

# RESEARCH & ANALYSIS REPORT ON

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The following document aims to inform the readers on several facts about the drug manufacturer company Johnson & Johnson when considering becoming one of the company's stockholders. It is divided into several parts: Profile, Important News, Financial Statements & Analysis, Comparative enterprises, Fundamental Analysis and Technical Analysis. Various analytical methods, such as financial ratios, are used to test essential facts about the company. All numerical data of the company were retained from the 10-K filing of the fiscal year 2012. Refer to J&J's website for a copy of the form 10-K.

## PROFILE

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Johnson & Johnson was founded in year 1886 by Robert Wood Johnson, an American Industrialist, with a desire to improve proper sanitation in humanity.

Name	Johnson & Johnson
Category	Healthcare: main focus on <i>Human Health &amp; Well-Being</i>
Industry	Pharmaceuticals
Specialization	Research, Development, Manufacture & Sale of Health Care Products
Geographic	More than 275 bases in 60 countries with over 127,600 employees
Brands	Tylenol <sup>®</sup> , Band-Aid <sup>®</sup> , Neutrogena <sup>®</sup> , Carefree <sup>®</sup> , AVEENO <sup>®</sup> , CLEAN & CLEAR <sup>®</sup> , Listerine <sup>®</sup> , etc.
Segments of Business	[Consumer (~21.5% of FY Revenue)]; [Pharmaceutical (~37.7% of FY Revenue)]; [Medical Devices and Diagnostics (~40.8% of FY Revenue)]
Major Competitors	Pfizers Inc., Novartis AG, Covidien plc
Stock Symbol	JNJ

▣ **Recalls**

In 2010, shareholders sued J&J Company for bribing personals, marketing false information to consumers and creating problems in manufacturing its products. Due to the latter, continuing recalls were observed. At multiple times, its products emitted musty or moldy odors. At another point, foreign materials, such as woods and metals could be found in its products. Failed to meet consumers' satisfaction, consumer's sales segment faced a decrease of 7.7% overall in revenue over the previous year. The first recall dominantly remarkable was on the 30th of April 2010, where 40 of its products had been recalled.

As today, J&J is still in recovery period from the year 2010's damages affected on the company's image. Recently, in the month of September, two recalls in a very short interval of time were announced (e.g. due to moldiness and plastic residues), raising questions on whether J&J's past problems have not yet been solved to serve its customers products with satisfying qualities.

▣ **Eco-Friendly Project: Healthy Future 2015**

In year 2011, J&J Company declared to engage in a long-term project, aiming to improve its environmental impact. Some of the fundamental goals are to promote clean and renewable energy technology and to minimize CO<sub>2</sub> emissions, water expense and waste production. Listed as one of the top enterprises in the Newsweek's "Green Rankings" and a "Member of the national Green Power Partnership", the company is today actively pursuing its ambitions.

Let us use the Financial Ratios to analyze JNJ's Financial Statements.

<b><u>BALANCE SHEET</u></b>	2012	2011
Assets	\$ 121,347 M	\$ 113,644 M
Liabilities	\$ (56,521) M	\$ (56,564) M
Shareholder's equity	\$ 64,826 M	\$ 57,080 M
Current assets	\$ 46,116 M	\$ 54,316 M
Current liabilities	\$ 24,262 M	\$ 22,811 M
Inventories	\$ 7,495 M	\$ 6,285 M

- ❏ **Current Ratio = Current assets / Current liabilities** = greater than 1 to be ideal

Current Ratio <sub>2012</sub>	Current Ratio <sub>2011</sub>
= \$ 46,116 M / \$ 24,262 M	= \$ 54,316 M / \$ 22,811 M
= 1.901	= 2.381

⇒ JNJ's ability to pay its short-term obligations to creditors on schedule has not changed, but the current ratio deteriorated by 20.2% since last year. Note that when a current ratio is too high, the company might not be using the current assets efficiently: this is not the case of J&J Company.

