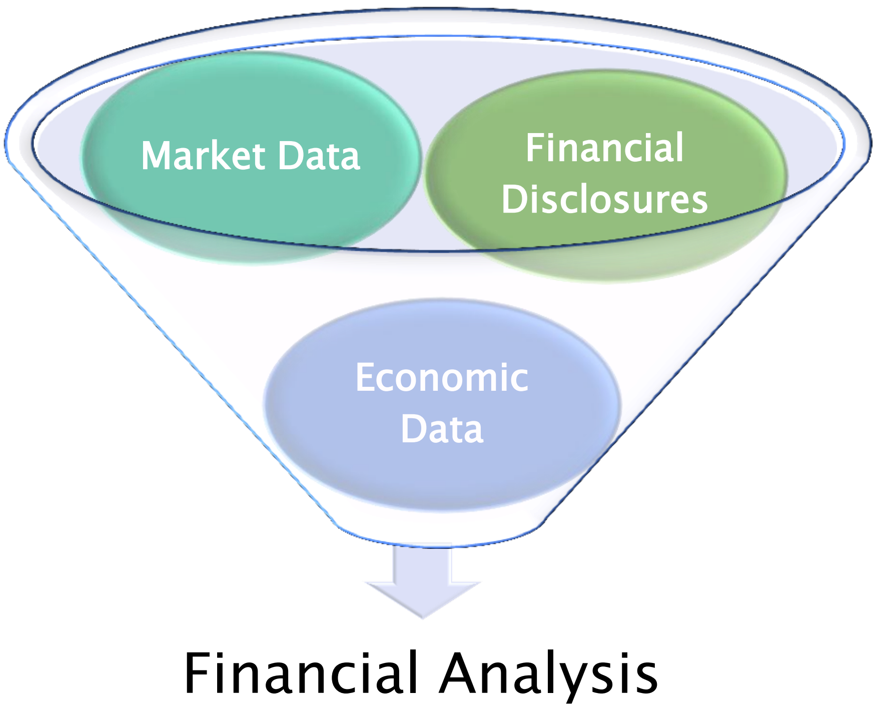
Profitability:
The increase in the fixed assets lead to increase the operating leverage, so the fixed cost increased and therefore sensitive profit.

Valuation:
The stock closed at JD 3.22 on the Amman Stock Exchange at the end of trading at December 31, 2014. We therefore reiterate our '**BUY**' recommendation on DADI stock at its prevailing price levels.

WHAT IS FINANCIAL ANALYSIS – TRADITIONAL ONE

Is a process of selecting, evaluating, and interpreting financial data, along with other pertinent information, in order to formulate an assessment of a company's present and future financial condition and performance? The below Figure-1 shows the traditional financial analysis components (Source: /www.cfainstitute.org CFA Institute)

Figure – 1



Source: www.cfainstitute.org

FINANCIAL ANALYSIS BY LINKING FINANCE WITH SUPPLY CHAIN

In this methodology I am linking the major finance metrics with the supply chain metrics to enable the organization decision makers to create decisions and use organizational resources that eventually impact the financial outcomes of the firm. To do so effectively, they need to link the results of supply chain decisions to the financial goals and related metrics of the company as shown in Figure – 2.
By creating a set of connections between the work that is being performed and the financial outcomes of the firm, the organization's supply chain function can increase organizational visibility and demonstrate the effect of supply chain decisions and resource operation on the firm's financial performance.

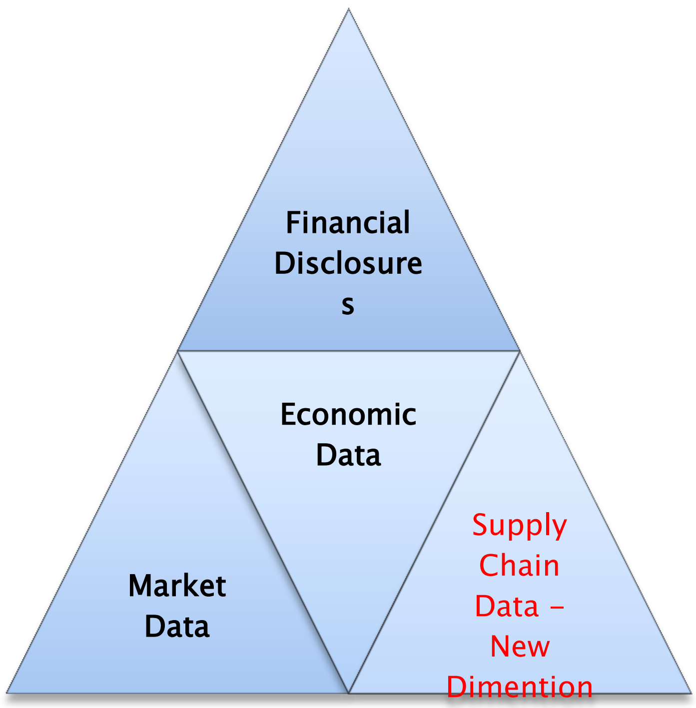


Figure – 2, Organization Financial Analysis

UNDERSTANDING PHARMACEUTICAL INDUSTRY

The pharmaceutical industry is the part of the healthcare sector that deals with medications. The industry comprises different subfields pertaining to the development, production, and marketing of medications. These more or less interdependent subfields consist of drug manufacturers, drug marketers, and biotechnology companies.
The main goal of the pharmaceutical industry is to provide drugs that prevent infections, maintain health, and cure diseases. This industry directly affects the global population, so a number of international regulatory bodies monitor things like drug safety, patents, quality, and pricing. Here are some of those regulatory entities:

- World Health Organization (or WHO)
- US Food and Drug Administration (or FDA)
- Medicines and Healthcare Products Regulatory Agency (or MHRA)[1]

[1] (For more details to understand the industry in more details, Source: http://marketrealist.com/2015/01/easier-way-understand-pharma-industry

GLOBALLY GROWTH

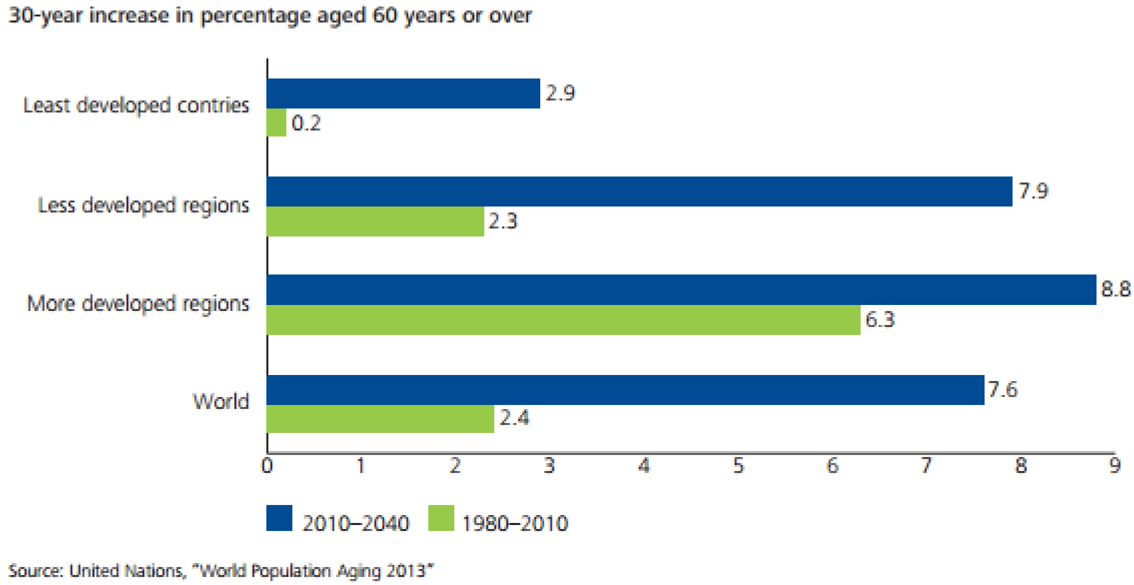
In today days the pharmaceutical industry is growing rapidly, and the followings are the major drivers (as shown in Figure – 3).

Figure – 3

- Aging population:

  Worldwide, the average human of life span has increased substantially over the last few decades. However, more infections and diseases have come along with this longevity growth. This has led to increased research on aging populations. The goals are to prevent infections and maintain health so that these populations can enjoy better lives, Figure-4 shows that increasing in percentage aged 60 years or over.

Figure – 4



- Changing life style

  Changing eating habits, less sleep with less sport and body exercises, demand on the health supplement introduces to meet the daily nutritional needs (like vitamins and mineral), and to remedy the issues of bad habits.

- Increased income and chronic diseases

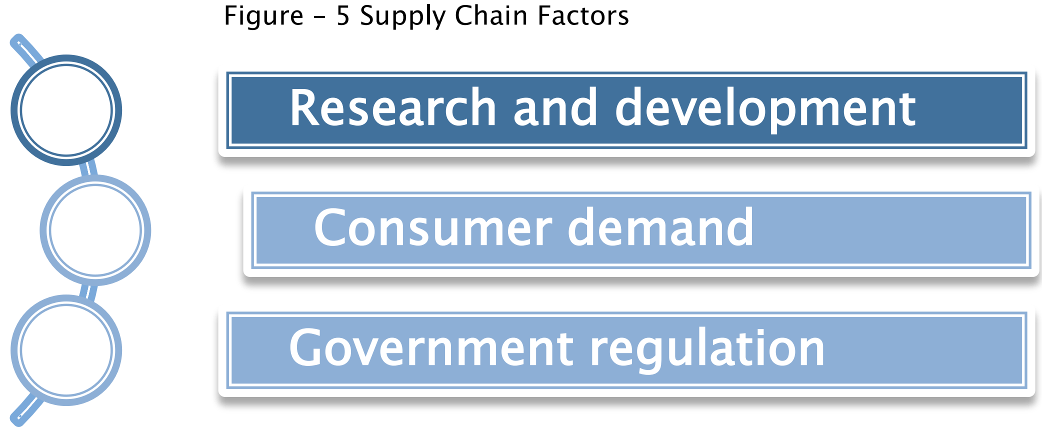
  As the number of chronic diseases are increased the demand on the medicines increased.

