

Company In-Depth

18 December 2006 | 29 pages

Bharati Shipyard (BHAR.BO)

Buy: Navigating for growth

- Initiating with Buy/Medium risk (1M) rating Bharati is our preferred pick among Indian shipbuilders, with a target price is Rs421. It has a c5x FY07E orderbook cover and strong earnings visibility. With its strong track record and execution skills Bharati should capitalize on the strong global outlook, especially for offshore vessels. This version corrects the EV/EBITDA figures.
- Strong Earnings Outlook A strong order book of Rs23bn extending until FY10 provides strong earnings visibility for the at least the next three years. We expect earnings to grow by 41% over FY06-FY09E. This will be backed by capacity expansion, with a new yard in Mangalore.
- Entering New Segments The company recently bagged an order for a jack-up rig worth US\$160m. With its expansion plans underway we expect it to manufacture higher-value vessels of up to 60,000 DWT. However, the company remains a play on offshore capex with about 75% of the order book linked to the offshore market.
- Valuations Attractive We value Bharati at 12x FY08E fully diluted earnings. The target price of Rs421 provides upside of 34%, which should be well supported by earnings CAGR of 41%.
- Key Risks Key downside risks include 1) implementation delays; 2) withdrawal of government subsidies; 3) sharp correction in crude prices; and 4) an upturn in the commodity cycle.

See page 27 for Analyst Certification and important disclosures.

Figure 1. Bha	arati Shipya	rds – Stati	stical A	bstract					
Year to	EPS	EPS Growth	P/E	EV/EBITDA	P /Book	ROE	ROCE	DPS	Div. Yield
31-Mar	(Rs)	(%)	(x)	(x)	(x)	(%)	(%)	(Rs)	(%)
2005	8.6	356.2	36.8	14.7	7.3	32.1	56.3	2.5	0.8
2006	16.0	86.7	19.7	8.8	5.6	32.1	46.5	2.5	0.8
2007E	20.5	28.0	15.4	8.6	4.2	31.2	27.4	2.5	0.8
2008E	35.1	71.3	9.0	6.4	3.0	38.7	25.9	2.5	0.8
2009E	45.8	30.4	6.9	5.4	2.1	35.7	23.3	2.5	0.8

Source: Citigroup Investment Research estimates

Buy/Medium Risk	1M
Price (15 Dec 06)	Rs315.15
Target price	Rs421.00
Expected share price return	33.6%
Expected dividend yield	0.8%
Expected total return	34.4%
Market Cap	Rs7,091M
	US\$159M

Price Performance (RIC: BHAR.BO, BB: BHSL IN)



Deepak Jain¹

+91-22-6631-9852 deepak3.jain@citigroup.com

Jamshed Dadabhoy¹

+91-22-6631-9883 jamshed.dadabhoy@citigroup.com

Citigroup Research is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Non-US research analysts who have prepared this report are not registered/qualified as research analysts with the NYSE and/or NASD.

¹Citigroup Global Market India Private Limited

Fiscal year end 31-Mar	2005	2006	2007E	2008E	2009E
Valuation Ratios					
P/E adjusted (x)	36.7	19.7	15.4	9.0	6.9
EV/EBITDA adjusted (x)	na	8.6	7.9	5.9	5.3
P/BV (x)	5.2	3.9	3.0	2.1	1.5
Dividend yield (%)	0.8	0.8	0.8	0.8	0.8
Per Share Data (Rs)					
EPS adjusted	8.58	16.01	20.49	35.11	45.79
EPS reported	8.58	16.01	20.49	35.11	45.79
BVPS	60.95	80.52	105.59	151.37	212.30
DPS	2.50	2.50	2.50	2.50	2.50
Profit & Loss (RsM)					
Net sales	1,926	2,933	3,964	7,316	10,120
Operating expenses	-1,465	-2,071	-2,842	-5,397	-7,578
EBIT	461	862	1,123	1,919	2,543
Net interest expense	-82	-98	-136	-324	-548
Non-operating/exceptionals	-4	18	4	5	6
Pre-tax profit	375	782	990	1,600	2,001
Tax	-101	-271	-337	-480	-540
Extraord./Min.Int./Pref.div.	0	0	0	0	0
Reported net income	274	511	654	1,120	1,461
Adjusted earnings	274	511	654	1,120	1,461
Adjusted EBITDA	466	876	1,170	2,018	2,712
Growth Rates (%)					
Sales	na	52.3	35.2	84.5	38.3
EBIT adjusted	na	86.8	30.3	70.9	32.5
EBITDA adjusted	na	88.2 86.7	33.5 28.0	72.5	34.4 30.4
EPS adjusted	na	00.7	20.0	71.3	30.4
Cash Flow (RsM)	1.41	C1	000	<u>co</u>	600
Operating cash flow	-141 4	61 15	-992 47	-68 100	622 170
Depreciation/amortization Net working capital	-528	-683	-1,759	-1,431	-1,069
Investing cash flow	-528 -92	-003 -1,081	-1,759 -1,160	-1,431 -2,692	-1,069 -2,277
Capital expenditure	-76	-1,081 -843	-1,000	-2,092	-2,000
Acquisitions/disposals	-70	-045	-1,000 0	-2,000	-2,000
Financing cash flow	786	5,181	215	1,121	993
Borrowings	8	5,240	279	1,211	1,083
Dividends paid	0	-64	-64	-90	-90
Change in cash	553	4,162	-1,937	-1,639	-662
Balance Sheet (RsM)					
Total assets	2,166	9,018	9,012	11,705	14,479
Cash & cash equivalent	548	4,713	2,776	1,137	475
Accounts receivable	498	1,220	1,978	3,612	4,472
Net fixed assets	196	1,018	1,970	3,871	5,701
Total liabilities	795	7,206	6,636	8,299	9,702
Accounts payable	349	1,285	345	653	913
Total Debt	230	5,470	5,749	6,960	8,042
Shareholders' funds	1,371	1,812	2,376	3,406	4,777
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	24.2	29.9	29.5	27.6	26.8
ROE adjusted	na	32.1	31.2	38.7	35.7
ROIC adjusted	na	28.2	17.8	18.3	17.5
Net debt to equity	-23.2	41.7	125.1	171.0	158.4
Total debt to capital	14.3	75.1	70.8	67.1	62.7

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791



Investment Summary

Bharati is our preferred pick in the Indian Shipbuilding sector. We are initiating coverage with a Buy/Low risk (1L) rating and target price of Rs412. Bharati is one of the leading private shipyards in India and is well positioned for growth. It has built a reputation for timely delivery and is well respected in its niche of offshore vessels. The company provides strong earnings visibility backed by a robust orderbook.

Our preferred pick in the sector

Strong Earnings Visibility

Despite higher depreciation and interest expenses we believe PAT will increase by 41% between FY06-FY09, driven by a sales growth of 50% over the same period. This growth is backed by:

- Unexecuted orderbook of Rs18bn i.e. about 5x FY07E sales.
- Capacity Expansion that should lead to faster execution for the orderbook.
- The company's diversification into new segments such as the jack-up rigs and higher value ships.

Diversifying Into New Areas

With a capacity expansion at its existing yard at Ratnagiri and a new yard at Mangalore, Bharati can manufacture vessels of up to 60,000 DWT. The expansion is backed by a strong order book of Rs23bn; of which Rs18bn is unexecuted with delivery dates extending until FY10. The company recently bagged an order for a jack-up rig – the first for an Indian private sector player.

Macro economic variables favorable

g With continuously high oil prices, strong E&P expenditure and high replacement demand for an aging fleet, we expect demand for offshore vessels to remain strong. Bharati which has developed a niche in the offshore segment should benefit from this strong environment.

Valuations - Attractive

At 9x FY08E earnings Bharati trades at discount to similar profiled Singaporean shipyards, which trade at 14.6x FY08E earnings. It is also cheaper than the large Korean yards (10x FY08E) and the Indian capital good companies (20x FY08E). We value Bharati at 12x FY08E earnings, which we believe is conservative given the strong 41% earnings CAGR for FY06-09E.