- ❏ **Quick Ratio = [Current assets – Inventories] / Current liabilities** = greater 1 to be ideal

Quick Ratio <sub>2012</sub>	Quick Ratio <sub>2011</sub>
= [\$ 46,116 M - \$ 7,495 M] / \$ 24,262 M	= [\$ 54,316 M - \$ 6,285 M] / \$ 22,811 M
= 1.592	= 2.106

⇒ The results demonstrate that JNJ has sufficient current assets to immediately retreat its current liabilities, but its capacity dropped by 24.4 % from the last fiscal year 2011.

- ❏ **Leverage Ratio = Liabilities / Shareholder's Equity** = greater than 2 means trouble!

Leverage Ratio <sub>2012</sub>	Leverage Ratio <sub>2011</sub>
= \$ 56,521 M / \$ 64,826 M	= \$ 56,564 M / \$ 57,080 M
= 0.872	= 0.991

⇒ JNJ must pay 0.872 and 0.991 of Liabilities for every 1.0 dollar of Stockholder's equity in fiscal years 2012 and 2011, respectively. No warning signals can be observed from these data.

- ❏ **Working Capital = Current assets – Current liabilities**

Working Capital <sub>2012</sub>	Working Capital <sub>2011</sub>
= \$ 46,116 M - \$ 24,262 M	= \$ 54,316 M - \$ 22,811 M
= \$ 21,854 M	= \$ 31,505 M

⇒ The data obtained for both fiscal years 2011 and 2012 signify that JNJ has sufficient resources to pay back its debts in short-term if necessary. The percentage change of Working Capital for the two years is of 69.4 %.

<u>INCOME STATEMENT</u>	2012	2011
Sales	\$ 67,224 M	\$ 65,030 M
Expenses	\$ (53,449) M	\$ (52,669) M
Provision for Taxes on Income	\$ (3,261) M	\$ (2,689) M
Net loss attributable to noncontrolling interest	\$ 339 M	\$ 0 M
Earnings before provision for taxes on income	\$ 13,775 M	\$ 12,361 M
Net Earnings attributable to Johnson & Johnson	\$ 10,853 M	\$ 9,672 M
Cost of Products Sold	\$ 21,658 M	\$ 20,360 M
Assets	\$ 121,347 M	\$ 113,644 M

▣ **Gross Margin Ratio = [Sales – Cost of Products Sold] / Sales**

Gross Margin Ratio <sub>2012</sub> = [ $\$ 67,224 \text{ M} - \$ 21,658 \text{ M}$ ] / $\$ 67,224 \text{ M}$ = 0.678 or 67.8 %	Gross Margin Ratio <sub>2011</sub> = [ $\$ 65,030 \text{ M} - \$ 20,360 \text{ M}$ ] / $\$ 65,030 \text{ M}$ = 0.687 or 68.7 %
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⇒ The gross margin ratio in 2012 is 1.31 % lower than the last year. This might not seem like a significant change, but it must not be ignored since it is an outcome of an inefficient sales performance, a decrease in products' prices or/and an increase in costs of goods sold.

▣ **Profit Margin Ratio = Net Profit before Taxes / Sales**

Profit Margin <sub>2012</sub> = $\$ 13,775 \text{ M} / \$ 67,224 \text{ M}$ = 0.205	Profit Margin <sub>2011</sub> = $\$ 12,361 \text{ M} / \$ 65,030 \text{ M}$ = 0.190
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⇒ The calculations show a 4.59 % increase for the fiscal year 2012, compared to the previous year. This is a positive result, indicating a progress in profitability and operational efficiency of Johnson & Johnson's Company.

▣ **Return on Assets (ROA) Ratio = Net Profit before Taxes / Assets**

ROA <sub>2012</sub> = $\$ 13,775 \text{ M} / \$ 121,347 \text{ M}$ = 0.114	ROA <sub>2011</sub> = $\$ 12,361 \text{ M} / \$ 113,644 \text{ M}$ = 0.109
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⇒ A 4.59 % rise in ROA for the fiscal year 2012 demonstrates a higher level of profitability than the previous year.