FACTORS AFFECTING PHARMACEUTICAL INDUSTRY

We can say that the factors affecting the pharmaceutical industry can be classified into two major categories, as shown in Figure – 5

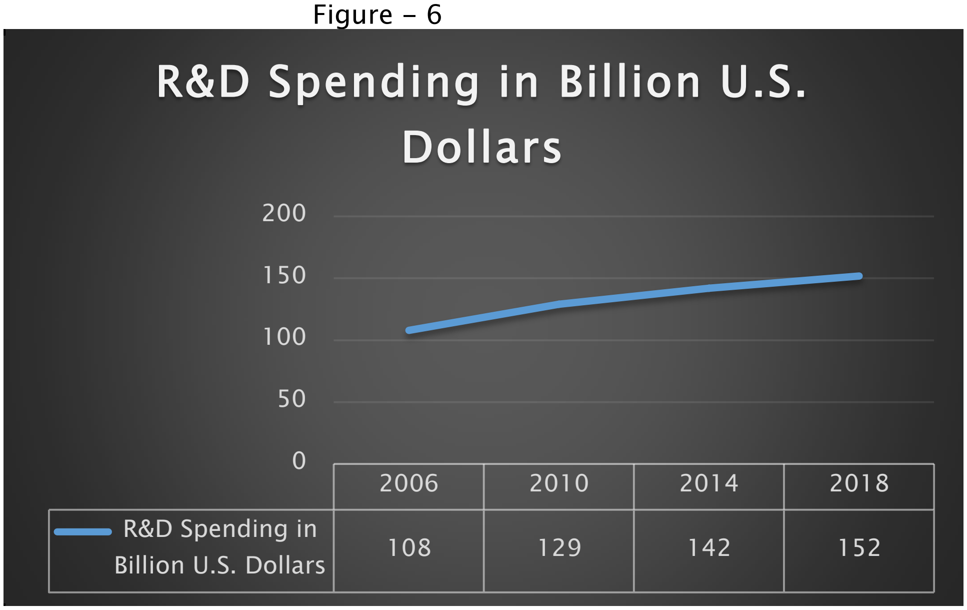
1. Supply Chain Factors

Figure – 5 Supply Chain Factors



As mentioned before in the global growth section, we found out that changing the life style, increasing the population, and increasing in the chronic diseases, this force the Pharma firms to invest more in the research and development field (Figure – 6 shows the global spending the Research and Development in the pharmaceutical industry) trying to enhance the current drugs and finding more drugs and supplements, and also we noted that the increasing in demand from the consumer side. The level of regulation carried out by the government on the industry determines its profitability. Every successive federal government regulates the industry to a certain extent. Some countries like Germany and Canada are known to have caps or price controls on all pharmaceuticals that are within their border.

Figure – 6



R&D Global Spending Source: Statistics Portal: http://www.statista.com/statistics

2. Economic Factors

The economic factors affecting Pharmaceutical industry, such as changes in GDP (gross domestic product), interest rates, and exchange rates as shown in the figure below.

STATISTICAL DATA

In this research and analysis report, we will focus in one of the main chronic disease, which exponentially increased worldwide – **Diabetes**

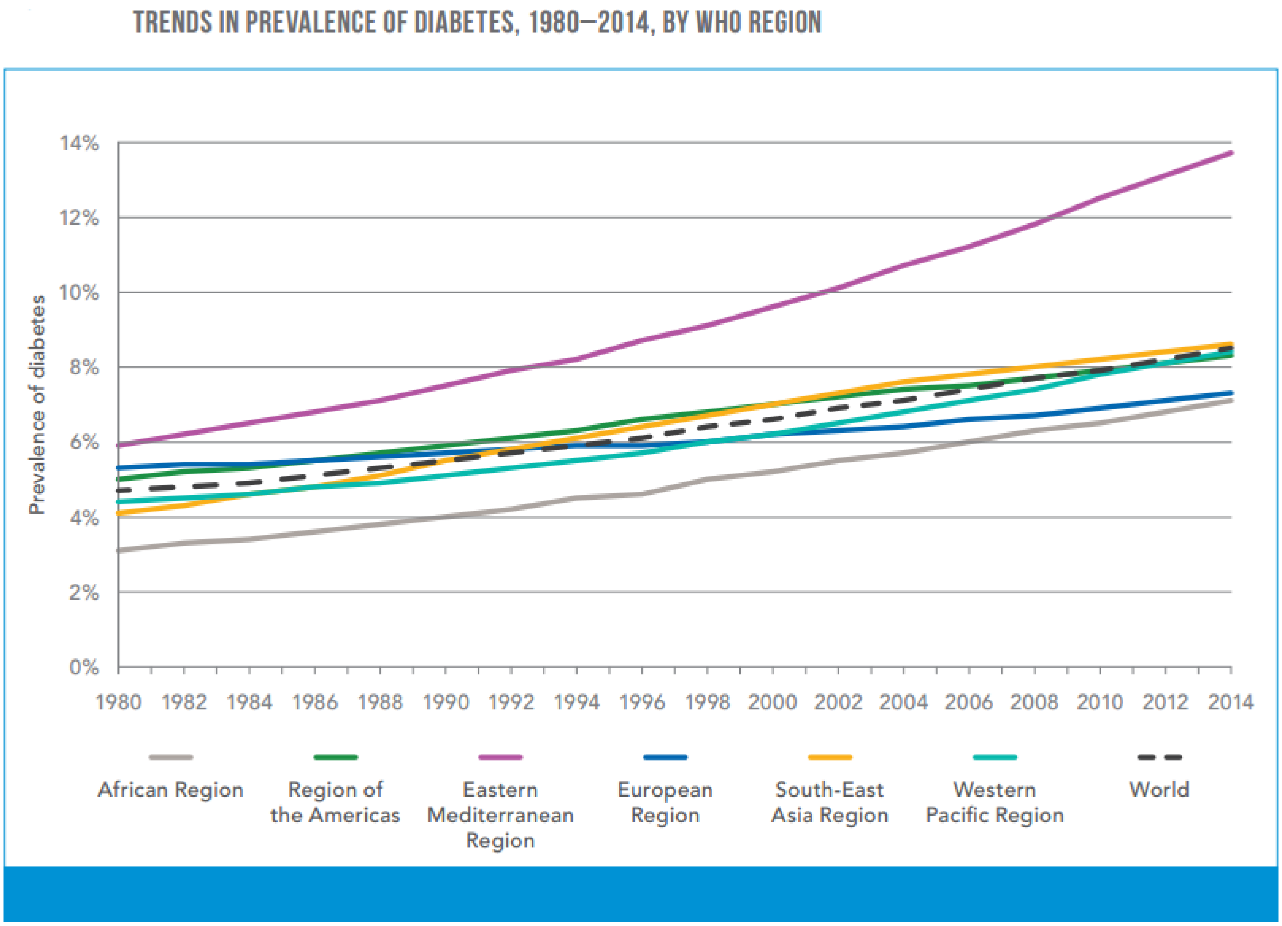
Fact, WHO estimates that, globally, 422 million adults aged over 18 years were living with diabetes in 2014? As shown in the figure – 7 and Figure – 8 that shows diabets globally

Figure – 7

WHO Region	Prevalence (%)		Number (millions)	
	1980	2014	1980	2014
African Region	3.1%	7.1%	4	25
Region of the Americas	5%	8.3%	18	62
Eastern Mediterranean Region	5.9%	13.7%	6	43
European Region	5.3%	7.3%	33	64
South-East Asia Region	4.1%	8.6%	17	96
Western Pacific Region	4.4%	8.4%	29	131

Source: Global Burden of Diabetes

Figure - 8



Source: Global Burden of Diabetes

From the above we can observe the increasing in the Diabetes that part from the chronic disease, and this means that increasing in the medicine supply.

Figure- 9 shows Diabetes in Jordan and Region:

Figure - 9

Country	2000	2030
Afghanistan	468,000	1,403,000
Bahrain	37,000	99,000
Cyprus	50,000	87,000
Djibouti	7,000	9,000
Egypt	2,623,000	6,726,000
Islamic Republic of Iran	2,103,000	6,421,000
Iraq	668,000	2,009,000
Jordan	195,000	680,000
Kuwait	104,000	319,000
Lebanon	146,000	378,000
Libyan Arab Jamahiriya	88,000	245,000
Morocco	427,000	1,138,000
Oman	113,000	343,000
Pakistan	5,217,000	13,853,000
Qatar	38,000	88,000
Saudi Arabia	890,000	2,523,000
Somalia	97,000	331,000
Sudan	447,000	1,277,000
Syrian Arab Republic	627,000	2,313,000
Tunisia	166,000	388,000
United Arab Emirates	350,000	684,000
Yemen	327,000	1,286,000
Total	15,188,000	42,600,000

Source: World Health Organization

DEMAND - SUPPLY

As seen before in the report, we observe that the supply of the diabetes medicine is increased and this needs also increasing in the Research and Development tasks trying to find better solution for this global issue to increase the customer values.

And one leading company in the region that provide Diabetes medicine is DAR AL DAWA.

COMPANY HISTORY

Introduction: Dar Al Dawa's (DADI) history dates back more than 40 years, during which time it has transformed itself from a small pharmaceutical company to Jordan's second largest producer of high-quality generic and branded pharmaceuticals and regional leader in anti-infectives and differentiated products. During it is long and distinguished history, it have been led by dedicated and fanciful persons who have always aimed to be one step ahead and who have carried success through high-quality products and services.

Dar Al Dawa Business: Dar Al Dawa is a MENA-wide leader in pharmaceutical and consumer health products. With a history of more than 40 years, As a fully integrated pharmaceutical company, it have a long established customer-centered methodology to developing, producing, marketing and commercializing high-quality affordable medicines and wellness consumer products in emerging markets, with more than 900 people serving patients in more than 40 countries throughout Middle East, North Africa and Europe.

Investment and Subsidiaries: Dar Al Dawa has different models of investment in several countries. Currently Dar Al Dawa has investments in the following countries: Romania, Libya, and Tunisia.

Responsibility: Dar Al Dawa is committed to building a high growth business while at the same time ensuring a safe environment for employees and minimizing impact on the environment. We aim to understand and respond to the needs of shareholders, employees, customers, suppliers, the communities in which we work and the wider public.

Main Products: Dar Al Dawa core business lies in the development, production and distribution of high-quality medicines and products. Dar Al Dawa offer more than 100 products in more than 200 dosage forms across more than 20 therapeutic areas worldwide and are a leading provider of differentiated, value-added products. In this report we will tell about the Diabetes products like Diapride.

Strategy

Dar Al Dawa strategy is to focus on core competencies and then execute, with customer centric high-performance, at every stage from medicine development to commercialization. This has successfully made Dar Al Dawa the second largest player in Jordan and a partner of choice to many collaboration (alliances) and healthcare partners within MENA.

Employees: Dar Al Dawa has 506 male and 283 female, with the total of 789 employees.

