



**“A STUDY ON THE FINANCIAL PERFORMANCE ANALYSIS  
WITH RESPECT TO HONEYWELL INTERNATIONAL INC., USA”**

By

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Of

Department of Management Studies  
**Kumaraguru College of Technology**  
Coimbatore

A PROJECT REPORT

Submitted to the

**FACULTY OF MANAGEMENT STUDIES**

In the partial fulfillment of the requirements

for the award of the degree

Of

**MASTER OF BUSINESS ADMINISTRATION**

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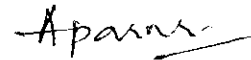
## DECLARATION

I, hereby declare that this project report entitled as “A Study on the Financial Performance Analysis with respect to Honeywell International Inc., USA” has been undertaken for academic purpose submitted to Anna University in partial fulfillment of the requirements for the award of the degree of Master of Business Administration. The project report is the record of the original work done by me under the guidance of Mr. A Senthil Kumar, Lecturer, KCT Business School during the academic year 2007 – 2008.

I, also declare hereby, that the information given in this report is correct to best of my knowledge and belief.

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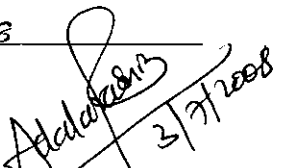
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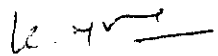
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**PROJECT COMPLETION CERTIFICATE**

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# **EXECUTIVE SUMMARY**

## EXECUTIVE SUMMARY

This study of Financial Performance Analysis with respect to HONEYWELL INTERNATIONAL INC., USA is intended to examine the current practices of financial management with regard to the present inflationary condition. Measurement of financial performance helps identify organizational strengths and weaknesses by detecting financial anomalies and focusing attention on issues of organizational importance. This study also helps to measure the intensity with which a business uses its assets to generate gross revenues and the effectiveness of production, purchasing, product pricing, financing decisions. The financial years Leverage Analysis (using Capital Structure Theory), EVA Analysis, Ratio Analysis considered for the study are from 2003 to 2007. The tools used for the analysis are Du-Pont Analysis, Financial, Other Measures such as Share Price Movements, Competitors Financial Position Comparison, EPS Growth Trend, Dividend Growth Trend. The limitations of this study are Major part of the work is concerned with financial data; adequate data was not able to be pooled because of the secrecy maintained by the company. This study reveals the findings for the present scenario and it will not reflect the past and the future.

Honeywell (NYSE: HON) is a major American multinational conglomerate company that produces a variety of consumer products, engineering services, and aerospace systems for a wide variety of customers, from private consumers to major corporations.

Honeywell is a Fortune 500 company with a workforce of over 100,000. The company is headquartered in Morristown, New Jersey. Its current chief executive officer is David M. Cote. The company was part of the Dow Jones Industrial Average Index until it was replaced on February 9, 2008.

Honeywell has many brands that consumers may recognize. Some of the most recognizable products are its line of home thermostats (particularly the iconic round type), Garrett turbochargers, and automotive products sold under the names of Prestone, Fram, and Autolite.

Among the various findings from the above mentioned analysis, a few are given below. Profitability of the organization is positively growing as the negative EBIT of USD (601) millions in 2002 has increased to USD 3777 millions in the year 2007. The firm is efficient in generating profits to the extent invested by the shareholders as its equity. Therefore the Return on Equity is increased from (2.399)% in 2002 to 25.144 % in 2007. Equity has contributed the higher proportion than the debt to the capital invested as the Debt Equity Ratio is 0.59 times in 2007. As a result of the financial leverage, it is inferred that the leverage debt and equity in the firm's structure have impact on the firm's value or its cost of capital. The dividends of the organization are growing by 10% every year maximizing the shareholders' wealth and satisfaction.

It is recommended to the organization that in spite of having zero credit policy has got a huge Accounts Receivables which implies that the Accounts Receivable Management is not functioning effectively and the organization has to take immediate steps in collecting the overdue. And the organization's cost of debt is more than its cost of equity. Holding equity funds provides an option of either issuing dividend or retaining the earnings with them, while debt funds have the fixed interest expenses. So the organization may consider reducing the debt funds and increasing the equity funds in the capital structure.

This study concludes that the financial performance of Honeywell International Inc., USA, is satisfied and the organization is considerably improving year by year. However there are a few issues that are recommended in the study for improvisation which would lead the organization to achieve further.

## **ACKNOWLEDGEMENT**

I express my sincere gratitude to our beloved Vice Chairman Prof. Dr. K. Arumugam, the prime guiding spirit of Kumaraguru College of Technology. I extend my heart felt thanks to our Correspondent Mr. M. Balasubramaniam and our Principal Dr. Joseph V. Thanikal, Kumaraguru College of Technology, Coimbatore for providing facilities to do this project. I express my sincere gratitude and thanks to our Director Dr. S. V. Devanathan for permitting me to carry out this project. I endeavor my sincere gratitude towards my guiding spirit Mr. A.Senthil Kumar, who has given me all the guidance throughout this project. I extend my sincere thanks and gratitude to Honeywell Technology Solutions Lab, Bangalore for permitting me to do the project. Specially, I would like to thank Mr. Murali Kalyanaraman, Head- Taxation and AR, Honeywell Technology Solutions Lab, Bangalore.



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# **CHAPTER I**

## **INTRODUCTION**

# **CHAPTER I**

## **INTRODUCTION**

### **1.1 BACKGROUND OF THE STUDY**

This study of Financial Performance analysis of HONEYWELL INTERNATIONAL INC., USA is intended to examine the current practices of financial management with regard to the present inflationary condition. Measurement of financial performance helps identify organizational strengths and weaknesses by detecting financial anomalies and focusing attention on issues of organizational importance. Financial Performance analysis may be done using various tools such as Du-pont Analysis which describes the inter-relationships between different elements of the financial statements, Financial Leverage which explains the relationship between the debt and equity and their impact in the financial performance, EVA analysis which helps us understand the shareholders wealth maximization aspect, Ratio Analysis which describes the quantitative relationship among the variables of the financial statements, and other measures dealt include the share price movements, competitor analysis, EPS growth trend, Dividend Growth trend etc. as applicable to the nature of study and the organization This study also helps to measure the intensity with which a business uses its assets to generate gross revenues and the effectiveness of production, purchasing, product pricing, financing decisions.

### **1.2 REVIEW OF LITERATURE**

The purpose of this title is to review the various studies conducted and made to consolidate the views and studies to determine the effectiveness of different factors, which influence the budgeting and its efficiency in real time

1. Dr. Laurence M. Crane <sup>1</sup>Five measures of financial efficiency are the asset turnover ratio, operating expense ratio, depreciation expense ratio, interest expense ratio and net income from operations ratio. The asset turnover ratio measures how efficiently assets are being used to generate revenue. The higher the ratio, the more efficiently assets are being used to generate revenue.

The last four efficiency measures are operating ratios accounting for the composition of gross revenues. The sum of the operating expense ratio, depreciation expense ratio and interest expense ratio reflects the total direct farm expenses per dollar of gross revenue for each component—operating, interest and depreciation. Note that the operating expense ratio standards will vary between types of organizations and operating systems. Taken together, these four ratios represent the total composition of gross revenues and in percentage terms accounts for 100 percent of the corporate's gross revenues.

2. Alastair Shaw <sup>2</sup> In many companies in the UK, as in the USA, the familiar cry "everything here is viewed in terms of the bottom line!" can be heard. In this sort of corporate environment, financial indicators remain the fundamental management tool and could be said to reflect the capital market's obsession with profitability as almost the sole indicator of corporate performance. Opponents of this approach suggest that it encourages management to take a number of actions which focus on the short term at the expense of investing for the long term. It results in such action as cutting back on R & D revenue expenditure in an effort to minimize the impact on the costs side of the current year's P & L, or calling for information on profits at too frequent intervals so as to be sure that targets are being met, both of which actions might actually jeopardize the company's overall performance rather than improve it.

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<sup>1</sup> *Financial Performance Measures*, Michigan State University Magazine, August 2007, pg 6.

<sup>2</sup> *Guide to Performance Measurement and Non-Financial Indicators*, Science Direct - Journal of Accounting and Economics, Mattison Public Relations, July 2004, pp 42 – 44.

3. Verena Veneeva,<sup>3</sup> Many banking services from Barclays to HSBC as well as I.T. companies including Microsoft have followed the same suit indicating a rising market trend. In 2005, BT derived 91% of its revenue in the UK by providing communication solutions for homes and business helped by rising demand for broadband internet services. Financial statistics reveal: profits up by 32% in 2005 - a clear indication of improved market performance. In the Global market BT have experienced immense growth and promises to continue developing our acquisition strategy, invest in our people, our skills and our global capabilities and unlock the value of our acquisitions and partnerships'. BT remains one of the market leaders in telecommunications. It started its journey as a state-owned enterprise. Following its privatization in the 1990s shows a gradual shift in restructuring operations and management in achieving economic efficiency thereby improving financial profitability and performance with an entrepreneurial flair. It seems that BT has found their ground transforming its unstable performance to an innovative and booming market performer.

4. Eveline Van de Velde, Wim Vermeir, Filip Corten et al ,<sup>4</sup> A historical financial performance engagement is an analysis of a company's past and current financial performance and compares such performance to similar sized companies within its industry providing insight into a company's historical growth, profitability, debt capacity and overall liquidity. All such factors can be important indicators of a company's ultimate value. We analyze the past five-year history of financial statements as well as financial information relative to your industry. We calculate financial ratios (liquidity, coverage, leverage and operating) for the company, prepare common size financial statements, and analyze the information on a trended and composite basis.

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<sup>3</sup> *How Effective can Financial Performance Analysis is?*, Credit Management,McKinsey Report Ethicalcorp Magazine, September 2006, pp 27-32.

<sup>4</sup> *Corporate Social Responsibility and Financial Performance*, Corporate Governance, Emerald Group Publishing Limited, Year 2005, Volume: 5, pp 129 – 138.

5. Sundaramurthy, Chamu ,<sup>5</sup> In its first report card on corporate governance, Business Week (Byrne and Melcher, 1996) ranked U.S. firms based on recommended best practices for independence, accountability, and board quality. Apple Computer, AT&T, Disney, and Quaker Oats were among those on the worst board list and have joined a growing list of companies under pressure from stockholders for poor performance, excessive executive compensation, and mismanaged strategies. In each case, critics have cited the board of directors for failing to exercise managerial and strategic oversight (Byrne and Melcher, 1996). In line with current "conventional wisdom," an alleged lack of independence is seen as the root cause of a board's failure to effectively monitor the actions of top management. Proponents of corporate board reform have long advocated increasing outside director representation as a means of increasing the independence and effectiveness of corporate boards (Bacon and Brown, 1975; Dayton, 1984; Waldo, 1985). The Business Week criteria for independence is "no more than two inside directors, no insiders on the board's audit, nominating, and compensation committees, no outside directors who directly or indirectly draw consulting, legal, or other fees from the company, and no interlocking directorships" (Byrne and Melcher, 1996: 98).

### **1.3 OBJECTIVES OF THE STUDY**

#### **Primary Objective:**

- To understand and ascertain the financial position of Honeywell International Inc.,

#### **Secondary Objectives:**

- To reveal the profitability trend and wealth maximization of Honeywell International Inc.,
- To identify the factors influencing profitability and wealth maximization. .
- To analyze, interpret and suggest the means for improving the operational efficiency of the organization.

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<sup>5</sup> *Board Composition and Financial Performance: A Meta-Analysis of the Influence of Outside Directors*, Journal of Managerial Issues, October 2006, pp 33-37.



## **1.4 SCOPE OF THE STUDY**

A financial performance analysis may provide the following helps the organization to

- Identify financial strengths and weaknesses and evaluate financial performance in relation to the industry performance as a whole, and acquire useful information concerning competitors.
- Financial Performance Analysis can be used as an effective preliminary step in preparing a budget or in making a forecast.
- Evaluate past performance and set objectives for future performance. Also provides an ongoing means to evaluate a company's performance financially.
- Evaluate a proposed sale, merger or acquisition. Determine the financial strengths and weaknesses of the company and ultimately the transaction.
- A greater awareness of financial statements and their interrelationship can lead to improved profitability or cash flow.

## **1.5 METHODOLOGY**

### **1.5.A Type of Study**

Descriptive Study

### **1.5.B Type of Data Used**

Secondary Data

**Source:** Annual Reports

**Period:** January 2003 to December 2007 (past 5 years)

### **1.5.C Tools for Analysis**

- Du-Pont Analysis
- Financial Leverage Analysis (using Capital Structure Theory)
- EVA Analysis
- Ratio Analysis
- Other Measures such as
  - Share Price Movements
  - Competitors Financial Position Comparison
  - EPS Growth Trend
  - Dividend Growth Trend

## **1.6 LIMITATIONS**

- No primary data is used for the study.
- Figures for the analysis are taken from the annual reports of the organization. So all the limitations of those statements will apply to the study.
- Major part of the work is concerned with financial data; adequate data was not able to be pooled because of the secrecy maintained by the company.
- This study reveals the findings for the present scenario and it will not reflect the past and the future.

## **1.7 CHAPTERIZATION**

### **CHAPTER 1**

This chapter covers the INTRODUCTION of the study which constitutes Background of the study, Review of Literature, Objectives and scope of the study, Methodology used, and limitations of the study.

### **CHAPTER 2**

This chapter covers the ORGANIZATION PROFILE which constitutes History, Management, Organization Structure, Products Profile and Market Potential, Competitive Strength and description about the functional areas of the organization.

### **CHAPTER 3**

This chapter covers the MICRO AND MACRO ANALYSIS which explains the prevailing scenario with respect to the industry and the company selected for the study.

### **CHAPTER 4**

This chapter covers the data analysis and interpretation out of it.

### **CHAPTER 5**

This chapter covers the results, discussions and recommendations of the study.

# **CHAPTER II**

## **ORGANIZATION PROFILE**

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### **ORGANIZATION PROFILE**

Honeywell (NYSE: HON) is a major American multinational conglomerate company that produces a variety of consumer products, engineering services, and aerospace systems for a wide variety of customers, from private consumers to major corporations.

Honeywell is a Fortune 500 company with a workforce of over 100,000. The company is headquartered in Morristown, New Jersey. Its current chief executive officer is David M. Cote. The company was part of the Dow Jones Industrial Average Index until it was replaced on February 9, 2008.

Honeywell has many brands that consumers may recognize. Some of the most recognizable products are its line of home thermostats (particularly the iconic round type), Garrett turbochargers, and automotive products sold under the names of Prestone, Fram, and Autolite.

#### **2.1 HISTORY OF THE ORGANIZATION**

Honeywell came into being through the invention of the damper flapper, a thermostat for coal furnaces, by Albert Butz, in 1885 and subsequent innovations in electric motors and process control by Minneapolis Heat Regulator Company tracing back to 1886. In 1906, Mark C. Honeywell founded Honeywell Heating Specialty Co., Inc. in Wabash, Indiana. Honeywell's company merged with Minneapolis Heat Regulator Company in 1927. The merged company was called the Minneapolis-Honeywell Regulator Company. Honeywell was its first president, W.R. Sweatt its first chairman.

From the 1950s until the mid-1970s, Honeywell was the United States importer of Pentax cameras and photographic equipment. These products were labeled in the U.S. Honeywell Pentax.

Under Binger's stewardship from 1961 to 1978 he expanded the company into such fields as defense, aerospace, computers and cameras.

### **Computing**

Honeywell originally entered the computer business via a joint venture with Raytheon called Datamatic Corp., but soon bought out Raytheon's share and the business became a Honeywell division. It also purchased minicomputer pioneer Computer Control Corporation, renaming it as Honeywell's Computer Control Division. Through most of the 1960s, Honeywell was one of the "Snow White and the Seven Dwarfs" of computing. IBM was "Snow White," while the dwarfs were the seven significantly smaller computer companies. Later, when their number had been reduced to five, they were known as "The Bunch", after their initials: Burroughs, Univac, NCR, Control Data Corporation, and Honeywell.

In 1970, Honeywell bought General Electric's computer division. The company was reorganized into two operating units one of which was Honeywell Information Systems, headed by President Clarence (Clancy) Spangle.

In 1991 Honeywell's computer division was sold to Groupe Bull.

### **Defense Interests**

Honeywell entered the defense industry in World War II, at first producing aerospace elements. During and after the Vietnam Era, Honeywell's defense division produced a number of products, including cluster bombs, missile guidance systems, napalm and land mines. The Honeywell project, founded in 1968, organized protests against the company to persuade it to abandon weapons production.

In 1990, Honeywell's defense division was spun off into Alliant Techsystems, whose headquarters are in Edina, a suburb of Minneapolis. Honeywell continues to supply aerospace products including jet engines.

In 1996, Honeywell acquired Duracraft and began marketing its products in the home comfort sector. Today, Kaz Incorporated owns both Duracraft and Honeywell's home comfort lines.

### **Specialty Materials**

Honeywell's Specialty Materials business can trace its heritage to a small sulfuric acid company started by chemist William H. Nichols in 1870. By the end of the 19th century, Nichols had formed several companies and was recognized as a force in America's fledgling chemical industry. Nichols's vision of a bigger, better chemical company took off when he teamed up with investor Eugene Meyer in 1920. Nichols and Meyer combined five smaller chemical companies to create the Allied Chemical & Dye Company, which later became Allied Chemical Corp., and eventually became part of AlliedSignal, the forerunner of Honeywell's Specialty Materials business. Meyer went on to serve in the Coolidge, Hoover and Truman administrations and to buy the Washington Post newspaper in 1933. Both he and Nichols have buildings named after them in Honeywell's headquarters in Morristown, N.J. Nance Dicciani is the current President and CEO of the Specialty Materials division.

### **GE-Honeywell merger attempt**

General Electric announced in 2000 it would attempt to acquire Honeywell; at the time, Honeywell was valued at over USD21 billion. The merger was cleared by American authorities but was blocked by the European Commission's competition commissioner, Mario Monti, on July 3, 2001. This decision was taken on the grounds that GE's dominance of the small jet engine market (led by the General Electric CF34 turbofan engine), leasing services (GECAS), and Honeywell's portfolio of regional jet engines and avionics, the new company would be able to "bundle" products and stifle competition through the creation of a horizontal monopoly. US regulators disagreed, finding that the merger would improve competition and reduce prices; United States Assistant Attorney General Charles James called the EU's decision "antithetical to the goals of antitrust law enforcement."<sup>[3]</sup> In 2007, General Electric acquired Smiths Aerospace, which had a similar product portfolio.<sup>[4]</sup>

### **Today**

The current "Honeywell International Inc." is the product of a merger between AlliedSignal and Honeywell Inc. in 1999. Although AlliedSignal was twice the size of Honeywell, the combined company chose the name "Honeywell" because of its superior brand recognition. However, the corporate headquarters were consolidated to AlliedSignal's headquarters in Morristown, New Jersey rather than Honeywell's former headquarters in Minneapolis,

Minnesota. When Honeywell closed its corporate headquarters in Minneapolis, over one thousand employees lost their jobs. A few moved to Morristown or other company locations, but the majority were forced to find new jobs or retire. Soon after the merger, the company's stock fell significantly, and the stock value only regained the pre-merger level in 2007.

In 2002 Knorr-Bremse took over from Honeywell International Inc USA its share of joint ventures in Europe, Brazil and the USA. Bendix Commercial Vehicle Systems became a subsidiary of Knorr-Bremse AG. Although declining in influence, Honeywell maintains a presence in emerging industries, such as Northern Alberta's Oilsands. Honeywell's Plant integrator is currently deployed in some of the most important plant-sites in the Oilsands (i.e. Syncrude, Suncor and others).

### **Six Sigma Plus**

Honeywell International is known for its aggressive implementation and daily practice of six sigma and lean manufacturing methodologies commonly referred to as Six Sigma Plus. Six Sigma Plus is focused on reducing errors/failures, improving cycle time, and reducing costs. Recently, Honeywell announced the implementation of a corporate philosophy known as the Honeywell Operating System (HOS), which incorporates practices from the Toyota Production System.

### **Honeywell Technology Solutions**

Honeywell Technology Solutions (HTS) is a research lab within Honeywell dedicated to innovative product research.[citation needed] HTS provides value to Honeywell businesses through Product Solutions & Analytics, New Product Introduction, Advanced Research and Technology and IT & Business Process Solutions.[5]

### **Corporate governance**

Current members of the board of directors of Honeywell are: Gordon Bethune, Jaime Chico Pardo, David Cote, Scott Davis, Clive Hollick, James Howard, Bruce Karatz, Russ Palmer, Ivan Seidenberg, Brad Sheares, Eric Shinseki, John R. Stafford, and Michael W. Wright.

### **Environmental record**

In 2006, Honeywell announced that its decision to stop manufacturing mercury switches had resulted in reductions of more than 11,300 kg, 2800 kg, and 1500 kg respectively of mercury, lead, and chromic acid usage. The largest reduction represents 5% of mercury use in the United States.[6] Honeywell ranks 44th in a list of U.S. corporations most responsible for air pollution, releasing more than 4.25 million kg (9.4 million pounds) of toxins per year into the air.[7] According to the United States Environmental Protection Agency, no corporation has been linked to a greater number of Superfund toxic waste sites than has Honeywell.[8] In 2001, Honeywell agreed to pay USD150,000 in civil penalties and to perform USD772,000 worth of reparations for environmental violations involving:[9] failure to prevent or repair leaks of hazardous organic pollutants into the air  
failure to repair or report refrigeration equipment containing chlorofluorocarbons  
inadequate reporting of benzene, ammonia, nitrogen oxide, dichlorodifluoromethane, sulfuric acid, sulfur dioxide, and caprolactam emissions

In 2003, a federal judge in Newark, New Jersey ordered the company to perform an estimated USD400 million cleanup of chromium waste, citing “a substantial risk of imminent damage to public health and safety and imminent and severe damage to the environment. [10] In the same year, Honeywell paid USD3.6 million to avoid a federal trial regarding its responsibility for trichloroethylene contamination in Lisle, Illinois.[11] In 2004, the State of New York announced that it would require Honeywell to complete an estimated USD448 million cleanup of more than 74,000 kg (165,000 lbs) of mercury and other toxic waste dumped into Onondaga Lake in Syracuse, NY.[12] In 2005, the state of New Jersey sued Honeywell, Occidental Petroleum, and PPG to compel cleanup of more than 100 sites contaminated with chromium, a metal linked to lung cancer, ulcers, and dermatitis.

### **Honeywell philanthropy**

Honeywell maintains a very active community involvement program called "Hometown Solutions".[14] Program initiatives include matching employee volunteer involvement with charitable donations, encouraging study of maths and science, re-building after hurricane Katrina and a long-standing partnership with the National Center for Missing and Exploited Children[15] called "Got2bSafe".



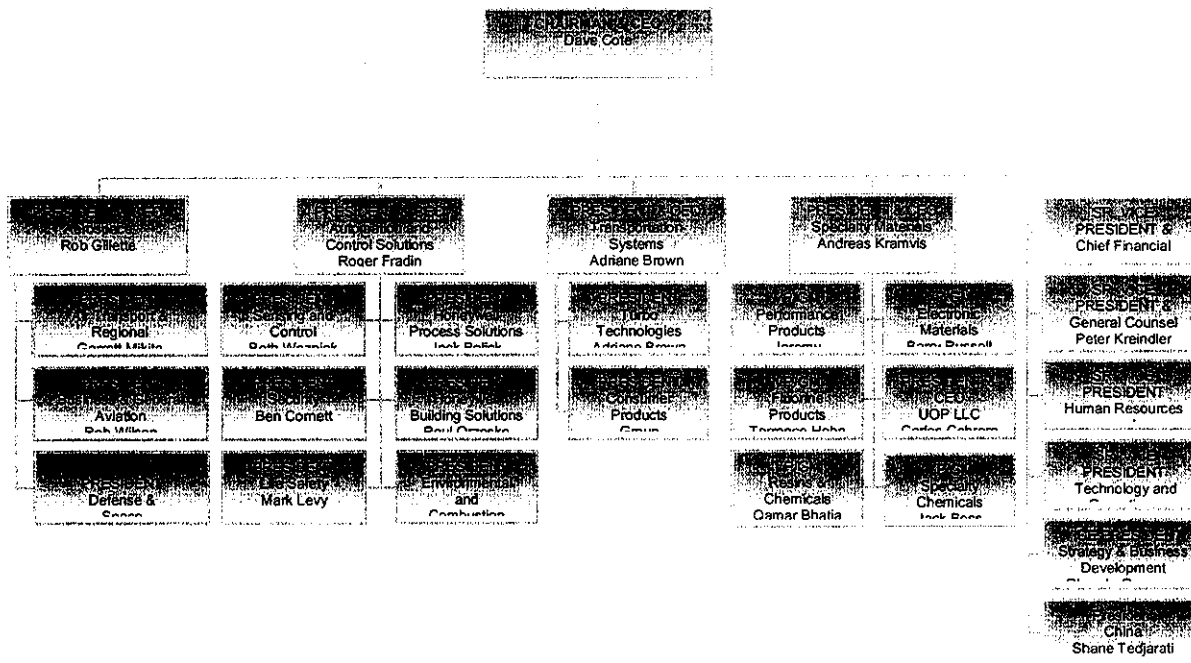
## 2.2 MANAGEMENT

Our leaders are among the most successful and sought after in the business world...and for good reason. We hire talented people, nurture their development with extensive training and challenging work assignments, then set aggressive goals. We promote heavily from within to give people the opportunity to excel and advance their careers

Here is the profile of the top management.

- **David M. Cote**  
Chairman and CEO
  
- **Adriane M. Brown**  
President and CEO,  
Transportation Systems
  
- **Nance K. Dicciani**  
President and CEO,  
Specialty Materials
  
- **Roger Fradin**  
President and CEO,  
Automation and Control Solutions
  
- **Rob Gillette**  
President and CEO,  
Aerospace
  
- **David J. Anderson**  
Senior Vice President and Chief Financial Officer

## 2.3 ORGANIZATION STRUCTURE



## 2.4 PRODUCTS PROFILE

Honeywell's portfolio includes a diverse and exciting range of technologies, which are used across a vast spectrum of industries in the areas of aerospace, automation and control solutions besides advanced research and technology supported by IT and digitization work. Given below is a brief overview of Honeywell's portfolio.

