JOHNSON
Cornell University

August 29, 2012

**OIL AND NATURAL GAS COMPANY OF INDIA:
TROUBLE OFF THE VIETNAMESE COAST IN 2011[1]**

On September 15th 2011, the Chinese government issued diplomatic protests directed toward India over the continued exploration by the state-controlled Oil and Natural Gas Company (ONGC) of India in Blocks 127 and 128 off the Vietnamese coast in South China Sea[2]. Many years of conflict between China, Vietnam, and other Southeast Asian countries over territorial rights in the waters of the South China Sea had escalated, with a high potential for the conflict to boil over in regional and even global instability. One week earlier, the government of India had filed a prospectus for a secondary issue of 5% of its stake in ONGC to raise US$2.5 billion to help fill dwindling government coffers (**Exhibit 1**). While the Indian government was dealing with a rising fiscal deficit and inflationary fears, its long-term interests were to manage energy security to fuel its rapidly growing economy. Chinese diplomatic protests could threaten the security of ONGC's assets and create doubts in their investors' minds. Given that previous equity issues of energy companies in India were highly oversubscribed, the government had to decide whether or not to go ahead with the secondary offering.

The Company & the Indian Oil Sector

ONGC was founded in 1956 by the government of India under the provisions of a legislative act to develop, produce and sell petroleum products within India.[3] Starting with a few oil fields in Digboi in northeast India, ONGC transformed India's upstream sector by developing onshore fields in the western state of Gujarat and the Assam-Arakan Basin in northeastern India. In 1974, ONGC discovered a giant oil field 75 kilometers (kms) long and 25 kms wide off the coast of Bombay, which subsequently helped catapult the company into major offshore energy development. As part of an economic liberalization program initiated in the 1990s, the Indian government launched an initial public offering (IPO) of ONGC on the Bombay Stock Exchange (BSE) in 1994, offloading a 20% stake in the company and making ONGC the largest Indian company by market capitalization.

ONGC is currently ranked second worldwide among global exploration and production (E&P) companies, behind the China National Offshore Oil Corporation (CNOOC) in terms of total assets. With a market capitalization of US$47 billion, it is the second largest Indian company behind Reliance Industries Limited, a conglomerate ranging in expertise from energy to retail. ONGC is a Fortune 500 company and the largest public-sector company in India with a net income of US$4.3 billion on revenues of US$22.6 billion in 2010. The company has over 32,000 employees and is global with operations in 15 countries

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[1] This case was prepared by Armina Hakobyan, Gokul Rajagopalan, Gopal Bethmangalkar, and Jeff West under the supervision of Professor Andrew Karolyi. It was written as a basis for class discussion rather than to illustrate effective or ineffective handling of an administrative situation. Original version is dated August 29, 2012; current version is dated April 8, 2015.

[2] Jeremy Page. "India Faces Stand-Off With China on Sea Oil." *Wall Street Journal*. 23 September 2011.

[3] See the company website for Oil & Natural Gas Company of India for company statistics (www.ongcindia.com).

outside India. ONGC specializes in "upstream activities" in the petrochemical chain and does not directly engage in the retail sale of petroleum products. It primarily caters to domestic demand in India where downstream production is handled by other state-owned companies including Indian Oil, Bharat Petroleum and Hindustan Petroleum. To date, India has been a net importer of oil and it supports consumption of 2,980,000 barrels per day against production of only 878,000 barrels per day. In addition, the government controls production and pricing through the Administered Pricing Mechanism (APM). Through the APM, ONGC subsidizes over 30% of its revenues to downstream operations, thus reducing its overall profitability. Investors have historically complained about these subsidies and have expressed concern that with an ever increasingly lower ownership stake, the government may not be able to pressure ONGC as easily through the APM program.[4]

Company Ownership

As of July 2011, the Indian government owns 74.14% of ONCG shares, with government owned oil and financial institutions maintaining an additional 7.37% stake in the company (**Exhibit 2**). Foreign institutional investors and the Indian public make up the marginal investors, with private investors showing significant interest in ownership of the well-run public sector undertaking. However, the key strategies of ONGC are determined mainly by the Ministry of Petroleum. In 2005, the Ministry vetoed ONGC's plans of expanding into the downstream sector and stopped them from setting up retail locations. Furthermore, licensing policies and regulations govern exploration licenses, petroleum pricing, and industry development. Due to government pressure, ONGC subsidizes oil prices up to 33% of market price of oil when selling to downstream companies in India.[5]

ONGC is only listed on the Bombay Stock Exchange (BSE) and is one of the most actively traded stocks. The BSE was one of the poorer performers among the constituents of the MSCI Emerging Markets for 2011, with a rank of 20th among 23 countries included. The benchmark index Sensex had shed almost 12% in the last 12 months, though the long-term returns were over 18%. Additionally, the Reserve Bank of India (RBI) has been aggressively moving to control inflation by increasing short term lending rates 8 times in the last 12 months, up to 8%.

Vietnamese Partnership & International Assets

ONGC's first overseas venture dates back to a highly successful 1988 production-sharing contract in Block 6.1 in Vietnam, producing over 50% of Vietnam's natural gas requirements. The following year ONGC established ONGC Videsh (OVL), a 100% subsidiary to control overseas assets.[6] Since then, OVL has won exploration and drilling rights individually and as a consortium. Over the last 23 years, OVL expanded operations globally to over 33 projects in 14 countries. Key overseas production facilities include Vietnam, Russia, Sudan, Syria, and Venezuela. However, many of OVL's exploratory fields are located in politically sensitive zones such as Libya, Iraq, Egypt, and Myanmar. The recent deterioration of the political situation in Libya, Egypt, and Iraq forced OVL to relinquish fields in those countries. In this context, therefore, existing exploratory rights in Russia, Venezuela, Brazil, and Vietnam have become much more critical to OVL's operations (**Exhibit 3** outlines ONGC's global footprint).

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[4] Adit Mathai. "Oily Conundrum." *Outlook Business.* 18 August 2012.

[5] Ramkrishna Kashelkar. "ONGC: Subsidy burden, OVL production are near-term concerns." *The Economic Times.* 9 February 2012

[6] See ONGC Videsh Limited (OVL) website for historical references (www.ongcvidesh.com).

Block 6.1 in Vietnam is the largest overseas production facility with over 2.25 billion cubic meters (BCM) of gas produced and over 11.2 billion barrels of oil equivalent (BBOE).[7]

Exploration and Production Industry

Oil and gas provide over 50% of global energy needs and are an integral part of every economy. The industry is highly profitable and in 2010, 4 of the 5 largest companies worldwide by revenue were from the oil and gas industry, with combined revenues of $1.3 trillion dollars. The industry has two broad types of companies: International Oil Companies (IOC) and National Oil Companies (NOC). IOCs allow public shareholding and are characterized by large companies with a market capitalization of over US$100 billion. In the 1970s, many countries nationalized oil assets, leading to the formation of government owned and controlled NOCs. Governments exercise tight control on NOCs and determine production, export, and domestic pricing of petroleum products. The largest NOCs in the Middle East together constitute a cartel known as the Organization of Petroleum Exporting Countries (OPEC) that controls over 40% of worldwide oil production. The industry's fortunes are often a cause or a consequence of events related to political stability and geopolitical relationships. In today's intertwined world economy, the oil market is sensitive to fluctuations in demand, supply, currency exchange rates, and a host of other indirect factors.

The oil and gas value chain is segmented into "upstream" exploration and production (E&P) activities, "midstream" transportation and pipelines, and "downstream" refining and retail sales. Exploration is a very expensive operation as costs can run into hundreds of millions of dollars before any revenues are achieved. High capital expenditures and uncertainty of cash flows from the investment are the primary reasons for oil companies to price and operate at high margins during favorable times. With such reserves getting harder to find on land, companies are increasingly looking to the seas; continental shelves have proven rich in oil and gas reserves.

Oil exploration companies are valued on the basis of their production, quality, and amount of reserves measured in terms of reserve replacement ratio or reserve life and other upstream performance measures such as exploration costs, development costs, and production costs. Oil exploration companies also need to be acutely aware of the consequences of their actions on the environment. As seen with the Exxon Valdez accident in Alaska in 1989 and British Petroleum's Deepwater Horizon explosion in the Gulf of Mexico in 2010, an oil-spill from a tanker or rig-explosion can adversely impact the marine ecosystem. The costs of such events must be factored in by the E&P companies, not only in terms of lost revenues but also the cost of clean-up and intangibles like public outrage. Avoidance of accidents and spills implies higher costs of exploration and production.