Accounting Standard: DADI using International Accounting Standard 28

DAR AL DAWA SWOT ANALYSIS

SWOT is an abbreviation that stands for Strengths, Weaknesses, Opportunities and Threats. As a company plans its next travel, it should study all of these factors before going on. The strengths and weaknesses are elements within the company's control. The company can then work to make the most of its strengths and eliminate the weaknesses. Opportunities and threats, are external elements.

Strength

- * Located in a strategic geographical area, link east with west and safe country
  Concentrating in the customer value by using customer-center approach
  * Safe environment employees
  * Solid Research and development
  * Having well educated and well trained skilled manpower

Weakness

- * Low local demand because of small local market
  * Local manpower salaries is high when you compared with other nationalities like china, Bangladesh, and India
  * Poor government support to the Research and development in the pharmaceutical industry
  * Difficult sales and marketing promotions and discounts

Opportunity

- * Government development program include healthcare
  * One the leading economy in the middle east is Jordan economy
  * Government trade agreement with big countries like USA and EU as an example of these agreement is FTA
  * Medical/Healthcare Tourism

Threats

- payments from some customers
- Leaving of key manpower
- Crisis in global economics
- Unstability Regonal Environemnt

FINANCIAL OVERVIEW

Financial statements provide information for determining how well their operations perform at all times. Many owners do not realize that financial statements have a value that goes away from their use as supporting documents to loan applications and tax returns.

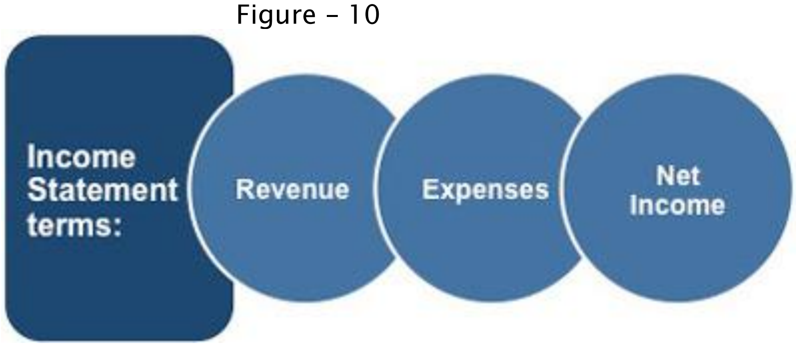
These statements are brief reports designed to summarize financial activities for specific periods, and in this report we analyze the reports for the period between 2011 and 2014 because of data availability in Amman Stock Exchange.

Decision makers can use financial statement analysis to evaluate the past and current financial situation of their business, identify any existing financial harms, and forecast future trends in the firm's financial position.

The statements that we are going to analyses are:

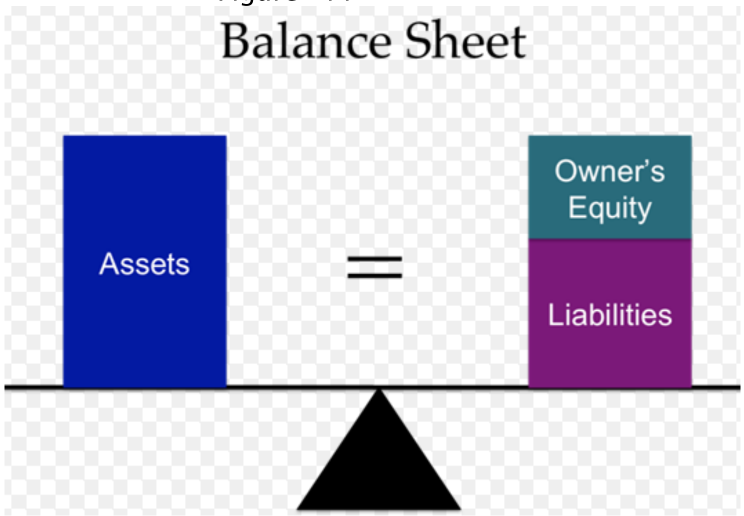
- Income Statement:
  A report of the firm's earnings over a specific period of time, calculated as sales activities (revenues) minus product costs (cost of goods sold) and selling, general, and administrative costs, as shown in the figure- 10.

Figure – 10



- Balance Sheet
  A report of what the firm owns (assets) and owes to either debtors (liabilities) or owners (shareholders' equity), as shown in the figure -11.

Figure- 11



Forecasts are respected in statement analysis for the following reason: Preparing forecasts that assume that the elementary financial facts about a company will remain the same for a specified period in the future. These forecasts will explain where you are expected to stand.

Evaluation identifies, in financial terms, where the firm has been and where it is today.

SUPPLY CHAIN OVERVIEW

As we see in the financial overview, most businesses measure success through a high-level set of financial metrics that are reported on a quarterly or annual basis, such as operating or net income, return on investment, and earnings per share. Financial performance metrics are valuable because they capture the economic consequences of business decisions. They are the "language of business," used by internal and external stakeholders to evaluate the results of business operations.

Supply chain leaders make judgements and use organizational resources that ultimately impact the financial outcomes of the firm. To do so efficiently, they need to link the results of supply chain decisions to the financial goals and related metrics of the organization.

By building a set of connections and link between the work that is being performed and the financial outcomes of the firm, the organization's supply chain function can gain organizational visibility and demonstrate the impact of supply chain decisions and resource utilization on the firm's financial performance.

From the Supply chain point of view we will discuss the most related measures in supply chain that will link to the financial measure, and these are:

- **Throughput**: Is the amount of a product or service a company can produce and deliver to a client in a specific period of time.
- **Operating expenses** are the costs a company incurs that are not related to the production of a product. These expenses include items like payroll, rent, office supplies, utilities, marketing, insurance and taxes. Operating expenses are essentially the costs to keep the business running.

Operating Expenses Formula:

Operating expenses = license fees + office expenses + legal fees + insurance + travel and vehicle expenses + salaries and wages + accounting expenses + maintenance and repairs + supplies + advertising + utilities + property taxes

- **Inventory** is an asset that is owned by a business that has the express purpose of being sold to a customer. This includes items sold to end customers or distributors. It includes raw materials, work in process, and finished goods.

FINANCIAL RATIOS ANALYSIS

In this section we will use the some financial ratios to analyze the company financial position, then later we will link these financial ratio with some supply chain measures, trying to understand the company performance and how it is perform it is operations from Fin-SC (Finance Supply Chain) point of view.

The financial ratios targeted in this report are classified into 4 categories and as the followings:

1. Liquidity Ratios
2. Asset Management Ratios
3. Profitability Ratios
4. Leverage Ratios

The standard ratios are based on paper “This Financial Review discusses the in-depth analysis of the operating and financial performance” by BIRDMAN SACHS Published on Feb 20, 2014, and for more details please refer to the link [2].

(A) Liquidity Ratios

Liquidity ratios measure company ability to pay it is obligations and we can say that it is the company ability to convert it is current assets into cash. In this report we will analyze current ratio (current assets / current liabilities), and quick ratio (current asset - inventories / current liabilities). Noting that current assets include: inventory, trade debtors, advances, deposits and repayment, investment in marketable securities in short term loan, cash and cash equivalents, current liabilities include: short term banks loan, long term loans-current portion, trade creditors liabilities, etc..

Analysis:

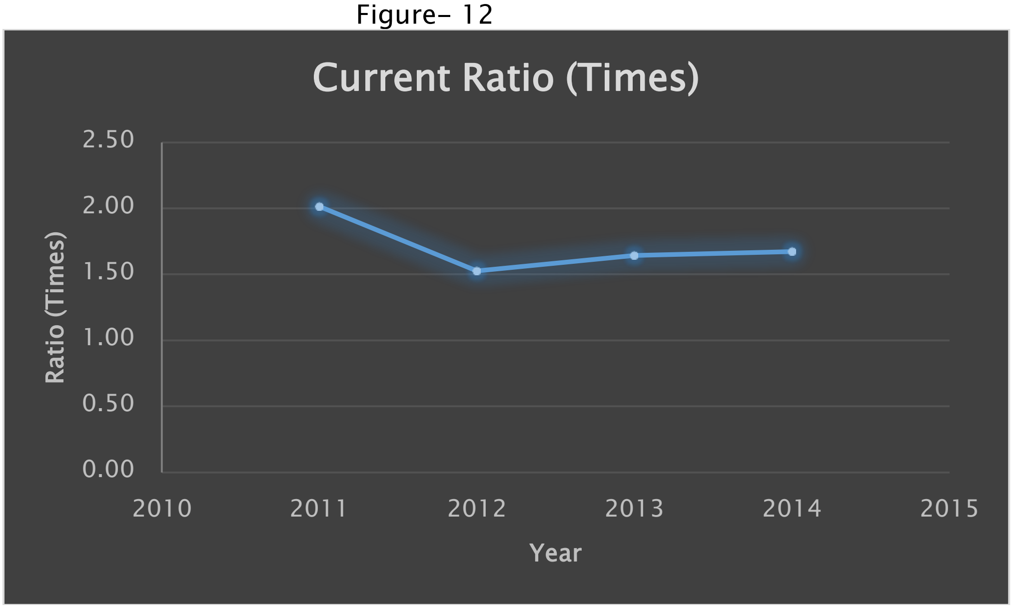
Current Ration: As shown in the figure- 12 below in 2011 the current ratio was 2.01 and when we compare to the industry standard (1.7) we can note that internally the company is more liquid and has

[2] ‘http://www.slideshare.net/RobyCamagong/a-financial-review-pharmaceuticals-industry-31423219’

better coverage to it is liabilities. But strategically this may means that the company is not investing or expanding it is operation, in 2012 it is reach 1.53 and this is a good figure, then in the next 2 years it increased to be near the industry standard.

