Project Dissertation Report on

Merger & Acquisition in oil and gas industry in India

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Declaration

I, **Sudhanshu Choudhary**, student of MBA 2016-2018 of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-110042 declares that Project Report on **“Merger and acquisition in oil and gas industry”** submitted in partial fulfilment of Degree of Masters of Business Administration is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge.

The report is not being submitted to any other University for award of any other Degree, Diploma and Fellowship.

Sudhanshu Choudhary

Place:

Date:

<u>CERTIFICATE FROM INSTITUTE</u>

This is to certify that the Project Report titled **" Merger and Acquisition in Oil and Gas Industry in India"** is a bona fide work carried out by Mr. Sudhanshu Choudhary, of MBA 2016-18 and submitted to Delhi School of Management, Delh Technological University, Bawana Road, Delhi-110042 in partial fulfilment of the requirement for the award of the Degree of Master of Business Administration.

Signature of Guide	Signature of HOD
(Ms. Deepali Malhotra)	(Prof. Rajan Yadav)

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EXECUTIVE SUMMARY

The Oil and gas sectors play an active role in the political and economic scenario of the globe.India stands fourth place in oil and petroleum consumption and import after United Sates, China and Japan. India is taking effective and efficient steps to develop its various renewable energy sources (EIA June 2014).

Mergers and acquisitions in banking sector have become familiar in the majority of all the countries in the world. A large number of oil and gas companies all over the world are engaged in merger and acquisition activities. One of the principal objectives behind the mergers and acquisitions in the this sector is to reap the benefits of economies of scale. As a result of economic changes and liberalization, the corporate sector has been undergoing major changes and restructuring themselves to face these challenges. Corporate restructuring can take place in three different ways; restructuring of business portfolios, financial restructuring, and organisational restructuring. Mergers could be of three types; vertical mergers, horizontal mergers, and conglomerate mergers.

Mergers and acquisitions in oil and gas sector are forms of vertical or horizontal merger depending upon whether the company is into upstream or downstream sector. HPCL's acquisition by ONGC is a form of vertical acquisition as ONGC is into upstream sector (i.e exploration and production) whereas HPCL into downstream sector (i.e., refining of crude oil).

The financial performance is the blue print of the financial affairs of a business concern. And, it reveals how a business has prospered under the leadership of its management. This study is based on secondary data. In this study, the data has been taken for last ten years from from 2007-08 to 2016-17 for the analysis of financial performance of Hindustan Petroleum Corporation Limited since 2007-08. The main emphasis in this study has been given to evaluate the financial performance of Hindustan Petroleum Corporation Limited with respect to measure the impact of liquidity, solvency and efficiency ratio on return on capital employed.

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INTRODUCTION

INTRODUCTION

Industry Overview

India is the world's fourth-largest energy consumer in the world. India's economic growth is closely connected to energy demand. The need for oil and gas is therefore projected to grow further, providing vast opportunities for investment.

To meet this demand, the Government of India has adopted various policies, such as allowing 100 per cent foreign direct investment (FDI) in many segments of the sector, such as natural gas, petroleum products, pipelines, and refineries. This move along with various others has made the oil and gas sector in India a more viable place to invest. Today, India's oil and gas sector attracts both domestic and foreign investment, as seen by the presence of Reliance Industries Ltd (RIL) and Cairn India in the country.

Oil consumption in India

- Oil consumption has expanded at a CAGR of 2.98 per cent during FY 2008-17(E) to reach 4.13 mbpd by 2017
- Due to expected strong growth in demand, India's dependency on oil imports is likely to increase further
- Rapid economic growth is leading to greater outputs, which in turn is increasing the demand of oil production and transportation.
- In FY17, total crude oil imports were valued at US$ 80.3 billion as compared to US$ 70 billion in FY16. In FY17, imports accounted for 82 per cent of the country's total oil demand. In FY18, up to January, crude oil imports stood at 4.04 mbpd.

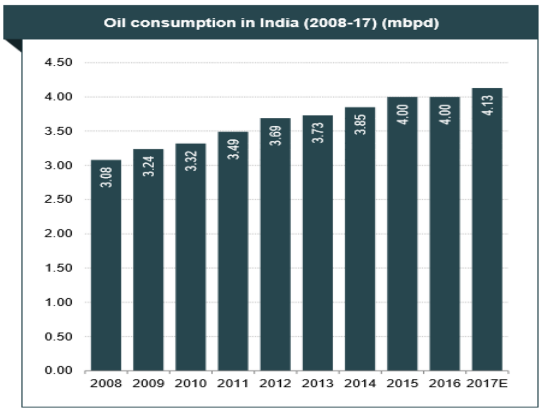


Figure 1 Oil consumption in India (Source- IBEF)

Gas consumption in India

- India's gas consumption has increased at a CAGR of 2.3 per cent between 2007 and 2016.
- Demand is not likely to simmer down anytime soon, given strong economic growth and rising urbanisation. Gas consumption is projected to reach 216 bcm by 2021-22.
- Domestic production accounts for more than three-quarter of the country's total gas consumption
- Demand is expected to increase due to higher economic growth, ensure less dependency on imported crude and a desire to use cleaner fuel
- India's LNG imports increased at a CAGR of 9.55 per cent during FY08–FY17.
- Domestic gas production in India stood at around 30.84 billion cubic metres in FY17. Production during April-January 2017-18 reached around 26.70 bcm.
- In India, auto LPG sector registered sales growth of 4.9 per cent to 346 TMT in 2016-17. Auto LPG consumption grew 10.7 per cent during April-December 2017.

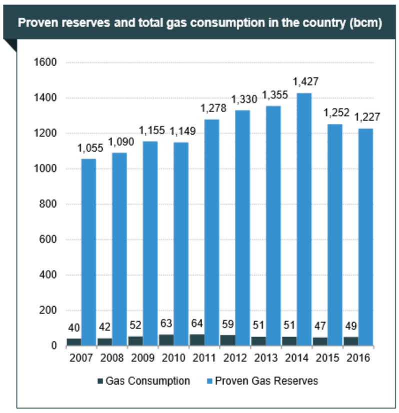


Figure 2 Gas consumption in India (Source- IBEF)

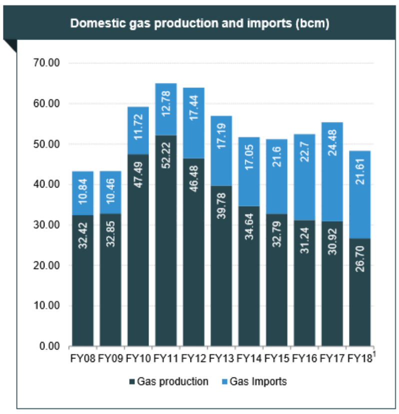


Figure 3 Gas production and imports (Source- IBEF)

Market Size

- India became the 3rd largest energy consumer in 2015 and continued to remain so in 2016.
- In FY17, oil production in the country reached 36.008 million metric tonnes as compared to 36.942 million metric tonnes in FY16. In 2017-18, up to October, oil production stood at 21.063 million metric tonnes. As of 2016, the country had 600 million metric tonnes (MMT) of proven oil reserves
- India had 1.2 million cubic metres of proven gas reserves at the end of 2016 and produced 30.84 bcm of gas in FY17 which is expected to rise and reach 37 bcm by 2021.

The Oil & Gas (Petroleum Industry) is usually divided into three major components:

- UPSTREAM
- MIDSTREAM
- DOWNSTREAM

UPSTREAM SECTOR

The upstream oil sector is a term commonly used to refer to the searching for and the recovery and production of crude oil and natural gas. This sector is also known as the ***Exploration and Production (E&P) Sector.***

The upstream sector includes the searching for potential underground or underwater oil & gas fields, drilling of exploratory wells, and subsequently operating the wells that recover and bring the crude oil and/ or raw natural gas to the surface.

State-owned ONGC dominate the upstream segment.

It is the largest upstream company in Exploration and Production (E&P) segment, accounting for approximately 61.5 per cent of the country's total oil output (FY17).

MIDSTREAM SECTOR

The midstream industry processes, stores, markets and transport commodities such as crude oil, natural gas, natural gas liquids (NGLs mainly ethane, propane and butane) and sulphur. Midstream operations are included under the downstream category.

IOCL operates a 13,391 km network of crude, gas and product pipelines, with a capacity of 1.896 mbpd of oil and 9.5 mmscmd of gas. This is around 30 per cent of the nation's total pipeline network

DOWNSTREAM SECTOR

The downstream oil sector is a term commonly used to refer to the refining of crude oil, and the selling and distribution of natural gas and products derived from crude oil. Such products include Liquefied petroleum gas (LPG), gasoline or petrol, jet fuel, diesel oil, and other fuel oils. The downstream sector includes oil refineries, petrochemical plants, petroleum products distribution, retail outlets and natural gas distribution companies.

The Indian petroleum industry is one of the oldest in the world, with oil being struck at Makum near Margherita in Assam in 1867 nine years after Col. Drake's discovery in Titusville. The industry has come a long way since then. For nearly fifty years after independence, the oil sector in India has seen the growth of giant national oil companies in a sheltered environment. A process of transition of the sector has begun since the mid-nineties, from a state of complete protection to the phase of open competition. The years since independence have however, seen the rapid growth of upstream and downstream oil sectors. The sector in recent years has been characterized by rising consumption of oil products.

- IOCL is the largest company, controls 10 out of 22 Indian refineries, with a combined capacity of 1.31 mbpd.
- Reliance launched India's 1st privately owned refinery in 1999 and has gained considerable market share (30 per cent).
- Essar's Vadinar refinery has a capacity of 20 mmtpa, currently accounting for around 10 per cent of total refining capacity.

GROWTH DRIVERS

Robust domestic market; expected to expand

- India is the world's 4th largest energy consumer
- Oil consumption is expected to rise by 42.5 per cent during 2010–20
- The country is the 4th largest importer of LNG

Increasing demand for natural gas

- Several industries are increasing the usage of natural gas in operations; this has boosted natural gas demand in India
- Some of the main industries that use natural gas are pulp, paper, metals, chemicals, glass, plastic and food processing

Abundant raw material

- The nation has large coal, crude oil and natural gas reserves
- Proven Oil reserves amounted to 600MMT in 2016
- Proved reserves of natural gas stood at 1.2 tcm in 2016

Favourable policies

- The government has allowed 100 per cent FDI in E and P projects/companies; and 49 per cent in refining under the automatic route from the earlier approval route
- It has also introduced policies to promote investments in the industry such as Hydrocarbon Exploration Licensing Policy (HELP) and Coal Bed Methane (CBM)

Huge investments

- Indian Oil is going to invest Rs 70,000 crore (US$ 10.81 billion) by 2030 to boost its oil refining capacity.
- ONGC plans to incure capital expenditure of US$ 4.31 billion in FY2017-18, for developing their offshore oil and gas fields in Gamji, Bassein, Daman on the West coast and Vasishta and Nagyalanka on the East coast.

Skilled Labour

- The nation offers abundant skilled labour at much competitive wages compared to other countries
- The University of Petroleum and Energy Studies in Dehradun, Uttarakhand, is Asia's first and only energy university

Massive gas pipeline network

- As of January 1, 2018, the country's natural gas pipeline network spanned over 16,475 km in length and proposed expansion of 30,000 kms is envisaged by 2018-19

Natural gas discoveries

- Several domestic companies (such as ONGC, Reliance and Gujarat State Petroleum) have reportedly found natural gas in deep waters
- In March, ONGC started production at two oil wells located in Jorhat, Assam. These oil wells were discovered in 2016-17, and are producing 50 tonnes per day, which increased the overall production of Jorhat asset from 350 tonnes per day to 400 tonnes per day.
- In April 2017, ONGC claimed to have made 23 new gas and oil discoveries in the fiscal 2016-17 and the company has set new record in exploring and production activities.
- In June 2017, Oil India Ltd. has made a oil discovery in the Baghjan area of upper Assam basin. The discovery was made by Baghjan Petroleum Mining Lease (PML).