### Product Portfolio

Polyethylene Waxes

Aegis Nylon

Aerospace Consumable Hardware

Aircraft Lighting and Electronics

Asia Pacific Sensing & Control

Avionics Extended Warranty Plan

Avionics Zone

Bendix/King Avionics - General Aviation  
Commercial Air Cleaners  
Compact Refrigerators and Wine Chillers  
Consumer Electronics  
Electric Floor Warming  
Garrett Turbochargers  
Greer Repair & Overhaul  
Home Comfort  
Home Products  
Home Security  
Micro Switch  
Portable Air Purifiers, Fans, Heaters and Humidification  
QuietClean Air Purifiers  
Rheochem™ PVC Lubricants  
Safes  
Smart Solutions  
Solid State Electronic Center  
Switches and Sensors  
Weather Stations and Clocks

## 2.5 COMPETITIVE STRENGTH

- On-line optimization world-wide business in 2006 expected to be 155.9M, CAGR of 12.3% according to latest ARC report (APC – 9.3% CAGR) – Honeywell share currently 7.8%
- “suppliers are making optimization software more robust and user friendly so that process engineers and operations personnel can understand it.”
- “ARC expects significant growth in the use of online models to monitor the performance of processes and equipment in realtime.”
- Key growth drivers:
  - APAC, India market growth
  - Aging workforce – knowledge retention

- Energy management
- Proliferation of online models for asset optimization
- Oil & Gas sector investment
- Regulatory compliance
- Vertical and Horizontal Applications Integration
- Key growth inhibitors:
  - Maturing Markets
  - End users perceive RPO solutions as high risk
  - High energy and feedstock costs – affects particular segments
  - Cyber security

### **Key Competitors**

- AspenTech (Aspen On Line, Aspen Optimizer)
- Invensys (ROMeo)
- Goodrich Corp.
- Johnson Controls Inc.
- United Technologies Corp.
- Emerson (AMS Real-Time Optimizer – based on MDC RTO+ )

## **2.6 FUTURE PLANS**

- Facility to produce diesel fuel from Vegetable Oil
- Integration of more airplane utility control functions, such as Environmental & Electrical Control, Fire & Smoke Detection, and Fuel System Control &

# **CHAPTER III**

## **MICRO AND MACRO ANALYSIS**

## **CHAPTER III**

### **MACRO - MICRO ANALYSIS**

#### **3.1 ABOUT THE INDUSTRY AND MARKET**

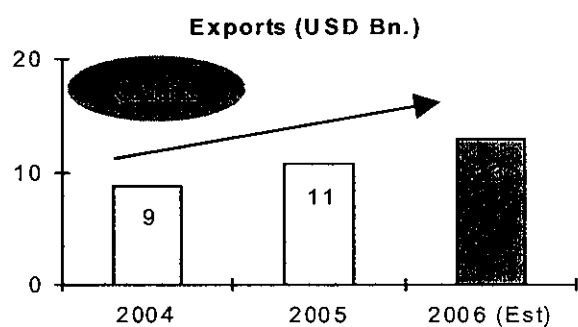
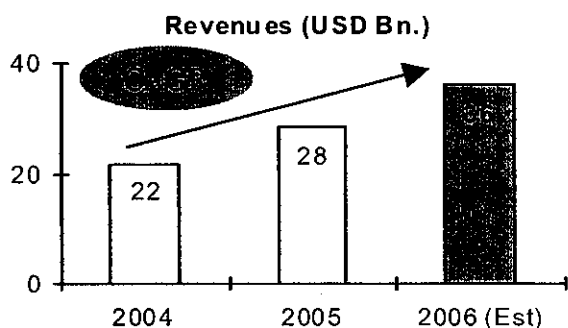
**Information technology (IT)**, as defined by the Information Technology Association of America (ITAA), is "the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware." IT deals with the use of electronic computers and computer software to convert, store, protect, process, transmit and retrieve information, securely.

Today, the term information technology has ballooned to encompass many aspects of computing and technology, and the term is more recognizable than ever before. The information technology umbrella can be quite large, covering many fields. IT professionals perform a variety of duties that range from installing applications to designing complex computer networks and information databases. A few of the duties that IT professionals perform may include data management, networking, engineering computer hardware, database and software design, as well as the management and administration of entire systems. When computer and communications technologies are combined, the result is information technology, or "Infotech". Information technology (IT) is a general term that describes any technology that helps to produce, manipulate, store, communicate, and/or disseminate information.

Information Technology sector has attained great heights in India. FICCI has been monitoring the present status and achievements in the field of IT, which has brought fame and pride to India. FICCI's IT Committee focuses on working in close association with the industry. It works for industry inputs in all issues and matters concerning Indian IT industry. It is a platform for the Indian IT industry to come together for policy changes and promote mutual interaction with companies in this sector. It is dedicated to work towards the development of the Indian IT industry and to create synergy between the Indian ICT industry & Global organizations. This committee prepares papers, organized business events and actively

participate in multilateral forums to create the linkages between the Indian ICT Industry and the user industries in India and in the world market, leveraging FICCI's global network.

**IT-one of the fastest growing sectors in India:**



*Source: NASSCOM strategic review 2006*

- Revenues ~ USD 36 billion (2006 Est.)
  - CAGR (FY 2004-06) - 30 %
  - Contribution to GDP up from 2% in 2000 to 5% in 2006
- Exports ~ USD 23.5 billion (2006 Est.)
  - CAGR (FY 2004-06) - 35 %
  - Has nearly doubled in last three years
- Domestic Market - USD 13 billion (2006 Est.)
  - CAGR (FY 2004-06) - 22%
  - Buoyed by an economy growing at nearly 8% per annum over the last 3 years

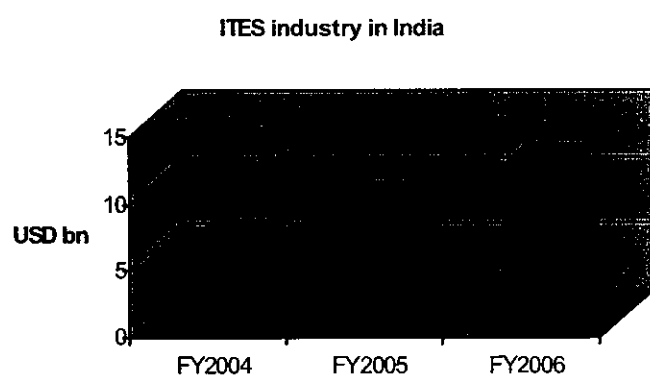
## ITES Industry

- Outsourcing of processes that can be enabled with information technology
- Delivered from/to remote areas through the telecom and Internet medium
- Transfer of ownership and management of the process from the customer to the service provider. Eg., functions like finance, HR (human resource), administration, healthcare, telecommunication, engineering etc

## The Drivers

- Focus of cost competitiveness leading to:
  - Concentration on core competencies, and
  - Outsourcing non-core processes

## Indian ITES industry – on the growth path



*Source: NASSCOM strategic review 2006*

## Relatively young industry

- Less than a decade old in India. One of the early starters was GE in 1997

## Total market size(2005-06): USD 12 bn

- Process outsourcing contributes - USD 7.2 bn
- Engg Services, R&D etc - USD 4.8 bn



## CAGR of over 35% for last 2 years

- Largely export oriented
- Comprises more than 30% of the total IT - ITES revenue in India

## ITES Evolution in India

### Phases

<b>Phase I (1996-2000)</b> <b>Pioneers - focus on building scale. Absence of vendors with exhibited capabilities. Preference of captive model</b>	<b>Phase II (2000-2003)</b> <b>Early adopters - sharpen outsourcing strategy. Rise of 3PSP</b>	<b>Phase III (2003-2008)</b> <b>Cautious followers - embracing outsourcing unconditionally. Higher degree of consolidation and shakeout</b>
<ul style="list-style-type: none"> <li>• Operational cultures previously seen only in western - shared centers were developed</li> <li>• Large operations and High quality infrastructure was built</li> <li>• Development of delivery processes - legalising working in shifts</li> <li>• Low resistance to offshore outsourcing</li> </ul>	<ul style="list-style-type: none"> <li>• Risk profile of supply side business model still perceived to be immature</li> <li>• Early movers display advantage of scale</li> <li>• Credibility of the business model reinforced - perceived risk dealt with satisfactorily</li> <li>• Imitation of work on process and regulatory standards.</li> <li>• Risk in anti- off shore backlash</li> </ul>	<ul style="list-style-type: none"> <li>• Widespread global acceptance of the economic imperative of global sourcing</li> <li>• Proliferation of players, service lines and sourcing destinations</li> <li>• Changing cost economics - decline in Labour arbitrage offset by leveraging process and SG&amp;A efficiencies and scale</li> <li>• Shift towards Higher order Cost plus benefits from sourcing</li> <li>• Maturity of process and regulatory standard in the industry</li> </ul>

- Large number of players - captive, and 3rd party (estimated - 1500)
- High acceptance of Indian outsourcing globally
- Industry expected to grow to USD 21- 28 bn by 2008

### World Bank - Outsourcing Programme

- Increasing credibility due to sustained delivery
- Clients have begun outsourcing complex and critical processes

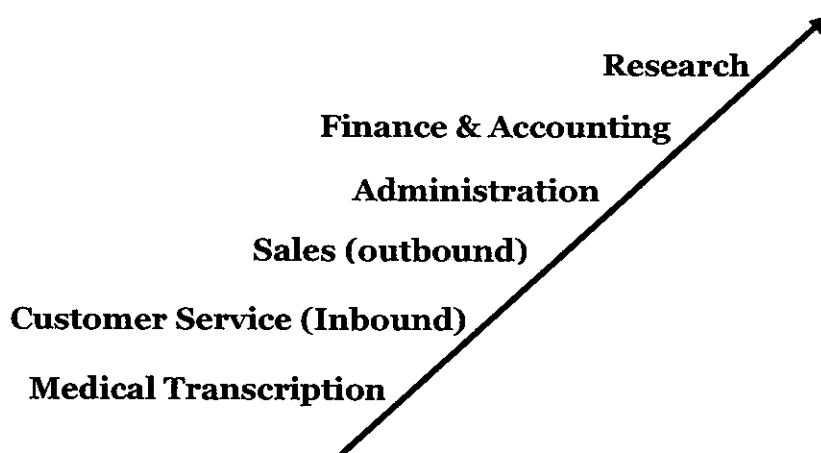
### **The Facility**

- Business Process outsourcing facility in Chennai with 110 employees in partnership with NASSCOMM
- Started with accounting, procurement and loan disbursements sections
- Has recently transferred its global bond valuation activity to Chennai

### **Benefits**

- Costs slashed down by 15%
- Backlog of accounts receivable and expense forms reduced from hundreds of items to just a few
- Highly qualified Indian professionals with knowledge based inputs to process improvements

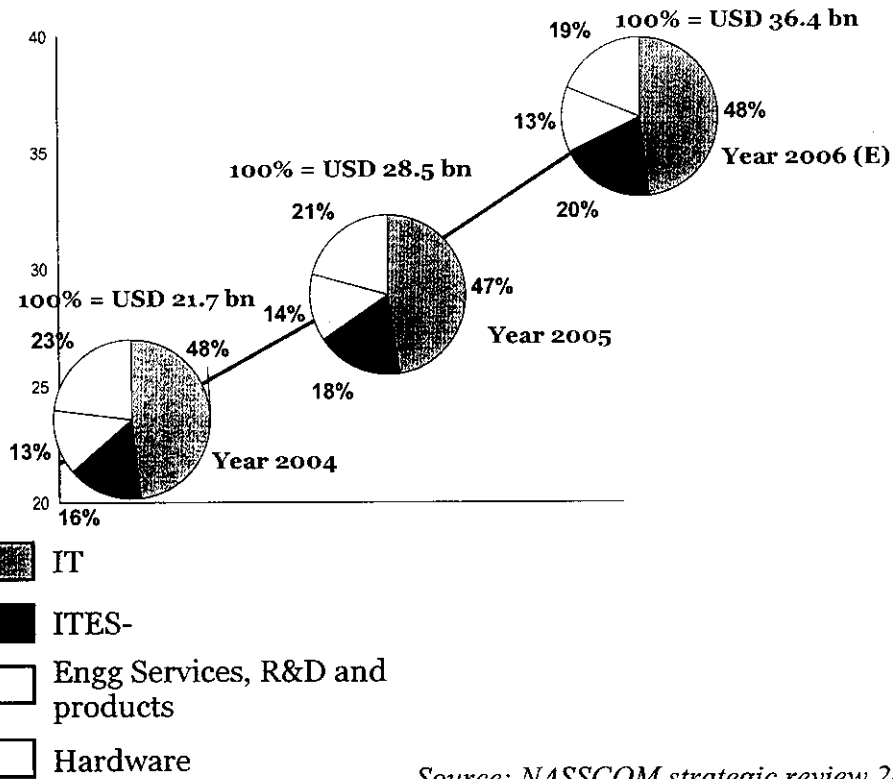
### **Indian IT & ITES industry is moving up the value chain**



*Source: NASSCOM strategic review 2006*

### **Exports contribute nearly 65 % of IT sector revenue**

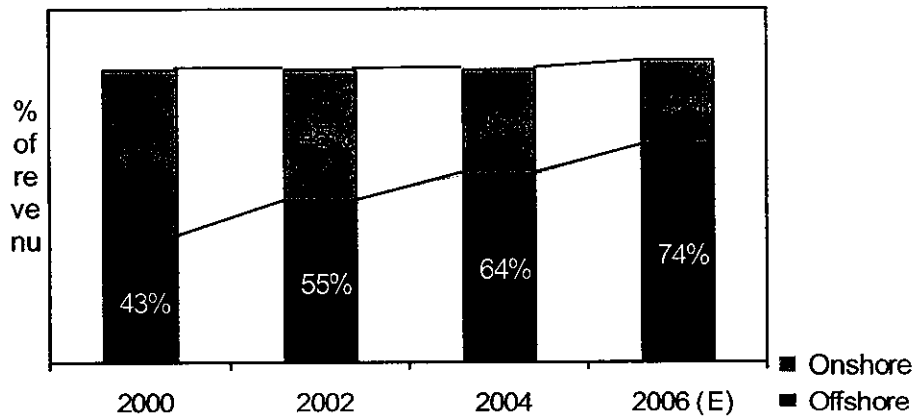
- IT services and ITES-BPO revenue largely export driven
  - Exports contributed 75% of IT services and 87% of ITES-BPO revenue
- Share of services in domestic market increasing
  - Revenue from services up from 43% to 47 % in the last 3 years



Source: NASSCOM strategic review 2006

**Business pressures and India advantages continue to drive off-shoring**

Share of Offshore component of revenue on the rise



Source: NASSCOM strategic review 2006

- The Global Offshore Delivery Model adopted by Indian software services vendors and increasing sophistication to sustain delivery over the last decade or more is already translating into more work being handled off-shored

- IT companies have developed capabilities to handle larger slices of work offshore and provide substantial value to customers facing pressure to drive down costs while maintaining quality
- Continued pressure on margins and tangible benefits from off shoring is expected to substantially increase the momentum in offshore outsourcing.

#### India's IT industry structure is vibrant and competitive

Category	No. of players	Share of export revenue	Revenue Performance
Tier I	3-4	<ul style="list-style-type: none"> <li>• 45% of IT Services</li> <li>• 4-5% of BPO</li> </ul>	> than USD 1 billion
Tier II	7-10	<ul style="list-style-type: none"> <li>• 25% of IT Services</li> <li>• 4-5% of BPO</li> </ul>	USD 100 million-USD 1 billion
Offshore operations of Global IT majors	20-30	<ul style="list-style-type: none"> <li>• 10-15% of IT Services</li> <li>• 10-15% of BPO</li> </ul>	USD 10 million-USD 500 million
Pure play BPO	40-50	<ul style="list-style-type: none"> <li>• 20% of BPO</li> </ul>	USD 10 million-USD 200 million (Excl. leader - USD 500 million)
Captive BPO	150	<ul style="list-style-type: none"> <li>• 50% of BPO</li> </ul>	USD 25 million-USD 150 million (top 10 units)
Emerging players	>3000	<ul style="list-style-type: none"> <li>• 10-15% of IT Services</li> <li>• 5% of BPO</li> </ul>	< USD 100 million (IT) < USD 10 million (BPO)

Source: NASSCOM strategic review 2006

## Factors impacting competitiveness of industry

### Infrastructure Elements

- Manpower
- Telecom Infrastructure
- Regulatory Environment
- Information Security Policy
- Investment incentives
- Costs

### Competitive ITES Sector

### Qualitative Factors

- 'Trainability' of manpower
- Service Delivery Quality
- Information Security Practices
- Marketing ability
- Entrepreneur pool
- Language skills

## Government regulations & policy

### Central (Federal) Government

- Concessions have been provided on remittances, on software imports, enhanced limit for External Commercial Borrowings
- Filing and clearances have been made easier
- FTP Incentives : Eg. Import of computers allowed without license.
- Customs duty exemption on import of Capital Goods
- 100% Foreign Direct Investment
- ITES are exempt from Service tax
- Income tax exemption on exports

### Policy Advantage

### State (Provincial) Government

- Assignment of priority sector status
- Cheap power and real estate
- Concessions in taxes and various fees
- Favourable legislation
- Labour Laws are relaxed for the IT Sector
- Special Information Technology parks

Source: NASSCOM strategic review 2006

## **IT-ITES is one of the key thrust areas of Government of India**

### ***Liberal Policy framework for the sector.***

- Continuous liberalisation and reform policies of Government of India had a positive impact
- Liberalisation and reforms in the telecom sector have had a direct impact on the industry's competitiveness and created further avenues for the growth of IT and BPO sectors
- India's federal governments have comprehensive IT policies to facilitate greater investments in the sector

### ***Export promotion and Tax/duty incentives***

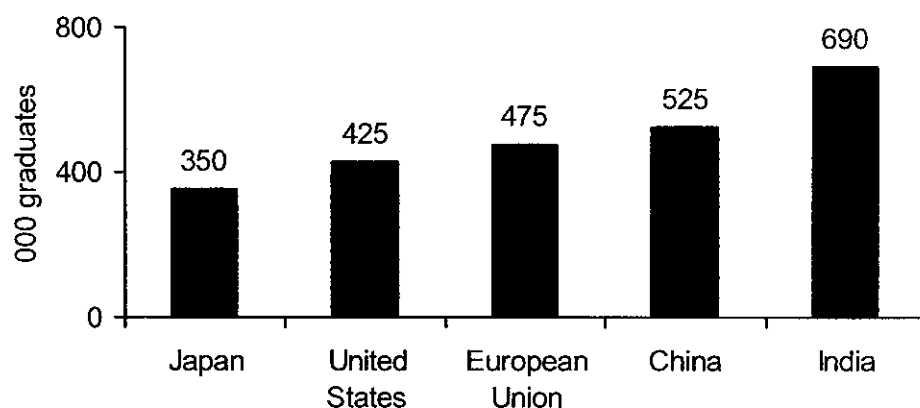
- Foreign Trade Policy 2004 - 2009 permits import of all kinds of computers (Except second hand computers) in India without any licenses.
- EPCG Scheme for software sector allows import of capital goods at 5 % basic customs duty subject to undertaking certain export commitments
- A number of Special schemes including Export Oriented Unit , Special Economic Zone etc offer a wide range of duty concessions and exemptions for IT exports

## **India has enacted comprehensive legislation (IT Act 2000) which covers copyright protection and cyber laws**

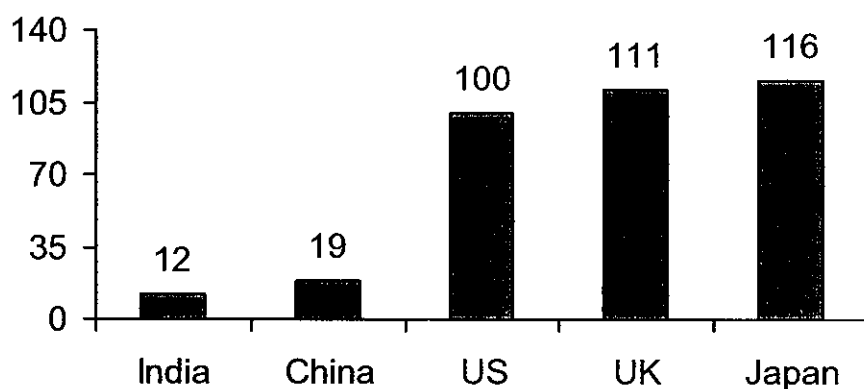
- Copyright and IPR
  - Intellectual Property Rights (IPR) of computer software covered under the Copyright Law.
  - Copyright of computer software protected under the provisions of Indian Copyright Act 1957.
  - Major changes to Indian Copyright Law were introduced in 1994 and came into effect from 10 May 1995, making, Indian Copyright law, one of the toughest in the world.
- Regulatory norms in Indian cyberspace
  - Comprehensive legislation for Information Technology - The Information Technology Act 2000 enacted.
  - Aims to provide the legal infrastructure for e-commerce in India
  - India only the 12th nation globally to enact cyber laws.

### India's cost and talent pool advantage is well established

University graduates in Science/Engineering every year in 2002-04



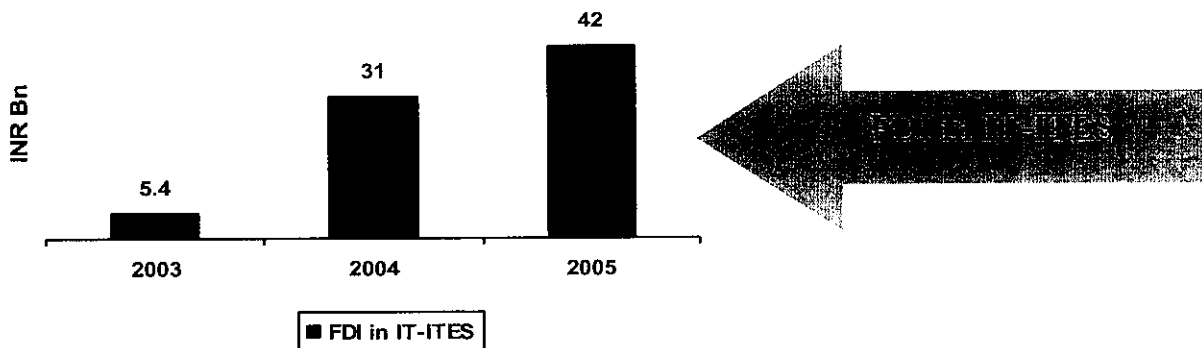
Hourly Labour Costs index (US=100)



Source: NASSCOM strategic review 2006

- India with 28% has the largest share of the global talent pool
- While China with around 11% stands next, the use of English as the official business language gives India a significant edge
- India also continues to hold a significant labor advantage over developed countries thus offering significant cost saving opportunities by off shoring
- India lead among potential outsourcing destinations as per the A T. Kearney Global Services Location Index 2005

**Rising FDI and PE are indicative of India's advantage and global interest**



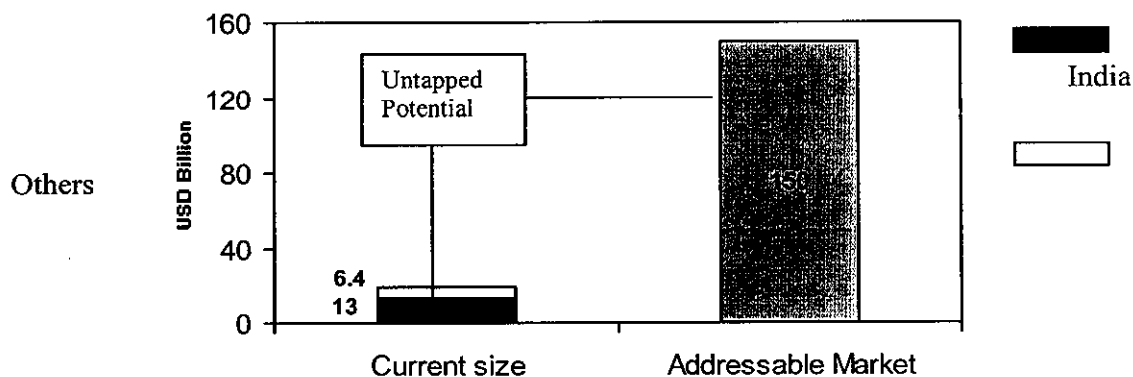
Sector	Number of Deals	Value (INR Bn)
Manufacturing	23	15.4
Healthcare and Life Sciences	13	9
BFSI	6	6.6
Textiles	12	6.5

Source: NASSCOM strategic review 2006

**India's IT exports to touch USUSD 60 billion by 2010**

- Global IT-ITES spending to cross USD 1198 billion by 2010
- The addressable market for offshore IT services and BPO industry is estimated at be USD 150-180 billion and USD 120-150 billion respectively
- With USD 13 billion, India has less than 10% of the current addressable market
- India expected to be well on track to achieve USD 60 billion by 2010.

Current size and Addressable market



Source: Nasscom. The IT Industry in India - Strategic Review 2006

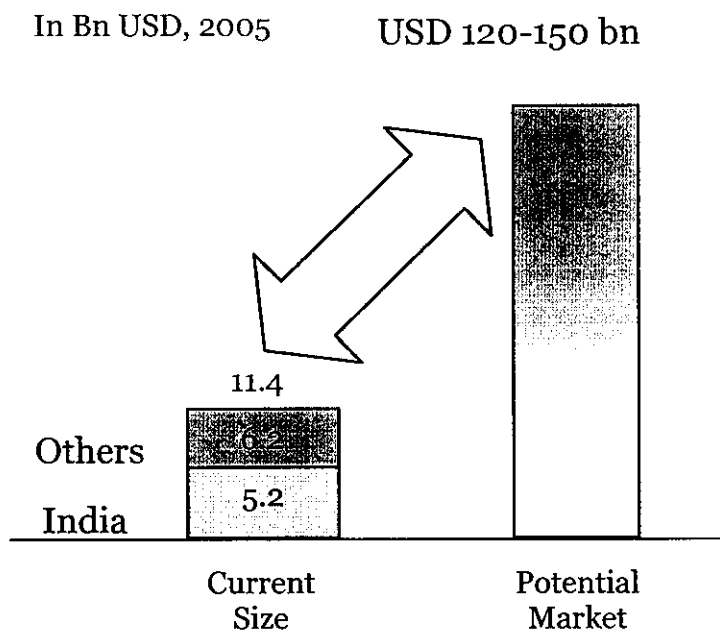


### India's IT spending is providing significant opportunities

- India's domestic market is also set to grow substantially, having grown at a CAGR of 22% over the last three years
- India's spending on software and services has grown at a CAGR of 27%
- Large Indian corporates have already begun to outsource their entire IT activities
- India will be the fastest growing market in Asia Pacific in terms of IT spending
- Servers shipments are expected to cross 100,000 during 2006
- Outsourcing Services to outgrow Technology Product Services in 2006 and would contribute to nearly of 24% of Indian IT Services market

Source: Excerpts from India Top 10 ICT Market Predictions 2006

### Huge market potential globally

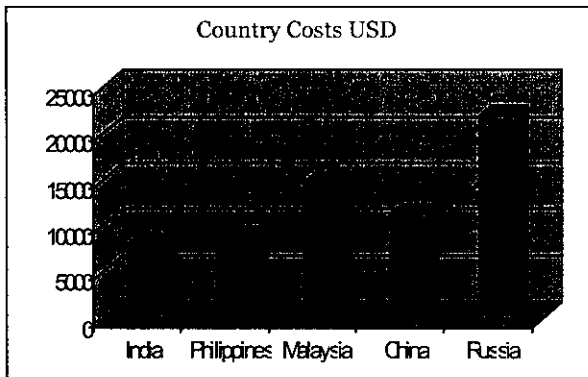


Source: NASSCOM estimates

- With only 10% of the market being currently addressed India has the potential to grow further
- Domestic demand has picked up rapidly (75% growth in last 3 years)
- The Bharti-IBM deal worth around USD 1bn is the largest in the domestic market

**Attractive cost savings**

India continues to lead in cost competitiveness

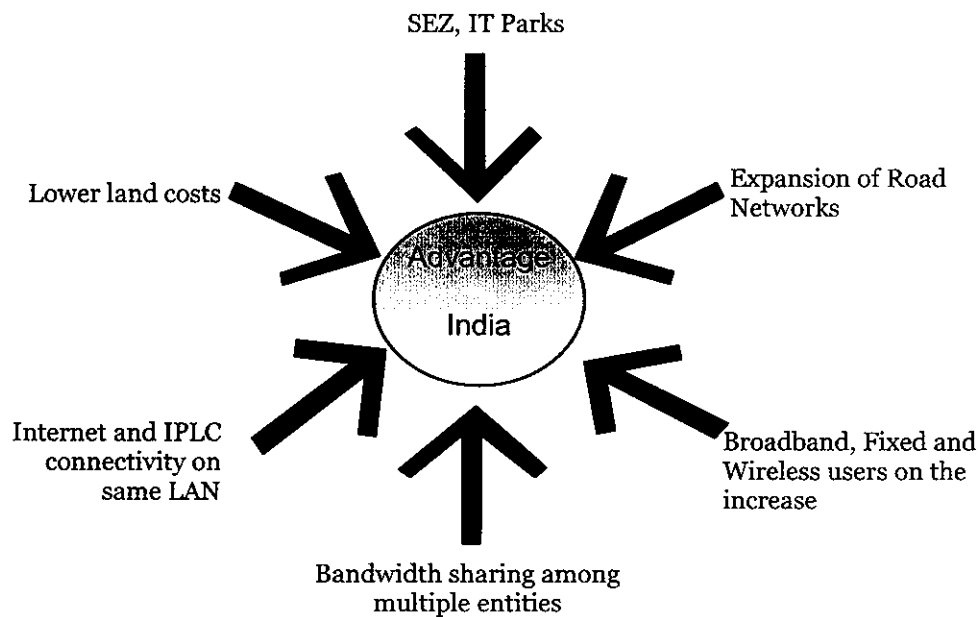


Typical Cost savings for illustrative processes

Transaction Processing	25-40%
Accounting	30-40%
ERP / Analytics	40-60%

Source: NASSCOM strategic review 2006

**Infrastructure being beefed up**



## 3.2 ABOUT THE ORGANIZATION

# Honeywell

## HONEYWELL INTERNATIONAL INC.,

Diverse, ingenious, committed and integrated – that's Honeywell International Inc.,(HON) for you. A place where technology and people strike a perfect balance to deliver unsurpassed value to customers by providing innovative total solutions enhancing the comfort, safety, security, efficiency and reliability of the environment they live, travel and work. A SEI CMMI Level 5 company, this is a place where commitment to quality and the spirit of innovation is intrinsic to its culture.