Key Risks

Key risks to our buy recommendation are: 1) implementation delays; 2) withdrawal of government subsidies without granting infrastructure status; 3) a sharp correction in crude prices; 4) an upturn in the commodity cycle. The key triggers for the stock would include 1) announcement of new orders; and 2) extension of subsidies

OSV demand likely to remain strong

Valuations remain attractive

Orderbook - Deep, Diversified and Dynamic

- Unexecuted order book at Rs18bn, c5x FY07E earnings, order book extends until FY10.
- The offshore market contributes about 75% of the order book (including rigs and tugs). Offshore rig orders are valued at Rs7.6bn.
- Export orders are c50%, domestic 50% (including the rig); excluding the rig orders exports are about 79% and domestic orders 21%.

Bharati's current orderbook stands at Rs22.54bn (unexecuted portion at Rs18bn) with orders extending until October 2009 (excluding the jack-up drill). The majority of the order book dominated by OSVs, but it also includes a substantial proportion of multi-purpose carriers and small container vessels.

Orderbook at c5x FY07E sales

Figure 2. Bharati Shipyards - Order Book

Type of Vessel	Name of Client	Contract Value	Delivery
		Rs. in Millions	Schedule
5250DWT Product Tanker cum Ro-Ro Vessel	Al-Jaber Shipping Agency & Marine Est.	251.06	Mar-07
120 Ton Bollard Pull Anchor Handling Tug cum Supply Vessel	The Great Eastern Shipping Co. Ltd.	574.53	Mar-07
Anchor Handling Towing Supply Vessel	Halul Offshore Services	315.59	Apr-07
80 Ton Bollard Pull Anchor Handling Tug cum Supply Vessel	The Great Eastern Shipping Co. Ltd.	479.99	Dec-06
60Mtr. Multi Purpose Offshore Platform Supply Vessel	Bourbon Supply Investissments	349.37	Jan-07
60Mtr. Multi Purpose Offshore Platform Supply Vessel	Bourbon Supply Investissments	349.37	0ct-07
1nos. Pallet /container Vessel	Sea Cargo Skips- Norway	614.49	0ct-07
1nos. Pallet /container Vessel	Sea Cargo Skips- Norway	614.49	Feb-08
1nos. Pallet /container Vessel	Nor Lines AS , Norway	631.75	Jun-08
1nos. Pallet /container Vessel	Nor Lines AS , Norway	631.75	Sep-08
Dredger	Adani Global FZE Itd.	298.31	Dec-06
Muti purpose carriers	M.K.Shipping B.V	495.22	March-08
Muti purpose carriers	M.K.Shipping B.V	495.22	Sept-08
Muti purpose carriers	M.K.Shipping B.V	495.22	Dec-08
Muti purpose carriers	M.K.Shipping B.V	495.22	Feb-09
Muti purpose carriers	M.K.Shipping B.V	495.22	June-09
Muti purpose carriers	M.K.Shipping B.V	495.22	Sept-09
140tons Bollard Pull Anchor Handling Tug Cum supply Vessel	Gesco	783.84	Jan-09
60Mtr. Multi Purpose Offshore Platform Supply Vessel	Bourbon Supply Investments	385.17	Mar-07
60Mtr. Multi Purpose Offshore Platform Supply Vessel	Bourbon Supply Investments	385.17	Jun-07
1 No. Twin Screw Pilot Cum -Survey Vessel	Kolkata Port Trust	131.40	March-08
120tons Bollard Pull Anchor Handling Tug Cum supply Vessel	Bourbon Supply Investissments	780.96	Feb-08
120tons Bollard Pull Anchor Handling Tug Cum supply Vessel	Bourbon Supply Investissments	780.96	Apr-08
120tons Bollard Pull Anchor Handling Tug Cum supply Vessel	Bourbon Supply Investissments	780.96	Aug-08
120tons Bollard Pull Anchor Handling Tug Cum supply Vessel	Bourbon Supply Investissments	780.96	Oct-08
120tons Bollard Pull Anchor Handling Tug Cum supply Vessel	Bourbon Supply Investissments	780.96	Dec-08
Pilot Boat	Reliance Industries Limited	84.24	0ct-07
Pilot Boat	Reliance Industries Limited	84.24	Nov-07
Diving Support Vessel (DSV)	Reliance Industries Limited	394.06	Feb-08
54tons Bollard Pull Tug	Reliance Industries Limited	220.90	Jul-07
54tons Bollard Pull Tug	Reliance Industries Limited	220.90	Aug-07
54tons Bollard Pull Tug	Reliance Industries Limited	220.90	Jan-08
Jack Up Drill Rig	The Great Eastern Shipping Co. Ltd.	7,642.80	Nov-09
TOTAL		22,540.41	

Source: Company Reports

Bharati's order book is clearly skewed towards the offshore segment – AHTSs, OSVs and the jack-up rig account for about 75% of Bharati's orderbook. In fact, many of the multipurpose carriers and tugs are likely to be used for the offshore business. Hence, Bharati appears to be a play on the offshore cycle.

Over 70% of the orderbook caters to the oil & gas segment

The other comforting factor is the long order book position. More than 70% of the current order book is due in FY09 and FY10. This provides a high degree of earnings visibility. Further, many of these orders have been booked in a strong market – indicating healthy margins for the next few years.

Figure 3. Bharati Shipyards - Order Book by Year of Delivery (Value)

FY09

32%

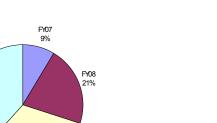
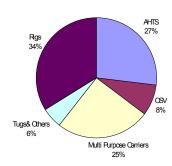


Figure 4. Bharati Shipyards - Order Book by Vessel Type (Value)



Source: Company, Citigroup Investment Research

FY10

389

Source: Company, Citigroup Investment Research

Capacity Expansion

- Greenfield project at Mangalore likely to be at full capacity by CY08, contribution to begin by 2H FY08.
- Mangalore yard located in an SEZ and will receive complete tax break on export orders.
- The rig manufacturing unit will come up at this yard, with the first rig to be delivered by November 2009.
- Ratnagiri capacity was increased by 20% recently.

Bharati Shipyards has emerged as one of the largest private sector shipyards in India. It has developed a niche in the offshore segment and has been able to secure orders in the high-value rig market. The expansion of capacity at its yards signals its foray into larger, higher value conventional ships.

We believe the expansion plans reflect the management's positive outlook. The huge orderbook (extending into FY10) provides a cushion for the capacity utilization in the near term.

Ratnagiri and Ghodbunder – Bharati shipyards has facilities in three locations in India: Ratnagiri, Goa and Ghodbunder. All are located on the West coast in Maharashtra. The facility at Ratnagiri is a sheltered lagoon that provides the yard with a natural barrier – this allows building activities to continue throughout the year even during monsoons. The Ghodbunder yard is a hull-building facility – hulls are then transported to the Ratnagiri shipyard. The Ghodbunder unit can erect 14 hulls. After expansion (at a cost of Rs650m), the Ratnagiri shipyard will be able to simultaneously erect 18-20 smaller vessels (or eight large vessels) with a maximum weight of 20,000 DWT.

Pinky Shipyard – The facility at Goa is due to an acquisition in 2005. It belonged to Pinky Shipyard, which manufactured hulls for Bharati on a contract basis. The yard has a capacity of one vessel – expansion is being undertaken.

Expansion reflects management's positive outlook

Capacity expansion at Ratnagiri

Mangalore yard will build rigs and vessels with a capacity of 20,000 DWT

Mangalore Facility – The company has also undertaken a new greenfield shipbuilding facility at Mangalore. The new yard will have capacity to build ships of 60,000 DWT. The yard, located in a SEZ, will be exempt from income taxes for five years with a 50% rebate for the next five years. The cost for the project is about Rs4.5bn and it is expected to be complete by end FY08. The yard also has capacity to manufacture jack-up rigs and can produce Handysize vessels.

Earnings Outlook

- Profit CAGR of 41%, sales CAGR of 50% during FY06-09E.
- Expect the Mangalore yard to contribute meaningfully from FY08 onwards with 45% of FY08E sales.
- Ex-subsidy OPMs to marginally increase, however subsidies as a percentage of sales to decline; trimming operating margins,
- Higher depreciation and interest costs, moderated by lower tax rates as the Mangalore yard would be tax free.