COMPANY OERVIEW

HPCL is a Government of India Enterprise with a **Navratna Status**, and a **Forbes 2000 and Global Fortune 500 company**. It had originally been incorporated as a company under the Indian Companies Act 1913.

It is listed on the Bombay Stock exchange (BSE) and National Stock Exchange (NSE), India.

HPCL owns & operates 2 major refineries producing a wide variety of petroleum fuels & specialties, one in Mumbai (West Coast) of **7.5** Million Metric Tonnes Per Annum (MMTPA) capacity and the other in Visakhapatnam, (East Coast) with a capacity of **8.3** MMTPA. HPCL also owns and operates the largest Lube Refinery in the country producing Lube Base Oils of international standards, with a capacity of 428 TMT. This Lube Refinery accounts for over 40% of the India's total Lube Base Oil production. Presently HPCL produces over 300+ grades of Lubes, Specialities and Greases. HPCL in collaboration with M/s Mittal Energy Investments Pte. Ltd.. is operating a 9 MMTPA capacity Refinery at Bathinda with 49% equity in Punjab and also holds an equity of about 16.95% in the 15 MMTPA Mangalore Refinery and Petrochemicals Ltd. (MRPL).

HPCL has the second largest share of product pipelines in India with a pipeline network of more than 3370 kms for transportation of petroleum products and a vast marketing network consisting of 13 Zonal offices in major cities and 106 Regional Offices facilitated by a Supply & Distribution infrastructure comprising Terminals, Pipeline networks, Aviation Service Stations, LPG Bottling Plants, Inland Relay Depots & Retail Outlets, Lube and LPG Distributorships.

Our Vision

To be a World Class Energy Company known for caring and delighting the customers with high quality products and innovative services across domestic and international markets with aggressive growth and delivering superior financial performance. The Company will be a model of excellence in meeting social commitment, environment, health and safety norms and in employee welfare and relations.

Our Mission

"HPCL, along with its joint ventures, will be a fully integrated company in the hydrocarbons sector of exploration and production, refining and marketing; focusing on enhancement of productivity, quality and profitability; caring for customers and employees; caring for environment protection and cultural heritage.

It will also attain scale dimensions by diversifying into other energy related fields and by taking up transnational operations."

ROOTS OF HPCL

- **1952**

  The company was incorporated in the name of Standard Vacuum Refining Company of India Limited on July 5, 1952.

- **1962**

  On 31st March,1962 the name was changed to ESSO Standard Refining Company of India Limited**.**

- **1974**

  Hindustan Petroleum Corporation Limited comes into being after the takeover and merger of erstwhile Esso Standard and Lube India Limited.

- **1976**

  Caltex Oil Refining (India) Ltd.- CORIL is taken over by the Government of India with an ordinance in 1976, subsequently ratified by an act in 1977 and merged with HPCL in 1978.

- **1979**

  Kosan Gas Company, the concessionaries of HPCL in the domestic LPG market are taken over and merged with HPCL.

HPCL thus comes into being after merging four different organisations at different points of time.

HPCL Recognition and Awards

- "Platts Global Energy Award 2016" for Corporate Social Responsibility by S&P Global Platts
- Petrofed Award for "Innovator of the Year 2015" in Team Category
- "National Energy Conservation Award (Second Prize)" to Mumbai Refinery by Ministry of Power, Government of India
- "Process Innovator of the Year" award by FICCI in Petroleum and Petrochemical Category
- "Asia Pacific Procurement Leaders Award 2016" to Central Procurement Organization (CPO), HPCL at Annual Asia Pacific Procurement forum, Singapore
- FICCI Chemical and Petrochemical Award" 2016 to Visakh Vijayawada Secunderabad Pipeline (VVSPL) for Most Environment Friendly Company in Petrochemicals Sector
- "FICCI Chemical and Petrochemical Award" 2016 to "MDPL for Excellence in Corrosion Management in Petrochemicals Sector"
- "Golden Peacock Innovative Product Service Award 2016" to HP Lubricants for 2nd Consecutive Year
- "Oil & Gas Excellence Awards" for (i) Project SHRESTHA in "Best Leadership Development Program in Oil & Gas" category, (ii) Project SANKALP in "Award for Innovation in Safety" category and (iii) Project SACHET in "Award for Innovation in Safety" category by CMO Asia
- "South Asia Procurement Innovation Awards 2016-17 (First Runner up)" to Central Procurement Organization (CPO), HPCL by South Asia Procurement Network
- "Golden Peacock Award for Sustainability" to Mumbai Refinery for the year 2016
- "Green Business Award" to Retail SBU for implementation of Vapour Recovery Systems, Solar Power Panels, Bio Toilets and Rain Water Harvesting Systems at retail outlets by SingEx Exhibitions and Franchise India

HPCL Joint Ventures and Subsidiaries

Joint Ventures

- HPCL-Mittal Energy Limited (HMEL) – December 13, 2000.
- Hindustan Colas Pvt. Ltd (HINCOL) – July 17, 1995.
- South Asia LPB Company Pvt. Ltd. (SALPG) – Noember 16, 1999.
- Bhagyanagar Gas Limited (BGL) – August 22, 2003.
- Aaantika Gas Limited (AGL) – June 7, 2006.
- Petronet MHB Limited (PMHBL)
- Mangalore Refineries and Petrochemicals Limited (MRPL)
- Mumbai Aviation Fuel Farm Facility Pvt. Ltd. (MAFFFL)
- GSPL India Gasnet Limited (GIGL) – October 13, 2011.
- GSPL India Transco Limited (GITL) – October 13, 2011
- HPCL Shapoorji Energy Pvt. Ltd. (HSEPL)
- Godavari Gas Pvt. Limited (GGPL) – September 27, 2016
- Ratnagiri Refineries and Petrochemicals Limited (RRPCL) – September 22, 2017

Subsidiaries

- Prize Petroleum Company Limited
- HPCL Biofuels Limited (HBL) – October 16, 2009
- HPCL Rajasthan Refinery Limited (HRRL) – September 18, 2013

A Conceptual Understanding of Merger and Acquisition

The expression mergers and acquisitions alludes to the part of corporate methodology, corporate fund and administration managing the purchasing, offering and consolidating of various organizations that can help, back, or enable a developing organization in an offered industry to develop quickly without creating another business element. Mergers, acquisitions and takeovers have been a piece of the business world for quite a long time. In the present dynamic monetary condition, organizations are regularly looked with choices concerning these activities - all things considered, the activity of administration is to amplify investor esteem. Through mergers and acquisitions, an organization can (from a certain point of view) build up an upper hand and at last increment investor esteem.

Merger is a money related device that is utilized for improving long haul gainfulness by extending their tasks. Mergers happen when the blending organizations have their shared assent as not the same as acquisitions, which can appear as an antagonistic takeover. A procurement, otherwise called a takeover or a buyout or "merger", is the purchasing of one organization (the 'objective') by another. A procurement might be amicable or antagonistic. In the previous case, the organizations collaborate in transactions; in the last case, the takeover target is unwilling to be purchased or the objective's board has no earlier information of the offer. Procurement normally alludes to a buy of a littler firm by a bigger one. Infrequently, in any case, a littler firm will procure administration control of a bigger or longer settled organization and keep its name for the joined substance. This is known as a turn around takeover. Another kind of obtaining is invert merger, an arrangement that empowers a privately owned business to get freely recorded in a brief timeframe period. An invert merger happens when a privately owned business that has solid prospects and is anxious to raise financing purchases a freely recorded shell organization, typically one with no business and constrained resources. Making securing progress has turned out to be exceptionally troublesome, while different investigations have demonstrated that half of acquisitions were unsuccessful. The procurement procedure is extremely perplexing, with numerous measurements affecting its result.

- The purchaser purchases the offers, and along these lines control, of the objective organization being obtained. Proprietorship control of the organization thusly passes on successful control over the advantages of the organization, yet since the organization is procured in place as a going concern, this type of exchange conveys with everything of the liabilities collected by that business over its past and the greater part of the dangers that organization faces in its business condition.

- The purchaser purchases the benefits of the objective organization. The money the objective gets from the auction is paid back to its investors by profit or through liquidation. This sort of exchange leaves the objective organization as a vacant shell, if the purchaser purchases out the whole resources. A purchaser frequently structures the exchange as a benefit buy to "filter out" the advantages that it needs and forget the advantages and liabilities that it doesn't. This can be especially vital where predictable liabilities may incorporate future, unquantified harm honors, for example, those that could emerge from case over imperfect items, worker advantages or terminations, or ecological harm. A burden of this structure is the duty that numerous purviews, especially outside the United States, force on exchanges of the individual resources, while stock exchanges can every now and again be organized as like-kind trades or different game plans that are tax-exempt or charge unbiased, both to the purchaser and to the merchant's investors.

The expressions "demerger", "turn off" and "turn out" are now and then used to show a circumstance where one organization parts into two, creating a moment organization independently recorded on a stock trade.

Articulation about the Problem

Beneficial development constitutes one of the prime destinations of the business firms. This can be accomplished 'inside' either through the way toward presenting/growing new items or by extending/developing the limit of existing item (s). On the other hand, development process can be encouraged 'remotely' by procurement of existing firms. There are qualities and shortcomings of both the development forms. Most importantly there may be once in a while issue of raising satisfactory accounts required for the usage of different capital planning ventures including development. Acquisitions and mergers forestalls, in the greater part of the circumstances, financing issues as generous/full installments are typically made as the offers of the gaining organization.

Chapter-2

Literature Review

LITERATURE REVIEW

Understanding Mergers and Acquisitions

In spite of the fact that they are frequently articulated in an indistinguishable breath and utilized from however they were synonymous, the terms merger and acquisition mean marginally extraordinary things. When one organization assumes control over another and obviously builds up itself as the new proprietor, the buy is called an obtaining. From a legitimate perspective, the objective organization stops to exist, the purchaser "swallows" the business and the purchaser's stock keeps on being exchanged.

In the unadulterated feeling of the term, a merger happens when two firms consent to go ahead as a solitary new organization instead of remain independently possessed and worked. This sort of activity is all the more exactly alluded to as a "merger of equivalents". The organizations are regularly of about a similar size. The two organizations' stocks are surrendered and new organization stock is issued in its place. For instance, in the 1999 merger of Glaxo Welcome and Smith Kline Beecham, the two firms stopped to exist when they blended, and another organization, GlaxoSmithKline, was made.

In basic terms, a merger includes the shared choice of two organizations to join and wind up one element; it can be viewed as a choice made by two "equivalents", though a procurement or takeover then again, is portrayed the buy of a littler organization by a considerably bigger one. This mix of "unequals" can deliver an indistinguishable advantages from a merger, however it doesn't really need to be a shared choice. A run of the mill merger, as it were, includes two moderately break even with organizations, which consolidate to wind up one legitimate substance with the objective of delivering an organization that is worth more than the entirety of its parts. In a merger of two enterprises, the investors ordinarily have their offers in the old organization traded for an equivalent number of offers in the consolidated element. In a procurement, the securing firm for the most part offers a money cost for each offer to the objective association's investors or the getting association's offer's to the investors of the objective firm as per a predefined change proportion. In any case, the buying organization basically funds the buy of the objective organization, getting it by and large for its investors.

By and by, in any case, genuine mergers of equivalents don't occur frequently. Typically, one organization will purchase another and, as a component of the arrangement's terms, just enable the gained firm to declare that the activity is a merger of equivalents, regardless of whether it is actually an obtaining. Being purchased out frequently conveys negative undertones, along these lines, by portraying the arrangement metaphorically as a merger, bargain creators and best chiefs endeavor to make the takeover more agreeable. A case of this would be the takeover of Chrysler by Daimler-Benz in 1999 which was broadly alluded to in the time. A buy arrangement will likewise be known as a merger when the two CEOs concur that alliance is to the greatest advantage of both of their organizations. Yet, when the arrangement is threatening - that is, the point at which the objective organization does not have any desire to be bought - it is constantly viewed as a procurement.