Offshore Exploration Process

A "block" is an area of land or sea where E&P rights are granted. Once an E&P company wins the rights to develop a block, the first step is to locate potential oil and gas reserves. This is typically accomplished by seismic surveys. If oil is detected by analysis of a seismic survey, extensive environmental impact studies are generally required before any drilling can commence. Typical exploration activity takes about 18-24 months. The success rate at finding oil reserves of commercially significant sizes is less than 10%. Unofficial estimates put the cost of 3-D sensing at $20,000-$25,000 per square kms. If the impact estimates satisfy regulations, the E&P company moves to set up a Mobile Offshore Drilling Unit (MODU) for exploratory drilling (**Exhibit 4**). A MODU is a submersible or floating unit whose primary function is to drill deep enough to hit oil. Given that MODUs are temporary

[7] Billion Cubic Meters (BCM) and Billion Barrels of Oil Equivalent (BBOE) are widely used industry metrics for measuring energy reserve and production quantities for oil and natural gas.

in their utility, they are generally leased at a cost of about $40,000 per day. For the period of exploration the average leasing cost of MODUs is in the range of $4-8 million per year. If a sufficient reserve of oil is found, the MODU makes way for a permanent production platform.

The permanent production platform ensures stability of the piping and includes pumps, pipes, and other infrastructure required to bring the oil to the surface. Depending on the distance of the rig from the shore, the oil may be transported by pipelines or by tanker ships back to refineries where the crude oil is distilled into its various components like gasoline, diesel, kerosene, naphtha, and tar. Building permanent rigs and the associated facilities is an expensive undertaking, starting at around US$10 million and increasing depending on size and location.

South China Sea

The South China Sea is a body of water in the southwestern Pacific Ocean stretching from the Straits of Melaka near Singapore to the Straits of Taiwan. It encompasses over 1.4 million square miles of open water and sees more than one third of the world's seaborne shipping traffic annually. The South China Sea lies at a strategic cross-roads with conflicting claims of ownership between nearly all of its bordering nations, including China, Taiwan, Malaysia, Brunei, Indonesia, Singapore, Vietnam, and the Philippines.

Historically, the economic importance of the South China Sea has laid in the abundant biodiversity resultant from its position at the confluence of the Indian and Pacific Oceans. This has resulted in an abundance of vital fisheries stocks. However, when large reserves of fossil fuels were discovered under the seas in the 1990s, it prompted many countries to reassess their territorial claims. Vying nations quickly developed small, uninhabited, and loosely claimed islands overnight, turning them from refueling and supply depots for fishing fleets into armed military outposts. Analysts estimate the region to contain oil reserves in the neighborhood of 7.5 billion barrels in total, with additional natural gas reserves estimated to total around 145.5 trillion cubic feet.

Phu Kanh Basin

Vietnam's growth in the late 1990s can be linked to its export of oil and gas resources. British Petroleum (BP) was a key partner during the initial set-up stages of PetroVietnam in providing technology and governance. PetroVietnam had granted exploration rights to BP for the Phu Kanh Basin, approximately 140 miles from Vietnam's coast and at water depths of 50-2,500 meters. In 2006, as the basin was previously unexplored and no wells had been drilled, PetroVietnam chose a bidding route to sell rights for 9 blocks at an average area of 7000 square kms per block. The reserves in the basin were estimated at 2.5 billion barrels of oil and 18 trillion cubic feet of gas. Out of the 9 bids presented, ONGC's proposal was accepted. OVL signed a production-sharing contract with Vietnam to obtain 7 years of exploration and 30 years of production rights. The rights included an option for Petro Vietnam to take up to 20% participating interest in operations if oil was discovered in the blocks.

China's Nine Dotted Lines Policy

The Nine-Dotted Line Policy is a loosely-defined, highly-contested territorial claim by the government of the People's Republic of China on a large U-shaped section of the South China Sea (**Exhibit 5**).[8] The claim is based on historical access and control over key island groups that the line encompasses, including the Spratly Islands, the Paracel Islands, and Scarborough Reef. The Chinese government based the boundary line for this claim on a historical map that entered into the Chinese

[8] Peter Brown. "Calculated Ambiguity in the South China Sea." *Asia Times*. 08 December 2009.

government archives in the 1940s, and recently presented it to the United Nations in 2009 in a move to make the territorial claim official.[9] The most heated of these territorial claims to date has been between China and the Socialist Republic of Vietnam. The majority of the clashes between the governments have been centered on the Spratly Islands, due to the largely unexplored deposits of oil and natural gas which are reported to exist beneath the surrounding waters.

In late May 2011, tensions escalated when three Chinese state-operated Ocean Marine Surveillance vessels encountered a survey vessel owned by the oil company Petro Vietnam, cutting a towed survey cable which had been mapping oil deposits in the development blocks leased by ONGC.[10] In early June 2011, Vietnam claimed that a Chinese fishing vessel intentionally rammed into the exploration cables of a vessel chartered by PetroVietnam and engaged in seismic surveys inside Vietnamese waters.[11] Two Chinese fisheries enforcement vessels and other fishing vessels were reported in the area and aided the vessel. In July 2011, upon the announcement that ONGC had signed a long-term cooperative agreement with PetroVietnam to continue offshore oil and gas exploration, Chinese Foreign Ministry spokesperson Jiang Yu stated:[12]

> "China enjoys indisputable sovereignty over the South China Sea. China's stand is based on historical facts and international law…. As for oil and gas exploration activities, our consistent position is that we are opposed to any country engaging in oil and gas exploration and development activities in waters under China's jurisdiction. We hope the foreign countries do not get involved in South China Sea dispute."

Maritime Law & Territorial Rights

Today, the International Maritime Organization, a directorate chartered by the United Nations, is the primary international body responsible for drafting and publishing maritime law doctrine, ranging from shipboard safety regulations to pollution standards and even to defining coastal boundaries. Within this body of law, the United Nations Convention on the Law of the Sea (UNCLOS) is the legal treaty in which member nations have codified their claims to territorial seaward boundary lines.[13] The UNCLOS was last amended in December 1982, following a multi-year conference initiated in 1973 that included participation from over 160 countries. The primary focus of the 1982 UNCLOS convention was establishing and agreeing upon acceptable criteria for maritime boundary zones, as well as the sovereign rights and jurisdictional authorities that accompany each.

Based upon the agreements from UNCLOS, the basic delineation of coastal zones began with defining a country's coastal baseline as the point where the average low tide water level can be measured on the shoreline. From this baseline out to 12 nautical miles offshore is defined as "Territorial Waters" (**Exhibit 6**). A coastal state is free to establish any laws and regulations within this zone, which can essentially be thought of as an extension of a nation's landside sovereignty, although some exceptions apply. From the offshore edge of the Territorial Seas out to 24 nautical miles offshore lines is called the "Contiguous Zone." A nation is allowed to establish and regulate laws in this zone pertaining only to pollution, taxation, customs, and immigration. The last major zone established by the convention is the "Exclusive Economic Zone" (EEZ), which extends from the baseline out to 200 nautical miles offshore. Within this area, the state is allowed to establish and regulate only those laws pertaining to natural

[9] Tessa Jamandre. "PH Protests China's '9-Dash Line' Spratlys Claim" *Malaya*, 14 April 2011.
[10] Michael Wines. "Dispute Between Vietnam and China Escalates Over Competing Claims in South China Sea." *New York Times*. 10 June 2011.
[11] "China accuses Vietnam in South China Sea Row." *BBC News*. 10 June 2011.
[12] Saibal Dasgupta. "China Warns India Against Exploring Oil in South China Sea Ahead of Krishna's Visit to Hanoi." *Times of India*. 15 September 2011.

resources, such as mineral and fishery harvesting rights. In some cases, where a shallow continental shelf protrudes from a country's shores beyond this 200 natural mile boundary, the nation may petition to have their EEZ extend up to 350 nautical miles from its coastal baseline. In cases where the distance between nations is such that the EEZs overlap, then convention usually holds that the boundary splits the distance between the baselines.

China, Vietnam, and India have all officially ratified the 1982 UNCLOS treaty. Although the 1982 UNCLOS agreement did not delineate any specific mechanisms for adjudicating conflicts, some recent disputes over maritime boundaries have been settled by the United Nations through its primary judicial branch, the International Court of Justice located in The Hague in the Netherlands. One of the last such incidents to be resolved, which coincidently occurred between Singapore and Malaysia over a small group of rocky islets in the South China Sea, was heard by the court in 2008.