<u><b>CASH FLOW STATEMENT</b></u>	2012	2011
<b>Net cash flows from operating activities</b>	\$ 15,396 M	\$ 14,298 M
<b>Net cash used by investing activities</b>	\$ (4,510) M	\$ (4,612) M
<b>Net cash used by financing activities</b>	\$ (20,562) M	\$ (4,452) M
<b>Effect of exchange rate changes on cash &amp; cash equivalents</b>	\$ 45 M	\$ (47) M
<b>(Decrease)/increase in cash and cash equivalents = Net cash flow</b>	\$ (9,631) M	\$ 5,187 M
<b>Cash and cash equivalents, end of year</b>	\$ 14,911 M	\$ 24,542 M
<b>Net cash paid for acquisitions</b>	\$ 4,486M	\$ 2,797M

▣ **Cash Flow Margin (CFM) Ratio = Operating Cash Flow / Sales**

CFM <sub>2012</sub> = $\$ 15,396 \text{ M} / \$ 67,224 \text{ M}$ = 0.229	CFM <sub>2011</sub> = $\$ 14,298 \text{ M} / \$ 65,030 \text{ M}$ = 0.220
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⇒ J&J Company performed better in making sales than last year with a cash flow margin ratio improving by 4.09 % in fiscal year 2012. It signifies that J & J holds enough cash to expand and to produce more goods.

▣ **Price / Cash Flow (P/CF) Ratio = Market Price per Share / Operating Cash Flow per Share**

$$\begin{array}{ll} P / CF_{2012} & P / CF_{2011} \\ = \$ 69.48 / (\$ 15,396 \text{ M} / 2,812.6 \text{ M}) & = \$ 65.58 / (\$ 14,298 \text{ M} / 2,775.3 \text{ M}) \\ = 12.693 & = 12.729 \end{array}$$

⇒ Given the same cash flow per share in the two years, the investors would pay slightly less this year, with Price-to-Cash Flow ratio reduced by 0.283 %.

The following two tables show data for EBIT and EBITDA calculations. Numbers in parentheses are negative, thus subtracted. First, enterprise values for the fiscal years 2011 and 2012 are calculated.

$$\begin{aligned} \text{Enterprise Value (EV)}_{2012} \\ = \text{Market Cap} + \text{Total Debt} - \text{Cash \& Cash Equivalents} \end{aligned}$$

$$\begin{aligned} \text{With Market Capitalization}_{2012} &= \text{Stock Price} \times \text{Number of outstanding shares} \\ &= \$ 69.48 \times 2,812.6 \text{ M} = \$ 195,419.448 \text{ M} \end{aligned}$$

$$\Rightarrow \text{EV}_{2012} = \$ 195,419.448 \text{ M} + \$ 56,521 \text{ M} - \$ 14,911 \text{ M} = \$ 237,029.448 \text{ M}$$

Using the same method,

$$\Rightarrow \text{Market Capitalization}_{2011} = \$ 65.58 \times 2,775.3 \text{ M} = \$ 182,004.174 \text{ M}$$

$$\Rightarrow \text{EV}_{2011} = \$ 182,004.174 \text{ M} + \$ 56,564 \text{ M} - \$ 24,542 \text{ M} = \$ 214,026.174 \text{ M}$$

<u>EBIT</u>	2012	2011
<b>Earnings before provision for taxes on income</b>	\$ 13,775 M	\$ 12,361 M
<b>Interest expense, net of portion capitalized</b>	\$ 532 M	\$ 571 M
<b>Interest income</b>	\$ (64) M	\$ (91) M
<b>Other (income) expense, net</b>	\$ 1,626 M	\$ 2,743 M
<b>Restructuring</b>	\$ 0 M	\$ 569 M
<b>EBIT</b>	\$ 15,869 M	\$ 16,153 M

▣ **EV / EBIT Ratio**

$$\begin{array}{ll} \text{EV} / \text{EBIT}_{2012} & \text{EV} / \text{EBIT}_{2011} \\ = \$ 237,029.448 \text{ M} / \$ 15,869 \text{ M} & = \$ 214,026.174 \text{ M} / \$ 16,153 \text{ M} \\ = 14.937 & = 13.250 \end{array}$$

⇒ In fiscal year 2012, J&J is potentially overvalued compared to the previous year, with its EV/EBIT ratio increasing by 12.7%.

