Oil and Natural Gas Corporation of India (ONGC) Public Offering, March 2004[1]

Oil and Natural Gas Corporation (ONGC) is an oil and gas company that accounts for a substantial portion of the domestic crude and natural gas supply in India. One of India's largest corporations, ONGC is engaged in the exploration, development, production, and distribution of crude oil and natural gas, as well as products such as LPG, naphtha, and kerosene oil.

ONGC is one of the "nav-ratna PSUs" (nav = nine; ratna = gemstone; PSU = public sector unit, a common term used to refer to state-owned enterprises in India), signifying its importance as one of a handful of the crown jewels of India's otherwise underperforming state-owned sector. In December 2003, with a view to signal to both domestic and foreign investors their continuing commitment to economic liberalization, the Government of India agreed to further privatize ONGC by offering 10% of its shares to the public. As a result of this offering – which was expected to take place in March 2004 – the government's share of ONGC's equity stake will decline from the current 84% to 74%. This would be the largest ever offering in the 120+ years of public equity markets in India.

News of the offering was received with considerable enthusiasm by institutional investors in the US, Europe, and Asia. It was even rumored (although quickly denied) that the US investor, Warren Buffett alone might be interested to put it a bid for 90% of all shares offered in the global portion of the public offering.

India's Equity Markets

Although categorized as an "emerging market," India's experience with equity markets can be traced back to 1875, when a group of 22 enterprising brokers gathered under a banyan tree to establish the Bombay Stock Exchange (BSE). Today, BSE, combined with the other major stock exchange, the National Stock Exchange (NSE), trade 9000 listed stocks, a number that is comparable to the quantity of listings in the US equity market. As of December 2003, the total market capitalization as of India's equity market was approximately $400 billion. Measured by the number of individuals who directly or indirectly own stocks, India has the third largest equity investor base in the world.

There are nearly 10,000 brokers on the BSE and the NSE, including dozens of foreign brokers. Both exchanges have fully electronic trading platforms, and conform to reasonably high standards of efficiency and settlement procedures. The market is regulated by the Securities Exchange Board of India (SEBI), a government agency that was formed in 1988, and one that plays a role similar to that of the Securities and Exchange Commission (SEC) in the US. India's equity markets were substantially

[1] *This case was developed by Professor Anant K. Sundaram, Faculty Director of Executive Education at the Tuck School of Business, as a basis for class discussion. Some of the case facts have been simplified for pedagogic purposes. Current version: February 2006.*

modernized and liberalized in the mid-1990s, producing a heightened regulatory role for SEBI. Additional national agencies such as the National Securities Clearing Corporation and the National Securities Depository were created during this period. Order-matching and trades were computerized, settlement practices tightened, data on prices and quantities made transparent (with buyer/seller anonymity), and transactions costs on major exchanges declined by over 90%.

Also during this period, Indian companies were allowed to raise equity in international capital markets and foreign investors were allowed to invest directly in the Indian equity market. Prior to this, foreign investors were able to access India's equity market only via listed country funds.

The Market for IPOs in India [2]

An 'initial public offering' (IPO) is a first-time sale of stock by a company to the public. It is also referred as sale of equity in the 'primary market.' It is a common means by which previously state-owned enterprises are privatized. Companies go public for various reasons, but typically to fund capital expenditure and working capital needs to get to a new stage of development, to fund accumulated losses, or to pay down debt. Issuers often dip back into the market to offer shares though 'secondary' or 'seasoned' offerings within the first few years of going public to raise larger sums of money. Benefits of going public include the provision of liquidity, enhancing credibility among suppliers, employees and customers, and having a currency with which to undertake acquisitions. But IPOs entail substantial direct and indirect costs. These include having to supply ongoing public information to investors and regulators, to pay transaction fees for the underwriters, lawyers and auditors, and to spend management time and effort in preparing and executing the IPO. In addition, there are costs associated with offering the shares at a price that is below the post-IPO trading price ('IPO underpricing'). There could be possible loss of control, increased analyst scrutiny, legal liability, and share price volatility. An IPO can thus change a non-public firm's corporate culture and governance styles in rather fundamental ways.