Recent Performance & Events at ONGC

ONGC is the largest exploration company in India by acreage, with 47% exploration acreage and in-place reserves of 6,840 Million Metric Tons of Oil and Oil-Equivalent Gas (MMTOE). ONGC's production exceeded 47 MMTOE in 2010.

In 2010, the number of discoveries within India was 28 discoveries, declining steadily from the peak total of 67 discoveries in 2006. This has increased the importance of international assets and partnerships. As of 2011, OVL had a proved, probable, and possible (together referred to as "3P") reserve replacement of 435 MMTOE, which represented 25% of the overall reserves across all ONGC assets. Reserve life of OVL was estimated at 21 years compared to 14 years at ONGC.

Based upon survey data and drills from a test platform established offshore, Block 127 did not yield any hydrocarbons and was subsequently relinquished to Petro Vietnam in 2010. OVL conducted testing on 1,150 square kms of the 9,246 square kms, tested drilling to a depth of 1,265 meters and incurring over US$68 million exploration costs. However, Block 128, which measures some 7,050 square kms, is still under exploration by OVL, as defined by the 2006 contract. Up until March 2011, ONGC had spent US$48 million on sensing and moving the well testing apparatus into place.

The 5% stake sale offering was expected to raise $2.5 billion for the government. The management team conducted road-shows in New York and London in addition to Indian cities. Institutional investors including Indian oil companies, mutual funds, and high net-worth individuals were likely to pick up a large part of the stake leaving the individual Indian investor at the fringe. Instead of supporting its pending development projects domestically and abroad, the proceeds of this offer were intended to go directly into the Indian Treasury to help reduce rising budget deficits.

Valuing ONGC

Two main approaches to valuing ONGC are direct valuation based on discounting estimated future free cash flows to equity and relative valuation based on market multiples of industry peers.[14] Factors such as reserve life, reserve replacement, and exploration and development costs pertain to upstream participants, while refining and marketing margins, and feedstock flexibility, are important factors to consider in analyzing the downstream activities. **Exhibits 7** to **9** provide the most recent years of financial statement information and **Exhibits 10** and **11** offer longer time series on stock price and

[13] See the United Nation's Division for Ocean Affairs and the Law of the Sea website (www.un.org).

[14] Financial data for the valuation section of this report was compiled from Capital IQ (www.capitaliq.com) and casewriter's estimates are furnished in an accompanying valuation spreadsheet.

financial performance. EBITDA has steadily improved over the last few years and, while the stock price has hovered in a range between INR 250 to INR 350 per share, its most recent closing price was INR 271 per share.

Direct Valuation

Direct valuation is theoretically appealing and sound. However, this approach requires accurate estimates of revenues and costs. Direct valuation requires estimating uncertain oil production as well as volatile oil prices. The exploration and development costs cannot be estimated easily as it is highly dependent on geological constraints of the block, depth of reserves, and exploration technology. Many oil and gas companies use their own accounting interpretation for capitalization and amortization of exploration costs and noncash items such as depreciation. Such subjective estimation of costs leads to difficulty in estimating free cash flows. Moreover, the direct approach is very sensitive to cost of capital and terminal growth. Given the volatility in market returns and interest rates, the cost of capital has a wide range. Additionally, terminal growth is very difficult to estimate given reserves are not known. Further uncertainty is added by the fact that government control of strategy and policy implies decisions that may not always add value to company and shareholders.

Assuming (1) a growth rate in revenues over a five-year planning horizon will be at around 6.62% annually, (2) key elements in the pro-forma income and balance sheet statements calculated as average ratios (common-sized to revenues) for the last five years, and (3) depreciation is based on the fixed assets schedule provided by the company from the offering memorandum, the discounted cash flow valuation of the ONGC stock price is close to the recent closing price of INR 271 per share. This is associated with an equity discount rate of 10% and a terminal growth rate of 5% beyond the five-year planning horizon. The implied valuations are very sensitive to these latter two assumptions.

Relative Valuation

Relative valuation techniques require comparables in business operations and accounting methods. Critical to the success of these methods is to carefully select other firms from the oil and gas industry. Once the selection is made, ratios such as stock price to earnings (P/E), forward P/E to long-term growth (PEG), and enterprise value (EV) to EBITDA or EV to EBITDAX (EBITDA before exploration expense) can be compared. However, the variety of geological features in exploration blocks implies that no two blocks can be treated similarly let alone oil and gas companies. In addition, accounting distortions for exploration and development costs and loose interpretations of reserves lead to high variation among peer ratios. This implies that relative valuation based on comparable peer ratios could be a widely inaccurate, and therefore not a recommended technique to use to value ONGC.

Sum of Parts Valuation

An alternative approach would be to consider the company as sum of its parts and value the key part in question – Block 128. This can be achieved by estimating net income from the block for the contracted period of production. To estimate annual revenues from the block, one approach is to estimate production by assigning probability of finding reserves. Another is to estimate the probable quantity of reserves based on comparable blocks by assessing reserves in the Phu Kanh Basin, and by determining expected annual production given reserve life. Since the lifted products are sold in India, the subsidized price per barrel is estimated to determine revenues. The net income from the block is determined by a percentage of revenues at the same net income ratio as the overall company. **Exhibit 12** offers estimates of the per share value contributed by Block 128 to ONGC in two scenarios that range between 11 INR to 24 INR per share.

Exhibit 1

OIL & NATURAL GAS COMPANY OF INDIA 2011

Red Herring Prospectus for 5% Equity Sale of ONGC

RED HERRING PROSPECTUS
Dated September 5, 2011
Please read section 60B of the Companies Act, 1956
Book Building Offer

OIL AND NATURAL GAS CORPORATION LIMITED

Our Company was incorporated in New Delhi on June 23, 1993 under the Companies Act, 1956 (the "**Companies Act**") as Oil and Natural Gas Corporation Limited and was granted the certificate of commencement of business on August 10, 1993.
Registered Office: Tower II, Jeevan Bharati Building, 124, Indira Chowk, New Delhi 110 001, India; **Telephone:** +91 (11) 2331 0156; **Facsimile:** +91 (11) 2331 6413
Corporate Office: Tel Bhavan, Dehradun 248 003, India; **Telephone:** +91(135) 275 1011; **Facsimile:** +91 (135) 275 5298
Company Secretary and Compliance Officer: Mr. N.K.Sinha; **Telephone:** +91 (11) 2331 0878; **Facsimile:** +91 (11) 2331 6413;
E-mail: fpo2011@ongc.co.in; **Website:** www.ongcindia.com.

PROMOTER: PRESIDENT OF INDIA, ACTING THROUGH THE MINISTRY OF PETROLEUM AND NATURAL GAS ("MoPNG"), GOVERNMENT OF INDIA

FURTHER PUBLIC OFFER OF 427,774,504 EQUITY SHARES OF ₹ 5 EACH ("EQUITY SHARES") OF OIL AND NATURAL GAS CORPORATION LIMITED ("ONGC" OR "OUR COMPANY") THROUGH AN OFFER FOR SALE BY THE PRESIDENT OF INDIA, ACTING THROUGH THE MoPNG, GOVERNMENT OF INDIA (THE "SELLING SHAREHOLDER") FOR CASH AT A PRICE OF ₹ [●]* PER EQUITY SHARE AGGREGATING UP TO ₹ [●] MILLION (THE "OFFER"). THE OFFER COMPRISES A NET OFFER TO PUBLIC OF 419,221,336 EQUITY SHARES (THE "NET OFFER") AND A RESERVATION OF 8,553,168 EQUITY SHARES FOR SUBSCRIPTION BY ELIGIBLE EMPLOYEES (THE "EMPLOYEE RESERVATION PORTION"). THE OFFER SHALL CONSTITUTE 5.00% OF THE PAID-UP EQUITY SHARE CAPITAL OF OUR COMPANY AND THE NET OFFER SHALL CONSTITUTE 4.90% OF THE PAID-UP EQUITY SHARE CAPITAL OF OUR COMPANY.