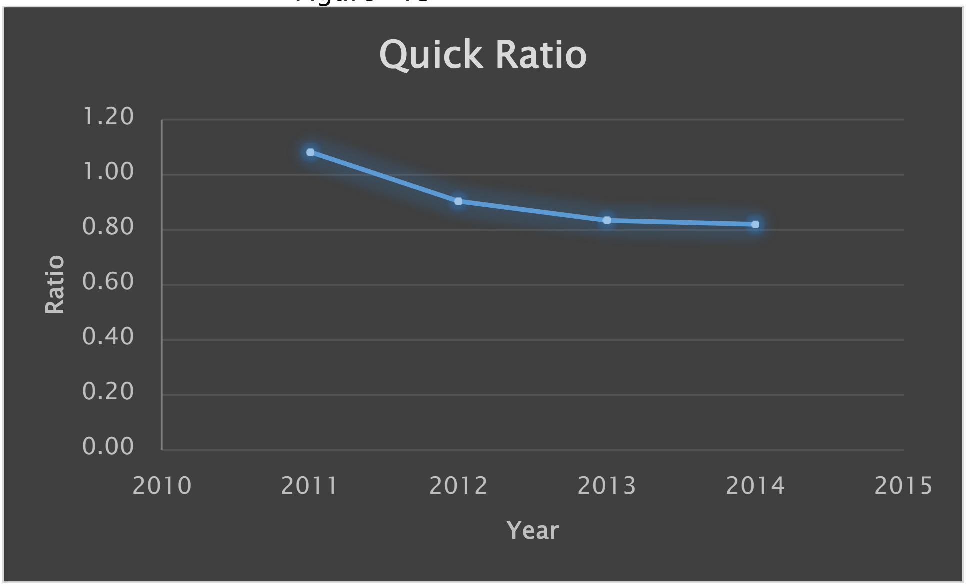
Ratios Categories	2011	2012	2013	2014	Industry Standard
Liquidity Ratios					
Current Ratio (Times)	2.01	1.53	1.64	1.67	1.70
Quick Ratio	1.08	0.90	0.83	0.82	1.20

Figure- 12



Quick Ratio: the quick ratio in 2011 was 1.08 that is near the standard value, then it degreased to .9 and this may happen because of building inventory in 2011, then DADI follow another strategy trying to increase the inventory turnover (eliminating waste, means better lean philosophy) as will see in asset management ratios as shown in Figure- 13.

Figure- 13



(B) Asset Management Ratio

Asset management ratios measure how efficiently a company practices and controls its assets. It is analysis how a company quickly converted to cash or sale on their resources. It is also called Turnover ratio because it indicates the asset transformed or turnover into sales. As a final point, we can identify the company can easily measurement their asset because this ratio made up between assets and sales.

The table below summarized the assets management ratios.

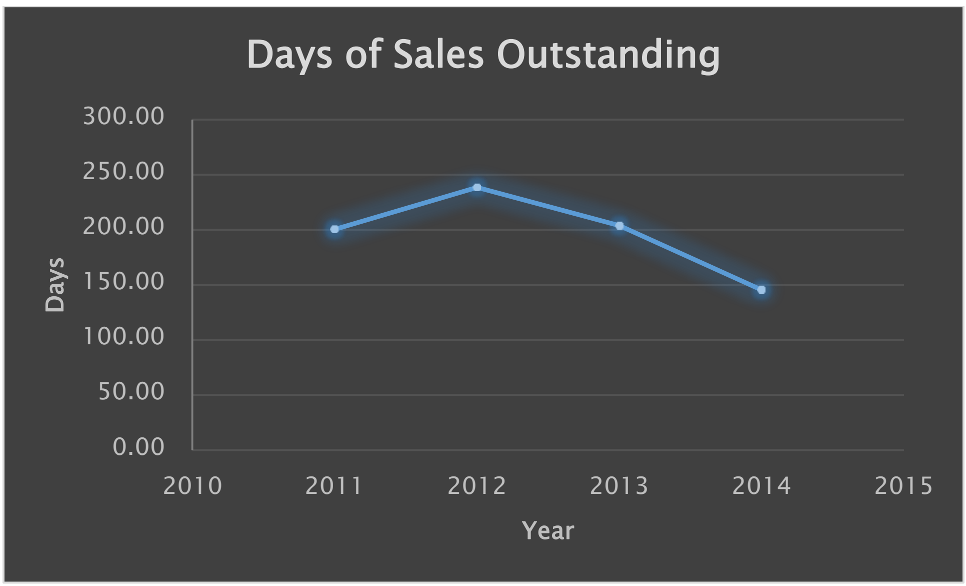
Ratio	2011	2012	2013	2014
Days of Sales Outstanding	200.30	238.37	203.55	145.23
Account Receivable Turnover	1.61	1.69	1.78	2.51
Inventory Turnover	1.24	3.16	4.26	5.46
Days Inventory	293.27	193.63	177.29	137.01
AP Turnover	3.70	4.57	3.48	4.26
Days Payable Outstanding (DPO)	92.36	73.45	131.05	78.33
Total Assets Turnover (Times)	0.45	0.49	0.49	0.69
Fixed Assets Turnover (Times)	3.40	1.96	1.60	2.22

Days of Sales Outstanding (DSO):

The Days of sales outstanding (DOS) is important as it measure the company efficiency and overall profitability, by calculating the collection speed, the faster collection means faster reinvest to make more money by making more sales.

As shown in the figure-14 below we can noted that the company is performing better in 2014 as it decreased by 55.07 from 2011, but if we compare it to the industry standard with the value of 66 (as per EY: Cash on prescription Pharmaceutical companies and working capital management 2014 report), we can easily find out that DADI has insufficient collection and should work to enhance the collection speed.

Figure- 14

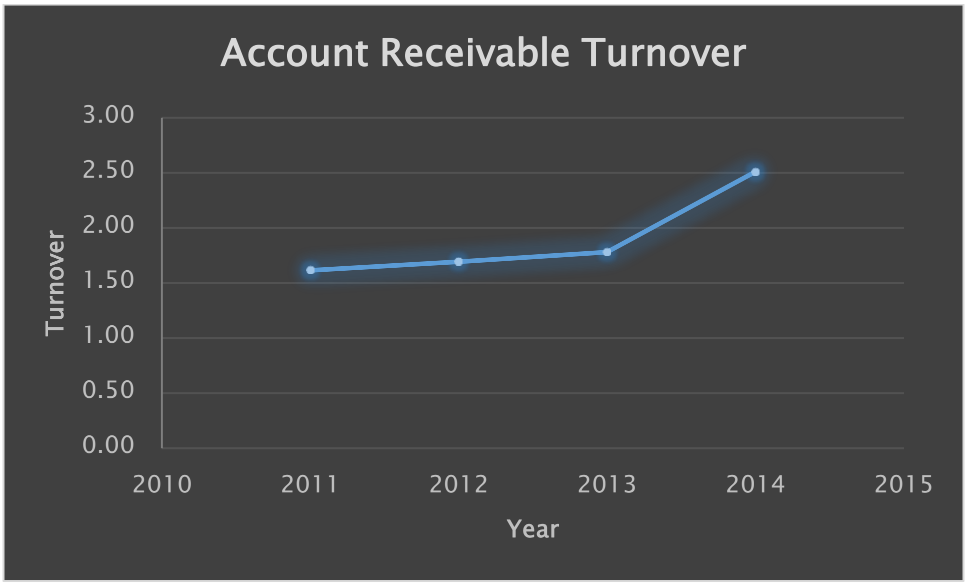


Account Receivable Turnover:

The receivables turnover ratio is an activity ratio measuring how efficiently a firm uses its assets, in other words, the accounts receivable turnover ratio measures how many times a business can collect its average accounts receivable during the year (As per my account course website).

In the below figure-15 we can see that we can see enhancement in the DADI account receivable turnover as it is increasing year by year with 2.5 times in 2014 and it is near to the standard 2.9 value, but still there is a room for enhancement.

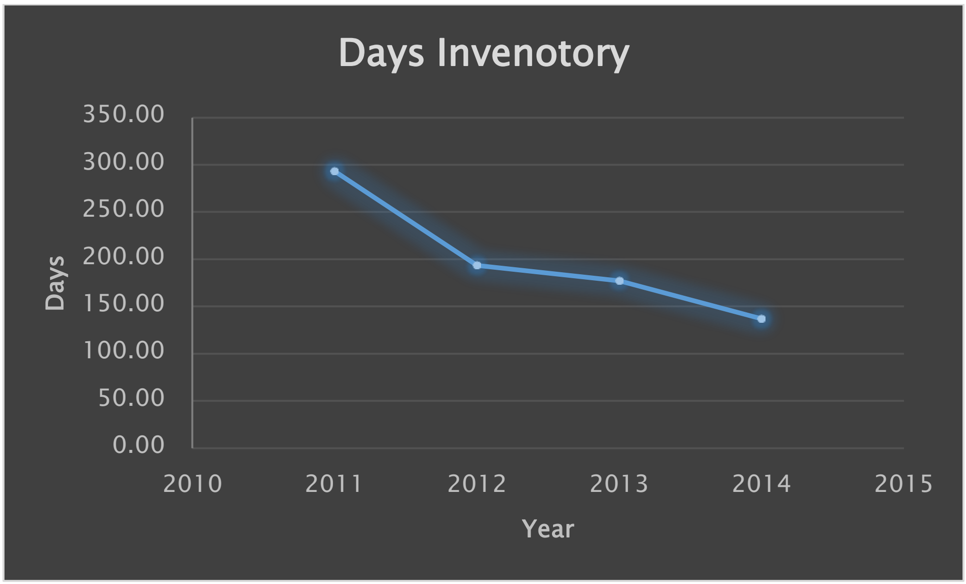
Figure- 15



Days Inventory or Days Sales of Inventory (DSI):
This Ratio Measures the number of days it will take a company to sell all of its inventory. In other words, the days sales in inventory ratio shows how many days a company's current stock of inventory will last (As per my account course website).

As per the figure-16 below we can see the decreasing in the number of days this calculation also shows the liquidity of DADI inventory. Shorter day's inventory remaining means the company can convert its inventory into cash sooner. In other words, the inventory is extremely liquid. As we can see that the number of days was 239.27 in 2011 decreased to 137.01 in 2014 but still DADI need to enhance this value to be near to the average value of 49.4 (as per EY: Cash on prescription Pharmaceutical companies and working capital management 2014 report).