HON believes that to grow, one needs to constantly embrace and adapt to change.

Honeywell International Inc. is a diversified technology and manufacturing leader, serving customers worldwide with aerospace products and services; control technologies for buildings, homes and industry; turbochargers; automotive products; specialty chemicals; fibers; plastics; and electronic and advanced materials. Based in Morris Township, N.J., USA, Honeywell is one of 30 stocks that make up the Dow Jones Industrial Average and is a component of the Standard & Poor's 500 Index. Its shares are traded on the New York Stock Exchange under the symbol HON, as well as on the London, Chicago and Pacific Stock Exchanges.

Honeywell International is a USD 33 billion diversified technology and manufacturing leader, serving customers worldwide with aerospace products and services; control technologies for buildings, homes and industry; automotive products; turbochargers; and specialty materials. Based in Morris Township, N.J., Honeywell's shares are traded on the New York, London, Chicago and Pacific Stock Exchanges. It is one of the 30 stocks that make up the Dow Jones Industrial Average and is also a component of the Standard & Poor's 500 Index.

**Honeywell Technology Solutions (HTS)** is an integral arm of Honeywell, one of the world's premier global and progressive companies.

As Honeywell's key regional arm of excellence, HTS provides technology, product and business solutions meeting global standards of quality, innovation and lifetime performance. HTS has operations in Bangalore, Madurai & Hyderabad, India; Shanghai & Beijing, China; Minneapolis & Phoenix, USA and Brno, Czech Republic. Today, HTS is keen to leverage its position as not just a regional engineering arm of Honeywell, but expand its scope of excellence to include services and business intelligence that will promote Honeywell's businesses with a clear competitive advantage in the local as well as global business arena. By doing so, HTS will create value by providing best-in-class product solutions that generate additional revenues for the business and help in building Honeywell's position as a partner of choice.

Currently, HTS is undergoing rapid expansion and adding personnel to its facilities in Bangalore, Madurai and Hyderabad, while looking to strengthen its head-count in China as well

## **Honeywell Initiatives & Behaviors**

### **The 5 Honeywell Initiatives**

- Growth
- Productivity
- Cash
- People
- Enablers: Honeywell Operating System (HOS), Velocity Product Development (VPD) and Functional Transformation Initiative (FTI)

### **Business Groups**

- Aerospace
- Automation and Control Solutions
- Specialty Materials
- Transportation Systems

**Company's environmental management system (EMS):**

HON has developed a robust process for its EMS. The environmental policy has been established which comprises the following key commitments viz

- conservation of natural resources
- pollution prevention
- safe work practices
- legal compliance
- continual improvement of EMS performance

**Process & Quality**

Today's global, competitive business environment expects nothing short of perfection and there is no room for error. In its endeavor to surpass excellence, HTSL is constantly looking to meet and exceed its customers' expectations, and has very stringent standards of process and quality.

Commitment to quality is not just another core value at HTSL, it is paramount. A stance on which there can be no compromise. The SEI-CMMI level 5 and ISO 9001:2000 Quality Certification, with a high degree of focus on Personal and Team Software Processes are testimony to this.

The Six Sigma and DFSS employed at HTSL make sure that it gets the results that meet the highest standards of quality. It is a reaffirmation of its commitment to quality because HTSL truly believes that it owes it to its customers, stakeholders, employees, associates and the community at large.

- Six Sigma
- SEI CMMI Level 5
- PCMM Maturity Level 5

Honeywell Technology Solution Lab (HTSL) is an integral R&D arm of Honeywell and a center for excellence in the region. It supports Honeywell's diversified businesses with a multi-discipline capability providing product solutions, besides working on new product solutions and IT Services and Solutions. This is augmented by its capabilities in the areas of software, mechanical and electronics engineering, systems engineering, quality assurance, program management and business analytics.

The sections below will throw light on these core areas of HTSL's portfolio:

- Engineering and Operations
- Information Technology

### **Engineering and Operations**

HTSL supports and develops product solutions in two key areas of Honeywell businesses – aerospace and automation and control solutions. Employing diverse engineering skills, coupled with program management, quality assurance, systems engineering, technology and market analytics, its focus today is on providing business oriented total solutions resulting in increased productivity, healthy bottom lines and complete satisfaction for the customer.

### **Aerospace**

The 1500 strong Aero business unit comprises of specialist teams with embedded and systems software development and verification expertise and over 10 years of contribution to Avionics products.

Besides owning total responsibility for software development for several products, the Aero team is responsible for Engineering product development and support for all commercial programs Joint product engineering and software re-architecting.

## **Automation and Control Solutions**

From serving partners and building capabilities in the earlier years to replicating these capabilities in various new contexts to provide new offerings and services, Automation and Control Solutions at HTSL has come a long way in satisfying business priorities through a total solution ownership approach.

HTSL has been involved in supporting businesses for over 10 years now. While initially the focus was on tactical, short-term support for the products, through enhanced competencies (product knowledge and rich lab infrastructure), during the last 10 years the team has matured to support the business from an end-end product development support responsibility.

The team contributes to product lines in Building Solutions, Environmental and Combustion Controls, Security, Life Safety, Process Solutions and Sensing & Control.

## **Platforms, Systems & Solutions**

The Platforms, Systems & Solutions team provides Technical Leadership in Systems Engineering for Honeywell businesses and customers, incubates new product architectures, and includes User Centric Design and Technical Supply Chain Management.

Since its inception, the PST team has evolved along multiple dimensions, providing technical leadership on various aspects including systems engineering, architecture, new product development, customer interface, platforms development & insertion, and technical supply chain management.

The team has been associated with and successfully demonstrated the ability to manage big systems programs. The level of competency has grown in different domains and product lines, in both aerospace and automation control businesses

## **IT Services and Solutions**

IT Services & Solutions, a business unit of HTSL, partners with various Honeywell businesses across the globe to maximize value maximization for them through the application of information technology.

# **CHAPTER IV**

## **DATA ANALYSIS**



## **CHAPTER IV**

### **DATA ANALYSIS**

The data used for analysis are all secondary data taken from the Annual Reports of the organization. The period considered for the study is January 2003 to December 2007.

The tools used for financial performance analysis are,

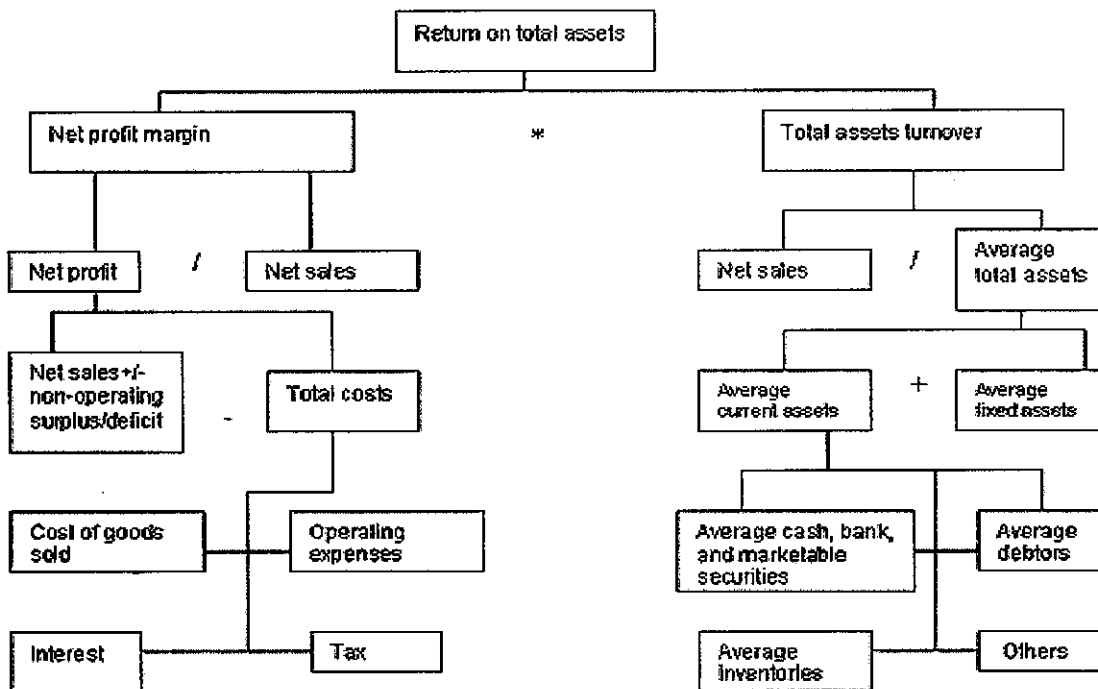
- Du-Pont Analysis
- Financial Leverage Analysis (using Capital Structure Theory)
- EVA Analysis
- Ratio Analysis
- Other Measures such as
  - Share Price Movements
  - Competitors Financial Position Comparison
  - EPS Growth Trend
  - Dividend Growth Trend

Line Charts and Bar Charts are used for Interpretation.

#### **4.1 DU - PONT Analysis**

The Du Pont Company of the US pioneered a system of financial analysis, which has received widespread recognition and acceptance. This system of analysis considers important interrelationships between different elements based on the information found in the financial statements.

The Du Pont analysis can be depicted via the following chart:



At the apex of the Du Pont chart is the Return On Total Assets (ROTA), defined as the product of the Net Profit Margin (NPM) and the Total Assets Turnover Ratio (TATR).

As a formula this can be shown as follows:

$$(\text{Net profit/Total asset}) = (\text{Net profit/Net sales}) * (\text{Net sales/Total assets})$$

$$(\text{ROTA}) \qquad \qquad \qquad (\text{NPM}) \qquad \qquad \qquad (\text{TATR})$$

Such decomposition helps in understanding how the return on total assets is influenced by the net profit margin and the total assets turnover ratio.

The left side of the Du Pont chart shows details underlying the net profit margin ratio. A detailed examination of this side presents areas where cost reductions may be effected to improve the net profit margin.

The right side of the chart highlights the determinants of total assets turnover ratio. If this study is supplemented by the study of other ratios such as inventory, debtors, fixed asset turnover ratios, a deeper insight into efficiencies and inefficiencies of asset utilisation can be sought.

The basic Du Pont analysis can be extended to explore the determinants of the Return On Equity (ROE).

**Return on equity = Asset turnover \* Net profit margin \* leverage**

*(Net profit/Equity) = (Net profit/Sales) \* (Sales/Total assets) \* (Total assets/Equity)*

*(ROE)            (NPM)                            (TATR)    1/(1-DR)*

*Where DR is the debt ratio = Debt (D)/Assets (A)*

Breaking ROE into these three parts allows evaluation of how well one can manage the company's assets, expenses, and debt. A manager has basically three ways of improving operating performance in terms of ROA and ROE. These are:

- Increase capital asset turnover
- Increase operating profit margins
- Change financial leverage

Each of these primary drivers is impacted by the specific decisions on cost control, efficiency productivity, marketing choices etc.

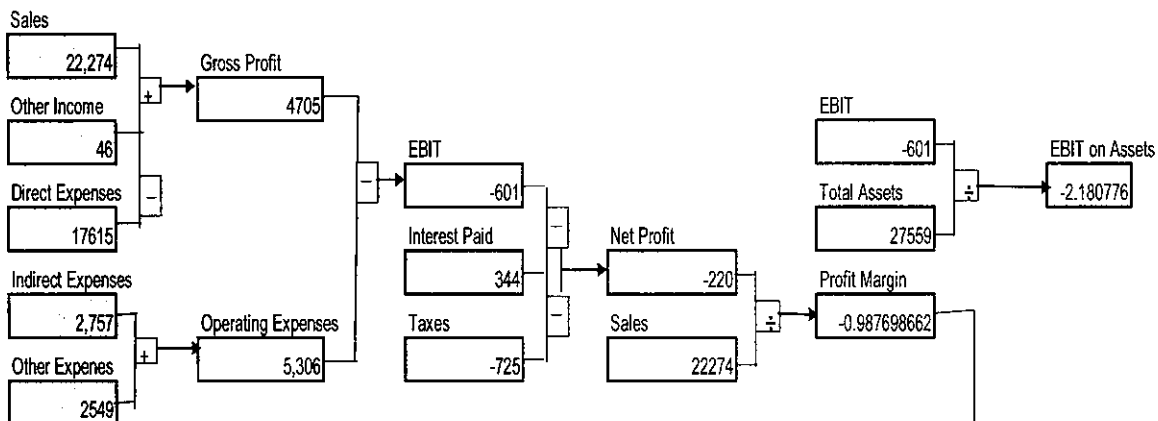
### **Importance of Du-Pont Analysis**

Any decision affecting the product prices, per unit costs, volume or efficiency has an impact on the profit margin or turnover ratios. Similarly any decision affecting the amount and ratio of debt or equity used will affect the financial structure and the overall cost of capital of a company. Therefore, these financial concepts are very important to evaluate as every business is competing for limited capital resources. Understanding the interrelationships among the various ratios such as turnover ratios, leverage, and profitability ratios helps companies to put their money areas where the risk adjusted return is the maximum.

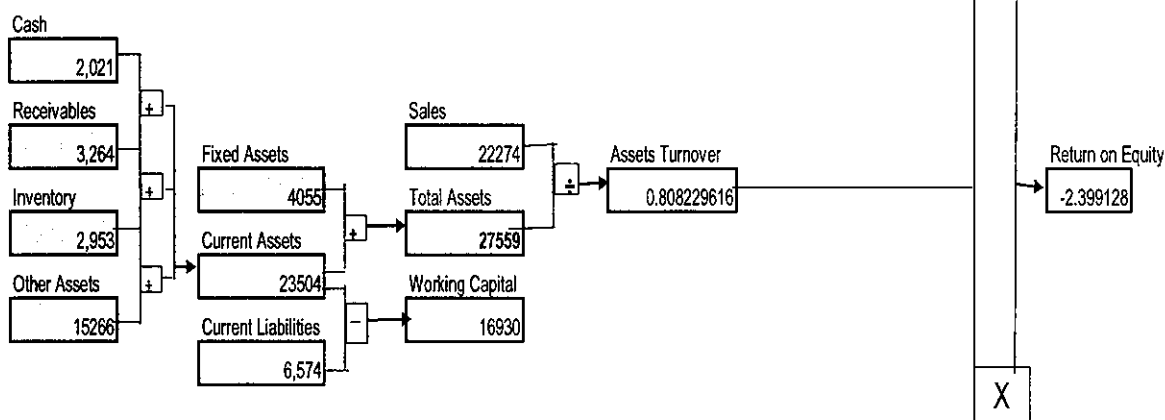
The Du-Pont Charts for the study period is as follows:

## HONEYWELL INTERNATIONAL INC. DU PONT CHART FOR THE YEAR 2002 ( Currency - USD)

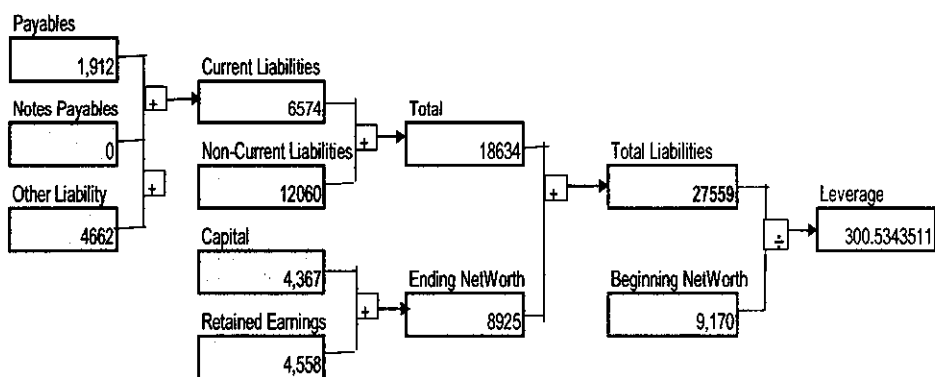
### Income Statement



### Assets



### Liabilities & Equity

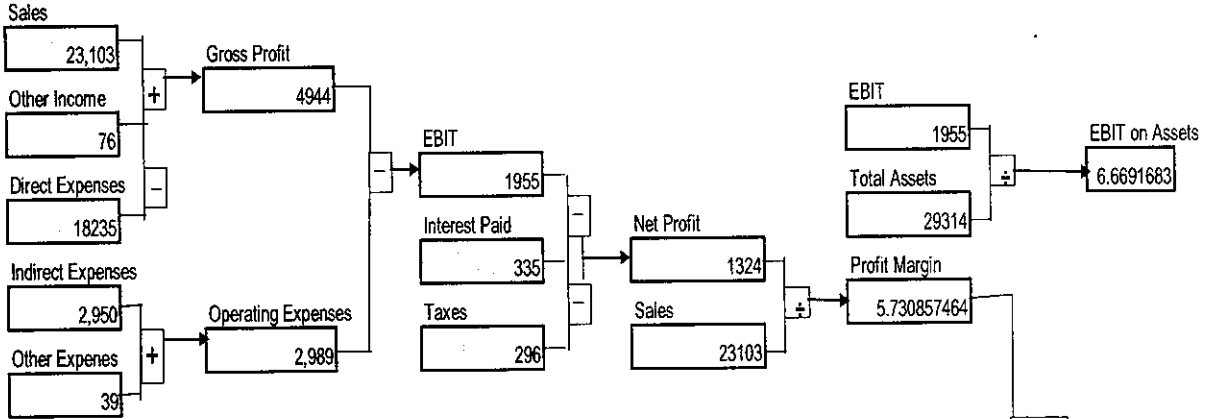


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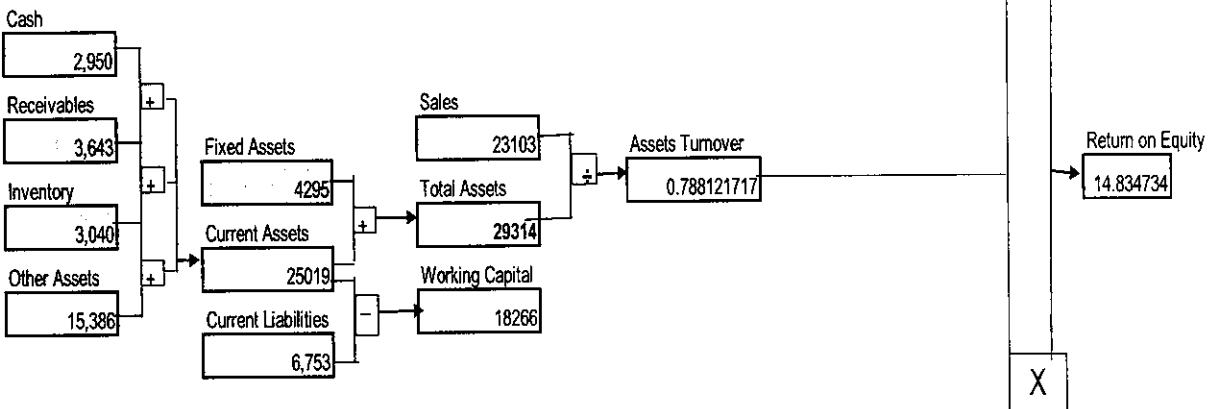
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## HONEYWELL INTERNATIONAL INC. DU PONT CHART FOR THE YEAR 2003 (Currency - USD)