THE PRICE BAND, THE MINIMUM BID LOT AND THE RUPEE AMOUNT OF THE RETAIL DISCOUNT AND EMPLOYEE DISCOUNT WILL BE DECIDED BY THE SELLING SHAREHOLDER IN CONSULTATION WITH THE COMPANY AND THE BOOK RUNNING LEAD MANAGERS AND ADVERTISED IN THE FOLLOWING NEWSPAPERS : INDIAN EXPRESS (ALL EDITIONS), FINANCIAL EXPRESS (ALL EDITIONS), NEW INDIAN EXPRESS (ALL EDITIONS) AND JANSATTA (ALL EDITIONS) AT LEAST ONE WORKING DAY PRIOR TO THE OFFER OPENING DATE, WITH THE RELEVANT FINANCIAL RATIOS CALCULATED AT THE FLOOR PRICE AND AT THE CAP PRICE

THE FACE VALUE OF THE EQUITY SHARES IS ₹ 5 EACH.

**Discount of ₹ [●] and ₹ [●] to the Offer Price is being offered to the Retail Individual Bidders ("Retail Discount") and Eligible Employees Bidding in the Employee Reservation Portion ("Employee Discount") respectively.*

In case of revision in the Price Band, the Offer Period will be extended for at least three additional Working Days after the revision of the Price Band subject to the Offer Period not exceeding 10 Working Days. Any revision in the Price Band and the revised Offer Period will be widely disseminated by notification to the Self Certified Syndicate Banks ("SCSBs"), the Bombay Stock Exchange Limited (the "BSE") and the National Stock Exchange of India Limited (the "NSE"), by issuing a press release, and also by indicating the change on the websites of the Book Running Lead Managers ("BRLMs") and at the terminals of the members of the Syndicate.

This Offer is being made through the Book Building Process where up to 50% of the Net Offer will be allocated on a proportionate basis to Qualified Institutional Buyers ("QIBs") ("QIB Portion"). Further, 5% of the QIB Portion will be available for allocation on a proportionate basis to Mutual Funds only. The remainder will be available for allocation on a proportionate basis to QIBs and Mutual Funds, subject to valid Bids being received from them at or above the Offer Price. In addition, not less than 15% of the Net Offer will be available for allocation on a proportionate basis to Non-Institutional Bidders and not less than 35% of the Net Offer will be available for allocation on a proportionate basis to Retail Individual Bidders, subject to valid Bids being received at or above the Offer Price. Further, 8,553,168 Equity Shares shall be available for allocation on a proportionate basis to the Eligible Employees, subject to valid Bids being received from them at or above the Offer Price. Retail Individual Bidders and Eligible Employees bidding in the Employee Reservation Portion have an option to participate in the Offer either through the Bid cum Application Form or the ASBA Form. QIBs and Non Institutional Bidders must Bid through the ASBA process on a mandatory basis if they wish to participate in the Offer. ASBA Bidders may participate in this Offer by providing the details of the ASBA Accounts in which the corresponding Payment Amounts will be blocked by the SCSBs. For more information, please see "Offer Procedure" on page 510.

BOOK RUNNING LEAD MANAGERS			REGISTRAR TO THE OFFER
JM FINANCIAL	citi	BofA Merrill Lynch	LINK INTIME INDIA PVT LTD
JM Financial Consultants Private Limited 141, Maker Chambers III, Nariman Point, Mumbai 400 021, Maharashtra, India Telephone: +91 (22) 6630 3030 Facsimile: +91 (22) 2204 7185 Email: ongc.fpo@jmfinancial.in Investor Grievance Id.: grievance.ibd@jmfinancial.in Website: www.jmfinancial.in Contact Person: Ms. Lakshmi Lakshmanan SEBI Registration No.: INM000010361	**Citigroup Global Markets India Private Limited** 12th Floor, Bakhtawar, Nariman Point, Mumbai 400 021, Maharashtra, India Telephone: +91 (22) 6631 9890 Facsimile: +91 (22) 6646 6366 Email: ongc.fpo@citi.com Investor Grievance Id.: investors.cgmib@citi.com Website: www.citibank.co.in; http:// www.online.citibank.co.in/rhtm/citigroupglobalscreen1.htm Contact Person: Mr. Shashank Pandey SEBI Registration No.: INM000010718	**DSP Merrill Lynch Limited** 8th Floor, Mafatlal Centre, Nariman Point, Mumbai 400 021, Maharashtra, India Telephone: +91 (22) 6632 8000 Facsimile: +91 (22) 2204 8518 Email: ongc.fpo@baml.com Investor Grievance Id.: india_merchantbanking@ml.com Website: www.dspml.com Contact Person: Mr. N S Shekhar SEBI Registration No.: INM000011625	**Link Intime India Private Limited** C-13, Pannalal Silk Millls Compound, L.B.S. Marg, Bhandup (West), Mumbai 400 078, Maharashtra, India Telephone: +91 (22) 2596 0320 Facsimile: +91 (22) 2596 0329 E-mail: ongc.fpo@linkintime.co.in Website: www.linkintime.co.in Contact Person: Mr. Sachin Achar SEBI Registration No.: INR000004058
HSBC	Morgan Stanley	NOMURA	
HSBC Securities and Capital Markets (India) Private Limited HSBC Building, 52/ 60 M.G. Road, Fort, Mumbai 400 001, Maharashtra, India Telephone: +91 (22) 2268 5555 Facsimile: +91 (22) 2263 1984 E-mail: ongcfpo@hsbc.co.in Investor Grievance Id.: investorgrievance@hsbc.co.in Website: http://www.hsbc.co.in/1/2/corporate/equities-global-investment-banking Contact Person: Mr. Gaurav Shimpi SEBI registration No.: INM000010353	**Morgan Stanley India Company Private Limited** 18F/19F, One Indiabulls Centre, Tower 2, 841 Senapati Bapat Marg, Mumbai 400 013, Maharashtra, India Telephone: +91 (22) 6118 1000 Facsimile: +91 (22) 6118 1040 Email: ongc_fpo@morganstanley.com Investor Grievance Id.: investor_india@morganstanley.com Website: http://www.morganstanley.com/indiaofferdocuments Contact Person: Ms. Mayuri Gupta SEBI Registration No.: INM000011203	**Nomura Financial Advisory & Securities (India) Private Limited** Ceejay House, Level 11, Dr. Annie Besant Road, Worli, Mumbai 400 018, Maharashtra, India Telephone: +91 (22) 4037 4037 Facsimile: +91 (22) 4037 4111 E-mail: ongc.fpo-in@nomura.com Investor Grievance Id.: investorgrievances-in@nomura.com Website: http://www.nomura.com/asia/services/capital_raising/equity.shtml Contact Person: Ms. Nisha Khetan SEBI Registration No: INM000011419	

OFFER PROGRAMME		
OFFER OPENS ON : SEPTEMBER 20, 2011	OFFER CLOSES ON (FOR QIB BIDDERS)	: SEPTEMBER 22, 2011
	OFFER CLOSES ON (FOR ALL OTHER BIDDERS)	: SEPTEMBER 23, 2011

Source: Red Herring Prospectus

Exhibit 2

OIL & NATURAL GAS COMPANY OF INDIA 2011

Shareholder Distribution

DISTRIBUTION OF SHAREHOLDERS AS OF QUARTER ENDING JUNE 30, 2011

Category	**No. of Shares**	**Percentage of Shareholding**
A. Promoter's Holding		
1. Promoters		
- Indian Promoters	6,342,962,692	74.14
- Foreign Promoters	NIL	--
- Persons Acting in Concert	NIL	--
Sub Total	6,342,962,692	**74.14**
B. Non-Promoters Holding		
2. Institutional Investors		
a. Mutual Funds and Unit Trusts of India	164,147,349	1.92
b. Banks, Financial Institutions, Insurance	466,615,565	5.45
c. FIIs	414,196,088	4.84
Sub Total	1,044,959,002	12.21
3. Others		
a. Private Corporate Bodies	992,164,194	11.60
b. Indian Public	166,725,638	1.95
c. NRIs/OCBs/Clearing Members	8,678,594	0.10
Sub Total	1,167,568,426	**13.65**
Grand Total	8,555,490,120	**100.00**

Source: ONGC Shareholding Pattern Report (http://www.ongcindia.com/wps/wcm/connect/ongcindia/home/investors/shareholding+pattern/pg_shareholding_pattern_+june+30_2011)