Sales – Backed by capacity expansion expect a CAGR of 50%

Bharati has a long and deep order book of Rs18bn. This provides it a strong earnings visibility over the next few years. We estimate sales to grow by about 33% in FY07 and close to 84% in FY08. The growth in the current year is on the back of expanded capacity at its yard at Ratnagiri. The Mangalore yard which is likely to be complete by end 2008 will however contribute substantially to the revenues in FY08. The expected doubling of revenue in FY08 is on account of the capacity expansion in the yard.

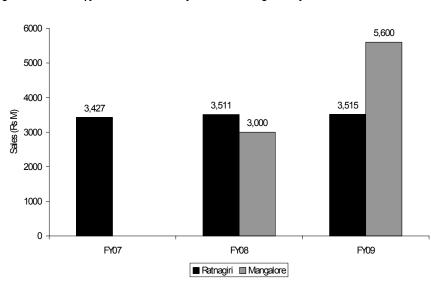


Figure 5. Bharati Shipyards – Contribution by Yard – Excluding Subsidy

Source: Citigroup Investment Research estimates, Company

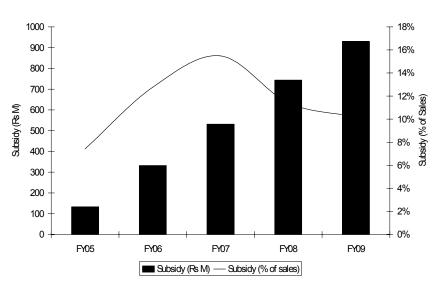
Our combined sales estimates for Bharati between 2HFY07 and FY09 total Rs17.5bn (ex-subsidies). This is below the unexecuted order book of Rs18bn.

Expansion led sales growth of 50%

Hence we believe our estimates remain conservative. The single largest order of Bharati – its jack-up rig is likely to provide a substantial boost to sales from FY09 onwards.

Also given the strong global environment for both OSVs and Fleet Ships we believe the order book can be sustained at these levels for the next three years.

Figure 6. Bharati Shipyards – Subsidy as a percentage of sales



Source: Citigroup Investment Research estimates, Company

Although we expect subsidies to increase in absolute terms, we estimate subsidies as a percentage of sales will decline to about 10%. This would be due to a higher percentage of domestic sales. This is especially true for Bharati's orders with Reliance Industries and also the huge jack-up rig order.

Costs – Relatively stable – estimate ex-subsidy margins at 18%

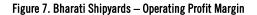
We estimate raw material costs to remain at about the current levels through FY09. We expect the orderbook to drive sales going forward between 2007 and 2009. Since Bharati has already entered forward contracts for its raw materials the costs are likely to remain stable.

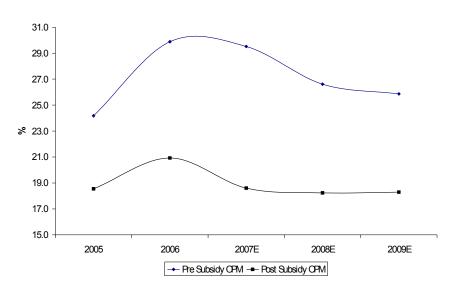
We estimate the pre-subsidy operating margins at around 18%. Subsidy estimated at between 13% of total sales. Hence, operating margins on net revenues including subsidies can be estimated as close to 26%.

The margins are lower than those in FY06. The year FY06 had higher margins due to higher final deliveries during the year; else we expect Bharati to maintain margins inline with FY05, at about 18%.

Subsidies as a percentage of sales likely to decline as domestic order book is executed

Costs to remain stable; much of the raw material is hedged.





Source: Citigroup Investment Research estimates, Company

PAT – expected to grow at 41% p.a. between FY06- FY09E

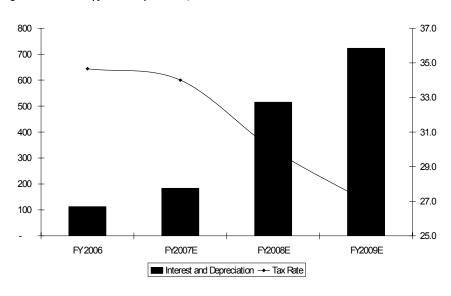
PAT to grow at 41% CAGR

We expect the interest cost to rise appreciably over the period. Now, interest on the FCCB is amortised while income from cash balances is accrued to Bharati. As cash balances decline net interest costs rise. With the higher asset base (Rs5bn worth of capex is expected over the next three years) depreciation expenses are expected to quadruple between FY06 and FY09.

Hence, while we expect pre-subsidy operating profits to grow by a 50% CAGR between FY06 and FY09, overall PAT is expected to rise by 41% over FY06-09 which is slower that the top line growth of the company.

Tax rate to decline as the Mangalore yard is in an SEZ

Figure 8. Bharati Shipyards – Depreciation, Interest and Taxes



Source: Citigroup Investment Research estimates, Company

Interest and depreciation costs likely to increase

Two factors affect the bottom line of the company:

- Higher interest and depreciation costs: We expect interest and depreciation costs to rise substantially. This is due to higher capex (about Rs5bn over the next three years) and higher interest expenses (due to higher debt). While interest on the FCCB is to be amortised initially, net interest will be affected by higher utilization of the existing cash balances (implying lower interest earnings). Also other interest expenses on account of bank guarantees will somewhat depress earnings.
- Lower Tax Rate: The new yard at Mangalore is situated in a Special Economic Zone. Hence all export orders executed through this yard would be tax free. Hence we expect the tax rate to fall progressively from 34% to 26% in FY09E.

Financial Analysis

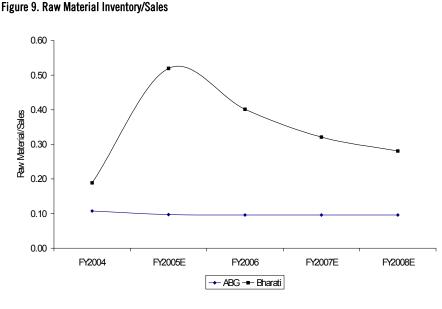
- Unusually long working capital cycle as the company prefers to keep raw material on its books.
- ROE, ROCE higher than its peers; though some pressure in the near term.
- FCCB if converted, could lead to a dilution of 42%

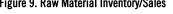
Working Capital Cycle

Bharati has a much longer working capital cycle than its peers. This is largely due to its huge raw material inventory. While raw material inventory formed about 10% of the ex-subsidy sales for ABG, it was close to 50% for Bharati. With a larger raw inventory Bharati can protect itself against possible price hikes in contracts. However, we believe the extraordinary inventory may have stemmed from Bharati's willingness to deploy its additional cash. It may have wanted to benefit from the difference in price between the forward contract and spot value.

Working capital cycle nearly twice as that of its peers

Going ahead, we believe the raw material on Bharati's books could come down as the company enters forward contracts. We believe this would be especially true in FY09 and FY10 if cash flow requirements increase.





Source: Citigroup Investment Research estimates, Company

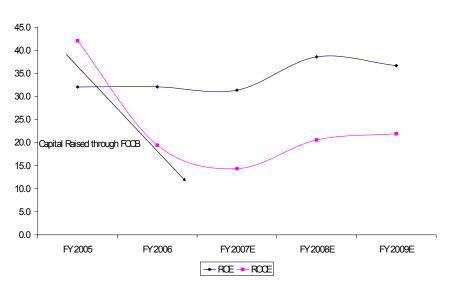
Further, Bharati imports much of its needs for steel for cash payments. This is against the domestic steel consumption of ABG.

Finally, the subsidy accrued to the company has not been received. This adds to net working capital. One key element affecting the cash flows has been the delayed payment of subsidies. Subsidies are accounted as a part of the sundry creditors.

Return Ratios – Near-term pressure likely

The company plans to spend nearly Rs5bn over the next three years on account of its capex plan. We believe this huge capex could lead to a decline in the return ratios - most notably the ROCE in the near term.







ROCE dipped in FY06 as the capital raised through FCCB's was still being invested

FCCB to lead to a 42% dilution

This is partially due to its higher margins as well as relatively higher capital turnover ratio.