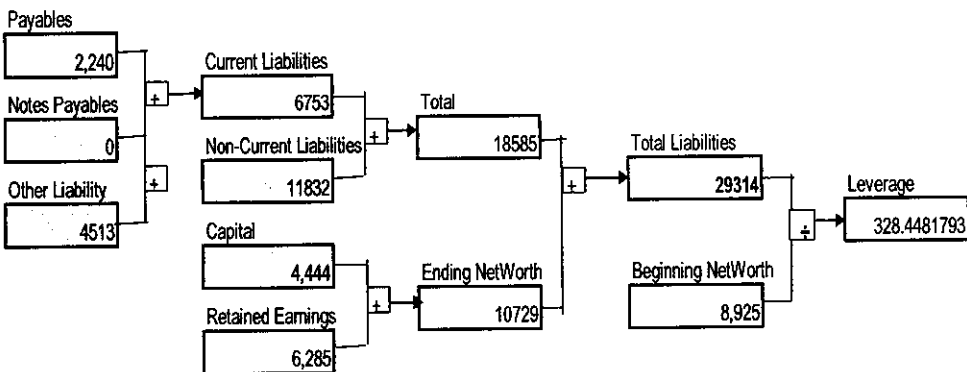
**Income Statement**



**Assets**

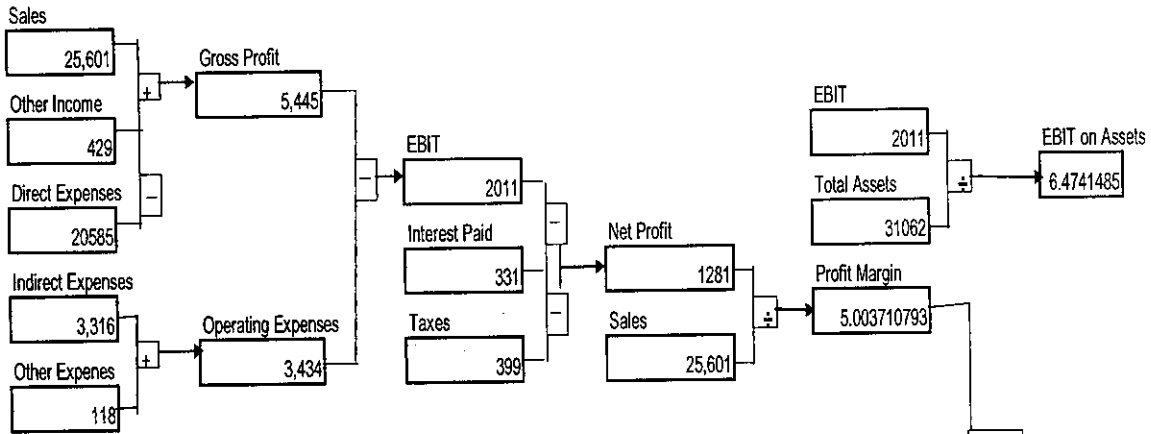


**Liabilities & Equity**

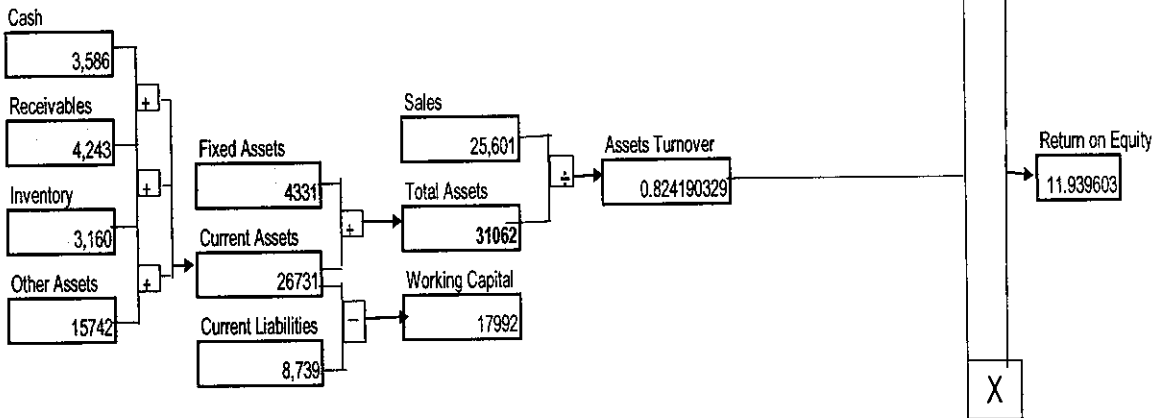


## HONEYWELL INTERNATIONAL INC. DU PONT CHART FOR THE YEAR 2004 (Currency - USD)

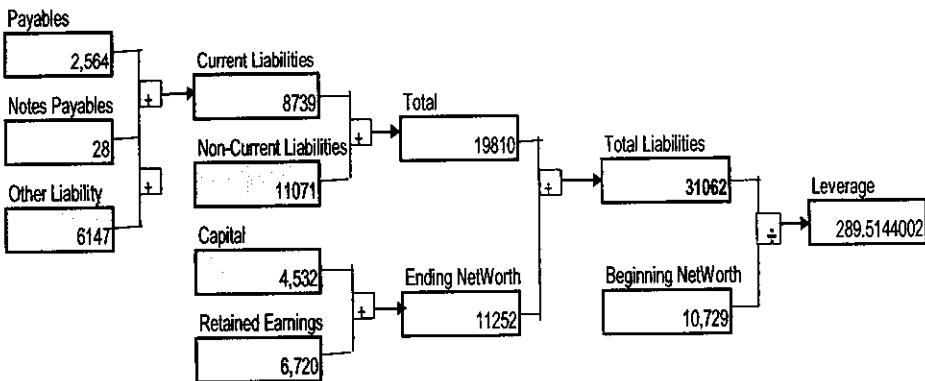
**Income Statement**



**Assets**

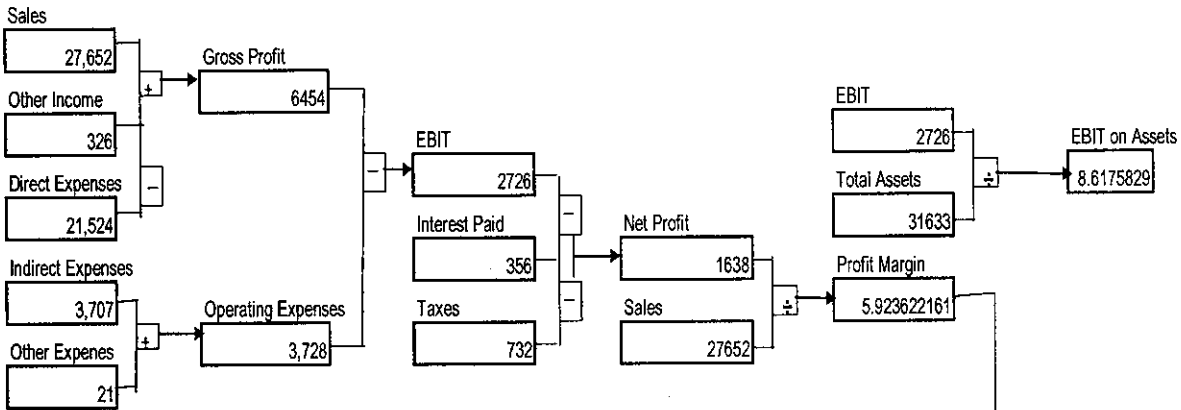


**Liabilities & Equity**

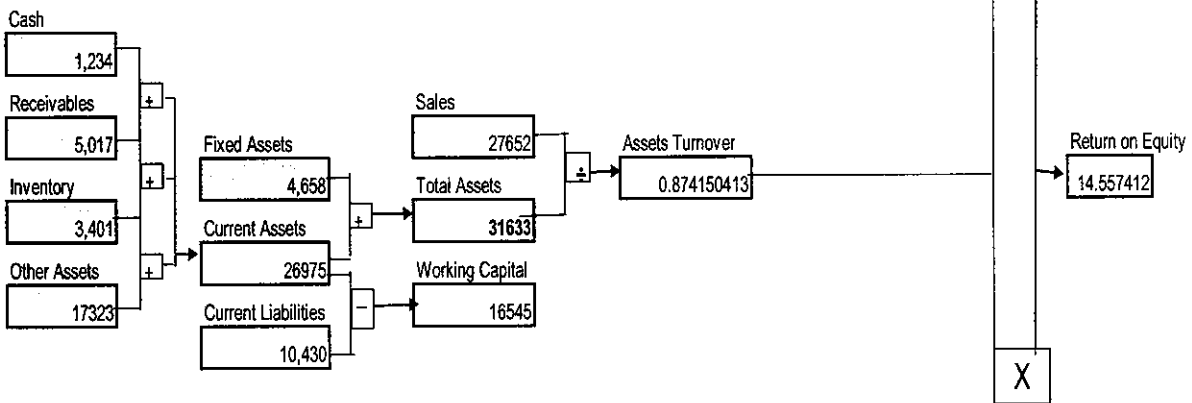


## HONEYWELL INTERNATIONAL INC. DU PONT CHART FOR THE YEAR 2005 (Currency - USD)

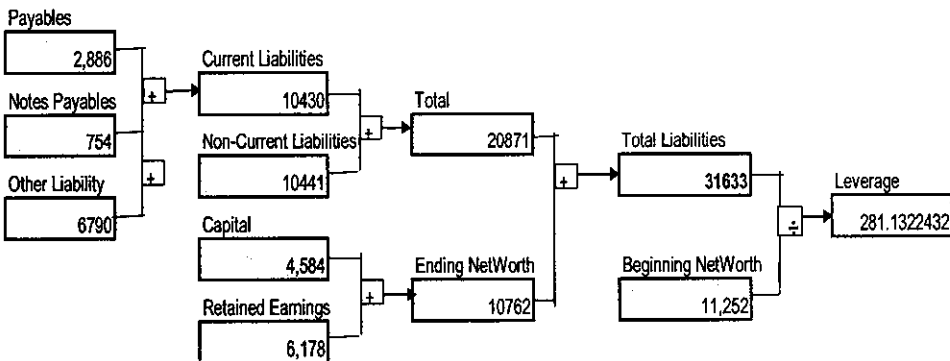
**Income Statement**



**Assets**

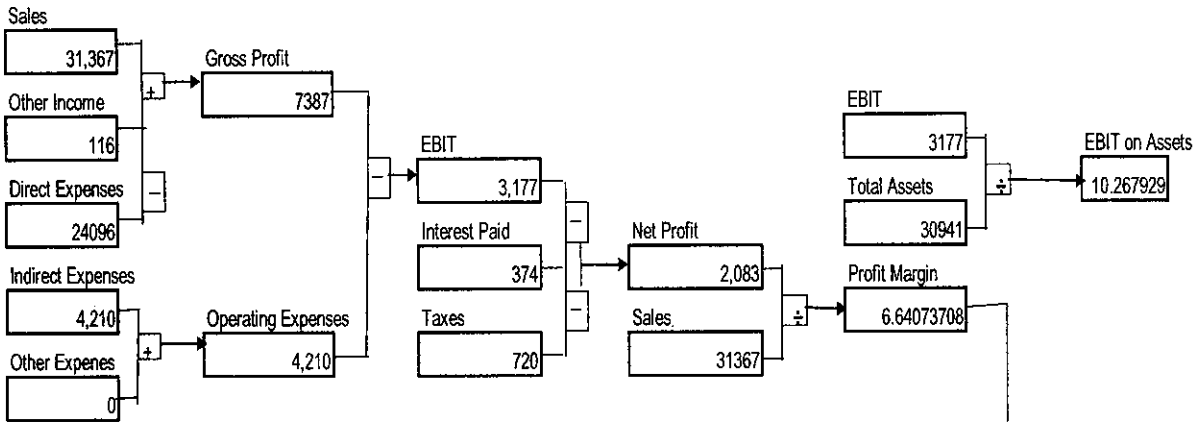


**Liabilities & Equity**

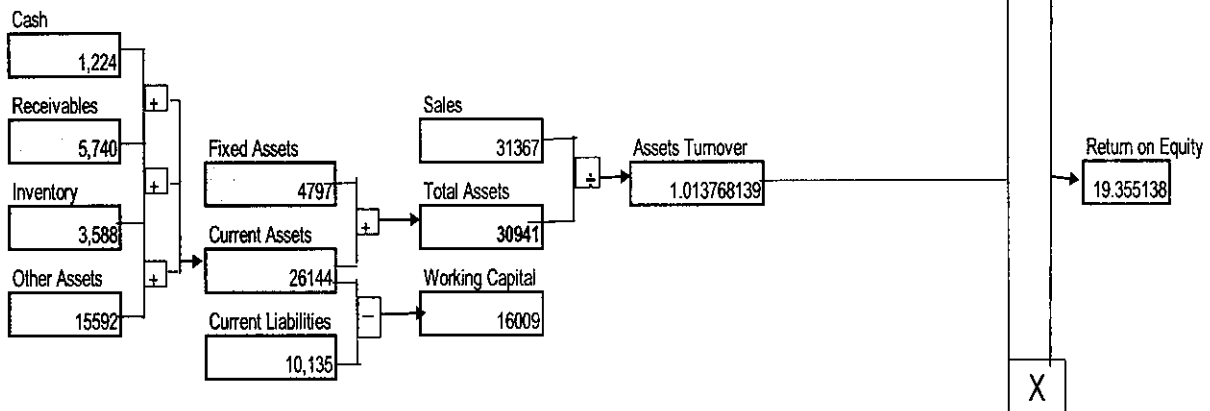


## HONEYWELL INTERNATIONAL INC. DU PONT CHART FOR THE YEAR 2006 (Currency - USD)

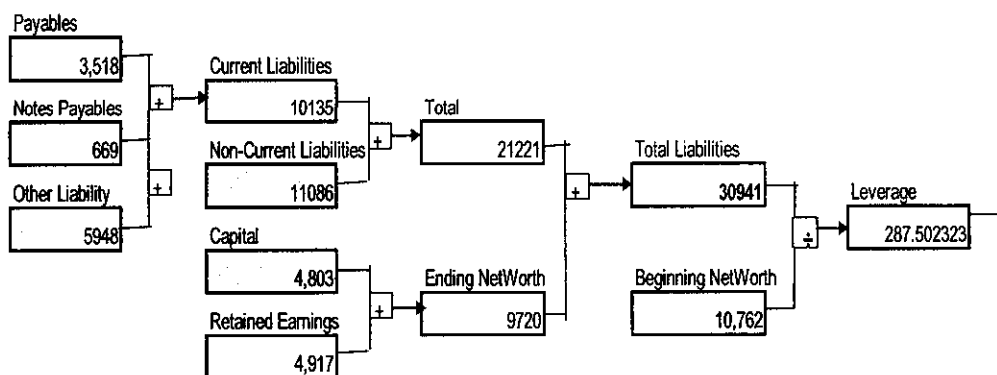
**Income Statement**



**Assets**



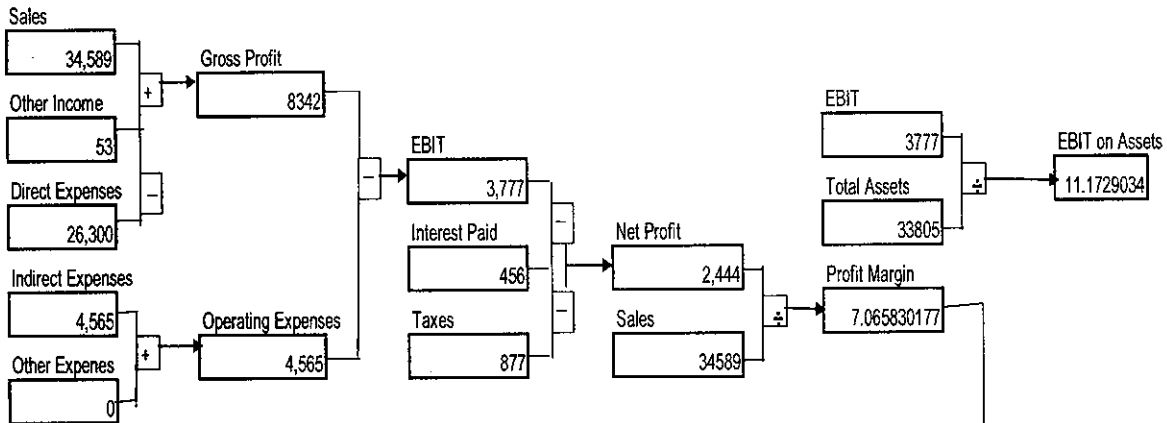
**Liabilities & Equity**



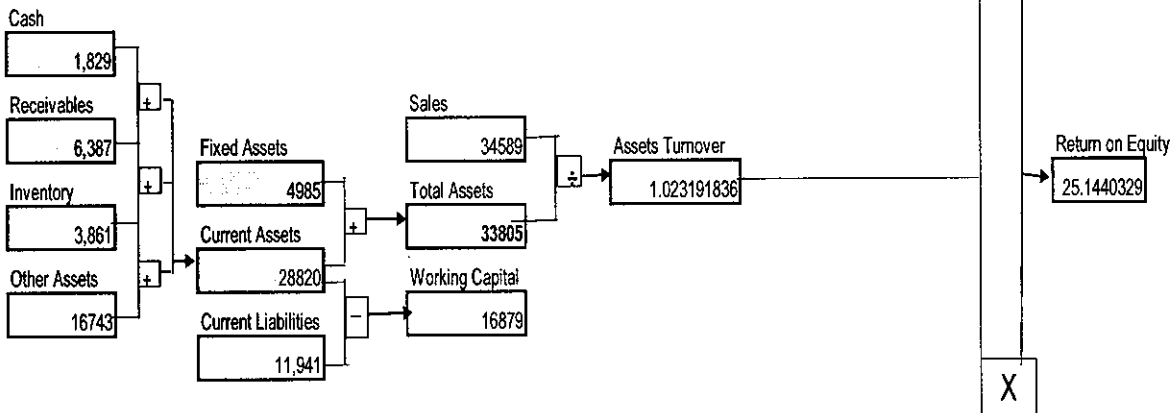


## HONEYWELL INTERNATIONAL INC. DU PONT CHART FOR THE YEAR 2007 (Currency - USD)

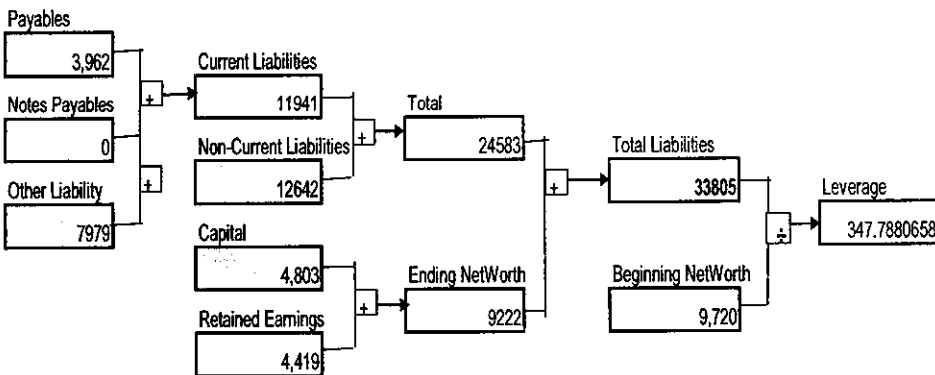
**Income Statement**



**Assets**



**Liabilities & Equity**



**Return on Equity**  
25.1440329

Table No.1

<b>CONSOLIDATED RESULTS FROM DU-PONT ANALYSIS</b>						
<b>Years</b>	<b>EBIT</b>	<b>Profit Margin</b>	<b>Leverage</b>	<b>Assets Turnover</b>	<b>EBIT on Assets</b>	<b>Return on Equity</b>
<b>2002</b>	-601	-0.987698662	300.5343511	0.808229616	-2.18077579	-2.39912759
<b>2003</b>	1955	5.730857464	328.4481793	0.788121717	6.669168315	14.83473389
<b>2004</b>	2011	5.003710793	289.5144002	0.824190329	6.474148477	11.93960295
<b>2005</b>	2726	5.923622161	281.1322432	0.874150413	8.617582904	14.55741202
<b>2006</b>	3177	6.64073708	287.502323	1.013768139	10.26792928	19.35513845
<b>2007</b>	3777	7.065830177	347.7880658	1.023191836	11.17290342	25.14403292

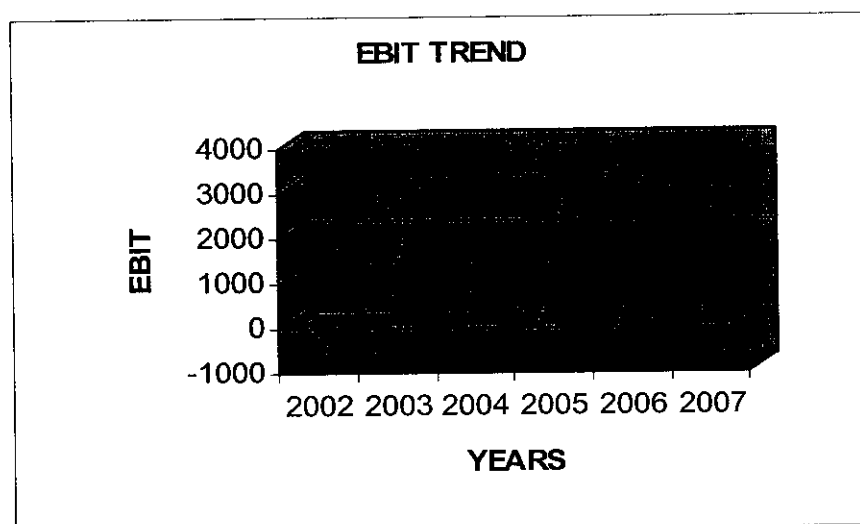
The various analyses are interpreted with the help of the following charts.

**i) EBIT**

**TABLE SHOWING EBIT - Table No 2**

<b>EBIT TREND</b>	
<b>Years</b>	<b>EBIT (USD in mio)</b>
2002	-601
2003	1955
2004	2011
2005	2726
2006	3177
2007	3777

Chart No 1



**Interpretation:**

EBIT is an acronym for Earnings before Interest and Taxes. It is commonly used by investors to compare companies. EBIT is a measure of the profitability of the company. The larger the EBIT value, the more profitable the company is likely to be. In the year 2002 the company has a negative EBIT to the extent of (USD601) millions. But the company has been constantly marching upwards.

**Inference:**

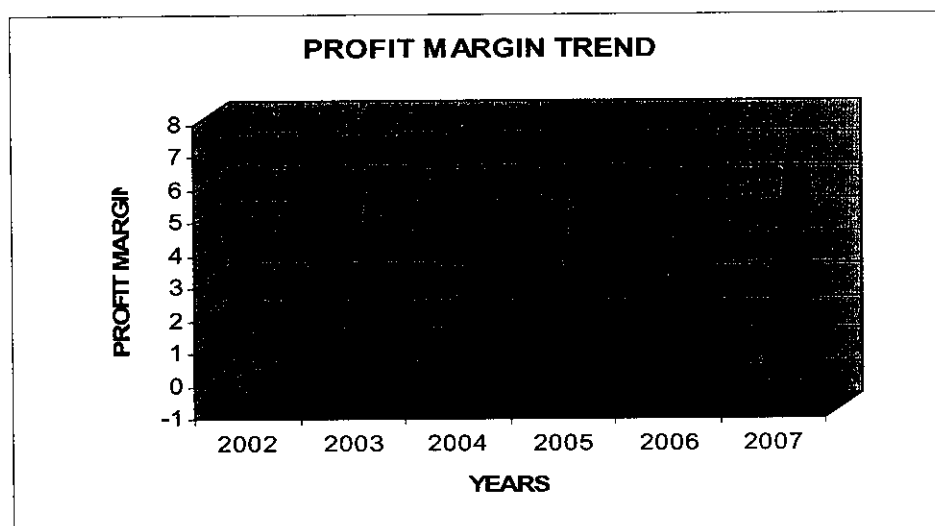
Therefore it is inferred that the profitability of the organization is positively growing.

## ii) Profit Margin

**TABLE SHOWING PROFIT MARGIN - Table No 3**

Profit Margin	
Years	Profit Margin(USD in mio)
2002	-0.987698662
2003	5.730857464
2004	5.003710793
2005	5.923622161
2006	6.64073708
2007	7.065830177

**Chart No 2**



### Interpretation:

**Profit margin, Net Margin or Net Profit Ratio** all refer to a measure of profitability. The profit margin is mostly used for internal comparison. Individual businesses' operating and financing arrangements vary so much that different entities are bound to have different levels of expenditure, so that comparison of one with another can have little meaning. Profit margin is an indicator of a company's pricing policies and its ability to control costs. Differences in competitive strategy and product mix cause the profit margin to vary among different companies.

### Inference:

Here, the profit margin trend is moving upwards from the year 2002 to 2007. Therefore we infer that customers are satisfied with the company's performance, since the sales are increased in spite of the constant increase in the profit margin.

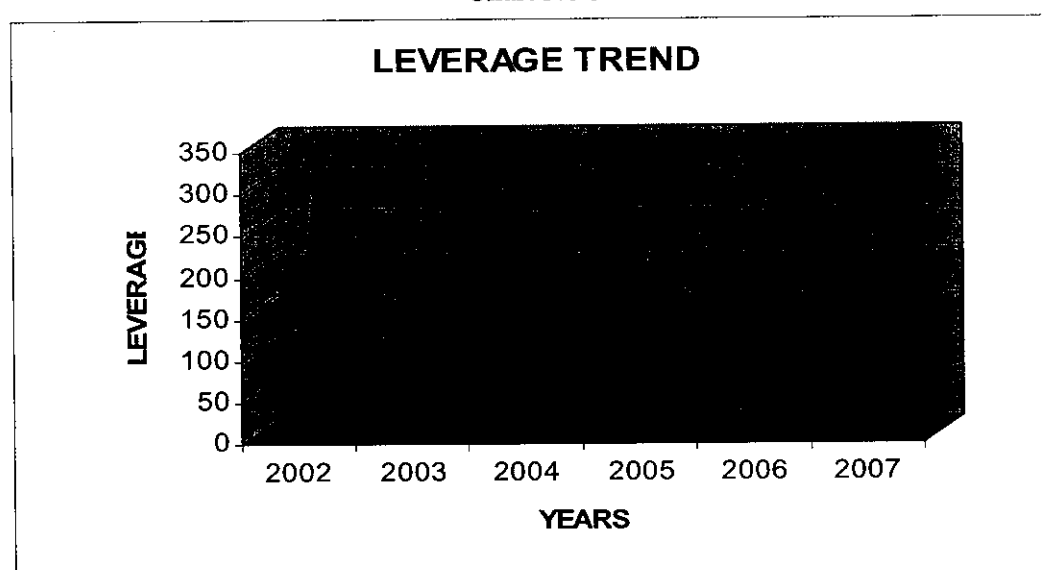
## iii) Leverage:

TABLE SHOWING LEVERAGE

Table No. 4

Leverage	
Years	Leverage(USD in mio)
2002	300.5343511
2003	328.4481793
2004	289.5144002
2005	281.1322432
2006	287.502323
2007	347.7880658

Chart No 3

**Interpretation:**

Leverage is the ratio of Total Liabilities and Ending Net Worth to the Beginning Net Worth. It shows the positive or negative magnification of risking the business resources. Here, the leverage has been positive and constantly growing indicating the healthy position of the business risk.

**Inference:**

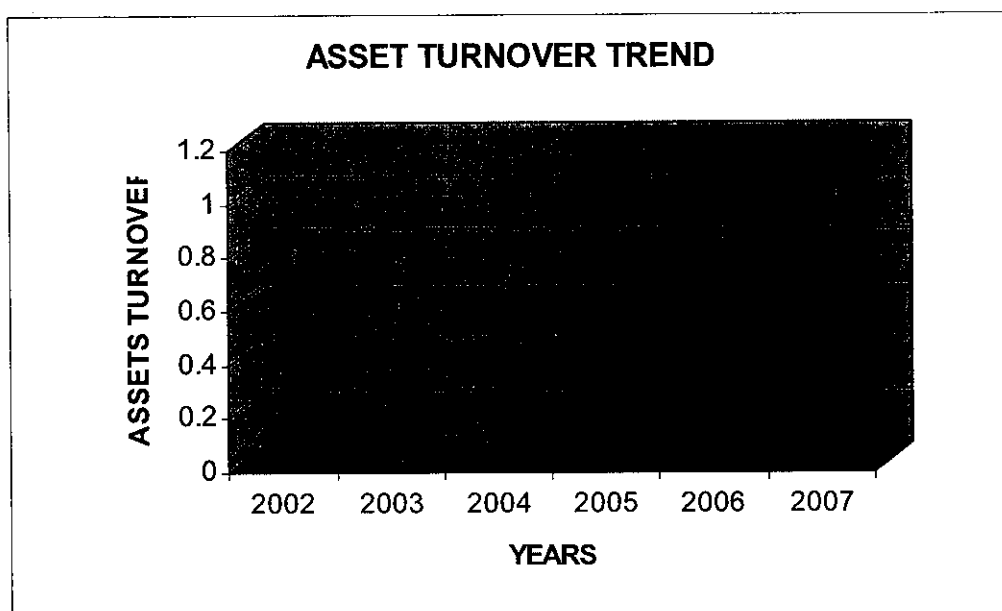
Therefore we infer from the above that, the organization, even though being a highly levered firm is positively balancing its risk.

**iv) Asset Turnover Ratio:**

**TABLE SHOWING ASSETS TURNOVER - Table No. 5**

Assets Turnover	
Years	Assets Turnover(USD in mio)
2002	0.808229616
2003	0.788121717
2004	0.824190329
2005	0.874150413
2006	1.013768139
2007	1.023191836

Chart No. 4



**Interpretation:**

This ratio is useful to determine the amount of sales that are generated from each dollar of assets. Generally, companies with low profit margins tend to have high asset turnover, those with high profit margins have low asset turnover. Asset turnover measures a firm's efficiency at using its assets in generating sales or revenue - the higher the number the better. It also indicates pricing strategy.

**Inference:**

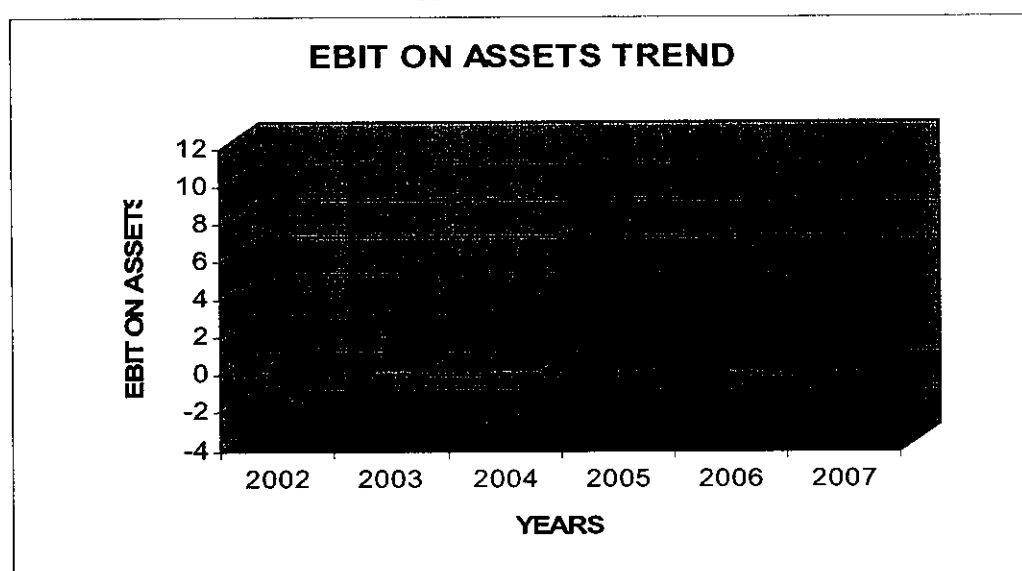
Here the asset turnover seems to be relatively low, meaning that it makes a high profit margin on its products.

## v) EBIT on Assets:

TABLE SHOWING EBIT ON ASSETS - Table No. 6

EBIT on Assets	
Years	EBIT on Assets(USD in mio)
2002	-2.18077579
2003	6.669168315
2004	6.474148477
2005	8.617582904
2006	10.26792928
2007	11.17290342

Chart No. 5

**Interpretation:**

This ratio is often called as Return on Total Assets (ROTA). This ratio indicates the raw earning power of the business. Raw earning power is independent of whether assets are financed by equity or debt.

**Inference:**

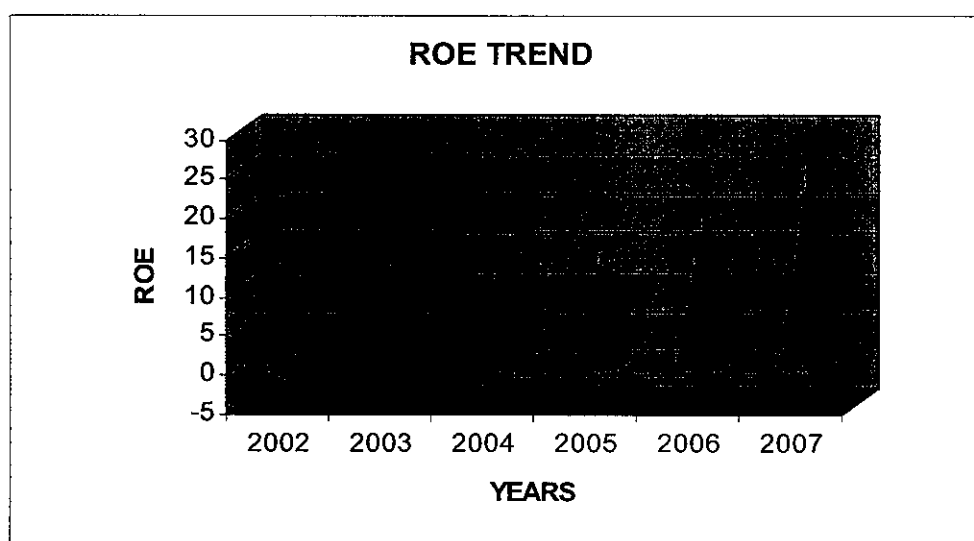
This chart shows us that the raw earning power of the business has been constantly growing from the year 2002 to 2007. Therefore we may infer that earnings to the total assets are healthy and positive to the financial position of the business.