<u>EBITDA</u>	2012	2011
<b>EBIT</b>	\$ 15,869 M	\$ 16,153 M
<b>Depreciation and Amortization</b>	\$ 3,666 M	\$ 3,158 M
<b>EBITDA</b>	\$ 19,535 M	\$ 19,311 M

▣ **Enterprise Multiple = EV / EBITDA**

$$\text{EV} / \text{EBIT}_{2012}$$

$$= \$ 237,029.448 \text{ M} / \$ 19,535 \text{ M}$$

$$= 12.134$$

$$\text{EV} / \text{EBIT}_{2011}$$

$$= \$ 214,026.174 \text{ M} / \$ 19,311 \text{ M}$$

$$= 11.083$$

⇒ The above shows an increment of 9.483 % for the fiscal year 2012 in J&J's Enterprise Multiple. J&J's stock value is more expensive for investors in 2012.

The data extracted from the Johnson & Johnson's financial statements for the two fiscal years 2011 and 2012 were analyzed and compared accordingly. It is critical to make a thorough study about Johnson & Johnson Company by comparing its values with ones of its competitors to determine the company's standing and performance in the industry.

*COMPARATIVE ENTERPRISES*

In this section, Pfizer Inc.'s financial ratios are compared to Johnson & Johnson's for the fiscal year 2012.

	Johnson & Johnson	Pfizer Inc.	Potentially Better Off
<b>Market Cap.</b>	\$ 195,419.448 M	\$ 182,482.08 M	Johnson & Johnson
<b>EV</b>	\$ 237,029.448 M	\$ 276,213.08 M	Johnson & Johnson J&J's and Pfizer Inc.'s market cap. are comparable, but the difference in EV is the result of Pfizer Inc.'s higher debt value
<b>Current Ratio</b>	1.901	2.146	Johnson & Johnson With current ratio > 2, Pfizer Inc. might not be using the current assets efficiently
<b>Quick Ratio</b>	1.592	1.899	Pfizer Inc.
<b>Leverage Ratio</b>	0.872	1.281	Johnson & Johnson Higher leverage means more money can be gained, but it is also riskier
<b>Working Capital</b>	\$ 21,854 M	\$ 32,796 M	Pfizer Inc. Pfizer Inc. is making an excellent sales performance compared to its costs of products

<b>Gross Margin Ratio</b>	0.678	0.808	Pfizer Inc.
<b>Profit Margin Ratio</b>	0.205	0.247	Pfizer Inc. Pfizer Inc. possesses more money to spend on operating and other expenses
<b>Return on Assets Ratio</b>	0.114	0.0786	Johnson & Johnson J&J is better at converting investment into profits
<b>Cash Flow Margin Ratio</b>	0.229	0.289	Pfizer Inc. Pfizers Inc. made more cash from sales left to be spent on other expenses

Let us examine Johnson & Johnson further using Fundamental analysis and Technical Analysis.

#### *FUNDAMENTAL ANALYSIS*

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Fundamental analysis is one of the most practical tools to determine a company's intrinsic value, its economy, its performance and its risks.

#### 1. Net Earnings

An increase of 15 % or more is ideal.

2012	2011
\$ 10,853 M	\$ 9,672 M

Calculation for % change:  $\$ 10,853 \text{ M} / \$ 9,672 \text{ M} = 1.1221$  or 12.21 % increase

⇒ The result is insufficient to be ideal, but it is a **fair** value.

#### 2. Earnings per Share (EPS)

Net Earnings	Diluted Average Shares Outstanding
\$ 10,853 M	\$ 2,812.6 M

$\$ 10,853 \text{ M} / \$ 2,812.6 \text{ M} = 3.859$  or 285.9 %, which is a sharp increase.

⇒ Using the same method,  $\text{EPS}_{2011} = \$ 9,672 \text{ M} / \$ 2,775.3 \text{ M} = 3.485$ . JNJ made profits in fiscal years 2011 and 2012. But the earnings in fiscal year 2012 are even **higher** than the previous fiscal year.