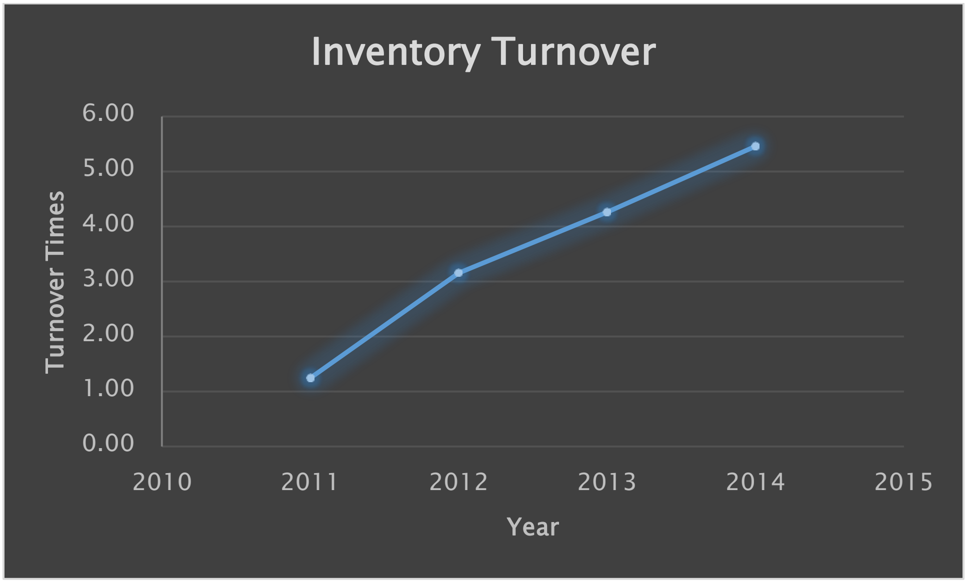
Figure- 16



Inventory Turnover:

The inventory turnover ratio is an efficiency ratio that shows how effectively inventory is managed by comparing cost of goods sold with average inventory for a period. This measures how many times average inventory is "turned" or sold during a period. In other words, it measures how many times a company sold its total average inventory dollar amount during the year. A company with $1,000 of average inventory and sales of $10,000 effectively sold its 10 times over (As per my account course website), please see Figure-17

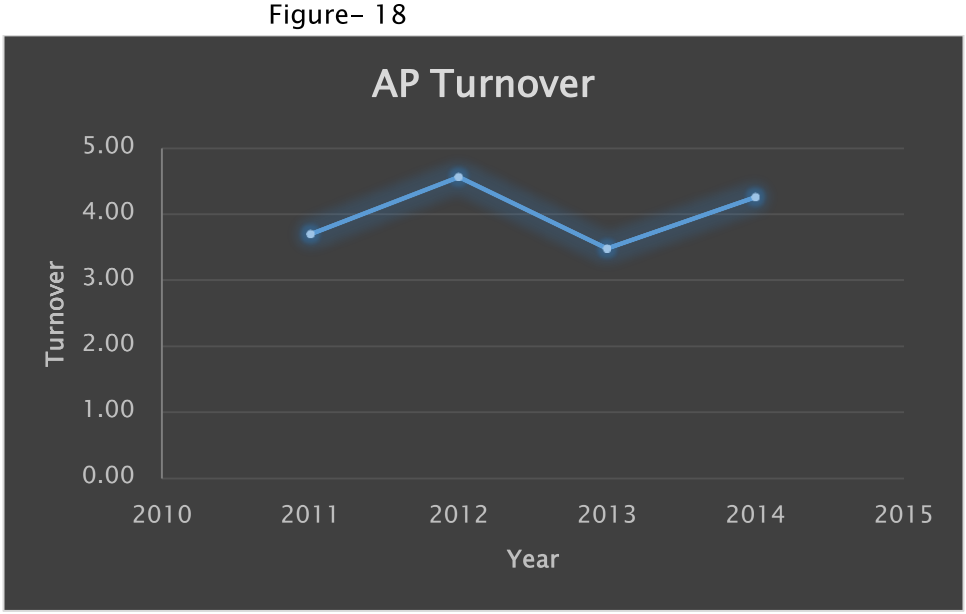
Figure- 17



Accounts Payable Turnover:
The accounts payable turnover ratio is a liquidity ratio that shows a company's ability to pay off its accounts payable by comparing net credit purchases to the average accounts payable during a period. In other words, the accounts payable turnover ratio is how many times a company can pay off its average accounts payable balance during the course of a year (As per my account course website).

From the below Figure-18, we can see fluctuation in the AP turn over, higher ratio means the company can paid it bills to the supplier and higher ratio is more favorable than lower ratio.

Figure- 18

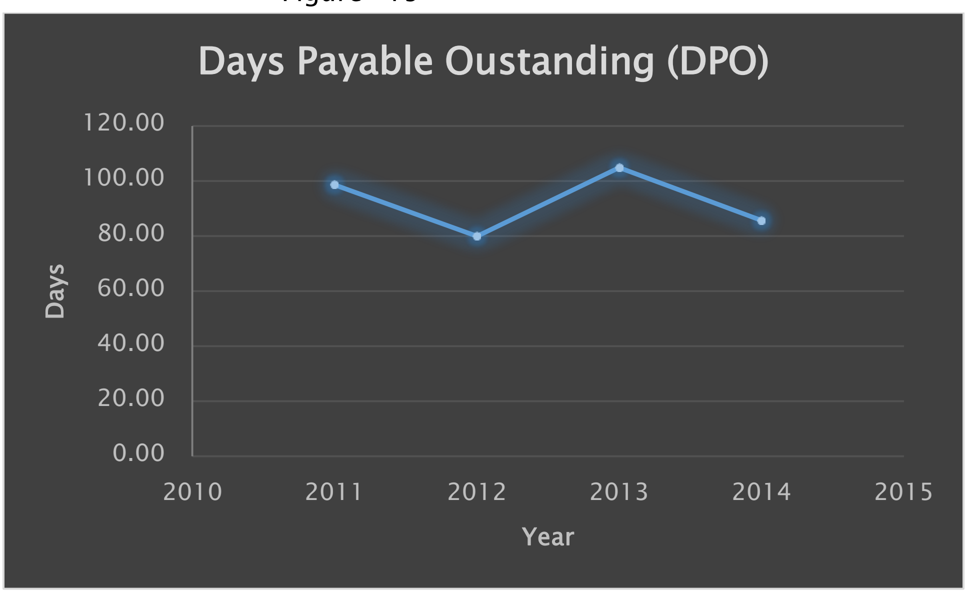


Days Payable Outstanding (DPO):

Day's payables outstanding (DPO) is the average number of days in which a company pays its suppliers. It is also called number of days of payables (As per accountingexplained.com)

From Figure -19, we can see the fluctuation in the DPO, In general, a low DPO highlights good working capital management because the company is availing early payment discounts. However, the DPO should be corroborated by other ratios, particularly the liquidity ratios. When a company's liquidity position is good, a high days payables outstanding most likely tells that the company is delaying payments to its creditors till the last possible date to shorten its cash conversion cycle. It highlights good working capital management. However, if the liquidity situation of the company is not good, a high DPO suggests that the company is facing problems paying its suppliers (As per accountingexplained.com).

Figure- 19

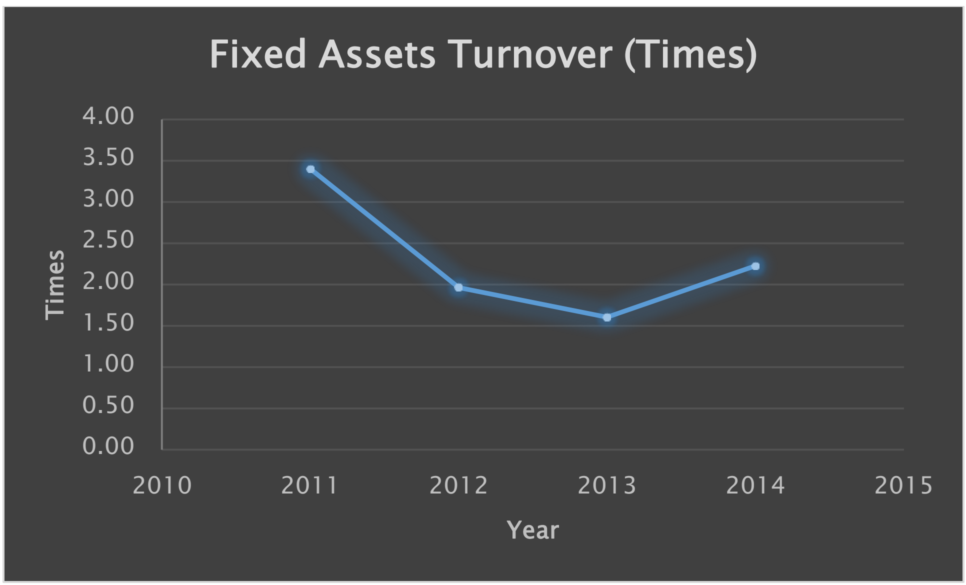


Fixed Assets Turnover:

The fixed asset turnover ratio is an efficiency ratio that measures a company's return on their investment in property, plant, and equipment by comparing net sales with fixed assets. In other words, it calculates how efficiently a company is a producing sales with its machines and equipment (As per my account course website).

From the below Figure-20 we can see that the company has higher utilization for it is assets in 2011 with the value of 3.4 then it decreased to reach the lowest value in 2013 then increased again to 2.22 in 2014, we can say that the increasing in this ratio is coming because of some problems like a bottleneck in the value chain that held up production during the year and resulted in fewer than anticipated sales. This also they might be manufacturing products that no one needs to buy. Also, they might have overestimated the demand for their product and overinvested in machines to produce the products.

Figure-20



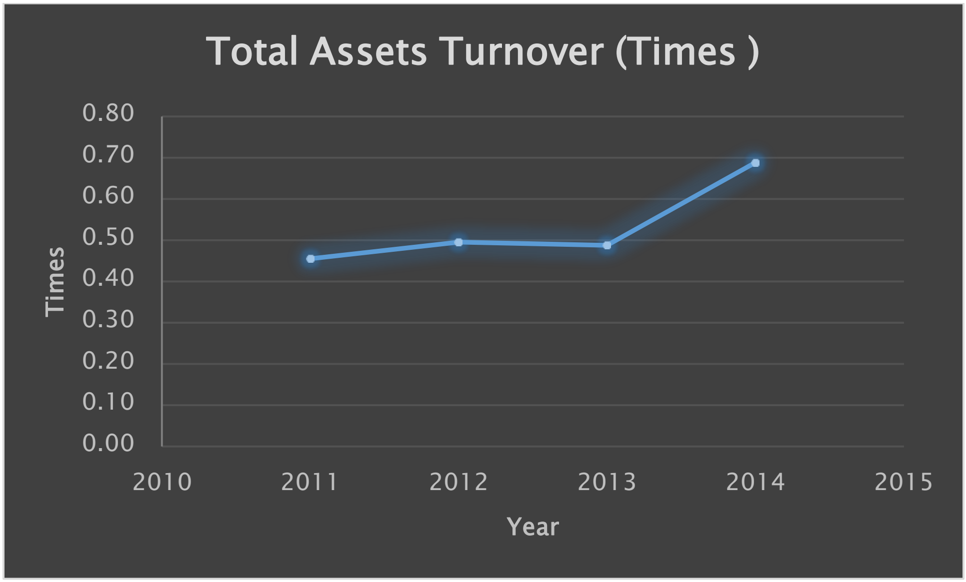
(C) Profitability Ratio

Return on Assets:

The return on assets ratio, often called the return on total assets, is a profitability ratio that measures the net income produced by total assets during a period by comparing net income to the average total assets. In other words, the return on assets ratio or ROA measures how efficiently a company can manage its assets to produce profits during a period (As per my account course website).