## vi) Return on Equity:

TABLE SHOWING RETURN ON EQUITY Table No. 7

Return on Equity	
Years	Return on Equity(USD in mio)
2002	-2.39912759
2003	14.83473389
2004	11.93960295
2005	14.55741202
2006	19.35513845
2007	25.14403292

Chart No. 6

**Interpretation:**

**Return on Equity (ROE, Return on average common equity, Return on Networth)** measures the rate of return on the ownership interest (shareholders' equity) of the common stock owners. ROE is viewed as one of the most important financial ratios. It measures a firm's efficiency at generating profits from every dollar of net assets (assets minus liabilities), and shows how well a company uses investment dollars to generate earnings growth. ROE is equal to a fiscal year's net income (after preferred stock dividends but before common stock dividends) divided by total equity (excluding preferred shares), expressed as a percentage.

**Inference:**

Here, the ROE is moving upwards from the year 2002 to 2007. Therefore we infer that the firm is efficient in generating profits to the extent invested by the shareholders as its equity.



## 4.2 FINANCIAL LEVERAGE

### 1. Debt Ratio:

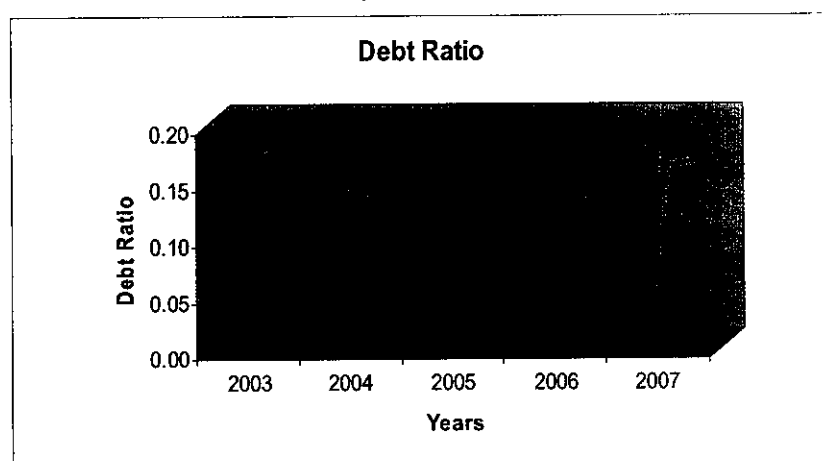
This ratio will tell you how much the company relies on debt to finance assets. When calculating this ratio, it is conventional to consider both current and non-current debt and assets. In general, the lower the company's reliance on debt for asset formation, the less risky the company is since excessive debt can lead to a very heavy interest and principal repayment burden. However, when a company chooses to forgo debt and rely largely on equity, they are also giving up the tax reduction effect of interest payments. Thus, a company will have to consider both risk and tax issues when deciding on an optimal debt ratio.

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

Table No.8

Year	Debt (USD in mio)	Assets (USD in mio)	Debt Ratio (USD in mio)
2003	4,961	29,314	0.17
2004	4069	31,062	0.13
2005	3082	31,633	0.10
2006	3909	30,941	0.13
2007	5419	33,805	0.16

Chart No. 7



#### Interpretation:

Here, the company has a lower reliance on debt for its assets; therefore we infer that the company bears comparatively less risk.

## 2. Debt-Equity Ratio:

Debt/equity ratio is equal to long-term debt divided by common shareholders' equity. Investing in a company with a higher debt/equity ratio may be riskier, especially in times of rising interest rates, due to the additional interest that has to be paid out for the debt. A high debt/equity ratio generally means that a company has been aggressive in financing its growth with debt. This can result in volatile earnings as a result of the additional interest expense.

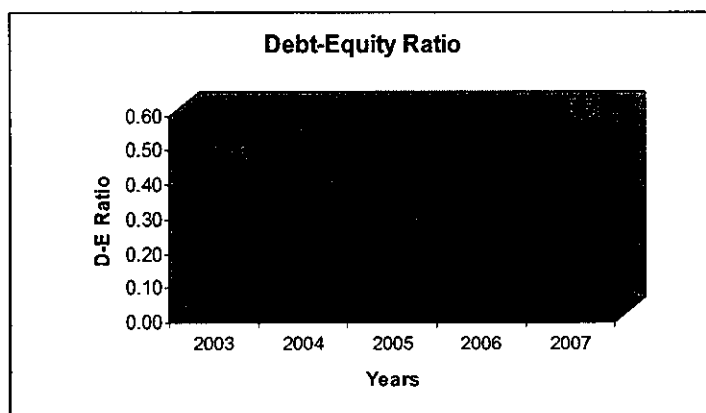
*A ratio greater than one means assets are mainly financed with debt, less than one means equity provides a majority of the financing.*

Debt-Equity Ratio	=	Debt Equity
-------------------	---	----------------

Table No 9

Year	Debt (USD in mio)	Assets (USD in mio)	Debt Equity Ratio (USD in mio)
2003	4,961	10,729	0.46
2004	4069	11,252	0.36
2005	3082	10,762	0.29
2006	3909	9,720	0.40
2007	5419	9,222	0.59

Chart No 8



P-2373

### Interpretation:

Here, the company even though has a rise in the debt-equity ratio trend has not exceeded one which means only equity has contributed the higher proportion than the debt.

Therefore, we may infer that the risk involved in the capital structure of the organization is less.

### 3. Interest Coverage Ratio:

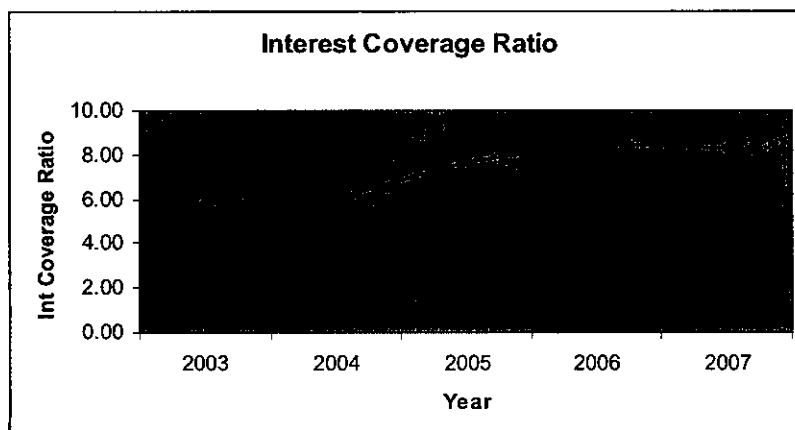
A ratio used to determine how easily a company can pay interest on outstanding debt. The lower the ratio, the more the company is burdened by debt expense. When a company's interest coverage ratio is 1.5 or lower, its ability to meet interest expenses may be questionable. An interest coverage ratio below 1 indicates the company is not generating sufficient revenues to satisfy interest expenses.

$\text{Interest Coverage Ratio} = \frac{\text{EBIT}}{\text{Interest}}$
--

Table No.10

Year	EBIT (USD in mio)	Interest (USD in mio)	Interest Coverage (USD in mio)
2003	1955	335	5.84
2004	2011	331	6.08
2005	2726	356	7.66
2006	3177	374	8.49
2007	3777	456	8.28

Chart No. 9



#### Interpretation:

As described above, it is riskier to have the interest coverage ratio below 1.5. But, here we have the ratios averagely more than 5. Also the interest coverage ratio had been constantly increasing which is a healthy trend.

Hence, we infer that company is generating sufficient revenues to satisfy its interest expenses.

### 4.3 CAPITAL STRUCTURE THEORY

Ensuring an optimal capital structure and securing the financing sources with the least cost of capital is as important, if not more, for corporate entities as it is for individuals. The ability of an organization to perform well in the market depends on the efficiency of its capital structure. In simple terms, the composition of the total capital of a company constitutes its capital structure. Here, total capital is the net funds available to the company after it fulfils its current liabilities.

Debt and equity are two major components of the total capital of companies. Debt is the amount owed for borrowed funds from sources such as individuals, banks, or other financial institutions. Equity is the ownership interest in a firm including equity share capital, share premium, preference share capital, free reserves, and surplus profits. The proportion of debt and equity (leverage) in the capital structure differs across companies. The capital structure also varies according to the industry and the market situation that the company is operating in. For example, the average capital structure of European firms is significantly different than that of the American firms.

#### Cost of Capital

The main determinants of cost of capital are

- Cost of Equity( $K_e$ ) =  $(D/M) + g$
- Cost of Debt( $K_d$ ) =  $(Int/d) * 100$
- Cost of Retained Earnings ( $K_s$ )  $(Div/P_o) + g$

Table No.11

Particulars	2004	2005	2006	2007
Dividend (D) (in USD)	0.1875	0.2063	0.2269	0.25
Market Price (P)(in USD)	35.21	36.93	40.79	54.33
Growth Rate (g)	9.97%	9.98%	10.18%	10%
Cost of Equity ( $K_e$ )	<b>10.50%</b>	<b>10.54%</b>	<b>10.74%</b>	<b>10.46%</b>

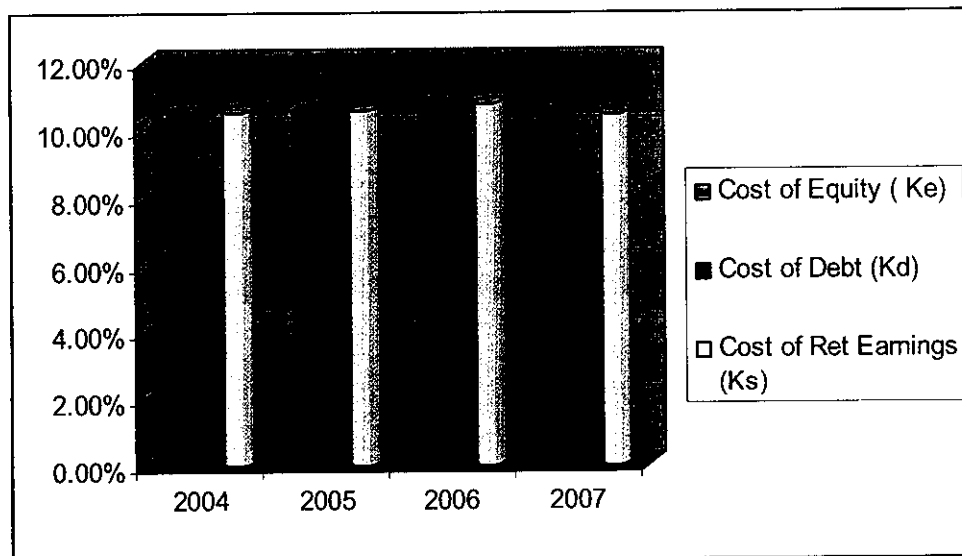
Table No.12

Particulars	2004	2005	2006	2007
Debt (d)(in million USD)	4069	3082	3909	5419
Interest (in million USD)	331	356	374	456
Cost of Debt (Kd)	8.13%	11.55%	9.57%	8.41%

Table No.13

Particulars	2004	2005	2006	2007
Dividend(D)(in USD)	0.1875	0.2063	0.2269	0.25
Share Price (Po)(in USD)	32.57	34.91	39.4	53.73
Growth Rate(g)	9.97%	9.98%	10.18%	10%
Cost of Ret Earnings (Ks)	10.55%	10.57%	10.76%	10.47%

Chart No. 10



The two main theories of capital structure are,

- Net Income Theory
- Net Operating Income Theory

### **NET OPERATING INCOME APPROACH**

The Net Operating Income (NOI) approach states that the proportion of debt and equity in the firm's structure does not have any impact on the firm's value or its cost of capital. The NOI approach assumes that while the cost of debt is constant for all levels of leverage, the cost of equity increases linearly with financial leverage. This increase is explained by the increase in the financial risk to the firm as it increases the proportion of debt in its capital structure. Cost of equity increases because the shareholders expect a higher rate of return to cover the risk of increase in leverage. Therefore, according to the NOI approach, there cannot be any optimum capital structure for a firm.

### **NET INCOME APPROACH**

The Net Income (NI) approach to an optimal capital structure states that the total value of the firm changes with a change in the financial leverage. The NI approach holds true under certain assumptions. For example, the NI approach assumes that the cost of debt is lower than the cost of equity. Therefore, an increase in the proportion of debt in the capital structure would result in a decrease in the firm's average cost of capital. A lower cost of capital would result in an increase in the value of the firm. The NI approach can be used to determine a firm's optimum capital structure where the value of the firm is highest and the cost of the capital is lowest.

**E=Net income/Cost of Equity**

**D= Interest/Cost of Debt**

**V= Value of Equity+ Value of Debt**

**Ko=Net Operating Income/ Value of Firm**

**WACC = (Cost of equity X Equity weight) + (Cost of debt X Debt weight)**

Here, we consider the Net Income theory for our study.

Table No.14

<b>CAPITAL STRUCTURE THEORY CALCUALATIONS</b>				
<b>NET INCOME APPROACH (USD in mio)</b>				
	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Net Operating Income	1612	1994	2457	2900
Debt	4069	3082	3909	5419
Interest	331	356	374	456
Net Income	1,281	1,638	2,083	2,444
Cost of Equity (Ke)	10.50%	10.54%	10.74%	10.46%
Cost of Debt (Kd)	8.13%	11.55%	9.57%	8.41%
Value of Equity (E)	12197.07	15542.83	19401.54	23364.86
Value of debt (D)	4069	3082	3909	5419
Value of Firm (V)	16266.07	18624.83	23310.54	28783.86
Cost of Capital (Ko)	9.91%	10.71%	10.54%	10.08%
Equity Weights	0.749847	0.834522	0.832308	0.811735
Debt Weights	0.250153	0.165478	0.167692	0.188265
WACC	9.91%	10.71%	10.54%	10.08%

From the above table following charts are interpreted:

Chart No.11

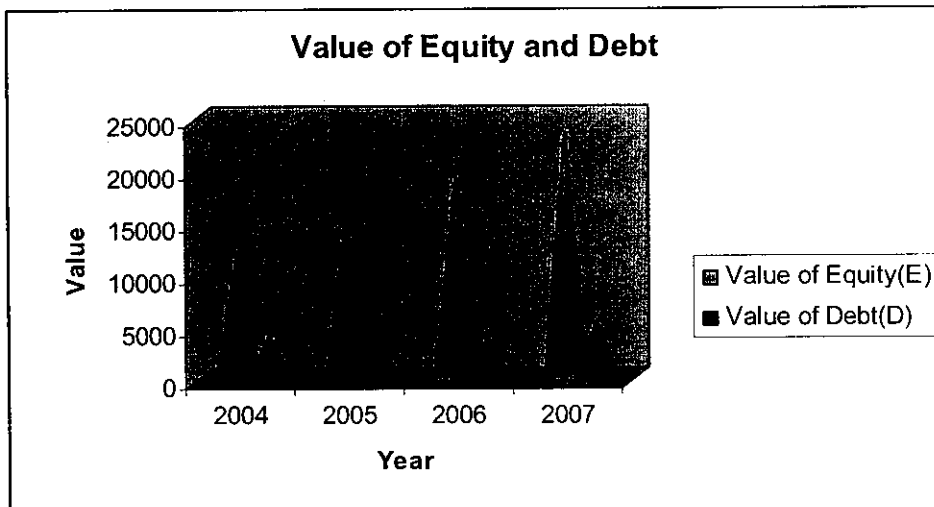


Chart No.12

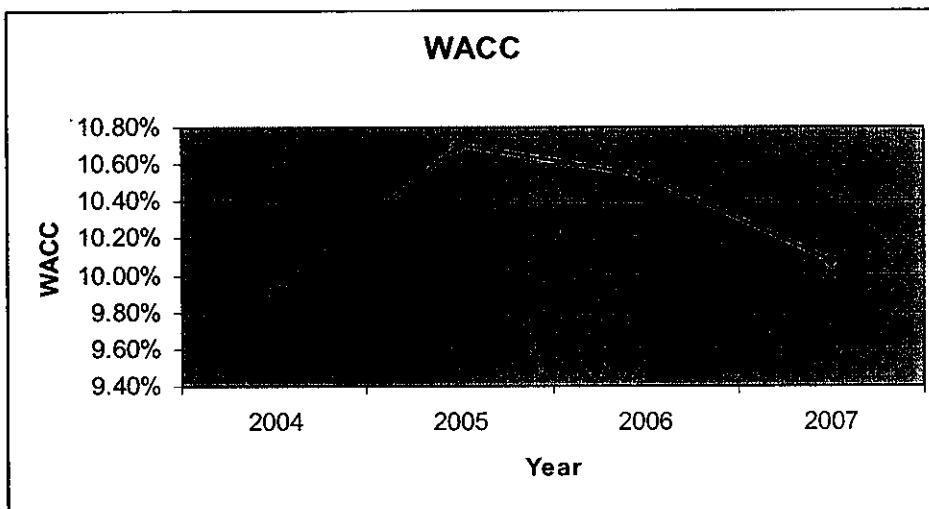
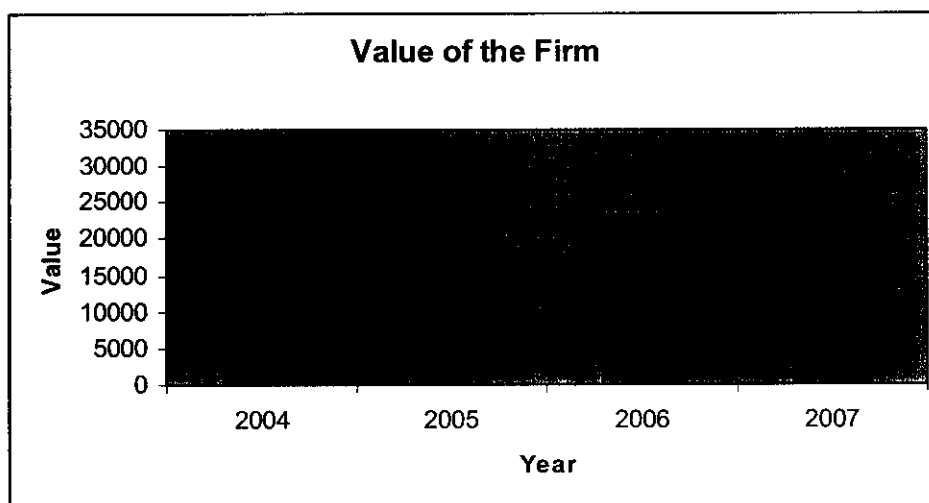


Chart No.13





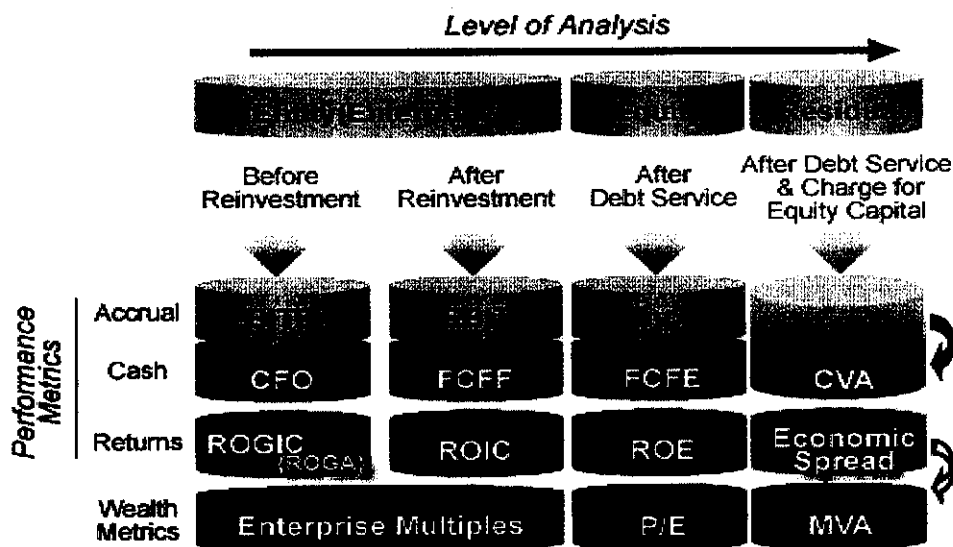
### Interpretation:

From the above charts we infer that,

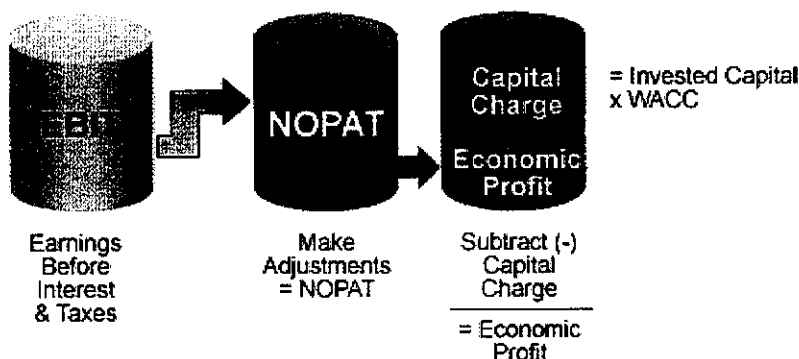
- Value of Equity and the Value of Debt are constantly moving upwards which in turn increases the Value of the Firm.
- The Weighted Average Cost of Capital (WACC) is moving downwards which is a healthy state by which the cost of capital is reduced increasing the returns from the capital invested.
- As a result of the financial leverage, we infer that the leverage debt and equity in the firm's structure have impact on the firm's value or its cost of capital.

## 4.4 ECONOMIC VALUE ADDITION

Economic Value Added (EVA) is the most successful performance metric used by companies and their consultants. Although much of its popularity is a result of able marketing and deployment by Stern Stewart, owner of the trademark, the metric is justified by financial theory and consistent with valuation principles, which are important to any investor's analysis of a company.



$$\text{Economic Profit} = \text{NOPAT} - \text{Capital Charge} (\text{Invested Capital} \times \text{WACC})$$



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$$\text{Economic profit} = \text{NOPAT} - [\text{WACC} \times \text{Invested Capital}]$$

$$(\text{NOPAT} = \text{ROIC} \times \text{Invested Capital})$$

Therefore,

$$\begin{aligned} \text{Economic profit} &= [\text{ROIC} \times \text{Invested Capital}] - [\text{WACC} \times \text{Invested Capital}] \\ &= [\text{ROIC} - \text{WACC}] \times \text{Invested Capital} \end{aligned}$$

- Economic profit boils down to a set of adjustments that translate an accrual-based earnings before interest and taxes (EBIT) into a cash-based net operating profit after taxes (NOPAT).
- Although the list of potential adjustments is long, it is important not to be seduced into an almost-impossible quest for absolute precision. From an investor's perspective, consistency is more important. That is, an income statement adjustment should always be matched by a balance sheet adjustment. For example, if we add back minority interest to earnings, then we need to add the minority interest balance sheet account to invested capital. We can add neither or both, but there is no truly right answer. In this example, it comes down to whether we prefer our economic profit to have an operational perspective (add both) or a financial perspective (add neither).

- Avoid seeking precision in the calculation of weighted average cost of capital (WACC), a dubious academic exercise. It is far better to charge the company with an approximate but consistent estimate of WACC than to try to chase down the elusive cost of equity.

Finally, to help you consider whether economic profit is an appropriate performance metric for the company you are evaluating, we have discussed the following strengths and weaknesses:

### **Strengths**

- If you had to rely on only one single performance number, economic profit is probably the best because it contains so much information (mathematicians would call it "elegant"): economic profit incorporates balance sheet data into an adjusted income statement metric.
- Economic profit works best for companies whose tangible assets (assets on the balance sheet) correlate with the market value of assets - as is often the case with mature industrial companies.

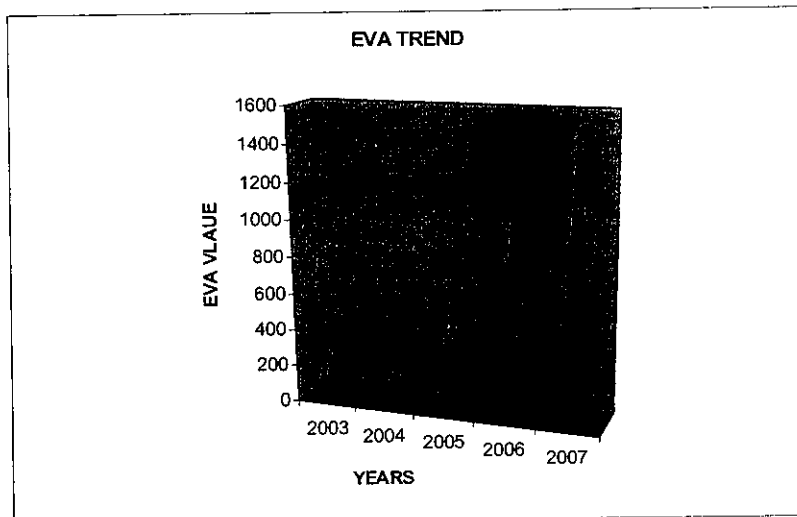
### **Weaknesses**

- Although some proponents argue economic profit is "all you need", it is very risky to depend on a single metric.
- The companies least suited for economic profit are high-growth, new-economy and high-technology companies, for whom assets are 'off balance sheet' or intangible.

Table No.15

<b>ECONOMIC VALUE ADDITIONS (EVA)</b>					
<b>EVA = [ROIC - WACC] × Invested Capital (USD in mio)</b>					
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Invested Capital (in million)	10729	11252	10762	9720	9222
NOPAT	1324	1281	1638	2083	2444
ROIC	12.34%	11.38%	15.22%	21.43%	26.50%
WACC	9.65%	9.91%	10.71%	10.54%	10.08%
<b>EVA</b>	<b>288.6515</b>	<b>165.9268</b>	<b>485.3898</b>	<b>1058.512</b>	<b>1514.422</b>

Chart No. 14

**Interpretation:**

EVA, as the most successful performance metric of wealth maximization to the shareholders of the organization, is constantly growing in case of our organization. Hence, we conclude that, the shareholders' wealth maximization has been healthy during the past five years, and in particular during the year 2007 it has gone to a new high.

## 4.5 RATIO ANALYSIS

An analysis of Financial Statements based on ratios is known as Ratio Analysis.

Ratio Analysis was pioneered by Alexander Wall who presented a system of ratio analysis in the year 1909.

A ratio is a mathematical relationship between two or more variables taken from the financial statements. Ratio Analysis is the process of computing, determining, and presenting the relationship of items. It also includes comparison and interpretation of ratios and using them as basis for the future projections. Ratio Analysis is helpful to management and outsiders to diagnoses the financial health of a business concern. It helps in measuring the profitability, solvency, and activity of a firm.

Ratio Analysis is an important way to state meaningful relationship between components of financial statements.

The following are the ratios used in this study with respect to four categories.