Exhibit 3

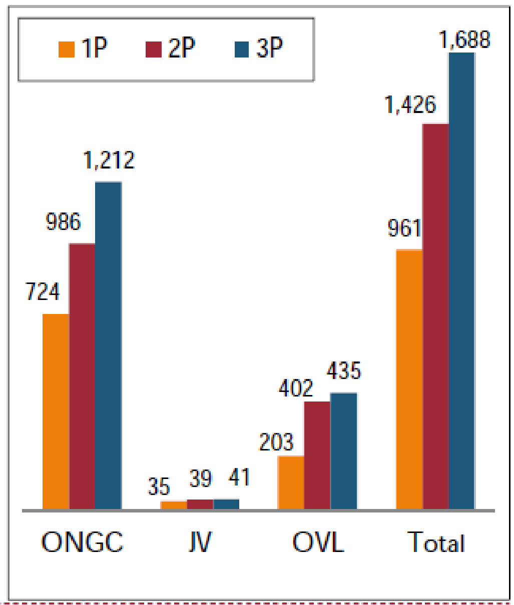
OIL & NATURAL GAS COMPANY OF INDIA 2011

Total Reserves
Million Tonnes of Oil Equivalent

ONGC Group: O+OEG Reserves

Total Reserves (3P): 1,688.29 MTOE

	Oil	Gas	Total
ONGC	552.61	659.38	1211.99
PSC JV	20.37	20.93	41.30
OVL	270.46	164.54	435.00
Total	**843.44**	**844.86**	**1688.29**



As on FY'11

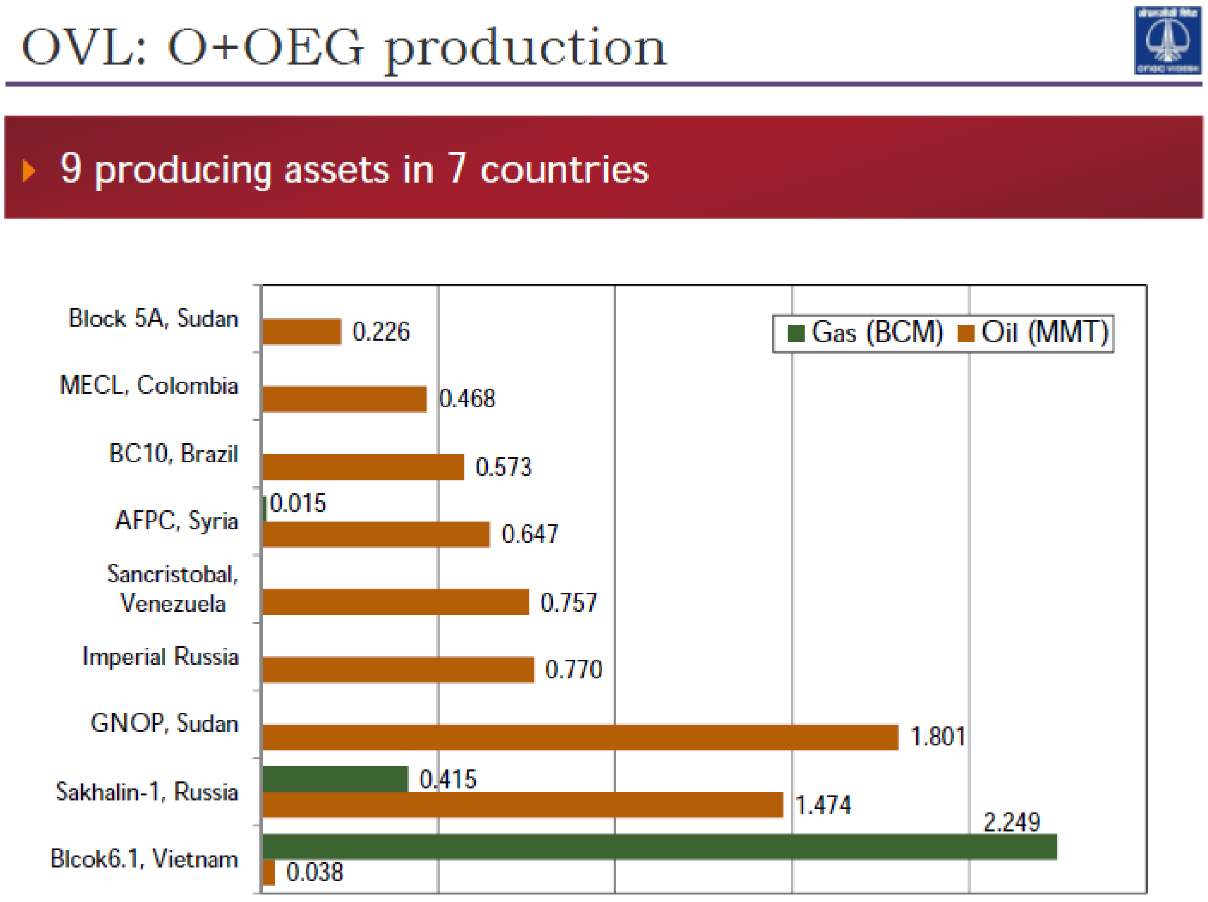
Note: "1P reserves" include both proved developed reserves and proved undeveloped reserves, "2P reserves" included 1P reserves and probable reserves, and "3P reserves" include 2P reserves and possible reserves. MTOE is Metric Tons of Oil and Oil-Equivalent.

Source: ONGC FY 11 Investor Presentation (http://ongc.net/wps/wcm/connect/a6176ebe-07aa-4342-8375-13c8d919cfa3/FY11_Presentation_31May2011.pdf?MOD=AJPERES&CACHEID=a6176ebe-07aa-4342-8375-13c8d919cfa3)

Exhibit 3 (continued)

OIL & NATURAL GAS COMPANY OF INDIA 2011

Oil & Oil Equivalent of Gas
Millions of Tonnes



Source: ONGC FY11 Investor Relations Presentation
(http://ongc.net/wps/wcm/connect/a6176ebe-07aa-4342-8375-13c8d919cfa3/FY11_Presentation_31May2011.pdf?MOD=AJPERES&CACHEID=a6176ebe-07aa-4342-8375-13c8d919cfa3)

Exhibit 3 (continued)

OIL & NATURAL GAS COMPANY OF INDIA 2011

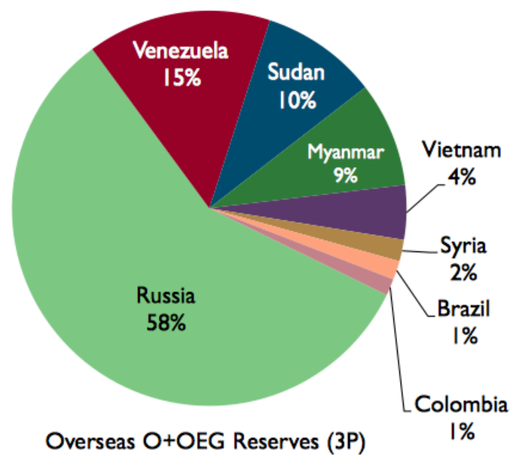
ONGC's Geographical Distribution

OVL: O+OEG reserves

435 Mtoe of ultimate reserves in 12 assets in 8 countries

	Oil (MMT)	Gas (BCM)	Total (Mtoe)
P1	104.57	98.34	202.91
P2	151.91	46.69	198.60
P3	13.98	19.51	33.49
Total	**270.46**	**164.55**	**435.00**