FCCB - dilution effect substantial

The debt equity ratio excluding the FCCB at about 0.5 is reasonable. We exclude the FCCB amount of US\$100m as conversion to shares maybe expected (conversion price of Rs421 and 497. for FY09 and FY11 bonds about 35% and 45% over current market value).

Figure 11. Bharati Shipy	ards – FCCB Conversion Rate		
	Amount Rs	Conversion Price	Additional Shares
FY09	907.7	421.94	2.2
FY10	3630.6	497.85	7.3
Source: Citigroup Investm	ent Research estimates		
Figure 12. Dilution Effect	t		
Figure 12. Dilution Effect Current Shares	t		22.5
Current Shares	t		
-	t		22.5 9.4 31.9

Source: Citigroup Investment Research

However, the post subsidy ROE of 31% in FY08 is higher than that of its peers.

Financials

Figure 13. Bharati Shipyards – P&L, FY05-09E

Year to 31 March	FY05	FY06	FY07E	FY08E	FY09E
Net sales	1,926	2,933	3,964	7,316	10,120
% change YoY	58.3	52.3	35.2	84.5	38.3
Raw material expenses	1,100	1,497	2,008	3,813	5,337
percentage of net sales	57.1	51.0	50.7	52.1	52.7
Manpower expenses	179	253	343	652	912
percentage of net sales	9.3	8.6	8.7	8.9	9.0
Manufacturing expenses	78	167	257	489	684
percentage of net sales	4.1	5.7	6.5	6.7	6.8
Selling and Distribution expenses	104	140	185	343	475
percentage of net sales	5.4	4.8	4.7	4.7	4.7
Total Operating Costs	1,460	2,056	2,794	5,297	7,408
percentage of net sales	75.8	70.1	70.5	72.4	73.2
EBITDA	466	876	1,170	2,018	2,712
Interest	82	98	136	324	548
Other income	(4)	18	4	5	6
Depreciation	4	15	47	100	170
Pre-Tax Profit	375	782	990	1,600	2,001
Tax	101	271	337	480	540
Net profit	274	511	654	1,120	1,461
Profit Margins (%)					
EBITDA	24.2	29.9	29.5	27.6	26.8
EBIT	23.9	29.4	28.3	26.2	25.1
Other income /EBDIT	-0.9	2.0	0.3	0.2	0.2
Interest cover (x)	5.6	9.2	8.6	6.2	5.0
Effective Tax rate	27.0	34.7	34.0	30.0	27.0
Per Share Data					
No. of O/S shares (Mils)	31.90	31.90	31.90	31.90	31.90
EPS (Rs)	8.6	16.0	20.5	35.1	45.8
Cash flow /share (Rs)	8.7	16.5	22.0	38.2	51.1
Dividend /share (Rs)	2.5	2.5	2.5	2.5	2.5

Source: Citigroup Investment Research estimates, Company

Figure 14. Bharati Shipyards – Balance Sheet, FY05-09E

ingule 14. Dilatati olipyatus	Datance once	,1100-002			
Year to 31 March	FY05	FY06	FY07E	FY08E	FY09E
Share capital	225	225	225	225	225
Reserves and surplus	1,146	1,587	2,151	3,181	4,552
Share holders equity	1,371	1,812	2,376	3,406	4,777
Secured loans	230	931	1,211	2,421	3,504
Unsecured loans	-	4,538	4,538	4,538	4,538
Total Borrowings	230	5,470	5,749	6,960	8,042
Total Capital	1,609	7,434	8,277	10,518	12,972
Net Fixed Assets	196	1,018	1,970	3,871	5,701
Investments	65	25	25	25	25
Miscellaneous Expenditure	54	49	49	49	49
Current Assets					
Inventories	806	1,993	2,213	3,011	3,757
Accounts Receivable	244	688	1,286	2,228	2,81
Cash and Bank Balances	548	4,713.43	2,776.39	1,136.98	474.87
Loans and Advances	254	532	692	1,384	1,661
Others	-	-	-	-	
Total Current Assets	1,851	7,927	6,968	7,760	8,704
Current Liabilities					
Accounts Payable	349	276	345	653	913
Others	3	13	13	13	13
Provisions	205	286	378	521	581
Total Current Liabilities	557	1,583	735	1,186	1,507
Net Current Assets	1,294	6,343	6,233	6,574	7,197
Total Assets	1,609	7,434	8,277	10,518	12,972
Key Ratios					
NAV (Rs)	43.0	56.8	74.5	106.8	149.7
Total debt /Equity (%)	16.7	51.4	51.0	71.1	73.4
ROE (%)	32.1	32.1	31.2	38.7	35.7
ROCE (%)	42.0	19.4	14.3	20.5	21.7

Source: Citigroup Investment Research estimates, Company

Figure 15. Bharati Shipyards – Cash Flows, FY05-09E

Depreciation Forex Gain	4.4 7.9	14.7 -3.9	47.2 0.0	99.7 0.0	169.7 0.0
Interest Expenses	82.1	97.7	136.3	323.8	547.8
Dividend Income	-2.8	-1.4	-2.0	-3.0	-4.0
Operating profit before WC changes	466.6	888.6	1172.0	2020.4	2714.4
Change in receivables	-130.2	-444.2	-598.2	-941.8	-583.3
Change in inventories	-369.5	-1187.2	-220.4	-797.8	-746.1
Change in trade payables	-28.5	948.1	-940.3	308.6	260.2
Cash Generated from operations	-61.7	205.4	-587.0	589.4	1645.3
Direct Taxes Paid	-0.25	-47.98	-270.87	-336.77	-479.96
Net Cash from Operating Activities	-61.9	157.5	-857.8	252.6	1165.3
Cash flow from Investing Activities					
Purchase of fixed assets	-75.8	-842.8	-1000.0	-2000.0	-2000.0
Change in deposits	48.8	-278.4	-159.7	-692.1	-276.8
Dividends received	2.8	1.4	2.0	3.0	4.0
Net Cash from Investing Activities	-24.2	-1119.8	-1157.7	-2689.1	-2272.8
Cash flow from financing activities					
lssue of share capital	832.6	0.0	0.0	0.0	0.0
Issue of FCCB	0.0	4538.3	0.0	0.0	0.0
Change in Investments	-65.1	40.6	-0.5	0.0	0.0
Miscellaneous expenditure	-54.2	5.3	0.0	0.0	0.0
Proceeding from borrowings	7.6	701.7	279.4	1210.6	1082.9
Interest Paid	-82.1	-97.7	-136.3	-323.8	-547.8
Dividend Paid	0.0	-64.1	-64.1	-89.7	-89.7
Net Cash from Financing	638.8	5124.0	78.5	797.1	445.4
Net Increase in Cash	552.7	4161.7	-1937.0	-1639.4	-662.1

Source: Citigroup Investment Research estimates, Company

Valuations

- Value Bharati at 12x FY08E fully diluted EPS versus the current valuation of C9x FY08E earnings.
- Closest peer set are smaller Singaporean shipyards which have a similar size and product profile. Indian yards trade at a c45% discount to this peer set.
- Also trades at a discount to Korean shipbuilders and the Indian capital goods sector.

We rate Bharati Shipyards as a Buy, Medium Risk (1M) with a target price of Rs421, which is 12x FY08E fully diluted earnings. This is in line with our methodology of rating Indian Shipbuilders.

We value the Indian Shipbuilders at 12x FY08E fully diluted EPS. The yards trade at a substantial discount to shipyards that have a similar order book profile, the Korean Shipbuilders and the Indian capital goods sector. We believe the smaller Singaporean shipyards, which are of a similar size and produce similar offshore vessels are the ideal peer set for the Indian companies.

Value Bharati at 12x FY08E fully diluted earnings

The peer set trades in a band of 12.3-16.4x FY08E earnings vis a vis 9x for the Indian Shipbuilders However, we do look at the Korean shipyards and the Indian capital goods sector for indicative purposes.

Comparison with shipyards with similar order book profile

Bharati Shipyard trades at 9x FY08E earnings. Amongst the closest global peer set for Indian companies we include Jaya Holdings (3rd largest AHTS order book in the world), Labroy Marine (4th largest AHTS shipbuilder), Pan United (5th largest) and Keppel Corp. Although Keppel is geared towards the rig segment we include it in our valuation set as the Indian shipyards aim to enter the rig segment.