- Profitability Ratios
  - ✓ Gross Profit Ratio
  - ✓ Net Profit Ratio
  - ✓ Operating Profit Ratio
- Liquidity Ratios
  - ✓ Current Ratio
  - ✓ Quick Ratio
  - ✓
- Turnover Ratios
  - ✓ Total Assets Turnover Ratio
  - ✓ Inventory Turnover Ratio
- Leverage Ratios
  - ✓ Debt Ratio
  - ✓ Debt – Equity Ratio
  - ✓ Interest Coverage Ratio

#### 4.5.1 PROFITABILITY RATIOS:

##### 1. Gross Profit Ratio:

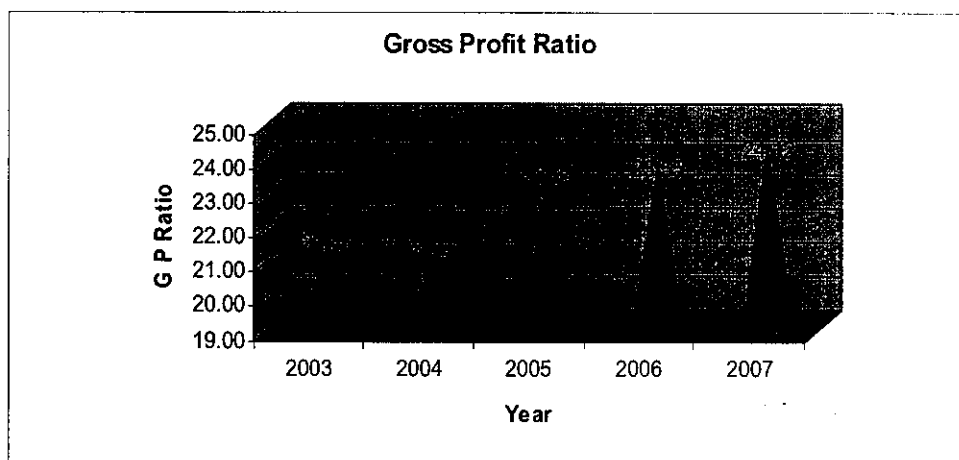
It is the relationship between the Gross Profit and the Sales. This ratio is obtained by reducing cost of goods sold from the sales. It is expressed in percentage as follows:

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

Table No. 16

Year	Gross Profit (USD in mio)	Sales (USD in mio)	G P Ratio
2003	4944	23,103	21.40
2004	5445	25,601	21.27
2005	6454	27,652	23.34
2006	7387	31,367	23.55
2007	8342	34,589	24.12

Chart No. 15



##### Interpretation:

The G P Ratio was low in 2002(21.40) but has credibly been increasing for the past 4 years reaching upto (24.12) in 2007. This shows that the company has an increase in Sales or has incurred a decrease in the cost. Thus the G P ratio is positive and healthy in the organization.

## 2. Net Profit Ratio:

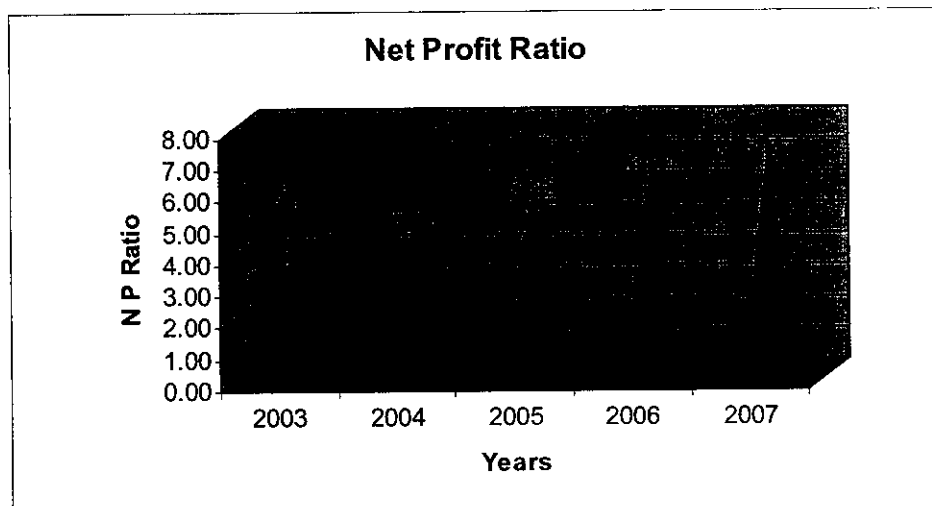
It is the relationship between the Net Profit and the Net Sales. It is calculated after excluding Non-Operating income and Non-Operating expenses. It is used to measure the efficiency and overall profitability of the organization.

$$\text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Sales}} \times 100$$

Table No. 17

Year	Net Profit (USD in mio)	Sales (USD in mio)	N P Ratio
2003	1324	23,103	5.73
2004	1281	25,601	5.00
2005	1638	27,652	5.92
2006	2083	31,367	6.64
2007	2444	34,589	7.07

Chart No. 16



### Interpretation:

The Net Profit Ratio in 2003 is 5.73%. Except for the year 2004 the ratio has been moving in the upwards trend, which shows the efficiency of the organization in generating profits constantly. In the year 2007 the Net Profit of the company was highest to the extent of 7.07 %, which clearly indicates the operating efficiency of the concern. The higher the Net Profit Ratio the better is the operating efficiency of the organization.

### 3. Operating Profit Ratio:

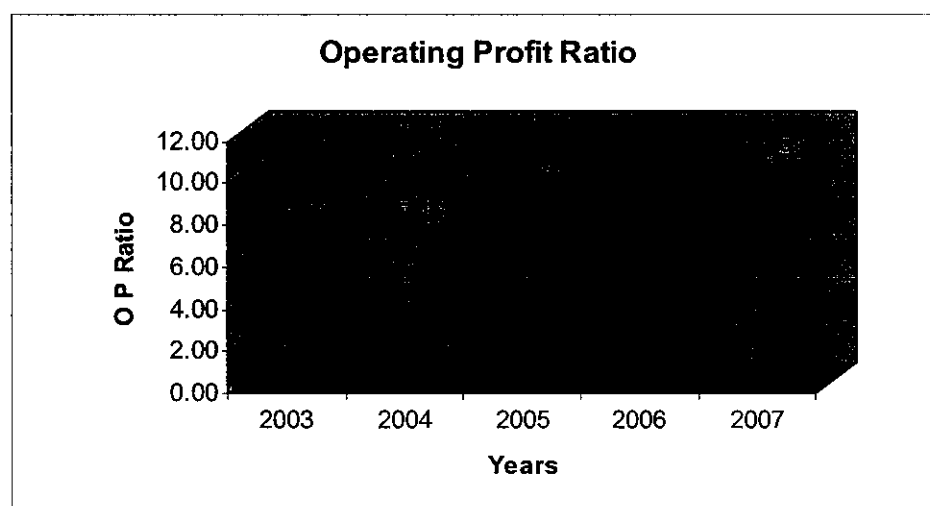
Operating Profit Ratio is the relationship between the profit before paying interest and taxes and the net sales.

$$\text{Operating Profit Ratio} = \frac{\text{EBIT}}{\text{Sales}} \times 100$$

Table No. 18

Year	EBIT (USD in mio)	Sales (USD in mio)	O P Ratio
2003	1955	23,103	8.46
2004	2011	25,601	7.86
2005	2726	27,652	9.86
2006	3177	31,367	10.13
2007	3777	34,589	10.92

Chart No.17



#### Interpretation:

The operating Profit ratio has been 8.46% in the year 2003. It has been increasing except in the year 2004. It has increased upto the extent of 10.92 % in the year 2007. Increase in the operating profit ratio implies the increase the sales which in turn leads to a huge turnover.



## 4.5.2 LIQUIDITY AND TURNOVER RATIOS:

### 1. Current Ratio:

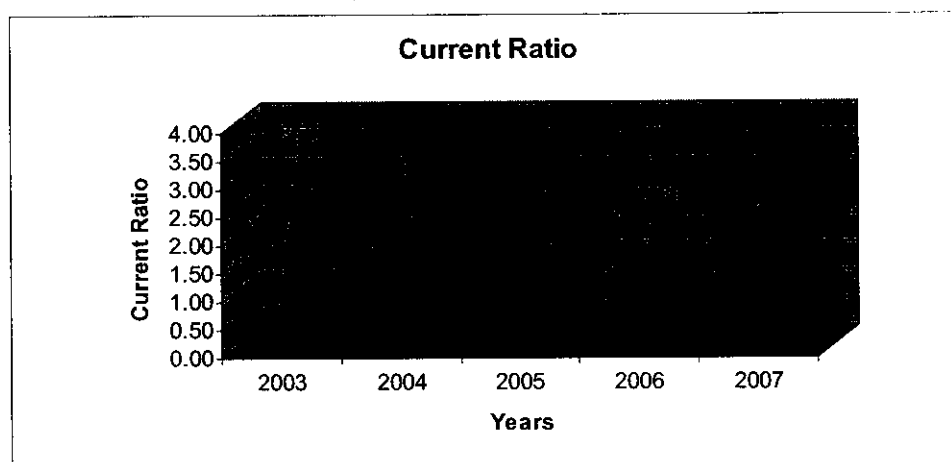
It compares the current assets with the current liabilities. Current Ratio is otherwise known as Working Capital Ratio.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Table No. 19

Year	Current Assets (USD in mio)	Current Liabilities (USD in mio)	Current Ratio
2003	25019	6,753	3.70
2004	26731	8,739	3.06
2005	26975	10,430	2.59
2006	26144	10,135	2.58
2007	28820	11,941	2.41

Chart No. 18



### Interpretation:

The firm's current ratio of 3.7 in the year 2003 is better when compared to the other years. It implies that for every one dollar of current liability current asset of 3.7 is available to meet them. The current ratios of the remaining years are decreasing. Therefore the ability to meet each dollar of liability gets decreased accordingly.

## 2. Quick Ratio:

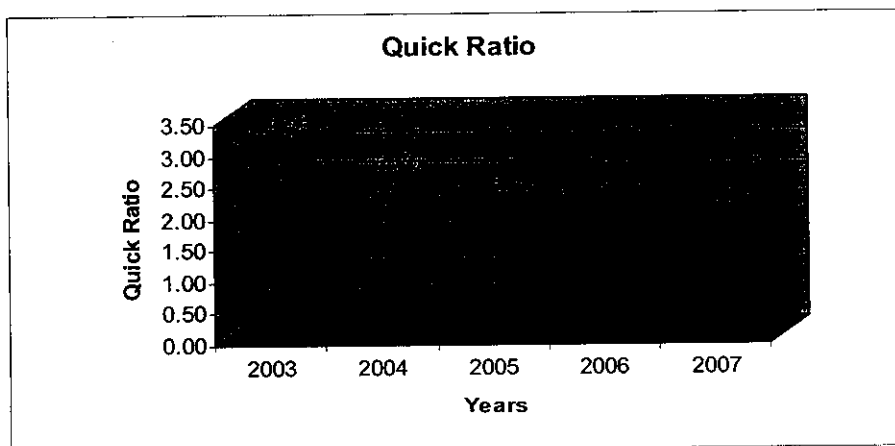
A measure of a company's liquidity and ability to meet its obligations. Quick ratio, often referred to as acid-test ratio, is obtained by subtracting inventories from current assets and then dividing by current liabilities. Quick ratio is viewed as a sign of company's financial strength or weakness (higher number means stronger, lower number means weaker). The higher the quick ratio, the better the position of the company.

Quick Ratio	=	$\frac{\text{Current Assets- Inventories}}{\text{Current Liabilities}}$
-------------	---	---

Table No. 20

Year	Current Assets (USD in mio)	Inventories (USD in mio)	Current Liabilities (USD in mio)	Quick Ratio
2003	25019	3,040	6,753	3.25
2004	26731	3,160	8,739	2.70
2005	26975	3,401	10,430	2.26
2006	26144	3,588	10,135	2.23
2007	28820	3,861	11,941	2.09

Chart No.19



### Interpretation:

As a rule of thumb or as a convention quick ratio of 1:1 is considered satisfactory. Then the concern may be able to meet its short-term obligations. Here, the quick ratio is high in 2003 and has considerably reduced in the consequent years. Hence, we infer that the company is moving weaker in terms of its meeting its obligations.

### 3. Total Assets Turnover Ratio:

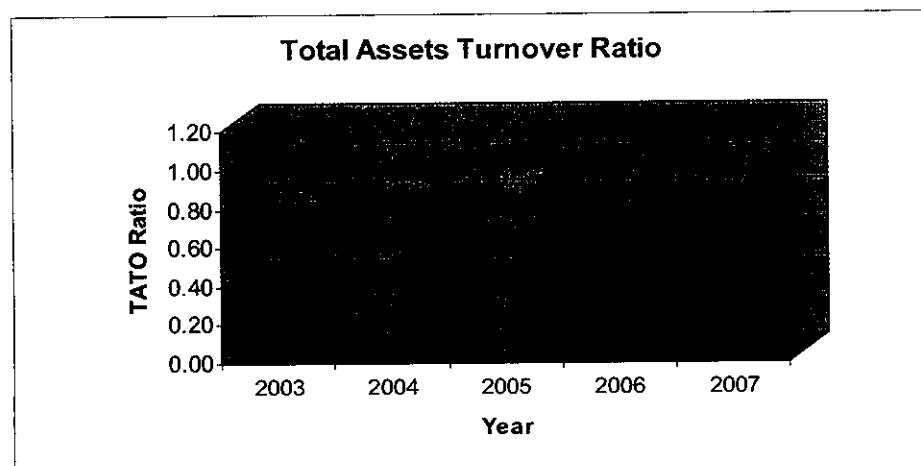
This ratio shows the firm's ability in generating sales from all financial resources committed to total assets. Companies with low profit margins tend to have high asset turnover, those with high profit margins have low asset turnover - it indicates pricing strategy. This ratio is more useful for growth companies to check if in fact they are growing revenue in proportion to sales.

$$\text{Total Assets Turnover Ratio} = \frac{\text{Sales}}{\text{Total Assets}}$$

Table No.21

Year	Sales (USD in mio)	Total Assets (USD in mio)	TATO Ratio
2003	23,103	29,314	0.79
2004	25,601	31,062	0.82
2005	27,652	31,633	0.87
2006	31,367	30941	1.01
2007	34,589	33,805	1.02

Chart No. 20



#### Interpretation:

Here, the trend is growing steadily in terms of turnover and its asset base. However, the very high net asset turnover ratio values came when the turnover and asset values were low, so mathematically this can often mean that the ratio is very likely to be high.

#### 4. Inventory Turnover Ratio:

It is also called as the Stock Velocity Ratio. It is calculated to ascertain the efficiency of inventory management in terms of capital investment. It shows the relationship between the cost of goods sold and the amount of average inventory. A low turnover implies poor sales and, therefore, excess inventory. High inventory levels are unhealthy because they represent an investment with a rate of return of zero. It also opens the company up to trouble should prices begin to fall.

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of goods sold}}{\text{Average Inventory}}$$

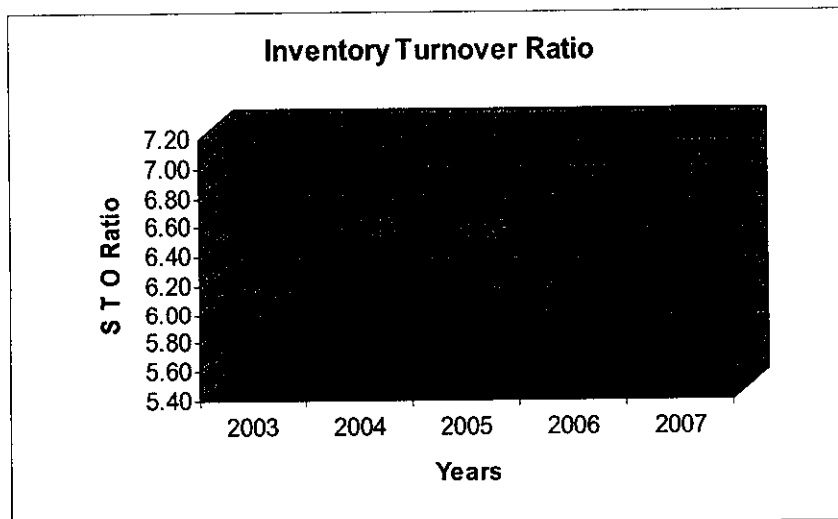
\*Cost of Goods Sold = Sales – Gross Profit

$$\text{Average Inventory} = \frac{\text{Opening Stock} + \text{Closing Stock}}{2}$$

Table No.21

Year	Cost of Goods Sold (USD in mio)	Opening Stock (USD in mio)	Closing Stock (USD in mio)	Average Inventory (USD in mio)	STO Ratio
2003	18,159	2,953	3040	2,997	6.06
2004	20,156	3040	3160	3,100	6.50
2005	21,198	3160	3401	3,281	6.46
2006	23,980	3401	3588	3,495	6.86
2007	26,247	3588	3861	3,725	7.05

Chart No. 20



#### Interpretation:

The inventory turnover ratio is considerably increasing from year to year. This either indicates good sales or ineffective buying.

### 4.5.3 Other Performance Measures:

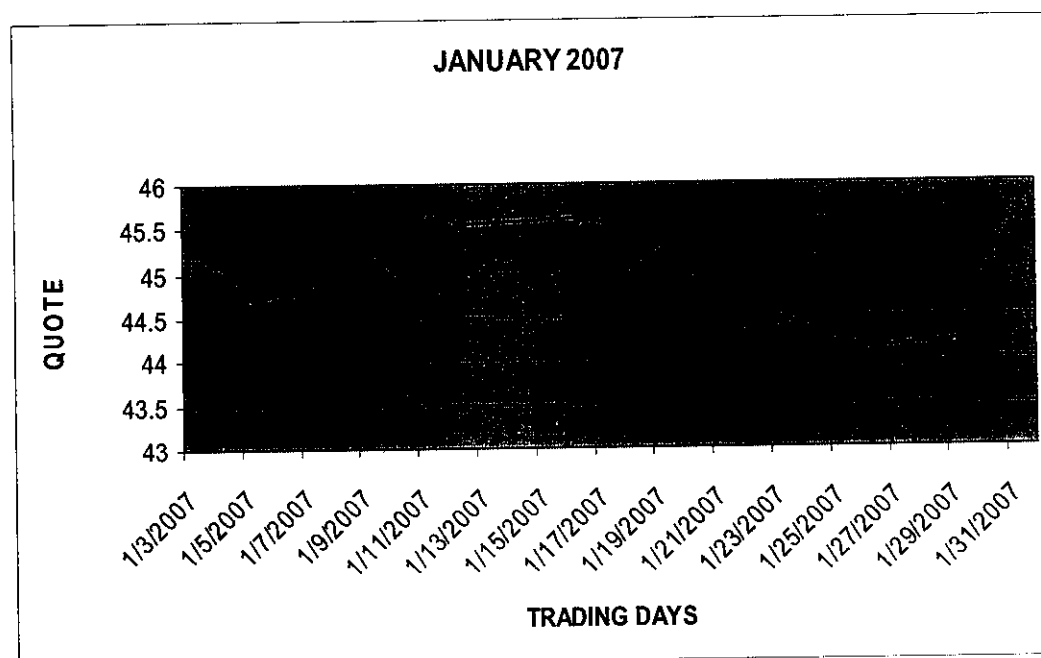
#### 1. Share Price Movements (in USD):

January

Table No.23

Date	Open	High	Low	Close	Volume	Adj Close
1/3/2007	45.02	45.69	44.88	45.1	3504600	44.06
1/4/2007	44.9	45.21	44.38	45.08	2628900	44.04
1/5/2007	44.89	45.11	44.29	44.65	3035100	43.62
1/8/2007	44.65	45.05	44.31	44.92	2589200	43.88
1/9/2007	45.07	45.33	44.67	45.24	3041100	44.2
1/10/2007	44.9	45.09	44.62	44.96	2320200	43.92
1/11/2007	45.2	45.99	45.16	45.71	3039900	44.65
1/12/2007	45.61	45.7	45.04	45.56	2663900	44.51
1/16/2007	45.42	45.71	45.22	45.62	2355800	44.57
1/17/2007	45.48	45.9	45.32	45.54	2710400	44.49
1/18/2007	44.74	45.7	44.74	45.04	3520800	44
1/19/2007	45.37	45.57	45.06	45.29	3705500	44.24
1/22/2007	45.07	45.26	43.97	44.26	4601800	43.24
1/23/2007	44.38	44.85	44.34	44.46	4518300	43.43
1/24/2007	44.39	44.86	44.25	44.42	2711800	43.39
1/25/2007	44.47	44.75	43.88	44.2	2875000	43.18
1/26/2007	44.1	44.5	43.14	44.13	5124700	43.11
1/29/2007	44.12	44.54	43.9	44.23	3884800	43.21
1/30/2007	44.23	45.23	44.23	45.14	4335400	44.1
1/31/2007	45.14	45.89	44.78	45.69	3879700	44.64

Chart No. 22

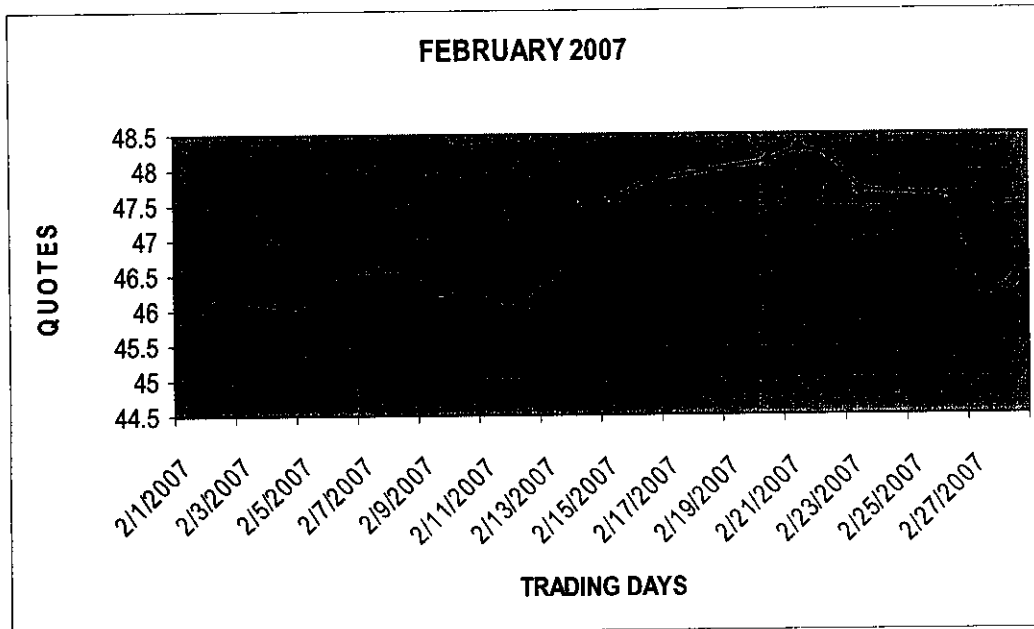


February

Table No.24

Date	Open	High	Low	Close	Volume	Adj Close
2/1/2007	45.79	46.01	45.51	45.93	3646100	44.87
2/2/2007	46.14	46.2	45.9	46.16	2768000	45.09
2/5/2007	45.98	46.12	45.67	46.02	3064700	44.96
2/6/2007	46.02	46.62	45.91	46.62	3508900	45.54
2/7/2007	46.63	46.75	46.29	46.57	3225700	45.49
2/8/2007	46.39	46.72	46.08	46.57	2933600	45.49
2/9/2007	46.7	46.75	46.07	46.24	3187600	45.17
2/12/2007	46.4	46.42	45.93	46.09	2919600	45.03
2/13/2007	46.1	46.59	46.03	46.51	3801400	45.44
2/14/2007	46.51	47.65	46.2	47.54	4503700	46.44
2/15/2007	47.38	47.68	47.15	47.57	3333900	46.47
2/16/2007	47.95	48	47.41	47.83	3830100	46.73
2/20/2007	47.98	48.28	47.8	48.12	4294000	47.01
2/21/2007	47.97	48.44	47.8	48.31	3717400	47.19
2/22/2007	48.3	48.5	47.88	48.19	5479800	47.08
2/23/2007	47.96	48.03	47.53	47.69	3500100	46.83
2/26/2007	47.8	47.91	46.85	47.62	2978500	46.76
2/27/2007	47.62	47.64	45.77	46.16	6664900	45.33
2/28/2007	46.16	46.82	45.77	46.4	5531700	45.57

Chart No. 23

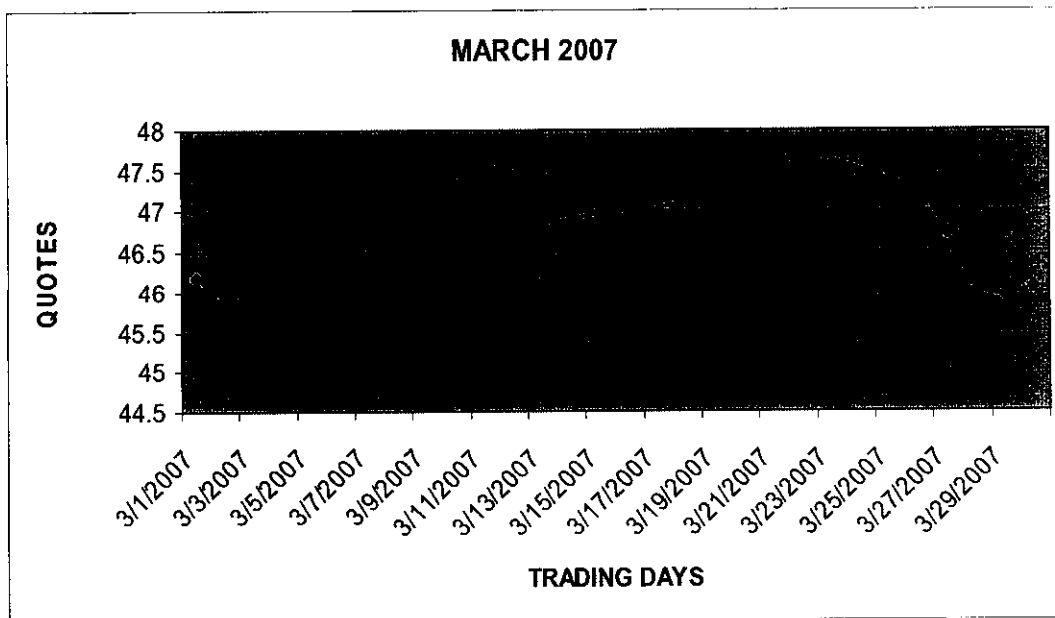


March

Table No.25

Date	Open	High	Low	Close	Volume	Adj Close
3/1/2007	45.3	46.43	44.56	46.19	5640500	45.36
3/2/2007	46.1	46.73	45.75	45.91	4361000	45.08
3/5/2007	45.48	46.5	45.39	45.87	5660200	45.04
3/6/2007	45.96	46.42	45.78	46.34	4229800	45.51
3/7/2007	46.34	46.99	46.05	46.59	3596400	45.75
3/8/2007	46.75	47.41	46.73	47.31	3912600	46.46
3/9/2007	47.5	47.84	47.14	47.23	4082300	46.38
3/12/2007	47.3	47.66	47.22	47.61	4326100	46.75
3/13/2007	47.42	47.78	46.88	46.88	4815400	46.04
3/14/2007	46.97	47.1	46.02	46.9	5167300	46.06
3/15/2007	46.76	47.02	46.61	46.98	3532400	46.13
3/16/2007	47.06	47.19	46.7	46.94	6963200	46.1
3/19/2007	47.28	47.57	47.1	47.21	2684200	46.36
3/20/2007	47.19	47.19	46.79	47.14	3708700	46.29
3/21/2007	47.05	47.74	46.89	47.7	3499100	46.84
3/22/2007	47.8	47.8	47.15	47.58	3331600	46.72
3/23/2007	46.72	47.88	46.72	47.71	2776500	46.85
3/26/2007	47.63	47.88	46.79	47.34	3357700	46.49
3/27/2007	47.18	47.31	46.53	46.73	3097100	45.89
3/28/2007	46.6	46.66	45.58	46.03	4377500	45.2
3/29/2007	46.49	46.49	45.6	45.94	5675100	45.11
3/30/2007	46.24	46.6	45.83	46.06	3817500	45.23