From the below figure -21, we can noted that the company efficiency as it managing its assets to produce greater amounts of net income in using it is assets to generate profit is increased from 0.45 in 2011 to 0.69 in 2014

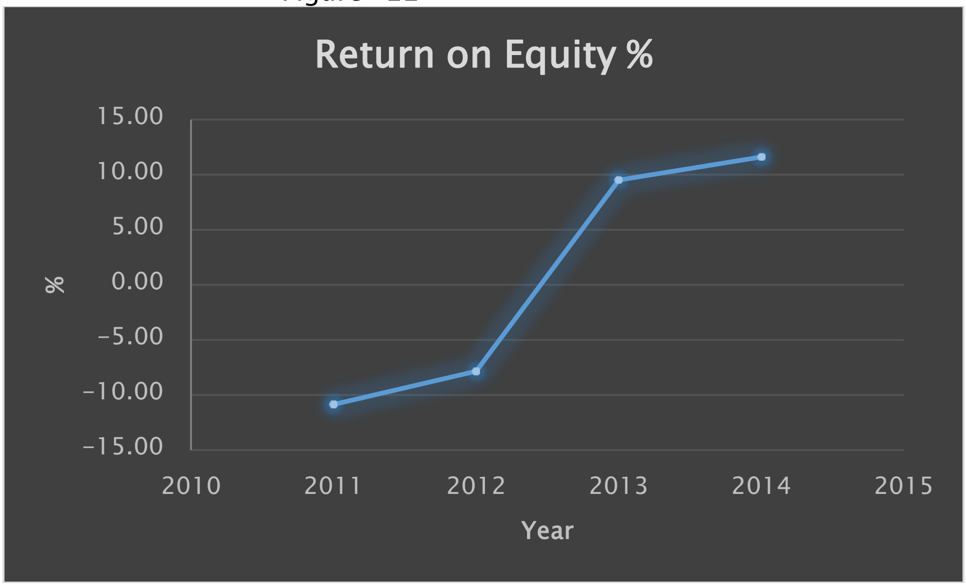
Figure-21



Return on Equity:
The return on equity ratio or ROE is a profitability ratio that measures the ability of a firm to generate profits from its shareholders investments in the company. In other words, the return on equity ratio shows how much profit each dollar of common stockholders' equity generates.
So a return on 1 means that every dollar of common stockholders' equity generates 1 dollar of net income. This is an important measurement for potential investors because they want to see how efficiently a company will use their money to generate net income.
ROE is also an indicator of how effective management is at using equity financing to fund operations and grow the company (As per my account course website).

From the below Figure- 22 we can see the increasing in the ROE ratio and this means that the company is doing better profit generating from its shareholders investment.

Figure- 22



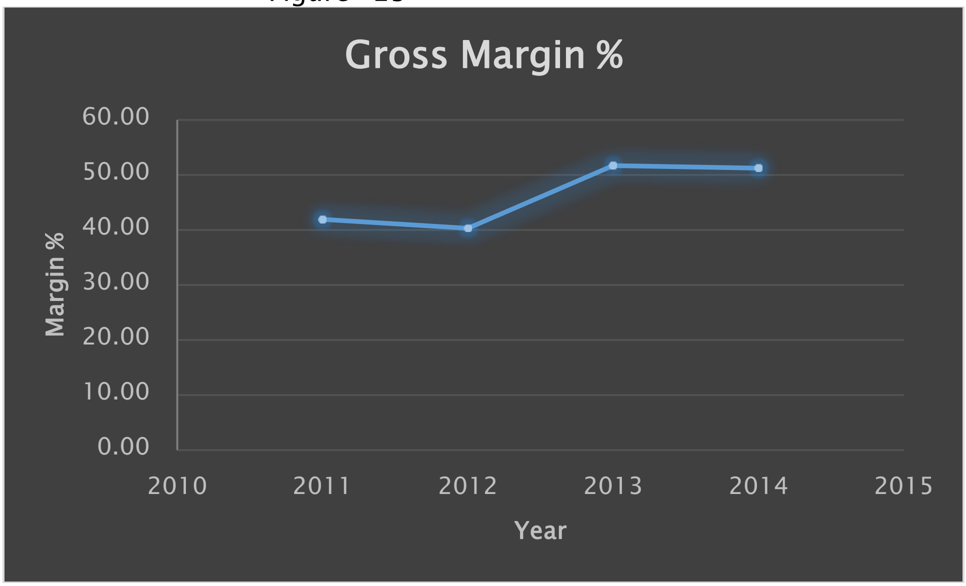
Gross Margin:

Gross margin ratio is a profitability ratio that compares the gross margin of a business to the net sales. This ratio measures how profitable a company sells its inventory or merchandise. In other words, the gross profit ratio is essentially the percentage markup on merchandise from its cost. This is the pure profit from the sale of inventory that can go to paying operating expenses.

Gross margin ratio is often confused with the profit margin ratio, but the two ratios are completely different. Gross margin ratio only considers the cost of goods sold in its calculation because it measures the profitability of selling inventory. Profit margin ratio on the other hand considers other expenses (As per my account course website).

From the below Figure- 23, we can see that the increasing in gross margin from 2011 to 2016 then it decreased in 2014 to reach 51.2 from 51.68 in 2013.

Figure- 23



Profit Margin:
The profit margin ratio, also called the return on sales ratio or gross profit ratio, is a profitability ratio that measures the amount of net income earned with each dollar of sales generated by comparing the net income and net sales of a company. In other words, the profit margin ratio shows what percentage of sales are left over after all expenses are paid by the business.
Creditors and investors use this ratio to measure how effectively a company can convert sales into net income. Investors want to make sure profits are high enough to distribute dividends while creditors want to make sure the company has enough profits to pay back its loans. In other words, outside users want to know that the company is running efficiently. An extremely low profit margin formula would indicate the expenses are too high and the management needs to budget and cut expenses.

The return on sales ratio is often used by internal management to set performance goals for the future (As per my account course website).

From the below Figure- 24, we can see that the increasing in profit margin from 2011 to 2016 then it decreased in 2014 to reach 8.73 from 9.35 in 2013.

Figure- 24

(D) Leverage Ratios:

Debit Ratio:

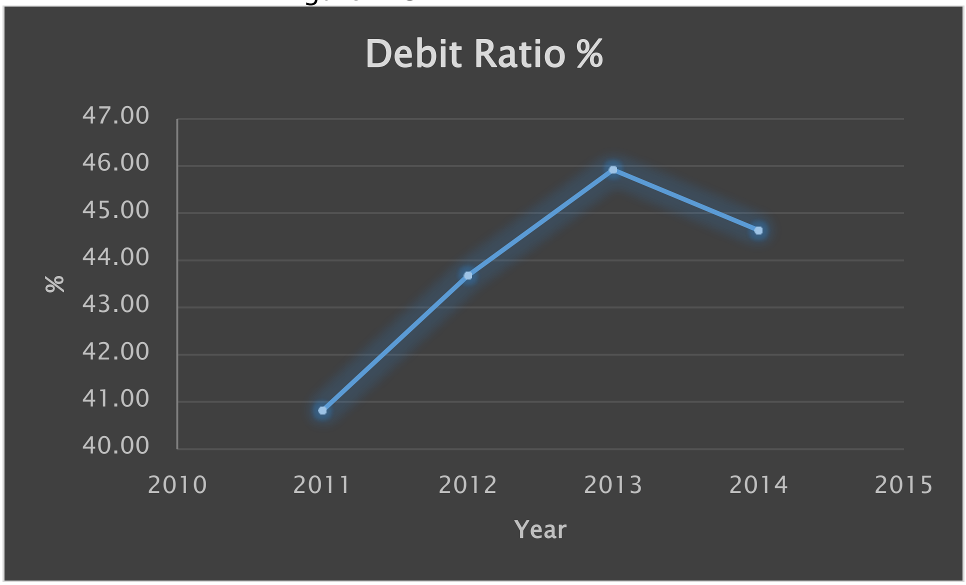
Debt ratio is a solvency ratio that measures a firm's total liabilities as a percentage of its total assets. In a sense, the debt ratio shows a company's ability to pay off its liabilities with its assets. In other words, this shows how many assets the company must sell in order to pay off all of its liabilities.

This ratio measures the financial leverage of a company. Companies with higher levels of liabilities compared with assets are considered highly leveraged and more risky for lenders.

This helps investors and creditors analysis the overall debt burden on the company as well as the firm's ability to pay off the debt in future, uncertain economic times (As per my account course website).

From the below Figure- 25, we can see that the increasing in Debit ratio from 2011 to 2013 then it decreased in 2014 to reach 8.73 from 9.35 in 2013, means the company increased its financial leverage along with the risk of being insolvency.