Geographical distribution

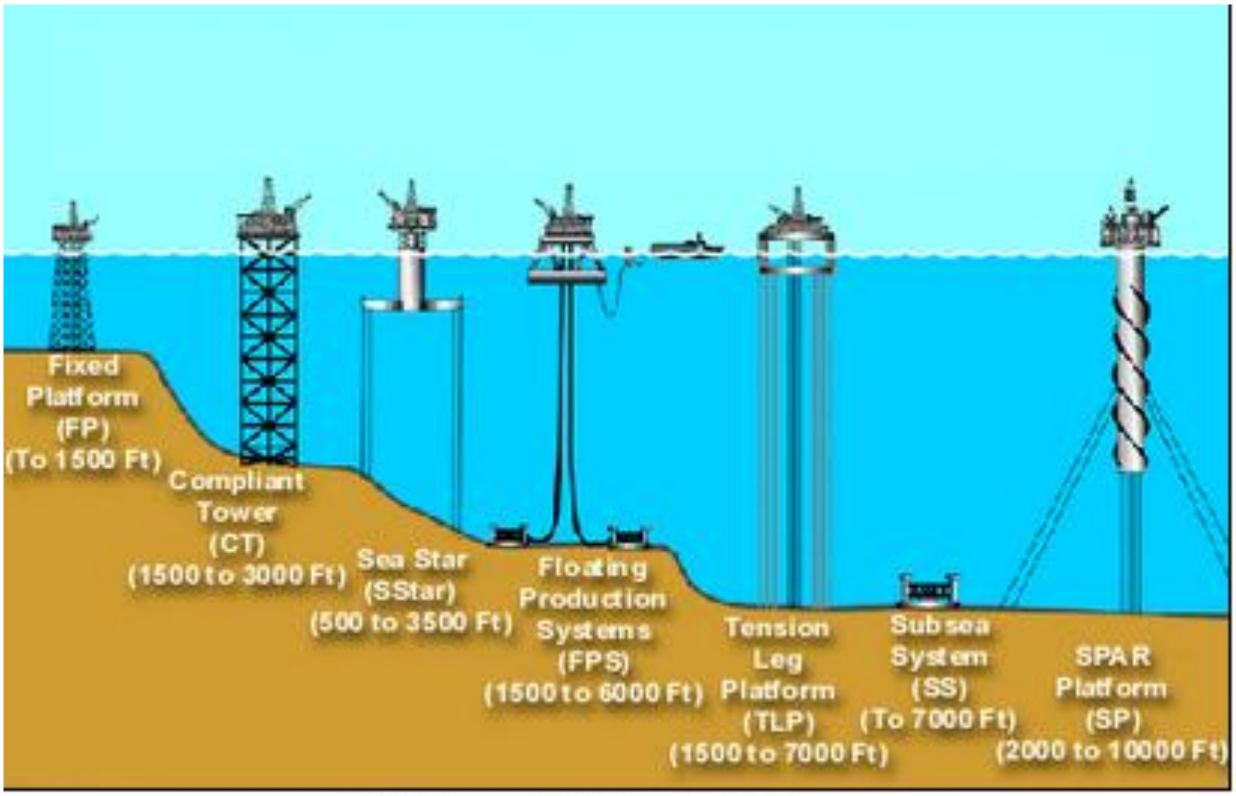


Source: ONGC FY11 Investor Relations Presentation (http://ongc.net/wps/wcm/connect/a6176ebe-07aa-4342-8375-13c8d919cfa3/FY11_Presentation_31May2011.pdf?MOD=AJPERES&CACHEID=a6176ebe-07aa-4342-8375-13c8d919cfa3)

Exhibit 4

OIL & NATURAL GAS COMPANY OF INDIA 2011

Offshore Drilling Platforms



Offshore Drilling Platforms

Source: http://melpor.hubpages.com/hub/Oil-Demystified

Exhibit 5

OIL & NATURAL GAS COMPANY OF INDIA 2011

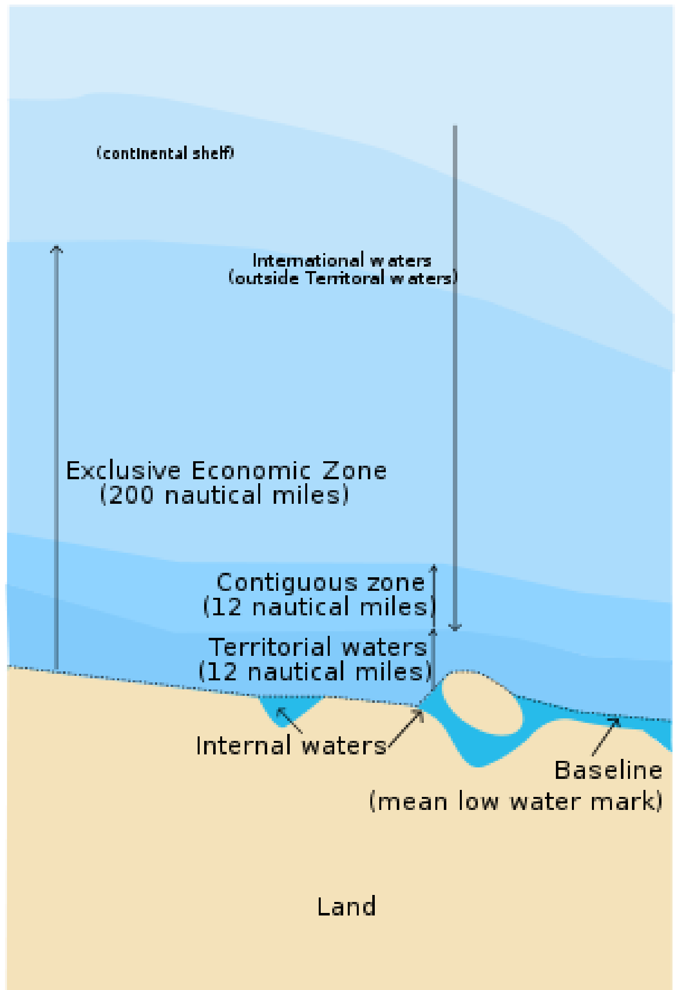
Lines of Control in South China Sea

Source: http://articles.economictimes.indiatimes.com/2011-10-25/news/30320234_1_south-china-sea-spratly-islands-continental-shelf.

Exhibit 6

OIL & NATURAL GAS COMPANY OF INDIA 2011

UN Convention on the Law of the Sea



Source: http://en.wikipedia.org/wiki/File:Zonmar-en.svg.

Exhibit 7

OIL & NATURAL GAS COMPANY OF INDIA 2011

Income Statement

Income Statement						
	Reclassified	**Reclassified**	**Reclassified**	**Reclassified**	**Restated**	
For the Fiscal Period Ending	**12 months**	**12 months**	**12 months**	**12 months**	**12 months**	**12 months**
	Mar-31-2006	**Mar-31-2007**	**Mar-31-2008**	**Mar-31-2009**	**Mar-31-2010**	**Mar-31-2011**
Currency	***INR***	***INR***	***INR***	***INR***	***INR***	***INR***
Revenue	706,858.6	822,615.5	967,821.8	1,045,883.9	1,017,545.7	1,176,151.3
Other Revenue	-	17,701.7	7,352.2	6,872.8	9,110.1	25,803.8
Total Revenue	**706,858.6**	**840,317.2**	**975,173.9**	**1,052,756.6**	**1,026,655.8**	**1,201,955.1**
Cost Of Goods Sold	304,727.5	346,151.5	442,945.4	481,300.6	459,873.0	552,501.3
Gross Profit	**402,131.1**	**494,165.7**	**532,228.5**	**571,456.1**	**566,782.8**	**649,453.8**
Selling General & Admin Exp.	27,047.6	38,323.5	35,932.2	29,618.6	35,686.9	40,116.3
Provision for Bad Debts	-	153.4	592.2	-	225.0	239.1
R & D Exp.	1,083.7	863.6	1,753.3	1,574.4	1,985.8	3,582.4
Depreciation & Amort.	97,852.2	118,020.2	111,145.9	120,105.2	114,599.6	131,833.4
Impair. of Oil, Gas & Mineral Prop.	-	1,025.9	27,662.1	35,011.8	72,218.4	73,424.6
Other Operating Expense/(Income)	45,942.4	74,573.4	73,041.8	88,253.1	69,655.8	73,083.1
Other Operating Exp., Total	**171,925.9**	**232,960.0**	**250,127.5**	**274,563.2**	**294,371.4**	**322,279.0**
Operating Income	**230,205.2**	**261,205.6**	**282,101.0**	**296,892.9**	**272,411.3**	**327,174.8**
Interest Expense	(1,597.4)	(1,614.3)	(1,135.3)	(1,528.6)	(1,772.0)	(4,106.8)
Interest and Invest. Income	13,274.7	21,126.3	28,499.5	35,332.6	21,302.7	24,393.4
Net Interest Exp.	**11,677.3**	**19,511.9**	**27,364.2**	**33,804.0**	**19,530.7**	**20,286.5**
Income/(Loss) from Affiliates	106.8	102.1	20.5	98.8	78.1	30.0
Currency Exchange Gains (Loss)	462.9	2,672.3	(1,017.5)	(11,716.0)	10,651.2	1,170.7
Other Non-Operating Inc. (Exp.)	(3,428.0)	2,188.4	553.1	(10,231.4)	948.1	(5,076.3)
EBT Excl. Unusual Items	**239,024.2**	**285,680.3**	**309,021.4**	**308,848.4**	**303,619.5**	**343,585.7**
Impairment of Goodwill	-	-	-	-	-	-
Gain (Loss) On Sale Of Invest.	6.0	(427.3)	10.9	3.9	0.6	0.6
Gain (Loss) On Sale Of Assets	(54.9)	(63.3)	(48.8)	(92.1)	(71.6)	(7.9)
Asset Writedown	-	(631.8)	(69.6)	813.2	(370.3)	(1,005.4)
Insurance Settlements	6,405.4	4,750.6	-	657.7	-	-
Other Unusual Items	(5,466.1)	(11,734.7)	317.5	1,562.5	1,313.6	620.1
EBT Incl. Unusual Items	**239,914.5**	**277,573.9**	**309,231.2**	**311,793.7**	**304,491.8**	**343,193.2**
Income Tax Expense	84,932.4	98,454.1	106,999.5	110,093.4	107,137.9	114,913.4
Earnings from Cont. Ops.	**154,982.0**	**179,119.8**	**202,231.8**	**201,700.3**	**197,353.9**	**228,279.7**
Earnings of Discontinued Ops.	-	-	-	-	-	-
Extraord. Item & Account. Change	-	-	-	-	-	-
Net Income to Company	**154,982.0**	**179,119.8**	**202,231.8**	**201,700.3**	**197,353.9**	**228,279.7**
Minority Int. in Earnings	(1,005.8)	(1,423.9)	(3,509.1)	(3,746.9)	(3,318.5)	(3,720.4)
Net Income	**153,976.2**	**177,696.0**	**198,722.6**	**197,953.4**	**194,035.3**	**224,559.3**