Regardless of whether a buy is viewed as a merger or a securing truly relies upon whether the buy is agreeable or unfriendly and how it is declared. At the end of the day, the genuine contrast lies in how the buy is imparted to and gotten by the objective organization's top managerial staff, representatives and investors. It is very ordinary however for M&A bargain interchanges to occur in a purported 'secrecy bubble' whereby data streams are confined because of privacy assentions (Harwood, 2005).

Precise business valuation is a standout amongst the most vital parts of M&A as valuations like these will majorly affect the value that a business will be sold for. Regularly this data is communicated in a Letter of Opinion of Value (LOV) when the business is being valuated for intrigue's purpose. There are other, more definite methods for communicating the estimation of a business. These reports by and large get more point by point and costly as the measure of an organization increments, be that as it may, this isn't generally the case as there are numerous convoluted ventures which require more tender loving care, paying little respect to estimate.

The five most basic approaches to valuate a business are

- asset valuation,
- historical income valuation,
- future viable income valuation,
- relative valuation (practically identical organization and tantamount exchanges),
- discounted income (DCF) valuation

➢ Experts who valuate organizations by and large don't utilize only one of these strategies however a mix of some of them, and additionally conceivably others that are not specified above, so as to get a more precise esteem. These qualities are resolved generally by taking a gander at an organization's asset report and additionally pay explanation and pulling back the proper data. The data in a critical position sheet or salary articulation is gotten by one of three bookkeeping measures: a Notice to Reader, a Review Engagement or an Audit. (Shankar, K., 2003)

Types of Mergers:

From the impression of business associations, there is an entire host of various mergers. Notwithstanding, from a financial specialist perspective i.e. in view of the connection between the two consolidating organizations, mergers are grouped into following:

Flat merger-Two organizations that are in coordinate rivalry and offer a similar product offerings and markets i.e. it brings about the combination of firms that are immediate opponents. E.g. Exxon and Mobil, Ford and Volvo, Volkswagen and Rolls Royce and Lamborghini

Vertical Merger-A client and friends or a provider and friends i.e. merger of firms that have genuine or potential purchaser vender relationship eg. Passage Bendix, Time Warner-TBS.

Combination merger-by and large a merger between organizations which don't have any regular business territories or no normal relationship of any sort. Solidified firma may offer related items or offer promoting and appropriation channels or generation forms.

Such sort of merger might be comprehensively arranged into following:

Item augmentation merger – Conglomerate mergers which includes organizations offering extraordinary however related items in a similar market or offer non-contending items and utilize same promoting channels of generation process. E.g. Phillip Morris-Kraft, Pepsico-Pizza Hut, Proctor and Gamble and Clorox

Market-expansion merger – Conglomerate mergers wherein organizations that offer similar items in various markets/geographic markets. E.g. Morrison grocery stores and Safeway, Time Warner-TCI.

Unadulterated Conglomerate merger-two organizations which combine have no undeniable relationship of any sort. E.g. Bank Corp of America-Hughes Electronics.

On a general examination, it can be inferred that Horizontal mergers take out merchants and subsequently reshape the market structure i.e. they have coordinate effect on merchant fixation while vertical and aggregate mergers don't influence advertise structures e.g. the merchant fixation straightforwardly. They don't have anticompetitive outcomes.

The conditions and purposes behind each merger are extraordinary and these conditions affect the way the arrangement is managed, drawn nearer, overseen and executed. .Be that as it may, the accomplishment of mergers relies upon how well the arrangement creators can coordinate two organizations while keeping up everyday tasks. Each arrangement has its own flips which are impacted by different unessential factors, for example, human capital part and the authority. Quite a bit of it relies upon the organization's authority and the capacity to hold individuals who are critical to organization's on going achievement. It is essential, that both the gatherings ought to be clear in their psyche with regards to the thought process of such obtaining i.e. there ought to be censusad-figure of speech. Benefits, protected innovation, costumer base are fringe or integral to the obtaining organization, the rationale will decide the hazard profile of such M&A. For the most part before the beginning of any arrangement, due persistence is led to bandage the dangers included, the quantum of benefits and liabilities that are procured and so on. (Kwang & Susan, 1998)

Financing M&A

Mergers are by and large separated from acquisitions incompletely by the manner by which they are financed and mostly by the relative size of the organizations. Different techniques for financing a M&A bargain exist:

Money

Installment with money. Such exchanges are normally named acquisitions as opposed to mergers on the grounds that the investors of the objective organization are expelled from the photo and the objective goes under the (roundabout) control of the bidder's investors alone.

A money arrangement would bode well amid a descending pattern in the loan fees. Another favorable position of utilizing money for a procurement is that it has a tendency to decrease odds of EPS weakening for the securing organization. However, a proviso in utilizing money is that it places requirements on the income of the organization.

Financing

Financing capital might be obtained from a bank, or raised by an issue of bonds. On the other hand, the acquirer's stock might be offered as thought. Acquisitions financed through obligation are known as utilized buyouts on the off chance that they take the objective private, and the obligation will frequently be moved down onto the monetary record of the gained organization. The association can likewise choose issuing of crisp capital in the market to raise the assets.

Crossovers

An obtaining can include a blend of money and obligation or of money and supply of the buying element.

Calculating

Calculating can give the additional to influence a merger or deal to work. Half breed can function as advertisement e-denit.

Intentions behind M&A

The overwhelming basis used to clarify M&A action is that gaining firms look for enhanced money related execution. The accompanying thought processes are considered to enhance money related execution:

- **Economy of scale:** This alludes to the way that the joined organization can regularly decrease its settled expenses by evacuating copy divisions or tasks, bringing down the expenses of the organization in respect to a similar income stream, in this way expanding net revenues.
- **Economy of degree:** This alludes to the efficiencies principally connected with request side changes, for example, expanding or diminishing the extent of advertising and appropriation, of various sorts of items.
- **Increased income or piece of the overall industry:** This expect the purchaser will ingest a noteworthy contender and accordingly increment its market control (by catching expanded piece of the overall industry) to set costs.
- **Cross-offering:** For instance, a bank purchasing a stock dealer could then pitch its managing an account items to the stock specialist's clients, while the

representative can join the bank's clients for money market funds. Or on the other hand, a maker can get and offer reciprocal items.

- **Synergy:** For instance, administrative economies, for example, the expanded chance of administrative specialization. Another illustration are buying economies because of expanded request measure and related mass purchasing rebates.
- **Taxation:** A beneficial organization can purchase a misfortune creator to utilize the objective's misfortune as their preference by decreasing their duty risk. In the United States and numerous different nations, rules are set up to restrict the capacity of beneficial organizations to "shop" for misfortune making organizations, constraining the assessment rationale of a securing organization.
- **Geographical or other enhancement:** This is intended to smooth the income consequences of an organization, which over the long haul smoothens the stock cost of an organization, giving moderate speculators more trust in putting resources into the organization. Be that as it may, this does not generally convey an incentive to investors (see beneath).
- **Resource exchange:** assets are unevenly disseminated crosswise over firms (Barney, 1991) and the cooperation of target and obtaining firm assets can make an incentive through either conquering data asymmetry or by consolidating rare assets.
- **Vertical incorporation:** Vertical mix happens when an upstream and downstream firm union (or one procures the other). There are a few purposes behind this to happen. One reason is to disguise an externality issue. A typical case is of such an externality is twofold minimization. Twofold underestimation happens when both the upstream and downstream firms have imposing business model power, each firm lessens yield from the focused level to the syndication level, making two deadweight misfortunes. By consolidating the vertically coordinated firm can gather one deadweight misfortune by setting the upstream company's yield to the aggressive level. This expands benefits and buyer excess. A merger that makes a vertically incorporated firm can be productive.

In any case, by and large and over the most ordinarily examined factors, procuring firms' budgetary execution does not decidedly change as an element of their securing movement. Consequently, extra thought processes in merger and procurement that may not include investor esteem include:

- **Diversification:** While this may fence an organization against a downturn in an individual industry it neglects to convey esteem, since it is feasible for singular investors to accomplish a similar support by expanding their portfolios at a much lower cost than those related with a merger.
- **Manager's hubris:** supervisor's arrogance about expected collaborations from M&A which brings about excessive charge for the objective organization.
- **Empire-building:** Managers have bigger organizations to oversee and subsequently more power.

- **Administrator's pay:** previously, certain official administration groups had their payout in view of the aggregate sum of benefit of the organization, rather than the benefit per share, which would give the group an unreasonable motivating force to purchase organizations to build the aggregate benefit while diminishing the benefit per share (which harms the proprietors of the organization, the investors); albeit some exact investigations demonstrate that pay is connected to gainfulness instead of negligible benefits of the organization. (Alexandra M., 1994)

Merger and Acquisition Strategies

A sound key arranging can shield any merger from disappointment. The vital issues that ought to be remembered at the season of creating Merger and Acquisition Strategy, are examined in the accompanying page.

- Merger and Acquisition Strategies are critical to infer the most extreme advantage out of a merger or obtaining bargain. It is very hard to settle on the techniques of merger and procurement , exceptionally for those organizations who will influence a merger or securing to bargain out of the blue. For this situation, they take lessons from the past mergers and acquisitions that occurred in the market between different organizations and turned out to be effective. (Cartwright S. (1997)

- Through market overview and market investigation of various mergers and acquisitions, it has been discovered that there are some brilliant guidelines which can be dealt with as the Strategies for Successful Merger or Acquisition Deal.

These tenets or methodologies are examined beneath:

- Before entering in to any merger or securing bargain, the objective organization's market execution and market position is required to be analyzed completely with the goal that the ideal target organization can be picked and the arrangement can be settled at a correct cost.

- Identification of future market openings, late market patterns and client's response to the organization's items are likewise essential to evaluate the development capability of the organization.

- After settling the merger or securing bargain, the combination procedure of the organizations ought to be begun in time. Prior to the finalizing of the negotiations, when the transaction procedure is on, from that time, the administration of both the organizations require to deal with an appropriate reconciliation methodology. This is to guarantee that no potential issue manifest after the settling of the negotiations.

- If the organization which means to obtain the objective firm designs rebuilding of the objective organization, at that point this arrangement ought to be announced and actualized inside the time of procurement to stay away from vulnerabilities.

- It is likewise imperative to consider the workplace and culture of the workforce of the objective organization, at the season of drawing up Merger and Acquisition Strategies, with the goal that the workers of the objective organization don't get a handle on left and wind up unsettled. (Cartwright S. (1997)

Difficulties in M and A

In numerous states, no commercial center presently exists for the mergers and acquisitions of exclusive little to average sized organizations. Market members frequently wish to keep up a level of mystery about their endeavors to purchase or offer such organizations. Their anxiety for mystery for the most part emerges from the conceivable negative responses an organization's representatives, brokers, providers, clients and others may have if the exertion or enthusiasm to look for an exchange were to wind up known. This requirement for mystery has so far ruined the development of an open gathering or commercial center to fill in as a clearinghouse for this extensive volume of business. In a few expresses, a Multiple Listing Service (MLS) of private companies available to be purchased is kept up by associations, for example, Business Brokers of Florida (BBF). Another MLS is kept up by International Business Brokers Association (IBBA).

An exchange normally expects six to nine months and includes numerous means. Finding parties with whom to direct an exchange frames one stage in the general procedure and maybe the most troublesome one. Qualified and intrigued purchasers of multimillion dollar companies are elusive. Considerably more troubles go to bringing various potential purchasers forward all the while amid transactions. Potential acquirers in an industry basically can't successfully "screen" the economy everywhere for securing openings despite the fact that some may fit well inside their organization's activities or plans.