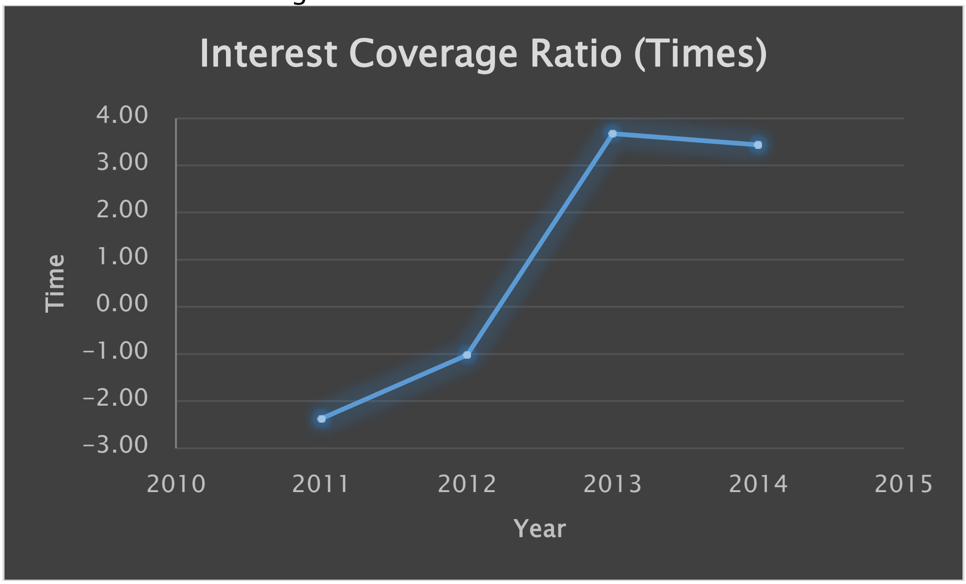
Figure- 25



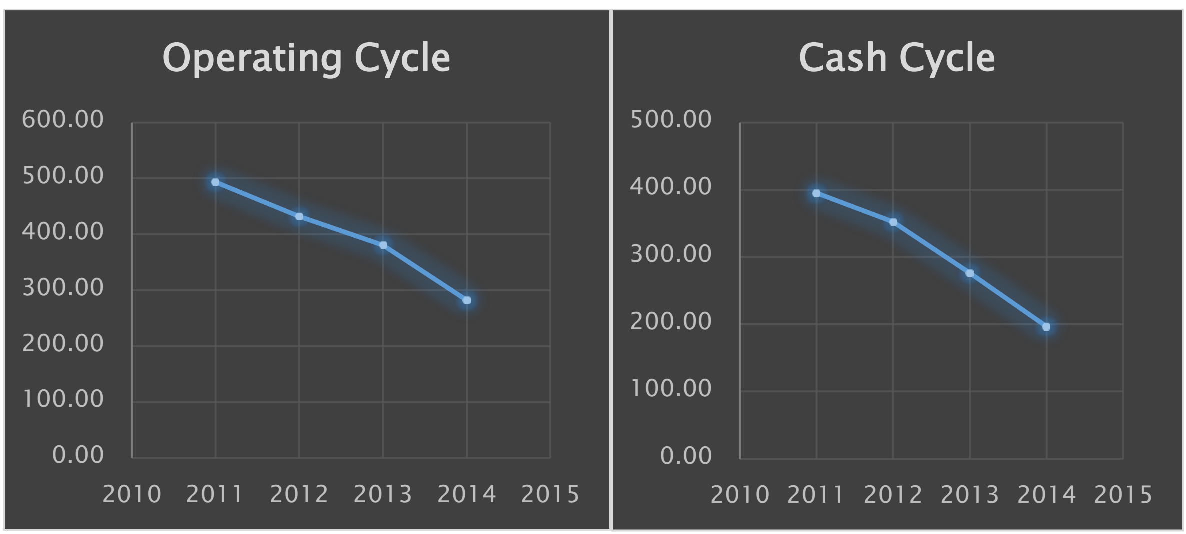
Interest Coverage Ratio:
The interest coverage ratio is a financial ratio that measures a company's ability to make interest payments on its debt in a timely manner. Unlike the debt service coverage ratio, this liquidity ratio really has nothing to do with being able to make principle payments on the debt itself. Instead, it calculates the firm's ability to afford the interest on the debt.
Creditors and investors use this computation to understand the profitability and risk of a company. For instance, an investor is mainly concerned about seeing his investment in the company increase in value. A large part of this appreciation is based on profits and operational efficiencies. Thus, investors want to see that their company can pay its bills on time without having to sacrifice its operations and profits.
A creditor, on the other hand, uses the interest coverage ratio to identify whether a company is able to support additional debt. If a company can't afford to pay the interest on its debt, it certainly won't be able to afford to pay the principle payments. Thus, creditors use this formula to calculate the risk involved in lending (As per my account course website).

From Figure- 26 from 2011 to 2013 increasing, means increase the company ability to pay the interest, then decrease which means the company interest increased.

Figure- 26



Operating Cycle and Cash Cycle:



Considering operating cycle and cash to cash cycle over years, we can noted that both are have same trend of enhancement due to better management of working capital elements.

Financial Ratios for the Forecasting Years (2015-2017)

Ratios	2015(F)	2016(F)	2017(F)
Current Ratio (Times)	1.68	1.68	1.68
Working Capital (JD)	25,232,870	25,499,052	25,777,071
Quick Ratio	0.82	0.83	0.83
Inventory Turnover	5.59	5.59	5.59
Days of Sales Outstanding	145.23	145.23	145.23
Account Receivable Turnover	2.52	2.52	2.52
Days Inventory	133.84	133.84	133.84
AP Turnover	4.67	4.67	4.67
AP Days	78.10	78.10	78.10
Days Payable Outstanding (DPO)	78.33	78.33	78.33
Operating Cycle	279.07	279.07	279.07
Cash Cycle	200.97	200.97	200.97

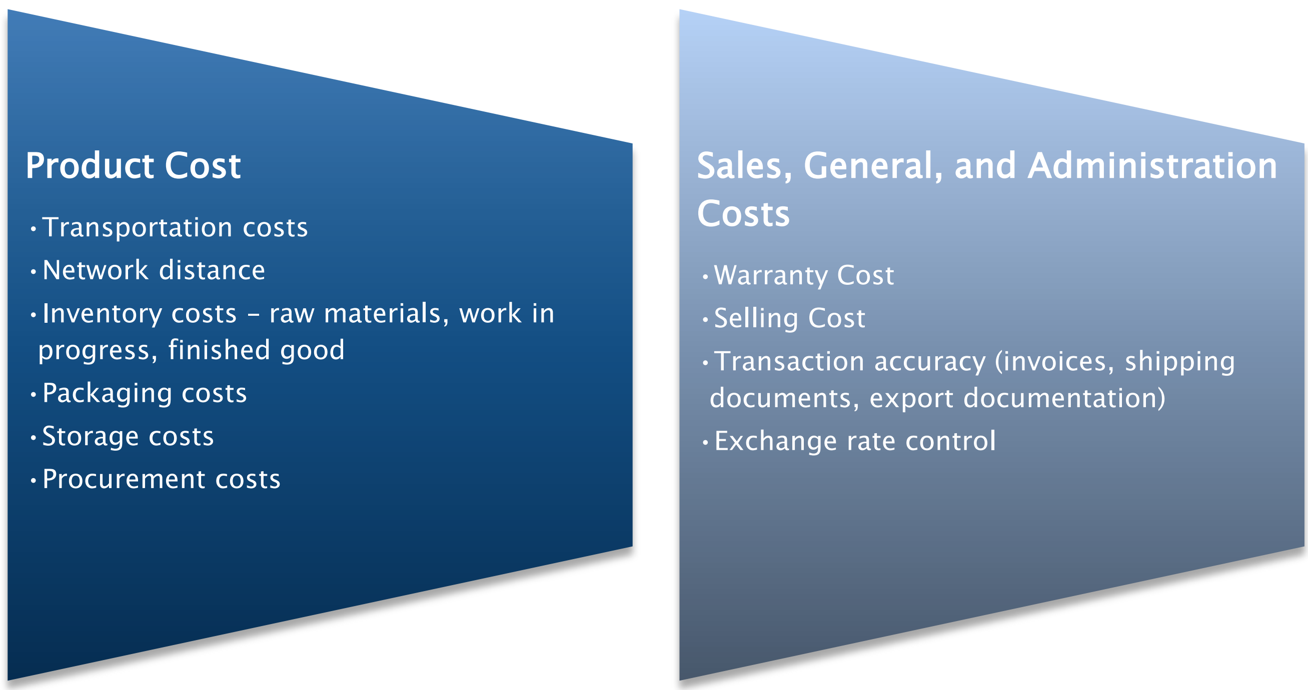
From the above table for the forecasting periods, we can see that enhancement in the ratios when we comparing with 2014 year.

LINKING SUPPLY CHAIN WITH FINANCIAL RATIOS

In this section we will see that there are a link between financial income statement and balance sheet components and with the supply chain issues.

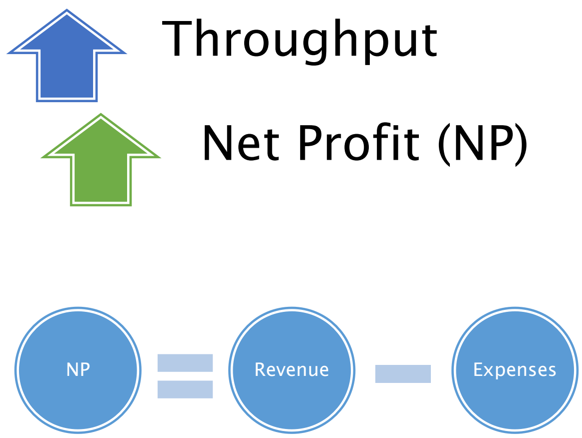
Income Statement Link with Supply Chain Factors:

Figure- 27



From the above figure we can notes that if the transportation cost, storage cost, and packaging costs as an example are increased this will directly impact the operating expense means product cost in the income statement, and also as an example increasing in the exchange rate, selling cost, and warranty cost will increase the Sales, General, and administration costs in the income statement, as an summary the supply chain function should coordinate with the finance function, trying to optimize the above supply chain factors and increasing the throughput, and this as an impact will increase the revenue and decreasing the expenses so increasing the net profit as shown in the below figure

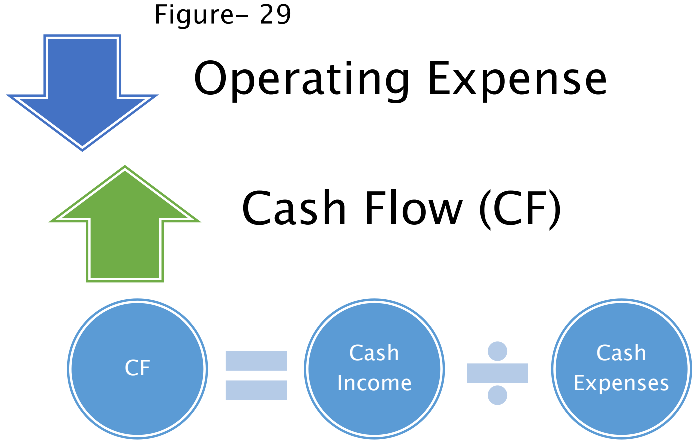
Figure- 28



Source (http:www.iscea.net)

From the above graph- 28 we can see that increasing throughput will increase the net profit by increasing the revenue and decreasing the expenses.

Figure- 29



Source (http:www.iscea.net)

From the above Figure-29 we can see that decreasing the operating expense will decrease the cash expense and this will increase the cash flow.

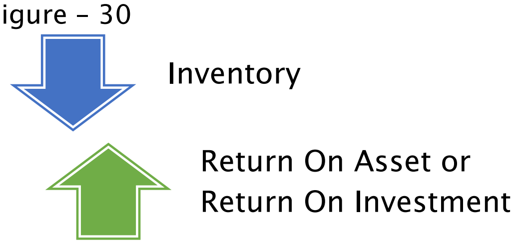
Link Financial Ratios with the Supply Chain Factor:

From the above ratios we found that DADI has optimize it is supply chain as an example the Inventory Turnover increased from 1.24 in 2011 to reach 5.46, and at the same time the Days Inventory decreased from 293.27 in 2011 to 137.01 in 2014. And same thing for the Account Receivable Turnover that increased from 1.61 in 2011 to 2.51 in 2014, and Days of Sales Outstanding decreased from 200.3 in 2011 to 145.23 in 2014. So from the above relation we can see the relation between the supply chain function and financial function.