Source: Capital IQ

Exhibit 8

OIL & NATURAL GAS COMPANY OF INDIA 2011

Balance Sheet

Balance Sheet					
Balance Sheet as of:	**Reclassified Mar-31-2007**	**Reclassified Mar-31-2008**	**Restated Mar-31-2009**	**Reclassified Mar-31-2010**	**Mar-31-2011**
Currency	***INR***	***INR***	***INR***	***INR***	***INR***
ASSETS					
Cash And Equivalents	150,653.1	186,525.0	156,331.2	149,702.5	205,620.1
Short Term Investments	6,654.0	5,016.7	20,000.0	15,000.0	-
Total Cash & ST Investments	**157,307.1**	**191,541.7**	**176,331.2**	**164,702.5**	**205,620.1**
Accounts Receivable	48,167.4	70,469.4	71,813.5	71,423.5	97,723.9
Other Receivables	14,719.0	16,375.5	13,425.4	(1.8)	(4,160.4)
Notes Receivable	9,142.5	17,423.0	20,983.8	18,110.0	17,207.6
Total Receivables	**72,029.0**	**104,267.9**	**106,222.7**	**89,531.7**	**110,771.0**
Inventory	58,743.5	72,984.8	65,423.9	82,401.4	85,675.7
Other Current Assets	100,325.0	106,550.5	159,168.6	169,053.8	187,251.0
Total Current Assets	**388,404.6**	**475,345.0**	**507,146.3**	**505,689.4**	**589,317.7**
Gross Property, Plant & Equipment	1,478,377.2	1,635,170.8	1,939,946.2	2,182,999.5	2,540,104.6
Accumulated Depreciation	(832,212.5)	(935,400.2)	(1,055,968.8)	(1,173,602.3)	(1,325,130.9)
Net Property, Plant & Equipment	**646,164.7**	**699,770.6**	**883,977.4**	**1,009,397.2**	**1,214,973.8**
Long-term Investments	35,832.3	44,821.4	34,803.5	51,593.1	33,561.0
Goodwill	30,616.3	25,777.3	114,038.9	95,385.5	89,928.6
Other Intangibles	1,234.0	1,131.9	1,539.2	2,168.1	1,738.5
Deferred Tax Assets, LT	-	-	186.0	164.7	238.2
Deferred Charges, LT	5,140.8	6,739.2	6,506.2	8,413.2	7,960.6
Other Long-Term Assets	-	-	-	-	-
Total Assets	**1,107,392.7**	**1,253,585.4**	**1,548,197.5**	**1,672,811.2**	**1,937,718.3**
LIABILITIES					
Accounts Payable	78,824.3	98,444.0	117,772.1	130,507.5	186,539.9
Accrued Exp.	30,491.0	45,463.8	48,183.1	50,789.5	58,858.2
Short-term Borrowings	3,263.4	492.6	52,589.0	21,554.8	20,733.5
Curr. Port. of LT Debt	3,221.2	296.6	3,919.5	53.4	8,068.3
Curr. Income Taxes Payable	4,983.8	5,470.4	5,474.4	5,705.2	1,412.5
Unearned Revenue, Current	-	5.4	6.0	3.6	20.8
Other Current Liabilities	68,656.7	85,742.4	110,911.6	114,966.6	144,415.0
Total Current Liabilities	**189,440.5**	**235,915.2**	**338,855.7**	**323,580.6**	**420,048.2**
Long-Term Debt	9,520.7	8,655.5	9,125.2	41,065.3	34,110.5
Def. Tax Liability, Non-Curr.	81,118.6	87,375.5	92,416.8	103,076.9	111,764.6
Other Non-Current Liabilities	151,856.8	129,324.7	171,451.2	174,590.4	198,503.7
Total Liabilities	**431,936.4**	**461,270.9**	**611,848.9**	**642,313.1**	**764,427.0**
Common Stock	21,388.7	21,388.7	21,388.7	21,388.7	42,777.5
Additional Paid In Capital	144.3	312.5	312.5	312.5	144.3
Retained Earnings	645,836.1	764,102.0	881,486.7	991,771.6	1,105,778.8
Treasury Stock	-	-	-	-	-
Comprehensive Inc. and Other	(233.4)	(4,937.1)	19,047.1	593.7	4,571.9
Total Common Equity	**667,135.7**	**780,866.1**	**922,235.0**	**1,014,066.4**	**1,153,272.4**

Source: Capital IQ

Exhibit 9

OIL & NATURAL GAS COMPANY OF INDIA 2011

Cash Flow

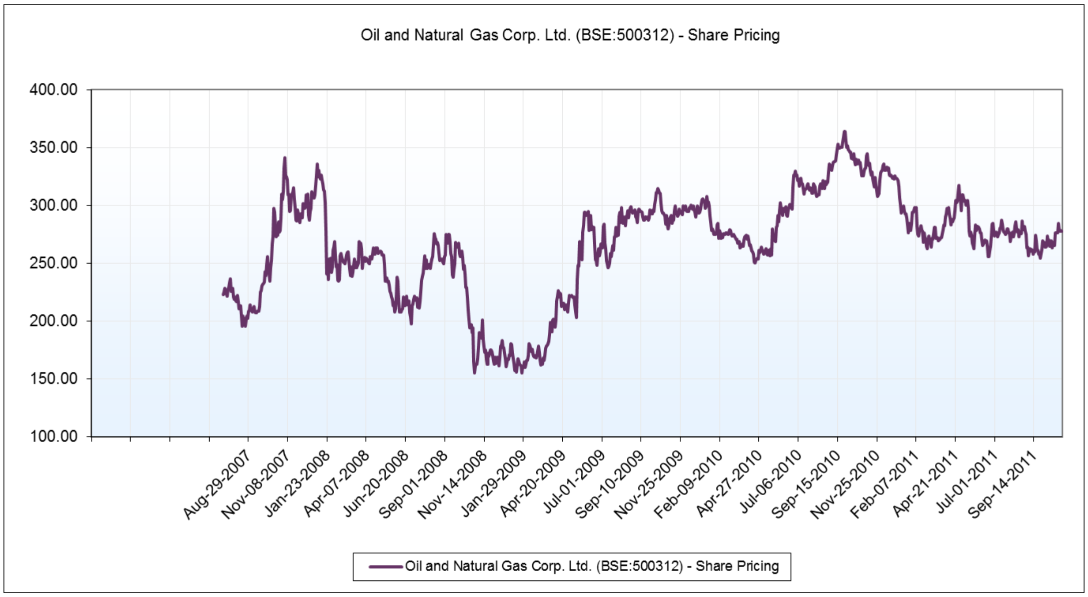
Cash Flow						
For the Fiscal Period Ending	Restated 12 months Mar-31-2006	12 months Mar-31-2007	12 months Mar-31-2008	Restated 12 months Mar-31-2009	Restated 12 months Mar-31-2010	12 months Mar-31-2011
Currency	*INR*	*INR*	*INR*	*INR*	*INR*	*INR*
Net Income	**153,976.2**	**177,696.0**	**198,722.6**	**197,953.4**	**194,035.3**	**224,559.3**
Depreciation & Amort.	61,322.4	115,973.4	107,514.6	116,502.1	82,162.7	103,220.7
Amort. of Goodwill and Intangibles	1,622.5	1,254.9	2,306.7	2,876.6	4,978.9	5,050.4
Impair. of Oil, Gas & Mineral Prop.	-	-	28,168.6	37,308.9	72,218.4	73,424.6
Depreciation & Amort., Total	**62,944.9**	**117,228.3**	**137,989.9**	**156,687.6**	**159,360.0**	**181,695.7**
Other Amortization	35,516.5	791.9	1,324.6	726.5	26,792.6	20,969.6
(Gain) Loss From Sale Of Assets	-	-	-	-	54.2	18.4
(Gain) Loss On Sale Of Invest.	-	-	10.9	(3.9)	(9.1)	-
Asset Writedown & Restructuring Costs	(304.0)	1,657.7	(436.9)	(3,110.3)	308.7	1,005.4
(Income) Loss on Equity Invest.	-	-	-	-	712.4	2,852.8
Other Operating Activities	(33,423.4)	(39,412.2)	(43,418.9)	(67,101.3)	(77,228.8)	(80,879.4)
Change in Acc. Receivable	(3,709.9)	(3,454.5)	(29,683.5)	(6,238.6)	1,091.8	(33,725.6)
Change In Inventories	(7,553.7)	(13,274.4)	(15,023.5)	7,626.6	(17,272.8)	(3,925.3)
Change in Acc. Payable	7,685.5	41,380.8	43,851.9	32,597.3	14,980.9	106,613.1
Change in Other Net Operating Assets	(1,463.4)	(4,711.7)	(3,048.6)	(29,160.7)	(14,996.1)	614.5
Cash from Ops.	**213,668.9**	**277,902.0**	**290,288.5**	**289,976.8**	**287,829.2**	**419,798.5**
Capital Expenditure	(113,829.9)	(135,663.2)	(168,144.2)	(216,389.8)	(219,387.2)	(287,165.4)
Cash Acquisitions	(1,086.8)	(20,855.7)	-	-	-	-
Divestitures	-	-	-	-	-	-
Invest. in Marketable & Equity Securt.	(8,882.0)	(1,196.0)	(12,649.2)	8,867.9	(22,915.9)	11,866.6
Net (Inc.) Dec. in Loans Originated/Sold	-	53.8	44.3	492.6	320.6	340.0
Other Investing Activities	(6,565.2)	73,556.4	17,893.3	(74,681.7)	30,963.7	30,805.0
Cash from Investing	**(130,363.9)**	**(84,104.7)**	**(162,855.8)**	**(281,711.0)**	**(211,018.8)**	**(244,153.8)**
Short Term Debt Issued	-	-	-	-	-	-
Long-Term Debt Issued	-	2,997.3	-	49,675.6	-	400.4
Total Debt Issued	**-**	**2,997.3**	**-**	**49,675.6**	**-**	**400.4**
Short Term Debt Repaid	(16,687.9)	-	-	-	-	-
Long-Term Debt Repaid	(2,096.1)	(9,631.0)	(5,983.4)	-	(3,038.7)	-
Total Debt Repaid	**(18,784.1)**	**(9,631.0)**	**(5,983.4)**	**-**	**(3,038.7)**	**-**
Issuance of Common Stock	0.5	7,027.8	1,664.8	-	2,874.6	4,095.3
Common Dividends Paid	(64,893.4)	(67,550.3)	(66,929.1)	(69,374.0)	(69,377.5)	(101,427.3)
Total Dividends Paid	**(64,893.4)**	**(67,550.3)**	**(66,929.1)**	**(69,374.0)**	**(69,377.5)**	**(101,427.3)**
Special Dividend Paid	-	-	-	-	-	-
Other Financing Activities	(10,809.9)	(10,992.1)	(12,404.5)	(13,193.8)	(13,185.5)	(20,671.0)
Cash from Financing	**(94,486.9)**	**(78,148.3)**	**(83,652.3)**	**(32,892.2)**	**(82,727.2)**	**(117,602.7)**
Misc. Cash Flow Adj.	-	-	-	-	-	895.5
Net Change in Cash	(11,181.9)	115,649.0	43,780.4	(24,626.4)	(5,916.8)	58,937.5

Source: Capital IQ

Exhibit 10

OIL & NATURAL GAS COMPANY OF INDIA 2011

Share Price in Rupees

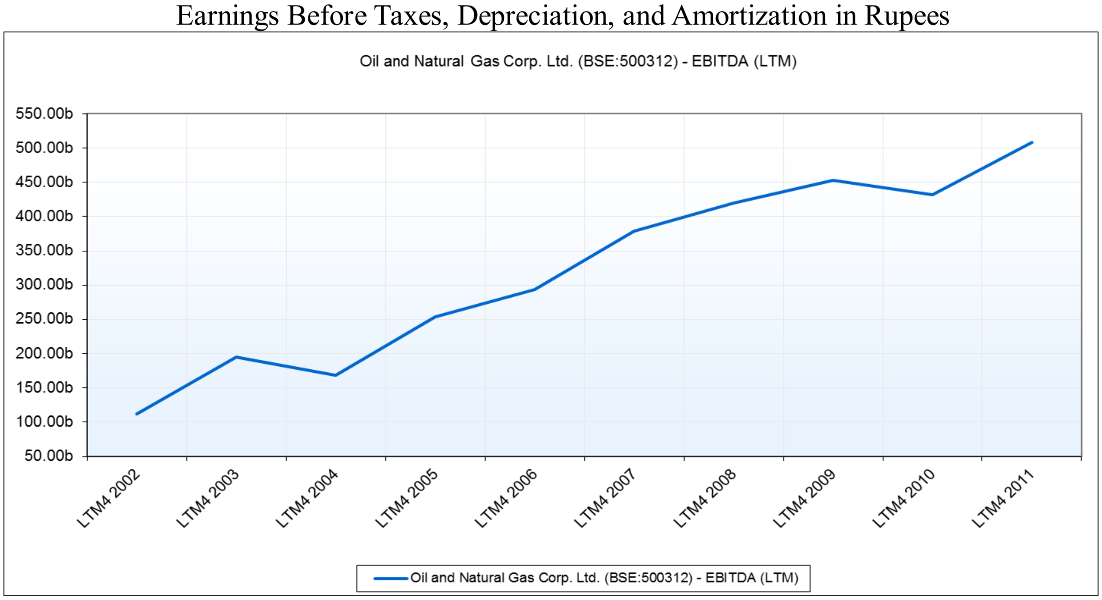


Source: Capital IQ

Exhibit 11

OIL & NATURAL GAS COMPANY OF INDIA 2011

Earnings Before Taxes, Depreciation, and Amortization in Rupees



Source: Capital IQ

Exhibit 12

OIL & NATURAL GAS COMPANY OF INDIA 2011

Valuation of Block 128

Valuation of Block 128				
Metric	**Value1**	**value2**	**Assumption for value 1**	**Assumption for value 2**
Probability of 1P	0.1	0.5	10% probability	50% probability
Acreage to 1P (MMTOE)	8.2848	26	11.21 MMTOE for 955 sqkm at Block 06	18 trillion cft gas at Phu kanh
Annual production (MMTOE)	1.6902	5.3068	Annual production of 2.287 MMTOE at Block 06	Annual production of 2.287 MMTOE at Block 06
Annual production Million (Bbl)	12.3324	38.7199	Bbl to MTOE conversion of 7.2963	Bbl to MTOE conversion of 7.2963
Implied oil price INR per bbl	2,246.34	2,246.34	5-year Average ONGC revenue/ production bbl	5-year Average ONGC revenue/ production bbl
Revenue INR Million	27,702.85	86,978.07		
Net Income INR Million	5,861.92	21,744.52	5-year average Net income margin 21.16%	25% net income margin excluding SGA
Lifetime of field years	30.00	20.00	contracted at 30 years	Reserve life at 20 years
Production growth rate	3.51%	3.51%	5-year OVL production growth	5-year OVL production growth
WACC	8.00%	12.00%		
Valuation INR Million	94,033.44	203,186.02	Annuity with growth	Annuity with growth
Number of shares Million	8555.49	8555.49	ONGC annual report	ONGC annual report
Value per share INR	**10.99**	**23.75**		

Source: Case Writers' Estimates