Chart No.24

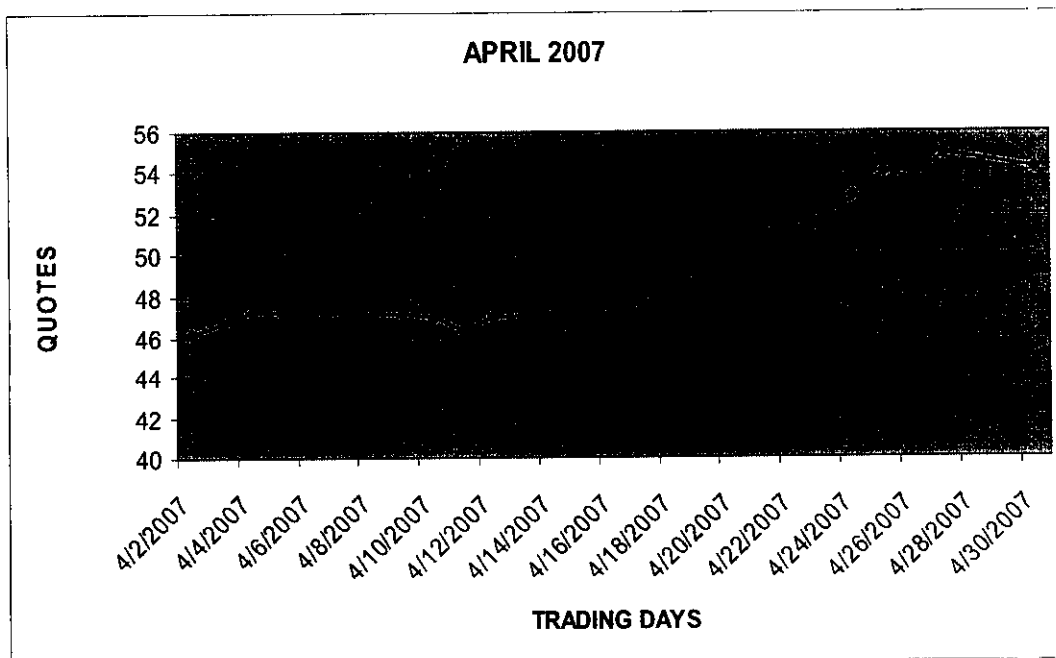


April

Table No.26

Date	Open	High	Low	Close	Volume	Adj Close
4/2/2007	45.58	46.22	45.58	46.15	2697700	45.32
4/3/2007	46.27	46.91	46.25	46.74	2911500	45.9
4/4/2007	46.8	47.3	46.32	47.25	3128600	46.4
4/5/2007	47.25	47.32	47	47.26	2117000	46.41
4/9/2007	47.36	47.37	46.97	47.11	1876500	46.26
4/10/2007	46.94	47.22	46.84	46.98	1685200	46.13
4/11/2007	46.95	47.09	46.19	46.39	2600000	45.56
4/12/2007	46.43	47.11	46.07	46.99	2989900	46.14
4/13/2007	47.76	47.76	46.59	47.03	2493300	46.18
4/16/2007	46.43	47.55	46.43	47.38	2130500	46.53
4/17/2007	47.35	47.78	47	47.64	2993500	46.78
4/18/2007	47.64	48.46	47.45	48.21	3709200	47.34
4/19/2007	48.21	49.55	47.5	49.06	8974000	48.18
4/20/2007	51.3	51.65	50.1	51.4	13329300	50.48
4/23/2007	51.2	51.5	50.94	51.23	5849700	50.31
4/24/2007	51.49	53.21	51.4	52.9	9307400	51.95
4/25/2007	53.2	54.18	52.91	53.99	9259000	53.02
4/26/2007	53.93	55.04	53.68	53.69	7151300	52.72
4/27/2007	53.43	55.04	53.1	54.89	8006400	53.9
4/30/2007	54.67	54.94	54.1	54.18	10198600	53.21

Chart No. 25



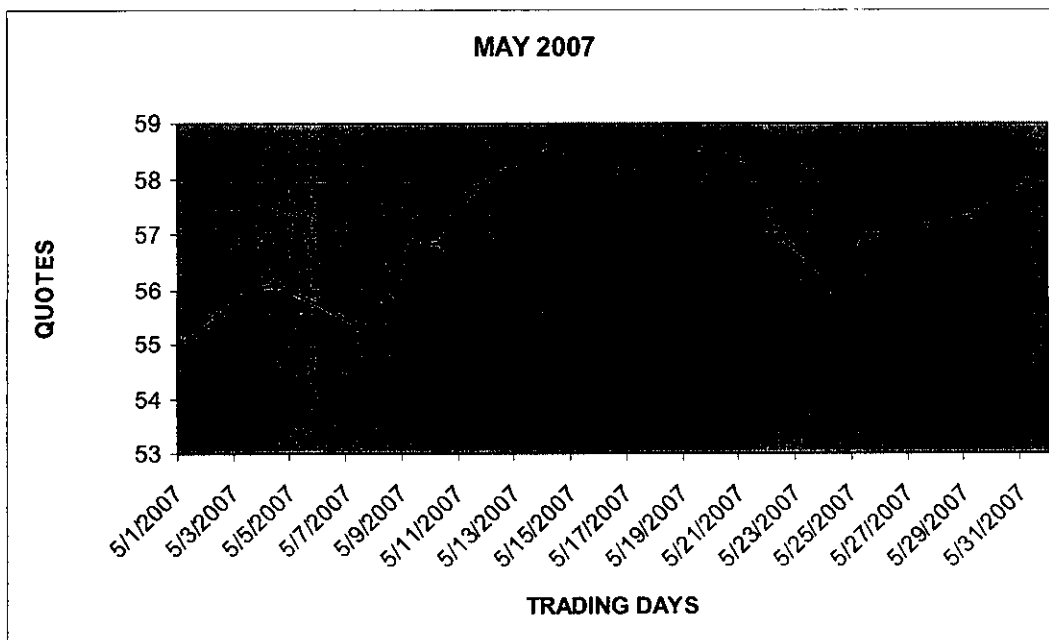


May

Table No.27

Date	Open	High	Low	Close	Volume	Adj Close
5/1/2007	54.49	55.13	54.25	55.08	9081700	54.09
5/3/2007	55.61	56.03	54.92	56	9234800	54.99
5/8/2007	55.33	55.95	54.97	55.79	8606400	54.79
5/2/2007	55.09	56.13	55.01	55.5	10725100	54.5
5/7/2007	56.04	56.3	55.27	55.33	6873100	54.33
5/4/2007	56	56.4	55.43	56.12	8562900	55.11
5/9/2007	55.85	56.85	55.79	56.81	7030400	55.79
5/23/2007	57.05	57.05	55.82	56.54	12017100	55.76
5/25/2007	55.93	57.25	55.93	56.93	4929400	56.15
5/24/2007	56.55	56.78	55.93	55.99	6693000	55.22
5/10/2007	56.26	57.43	56.01	56.86	9978300	55.84
5/30/2007	57.25	57.79	56.46	57.73	4664200	56.94
5/22/2007	58.25	58.38	56.87	56.98	9787800	56.2
5/29/2007	57.02	57.57	57.01	57.35	5188500	56.56
5/11/2007	57.21	58.21	57.18	57.79	7925800	56.75
5/14/2007	57.81	58.8	57.55	58.7	12723300	57.64
5/31/2007	57.75	58.21	57.61	57.91	6119900	57.11
5/16/2007	57.99	58.15	57.65	58.14	9219200	57.34
5/15/2007	58.56	59.37	57.95	58.01	10542500	56.97
5/17/2007	58.12	58.53	58.04	58.22	6259000	57.42
5/21/2007	58.5	58.68	58.1	58.3	7615300	57.5
5/18/2007	58.39	58.75	58.11	58.7	6948800	57.89

Chart No. 26

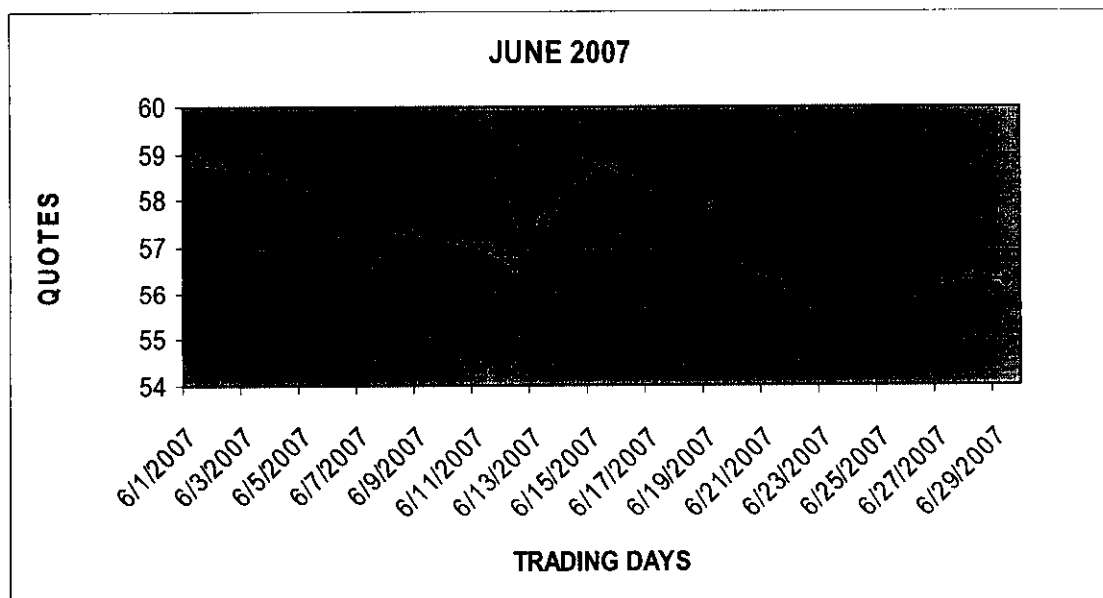


June

Table No.28

Date	Open	High	Low	Close	Volume	Adj Close
6/1/2007	58.11	58.85	58.07	58.8	5809700	57.99
6/4/2007	58.5	58.98	58.28	58.62	4766600	57.81
6/5/2007	58.45	58.65	57.96	58.18	5538600	57.38
6/6/2007	58.08	58.09	56.98	57.34	5501100	56.55
6/7/2007	57.26	57.47	56.4	56.4	5947100	55.62
6/8/2007	56.5	57.41	56.2	57.38	4053100	56.59
6/11/2007	57.25	57.4	56.91	57.02	4729700	56.24
6/12/2007	57	57.15	56.41	56.64	4337200	55.86
6/13/2007	57.02	57.65	56.77	57.55	5369600	56.76
6/14/2007	57.65	58.46	57.5	58.24	4381100	57.44
6/15/2007	58.64	59.14	58.24	58.87	7291300	58.06
6/18/2007	59.24	59.24	57.7	57.81	4341300	57.02
6/19/2007	57.6	58.28	57.52	57.87	3252700	57.07
6/20/2007	57.96	58.2	56.46	56.55	5146300	55.77
6/21/2007	56.6	56.83	55.62	56.38	5049400	55.61
6/22/2007	56.18	56.25	55.55	55.68	6236100	54.91
6/25/2007	55.82	56.33	55.34	55.68	3567700	54.91
6/26/2007	55.9	56.43	55.68	56.01	6656800	55.24
6/27/2007	55.81	56.37	55.49	56.31	4796600	55.54
6/28/2007	56.31	57.3	56.06	56.38	3975400	55.61
6/29/2007	56.51	56.82	55.99	56.28	3921400	55.51

Chart No.27

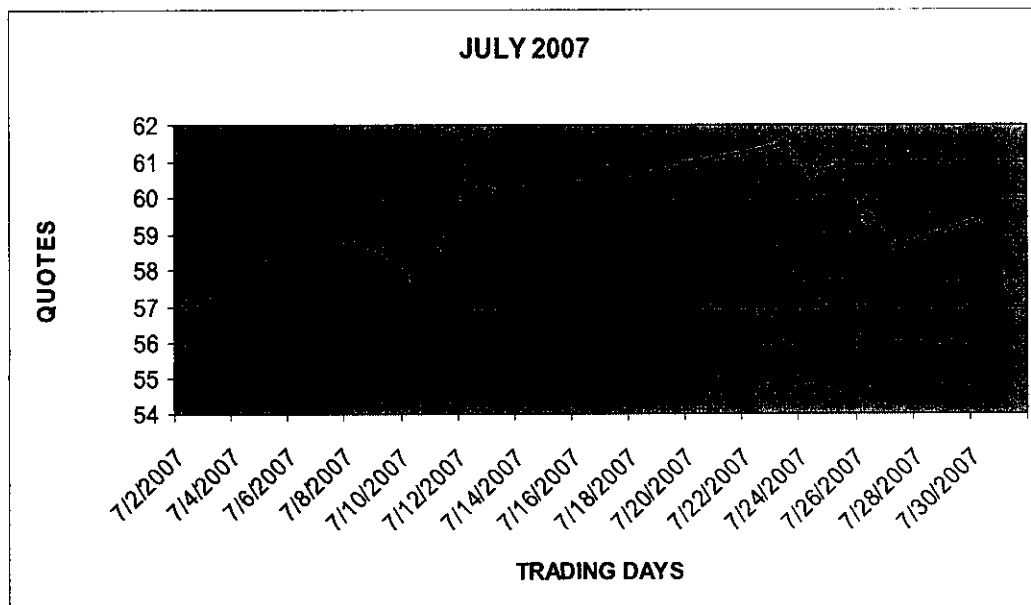


July

Table No.29

Date	Open	High	Low	Close	Volume	Adj Close
7/2/2007	56.7	57.5	56.61	57.08	4293200	56.3
7/3/2007	57.32	57.59	56.97	57.2	1784200	56.41
7/5/2007	57.05	58.59	57.05	58.36	4983700	57.56
7/31/2007	59.57	59.75	57.44	57.51	7153000	56.72
7/11/2007	57.98	58.98	57.8	58.74	5035000	57.93
7/10/2007	58.06	58.49	57.8	57.82	3872800	57.03
7/30/2007	59	59.73	58.44	59.44	5253100	58.62
7/26/2007	60.49	60.5	58.46	59.42	9265700	58.6
7/6/2007	58.61	59.22	58.46	59.08	3150700	58.27
7/9/2007	59.21	59.23	58.5	58.53	3032600	57.73
7/27/2007	59.31	59.77	58.61	58.61	6464500	57.8
7/12/2007	58.95	60.49	58.74	60.44	7032700	59.61
7/19/2007	61.7	61.9	59.76	60.98	7556800	60.14
7/13/2007	60.28	60.61	59.79	60.14	4809700	59.31
7/18/2007	60.69	60.95	60.17	60.54	4795000	59.71
7/16/2007	60.34	61.12	60.3	60.6	5276000	59.77
7/20/2007	60.46	61.75	60.42	60.96	8138000	60.12
7/24/2007	61.01	61.46	60.59	60.68	5343700	59.85
7/17/2007	60.94	61.21	60.6	60.84	5555700	60
7/25/2007	61.35	61.74	60.68	60.88	6978600	60.04
7/23/2007	61.4	61.67	61.2	61.45	4069300	60.61

Chart No. 28

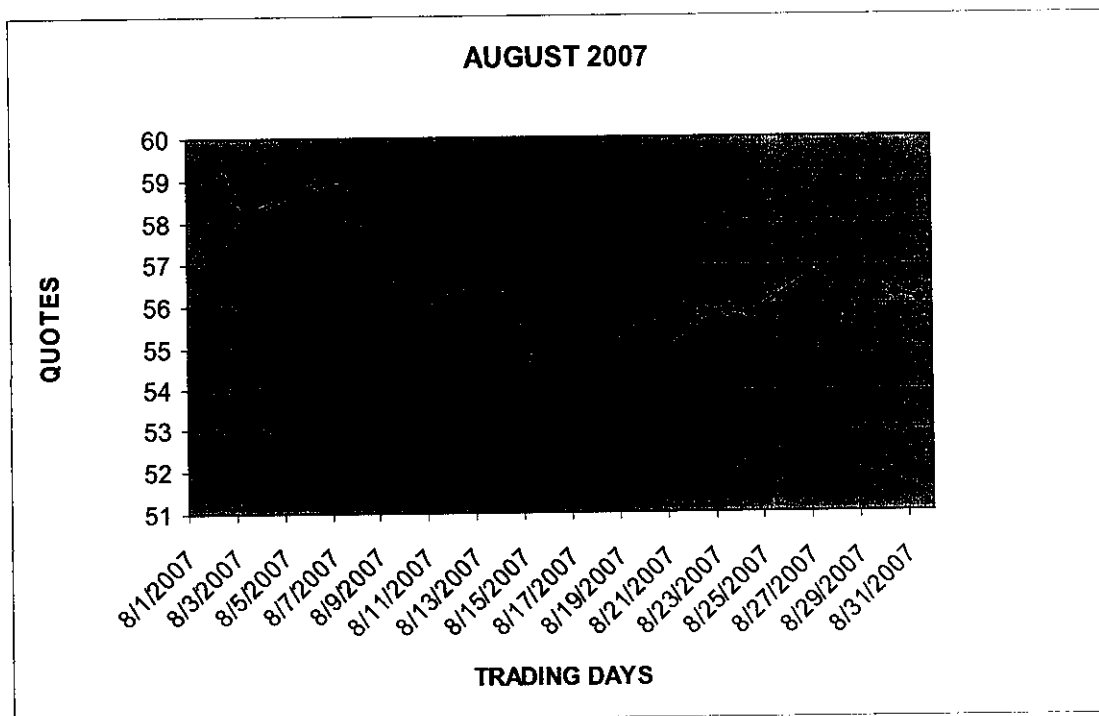


August

Table No.30

Date	Open	High	Low	Close	Volume	Adj Close
8/1/2007	56.94	57.67	56.51	57.15	9123200	56.36
8/2/2007	57.4	59.37	57.2	59.05	6344300	58.24
8/3/2007	59.11	59.61	58.07	58.18	5006100	57.38
8/6/2007	58.92	58.97	57.56	58.95	5439600	58.14
8/7/2007	58.55	59.24	56.64	58.87	5314900	58.06
8/8/2007	59.47	59.47	56.76	57.75	5986700	56.96
8/9/2007	56.9	57.77	56.7	56.78	5860700	56
8/10/2007	56.31	56.7	53.5	56.01	8808700	55.24
8/13/2007	56.1	56.89	56	56.49	4161400	55.71
8/14/2007	56.63	57.59	55.98	56.37	4442600	55.6
8/15/2007	56.59	57.21	54.55	54.72	6901500	53.97
8/16/2007	54	54.84	52.88	54.12	10739300	53.62
8/17/2007	55.4	55.74	53.93	54.46	7299400	53.96
8/20/2007	55.02	55.98	54.55	55.82	4290500	55.31
8/21/2007	55.3	55.85	54.93	55.02	3461400	54.51
8/22/2007	55.29	55.94	55.22	55.82	3992800	55.31
8/23/2007	56.2	56.32	55.75	55.87	3811800	55.36
8/24/2007	55.75	55.96	55.5	55.8	4213800	55.29
8/27/2007	55.64	57.47	55.61	56.9	4102700	56.38
8/28/2007	56.6	56.96	55.54	55.59	4307800	55.08
8/29/2007	56	57.03	55.71	57	2953900	56.47
8/30/2007	56.5	57.56	56.04	56.29	3822800	55.77

Chart No. 29

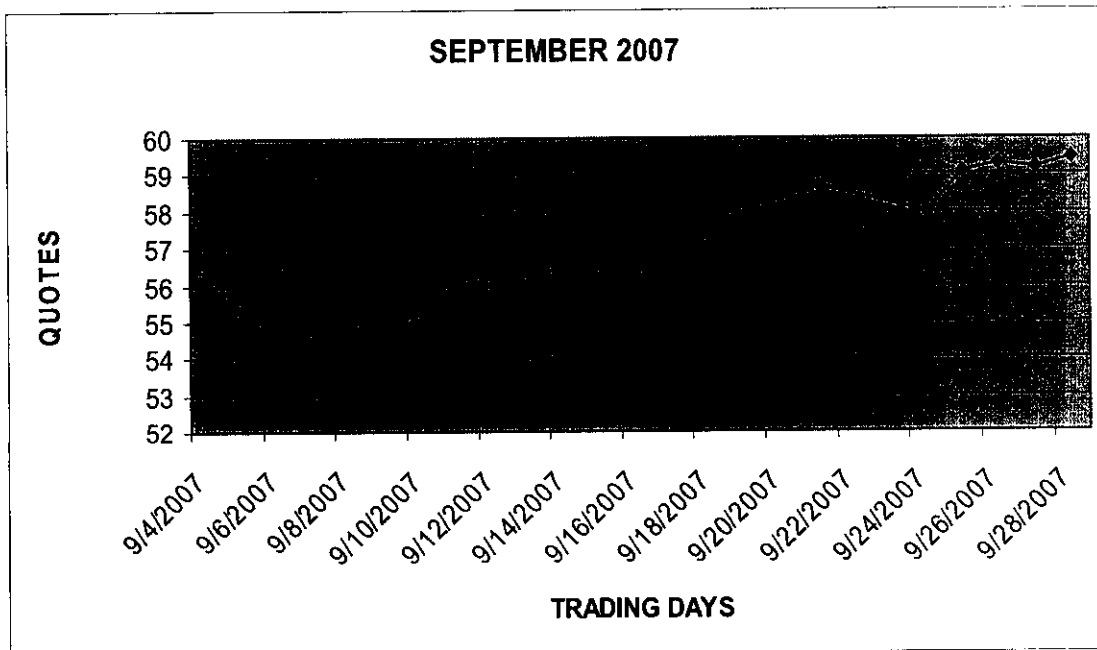


September

Table No.31

Date	Open	High	Low	Close	Volume	Adj Close
9/4/2007	56.23	56.5	55.42	56.36	4027000	55.84
9/5/2007	55.85	56.36	54.92	55.24	5384400	54.73
9/6/2007	55	56.67	55	56.66	4342100	56.14
9/7/2007	55.9	56.4	54.53	54.71	5204800	54.21
9/10/2007	54.98	55.39	54.12	55.06	3233800	54.55
9/11/2007	55.05	56.47	55.05	56.22	3766800	55.7
9/12/2007	56.24	56.43	55.79	55.97	3539000	55.45
9/13/2007	56.05	56.59	55.84	56.3	2845700	55.78
9/14/2007	56.07	56.55	55.95	56.44	2340200	55.92
9/17/2007	56.33	56.59	55.75	56.34	3614300	55.82
9/18/2007	56.37	57.4	55.98	57.28	4370300	56.75
9/19/2007	58.25	58.96	58.02	58.26	5533500	57.72
9/20/2007	58.15	58.5	57.8	58.17	3485800	57.63
9/21/2007	58.58	59.09	58.17	58.69	8791500	58.15
9/24/2007	58.77	59.14	57.78	58.01	4092400	57.48
9/25/2007	57.9	59.16	57.74	59.09	3465100	58.55
9/26/2007	59.54	59.67	58.77	59.3	3270600	58.75
9/27/2007	59.49	59.7	58.98	59.2	3398200	58.65
9/28/2007	59.18	59.67	59.07	59.47	3339600	58.92

Chart No. 30

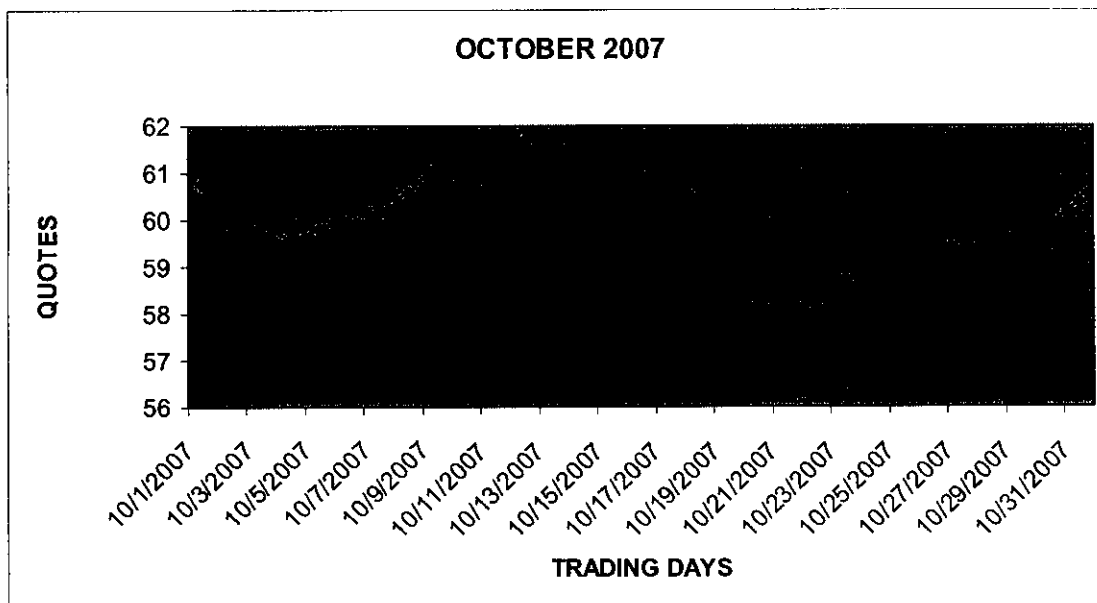


October

Table No.32

Date	Open	High	Low	Close	Volume	Adj Close
10/1/2007	59.6	60.95	59.46	60.76	3577000	60.2
10/2/2007	60.89	60.96	59.57	59.75	3327700	59.2
10/3/2007	59.72	60.62	59.53	59.91	2828900	59.36
10/4/2007	60.15	60.5	59.51	59.59	2732600	59.04
10/5/2007	59.91	60.15	59.55	59.82	2723300	59.27
10/8/2007	59.95	60.86	59.79	60.59	2736100	60.03
10/9/2007	60.51	61.24	60.37	61.24	3517300	60.68
10/10/2007	61.25	61.39	59.59	60.71	4853600	60.15
10/11/2007	60.87	61.85	60.47	60.88	3721800	60.32
10/12/2007	60.99	62.29	60.66	61.71	2403900	61.14
10/15/2007	61.73	62	60.68	61.37	3148800	60.8
10/16/2007	61.49	61.73	60.96	61.16	3100500	60.6
10/17/2007	61.65	61.98	60.43	60.7	5045500	60.14
10/18/2007	60.7	60.99	60	60.69	3626500	60.13
10/19/2007	58.6	60	57.24	58.32	7963900	57.78
10/22/2007	57.22	58.42	57.17	58.14	4523500	57.6
10/23/2007	57.64	58.76	57.39	58.7	3344600	58.16
10/24/2007	58.43	58.85	57.58	58.72	3653300	58.18
10/25/2007	58.87	59.38	58.4	59.13	3312000	58.59
10/26/2007	59.5	59.66	58.86	59.44	3254400	58.89
10/29/2007	59.52	59.99	59.49	59.71	2298400	59.16
10/30/2007	59.66	60.54	59.51	59.91	3088200	59.36
10/31/2007	60.32	60.69	59.66	60.41	3345600	59.85