India has a broad and deep market for both primary and secondary share issues.[3] For instance, total amounts raised via such issues in the mid-1990s accounted for nearly one-fifth of the country's domestic savings. Prior to the market reforms of the 1990s, an agency known as Controller of Capital Issues (CCI) exercised often arbitrary regulatory control over share issues. Offer prices had to subscribe to a "CCI Formula" which calculated a "fair price" for share issues based on accounting data provided by the issuer,

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[2] Although ONGC's share issue is technically not an *initial* public offering in the Indian setting (since 16% of its shares are already owned publicly), this is its first share issue in international equity markets. In addition, many institutional features (e.g., the process of setting issue prices, consideration of underpricing effects, bankers' fees, regulatory filing requirements, etc) are, in principle, similar to that of a traditional Indian IPO.

[3] This section draws upon the research of Mr. Ajay Shah of the Center for Monitoring the Indian Economy, Mumbai, India, on India's IPO markets.

with no regard to market demand or sentiment, or factors such as cash flows and cost of capital. This deterred firms from going public, and debt played a major role in the financing of Indian projects. In 1992, CCI was disbanded, and firms were allowed to price their new share issues at whatever they felt the market would bear. SEBI was charged with the task of vetting prospectuses, and in ensuring that issuers were providing fair, accurate, and timely information.

The IPO process in India works broadly as follows. About 4 -5 months prior to issue, the firm and its investment bankers choose a preliminary offer price, and prepare a prospectus. If the company has made at least three consecutive years of profit prior to the issue year, it can price the offer at essentially any price it considers fair. However, once this price – say, X – is chosen, the final offer price cannot be more that 1.2X. This final offer price has to be typically decided upon at least three weeks prior to the actual issue date. Starting a month before the issue date, and subject to SEBI approval, the issuer can start to advertise the share issue. At this stage, an underwriting syndicate is often put together, and each member of the syndicate agrees to a firm-commitment offering to deliver a certain amount as apportioned by the lead banker. Syndicate members are typically paid a fee of 2.5% of the value of their portion of the offering (compared to fees of up to 7% in the US). The issue closes 10 days after it opens, and allotment takes place soon thereafter. However, the actual listing – and the first day of trading – happens long after the issue opens; the modal listing delay is an unusually long 11 weeks.

Perhaps resulting from these features, Indian IPO issues witness high under-pricing relative to world standards.[4] For example, a study of 2056 Indian IPO issues during the 1990s finds that the average underpricing was over 105%. (This compares to a typical 16% - 20% underpricing in the US IPO markets.) Another way to see this is as follows: An equal-weighted portfolio of Indian IPOs yields an enormous *3.8% weekly excess return* (relative to a benchmark of a broad basket of Indian stocks) between issue date and listing date. While post-issue underperformance in the first few years following issue is common in many developed IPO markets (for instance, portfolios of US IPOs under-perform market benchmarks for up to three years following issue), a portfolio of Indian IPOs *outperform* market benchmarks by about 40% during the first 200 trading days following issue.

ONGC

While India has a population roughly three times that of the US, it consumes less than one-fifteenth of the oil and natural gas that the US does. Foreseeing tremendous growth in the Indian economy, and resulting exploration and development spending, as well as acquisition expenditures that would be required to meet the country's burgeoning energy needs, the CEO of ONGC, Subir Raha, in consultation with his board and India's Ministry of Petroleum, decided to raise cash by selling 10% of the shares owned by the Government.

[4] "Underpricing" refers to the percentage difference between the price at the end of the first trading day and the issue price.

The company accounts for 84% of the oil and natural gas supply in India. In FY2003 (fiscal year ends March), ONGC had total revenues of INR354 billion ("INR" = Indian Rupee, which in 2003 traded at an average exchange rate of INR45/US$. See ONGC's financial data in Exhibit 1; data on Indian capital markets and other relevant market data are shown in Exhibit 2.)[5] Slightly more than two-thirds of ONGC's revenues come from crude oil, 15% from natural gas. The remainder comes from products such as kerosene and naphtha. A reasonable estimate for revenues in FY2004 is INR339 billion, with INR226 billion coming from oil, INR50 billion from natural gas, and other revenues accounting for about INR63 billion (see estimates for FY2004 in Exhibit 1).