Balance Sheet Link with Supply Chain Factors:
Within the balance sheet, a key component of organizational success (or failure) is the control of working capital. Working capital is defined as current assets less current liabilities; think of working capital as the "lifeblood" of an organization, as it is essential to keeping the organization healthy and viable.

The primary components of current assets are cash (and cash-like investments), **accounts receivables**, and **inventories**; the primary component of current liabilities for most firms is **accounts payables**.

Figure – 30



Source (http:www.iscea.net)

From Figure-30 we can see that decreasing inventory will increase return on asset or return on investment.

OUTLOOK AND VALUATION

We used the Capital Asset Pricing Model (CAPM) to compute the cost of equity for DADI.
The following assumptions have been made in order to arrive at the intrinsic value of Dar Al Dawa.

- A risk-free rate of 3.5%.
- A return on the market index of %.
- Beta - 20.9% has been calculated.
- The cost of equity derived from the above assumptions using the Capital Asset Pricing Model (CAPM) is 4.2%.
- The cost of debt 23.7%.
- Based on the above assumptions, the Weighted Average Cost of Capital (WACC) works out to be 6.2%.
- Tax rate of 14%.
- Cash Flow constant growth rate of 1% has been assumed.

FCF Valuation

(JD' 000)	2011	2012	2013	2014	2015 (F)	2016 (F)	2017 (F)
EBIT	(4,097,823)	(1,779,331)	6,737,186	8,950,329	8,950,329	9,308,893	4,633,834
Tax Rate	-0.0073550	-0.0205070	0.0495501	0.044134	0.14	0.14	0.14
NOPAT	(4,127,963)	(1,815,820)	6,403,357	8,555,313	7,697,283	8,005,648	3,985,098
Net Operating Working Capital	45,139,619	33,799,073	35,121,461	35,085,217	35,403,980	35,733,749	36,075,737
Net Fixed Assets	11,549,904	10,885,823	23,501,113	23,289,494	23,641,674	23,993,855	24,346,035
Total Operating Capital	56,689,523	44,684,896	58,622,574	58,374,711	59,045,654	59,727,604	60,421,773
NOPAT	(4,127,963)	(1,815,820)	6,403,357	8,555,313	7,697,283	8,005,648	3,985,098
Net Operating Capital		4,587,537	2,151,956	(858,030)	308,365	(4,020,550)	(3,985,098)
Free Cash Flows (FCF)		(6,403,357)	4,251,402	9,413,343	7,388,918	12,026,197	7,970,195

Valuation of DADI

Based on our future earnings projections and the above assumptions, the value of Dar Al Dawa Company comes out to be JD 5.6 per share.

	(JD)
Value of operations at the end of 2014	154,361,604
Add: Value of Non-Operating Assets	0
Total Corporate Value	154,361,604
Less: Value of Interest-Bearing Debt	14,423,331
Intrinsic Value of the Firm's Equity	**139,938,273**
Number of shares outstanding	24,893,332
Intrinsic Value per share	**5.6**

The stock closed at JD 3.22 on the Amman Stock Exchange at the end of trading at December 31, 2014. We therefore reiterate our '**BUY**' recommendation on DADI stock at its prevailing price levels.

REFERENCES

Web Sites:

- www.ase.com.jo
- www.myaccountingcourse.com
- www.Deloitte.com
- www.marketrealist.com
- Study.com
- investopedia.com
- inventorydefinition.com
- www.cfainstitute.org
- Priscilla Wisner; Distinguished Lecturer The University of Tennessee

BALANCE SHEET

Dar Al Dawa Company

(JD)	2011	2012	2013	2014	2015 (F)	2016 (F)	2017 (F)
Assets							
Cash on Hand & at Banks	12,529,323	1,046,594	3,991,838	2,914,719	3,037,898.00	3,170,910.27	3,314,960.93
Short Term Investments	0	0	0	0	0	0	0
Cash & equivalents	12,529,323	1,046,594	3,991,838	2,914,719	3,037,898	3,170,910	3,314,961
Account Receivables, Net	22,529,648	27,903,921	27,536,721	27,442,234	27,606,887	27,772,529	27,939,164
Inventory	16,785,611	10,291,266	12,888,874	12,377,812	12,452,079	12,526,791	12,601,952
Other current assets	7,368,700	5,823,560	7,780,923	6,629,757	6,669,536	6,709,553	6,749,810
Total Current Assets	65,260,258	48,910,599	62,137,634	62,037,258	62,515,172	63,005,048	63,508,104
Long Term Investments	7,467,007	4,090,069	2,607,195	2,721,325	2,737,653	2,754,079	2,770,603
Fixed Assets, Net	11,549,904	10,885,823	23,501,113	23,289,494	23,641,674	23,993,855	24,346,035
Projects in Progress	536,058	10,915,366	7,332,646	7,748,615	7,795,107	7,841,877	7,888,929
Total Fixed Assets	12,085,962	21,801,189	30,833,759	31,038,109	31,224,338	31,411,684	31,600,154
Other Assets	5,470,971	11,565,401	5,725,181	4,493,339	4,561,287	4,629,234	4,697,182
Total Assets	90,284,198	86,367,258	101,303,769	100,290,031	100,891,771	101,497,122	102,106,105
Liabilities							
Accounts and Notes Payable	6,038,910	5,135,761	8,567,353	7,222,770	7,266,107	7,309,703	7,353,561
Credit Banks	12,634,559	18,001,321	11,440,513	7,941,440	7,989,089	8,037,023	8,085,245
Accrued Part of Long Term Loans	2,718,023	0	2,796,734	3,808,277	2,796,734	2,796,734	2,796,734
Total Current Liabilities	32,412,654	32,043,180	37,824,061	37,059,943	37,282,303	37,505,996	37,731,032
Long Term Loans & Notes Payable	4,221,697	5,441,898	8,275,504	7,200,561	8,275,504	8,275,504	8,275,504
Other Liabilities	213,746	237,235	420,641	504,381	507,407	510,452	513,514
Total Liabilities	36,848,097	37,722,313	46,520,206	44,764,885	46,065,214	46,291,952	46,520,051
Authorized Capital	23,000,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000
Subscribed Capital	23,000,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000
Paid-in Capital	23,000,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000	25,000,000
Compulsory Reserves	9,260,627	9,260,627	9,260,627	9,260,627	9,260,627	9,260,627	9,260,627
Voluntary Reserve	9,372,759	9,372,759	9,372,759	9,372,759	9,372,759	9,372,759	9,372,759
Other Reserves	8,884,753	6,412,791	6,417,762	3,729,613	3,729,613	3,729,613	3,729,613
Proposed Cash Dividends	0	0	2,500,000	3,125,000	3,125,000	3,125,000	3,125,000
Accumulated Change in Fair Value	(505,032)	(55,834)	(186,409)	(189,444)	(186,409)	(183,423)	(180,484)
Retained Earnings	3,116,347	(991,160)	2,327,888	5,280,971	5,150,308	5,022,878	4,898,601
Total Shareholders' Equity	53,129,454	45,538,407	51,231,851	52,118,750	58,912,674	58,788,231	58,666,892
Minority Interest	306,647	3,106,538	3,551,712	3,406,396	3,894,540	4,452,637	5,090,710
Total Liabilities & Shareholders' Equity	90,284,198	86,367,258	101,303,769	100,290,031	108,872,428	109,532,820	110,277,653

INCOME STATEMENT

Dar Al Dawa Company

(JD)	2011	2012	2013	2014	2015 (F)	2016 (F)	2017 (F)
Operating Revenues	41,054,922	42,727,786	49,377,571	68,969,440	69,383,256.640	69,799,556	70,218,353.517
Operating Expenses	23,866,238	25,519,918	23,861,463	33,654,643	33,856,571	34,059,710	34,264,069
Gross Profit	17,188,684	17,207,868	25,516,108	35,314,797	35,526,686	35,739,846	35,954,285
General and Administrative Expenses	4,135,563	3,282,097	3,527,327	4,587,203	4,892,301	5,237,263	5,630,230
Selling and Distribution Expenses	10,316,052	9,904,991	11,415,545	17,517,731	21,967,106	28,922,008	40,906,075
Depreciation (period)	1,483,265	16,221,769	1,696,163	2,271,983	2,329,157	2,391,970	2,448,449
Other Operating Expenses	2,295,147	2,728,311	2,322,777	2,701,029	2,806,809	2,920,354	3,042,539
Net Operating Income	2,295,147	2,728,311	2,322,777	2,701,029	2,806,809	2,920,354	3,042,539
Other Revenues	614,619	578,255	1,338,781	780,299	789,127	798,102	807,228
Other Expenses	5,154,364	3,650,055	2,852,054	2,338,804	2,418,115	2,502,390	2,592,103
Income Before Interest & Tax	(4,097,823)	(1,779,331)	6,737,186	8,950,329	8,950,329	9,308,893	4,633,834
Interest Expenses	1,726,851	1,744,377	1,833,428	2,605,983	2,409,005	2,409,005	2,409,005
Net Income before Tax	(5,824,674)	(3,523,708)	4,903,758	6,344,346	4,072,363	4,212,167	4,507,918
Income Tax (Period)	42,841	72,261	242,982	280,003	99,335	102,745	109,959
Board of Directors Remuneration	0	0	45,000	45,000	45,000	45,000	45,000
Net Income	(5,867,515)	(3,595,969)	4,615,776	6,019,343	6,019,343	3,928,028	4,064,422

GLOBAL EQUITY RATINGS DEFINITIONS

Global Rating	Definition
Buy	Fair value of the stock is >10% from the current market price
Hold	Fair value of the stock is between +10% and -10% from the current market price
Reduce	Fair value of the stock is between -10% and -20% from the current market price
Sell	Fair value of the stock is < -20% from the current market price

DADI PROFILE

Code:	**141012**
Symbol:	DADI
Address:	NA'UR
Telephone:	5727132
P.O. Box:	(9364) Amman 11191
Email:	admin.dad@dadgroup.com
Fax:	5727776
Established Date :	17-08-1975
Listing Date:	01-01-1978
No. of Branches:	Local 1 - Abroad 0
Main Objectives:	Manufacturing, producing and marketing medical pharmaceutical for human usage.
General Manager:	Amer Al-Khatib

No. of Employees

	Male	Female	Total
Jordanian	**506**	**283**	**789**
Non Jordanian	1	2	3
Total	**507**	**285**	**792**