An industry of expert "mediators" (referred to differently as middle people, business agents, and speculation financiers) exists to encourage M&A exchanges. These experts don't give their administrations inexpensively and for the most part turn to already settled individual contacts, coordinate calling efforts, and putting commercials in different media. In adjusting their customers they endeavor to make a one-time advertise for a one-time exchange. Stock buy or merger exchanges include securities and require that these "agents" be authorized merchant merchants under FINRA (SEC) with a specific end goal to be repaid as a % of the arrangement. As a rule, an unlicensed go between might be repaid on an advantage buy without being authorized. Many, however not all, exchanges utilize mediators on one or the two sides. In spite of best expectations, go-betweens can work wastefully due to the moderate and constraining nature of relying intensely on phone correspondences. Numerous telephone calls neglect to contact with the proposed party. Occupied administrators have a tendency to be restless when managing deals calls concerning openings in which they have no intrigue. These advertising issues epitomize any private arranged markets. Because of these issues and different issues like these, specialists who manage little to average sized organizations frequently manage substantially more strenuous conditions than different business intermediaries. Fair sized business merchants have a normal life expectancy of just 12– year and a half and as a rule never develop past 1 or 2 workers. Special cases to this are rare. Some of these exemptions incorporate The Sundial Group, Geneva Business Services, Corporate Finance Associates and Robbinex.

The market wasteful aspects can demonstrate inconvenient for this essential part of the economy. Past the middle people's high expenses, the present procedure for mergers and acquisitions has the impact of making privately owned businesses at first offer their offers at a critical rebate in respect to what a similar organization may offer for were it as of now traded on an open market. An imperative and substantial division of the whole economy is kept down by the trouble in leading corporate M&A (and furthermore in raising value or obligation capital). Moreover, it is likely that since secretly held organizations are so hard to offer they are not sold as frequently as they may or ought to be.

Past endeavors to streamline the M&A procedure through PCs have neglected to prevail on a vast scale since they have given unimportant "announcement sheets" - static data that promotes one company's chances. Clients should even now look for different hotspots for circumstances similarly as though the release board were not electronic. A different postings benefit idea was beforehand not utilized because of the requirement for privacy but rather there are at present a few in task. The most huge of these are controlled by the California Association of Business Brokers (CABB) and the International Business Brokers Association (IBBA) These associations have effectivily made a sort of virtual market without trading off the secrecy of gatherings included and without the unapproved arrival of data.

- One a player in the M&A procedure which can be enhanced essentially utilizing arranged PCs is the enhanced access to "information rooms" amid the due perseverance process however just for bigger exchanges. For the reasons for little medium estimated business, these information rooms fill no need and are for the most part not utilized. (Alexandra M., 1994)

Major merger and acquisition in recent time

Major merger and acquisition in oil and gas industry in India in recent time-

Date announced	Acquirer name	Target name	Value of deal (US$ million)
Feb 2018	ONGC	HPCL (51.11 per cent stake)	57,020.39
Feb 2018	ONGC Videsh	Abu Dhabi National Oil Co (10 per cent stake in offshore oilfield)	600
Aug 2017	Rosneft	Essar Oil (49 per cent stake)	1,290
Dec 2016	Oil and Natural Gas Corp's	Gujarat State Petroleum Co's	1200
Dec 2015	ONGC Videsh Ltd (OVL)	Vankor oil field	1260
Jan 2015	Bharat Forge	Mecanique Generale Langroise	12.82
Jun 2014	Gulf Petrochem Ltd	Sah Petroleums Limited	7.13
Mar 2014	IOCL	Progress Energy Canada Ltd	Not disclosed
Oct 2013	ONGC Videsh Ltd	Parque das Conchas, Brazilian Oilfield	529
Jun 2013	ONGC Videsh Ltd (in partnership with Oil India Ltd)	Rovuma Area 1 Offshore Block	2640
Nov 2012	ONGC Videsh	ConocoPhillips (Kashagan Field)	5,000.0
Nov 2012	Inpex Corp	Oil and Natural Gas Corp's exploration block KG-DWN-2004/6	Not disclosed
Sep 2012	ONGC Videsh	Hess Corp (Azrei oilfield)	1,000.0
Apr 2012	Trafigura Pte Ltd	Nagarjuna Oil Co Ltd	130.0
Apr 2011	Sesa Goa Ltd	Calm India Ltd	1,492.0
Feb 2011	BP PLC	Reliance Industries Ltd	9,000.0
Aug 2010	BPRL	EP413	13.4
Aug 2010	Sesa Goa Ltd	Cairn India Ltd	1,180.8
Aug 2010	Vedanta Resources PLC	Cairn India Ltd	6,568.5
Aug 2010	Reliance Industries Ltd	Marcellus Shale Natural Gas	391.6

Figure 4 Merger and acquisition in recent time (Source- IBEF)

Mergers and acquisitions in India

Mergers and acquisitions in India are on the ascent. Volume of mergers and acquisitions in India in 2017 are required to grow two overlap from 2016 and four times contrasted with 2015. India has developed as one of the best nations as for merger and securing bargains. In 2014, the initial two months alone represented merger and securing bargains worth $40 billion in India. The evaluated figures for the whole year anticipated a sum of more than $ 100 billions worth of mergers and acquisitions in India. This is two crease development from 2013 and a development of just about four times from 2012.

Mergers and Acquisitions in various sectors in India

Segment shrewd, extensive volumes of mergers and mergers and acquisitions in India have happened in back, telecom, FMCG, development materials, automotives and metals. In 2005 back finished the rundown with 20% of aggregate estimation of mergers and acquisitions in India occurring in this division. Telecom represented 16%, while FMCG and development materials represented 13% and 10% individually.

In the keeping money division, essential mergers and acquisitions in India as of late incorporate the merger between IDBI (Industrial Development bank of India) and its own backup IDBI Bank. The arrangement was worth $ 174.6 million (Rs. 7.6 billion in Indian cash). Another imperative merger was that between Centurion Bank and Bank of Punjab. Worth $82.1 million (Rs. 3.6 billion in Indian cash), this merger prompted the making of the Centurion Bank of Punjab with 235 branches in various locales of India.

- In the telecom segment, an expansion of stakes by SingTel from 26.96 % to 32.8 % in Bharti Telecom was worth $252 million (Rs. 10.9 billion in Indian money). In the Foods and FMCG area a controlling stake of Shaw Wallace and Company was gained by United Breweries Group possessed by Vijay Mallya. This arrangement was worth $371.6 million (Rs. 16.2 billion in Indian money). Another critical one in this segment, worth $48.2 million (Rs 2.1 billion in Indian money) was the procurement of 90% stake in Williamson Tea Assam by McLeod Russell India In development materials 67 % stake in Ambuja Cement India Ltd was gained by Holcim, a Swiss organization for $634.9 million (Rs 27.3 billion in Indian cash). (Mattoo, P.K, 1998)

FINANCIAL RATIOS

A ratio is a relationship expressed in mathematical terms between two individual or groups of figures connected with each other in some logical manner. The ratio analysis is based on the premise that a single accounting figure by itself may not communicate any meaningful information but when expressed as a relative to some other figure, it may definitely give some significant information. The relationship between two or more accounting figures is called a financial ratio. A financial ratio helps to summarize a large mass of financial data into a concise form and to make meaningful interpretations and conclusions about the performance and position of a firm. (Rustagi, 2011)

Financial ratio analysis is the process of calculating financial ratios, which are mathematical indicators calculated by comparing key financial information appearing in financial statements of a business, and analyzing those to find out reasons behind the business's current financial position and its recent financial performance, and develop expectation about its future outlook.

Ratio analysis is a tool that was developed to perform quantitative analysis on numbers found on financial statements. Ratios help link the three financial statements together and offer figures that are comparable between companies and across industries and sectors. Ratio analysis is one of the most widely used fundamental analysis techniques. (Jenna, 2015)

Financial ratios can be used to answer the following:

(i) How liquid is the firm?
(ii) Is the firm generating adequate operating profit on the assets of the firm?
(iii) How the assets of the firm has been financed?
(iv) Are the shareholders earnings adequate return on their investment?

The ratios in this project has been compared using Time-Series Analysis. The analysis is called Time-Series Analysis when the performance of the firm is evaluated over a period of time. By comparing the present performance of a firm with the performance of the same firm over last few years, an assessment can be made about the trend in progress of the firm, about the direction of the progress of the firm. It can help the firm to assess whether the firm is approaching long term goals or not. It can also be extended to cover the projected financial statements also.

The ratios can be classified into following groups:

- Liquidity Ratio
- Solvency Ratio
- Efficiency Ratio
- Profitability Ratio

LIQUIDITY RATIO

Liquidity ratios asses a business's liquidity, i.e. its ability to convert its assets to cash and pay off its obligations without any significant difficulty (i.e. delay or loss of value). Liquidity ratios are particularly useful for suppliers, employees, banks, etc. Important liquidity ratios are:

Current ratio

The current ratio is a liquidity ratio that measures a company's ability to pay short-term and long-term obligations. To gauge this ability, the current ratio considers the current total assets of a company (both liquid and illiquid) relative to that company's current total liabilities. The formula for calculating a company's current ratio is:

Current Ratio

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

Interpretation- A ratio under 1 indicates that a company's liabilities are greater than its assets and suggests that the company in question would be unable to pay off its obligations if they came due at that point. While a current ratio below 1 shows that the company is not in good financial health, it does not necessarily mean that it will go bankrupt. There are many ways for a company to access financing, and this is particularly so if a company has realistic expectations of future earnings against which it might borrow. For example, if a company has a reasonable amount of short-term debt but is expecting substantial returns from a project or other investment not too long after its debts are due, it will likely be able to stave off its debt.

The higher the current ratio, the more capable the company is of paying its obligations, as it has a larger proportion of asset value relative to the value of its liabilities. However, a high ratio (over 3) does not necessarily indicate that a company is in a state of financial well-being either. Depending on how the company's assets are allocated, a high current ratio may suggest that that company is not using its current assets efficiently, is not securing financing well, or is not managing its working capital well. To better assess whether or not these issues are present, a liquidity ratio more specific than the current ratio is needed.

<u>Quick ratio</u> (also called acid-test ratio)

The quick ratio is an indicator of a company's short-term liquidity, and measures a company's ability to meet its short-term obligations with its most liquid assets. Because we're only concerned with the most liquid assets, the ratio excludes inventories from current assets. Quick ratio is calculated as follows:

Quick Ratio

$$\text{Quick Ratio} = \frac{\text{Total Current Assets} - \text{Inventory} - \text{Prepaid Expenses}}{\text{Current Liabilities}}$$

Quick Ratio

$$\text{Quick Ratio} = \frac{\text{Cash} + \text{Cash Equivalents} + \text{Short Term Investments} + \text{Current Receivables}}{\text{Current Liabilities}}$$

Interpretation- While a quick ratio lower than 1 does not necessarily mean the company is going into default or bankruptcy, it could mean that the company is relying heavily on inventory or other assets to pay its short term liabilities. The higher the quick ratio, the better the company's liquidity position. However, too high a quick ratio may indicate that the company has too much cash sitting in its reserves.

It may also mean that the company has a high accounts receivables, indicating that the company may be having problems collecting on its account receivables.

SOLVENCY RATIOS

Solvency ratios assess the long-term financial viability of a business i.e. its ability to pay off its long-term obligations such as bank loans, bonds payable, etc. Information about solvency is critical for banks, employees, owners, bond holders, institutional investors, government, etc. Key solvency ratios are:

Debt to equity ratio

Debt/Equity (D/E) Ratio, calculated by dividing a company's total liabilities by its stockholders' equity, is a debt ratio used to measure a company's financial leverage. The D/E ratio indicates how much debt a company is using to finance its assets relative to the value of shareholders' equity. The formula for calculating D/E ratios is:

Debt to Equity Ratio

$$\text{Debt to Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Total Equity}}$$

Interpretation- A high debt/equity ratio generally means that a company has been aggressive in financing its growth with debt. Aggressive leveraging practices are often associated with high levels of risk. This may result in volatile earnings as a result of the additional interest expense.