### 3. Price/Earnings (P/E) Ratio

Average P/E ratio
15 - 30

$$\text{\$ } 69.48 / \text{\$ } 3.86 = 18.0$$

⇒ Investors will voluntarily contribute 18 \$ for 1 \$ of JNJ's current earnings. According to P/E Ratio, JNJ is doing **average**.

### 4. Price/Earnings/Growth (PEG) Ratio

$$\text{P/E} / \text{Growth} = 17.635 / 12.21 = 1.444, \text{ which is } \mathbf{NOT} \text{ recommended}$$

⇒ The price is neither fair nor overvalued. The PEG value indicates that investors pay more for each unit of earnings growth to JNJ than to its competitors with PEG value of less than 1.

### 5. Diluted Price-to-Sales (P/S) Ratio

$$\begin{aligned} \text{P/S} &= \text{Market Capitalization} / \text{Total Sales Revenue} \\ &= \text{\$ } 195,419.448 \text{ M} / \text{\$ } 67,224 \text{ M} = 2.907, \text{ which is less than } 5 \text{ (e.g. } 5 \text{ meaning highly} \\ &\quad \text{priced stock!). According to P/S Ratio, JNJ's stock price is } \mathbf{reasonable}. \end{aligned}$$

### 6. Return On Equity (ROE)

Like EPS, an increase of 15 % or more is ideal.

$$\begin{aligned} \text{ROE} &= \text{Net Income} / \text{Shareholder's Equity} \\ &= \text{\$ } 10,853 \text{ M} / \text{\$ } (23.33 \times 2,753.3) \text{ M} = 0.16896 \end{aligned}$$

⇒ The calculated ROE value is **greater** than 15 %; hence, the Company's management team is productive with a minimum of the Company's resources being used.

☞ With a slightly warning from the PEG Ratio, the data obtained from the Fundamental Analysis indicates that JNJ is **at least a decent stock** to hold on to for a long-term investment.



As Fundamental analysis solely uses information provided by JNJ Company, let us focus on stock prices by using Technical Analysis to predict its movements.