This peer set trades in a 12.3-16.4x FY08E earning band – a substantial premium to Indian companies. Even allowing for the uncertainty regarding subsidies, we believe this premium is not entirely justified given the strong growth rates and expansion plans of Indian shipbuilders.

Figure 16. Similar Profile Shipyards – Relative Valuations

Company	MCAP (USD)	P/E (FY08E)
Jaya Holdings	729	14.3
Labroy Marine	981	12.3
Pan United Marin	217	16.4
Keppel Corp	8,959	15.6
Average	10,886	14.6
Bharati Shipyards	151	9.0
ABG Shipyards	248	9.2

Source: Citigroup Investment Research estimates. Bloomberg estimates, DataCentral

Comparison with Korean builders

Bharati trades at a c10% discount to larger Korean Shipyards. However, we believe the Korean Shipyards are not in the correct peer set for Indian builders due to the difference in product profile. Korean shipbuilders produce large LNG tankers and are more likely to be affected by a change in global trends than the Indian players that currently cater to niche segment.

Figure 17. Korean Shipbuilders – Relative Valuations

Company	MCAP (USD)	P/E (FY08E)
Hyundai Heavy Industries	10,463	8.4
Samsung Heavy Industries	5,543	11.3
Hyundai MIPO Shipyards	2,753	12.3
Daewoo Shipbuilding	5,820	8.0
Average	24,579	10.0
Bharati Shipyards	151	9.0
ABG Shipyards	248	9.2

Source: Citigroup Investment Research, Bloomberg

Further, our Korean Shipbuilding analyst Sokje Lee values the Korean shipyards at c15x FY08E earnings, which is at a substantial premium to Indian shipbuilders.

Trades at a discount to Korean Shipbuilders

Comparison with Indian capital goods sector

Bharati was listed recently so it does not have any meaningful historical trading bands. Shipbuilders are similar to the capital goods sector with respect to the long order book cover. However, they differ in terms of the business dynamics – 1) capacities for production/business implementation can easily be expanded 2) The capital goods companies broadly cater to the domestic Indian market rather than the global sector.

Our peer set of companies in the capital goods sector are valued at an average P/E of 22x with a similar growth profile – the extent of discount again seems unqualified.

Same growth as capital goods but at a discount

Figure 18. Capital Good Companies – Relative Valuations	
---	--

	P/E (08E)	EPS CAGR (06-09E)
L&T	25	29%
BHEL	22	27%
Suzlon	21	39%
Average	22	32%
Bharati	9	41%
ABG	9	20%
Source: Citigroup Investment Research e	stimates, Bloomberg	

Going ahead we see two key triggers that could drive valuations:

- Announcement on continuation/payment of subsidies
- New order inflows
- Continued strength in global shipbuilding prices

Risks

We rate Bharati shipyards Medium Risk based on our global quantitative analysis. Being a small shipyard in the global context, Bharati is subject to industry-wide risk factors that include a rise in raw material costs and a steep rise global ship building capacity. Further, the global macro economic variables such as a decline in GDP growth rates or a decline in sea trade could adversely impact Bharati Shipyards. Besides these factors we highlight risks unique to Bharati and the Indian Shipbuilding industry.

Company Specific Risks Delay in Capacity Expansion

Bharati plans to triple its current capacities for which orders have been received. Any delay in the scheduled capacity expansion would inevitably compromise the delivery schedules of the current order book – time over runs would lead to imposition of financial penalties. This would also impact the company's reputation and could adversely affect future order flows.

Execution Risks

Bharati will be producing a new type of ships – such as the jack-up rigs. While it has international partners for support, cost and time over runs in the initial stages of the learning curve cannot be ruled out. Further, performance

Capacity expansion and execution are key risks

guarantees are typically in place for 6 months – any below par performance could lead to financial penalty. Besides the financial impact, it would adversely affect the company's reputation and a potential loss of orders.

Industry Risks

Subsidy retraction by the government

Without subsidies offered by the government, net profit would fall by c45% in FY07E. We believe subsidies would affect profitability only if it is removed and infrastructure status is not granted. Please refer to the appendix for details.

Decline in Oil Prices

Demand for offshore vessels is affected by the E&P budgets of oil companies. These are in turn determined by the *expected long-term* fuel prices. A sustained and continuous decline in oil prices would negatively impact demand for offshore vessels which account for nearly 70% of Bharati's orderbook.

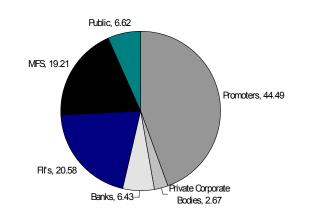
Company Description

Set up in 1973, Bharati Shipyard is one of the largest private shipyards in India. From its shipyards, spread across three regions – Ratnagiri, Ghodbunder and Goa – the company has built ships including OSVs, cargo ships and a wide range of tugs/deepwater trawlers. The company is in the process of setting up a new shipyard in Mangalore and expanding its capacity in Ratnagiri. It recently bagged an order for building a jack-up rig – a first for any Indian shipyard. It has an unexecuted order book of Rs18bn. The company had an initial public offering in May 2004 and subsequently raised \$100m through an FCCB in Dec 2005.

Management and Ownership

Bharati Shipyard was established by Mr. PC Kapoor and Mr. Vijay Kumar – both qualified technocrats. The management is well respected for its execution skills, which have earned the company a reputation for timely delivery. This has been reflected in the number of repeat orders.

Figure 19. Bharati Shipyards - Shareholding Pattern



Source: Citigroup Investment Research, BSE

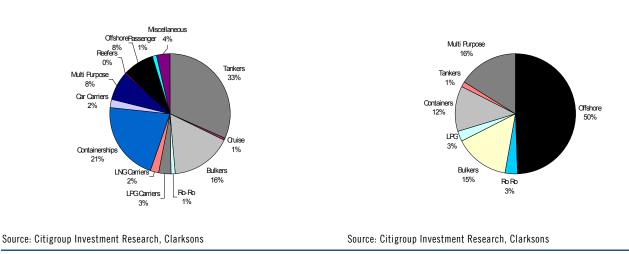
Appendix 1 - OSV markets: Initial Successes; Bright Future

- About 65% of private shipbuilders' order book is geared towards the oil & gas sector; globally India has one of the largest AHTS order books.
- India's prominence in the sector due to: 1) unfeasibility of producing niche vessels in the large shipyards; and 2) availability of skilled labour.
- Demand drivers for OSVs namely E&P expenditure, average fleet age and technological advancements remain favourable.

India has been extremely successful in the OSV markets. Bharati and ABG shipyards are amongst the top yards in terms of number of AHTS order book. While offshore vessels account for 8% of the world orderbook, they contribute close to 46% of India's orderbook.

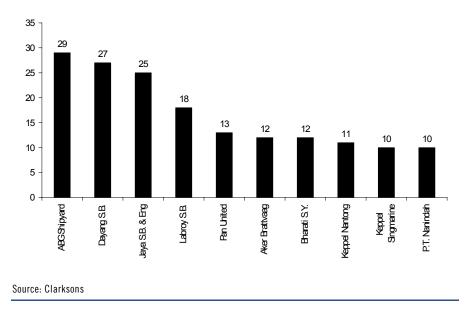
Offshore vessels account for 8% of the world orderbook, while they contribute close to 46% of India's order book

Figure 20. World – Order Book (number of ships)



In fact a look at the OSV market shares by countries indicates a clear shift towards countries without a strong shipping history. Shipyards from India, China and Singapore dominate the list of the top 10 shipyards by AHTS order book. India's ABG has the highest orderbook for AHTSs worldwide.