ONGC's revenues are dependent on the world price of crude, a commodity whose world prices are denominated in US dollars. The Government of India had earlier regulated (and often set) prices at which ONGC could sell its crude to refiners, but starting in April 2002, the company was largely allowed to set a price that reflected the world market price.[6] While most of its oil and gas currently comes from fields in India, ONGC has substantial operations abroad, managed through its wholly-owned subsidiary ONGC Videsh Limited (OVL). Mr. Raha had aggressive growth plans for OVL, but much of the untapped oil and gas (and hence growth opportunities), as well as OVL's existing involvement, are in countries such as Myanmar, Libya, Iraq, Sudan, Syria, Vietnam, and Russia.

With a current market capitalization of INR1114.2 billion, ONGC is among the largest publicly traded Indian companies. The company has competitors, but they are small given its 84% share of the Indian oil and natural gas market (see Exhibit 3 for comparable data on ONGC's competitors). The company has little debt, high operating margins, and is a cash flow gusher.

ONGC's Share Issue

The 10% ownership stake of Government of India for the share issue will amount to 142.6 million shares. ONGC chose as its lead bankers DSP Merrill Lynch and JM Morgan Stanley. Ten percent of the issue would be reserved for employees, and an equal amount for ONGC's existing (non-governmental) shareholders. Of the remaining shares, 50% would be allotted to qualified institutional buyers, 25% for certain other categories of investors, and 25% for retail buyers. The issue would open March 5, 2004, and close on March 13, 2004.[7]

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[5] In Indian parlance, ONGC's revenue would be referred to as "35400 crores." The two commonly used terms for larger multiples of 10 in India are "crore" and "lakh": 1 lakh = 100,000 and 1 crore = 100 lakhs. Thus, 1 million = 10 lakhs, 1 billion = 100 crores.

[6] ONGC's sale prices for all of its other major products – natural gas, kerosene, naphtha, LPG – are still controlled by the government. While analysts expect that natural gas prices will be deregulated in the next year or two and subsidies were being held flat (or even declining), it was anyone's guess whether and when there would be deregulation of other prices.

[7] The prospectus was filed with SEBI only a month prior, and the government would

Valuation of ONGC's equity would require a number of assumptions to be made about its revenues in oil, natural gas, and other product segments, as well as its costs and capital expenditure. Revenue assumptions for oil will depend on US$ per-barrel crude prices during the forecast period, appreciation or depreciation of the INR against the US$, quantity of crude sold (in millions of metric tons, or MMT) and its likely growth, and a "conversion factor" that converts barrels (bbl) to MMT.[8] In February 2004, crude oil is selling for US$28.30/bbl, the exchange rate is INR45/US$, and ONGC expects to produce and sell 24 MMT of oil during FY2004 (Exhibit 1). In the past few years, quantity of oil consumed in India has grown an annual rate of approximately 4%, and this growth rate is expected to sustained well into the foreseeable future.

Similarly, revenue forecasts for natural gas will require assumptions about INR revenue per-cubic-meter (M3) of gas sold, quantities sold, and their likely growth. In 2003-04, ONGC was getting an average of INR2.38 in revenue per M3 of gas sold. The company expects to sell 21,110 million M3 (MM3) of natural gas during the fiscal year. Because of distribution constraints, growth rates in natural gas quantities are expected to be low in India, somewhere in the region of 2.0% annually. "Other revenue" would be calculated as growing from the forecasted 2003-04 base. While such revenues grew in double digit terms during the past few years, growth is expected to slow because of the effect of increased government-mandated price subsidies.

Given the relatively stable cost economics of this sector, metrics such as SG&A, cost of goods sold, current assets (excluding cash), current liabilities (excluding short-term debt), etc. are expected to stay at the same percentage of sales for the foreseeable future as in 2003-04. While preliminary forecasts of capital expenditure for FY2004 put it in the region of INR62 billion, management estimates that these could rise substantially to INR83 billion in FY2004 if ONGC decides to pursue faster growth. (Indeed, under the fast-growth scenario, capital expenditure is forecast to grow at the rate of inflation; capital expenditures would be depreciated over a 20-year life). ONGC is not contemplating additional debt financing at this time. The effective tax rate for ONGC is approximately 30%. Mr. Raha believes that cash flows can grow at the Indian rate of inflation in the long run, estimated to be about 4% - 5% annually.

As March 5 approached, Mr. Raha was wondering about the price at which he should recommend the issue be offered. Also, would foreign investors be willing to pay the same price as Indian investors for ONGC's shares?