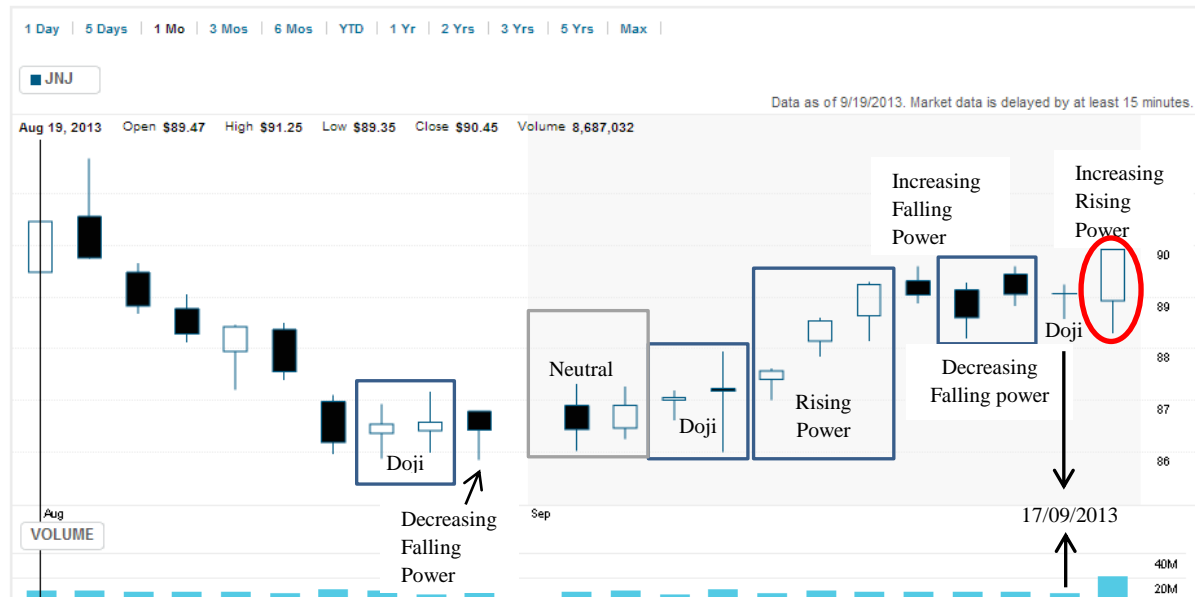
### 1. Line Charts



\* Refer to <http://www.reuters.com/finance/stocks/chart?symbol=JNJ>

⇒ A severe decline in the stock price is noticeable on the 20th of June. Due to the high volume of stock purchasers, JNJ increases by several points in the following weeks. The changes occurring in the stock price cannot be determined by the volume since in the later part of the graph (e.g. Aug. – Sep.), the change in volume does not is consistent with the change in stock prices. A downtrend is noticeable from the 2<sup>nd</sup> to 27<sup>th</sup> of August without any remarkable volume of stocks being bought or sold. The trend slowly changes from the 28<sup>th</sup>, and an uptrend returns on the 3<sup>th</sup> of September. At the final date of our graph, there is a high volume of sellers and buyers.

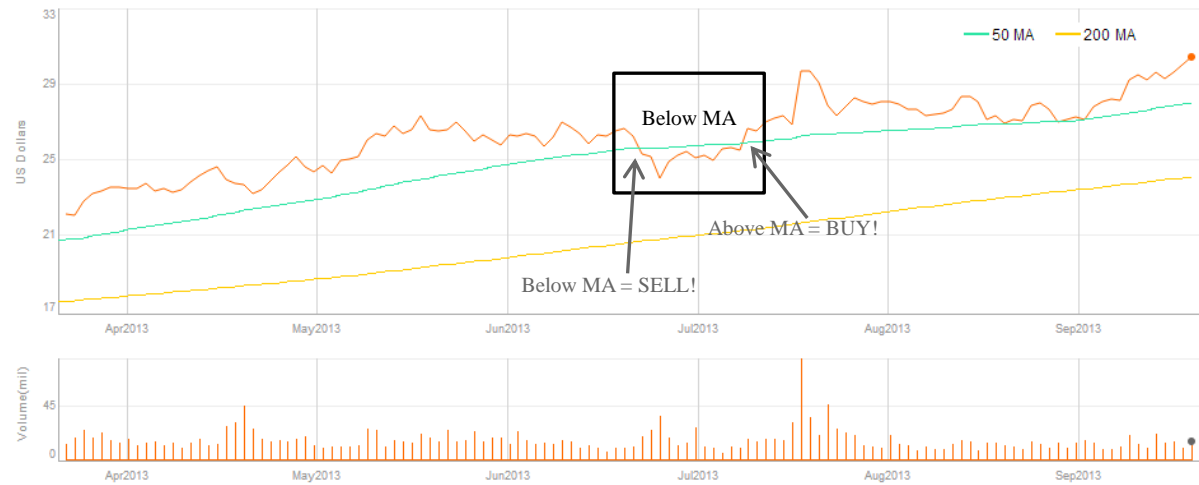
## 2. Candlestick Charts



\* Refer: <http://www.reuters.com/finance/stocks/chart?symbol=JNJ>

⇒ After a dominant power of the sellers, a Doji is observed on the 17<sup>th</sup> of September. This indicates that a reversal of trend will shortly be observable. Indeed, there's a high peak in the volume the next day, along with strong buying pressure. The big white rectangle with a low shadow (e.g. refer to the figure in the red oval) on the last day of the graph implies that the buyers are in the control: a sign of a possible uptrend.

### 3. The Technical Indicator: Moving Average (MA)



\* Refer to: <http://www.theglobeandmail.com/globe-investor/markets/stocks/chart/?q=YHOO-Q>

⇒ The values of the 200-day MA are well below the current stock prices. As for the 50-day MA, the closing stock price dropped below the line of the MA on the June 20<sup>th</sup>, which implies that the selling power was in control. But on the 8<sup>th</sup> of July, the stock price returned above MA: a signal to buy. Except for the period from June 20<sup>th</sup> to July 8<sup>th</sup>, no sign of warning is noticeable. From the 3<sup>rd</sup> of September until the present time, the stock prices are considerably moving away from the MA. JNJ is a solid bet to make when considering only this particular technical indicator.

### References

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