Chart No.31

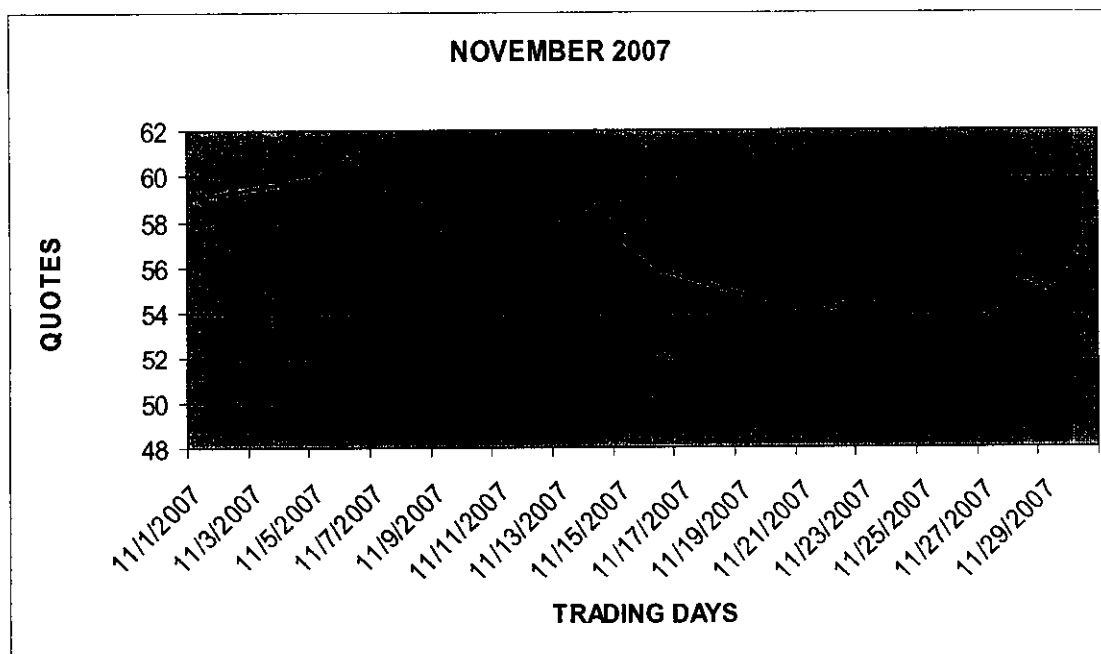


November

Table No.33

Date	Open	High	Low	Close	Volume	Adj Close
11/1/2007	60.2	60.23	58.97	59.04	3679000	58.5
11/2/2007	59.31	59.61	58.51	59.35	4221400	58.8
11/5/2007	57.99	60.24	57.99	59.91	3686500	59.36
11/6/2007	59.96	61.07	59.93	60.99	4345200	60.43
11/7/2007	61.03	61.03	59	59.04	3658800	58.5
11/8/2007	59.09	59.9	58.55	59.29	4596800	58.74
11/9/2007	58.52	59.23	57.57	57.76	4185300	57.23
11/12/2007	57.54	58.1	57	57.13	3874500	56.6
11/13/2007	57.3	58.31	57.11	58.14	5047100	57.6
11/14/2007	58.38	59.74	58.16	58.52	4418600	57.98
11/15/2007	58.17	58.54	56.87	57.16	4153400	56.63
11/16/2007	57.43	57.47	55.27	55.88	7135300	55.61
11/19/2007	55.55	56.22	54.51	54.76	6546000	54.49
11/20/2007	54.74	55.55	53.63	54.51	7365800	54.24
11/21/2007	53.95	54.73	53.72	53.91	7226200	53.65
11/23/2007	54.18	54.73	54.01	54.67	1445200	54.4
11/26/2007	54.7	54.84	53.06	53.19	5217100	52.93
11/27/2007	53.53	54.4	53.15	54.05	4881300	53.79
11/28/2007	54.35	55.97	54.26	55.58	7783400	55.31
11/29/2007	55.51	55.57	54.76	54.88	5170800	54.61
11/30/2007	55.43	57.61	55.29	56.62	10069900	56.34

Chart No.32

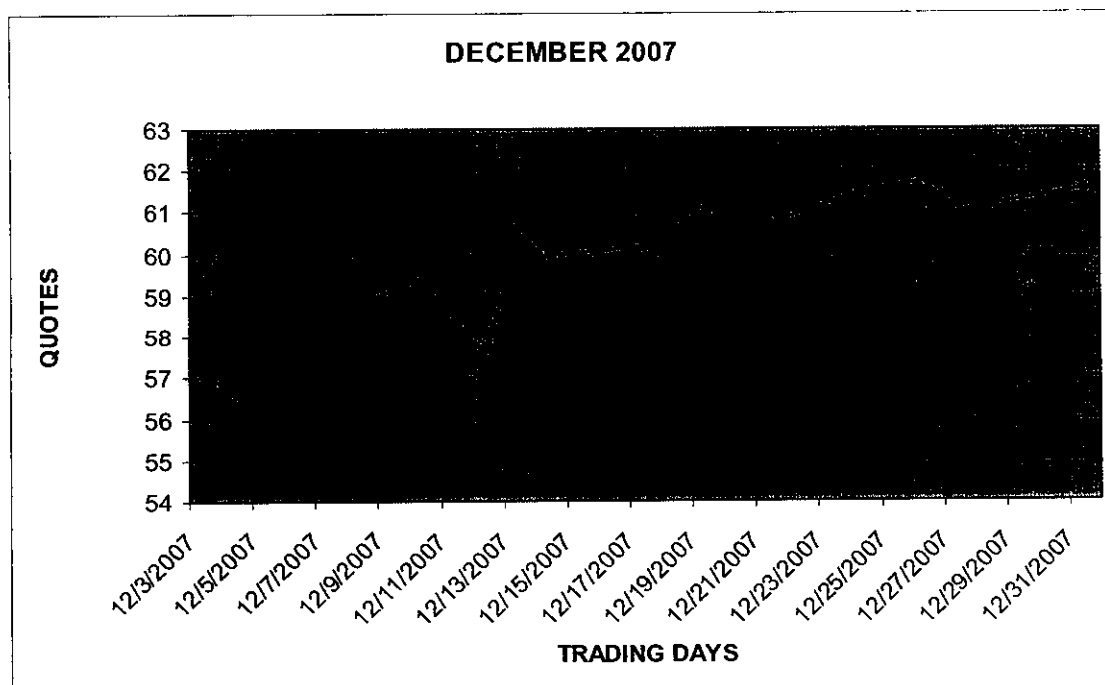


December

Table No.34

Date	Open	High	Low	Close	Volume	Adj Close
12/3/2007	56.27	57.71	56.27	57.06	5646000	56.78
12/4/2007	56.75	56.94	56.34	56.64	3848800	56.36
12/5/2007	56.9	58.08	56.9	57.73	3888300	57.45
12/6/2007	57.71	58.32	57.58	58.23	2669400	57.95
12/7/2007	58.22	58.82	57.69	58.51	3048300	58.23
12/10/2007	58.56	59.94	58.56	59.48	3902400	59.19
12/11/2007	59.69	59.95	58.23	58.35	4731400	58.07
12/12/2007	59.54	59.54	56.71	57.74	6918000	57.46
12/13/2007	58.67	60.96	57.93	60.65	7694000	60.36
12/14/2007	60.67	60.87	59.97	59.98	4623200	59.69
12/17/2007	59.63	60.78	59.63	60.2	4410700	59.91
12/18/2007	60.51	61.16	60.19	60.59	5658500	60.3
12/19/2007	60.48	61.67	60.48	61.09	5571000	60.79
12/20/2007	61.41	61.73	60.44	60.69	4150600	60.39
12/21/2007	61.75	61.96	60.11	60.71	6491800	60.41
12/24/2007	61.36	61.75	60.87	61.53	1470700	61.23
12/26/2007	61	61.79	61	61.77	2003600	61.47
12/27/2007	61.74	61.74	60.84	61.19	3360600	60.89
12/28/2007	61.72	61.97	60.79	61.2	3318700	60.9
12/31/2007	60.89	62	60.89	61.57	3703600	61.27

Table No.33



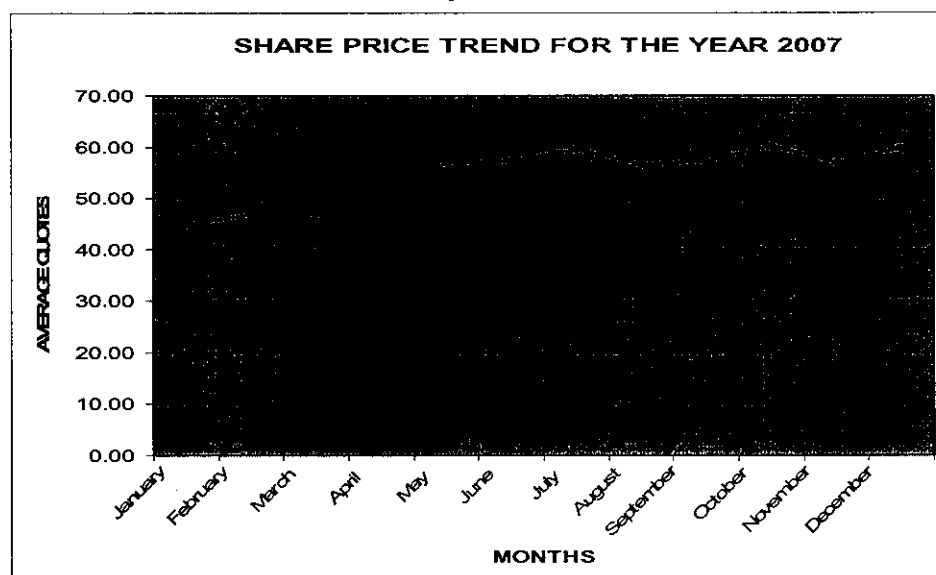


### Consolidated Average Stock Prices for the year 2007

Table No. 35

Month	Close (in USD)
January	44.96
February	46.95
March	46.83
April	49.32
May	56.96
June	57.14
July	59.49
August	56.49
September	57.20
October	60.06
November	56.88
December	59.75

Chart No. 34



#### Interpretation:

From the above charts, it is very clear that the share prices of the organization is moving upwards continuously for the past whole year. During January 2007 the average share price of the organization was USD44.96. From that price it has grown considerably upto USD59.75 on an average in December 2007. This shows the extent of shareholders' wealth maximization during the year of 2007. This is healthy state of performance for the organizations' financial performance.

2. Comparison with the Competitors:

Table No. 36

DIRECT COMPETITOR COMPARISON					
	HON	GR	JCI	UTX	Industry
Market Cap ( in USD)	40.94B	7.14B	20.06B	68.13B	288.84M
Employees	122,000	23,400	140,000	225,600	1.46K
Quarterly Rev Growth	12.10%	11.60%	15.50%	14.20%	13.80%
Revenue ( in USD )	34.59B	6.39B	35.90B	54.42B	528.53M
Gross Margin	25.40%	29.86%	14.79%	26.84%	25.83%
EBITDA	5.10B	1.13B	2.62B	8.05B	41.39M
Operating Margins	12.34%	13.79%	5.24%	12.63%	9.78%
Net Income ( in USD)	2.44B	496.00M	1.36B	4.22B	15.03M
EPS ( in USD)	3.157	3.776	2.204	4.272	0.93
Price Earning Ratio ( in USD )	17.42	15.12	15.33	16.25	17.4

HON=Honeywell International Inc

GR = Goodrich Corp.

JCI = Johnson Controls Inc.

UTX = United Technologies Corp.

Industry = Aerospace/Defense Products & Services

Interpretation:

Chart No. 35

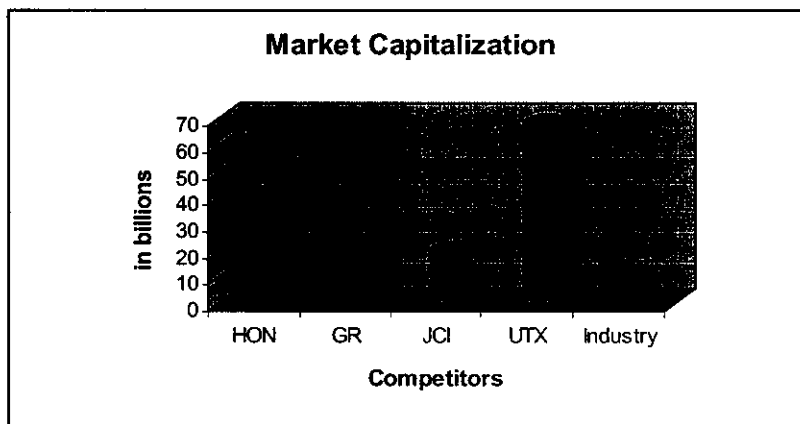


Chart No. 36

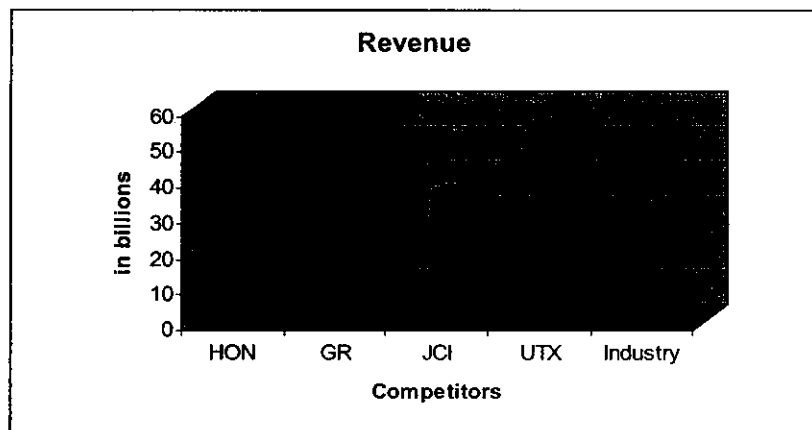


Chart No. 37

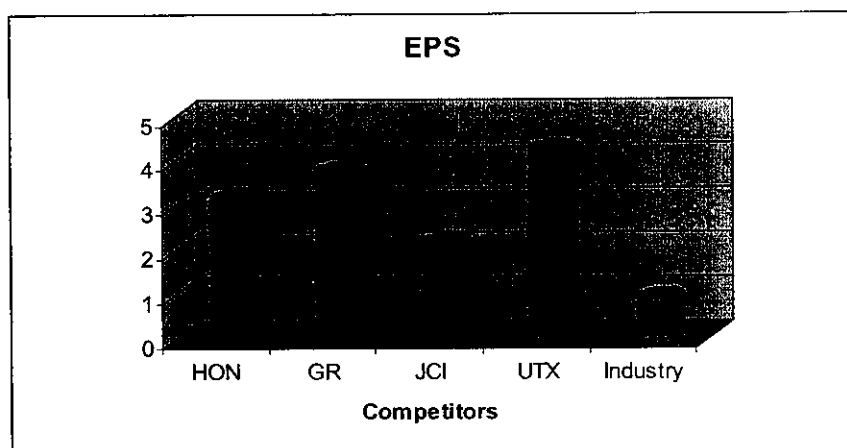
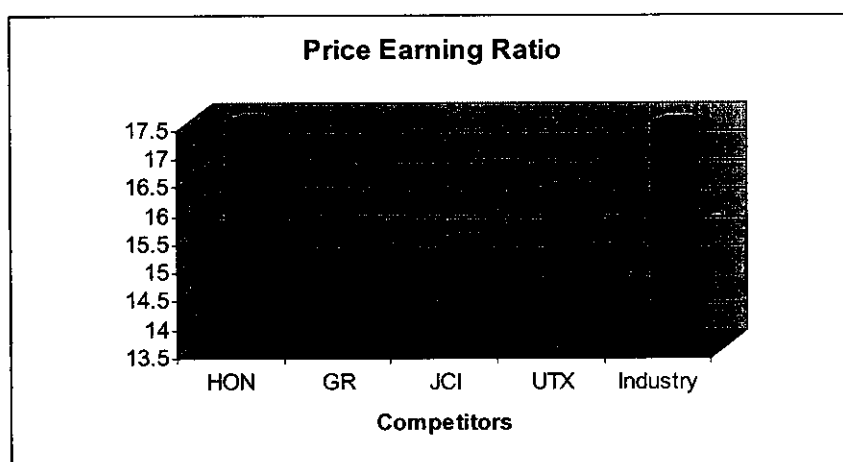


Chart No. 38

**Interpretation:**

- When the industry standard is USD288.84 millions, HON's market capitalization is USD40.94 billions standing in the second position next to UTX of USD68.13 billions.
- When the industry standard is USD528.53 millions, HON's revenue is USD34.59 billions standing in the second position next to UTX of USD54.42 billions.
- When the industry standard is USD0.93, HON's EPS is USD3.157 standing in the second position next to UTX of USD4.272 billions.
- When the industry standard is USD17.4, HON's P/E ratio is USD17.42 standing in the first position.

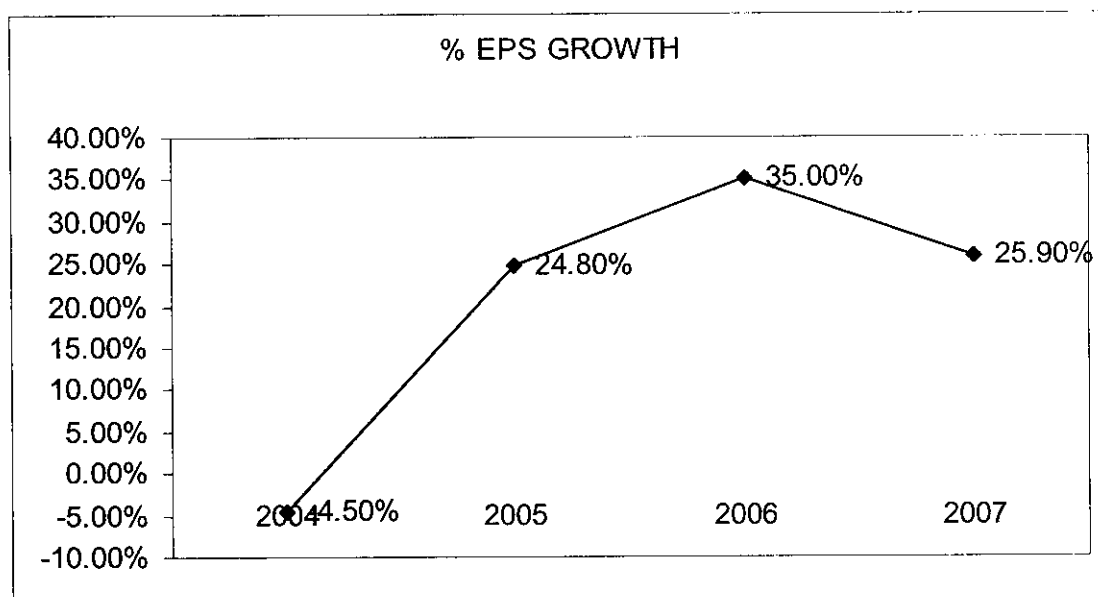
Thus we may infer from the above that Honeywell International's main competitor is United Technologies Corp, and has competed HON in all the other aspects except for the P/E ratio in which HON stands first.

### 3. EPS Growth Rates:

Table No. 37

EPS ( in USD )					
<b>Year over Year</b>	---	4.50%	24.80%	35.00%	25.90%
<b>3-Year Average</b>	8.70%	---	---	17.20%	28.50%
<b>5-Year Average</b>	7.60%	4.80%	-1.90%	---	---
<b>10-Year Average</b>	---	1.10%	1.90%	3.40%	4.60%

Chart No. 39



#### Interpretation:

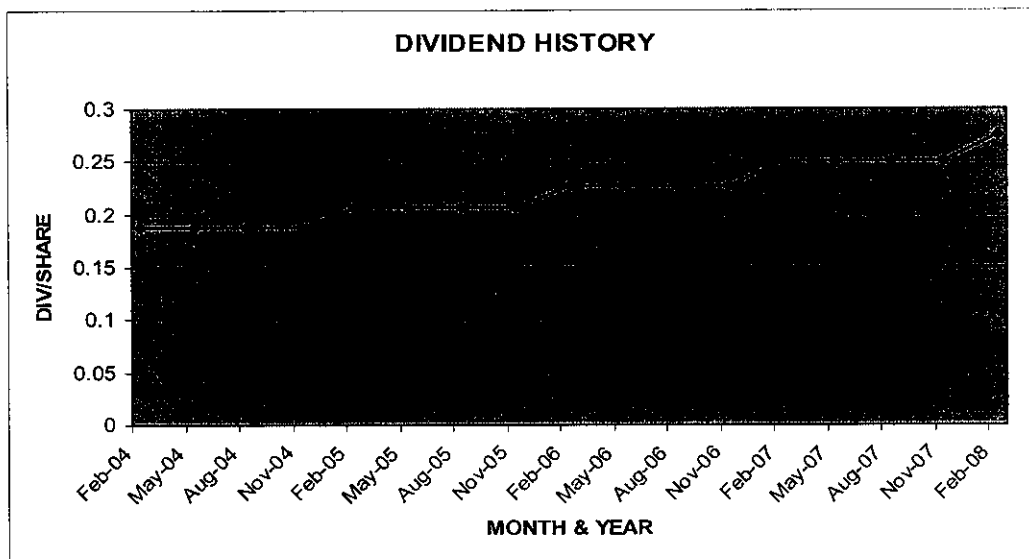
The portion of a company's profit allocated to each outstanding share of common stock. EPS serves as an indicator of a company's profitability. The company has recorded a negative EPS of (USD4.5) in the year of 2004. From that year it has gradually increased upto USD26 in the year of 2007 from an all time high of USD35 in the year 2006. Therefore, from this we may infer that the company's common stock and the profit are facing volatile changes which are healthy to the organization.

#### 4. Dividend Growth Rates:

Table No. 38

GROWTH RATES			
Year	Current Dividend (in USD)	Growth Rate	Future Dividend(in USD)
2004	0.1875	9.97%	0.2063
2005	0.2063	9.98%	0.2269
2006	0.2269	10.18%	0.25
2007	0.25	10%	0.275
2008	0.275	10%	0.303

Chart No. 40



#### Interpretation:

The organization started issuing dividends from the year 2004. It was USD0.18/share. From then, it is issuing dividends at a growth rate of about 10% every year.

Therefore we infer that the dividends of the organization are growing year by year maximizing the shareholders' wealth and satisfaction.

# **CHAPTER V**

# **CONCLUSION**

# CHAPTER V

## CONCLUSION

### 5.1 FINDINGS

#### 5.1.1 DU-PONT ANALYSIS:

- Profitability of the organization has positively grown as the negative EBIT of USD (601) millions in 2002 has increased to USD 3777 millions in the year 2007.
- Customers are satisfied with the company's performance, since the sales are increased in spite of the constant increase in the profit margin of (0.98%) in 2002 to 7.065% in 2007.
- Even though being a highly levered firm of 300 times in 2002 to 347 times in 2007 are positively balancing its risk.
- The asset turnover seems to be relatively low of just 1.02 times, meaning that it makes a high profit margin on its products.
- The earnings to the total assets are healthy and positive to the financial position of the business as it (2.18) % in 2002 and has increased upto 11.17 % in 2007.
- The firm is efficient in generating profits to the extent invested by the shareholders as its equity. Therefore the Return on Equity is increased from (2.399)% in 2002 to 25.144 % in 2007.

#### 5.1.2 FINANCIAL LEVERAGE

- The company has a lower reliance on debt for its assets i.e 0.16 times; therefore we infer that the company bears comparatively less risk.
- Equity has contributed the higher proportion that the debt to the capital invested as the Debt Equity Ratio is 0.59 times in 2007.
- The company is generating sufficient revenues to satisfy its interest expenses yielding an interest coverage ratio of 8.28 % in 2007 which has increased from 5.84 5 in 2004.

### 5.1.3 CAPITAL STRUCTURE THEORY

- Value of Equity from USD12197 millions in the year 2004 to USD23364 millions in 2007 and the Value of Debt USD4069 millions in the year 2004 to USD5419 millions in 2007 are constantly moving upwards which in turn increases the Value of the Firm from USD16266.07 millions in the year 2004 to USD28783.8 millions in 2007.
- The Weighted Average Cost of Capital (WACC) is moving downwards from 10.54% in 2006 to 10.08 % in 2007, which is a healthy state by which the cost of capital is reduced increasing the returns from the capita invested.
- As a result of the financial leverage, we infer that the leverage debt and equity in the firm's structure have impact on the firm's value or its cost of capital.

### 5.1.4 ECONOMIC VALUE ADDITION

- EVA is constantly growing from USD28865 millions in 2003 to USD1514.422 millions in 2007 .
- The shareholders' wealth maximization has been healthy during the past five years as the EVA has increased upto 425% from 2003 to 2007, and in particular during the year 2007 it has gone to a new high.

### 5.1.5 RATIO ANALYSIS

- G P ratio is positive as 24.12 %in 2007, shows that the company has an increase in Sales or has incurred a decrease in the cost.
- The higher the Net Profit Ratio the better is the operating efficiency of the organization as the Net Profit Ratio has increased from 5.73% in 2003 to 7.07% in 2007.
- Increase in the operating profit ratio from 8.46% in 2002 to 10.92% in 2007, implies the increase the sales which in turn leads to a huge turnover.
- The ability to meet each dollar of liability gets decreased accordingly as the current ratio decreased from 3.70% in 2003 to 2.41 % in 2007.
- The company is moving weaker in terms of its meeting its obligations as the quick ratio is decreased from 3.25 % in 2003 to 2.09 % in 2007.



- The high net asset turnover ratio values from 0.79% in 2003 to 1.02 % in 2007 came when the turnover and asset values were low, so mathematically this can often mean that the ratio is very likely to be high.
- The inventory turnover ratio is considerably increasing from year to year i.e., 6.06% in 2003 to 7.05% in 2007. This either indicates good sales or ineffective buying.

### **5.1.6 Other Performance Measures:**

#### **1. Share Price Movements:**

- During January 2007 the average share price of the organization was USD44.96.
- From that price it has grown considerably upto USD59.75 on an average in December 2007.
- This shows the extent of shareholders' wealth maximization during the year of 2007 is upto 33%.

#### **2. Comparison with the Competitors:**

- Honeywell International's(HON) main competitor is United Technologies Corp(UTX)
- It has competed HON and pushed to second place in aspects like Market Capitalization where HON has USD40.94 billions in the second place and UTX having USD68.13 billions securing the first place.
- Revenue of HON is USD 34.59 billions whereas UTX has a revenue of USD54.42 billions
- EPS of HON is USD3.157 whereas UTX has an EPS of USD4.272
- HON stands first in the P/E ratio having 17.42 % whereas UTX has 16.25 % securing the second place.

#### **3. EPS Growth Rates:**

Company's common stock and the profit are facing volatile changes as it was 4.50% in 2004 and rapidly moving to 24%, 35%, and 25% in the years 2005, 2006 and 2007 respectively.

#### **4. Dividend Growth Rates:**

The dividends of the organization are growing by 10% every year maximizing the shareholders' wealth and satisfaction.

## 5.2 CONSIDERABLE RECOMMENDATIONS:

- The company in spite of having zero credit policy has got a huge Accounts Receivables which implies that the Accounts Receivable Management is not functioning effectively and the organization has to take immediate steps in collecting the overdue.
- The current liabilities are increasing year by year; as a result the working capital may be affected. So the organization may seriously take steps to either increase the current assets or decrease the current liabilities.
- The organization's cost of debt is more than its cost of equity. Holding equity funds provides an option of either issuing dividend or retaining the earnings with them, while debt funds have the fixed interest expenses. So the organization may consider reducing the debt funds and increasing the equity funds in the capital structure.

## 5.3 CONCLUSION

This study of Financial Performance Analysis with respect to HONEYWELL INTERNATIONAL INC., USA was intended to examine the current practices of financial management with the help of performance measurement tools such as Du-Pont Analysis, Financial, Other Measures such as Share Price Movements, Competitors Financial Position Comparison, EPS Growth Trend, Dividend Growth Trend. This study reveals the findings for the present scenario and it will not reflect the past and the future.

This study concludes that the financial performance of Honeywell International Inc., USA, is satisfied and the organization is considerably improving year by year. However there are a few issues that are recommended in the study for improvisation which would lead the organization to achieve further.