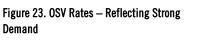
Figure 21. India - Order Book (number of ships)

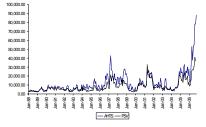




We believe the success of the Indian builders in this segment has been due to two key factors:

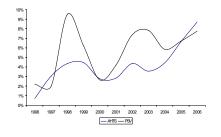
Bigger yards unfeasible to produce OSV: The yards at major shipbuilding countries such as Korea and Japan have capacities where the production of OSVs would have been uneconomical. In addition, major shipyards in the world have huge order backlogs of cargo vessels (which are priced much





Source: Citigroup Investment Research, Clarksons

Figure 24. Orderbook as a percentage of fleet



Source: Citigroup Investment Research, Clarksons

higher) forcing the owner of OSVs to look towards newer shipyards, creating the shift toward countries such as India.

Capitalizing on skilled labour: The OSV segment utilizes one of India's key advantages – lower *skilled* labour costs. OSVs typically require a higher degree of technological skill than vessels in the tanker/bulk segments. This has helped India succeed against more competitive Chinese shipbuilders that have been able to build plain vanilla tanker vessels, which are more labour intensive.

We also believe production of OSVs could be a stepping stone towards building higher tonnage vessels. India lacks a strong reputation for shipbuilding. Once the shipyards can earn a reputation for timely and quality building we would expect them to migrate towards higher tonnage ships. In fact, this impending shift can be seen in the capacity expansion programs of ABG and Bharati. They are clearing looking to expand their capacities substantially – ABG plans to be able to build ships up to 1,20,000 DWT at its shipyard in Dahej.

OSV segment – Strong growth prospects

The key demand drivers for the offshore Supply Vessels are largely favorable. Strong E&P spending, *expected* crude prices, increasing requirements of vessels per rig and an aging fleet should drive growth going forward.

Expected Crude Prices: E&P activities dictate demand for OSVs. The E&P budget is a direct function of the *expected* crude oil prices. Typically an expectation of higher oil prices leads to a surge in exploration activity. Exploration activities now occur deep within the seas with floating production facilities (or rigs). This increases demand for OSVs, which service these markets. As per the survey done by our global analyst Geoffrey Kieburtz only a decline in oil prices below the \$42 level could bring down global E&P budgets and consequently decrease demand for offshore vessels.

Figure 25. What Oil Price in Next Six Months Would Be Required to Alter Current Spending Plans by 10% (Question to oil companies in the E&P Survey by Geoff Kieburtz)

	10% Decrease For		10% Increase for	
-	2006	2007E	2006	2007E
US Independents	\$41.36	45.91	77.14	75
Canada	44.58	45	77.5	71.36
Outside North America	36.11	33.75	83.33	76.67
Worldwide	42.08	42.71	78.16	74
Source: Citigroup Investment	Research estimates			

Strong E&P expenditure: The outlook for spending also remains positive – the E&P budgets are estimated to have been increased by 22% in FY06. This is the 7th consecutive year of an increase in E&P budgets.

	2005A	2006E	% Change
US Independents	34,370	44,280	28.8%
US Majors	14,812	17,974	21.3%
US Total	49,182	62,254	26.6%
Canada	25,570	27,777	8.6%
Outside North America	132,269	162,994	23.2%
Worldwide	207,021	253,025	22.2%

Figure 26. World – E&P Expenditure remains strong (US\$ M)

Source: Citigroup Investment Research estimates

Number of vessels/rigs: Demand for OSVs depends on the number of vessel required to service a rig. New, more advanced rigs (4th and 5th generation) has a drilling speed which is three times that of older rigs. A higher drilling speed leads to a demand for a greater number of service vessels. Currently it is estimated that about 1.75 vessels per day are required for a floating rig - this could increase going forward.

Profile of the Fleet: Like all vessels, OSVs have a fixed life span beyond which operation become uneconomical. The typical lifespan of an AHTS is about 20 years. As the graph shows about 73% of the AHTS fleet and 62% of the PSV fleet is over 20 years old – these vessels were ordered in the oil boom of 1973 and 1979. During this period oil prices increased from \$1 to \$10/barrel in 1973 and \$40/barrel in 1979. Between the late 1980's and late 1990's virtually no OSVs were ordered. Hence the skewed age profile. Despite this the order book currently forms below 10% of the current fleet – clearly indicating a huge potential.

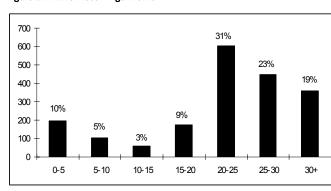
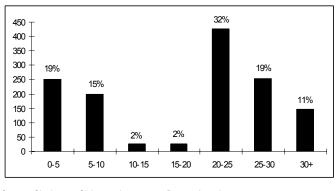


Figure 27. AHTS Fleet – Age Profile

Source: Clarksons, Citigroup Investment Research estimates

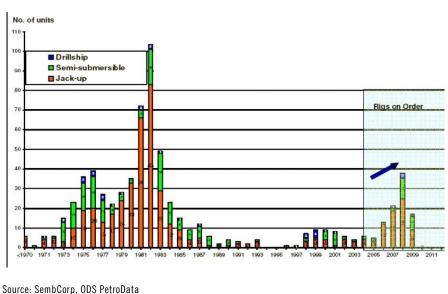
Figure 28. PSV Fleet – Age Profile



Source: Clarksons, Citigroup Investment Research estimates

Jack-up rigs are a new area where Indian shipbuilders – notably ABG and Bharati shipyards – have entered. Just like the OSVs rigs, they are also a direct play on the E&P cycle. The fleet development of rigs has been very similar to that of OSVs with deliveries peaking during the boom of the 1980s and the sudden fall in demand immediately after. As pointed out the newer oil rigs (4th and 5th generation) being 3-4 times faster than older drilling rigs the replacement demand will also be higher.

Figure 29. World - Rigs on Order



More than 90% of the jack-up rigs are over 20 years old.

As the above graph shows over 90% of the jack-up rigs are over 20 years old. This has not only enhanced the funds required or repairing but also enhanced downtime. Hence we expect strong replacement demand. An estimated 350 rigs are over 20 years old but only 70 are under construction – deliveries of these stretch well into FY09, so we expect strong demand extending into the next decade.

Appendix 2 – Subsidy or Infrastructure Status would be as good

- Subsidies account for c50% of the profitability of Indian builders like Bharati and ABG.
- Calculations suggest a shift from outright 30% subsidies to granting "infrastructure status" to the industry would be equally beneficial
- The grant of infrastructure status would also improve cash flows as currently no currently company has received subsidies.

In 2002, the government announced a policy of providing subsidies to private sector shipbuilding companies. The policy guidelines however, came through only in mid-2003. The policy was introduced for a five-year period ending July 2007. The government was to provide 30% of the sale price on all ships for foreign orders. Ships on domestic orders would however be eligible for subsidy if: 1) The vessels were a minimum of 80 metres in length and 2) The orders are won through a global tendering process.

While technically the sales price of the ship value is to be used for the subsidy calculation; the sales price is evaluated by a DGCA committee. This committee evaluates the sale price and may alter the ship value before awarding an inprincipal approval. Historically in-principal approval has been marginally below No private player has actually received cash subsidy

Very little difference between subsidy

and infrastructure status

the sales price. For private players the subsidy payment is made only after the delivery of the ship; while payment to the public sector yards is stage based.

Following the in-principal approval a budget is sanctioned after which final payout is made. It is noteworthy that *no private player has actually received any subsidy until now*. However, ABG recently received a budget approval for some of the ships delivered and is confident of an actual cash payment in the coming months.

The tremendous margin growth of private players since 2005 has largely been due to subsidies (we estimate that subsidies would reduce the FY08E PAT of Bharati and ABG by about 44% and 51% respectively). Hence the continuation of subsidies beyond July 2007 assumes significance.

The industry is of the opinion that the subsidy is likely to extend beyond 2007 until at least 2012. Further subsidy is available on all ships contracted before 2007 – hence the current order book which will power growth in FY08 and FY09 will receive the subsidy benefit.

There is also a possibility of subsidy being removed and shipbuilding receiving an infrastructure status. We analyse the profitability of a typical shipbuilder receiving subsidy, not receiving subsidy and one with infrastructure status.