A lower debt to equity ratio usually implies a more financially stable business. Companies with a higher debt to equity ratio are considered more risky to creditors and investors than companies with a lower ratio. Unlike equity financing, debt must be repaid to the lender. Since debt financing also requires debt servicing or regular interest payments, debt can be a far more expensive form of financing than equity financing. Companies leveraging large amounts of debt might not be able to make payments.

Interest coverage ratio

The interest coverage ratio is a debt ratio and profitability ratio used to determine how easily a company can pay interest on its outstanding debt. The interest coverage ratio may be calculated by dividing a company's earnings before interest and taxes (EBIT) during a given period by the company's interest payments due within the same period.

The method for calculating interest coverage ratio may be represented with the following formula:

Interest Coverage Ratio

$$\text{Interest Coverage Ratio} = \frac{\text{EBIT (Earnings Before Interest \& Taxes)}}{\text{Interest Expense}}$$

Interpretation- The lower a company’s interest coverage ratio is, the more its debt expenses burden the company. When a company's interest coverage ratio is 1.5 or lower, its ability to meet interest expenses may be questionable. 1.5 is generally considered to be a bare minimum acceptable ratio for a company and the tipping point below which lenders will likely refuse to lend the company more money, as the company’s risk for default may be perceived as too high.

Moreover, an interest coverage ratio below 1 indicates the company is not generating sufficient revenues to satisfy its interest expenses. If a company’s ratio is below 1, it will likely need to spend some of its cash reserves in order to meet the difference or borrow more, which will be difficult for reasons stated above.

Generally, an interest coverage ratio of 2.5 is often considered to be a warning sign, indicating that the company should be careful not to dip further.

PROFITABILITY RATIOS

Profitability ratios measure the ability of a business to earn profit for its owners. While liquidity ratios and solvency ratios explain the financial position of a business, profitability ratios and efficiency ratios communicate the financial performance of a business. Important profitability ratios include:

Net profit margin

Net profit margin is the ratio of net profits to revenues for a company or business segment . Typically expressed as a percentage, net profit margins show how much of each dollar collected by a company as revenue translates into profit.

Net Profit Margin

$$\text{Net Profit Margin} = \frac{\text{Net Profit}}{\text{Total Revenue}}$$

A higher margin is always better than a lower margin because it means that the company is able to translate more of its sales into profits at the end of the period.

Gross profit margin

Gross profit margin is a financial metric used to assess a company's financial health and business model by revealing the proportion of money left over from revenues after accounting for the cost of goods sold (COGS). Gross profit margin, also known as gross margin, is calculated by dividing gross profit by revenues. Also known as "gross margin."

Calculated as:

Gross Profit Percentage

$$\text{Gross Profit Percentage} = \frac{\text{Total Sales - Cost of Goods Sold}}{\text{Total Sales}}$$

The gross profit ratio is important because it shows management and investors how profitable the core business activities are without taking into consideration the indirect costs. In other words, it shows how efficiently a company can produce and sell its products. This gives investors a key insight into how healthy the company actually is. For instance, a company with a seemingly healthy net income on the bottom line could actually be dying. The gross profit percentage could be negative, and the net income could be coming from other one-time operations. The company could be losing money on every product they produce, but staying a float because of a one-time insurance payout.

Operating profit margin

Operating Profit Margin Ratio is the percentage of operating profit (i.e. profit before interest and tax) relative to the revenue earned during a period.

Operating Profit Margin Ratio is also known as *Operating Income Percentage* and *Operating Margin Ratio.*

Formula

Operating Margin Ratio

$$\text{Operating Margin Ratio} = \frac{\text{Operating Income}}{\text{Net Sales}}$$

Where,

- Operating Profit = Net Profit + Interest Expense + Tax Expense - Other Income

  = Gross Profit - Selling, General & Administrative Expenses

- Revenue is income earned from the principal business activities

Operating Profit Margin Ratio is a measure of an organization's profit generation efficiency. Operating Profit Margin of 20% means that every $1 of sale earns a profit of 20 cents for the business before taking into account taxation, interest expense and other income.

The exclusion of other income, taxation and interest expense from the calculation of profit margin arguably provides a better measure for assessing the underlying financial performance of a business as compared to net profit margin ratio because it places emphasis on only the recurring profits of a business which are not affected by fluctuations caused by changes in gearing level, tax rates and one-off gains.

A change in OP Margin Ratio could be attributed to several factors as discussed below:

<u>a) Increase in OP Margin Ratio & Decrease in GP Margin Ratio</u>

Possible Causes:

- Reduction in the proportion of non-production overheads due to economies of scale as a result of which fixed overheads (e.g. salaries of management, office rent, etc.) are distributed over a greater number of sales units.
- Cost curtailment measures (e.g. eliminating overstaffing, promoting lean management) to reduce the impact of falling gross profit margin.

<u>b) Increase in OP Margin Ratio & Increase in GP Margin Ratio</u>

Possible Causes:

- Increase in sales volume causing a decrease in the proportion of both production and non-production costs due to economies of scale.

<u>c) Decrease in OP Margin Ratio & Increase in GP Margin Ratio</u>

Possible Causes:

- Increase in the proportion of selling, general and administrative expenses (e.g. advertisement, management salaries, rent) due to recent expansion of business into new markets whose revenue potential has not yet been realized.

<u>d) Decrease in OP Margin Ratio & Decrease in GP Margin Ratio</u>

Possible Causes:

- Operating inefficiencies (e.g. overstaffing, lower productivity, poor cost control).

- Increase in competition (e.g. saturation in existing markets forcing companies to seek business in less profitable markets).

Return on assets

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

Since company assets' sole purpose is to generate revenues and produce profits, this ratio helps both management and investors see how well the company can convert its investments in assets into profits. You can look at ROA as a return on investment for the company since capital assets are often the biggest investment for most companies. In this case, the company invests money into capital assets and the return is measured in profits.

The return on assets ratio formula is calculated by dividing net income by average total assets.

Return on Assets Ratio

$$\text{Return on Assets Ratio} = \frac{\text{Net Income}}{\text{Average Total Assets}}$$

This ratio can also be represented as a product of the profit margin and the total asset turnover.

Interpretation- The return on assets ratio measures how effectively a company can earn a return on its investment in assets. In other words, ROA shows how efficiently a company can convert the money used to purchase assets into net income or profits. A higher ratio is more favorable to investors because it shows that the company is more effectively managing its assets to produce greater amounts of net income. A positive ROA ratio usually indicates an upward profit trend as well.

Return on capital employed

Return on capital employed or ROCE is a profitability ratio that measures how efficiently a company can generate profits from its capital employed by comparing net operating profit to capital employed. In other words, return on capital employed shows investors how many dollars in profits each dollar of capital employed generates.

ROCE is a long-term profitability ratio because it shows how effectively assets are performing while taking into consideration long-term financing. This is why ROCE is a more useful ratio than return on equity to evaluate the longevity of a company.

Return on capital employed formula is calculated by dividing net operating profit or EBIT by the employed capital.

Return on Capital Employed

$$\text{Return on Capital Employed} = \frac{\text{Net Operating Profit}}{\text{Employed Capital}}$$

If employed capital is not given in a problem or in the financial statement notes, you can calculate it by subtracting current liabilities from total assets. In this case the ROCE formula would look like this:

Return on Capital Employed

$$\text{Return on Capital Employed} = \frac{\text{Net Operating Profit}}{\text{Total Assets - Current Liabilities}}$$

Interpretation- The return on capital employed ratio shows how much profit each dollar of employed capital generates. Obviously, a higher ratio would be more favorable because it means that more dollars of profits are generated by each dollar of capital employed.

For instance, a return of .2 indicates that for every dollar invested in capital employed, the company made 20 cents of profits.

Investors are interested in the ratio to see how efficiently a company uses its capital employed as well as its long-term financing strategies. Companies' returns should always be high than the rate at which they are borrowing to fund the assets. If companies borrow at 10 percent and can only achieve a return of 5 percent, they are loosing money.

Return on equity

The return on equity ratio or ROE is a profitability ratio that measures the ability of a firm to generate profits from its shareholders investments in the company. In other words, the return on equity ratio shows how much profit each dollar of common stockholders' equity generates.

So a return on 1 means that every dollar of common stockholders' equity generates 1 dollar of net income. This is an important measurement for potential investors because they want to see how efficiently a company will use their money to generate net income.

ROE is also and indicator of how effective management is at using equity financing to fund operations and grow the company.

The return on equity ratio formula is calculated by dividing net income by shareholder's equity.

Return on Equity Ratio

$$\text{Return on Equity Ratio} = \frac{\text{Net Income}}{\text{Shareholder's Equity}}$$

Interpretation- Return on equity measures how efficiently a firm can use the money from shareholders to generate profits and grow the company. Unlike other return on investment ratios, ROE is a profitability ratio from the investor's point of view—not the company. In other words, this ratio calculates how much money is made based on the investors' investment in the company, not the company's investment in assets or something else.

That being said, investors want to see a high return on equity ratio because this indicates that the company is using its investors' funds effectively. Higher ratios are almost always better than lower ratios, but have to be compared to other companies' ratios in the industry.

Earnings per share

Earning per share (EPS), also called net income per share, is a market prospect ratio that measures the amount of net income earned per share of stock outstanding. In other words, this is the amount of money each share of stock would receive if all of the profits were distributed to the outstanding shares at the end of the year.

Earnings per share is also a calculation that shows how profitable a company is on a shareholder basis. So a larger company's profits per share can be compared to smaller company's profits per share. Obviously, this calculation is heavily influenced on how many shares are outstanding.

Earnings per share or basic earnings per share is calculated by subtracting preferred dividends from net income and dividing by the weighted average common shares outstanding. The earnings per share formula looks like this.

Earnings Per Share

$$\text{Earnings Per Share} = \frac{\text{Net Income - Preferred Dividends}}{\text{Weighted Average Common Shares Outstanding}}$$

You'll notice that the preferred dividends are removed from net income in the earnings per share calculation. This is because EPS only measures the income available to common stockholders. Preferred dividends are set-aside for the preferred shareholders and can't belong to the common shareholders.

Interpretation- Earning per share is the same as any profitability or market prospect ratio. Higher earnings per share is always better than a lower ratio because this means the company is more profitable and the company has more profits to distribute to its shareholders.

EFFICIENCY RATIOS

Activity ratios assess the efficiency of operations of a business. For example, these ratios attempt to find out how effectively the business is converting inventories into sales and sales into cash, or how it is utilizing its fixed assets and working capital, etc. Key activity ratios are:

Inventory turnover ratio

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

The inventory turnover ratio is calculated by dividing the cost of goods sold for a period by the average inventory for that period.

Inventory Turnover Ratio

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

Interpretation- Inventory turnover is a measure of how efficiently a company can control its merchandise, so it is important to have a high turn. This shows the company does not overspend by buying too much inventory and wastes resources by storing non-salable inventory. It also shows that the company can effectively sell the inventory it buys.

Days sales outstanding

The days sales outstanding calculation, also called the average collection period or days' sales in receivables, measures the number of days it takes a company to collect cash from its credit sales.

The ratio is calculated by dividing the ending accounts receivable by the total credit sales for the period and multiplying it by the number of days in the period. Most often this ratio is calculated at year-end and multiplied by 365 days.

Days' Sales Outstanding

$$\text{Days' Sales Outstanding} = \frac{\text{Accounts Receivable}}{\text{Net Credit Sales}} \times 365$$

Interpretation- A lower ratio is more favorable because it means companies collect cash earlier from customers and can use this cash for other operations. It also shows that the accounts receivables are good and won't be written off as bad debts.