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decide on the final issue price no earlier than the day before the issue opening. Mr. Raha, his management team, and his bankers also planned to do a road show in New York, London, Hong Kong, Singapore, Dubai, and a few cities in India during February 2004.

[8] ONGC's forecasted conversion factor for 2003-04, and going forward, is 7.40. In other words, 7.4 bbl of crude are needed to make each metric ton of oil sold.

Exhibit 1: ONGC's Financials, 2001 – 2004 [9]

(INR millions, unless otherwise mentioned)

	2001-02	*2002-03*	*2003-04[10]*
Crude Oil Revenue	137,115	244,131	226,032
Qty Sold (MMT)	*22.86*	*23.90*	*24.00*
INR Crude Oil Revenue/MMT	*5,998*	*10,215*	*9,418*
Natural Gas Revenue	49,446	49,886	50,330
Qty Sold (MM3)	*20,446*	*21,110*	*21,110*
INR Natural Gas Revenue/MM3	*2.42*	*2.36*	*2.38*
Other Revenue	41,851	52,839	62,839
TOTAL REVENUE	238,574	353,821	339,201
Interest Income	10,141	13,317	9,000
SG&A and Cost of Goods	130,727	163,542	171,000
EBITDA	117,988	203,596	180,000
Depreciation/Amortization	38,152	41,277	33,507
EBIT	79,836	162,319	146,493
Interest Expense	2,469	1,132	700
EBT	77,367	161,187	145,793
Taxes	36,573	55,945	43,738
Net Income	40,794	105,242	102,055
Dividends	19,963	42,778	41,483
Current Assets	155,249	142,620	151,611
Of which, Cash	*83,825*	*61,090*	*87,960*
TOTAL ASSETS	330,226	364,083	424,588
Current Liabilities	119,262	139,081	159,725
Of which, Short Term Debt	*4,727*	*4,375*	*4,000*
Long Term Debt	30,381	3,627	1,000
Capital Expenditure[11]	36,185	48,744	61,756
Oil Price/bbl (US$; avg during year)	25.00	29.20	28.30
INR/US$	49.00	45.00	45.00

[9] All data from public sources; some are case writer estimates.
[10] Case writer estimates.
[11] Includes exploration and development spending; could be as high as INR83 billion in 2003-04.

Exhibit 2: Capital Markets and ONGC Market Data

(As of end-February 2004, unless otherwise mentioned)

ONGC:

Number of Shares Outstanding (millions)	1426.73
Percentage Share of Gov't of India	84.00%
Market Capitalization (INR millions)	1,114,276
Stock Price – High, 2003 (INR)	800
Stock Price – Low, 2003 (INR)	350
Stock Price – end-Feb, 2004 (INR)	781
Stock Price – end-Feb, 2003 (INR)	371
Indian Beta (against SENSEX;[12] INR returns)	0.57
US Beta (against S&P 500; US$ returns)	0.75
P/E (FY2003)	10.6
P/E (FY2004, forecast)	10.9
Market-to-Book Ratio	3.1
Credit Rating	AAA
Book Equity (FY 2003; INR millions)	356,082

Capital Markets:

INR Yield on 10-year Gov't of India Bond	6.50%
INR Yield on 10-year AAA Corporate Bond	7.10%
US$ Yield on 10-year US Gov't Bond	4.25%
MRP Estimate for Indian Investors (INR)	7.00%
MRP Estimate for US Investors (US$)	5.00%
Euro-$ Bond Yield Spread for Indian Issuers (vis-à-vis US Issuers)	2.25%
US Inflation Rate Estimate	2% - 3%
India Inflation Rate Estimate	4% - 5%

[12] "SENSEX" is a broad index of Bombay Stock Exchange (BSE) stocks.

Exhibit 3: ONGC's Competitors

(Data for FY2004)

	Indian Oil Company (IOC)	Hindustan Petroleum Corp. Ltd. (HPCL)	Bharat Petroleum Corp. Ltd (BPCL)
Stock Price (INR)	473	466	480
P/E (FY2004)	8.4	10.3	11.5
Market-to-Book Ratio (FY2004)	2.9	2.4	3.0
Operating Margin (%)	9.4%	5.9%	5.5%
Net Profit Margin	6.1%	3.2%	2.9%