	With With Subsidy Infrastructure Status		Without Subsidy	Comments	
Sales	100	100	100	Sales without subsidy	
Raw Material	60	57	60	About 60% of total sales value	
- Domestic	21	18	21	Infrastructure Status Benefit : 16% excise duty benefit on domestic purchases	
- Imported	39	39	39		
Other Expenses	23	19	23	Infrastructure Status Benefit : 4% CST benefit	
EBITDA	17	24	17		
Value of Subsidy	15	0	0	Subsidy at an average of 15% of sales	
Adjusted EBITDA	32	24	17		
Interest Charges	3.5	3.2	3.5	Infrastructure Status Benefit : Interest costs could be about 10% lower	
Depreciation	1	1	1		
Other Income	0.5	0.5	0.5		
PBT	28	20.7	13		
Tax	9.2	2.5	4.3	Infrastructure Status Benefit :Pays only MAT instead of the regular 33% tax rate	
PAT	18.8	18.2	8.7	Net difference between subsidy status and Infrastructure Status negligible	

Figure 30. Bharati Shipyard – Subsidy & Infrastructure Status

Source: Citigroup Investment Research estimates

Cash flows will increase if infrastructure status is granted

We believe the profitability will be largely unchanged for the company with infrastructure status vis a vis with subsidy. Further, it would imply *immediate* accretion to the company's cash flow (vis a vis a long delayed subsidy payment).

Bharati Shipyards Company Description

Set up in 1973, Bharati Shipyard is one of the largest private shipyards in India. From its shipyards, spread across three regions – Ratnagiri, Ghodbunder and Goa – the company has built ships including OSVs, cargo ships and a wide range of tugs/deepwater trawlers. It is setting up a new shipyard in Mangalore and expanding its capacity in Ratnagiri. It recently bagged an order to build a jack-up rig – a first for any Indian shipyard. It has an unexecuted order book of Rs18bn. The company had an initial public offering in May 2004 and subsequently raised \$100m through an FCCB in Dec 2005.

Investment Summary

Bharati has strong earnings momentum and an order book of c5x FY07E sales. It is our preferred pick in the Indian Shipbuilding space. We initiate on Bharati Shipyards with a Buy/Medium risk (1M) rating and target price of Rs421. Our stance is backed by solid 41% earnings CAGR for FY06-FY09E.The company's order book of Rs23bn (unexecuted portion of Rs18bn) is heavily geared towards the oil & gas segment, which has strong demand drivers. The company recently bagged an order for a jack-up rig – the first for an Indian company. Its aggressive expansion plans are backed by its strong orderbook. The company will expand its capacity at Ratnagiri by 20%, while its new yard at Mangalore should generate revenues in FY08. The Mangalore yard can produce ships of 60,000 DWT and also house the rig building unit. Current valuations are attractive.

Valuation

We rate Bharati shipyards Buy/Medium Risk (1M) with a target price of Rs421, or 12x FY08E earnings. The valuation accounts for complete conversion of the FCCB – leading to a 42% dilution in earnings. This is in line with our methodology of rating Indian shipbuilders. At our target price ABG would provide 35% upside from current levels. The current valuations at 9x FY08E earnings are at a substantial discount to the smaller Singaporean yards. Singaporean yards including Jaya Holdings, Lebroy Marine, Pan United Marine and Keppel have an order book profile that most closely matches that of Bharati; and trade at an average of 14.6x FY08E. ABG also trades at a discount to Korean shipyards (10x FY08E) and is substantially cheaper than the Indian capital goods companies (20x FY08E). With a profit growth of 41% CAGR expected between FY06-09E, we believe valuations remain conservative. The robust orderbook at c5x FY07E sales would provide greater comfort.

Risk

We rate Bharati shipyards Medium risk based on our global quantitative analysis. Being a small shipyard in the global context, Bharati is subject to industry-wide risk factors that include a rise in raw material costs and a steep rise global ship building capacity. Further, global macro economic variables such as a decline in GDP growth rates or a decline in sea trade could adversely impact Bharati Shipyards. Key risks include (1) removal of subsidies; (2) declining oil prices; and (3) execution risk.

ABG Shipyards Company Description

ABG, the largest private sector yard in India has built more than 90 ships since 1990. It has a shipbuilding facility in Magdala, near Surat in Gujarat. It is now setting up a new shipyard at Dahej and expanding its capacity in Surat. The first phase of the Dahej shipyard, being constructed at a cost of Rs4bn, can build ships with a capacity of up to 120,000 DWT. At Dahej, it can build rigs – a large-ticket profitable segment.

Investment Summary

ABG is India's leading private shipbuilder and has the world's largest AHTS (Anchor Handling Tug) order book. The company has a strong earnings visibility with a robust order book of Rs23bn (unexecuted portion of Rs15.5bn), to be executed until FY10.The company has strong expansion plans at its existing yards at Surat where it plans to increase capacity by 40%. Its new Greenfield yard at Dahej, which will be commissioned in April 2008, will have capability to produce ships up to 120,000 DWT. In its second phase of expansion, the yard would also have a rig-building facility. This should increase the orderbook execution rate and provide an entry into new shipbuilding segments. With earnings CAGR of 20% over FY06-09E, we believe current valuations are attractive.

Valuation

We rate ABG Shipyards Buy/Medium Risk (1M). We value ABG Shipyards at Rs291, which is 12x FY08E earnings. This is in line with our methodology for rating Indian shipbuilders. At our target price ABG provides 29% upside from current levels. The current valuations at 9x FY08E earnings are at a substantial discount to the smaller Singaporean yards. These include Jaya Holdings, Lebroy Marine, Pan United Marine and Keppel, which have order book profiles that most closely match that of ABG; trade at an average of 14.6x FY08E. ABG also trades at a discount to Korean shipyards (10x FY08E) and is substantially cheaper than the Indian capital goods companies (20x FY08E). We believe the valuations will be supported by earnings growth of 20% CAGR for FY06-09E. The strong orderbook provides comfort to the valuations.

Risk

We rate ABG Shipyards Medium Risk, which differs from our 260 day quantitative rating of High Risk. We believe, the lower rating is justified given the strong order book cover of c3x FY07E sales and the offshore segment seems to have strong demand drivers in place. Being a small shipyard in the global context, ABG is subject to industry-wide risk factors that include a rise in raw material costs and a steep rise in global ship building capacity. Key risks include: (1) removal of subsidies; (2) declining oil prices; and (3) execution risk.

Analyst Certification Appendix A-1

We, Deepak Jain and Jamshed Dadabhoy, research analysts and the authors of this report, hereby certify that all of the views expressed in this research report accurately reflect our personal views about any and all of the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

IMPORTANT DISCLOSURES

Bharati Shipyard Ltd (BHAR.BO)

Ratings and Target Price History - Fundamental Research Target Closing INR Date Ratino Price Price Indicates change. Chart 500 current 400 as s of 17 300 Decen 200 nper J FM A M J J A S O N D J FM A M J J A S O N D J FM A M J J A S O N D 2004 2005 2006 Covered ----- Not covered

A director of Reliance Industries serves as a director on Citigroup's International Advisory Board.

Citigroup Global Markets Inc. or its affiliates beneficially owns 1% or more of any class of common equity securities of Bharati Shipyard Ltd, Reliance Industries and Suzlon Energy Ltd. This position reflects information available as of the prior business day.

Within the past 12 months, Citigroup Global Markets Inc. or its affiliates has acted as manager or co-manager of an offering of securities of Reliance Industries and Suzlon Energy Ltd.

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from Bharati Shipyard Ltd and Reliance Industries.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from Great Eastern Shipping Co Ltd, Keppel Corporation, Reliance Industries and Suzlon Energy Ltd in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following company(ies) as investment banking client(s): Bharati Shipyard Ltd and Reliance Industries.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following company(ies) as clients, and the services provided were non-investment-banking, securities-related: Great Eastern Shipping Co Ltd, Keppel Corporation, Reliance Industries and Suzlon Energy Ltd.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following company(ies) as clients, and the services provided were non-investment-banking, non-securities-related: Great Eastern Shipping Co Ltd, Keppel Corporation, Reliance Industries and Suzlon Energy Ltd.

Analysts' compensation is determined based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates ("the Firm"). Like all Firm employees, analysts receive compensation that is impacted by overall firm profitability, which includes revenues from, among other business units, the Private Client Division, Institutional Sales and Trading, and Investment Banking.