A higher ratio indicates a company with poor collection procedures and customers who are unable or unwilling to pay for their purchases. Companies with high days sales ratios are unable to convert sales into cash as quickly as firms with lower ratios.

Fixed asset turnover ratio

The fixed asset turnover ratio is an efficiency ratio that measures a companies return on their investment in property, plant, and equipment by comparing net sales with fixed assets. In other words, it calculates how efficiently a company is a producing sales with its machines and equipment.
he fixed asset turnover ratio formula is calculated by dividing net sales by the total property, plant, and equipment net of accumulated depreciation.

Fixed Asset Turnover

$$\text{Fixed Asset Turnover} = \frac{\text{Net Sales}}{\text{Fixed Assets - Accumulated Depreciation}}$$

Interpretation- A high turn over indicates that assets are being utilized efficiently and large amount of sales are generated using a small amount of assets. It could also mean that the company has sold off its equipment and started to outsource its operations. Outsourcing would maintain the same amount of sales and decrease the investment in equipment at the same time. A low turn over, on the other hand, indicates that the company isn't using its assets to their fullest extent.

OBJECTIVES OF PROJECT

- Understanding the basics of merger and acquisition
- Calculating various financial ratios and their analysis for Hindustan Petroleum Corporation Limited.
- To evaluate the financial performance of Hindustan Petroleum Corporation Limited in respect of liquidity, Solvency, Efficiency and Profitability.
- To study effect of acquisition of Hindustan Petroleum Corporation Limited by Oil and Natural Gas Corporation Limited.

CHAPTER-3

RESEARCH METHODOLOGY

RESEARCH METHODOLOGY

Research methodology process includes a number of activities to be performed. These are arranged in proper sequence of timing for conducting research. One activity after another is performed to complete the research work. Research methodology includes the following steps:

Sources of Data

For the study purpose both primary and secondary data are used. The primary data collected from sales men of the companies, customers and dealers dealing in the products of the company. The secondary data collected from records of the company, retailers and dealers. The data of past sales also have been collected. The primary and secondary data have been collected to cover every aspect of the study. The primary data are related to behaviour and response of employees, dealers and customers. The secondary data shows the sales of the company product wise. These data used in combination as per need of the study. These data having different merits and demerits and have serves our purpose of the research study.

These are explained below:

(a) Primary Data

Primary data are information collected by a researcher specifically for a research assignment. In other words, primary data are information that a company must gather because no one has compiled and published the information in a forum accessible to the public. Companies generally take the time and allocate the resources required to gather primary data only when a question, issue or problem presents itself that is sufficiently important or unique that it warrants the expenditure necessary to gather the primary data.

Primary data are original in nature and directly related to the issue or problem and current data. Primary data are the data which the researcher collects through various methods like interviews, surveys, questionnaires etc. The primary data have own advantages and disadvantages:

(i) Advantages of primary data:

• The primary data are original and relevant to the topic of the research study so the degree of accuracy is very high.

• Primary data is that it can be collected from a number of ways like interviews, telephone surveys, focus groups etc. It can be also collected across the national borders through emails and posts. It can include a large population and wide geographical coverage.

• Moreover, primary data is current and it can better give a realistic view to the researcher about the topic under consideration.

• Reliability of primary data is very high because these are collected by the concerned and reliable party.

(ii) Disadvantages of primary data:

• For collection of primary data where interview is to be conducted the coverage is limited and for wider coverage a more number of researchers are required. • A lot of time and efforts are required for data collection. By the time the data collected, analysed and report is ready the problem of the research becomes very serious or out dated. So the purpose of the research may be defeated.

• It has design problems like how to design the surveys. The questions must be simple to understand and respond.

• Some respondents do not give timely responses. Sometimes, the respondents may give fake, socially acceptable and sweet answers and try to cover up the realities.

• With more people, time and efforts involvement the cost of the data collection goes high. The importance of the research may go down.

• In some primary data collection methods there is no control over the data collection. Incomplete questionnaire always give a negative impact on research.

• Trained persons are required for data collection. In experienced person in data collection may give inadequate data of the research.

(b) Secondary Data

Secondary data are the data collected by a party not related to the research study but collected these data for some other purpose and at different time in the past. If the researcher uses these data then these become secondary data for the current users. These may be available in written, typed or in electronic forms. A variety of secondary information sources is available to the researcher gathering data on an industry, potential product applications and the market place. Secondary data is also used to gain initial insight into the research problem. Secondary data is classified in terms of its source – either internal or external. Internal, or in-house data, is secondary information acquired within the organization where research is being carried out. External secondary data is obtained from outside sources. There are various advantages and disadvantages of using secondary data.

(i) Advantages of Secondary Data:

• The primary advantage of secondary data is that it is cheaper and faster to access.

• Secondly, it provides a way to access the work of the best scholars all over the world.

• Thirdly, secondary data gives a frame of mind to the researcher that in which direction he/she should go for the specific research.

• Fourthly secondary data save time, efforts and money and add to the value of the research study.

(ii) Disadvantages of Secondary data:

• The data collected by the third party may not be a reliable party so the reliability and accuracy of data go down.

• Data collected in one location may not be suitable for the other one due variable environmental factor.

• With the passage of time the data becomes obsolete and very old

• Secondary data collected can distort the results of the research. For using secondary data a special care is required to amend or modify for use.

• Secondary data can also raise issues of authenticity and copyright.

Keeping in view the advantages and disadvantages of sources of data requirement of the research study and time factor, secondary data have been selected.

FINANCIAL RATIO ANALYSIS

Current Ratio

Year	Current Ratio
2007-2008	1.03
2008-2009	0.93
2009-2010	0.74
2010-2011	0.77
2011-2012	0.66
2012-2013	0.68
2013-2014	0.73
2014-2015	0.61
2015-2016	0.53
2016-2017	0.54

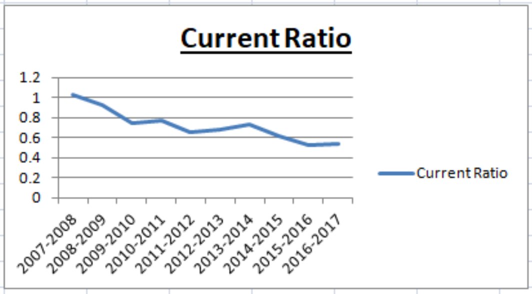


Figure 5 Current Ratio

Analysis

The table no. 1 shows that the current ratio of the company is below the standard norms of the current account ratio i.e. 2:1. In the year 2007-08, the current ratio is recorded highest during the study period i.e. 1.03 and 0.53 is lowest in the year 2015-16. With the help of analysis it is found that the liquidity position of the HPCL is not meeting with the standard norms of the liquidity ratio. The graph of the current ratio from 2007-08 to 2016-17. Here, X-axis represents the year and the value of ratios are represented on the Y-axis. Moreover, the figure indicates the actual position of the current.

A ratio under 1 indicates that a company's liabilities are greater than its assets and suggests that the company in question would be unable to pay off its obligations if they came due at that point. While a current ratio below 1 shows that the company is not in good financial health, it does not necessarily mean that it will go bankrupt.

Quick Ratio

Year	Quick Ratio
2007-2008	0.51
2008-2009	0.53
2009-2010	0.43
2010-2011	0.44
2011-2012	0.52
2012-2013	0.71
2013-2014	0.57
2014-2015	0.31
2015-2016	0.3
2016-2017	0.27

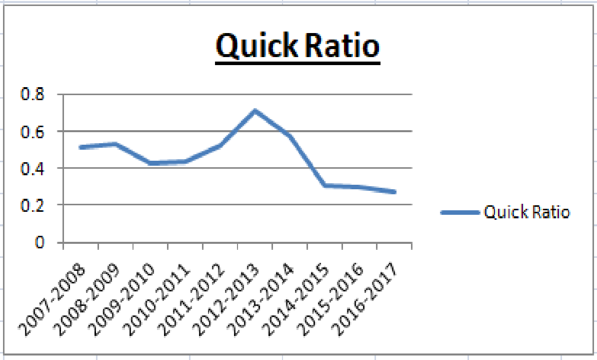


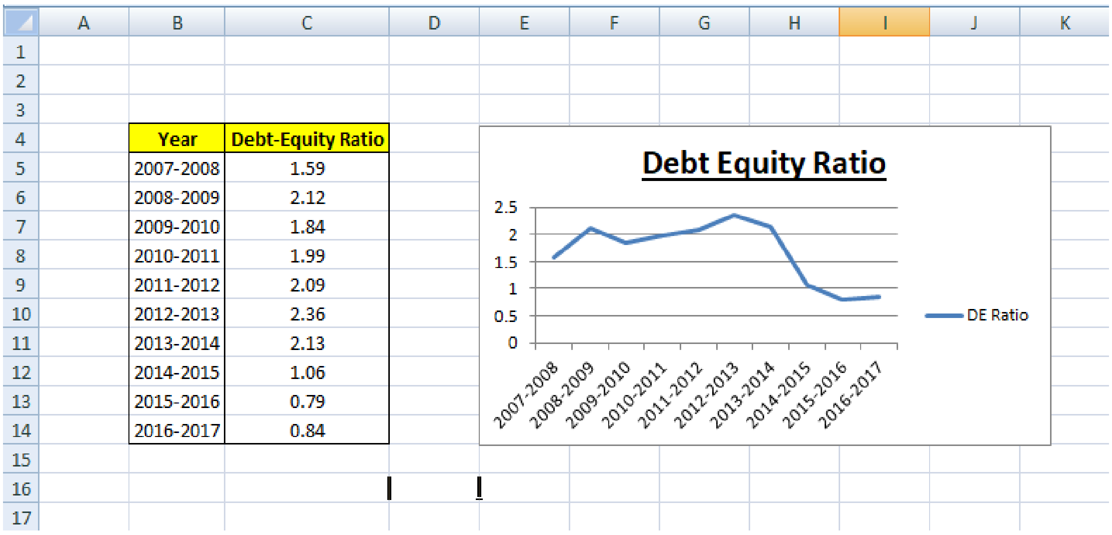
Figure 6 Quick Ratio

Analysis

The table no. 1 shows that the quick ratio of the company is below the standard norms of 2:1. In the year 2012-13, the quick ratio is recorded highest during the study period i.e. 0.71 and 0.27 is lowest in the year 2016-17. With the help of analysis it is found that the liquidity position of the HPCL is not meeting with the standard norms of the liquidity ratio. The graph of the quick ratio from 2007-08 to 2016-17. Here, X-axis represents the year and the value of ratios are represented on the Y-axis.

While a quick ratio lower than 1 does not necessarily mean the company is going into default or bankruptcy, it could mean that the company is relying heavily on inventory or other assets to pay its short term liabilities.

Debt Equity Ratio



Year	Debt-Equity Ratio
2007-2008	1.59
2008-2009	2.12
2009-2010	1.84
2010-2011	1.99
2011-2012	2.09
2012-2013	2.36
2013-2014	2.13
2014-2015	1.06
2015-2016	0.79
2016-2017	0.84

Figure 7 Debt Equity Ratio

Analysis

The table no. 2 reveals that the debt-equity ratio recorded highest in the year 2012-13 i.e. 2.36 and lowest is found in the year 2015-16 i.e. 0.84. Moreover, on the basis of research data it is found that the debt-equity ratio remains above the 1 to 1 ratio. The increasing trend of debt-equity ratio shows that the company is using more debt in the business with some fluctuations. Also from 2013-2014 debt equity ratio starts decreasing showing that less amount of debt is used in the business. A lower debt to equity ratio usually implies a more financially stable business.

Interest Coverage Ratio

Year	Interest Coverage Ratio
2007-2008	2.15
2008-2009	1.53
2009-2010	3.61
2010-2011	3.37
2011-2012	1.55
2012-2013	1.67
2013-2014	3
2014-2015	6.87
2015-2016	9.97
2016-2017	17.84

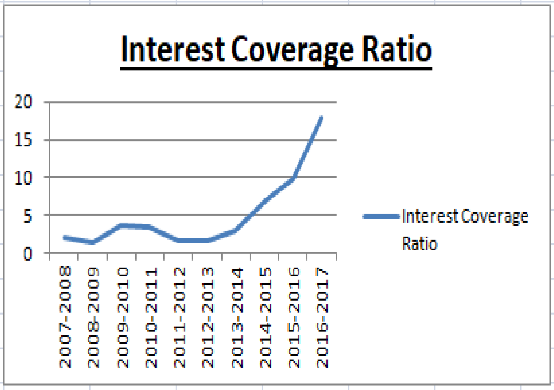


Figure 8 Interest Coverage Ratio

Analysis

In the case of interest coverage ratio high ratio is considered beneficial for the long term creditors. The interest coverage ratio was very high in the year 2016-17 i.e. 17.84. It shows a very high interest of payment is made to lenders. Higher ratio attracts more outsider funds. But, in the year 2008-09 the interest coverage ratio was very low i.e. 1.53. Meanwhile, before 2011-2012 it can be seen that interest coverage ratio was in fluctuating mood. On the other hand after 2011-12 it is found that the interest coverage ratio keeps on increasing.

Long Term Debt Equity Ratio

Year	Long Term Debt Equity Ratio
2007-2008	1.19
2008-2009	1.79
2009-2010	1.02
2010-2011	1.1
2011-2012	0.48
2012-2013	0.65
2013-2014	1.04
2014-2015	0.93
2015-2016	0.58
2016-2017	0.31

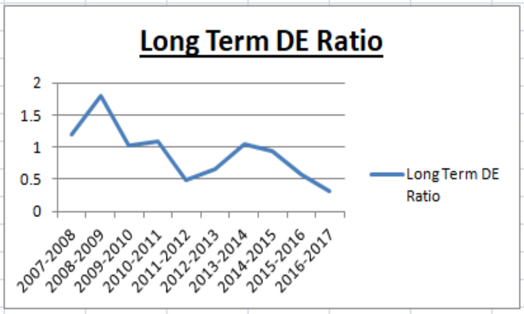
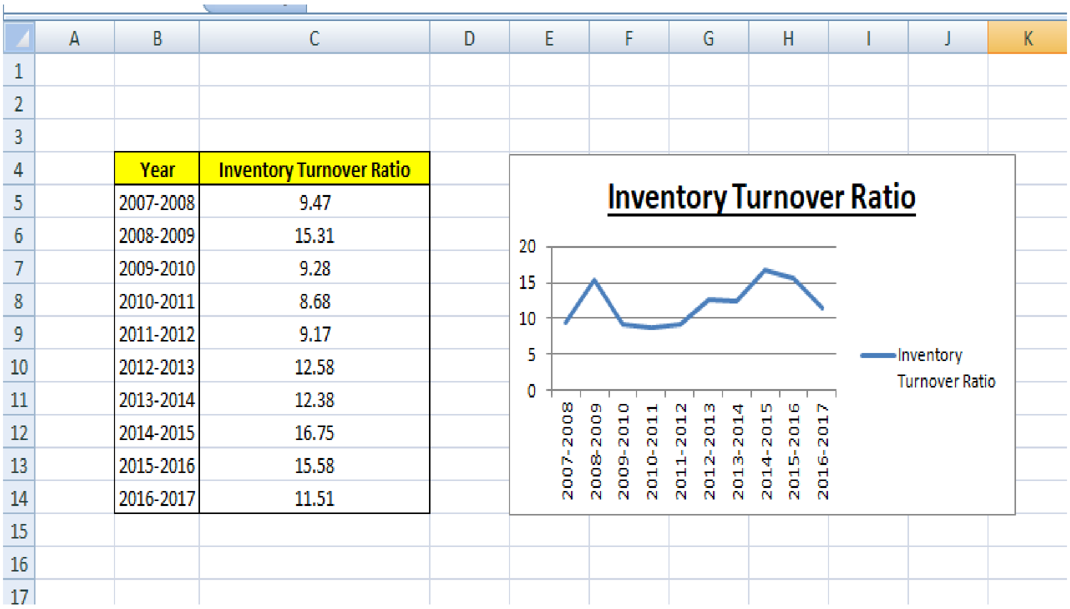


Figure 9 Long Term Debt Equity Ratio

Analysis

In the case of long term debt equity ratio remains below 2 in times. The highest ratio was recorded in 2008-09 i.e. 1.79. But, in the year 2016-17 the long term debt equity ratio was very low i.e. 0.31, which indicates the less used of long term debts in the business.

Inventory Turnover Ratio



Year	Inventory Turnover Ratio
2007-2008	9.47
2008-2009	15.31
2009-2010	9.28
2010-2011	8.68
2011-2012	9.17
2012-2013	12.58
2013-2014	12.38
2014-2015	16.75
2015-2016	15.58
2016-2017	11.51

Figure 10 Inventory Turnover Ratio

Analysis

The efficiency ratios estimated that how effectively a firm is using its assets. In the case of inventory turnover ratio, a high inventory turnover ratio indicates good inventory management. The inventory turnover ratio is maximum in the year of 2014-15 i.e. 16.75. The ITR is lowest in the year of 2010-11 i.e. 8.68. In inventory turnover ratio we couldn't found uniformity in the management of the inventory.

Debtors Turnover Ratio

Year	Debtors Turnover Ratio
2007-2008	63.44
2008-2009	63.23
2009-2010	45.87
2010-2011	52.33
2011-2012	57.35
2012-2013	48.64
2013-2014	42.93
2014-2015	45.57
2015-2016	46.07
2016-2017	45.3

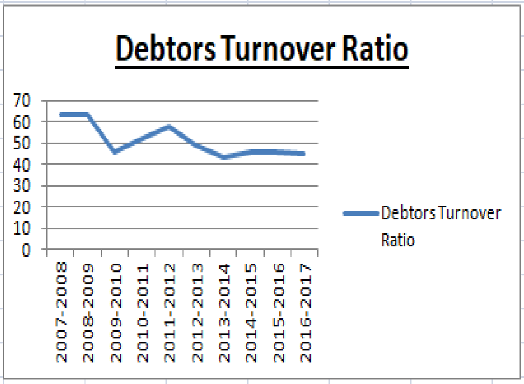
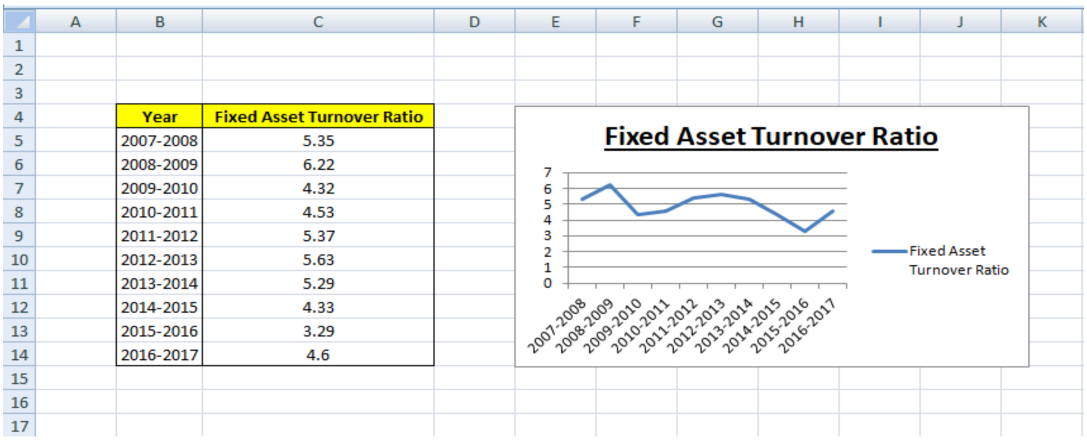


Figure 11 Debtors Turnover Ratio

Analysis

The debtor turnover ratio is recorded satisfactory. The debtors turnover ratio is maximum in the year of 2007-08 i.e. 63.44. The debtors turnover ratio is lowest in the year of 2013-14 i.e. 42.93. Debtors turnover ratio shows a decreasing trend over the years.

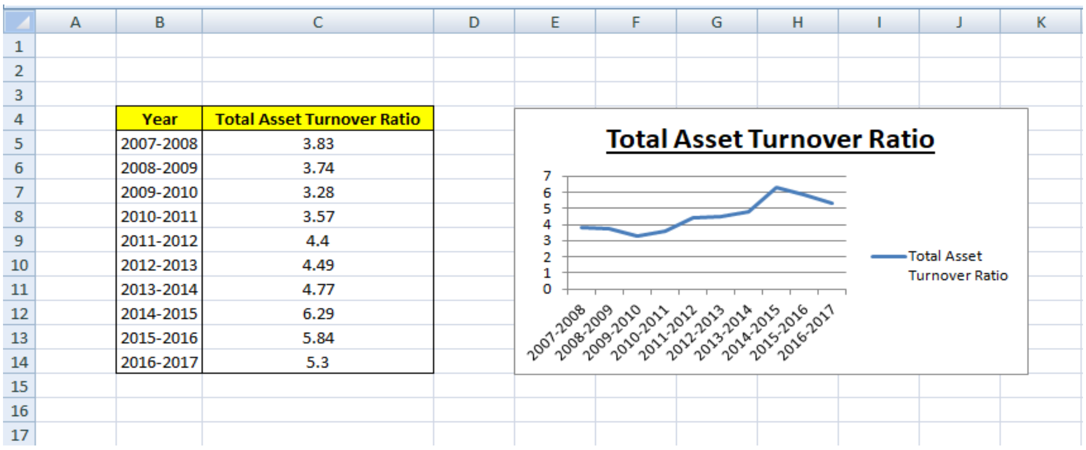
Fixed Asset Turnover Ratio



Year	Fixed Asset Turnover Ratio
2007-2008	5.35
2008-2009	6.22
2009-2010	4.32
2010-2011	4.53
2011-2012	5.37
2012-2013	5.63
2013-2014	5.29
2014-2015	4.33
2015-2016	3.29
2016-2017	4.6

Figure 12 Fixed Asset Turnover Ratio

Total Asset Turnover Ratio



Year	Total Asset Turnover Ratio
2007-2008	3.83
2008-2009	3.74
2009-2010	3.28
2010-2011	3.57
2011-2012	4.4
2012-2013	4.49
2013-2014	4.77
2014-2015	6.29
2015-2016	5.84
2016-2017	5.3

Figure 13 Total Asset Turnover Ratio

Analysis

The fixed assets to turnover ratio and total assets to turnover ratio highest recorded 8.23, 6.22 and 6.29 in the year 2008 -09 and 2014-15 respectively. In all the efficiency ratios we couldn't found uniformity in the management of the assets. It means unevenly these ratios managed very efficiently and effectively.

A high turn over indicates that assets are being utilized efficiently and large amount of sales are generated using a small amount of assets. It could also mean that the company has sold off its equipment and started to outsource its operations.

Operating Profit Margin

Year	Operating Profit Margin
2007-2008	1.77
2008-2009	2.63
2009-2010	3.08
2010-2011	2.49
2011-2012	2.31
2012-2013	2.06
2013-2014	2.34
2014-2015	2.74
2015-2016	4.4
2016-2017	5.65

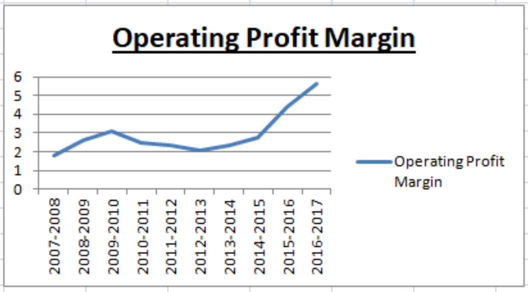


Figure 14 Operating Profit Margin

Analysis

The table no. 4 reveals that the operating profit margin was highest in the year 2016-17 i.e. 5.65. It shows a fluctuation initially then it starts increasing and reaches up to 5.65 in the year 2016-17. It may happen due rise in the sales.

Gross Profit Margin

Year	Gross Profit Margin
2007-2008	0.95
2008-2009	1.84
2009-2010	2
2010-2011	1.43
2011-2012	1.35
2012-2013	1.1
2013-2014	1.35
2014-2015	1.78
2015-2016	2.92
2016-2017	4.29

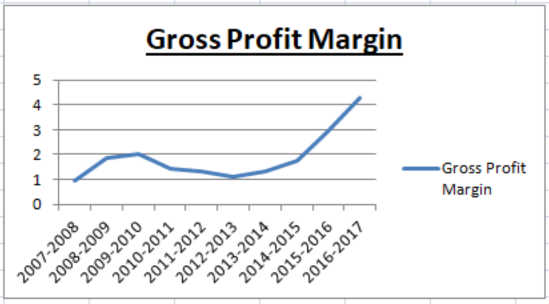


Figure 15 Gross Profit Margin

Analysis

The gross profit margin shows a very high fluctuation trend of HPCL since 2007-08. The highest ratio of gross profit margin is recorded in the year 2016-17 i.e. 4.29. After 2012-2013 the gross profit margin started to show increasing trend and touched 4.29 in the year 2016-17 from 1.1 in the year 2012-13. It may be due to the decrease in cost of goods sold.

Net Profit Margin

Year	Net Profit Margin
2007-2008	1.08
2008-2009	0.45
2009-2010	1.21
2010-2011	1.15
2011-2012	0.51
2012-2013	0.43
2013-2014	0.77
2014-2015	1.31
2015-2016	2.15
2016-2017	3.31

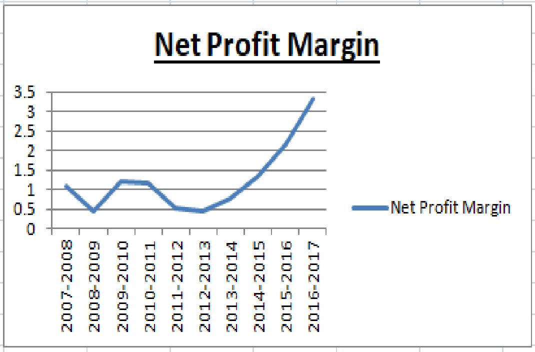


Figure 16 Net Profit Margin

Analysis

In the case of net profit ratio the highest net profit margin is recorded in the year 2016-17 i.e. 3.31. It also not shows a good result for the company. The net profit ratio remains less than 1% in various years. A higher margin is always better than a lower margin because it means that the company is able to translate more of its sales into profits at the end of the period.

Since net profit margin shows an increasing trend since 2011-12, this shows that the company is able to translate more of its sales into profit.

Return on Capital Employed

Year	Return on Capital Employed
2007-2008	6.23
2008-2009	9.48
2009-2010	9.91
2010-2011	7.93
2011-2012	8.48
2012-2013	7.31
2013-2014	8.54
2014-2015	14.68
2015-2016	19.41
2016-2017	25.47

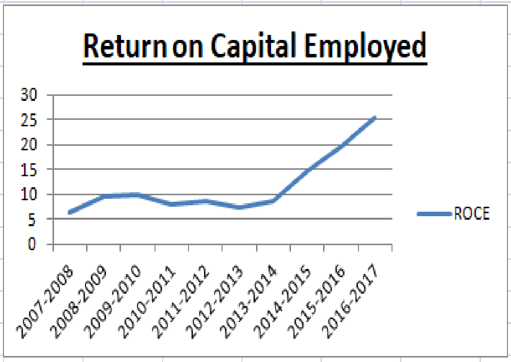


Figure 17 Return on capital employed

Analysis

The return on capital employed indicates the return on investment. The high ratio is considered beneficial for the company. The highest ROCE is found in the year 2016-17 i.e. 25.47. On the other hand, the lowest return on capital employed was recorded in the year 2007-08 i.e.6.23. Initially it shows a uniformity in the performance of the company and then shows an increasing trend since 2012-13. Obviously, a higher ratio would be more favorable because it means that more rupee of profits are generated by each rupee of capital employed.

HPCL's acquisition by ONGC

The acquisition of HPCL by ONGC will help the government realise nearly $4.5 billion for its 51% stake in HPCL. That will surely go a long way in helping the government meet this year's divestment target of $12 billion. But this acquisition is much beyond that. This acquisition needs to be seen in the light of the government's efforts to move towards greater self-sufficiency in oil consumption. Currently, India depends on global crude imports for meeting nearly 85% of its daily crude oil requirement. This could create a peculiar situation in the event of geopolitical troubles which could impede the traditional trade routes for oil. For this it is essential to ensure that the government retains a semblance of control over these oil companies; either directly or indirectly. By making HPCL a subsidiary of ONGC, the government will be able to raise money for its divestment targets but at the same time the indirect control over oil will continue to predominantly reside with the government.

The oil extraction capacity of ONGC is substantially lower when compared to global giants like Exxon, Shell, Aramco and China Petro. Growing India's oil capacity organically will be too time consuming and may not be a feasible solution. The answer will be inorganic growth. For Indian oil companies to even think of acquisition of oil properties in other countries will require a much bigger balance sheet. The acquisition of HPCL by ONGC may just be the beginning. A larger merger and acquisition of oil companies will give the holding company a much bigger balance sheet to leverage and raise the necessary resources to undertake major global acquisitions. It is from this larger inorganic perspective that this acquisition of HPCL by ONGC needs to be seen.

The good news from the perspective of HPCL shareholders is that HPCL became a subsidiary of ONGC. As a majority shareholder of HPCL, it will be within the means of ONGC to leverage the balance sheet of HPCL. The apprehension is that a full merger would not have been valued accretive to the shareholders of HPCL, which has enjoyed a 900% appreciation in price in the last 3 years. That is because; HPCL and BPCL have been the two biggest beneficiaries of the free pricing of petrol and diesel. Since HPCL just became a subsidiary of ONGC, the twin purposes of a bigger balance sheet of ONGC and protecting the interests of HPCL shareholders is met.

Why HPCL and not BPCL?

BPCL or Bharat Petroleum Corporation Ltd. is India's second largest fuel retailer. On the other hand HPCL or Hindustan Petroleum Corporation Ltd. is the third largest. In order to acquire any of these companies, ONGC has to buy at least 51% stake. Their positions in the oil market are as follows:

1. **BPCL** | 2nd largest | **Market Cap**: Rs. 1,01,738 crore | **Govt's desired stake:** 54.93% | equals to Rs. 55,885 crore |

2. **HPCL** | 3rd largest | **Market Cap**: Rs. 54,797 crore | **Govt's desired stake:** 51.11% | equals to Rs. 28,006 crore |

Since BPCL is too expensive for ONGC to acquire, it is going for HPCL.

Integrated oil company

India has 6 major oil companies - 2 oil producers (ONGC & Oil India), 3 refiners (IOC, HPCL & BPCL) and 1 midstream gas transportation company (GAIL). An integrated oil company can perform multiple operations from oil exploration and production to refining. With the help of this acquisition, ONGC will become the third-largest refiner in the country.

Benefits of the acquisition:

The benefits lie for ONGC as it'll help it become a global oil competitor:

1. It will be able to compete with international and domestic oil companies.
2. Added oil refining capacity of 23.8 million tonnes per annum.
3. As an integrated oil company, it will add more value to the economy.
4. It will be able to better shield itself from volatile crude oil market.
5. Its earnings will smoother than before due to an integrated business.
6. A stronger composite balance sheet and portfolio.
7. It will be better able to bid for oil fields globally.
8. That will prevent oil shocks for India in future.

The Government of India entered into an agreement with ONGC on January 20, 2018 for sale of its 51.11% equity shareholding in HPCL at a consideration of Rs. 36,915 crore. This is in line with the Budget announcement 2017-18 to create oil majors in the country. This has completed the successful implementation of the Budget announcement in a time bound manner.

ONGC-HPCL integration is the first innovative vertical integration that will help leveraging the strength of both the companies. Through this acquisition, ONGC will become India's first vertically integrated 'oil major' company, having presence across the entire value chain. The group company will have advantage of having enhanced capacity to bear higher risk, take higher investment decisions and improve business.

ONGC-HPCL integration offers huge potential to attain economies of scale at various levels of operations and consolidation in petrochemical and refining business. The group company will leverage the financial strength and diversify business portfolio in upstream, midstream and downstream sectors. HPCL will continue to be a Board-managed Central Sector Public Enterprise and will maintain its distinct identity and brand value.

CONCLUSION

The present study reveals that HPCL came into existence with the objectives of earning profit on one side and rendering the services towards society on the other side. However, an analysis of financial performance shows that the company's ability to meet its current obligations is not satisfactory. Meanwhile, the management of company should focus on profitability. In the case of profitability ratios it was found to be fluctuating. In the light of above conclusion it is suggested that company should pay attention towards the management of liquidity position also. The current and quick ratios were not found with the standard norms of the liquidity ratio. The company may either increase its current assets or reduce current liabilities. In order to enhance the profitability the management should focus on to control cost of sales and other direct and indirect expenses.

Also, solvency ratio gives positive results, as debt equity ratio shows decreasing trend in last few years showing less use of debt in business and interest coverage ratio shows increasing trend showing that large amount of interest is paid. Efficiency ratio were also recorded satisfactory, hinting towards the efficient and effective use of resources by management.

Profitability ratios shows fluctuating trend initially, but in last few years they were increasing hinting towards better profit generation by the company which might be due to increased sales or decrease in cost of goods sold.

Return on capital employed shows uniformity before it started increasing since 2012-13, which is favourable too because it means that more rupee of profits are generated by each rupee of capital employed.

ONGC is an upstream company whose top line and bottom line moves in tandem with crude oil price while reverse is the case for downstream company like HPCL. Together, this is going to provide a stable income and also higher risk appetite.

Synergies in the deal

On the face of it, the deal is merely transactional as both companies are already under the majority government holding. With a vertical integration in the value chain between an oil explorer and an oil marketer, the deal provides an opportunity to

HPCL for backward integration which would help in sourcing stable crude for its refineries in the current time of rising oil prices and help in protecting margins. For ONGC, it will enable integration with a major OMC (oil marketing company) and provide access to end markets for its products. It will also help them in bidding together for bigger global oil fields which are often outside their reach bringing in economies of scale.

When we talk about the ONGC's group company MRPL, HPCL has a very well established marketing network. Last fiscal, they marketed more than 35 million tonnes of refined products and their total refining capacity is way below this number whereas in case of MRPL they do not have any marketing set up. Now, this existing marketing network of HPCL can also be used to market refined products from MRPL. So, this number one. Number two, both MRPL and HPCL procure crude oil from overseas. Together they can get a better price for the crude oil. Number three, ONGC is a primarily upstream company and their top line and bottom line moves in tandem with the crude oil price and reverse is the case in case of downstream companies like MRPL and HPCL.

At the group level, this is going to provide a stable income. This is another aspect and major advantage of consolidation. If you look at the balance sheet, this will give them a higher risk appetite and probably at a group level, they should be able to leverage it for any acquisition or future growth of any of these companies.

I believe that this will be vital for India's energy sector in India as having a presence in both upstream and downstream will help us to deal with the volatility in crude oil prices in a better way.

Last, but not the least, the consolidation will also de-risk the business model of ONGC. An inordinately large focus on crude oil extraction will make ONGC vulnerable to weak oil prices. With the OPEC cuts ineffective and countries like the US, Nigeria and Libya flooding the oil market, pressure on oil prices may be here to stay. By creating a single conglomerate spanning the entire value chain of hydrocarbons, model can be substantially de-risked.

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