The Firm is a market maker in the publicly traded equity securities of Keppel Corporation.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citigroup Investment Research product ("the Product"), please contact Citigroup Investment Research, 388 Greenwich Street, 29th Floor, New York, NY, 10013, Attention: Legal/Compliance. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at www.citigroupgeo.com. Private Client Division clients should refer to www.smithbarney.com/research. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Historical disclosures (for up to the past three years) will be provided upon request.

Citigroup Investment Research Ratings Distribution			
Data current as of 30 September 2006	Buy	Hold	Sell
Citigroup Investment Research Global Fundamental Coverage (2914)	46%	40%	14%
% of companies in each rating category that are investment banking clients	44%	43%	32%
India Asia Pacific (105)	59%	16%	25%
% of companies in each rating category that are investment banking clients	52%	65%	38%
Singapore Asia Pacific (47)	60%	26%	15%
% of companies in each rating category that are investment banking clients	50%	25%	14%

Guide to Fundamental Research Investment Ratings:

Citigroup Investment Research's stock recommendations include a risk rating and an investment rating.

Risk ratings, which take into account both price volatility and fundamental criteria, are: Low (L), Medium (M), High (H), and Speculative (S).

Investment ratings are a function of Citigroup Investment Research's expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating.

For securities in emerging markets (Asia Pacific, Emerging Europe/Middle East/Africa, and Latin America), investment ratings are: Buy (1) (expected total return of 15% or more for Low-Risk stocks, 20% or more for Medium-Risk stocks, 30% or more for High-Risk stocks, and 40% or more for Speculative stocks); Hold (2) (5%-15% for Low-Risk stocks, 10%-20% for Medium-Risk stocks, 15%-30% for High-Risk stocks, and 20%-40% for Speculative stocks); and Sell (3) (5% or less for Low-Risk stocks, 10% or less for Medium-Risk stocks, and 20% or less for Speculative stocks).

Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 15 December 2006 04:00 PM on the issuer's primary market.

Within the past 5 years, Citigroup Global Markets Inc. or its affiliates has acted as manager or co manager of an offering of equity securities of Bharati Shipyard Ltd, Reliance Industries and Suzlon Energy Ltd.

Within the past 5 years, Citigroup Global Markets Inc. or its affiliates has acted as manager or comanager of an offering of fixed income securities of Great Eastern Shipping Co Ltd, Keppel Corporation and Reliance Industries.

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Reliance Industries and Suzlon Energy Ltd. (For an explanation of the determination of significant financial interest, please refer to the policy for managing conflicts of interest which can be found at www.citigroupgeo.com.)

Citigroup Global Markets Inc. or its affiliates beneficially owns 5% or more of any class of common equity securities of Bharati Shipyard Ltd, Reliance Industries and Suzlon Energy Ltd.

Citigroup Global Markets Inc. or its affiliates holds a long position in any class of common equity securities of Great Eastern Shipping Co Ltd, Jaya Holdings Limited, Reliance Industries and Suzlon Energy Ltd.

For securities recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in the issuers' financial instruments and may act as principal in connection with such transactions. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the subject company(ies) discussed in the Product. The Firm may engage in securities transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

This Product has been modified by the author following a discussion with one or more of the named companies.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citigroup Investment Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citigroup Investment Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citigroup Investment Research does not set of the/those issuer(s) mentioned therein, including in res

Investing in non-U.S. securities, including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of the U.S. Securities and Exchange Commission. There may be limited information available on foreign securities. Foreign companies are generally not subject to uniform audit and reporting standards, practices and requirements comparable to those in the U.S. Securities of some foreign companies may be less liquid and their prices more volatile than securities of comparable U.S. companies. In addition, exchange rate movements may have an adverse effect on the value of an investment in a foreign stock and its corresponding dividend payment for U.S. investors. Net dividends to ADR investors are estimated, using withholding tax rates conventions, deemed accurate, but investors are urged to consult their tax advisor for exact dividend computations. Investors who have received the Product from the Firm may be prohibited in certain states or other jurisdictions from purchasing securities mentioned in the Product from the Firm. Please ask your Financial Consultant for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in Australia to wholesale clients through Citigroup Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992) and to retail clients through Citigroup Wealth Advisors Pty Ltd. (ABN 19 009 145 555 and AFSL No. 240813), Participants of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. If the Product

is being made available in certain provinces of Canada by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. The Product may not be distributed to private clients in Germany. The Product is distributed in Germany by Citigroup Global Markets Deutschland AG & Co. KGaA, which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). Frankfurt am Main, Reuterweg 16, 60323 Frankfurt am Main. If the Product is made available in Hong Kong by, or on behalf of, Citigroup Global Markets Asia Ltd., it is attributable to Citigroup Global Markets Asia Ltd., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Product is made available in Hong Kong by The Citigroup Private Bank to its clients, it is attributable to Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. The Citigroup Private Bank and Citibank N.A. is regulated by the Hong Kong Monetary Authority. The Product is made available in India by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. If the Product was prepared by Citigroup Investment Research and distributed in Japan by Nikko Citigroup Ltd., it is being so distributed under license. Nikko Citigroup Limited is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Akasaka Park Building, 2-20, Akasaka 5-chome, Minato-ku, Tokyo 107-6122. The Product is made available in Korea by Citigroup Global Markets Korea Securities Ltd., which is regulated by Financial Supervisory Commission and the Financial Supervisory Service. Hungkuk Life Insurance Building, 226 Shinmunno 1-GA, Jongno-Gu, Seoul, 110-061. The Product is made available in Malaysia by Citigroup Global Markets Malaysia Sdn Bhd, which is regulated by Malaysia Securities Commission. Menara Citibank, 165 Jalan Ampang, Kuala Lumpur, 50450. The Product is made available in Mexico by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, which is regulated by Comision Nacional Bancaria y de Valores. Reforma 398, Col. Juarez, 06600 Mexico, D.F. In New Zealand the Product is made available through Citigroup Global Markets New Zealand Ltd., a Participant of the New Zealand Exchange Limited and regulated by the New Zealand Securities Commission. Level 19, Mobile on the Park, 157 lambton Quay, Wellington. The Product is made available in Poland by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Papierów Wartosciowych i Gield. Bank Handlowy w Warszawie S.A. ul. Senatorska 16, 00-923 Warszawa. The Product is made available in the Russian Federation through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in Singapore through Citigroup Global Markets Singapore Pte. Ltd., a Capital Markets Services Licence holder, and regulated by Monetary Authority of Singapore. 1 Temasek Avenue, #39-02 Millenia Tower, Singapore 039192. The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Citigroup Global Markets (Pty) Ltd. is incorporated in the Republic of South Africa (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in Taiwan through Citigroup Global Markets Inc. (Taipei Branch), which is regulated by Securities & Futures Bureau. No portion of the report may be reproduced or quoted in Taiwan by the press or any other person. No. 8 Manhattan Building, Hsin Yi Road, Section 5, Taipei 100, Taiwan. The Product is made available in Thailand through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in United Kingdom by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. This material may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in United States by Citigroup Global Markets Inc, which is regulated by NASD, NYSE and the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority. Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to Citigroup Investment Research's Products can be found at www.citigroupgeo.com. Compensation of equity research analysts is determined by equity research management and Citigroup's senior management and is not linked to specific transactions or recommendations. The Product may have been distributed simultaneously, in multiple formats, to the Firm's worldwide institutional and retail customers. The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would be illegal. Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. Advice in the Product has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs.

© 2006 Citigroup Global Markets Inc. Citigroup Investment Research is a division and service mark of Citigroup Global Markets Inc. and its affiliates and is used and registered throughout the world. Citigroup and the Umbrella Device are trademarks and service marks of Citigroup or its affiliates and are used and registered throughout the world. Nikko is a registered trademark of Nikko Cordial Corporation. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure is prohibited by law and will result in prosecution. The information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm has not reviewed the linked site. Equally, except to the extent to which the Product refers to website material of the Firm) is provided solely for your convenience and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of the Firm) is provided solely for your convenience and information and the content of the linked site does not in anyway form part of this document. Accessing such website or following such link through the Product or the website of the Firm shall be at your own risk and the Firm shall have no liability arising out of, or in connection with, any such referenced website.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST