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Shipbuilding Sector Report

Built to last

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Executive Summary

The Indian Shipbuilding Industry is relatively small compared to the Global Industry with a mere 1% market-share but, the Indian players enjoy definite advantages over their global counterparts, which are expected to help them clock strong growth over next few decades. Currently, India has two mid sized private shipyards viz., ABG Shipyard and Bharati Shipyard. However, there are several new players who are in the waiting or in the process of setting up their shipbuilding capacity in India.

Advantage India v/s Global peers

The Indian shipyards enjoy several advantages over their global peers, which would support development of the Indian Shipbuilding industry. The primary advantages include:

- Indian players enjoy an edge over current shipbuilding leaders Korea and Japan on account of having cheap labour at their disposal. Historocally, it has been observed that the shipbuilding industry moves from high labour cost countries to low labour cost countries.
- India has abundant supply of talented labour required by the Shipbuilding industry.
- The Indian shipyards are currently foraying into the manufacture of Rigs, which is a relatively high-end work with higher Margins compared to building of cargo vessels.
- With new capacities coming up in Indian shipyards, they would be able to provide earlier time slots, which command a premium over later time slots.

Government of India to aid Industry

Apart from the natural advantages available to the Indian shipbuilders, the Government of India (GoI) is also supporting the industry through various initiatives, as the Shipbuilding industry leads to overall development of several ancillary industries apart from promoting trade activities in the country. The various initiatives extended by the GoI include:

- *Subsidy Scheme* - The GoI provides 30% subsidy on the value of ships built by the Indian shipyards. This scheme is currently under review.
- *Sagarmala Project* - With an outlay of $22bn under the Public - Private - Partnership (PPP) model, a string of ports and shipyards would be built across the entire coastline of India. This will help promote domestic as well as international trade.
- *NELP VII* - The New Exploration Licensing Policy (NELP) VII would help boost demand for Rigs and Offshore vessels where currently the Indian shipyards have expertise.
- *FDI Policy* - Foreign direct investments (FDI) in the Shipbuilding industry would promote higher investments in the sector going ahead.
- *EoU Status and Tonnage Tax regime* - Grant of Export oriented Unit (EoU) status to the shipyards and Tonnage Tax regime for the shipping companies would provide several tax benefits to the shipyards and shipping companies and thus promote investments in the sector.

Global Shipbuilding Industry

The demand for shipbuilding is increasing across the world due to rapidly rising world trade and need to scrap old vessels, which are being used beyond their serviceable life due to shortage of new vessels. The healthy order book of the global shipyards is expected to result in high Revenue visibility for all.

The current global order books for shipbuilding, which would be executed over the next four to five years, are barely sufficient to replace the older vessels. Further order books would be sustained by an increase in world trade and obsolesce more vessels by the time the current order books are executed. Factors like International Maritime Oragnisation's (IMO) guidelines to scrap all single hull tankers by 2010 and skewed movement of goods across the world would also lead to additional demand for shipbuilding.

Shipping Industry

The world sea-borne trade has increased rapidly over the last several decades. Approximately, 90% of the goods by volume and 70% by value are transported by sea route. The world sea-borne trade has increased from 16,777bn tonne-miles during 1980 to 30,687bn tonne-miles in 2006 growing at a CAGR of 2.4% in the mentioned period. The fleet of available vessels capacity has increased at a CAGR of 1.6% over the mentioned period. The gap in demand and supply for shipping capacities has been building over the last several decades and needs to be bridged.

Oil trend

The crude oil prices are currently at high levels leading to high operating margins and cash flows for the exploration and production (E&P) companies. Due to high profitability, these companies intend to increase their production. Equipment required by the E&P companies like off-shore rigs and Support vessels is in short supply and existing fleet of this equipment is obsolete, to a large extent. This demand for new equipment by the E&P companies would lead to additional orders for the Shipbuilding industry. The E&P companies are currently cash rich, which entails adequate support for their capex plans. Indian Shipyards, ABG and Bharati, have a good track record of manufacturing support vessels and are foraying into the business of building off-shore rigs as well.

Conclusion

Overall, the Indian Shipbuilding industry would continue to grow over the next few years on the back of cheap labour, government initiatives to support the industry, earlier time slots available compared to the overseas shipyards, expertise in building offshore support vessels (OSVs) and platform support vessels (PSVs) and strength in the Oil prices. Clearly, the Indian Shipyards are enjoying a definite edge over their global peers at the current juncture.

Comparative Valuation

		CMP	MCap	Target	P/E (x)			EV/EBITDA (x)			RoE (%)			RoCE (%)		
Company	Reco	(Rs)	(Rs cr)	Price (Rs)	FY08	FY09E	FY10E	FY08	FY09E	FY10E	FY08	FY09E	FY10E	FY08	FY09E	FY10E
ABG Shipyard	BUY	365	1,860	445	12.5	9.8	6.6	4.0	3.1	2.0	21.9	21.9	24.8	16.4	14.3	16.2
Bharati Shipyard	BUY	296	817	346	8.8	7.7	6.0	2.3	1.7	1.3	18.8	17.9	18.8	14.3	15.9	15.6

Source: Company, Angel Research

Industry

Indian Shipbuilding Industry

India's Shipbuilding Industry has been recognised by the Government of India as one of the strategic industries to be developed to meet the country's Defence requirements and shipping tonnage under the national merchant fleet. The existing Indian shipping fleet is however, small compared to other countries with large registries and tax havens. Ninety per cent of all India-owned ships are foreign built, and shipyards in India use mostly imported equipment. Overall, there are 28 large, medium and small shipyards, many of them combining ship repair services. Major shipyards are in the public sector. Further, over 40% of the Indian shipping fleet is over 20 years old and would be due for replacement over the first half of the next decade. The general cargo, bulk carriers and other miscellaneous class of ships are the ones that would come up for replacement on a priority basis.

India's share in international shipbuilding is currently quite low and there are very few private sector shipyards. India currently accounts for slightly over 1% of the worldwide shipbuilding order book. However, more than half of the order books of Indian shipyards pertain to exports.

The Indian shipbuilding industry structure can be divided into three distinct segments:

Public sector shipyards: The public sector shipyards build merchant class ships. These include Hindustan Shipyard, Cochin Shipyard, Hoogly Dock & Port Engineers and Central Inland Water Transportation.

Defence shipyards: There are three naval shipyards under the purview of the Ministry of Defence (MoD), which include Mazgaon Dock, Goa Shipyard and Garden Reach Shipbuilders & Engineers.

Private shipyards: India has two mid-sized private shipyards namely ABG Shipyard and Bharati Shipyard.

Besides, a number of smaller shipyards and repair yards manufacture smaller barges, tugs, patrol ships, fishing ships. Some of the new entrants in the business of shipbuilding include Pipavav Shipyard, Larsen & Toubro, Shipping Corporation of India, Reliance Group, Ruia Group, Adani Group, Tutocorin Port Trust, Tata Group, Mercator Lines and Dolphin Offshore. Entry of these players would lead to growth of shipbuilding industry in India.

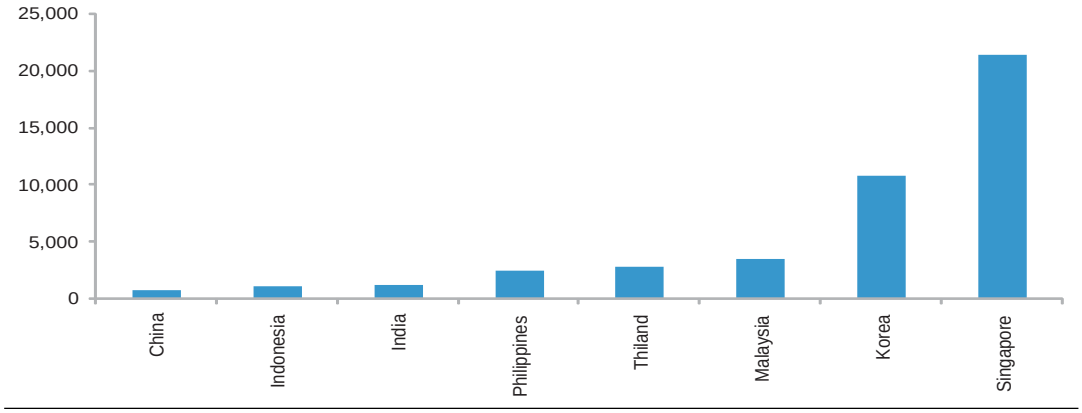
Advantage India v/s Global peers

India enjoys cost advantages…

The Indian shipyards enjoy an edge over their global counterparts where pricing of the ships is concerned

India has abundance of qualified manpower availability, which is cheaper than largest hubs for shipbuilding in the world, Korea and Japan. China is another country where labour cost is lower than Korea and Japan. Labour cost, as a percentage of total cost of building a ship, is approximately 21-23% in Europe and Japan, whereas it is 19% in Korea. The Indian shipyards enjoy an edge over their global counterparts where pricing of the ships is concerned as they incur costs as low 8-10% to build a ship.

Exhibit 1: Labour cost across Asian countries (USD per year)



Source: Ministry of Commerce and Industry

…possesses requisite talent

Good communication skills facilitate the Indian professionals in maintaining good relations with their existing clients

India has well qualified manpower in heavy engineering including maritime engineering, naval architecture, port management and other ancillary education. Indian professionals also have a good command over spoken and written English compared to their counterparts in the other Asian countries, particularly China and Singapore. Good communication skills facilitate the Indian professionals in maintaining good relations with their existing clients as well as in generating repeat business.

Indian shipbuilders ensure quality and faster delivery of vessels

The quality of ships delivered by the Indian shipbuilders is also at par with the ships built by the Korean shipyards. Pertinently, the Indian shipyards are also able to execute the orders and deliver the ships faster than their Korean and Japanese counterparts, as they are setting up new capacities. Thus, the ship buyer stands to benefit buying a vessel from an Indian shipyard as he is ensured of faster of delivery of similar quality ships and at a cheaper price. Indian shipbuilders, Bharati Shipyard and ABG Shipyard in particular, enjoy an absolute advantage where bagging of orders from the global ship buyers is concerned and are well placed to maintain their orders book position/backlog going ahead.

Earlier timeslots available which can be sold at a premium

Early delivery slots of ships would command a premium

The Indian companies are currently in the process of ramping up their shipbuilding capacity. India has a long coastline with several locations for setting up large shipyards advantageously. When these capacities get commissioned, these companies would be in a position to give earlier delivery slots to the ship buyers. Currently, most of the viable shipyards across the world are fully booked for the next few years. Hence, early delivery slots of ships would command a premium to later deliveries.

Promotion of Domestic shipping routes to spur additional demand for ships

The Government of India is also in the process of implementing a Maritime Policy, which would lead to several new ports and shipyards coming up across the coastline. This would also lead to development of domestic water (coastal) transport system in the country, which would in turn lead to demand for additional vessels.

Capability to manufacture Off-shore rigs, a technological breakthrough

Currently, there are only 9-10 yards in the world which manufacture off-shore rigs

The Indian shipyards are also foraying into the manufacture of off-shore rigs, success of which would place them among the elite list of yards having the capability to manufacture offshore rigs. Currently, there are only 9-10 yards in the world which manufacture off-shore rigs. Among the Indian players, Bharati Shipyard is already in the process of manufacturing an off-shore rig for Great Offshore, which is expected to be delivered by the end of FY2009 or beginning of FY2010. Meanwhile ABG Shipyard is in negotiation with Essar Shipping for procuring a contract to manufacture two off-shore rigs. We believe that further orders would start flowing in to manufacture off-shore rigs once the current orders have been executed and the buyers, particularly when the overseas players, are assured that the Indian shipyards have the capability to manufacture sophisticated off-shore rigs.

Indian Shipping fleet small and due for Replacement

Over 40% of the Indian shipping fleet is more than 20 years old and would be due for replacement

India's current shipping fleet is small compared to other countries and tax havens, which have large registries. However, over 40% of the Indian shipping fleet is over 20 years old and would be due for replacement over the first half of the next decade. The general cargo, bulk carriers and other miscellaneous class of ships are due for replacement on a priority basis. The Indian shipyards have the capability to manufacture most of these ships and the players expect a large part of the replacement demand to be diverted to the Indian shipyards.

Approximately, 63.5% of the Indian shipping fleet constitutes Oil tankers while Bulk carriers make up 26.0%. Total size of the Indian merchant fleet was approximately 14.2mn dead weight ton (DWT) at the beginning of FY2007. The replacement market would translate into 6.1mn DWT over the next decade on a conservative basis.

Exhibit 2: Age distribution of the Indian Merchant fleet (% of DWT, 2007)

Type	0-4 years	5-9 years	10-14 years	15-19 years	20 years +	Average age
Bulk carriers	1.6	7.9	15.2	5.3	70	19.8
Containerships	0	0	52	25.1	23	15.9
General cargo	5.9	12.6	18.8	17.1	45.7	16.9
Oil tankers	31.6	8.4	15.6	15.5	28.9	12.5
Other types	3.3	5.8	1.1	26.3	63.5	20
All	**20.5**	**8**	**14.7**	**14**	**42.8**	**15.2**

Source: United Nations Conference on Trade and Development (UNCTAD) Maritime Review 2007

Export led demand

Majority of the orders with the Indian shipyards pertain to exports. For example, 65% of Bharati Shipyard's order book and 85% of ABG Shipyard's order book constitutes exports. The Indian shipyards have carved a niche for themselves in the manufacture of Off-shore Support Vessels (OSV) and Platform Support Vessels (PSV) and majority of their order book pertains to this class of vessels.

Initiatives by the Government of India to support Indian Shipbuilding industry

Shipbuilding Subsidy

The Indian shipbuilders have been availing subsidy extended by the Government of India to stay competitive with the global players. The Indian shipyards pay far more taxes compared to their overseas counterparts. A subsidy of 30% was available for all ocean going merchant vessels of over 80 meters of length, which were booked on or before August 2007. The industry currently expects to receive 20% subsidy from the government with retrospective effect. Recently, ABG Shipyard received approximately Rs20cr by way of subsidy.

Process of claiming Subsidy: When a shipyard gets an order for a ship it applies for subsidy to the shipping authorities who issue a letter of approval. After construction of the vessel is complete, the shipping authorities inspect and assess the value of the ship. The subsidy is paid on the assessed value of the ship and not the market value of the ship. After assessment of the vessel, a subsidy certificate is issued to the shipyard towards recognition of subsidy and finally the subsidy is disbursed. Delays, if any, occur at the stage of assessing the value of the ship and subsequent issue of subsidy recognition certificate. The shipyards usually account for the subsidy as per contract accounting, percentage completion basis.

Manufacturing a ship is a lengthy process and requires 2-3 years

Manufacturing a ship is a lengthy process and requires 2-3 years from the time of the original order. If this period extends substantially, the ship owners/buyers shy away from placing the orders, or look for alternate sources for procuring their requirement. It is in this context that the new capacities coming up in India enjoy an advantage over their older counterparts, and their order books are likely to get ramped up at a steady pace.

Absolute Profitability to improve at declining Subsidy levels

We have worked out the profit sensitivity at various subsidy levels and believe that there is sufficient growth and value in these companies even if no new subsidy scheme is announced. ABG Shipyard and Bharati Shipyard are currently trading at 6.6x and 6.0x FY2010E Earnings respectively, after considering no new subsidy scheme being announced by GoI. We have, however, considered pending subsidy to be availed by the companies on orders booked prior to August 2007. Bharati Shipyard has added very few orders after August 2007 and thus the proportion of subsidy to Total Revenue would remain constant until the current order book is executed. ABG Shipyard has however, increased its order book substantially after August 2007 and the quantum of subsidy to be claimed by the company compared to the total orders

executed would decline. The quantum of subsidy claimed by ABG for the next few years would increase in absolute terms until the orders booked before August 2007 are fully executed.

Exhibit 3: Sensitivity of Profit at different subsidy levels

ABG Shipyard

Operating Profit				Net Profit			
(%)	FY2008	FY2009E	FY2010E	(%)	FY2008	FY2009E	FY2010E
30	**291.7**	**376.2**	**577.5**	**30**	**160.7**	**203.7**	**305.2**
20	265.4	342.3	525.5	20	143.0	179.3	268.5
10	239.2	304.7	467.8	10	125.3	154.8	228.9
0	210.0	267.1	410.0	0	106.1	130.4	189.2

Bharati Shipyard

Operating Profit				Net Profit			
(%)	FY2008	FY2009E	FY2010E	(%)	FY2008	FY2009E	FY2010E
30	**188.1**	**245.3**	**323.8**	**30**	**107.3**	**124.0**	**158.2**
20	174.9	219.6	289.8	20	94.4	106.6	136.1
10	161.8	193.8	255.8	10	81.6	89.3	113.9
0	148.6	166.8	220.2	0	68.7	73.2	93.3

Source: Company, Angel Research

Sagarmala Project - To develop a string of ports and shipyards across India

Sagarmala project envisages efficient Inter-port connectivity to augment coastal shipping and reducing transaction costs

The GoI's Sagarmala Project has an outlay of $22bn under the PPP module. The government is offering several incentives under this program including 100% foreign direct investment (FDI). The government's stake in the program is expected to be 15% with the rest of the funds coming from the private sector. It is a long-term project aimed at boosting Indian Maritime infrastructure, which includes ports, shipping, shipbuilding, inland waterways, costal shipping and maritime education and training. The project envisages efficient Inter-port connectivity to augment coastal shipping and reducing transaction costs. The project is expected to result in additional demand for 2,500 new ships. Objectives of this project would be achieved within a decade.

NELP VII to increase demand for Off-shore vessels in India

The GoI launched the New Exploration Licensing Policy (NELP) VII in December 2007. Under this Policy, totally 57 blocks have been offered for exploration including 28 off-shore blocks. These exploration licenses include shallow water and deep sea blocks. Exploration of these blocks would lead to demand for exploration equipment like off-shore rigs and support vessels in India.

FDI Policy to enhance investments

The GoI has an automatic approval system for up to 74% FDI in the Shipping sector. The ship repair industry is treated on par with 100% Export Oriented Units (EOUs). These sops extended by the GoI would go a long way in attracting investments in the Shipbuilding and Shipping industries in India by attracting foreign investments and providing tax benefits to these industries.

Grant of EoU status to Indian shipyards to save on Tax and improve Cash flows

Governments are granting subsidy to the shipyards in various forms to develop their Shipbuilding industry

The GoI is in the process of granting EoU status to shipyards in India. As a result, the shipyards would automatically avail tax benefits and which would take care of the subsidy issues. The world-over, the governments are granting subsidy to the shipyards in various forms to develop their shipbuilding industry and the Indian government is doing the same. For the shipyards which do not qualify for EoU status, the government is likely to introduce a new subsidy scheme.

Tonnage Tax regime - To facilitate further Tax saving

The GoI has introduced a Tonnage Tax regime whereby the shipping companies would be able to pay tax based on the tonnage of their qualifying vessels and would not have to get into the lengthy process of getting their accounts audited. The shipping companies would benefit greatly from this and would be able to invest the amount of tax saved to increase/augment their existing fleet. This move is likely to enhance the total size of Indian shipping fleet. Furthermore, many Indian shipping companies were getting their vessels registered in other tax havens through subsidiaries to save on tax. The GoI's move to introduce tonnage tax would attract these companies to register their shipping assets under Indian flags.

Order cancellation not a concern for Indian Shipyards

Indian companies charge a forfeitable 20% advance as a commitment from the buyer of vessels at the time of booking the order

There have been a few order cancellations in the recent past in the Chinese shipyards as these yards were consistently delaying on there delivery schedules. This was due to these yards being start-up operations on account of which they were facing teething operational problems. Regards Indian companies, ABG Shipyard and Bharati Shipyard, they are established players having the requisite expertise in the shipbuilding business. They have been consistent in maintaining their delivery schedules. Also, these companies charge a forfeitable 20% advance as a commitment from the buyer of vessels at the time of booking the order. This gives us significant assurance that the orders for the Indian shipyards would not be cancelled in future.

Concern

Cyclical nature of the industry

The shipping market is cyclical in nature and freight rates tend to be highly volatile. Freight rates and Earnings of shipping companies are primarily driven by the demand-supply situation. While demand drivers are a function of world trade growth and trade patterns, the supply drivers are a function of new shipbuilding orders and the scrapping of existing tonnage. The cyclical nature of the shipping market means highly variable workloads. Also, the prices to build new ships may fluctuate significantly according to market conditions. The governments try to maintain capacity through subsidies even as other macro factors like oil prices and global GDP growth, among other factors, impact the cyclicality of the business.

Overall, the Indian Shipbuilding industry is set to embark on strong growth path over the next few years on the back of cheap labour, expertise in building OSVs and PSVs backed by firm Oil prices, government initiatives to support the industry and earlier time slots available compared to the overseas shipyards. Clearly, the Indian shipyards enjoy a definite edge over their global peers.

Global Shipbuilding Industry

The Indian shipbuilding industry is currently at a nascent stage. However, there is a trend being witnessed that the Shipbuilding industry is moving from high labour cost countries to low labour cost countries. India has abundant supply of cheap and talented labour force. Further a substantial portion of Indian shipyards' order book pertains to exports. To get further insight to the Indian Shipbuilding industry we need to understand the global dynamics of the industry.

Healthy Order Book position of yards across the world - High Revenue visibility

China leads the pack with an order book of over 9.4x 2007 deliveries

Global shipbuilding capacities have been increasing at a rapid pace with completions posting 9% CAGR compensated gross tonnage (CGT) during the last 20 years. Meanwhile, new orders have been growing at 15% CAGR CGT over the mentioned period. In 2007, pending global order books stood at 5.8x 2007 deliveries. The total global Shipbuilding order book stood at 32.9cr CGT compared to completions of 5.6cr GT during 2007. China leads the pack with an order book of over 9.4x 2007 deliveries compared to laggards including Europe and Japan whose order books are merely 3.0x and 3.7x 2007 deliveries. Pending order books of the shipyards have witnessed a significant jump in the last five years from the range of 2.0-2.5x of the corresponding year deliveries to 5.8x during 2007. The increase in GT was also partially due to the adoption of modern designs for building ships. For instance, a double hull oil tanker instead of single hull tanker of the same payload carrying capacity would be of a higher GT.

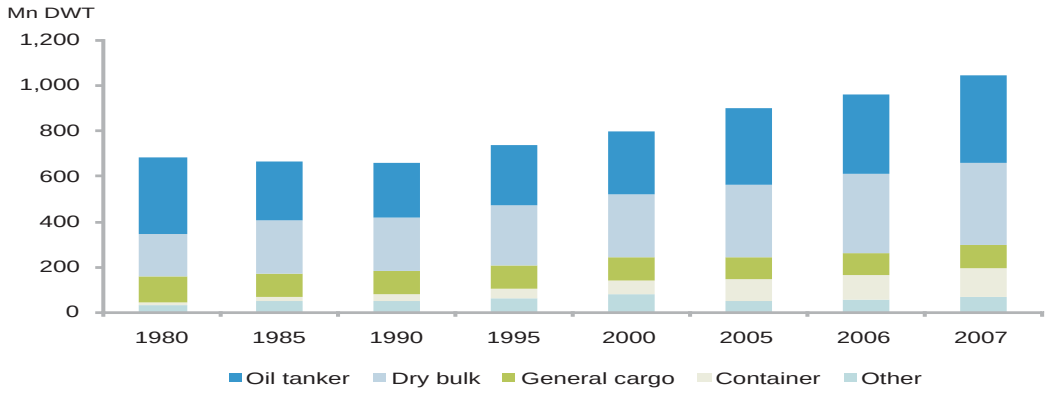
Increase in tonne miles lags increase in DWT - To increase demand for shipyards

Shipping capacity has lagged over the last several decades

Shipping capacity available during 2007 was 1.04bn DWT compared to 0.68bn DWT in 1980, representing a CAGR of 1.6%. World sea-borne trade meanwhile has increased by 2.4% (tonne miles) over the same period. Thus, capacity has lagged over the last several decades.

To counter this situation, the vessel owners have increased the speed of the vessels. Hence, more tonne miles have been achieved by using same or lesser DWT. It maybe noted here that increase in the speed of the vessels comes at higher Operating and Maintenance costs. Such increase in costs have been sustained due to increase in freight rates, which have remained attractive over the last several years.

Exhibit 4: World fleet by Principal vessel type



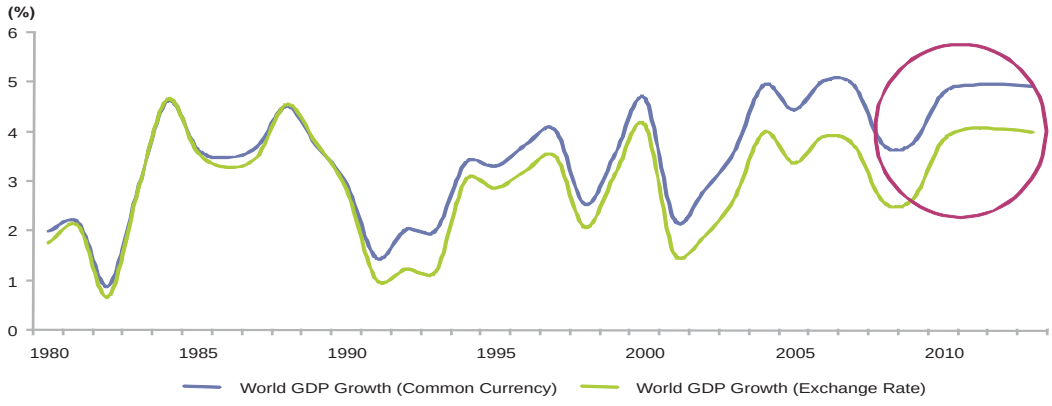
Source: UNCTAD Maritime Review 2007

GDP - Real growth rate across the globe remains strong - To fuel world trade

Increase in global GDP would lead to a proportional increase in global trade

As per the International Monetary Fund (IMF), the real growth rate of GDP across the world is estimated at 3.7% for 2008 and is expected to move at above 4% over the next few years. This increase in global GDP would lead to a proportional increase in global trade. Increase in global trade would lead to more freight being hauled in turn resulting in requirement for additional shipping capacities. Considering that the shipping capacities have posted a mere 1.6% CAGR over the last 27 years, new shipbuilding capacities would have to be set up to keep pace with growing demand.

Exhibit 5: Global GDP growth



Source: International Monetary Fund, Angel Research

Usage of old vessels by industry due to shortage of new vessels

Attractive freight rates during the last several years have been a major deterrent for the vessel owners to scrap their old vessels. This is evident from the low volumes being sold for scrapping. This is despite the prices for scrapping ships quoting at attractive levels since the past several years because of high metal costs. But the vessel owners still find it attractive to use the old war horses to the maximum possible extent because of the high freight rates, which takes care of the additional cost of operating the old vessels.

We expect a sharp increase in the demolition activities as soon as the new ships are available

There has been a substantial decrease in DWT sold for demolition during the last few years. The old ships are being used by the ship owners primarily due to the tremendous shortage in the availability of ships. Usage of old ship is highly risky apart from being more expensive. Further, several countries around the world have banned certain class of ships as per their build and age from their ports. Hence, in line with this, we expect a sharp increase in the demolition activities as soon as the new ships are available. A large part of the current order book of the shipyards would go towards replacing these old vessels and the incremental increase in capacities would be far lesser than the deliveries by the shipyards on account of demolition of older vessels.

Exhibit 6: Tonnage sold for breaking, by vessel type (2000-2006, Mn DWT)

Year	Tankers	Combined carriers	Bulk carriers	Others	Total	As % of world fleet
2000	13.5	1.0	4.6	3.1	22.2	2.7
2001	15.7	0.8	8.1	3.2	27.8	3.4
2002	18.1	1.6	5.9	4.9	30.5	3.6
2003	18.4	0.5	3.3	3.4	25.6	3.0
2004	7.8	0.5	0.5	1.8	10.6	1.2
2005	4.5	-	0.9	0.9	6.3	0.7
2006	2.7	0.2	1.3	1.8	6.0	0.6

Source: UNCTAD Maritime Review 2007

Single hull tankers to be phased out by 2010 - Replacement needed

As per the IMO guidelines, all single hull tankers would have to be phased out by 2010 and all future tankers would have to be double hull. This phasing out targets to reduce the pollution that takes place when the hull of a single hull ship ruptures. Currently, there is a ban on single hull tankers entering the ports of the European Union (EU) and some other ports across the world. Over 20% of the tanker fleet by DWT was single hull and another 4% were double bottom or double sided. We believe that at least the 20% tankers which have single hull would have to be replaced by 2010. This provides substantial replacement opportunity for the shipyards across the world. We believe that there is not enough capacity at the shipyards to service this demand and the IMO would have to relax its deadline by 1-2 years to replace the existing fleet of single hull tankers with double hull tankers.

Argument against double hull tankers by vessel owners: Initially, there were concerns being voiced by the vessel owners against this guideline. The owners said it was expensive to own and maintain the double hull tankers. The surface area of the double hull tankers is substantially larger than the single hull tanker and requires more time to inspect it for corrosion and repairs. Further, design of the double hull tanker is such that the center of gravity is higher both in fully laden and fully unladen state compared to single hull tankers. This leads to higher risk of misbalancing the vessel and the subsequent consequences. Thus, a double hull tanker is more prone to corrosion, expensive to own and operate and suffers from the risks of misbalancing.

IMO mandate to phase out single hull tankers: The single hull tankers spill oil in the sea when a hole/fracture develops in the hull. This leads to high level of oil pollution and loss of marine life in the surrounding area and near the shore. Several coastal communities face grave dangers to life and livelihood due to such pollution. It is also very expensive and difficult to clean the spill. It is almost never achieved in entirety with impact of the same remaining in the surrounding environment for the next few decades.

Several countries have banned single hull tankers from their ports with immediate effect

The spills usually occur near the coasts when the tankers develop holes/ leaks when they run aground or hit a sharp object, which could punch a hole in the hull. This kind of events usually occurs near the shore where the waters are shallow or have lots of coral reef. On the other hand, the double hull tankers save the cargo from spilling as the inner hull maintains its structural integrity to a large extent even if the outer hull gets ruptured. This retention of structural integrity avoids pollution occurring from accidents to a large extent and saves the aquatic life in the vicinity and avoids pollution to a large extent. This is the main reason why the IMO is insistent on phasing out single hull tankers. The IMO has mandated to phase out all single hull oil tankers by 2010, while several countries have banned single hull tankers from their ports with immediate effect.

Double hull order books surge on high Oil demand: Currently, there is substantial global demand for crude, which is not likely to slowdown significantly over the next few years. This would thus, lead to demand for additional tanker capacities. This has led to huge order books for double hull tankers at the shipyards across the world due the need for increased capacity and phasing out of single hull tankers. The freight rates have also increased significantly due to shortage of double hull tankers.

Skewed movement of goods leads to requirement for more ships and containers

Tankers usually return empty to OPEC destinations as they cannot be used for alternate purposes

Approximately 90% of the EXIM trade by volume is executed via sea route across the world. This trade has been growing at a CAGR of 3.1% since the last 35 years. The direction of world trade is skewed with more volumes being moved from the developing countries with lower wage structure to developed countries where the labour costs are higher. This leads to piling up empty containers and vessels at the ports and depots of the developed countries, when they are required at the port of the developing countries that need them to export further goods. In the process, the vessels deployed to transport goods to these destinations would not be able to get

full payload on the return trip from these destinations. The empty containers would also have to be brought back to the exporting locations. This process is called re-location. For instance, the oil tankers run at full capacity from an Oil Producing and Exporting Country (OPEC) to the importing destination, but have to usually return empty to the OPEC destinations as they cannot be used for alternate purposes in majority of the cases.

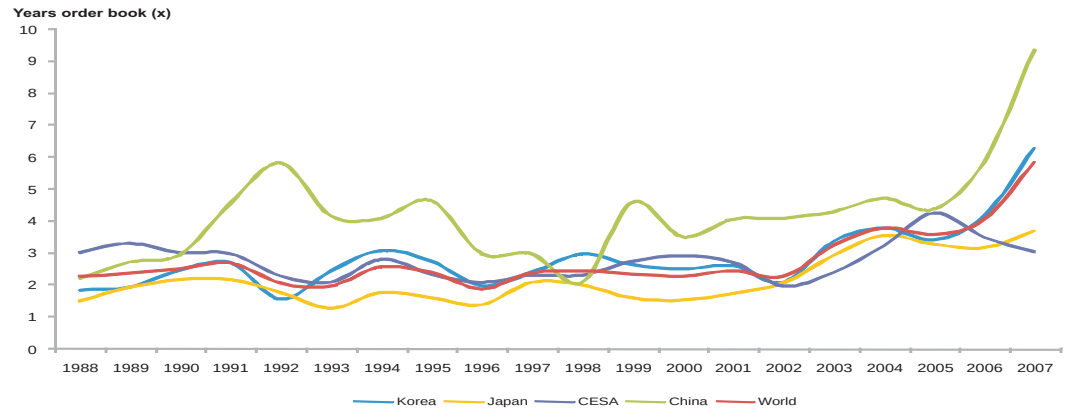
Shutdown of capacities in Europe to result in addition of capacities elsewhere

There has been a trend of closure of shipbuilding capacities across Europe and North America. These closures have primarily been on account of expensive labour associated with those geographies, which make it unviable for shipyards to compete with the low labour cost countries. The increase in shipbuilding capacities in Asia are to an extent also being offset by these closures across the West.

ABG Shipyard and Bharati Shipyard have both procured used equipment from the shipyards (which were shutting down) in the Western hemispheres to set up their new shipbuilding capacities. This serves as an excellent example to the fact that a large part of new capacities being set up across Asia are merely replacing the old shipbuilding facilities across Europe and North America.

Yard capacity full for next few years, urgent need for expansion of yards: Shipyards around the world have been witnessing strong order book position since the last few years. The world order book is 5.8x 2007 completion. The highest completion to order book ratio is in China at 9.4x 2007 completions whereas the Community of European Shipyards Associations (CESA) has the lowest completion to order book position at 3.0x 2007 completions. The worldwide order books have increased sharply during the last three years from 3.6x 2005 completions to 5.8x 2007 completions.

Exhibit 7: Movement of World Order Book v/s Production



Source: Koshipa Annual Report 2008

Shipbuilding leaders (Japan, Korea and China) - India - A talented distant fourth

CESA has been a net loser of market-share

Korea, Japan and China are the three largest ship manufacturing nations in the world and their order books comprised 87% of the world order book during 2007. Among this lot, Korea is an absolute leader with 38% of the world order book during 2007 compared to 21% during 1990. China has also been a fast mover in shipbuilding with 30% of the world order book compared to 3% during 1990. In the process, CESA has been a net loser of market-share with its order book dwindling down from 22% in 1980 to 4% in 2007. Apart from CESA, Japan has also been a net loser of market-share from 37% in 1990 to 19% in 2007. India ranks fourth in the world with an order book market-share of 1.17%. India however, has an advantage in terms of expertise required for shipbuilding and availability of cheap labour.

Exhibit 8: Worldwide Order Book and Completion positions (2007)

Country		New Orders	Completions	Order books	Order book / Completion 2007
Korea	'000 GT	67,962	20,208	126,531	6.3x
	% of Total	*41*	*36*	*38*	
Japan	'000 GT	20,667	17,325	63,814	3.7x
	% of Total	*13*	*31*	*19*	
CESA	'000 GT	3,986	4,557	13,798	3.0x
	% of Total	*2*	*8*	*4*	
China	'000 GT	58,012	10,426	97,761	9.4x
	% of Total	*35*	*18*	*30*	
Others	'000 GT	14,205	4,058	27,827	6.9x
	% of Total	*9*	*7*	*8*	
Total World	**'000 GT**	**1,64,832**	**56,574**	**329,731**	**5.8x**

Source: Koshipa Annual Report, 2008

Expertise required for Shipbuilding industry - India has it all

Technological sophistication has also been increasing for building all sizes and types of ships

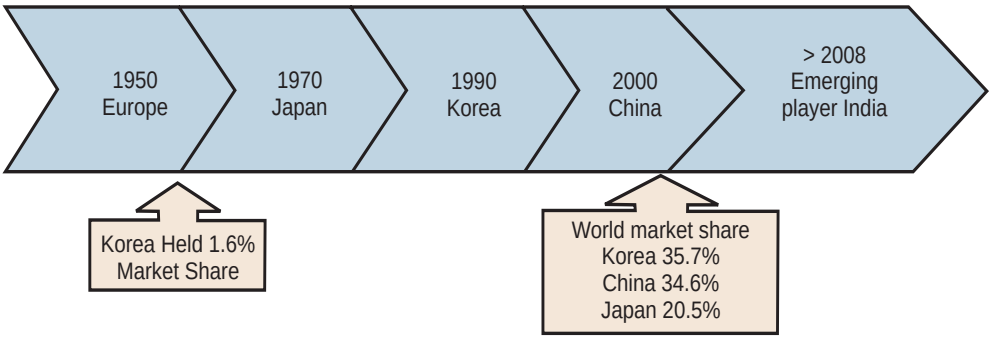
Shipbuilding also involves heavy engineering with a multi-disciplinary technical and industrial competence requiring expertise in metallurgy, heavy sheet metal fabrication, high-tech welding, structural engineering, naval architecture, material sciences, hydrology and propulsion systems. Technological sophistication has also been increasing for building all sizes and types of ships. India has a large number of education institutions catering to students interested in learning these sciences, and over a period of time has developed a significant talent pool required for development of the Shipbuilding industry. This talent pool would be advantageous for future development of the Shipbuilding industry in India.

Shipbuilding, a labour-intensive industry - Indian an emerging player

Over the several past decades, the Shipbuilding industry has been moving consistently to cheaper labour destinations. It moved from Europe to Japan over several years after the Second World War and then started moving to Korea. This is evident from the fact that Korea currently has the largest shipbuilding capacity and the highest proportion of the world's total shipbuilding order

book and Japan has lost market-share over the last two decades. Further, China and India are cheaper labour destinations compared to Korea and Japan. The Chinese shipbuilding order book is already 30% of the total worldwide shipbuilding order book. Thus, we believe that going ahead India has a strong case for enhancing its Shipbuilding industry. Bangladesh and Pakistan too have labour, which is cheaper than India. However, these countries would take substantial period of time before they can develop their local Shipbuilding industry as they do not have the labour force with requisit talent. Hence, over a period of time with these markets have reasonable amount of talented manpower and technology, the shipbuilding industry will move to these countries.

Exhibit 9: Global Shipbuilding location trend



Source: Korea Maritime Consultants Co.

Global Shipping Industry

The Shipping industry is the consumer for products manufactured by the Shipbuilding industry. To understand the dynamics of the Shipbuilding industry it becomes important to understand the Shipping industry.

Baltic Dry Index - Currently at high levels

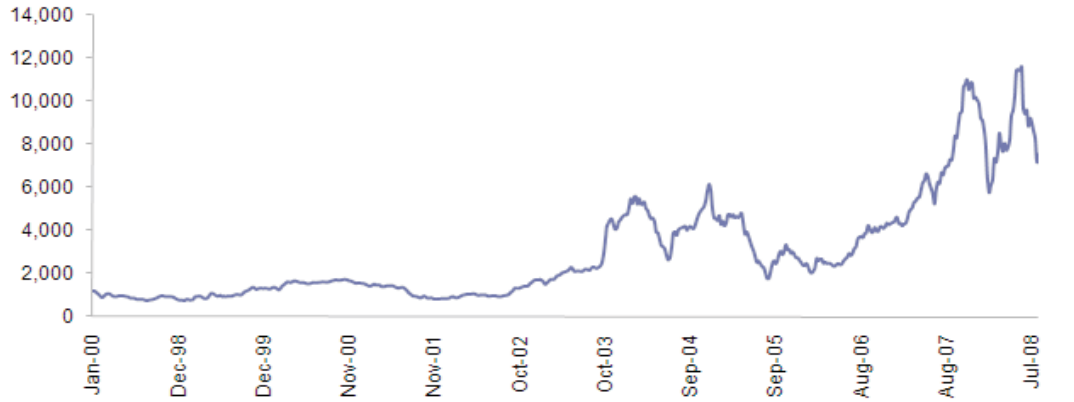
The Baltic Dry Index (BDI), which tracks movement of the freight rate is at high levels of more than 8,000. Freight rates are ruling high primarily owing to the higher demand for movement of goods compared to the availability of vessels, and to a lesser extent due to the high energy costs, which constitute a significant part of the operating costs of the shipping lines.

The BDI peaked during FY2008 and is currently witnessing a downward trend. We believe that the index would continue to rationalise as fresh capacity gets added to the global shipping fleet but, would still rule significantly high as the fuel costs remain high. The index is not likely to witness a stark correction as the vessels which are very old would be scrapped/demolished when they become unviable to operate owing to high operating costs. Thus, when the index goes below a rational level, capacity would be sucked out by way of demolition of older vessels and equilibrium would be maintained in capacities and freight prices. Further, the increase in

sea-borne trade would also support the freight index to a large extent as it has the propensity to increase in the long term.

We believe that the ship owners have currently postponed scrapping of vessels, which have reached their serviceable age as freight realisations from these ships have been attractive. However, the vessel owners may not be in a position to use the vessels for a very long period and tightness in the freight market would be maintained.

Exhibit 10: Baltic Dry Index



Source: Bloomberg, Angel Research

World Sea-borne trade ever increasing

The world sea-borne trade has increased rapidly over the last several decades. Approximately, 90% of the goods by volume and 70% by value are transported by the sea route. The world sea-borne trade has increased from 16,777bn tonne-miles during 1980 to 30,687bn tonne-miles in 2006 growing at a CAGR of 2.4%. Thus, the sea-borne trade has increased at a faster pace compared to the fleet of available vessels capacity, which has increased at a CAGR of 1.6% over the mentioned period.

Exhibit 11: Cargo carrying capacity

Year	World Fleet (Mn DWT)	Total cargo (Mn tonnes)	Total tonne Miles (Bn)	Tons Carried per DWT	'000 ton miles per DWT
1990	658	4,008	17,121	6.1	26.0
1995	735	4,651	20,262	6.3	27.6
2000	808	5,871	23,693	7.3	29.3
2004	896	6,846	27,574	7.6	30.8
2005	960	7,109	29,094	7.4	30.3
2006	1,042	7,416	30,686	7.1	29.4

Source: UNCTAD Maritime Review 2007

The difference in fleet expansion and sea-borne trade has been bridged owing to higher tonnage and tonne-miles carried per DWT. Increase in effeciency of fleet capacity usage has not been able to cope with demand and thus, there has been an upward pressure on the freight rates globally since the last several years.

Increase in effeciency of fleet capacity usage has not been able to cope with demand

More efficient usage of the fleet has generally been achieved by increasing the cruising speed of the vessels. This increase in speed leads to higher consumption of fuel by the vessels per tonne mile and also leads to higher maintenance cost of the vessels leading to higher absolute operating costs. However, the vessel owners are currently enjoying high freight rates and hence increases in absolute operating costs are sustainable. As the world fleet gets rationalised in terms of capacity and freight rates decline, the vessel owners will lower the speed of their vessels and reduce the absolute operating costs. Thus, Operating Margins of these shipping lines would be maintained.

Exhibit 12: World seaborne trade (billion tonne miles)

Year	Crude oil and related products	Main dry bulk	Other dry cargo	Total
1980	9,405	3,652	3,720	16,777
1990	7,821	5,259	4,041	17,121
2000	10,265	6,638	6,790	23,693
2001	10,179	6,782	6,930	23,891
2002	9,898	6,879	7,395	24,172
2003	10,580	7,464	7,810	25,854
2004	11,100	8,139	8,335	27,574
2005	11,749	8,615	8,730	29,094
2006	12,151	9,341	9,195	30,687

Source: UNCTAD Maritime Review 2007

Profile of current Global Shipping fleet

Size of the total world fleet has increased from 683mn DWT in 1980 to 1,043mn DWT at the beginning of 2007 representing a net capacity CAGR of 1.6%. Out of the total fleet of vessels, oil tankers and bulk carriers constitute the largest chunk of the fleet at 37% and 35%, respectively. Average age of vessels in the oil tanker and bulk carrier segments is 10 years and 13 years, respectively. The container vessel fleet is the youngest of the group with an average age of 9 years and constitutes 12% of the total world fleet. General cargo vessels are the oldest of the group with an average age of 17 years and constitute 10% of the total world fleet. Average age of the world fleet was 12 years in 2007.

Less than 2% per year of tonnage is being sold for scrapping despite the rates for scrapping being attractive

- Older vessels are expensive to operate as they have higher operating costs and high down time. In the past, 3-4% of the tonnage was sold for demolition or scrapping during a year. However, since 2004, less than 2% per year of tonnage is being sold for scrapping despite the rates for scrapping being attractive. During this period, the BDI clocked robust performance. Realisations on the vessels have been healthy due to the higher freight rates. The higher freight rates have also kept operation of older ships viable.

The vessel demolition/ scrapping activity would increase once the shipbuilding yards provide near-term delivery slots

- Most of the shipyards across the globe have bulky order books with deliveries planned up to 2012 and most of 2013. The vessel owners would generally shy away from placing orders for vessels to be delivered in the more distant future. Thus, the vessel owners would find it difficult to replace the old vessels, which are earning healthy profits and revenue for them. We believe that the vessel demolition/scrapping activity would increase once the shipbuilding yards provide near-term delivery slots.

- More than 26% of all the vessels are more than 20 years old and most of them would reach the end of their serviceable life soon. Replacement of these vessels would keep the order book of the shipyards healthy for a significant period of time.

- There has also been a distinct increase in containerised transport across the world over the last several decades. This has led to additional demand for container ships. This is an area where we may witness a boom in orders.

Exhibit 13: Age Distribution of World Merchant fleet (% of total DWT) CY2007

Type	0-4 years	5-9 years	10-14 years	15-19 years	20 years +	Average age (Years)
Bulk carriers	21.6	19.0	19.1	9.0	31.3	12.9
Containerships	34.7	25.7	18.6	8.0	13.0	9.1
General cargo	10.1	12.6	10.9	9.6	56.8	17.4
Oil tankers	30.3	25.0	16.4	14.6	13.6	10.0
Other types	19.6	14.4	10.7	9.1	46.3	15.1
All	**25.1**	**21.0**	**16.7**	**10.9**	**26.2**	**12.0**

Source: UNCTAD Maritime Review 2007

Sustained growth in order book across global shipyards v/s increasing world shipping capacity

We believe this 2.9% increment in the shipping fleet will not be sufficient to meet the growth in world trade if it increases at the current rate

The world order book at the end of December 2006 stood at 30.2mn DWT and represented 29.1% of the world's total shipping capacity. The dynamics across various classes of ships may vary. This order book is expected to be executed over the next 5-6 years. Approximately, 26.2% of the world's shipping fleet is over 20 years old and need to be replaced in less than 5 years. But, the net capacity expansion to the shipping fleet over the next 5-6 years would be 2.9% considering that the fleet which is over 20 years old would be due for replacement. We believe this 2.9% increment in the shipping fleet will not be sufficient to meet the growth in world trade if it increases at the current rate.

World trade is growing at a fast clip. Between 1980 and 2007, world trade posted a CAGR of 2.4% increasing to 3.8% during 2000-2007. We expect shipping lines across the world to continue to use the old ships to support the increase in world trade despite the ships getting riskier and expensive to operate. Governments and maritime regulatory bodies across the world have also been insisting on discarding the older ships as they as riskier to operate, do not

conform with the new design requirements and pose a hazard to the crew and surrounding of the ports that they visit. Several countries across the world have fixed the maximum age of the vessels that can ply their waters. We believe that these regulating bodies and governments would continue to get stricter as time passes by. Overall, going ahead, we believe shipping companies across the world would find it difficult and expensive to operate their older vessels. These reasons would lead to sustained growth of order books across shipyards around the globe.

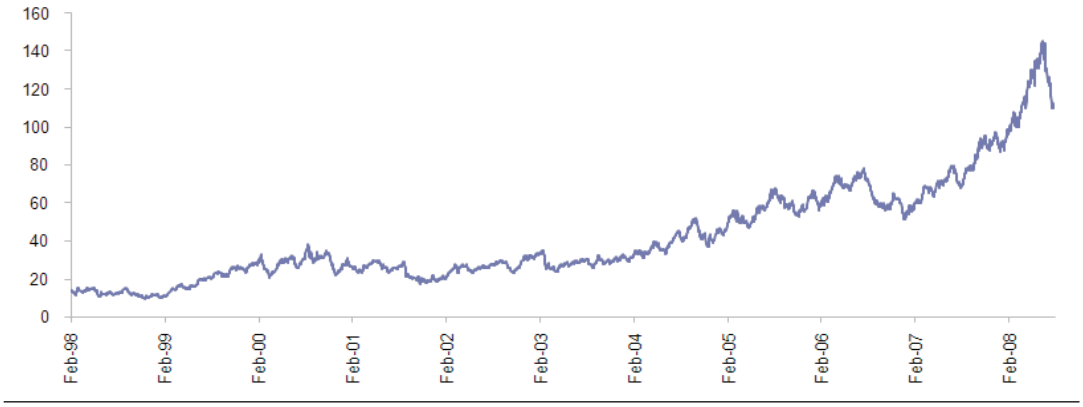
There is a distinct trend to build larger vessels as the overall tonne-mile cost is lower for these vessels

Amidst this scenario of burgeoning order book, we believe that there is a distinct trend to build larger vessels as the overall tonne-mile cost is lower for these vessels. Shipping companies and traders across the world are also interested in reducing their costs. Usage of larger vessels addresses this issue efficiently by decreasing the tonne-mile cost of operations. Hence, going ahead we may witness smaller vessels becoming unviable to operate due to their higher tonne-mile cost and would be scrapped earlier than their service life.

Oil price trends

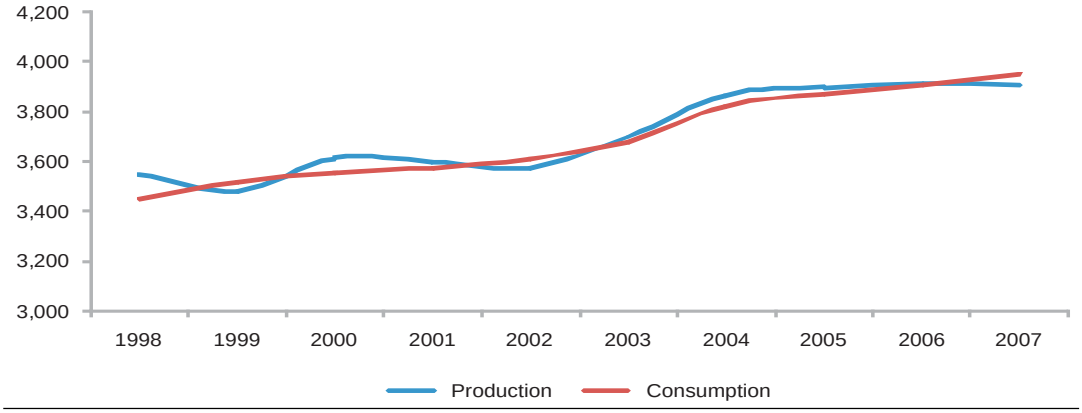
Global consumption of crude oil has been increasing steadily at approximately 1-2% per year. However, production capacities for crude oil have not risen in tandem with the demand. Currently, there is a dearth of oil exploring and extracting equipment like off-shore and on-shore drilling equipment. Due to this, the oil prices are likely to remain high for a considerable period of time.

Exhibit 14: Global crude oil prices (USD per Barrel)



Source: Bloomberg; Angel Research

Exhibit 15: Global crude oil production and consumption (Mn Tonne)

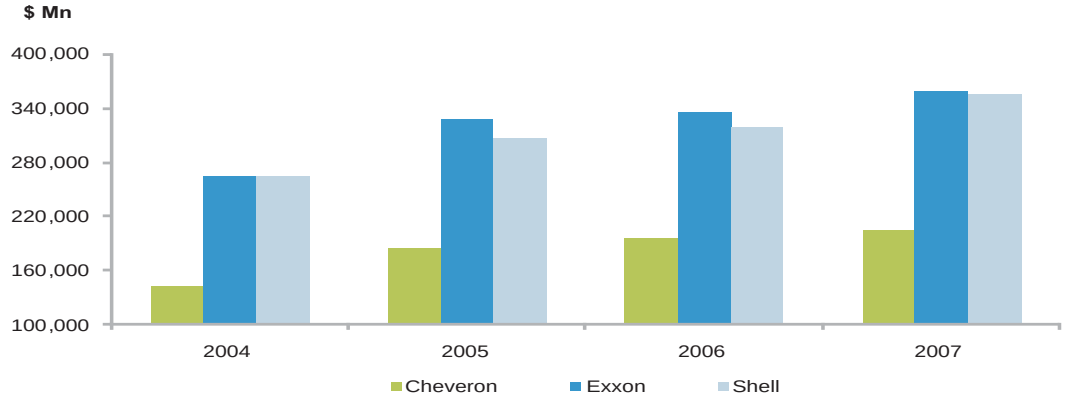


Source: BP Statistical Review of World Energy 2008

Feasibility of extracting Oil and lucrative Profits from Oil

Profitability and cash flow of the global oil E&P companies have shown a healthy increase over the last four years. The operating cost of extracting a barrel of oil ranges between $2 to $25 for an oil producing company depending on the type of field and its productivity. Additionally, approximately $10-15 is spent on non-operating expenses like depreciation. An oil extracting company would be profitable with oil hovering at above $40 a barrel. Currently, with the oil prices at above the $100 per barrel mark, it would be lucrative for these companies to increase their production capacity and they would also be in a position to finance their capex thanks to strong cash flows. This capex by the E&P companies would translate into huge order books for the shipbuilding yards, particularly the ones with expertise in manufacturing off-shore rigs, OSVs and PSVs.

Exhibit 16: Revenue of Global oil companies

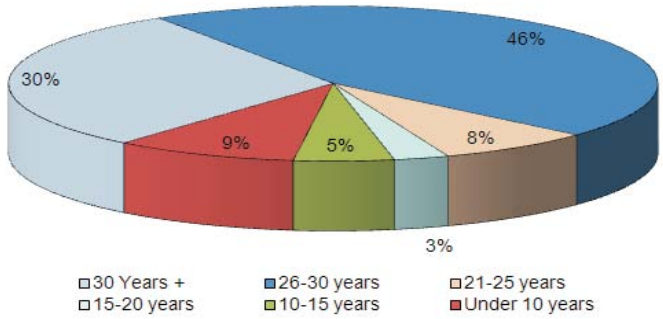


Source: Bloomberg, Angel Research

Rigs around the world - A very aged fleet

There are approximately 650 off-shore rigs around the world. Out of this, approximately 50-60 have been built after 1999. However, more than 75% of the rigs have been built more than 22 years ago or before 1985. Average life of a rig ranges between 25 to 30 years depending on the kind of rig it is and how it has been maintained. This would mean that most of the rigs around the world are nearing their replacement age or have already crossed it.

Exhibit 17: Global Rig fleet age



Source: Bloomberg, Angel Research

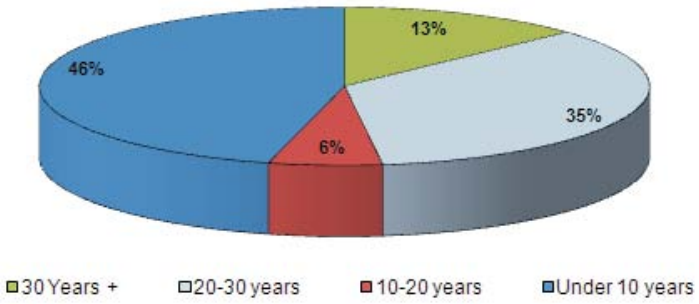
Most of the viable areas near the shores have been explored for oil. The upstream oil companies now need to move their exploration into deeper waters to meet the world's requirement for oil. However, most of the existing rigs are not equipped to operate in deep waters. Hence, there exists demand for new generation rigs to operate in deep waters. The existing rigs need to be replaced on two counts - ageing and incapability to operate in deep waters.

The oil prices have remained relatively flat during the last decade of the previous century. Apart from this, global demand for oil also remained pretty much flat. Hence, new rigs were not added globally. However, since the last four years, the demand for oil has spiked and the current oil infrastructure is under strain to meet this demand. With oil crossing and hovering above $100 a barrel currently, it has become very profitable for the upstream oil companies to increase their proven and develop reserves as well as extract more oil. Hence, we expect more rigs would be sought by these oil producing companies in the future.

Each rig requires to be serviced by approximately 8-12 support vessels depending on the kind of rig and its distance from the shore. With oil exploration moving to deeper waters, the number of support vessels required by each rig would increase. Currently, age of the platform support vessels follow the age of the rigs, with a lag effect of few years. The average expected life of a support vessel is approximately 25 years. Thus, oil E&P companies would have to procure more support vessels for their rigs as most of them are close to the end of their service life and more vessels would be required to service each rig as operations move to deeper waters.

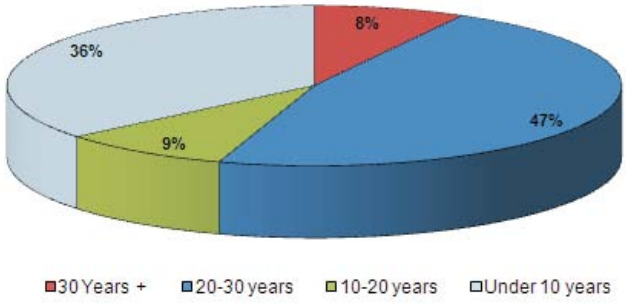
The age profile of the support vessels is following the pattern of the rig age with a slight lag effect. Like in the case of the rigs, the support vessels also have to be replaced. The safety profile of these vessels also deteriorates as they get older. We believe that the upstream oil companies would order support vessels with a lag effect to the orders placed for the rigs.

Exhibit 18: Global AHTS fleet age



Source: Korea Maritime Consultants Co.

Exhibit 19: Global PSV fleet age



Source: Korea Maritime Consultants Co.

Approximately, 430 rigs were built before 1985. World-wide capacity for building rigs is approximately 30 per year. This would take well over 10 years to supply all these rigs with the existing capacity. Assuming that each rig would require 10 support vessels, this would translate into a market of 4,300 support vessels of various types including AHTS, PSV, Tugs, etc. A support vessel, on an average, costs $18-20mn. Assuming that all the vessels would cost $18mn, the total market opportunity would be approximately $77bn over the next 10 years. This market opportunity does not take into account any inflation costs.

50-60 new rigs would be built and delivered over the next three years

Currently, there are only few yards around the world, which can manufacture off-shore rigs on account of being a highly niche segment. We believe that there are approximately 9-10 yards around the world that have the capability to manufacture a rig. It takes approximately two years to build a rig. All these yards have their order books full for the next three years and we believe that approximately 50-60 new rigs would be built and delivered over the next three years. The upstream oil companies are forced to use their existing old rigs as there is a severe supply crunch of these rigs. These companies are likely to continue placing orders for new and more advanced rigs over the next several years. We believe that these companies would to find it profitable to continue their exploration at high pace even if the global oil prices drop significantly to $80 per barrel.

The upstream oil companies would find it difficult to use their existing rigs as the cost of operating these old rigs is high. Apart from this, safety and reliability also becomes an issue as the rigs get older. This gets reflected in the higher cost of insurance that these companies have to bear for using the older rigs. Also, the day rate for hiring these rigs has shown a significant upward movement during recent times. This increase in day rates would significantly improve the cash flows and profitability of the players. Hence, the upstream oil companies would want to replace their old rigs with new ones as and when the slots for procuring them within a reasonable time period are available. Besides, these companies are flush with funds to execute their procurements.

As of now, the upstream oil companies have still not started scrapping the old rigs as there exists a severe supply crunch. World-wide rig utilisation has been flat at 100% usage over the past several quarters. The rig owners would be able to retire the old rigs only when there is some excess capacity available globally. Rigs manufactured during the last several quarters have not been able to relieve any old rigs from service. With the oil price at an all-time high, the rig owners are finding it lucrative to use even the rigs that have crossed their viable life span. We believe that the old rigs would have to be phased out and be substituted by the new rigs over the next couple of years.

Conclusion

The global Shipbuilding industry is set to grow at a rapid pace backed by rapid increase in the global GDP and world trade. Robust demand and firm price of oil would also help growth of the Shipbuilding industry. The Shipbuilding industry has shown a distinct trend of moving from a high labour cost location to low labour cost location during the second half of the 20th century. India is a low labour cost location compared to the current shipbuilding leaders. Apart from this, the GoI is providing various sops to the Indian Shipbuilding industry. These factors would lead to growth of the Indian Shipbuilding industry. We remain positive on the sector and believe that it is a multi-year growth story supported by strong order books and technological expertise of the current players.

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Companies

BUY

Price	**Rs365**
Target Price	**Rs445**
Investment Period	**12 Months**

Stock Info

Sector	Shipbuilding
Market Cap (Rs cr)	1,860
Beta	0.7
52 Week High / Low	1045/295
Avg Daily Volume	32282
Face Value (Rs)	10
BSE Sensex	14,401
Nifty	4,327
BSE Code	532682
NSE Code	ABGSHIP
Reuters Code	ABGS.BO
Bloomberg Code	ABGS IN

Shareholding Pattern (%)

Promoters	56.9
MF / Banks / Indian FIs	14.1
FII / NRIs / OCBs	20.3
Indian Public / Others	8.7

Abs.	3m	1yr	3yr*
Sensex (%)	(14.8)	1.1	53.7
ABG (%)	(38.8)	(25.1)	25.8

** Since listing on Dec. 22, 2005*

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Riding the orders' tide

ABG Shipyard (ABG) is the largest of the private sector shipyard in India. It boasts of a strong unexecuted order book, which is 8.1x its FY2008 Revenue. The company has been rapidly expanding manufacturing capacities at its shipyards to capitalise on the huge requirement of ships across the world. ABG has a wide client base with several instances of repeat orders, which gives us confidence that it will not face problems in procuring further orders. We estimate Top-line and Bottom-line of the company to grow at a CAGR of 47.4% and 37.8%, respectively. The stock is trading at 9.8x and 6.6x FY2009E and FY2010E Earnings, respectively. ***We Initiate Coverage on the stock, with a Buy recommendation and 12-month Target Price of Rs445.***

- **Strong Order Book and repeat Clientele:** ABG has a strong order book of Rs8,985cr (94 vessels) with deliveries spread over the next five years. Currently, Rs7,135cr of the order book remains unexecuted, which is over 8.1x FY2008 Revenue of Rs885.2cr (excluding Subsidy). Further, 44% of the order book constitutes repeat orders, which signifies ABG's ability to procure additional orders from existing clients. Repeat clientele ensures saving on brokerage on new orders procured, which could be 1-3% of the order size. Estimated Total Revenues of ABG are Rs1,299.4cr and Rs2,099.5cr in FY2009 and FY2010, representing a yoy growth of 34.4% and 61.6%, respectively.

- **Rapid expansion to capture upswing in demand:** ABG is in the process of expanding its manufacturing capacity at Surat and Dahej and have a higher run rate of its order book. Post expansion of both its facilities, ABG will have the capacity to construct 68 vessels, four off-shore rigs and repair eight ships of various sizes and types simultaneously, on a modular basis.

- **Concentrated facilities with scope of Scalability:** ABG's shipyards are strategically located and facilitate convenient transfer of men, material and equipment from one facility to another as per the requirement. Furthermore, the managerial staff required to supervise functioning of the yard is common and would lead to substantial saving in the cost of operations. Considering that these are large yards with combined capacity to manufacture approximately 60 vessels by FY2010, such inter-changeability would entail substantial cost savings for the company.

Key Financials

Y/E March (Rs cr)	FY2007	FY2008	FY2009E	FY2010E
Net Sales	**706.2**	**966.8**	**1,299.4**	**2,099.5**
% chg	*30.0*	*36.9*	*34.4*	*61.6*
Net Profit	**114.4**	**160.7**	**203.7**	**305.2**
% chg	*40.1*	*40.5*	*26.8*	*49.8*
Diluted EPS (Rs)	**22.5**	**29.3**	**37.1**	**55.6**
EBITDA Margin (%)	27.7	30.2	28.9	27.5
P/E (x)	16.3	12.5	9.8	6.6
RoE (%)	19.5	21.9	21.9	24.8
RoCE (%)	14.1	16.4	14.3	16.2
P/BV (x)	3.2	2.5	2.0	1.5
EV/Sales (x)	1.7	1.2	0.9	0.6
EV/EBITDA (x)	6.0	4.0	3.1	2.0

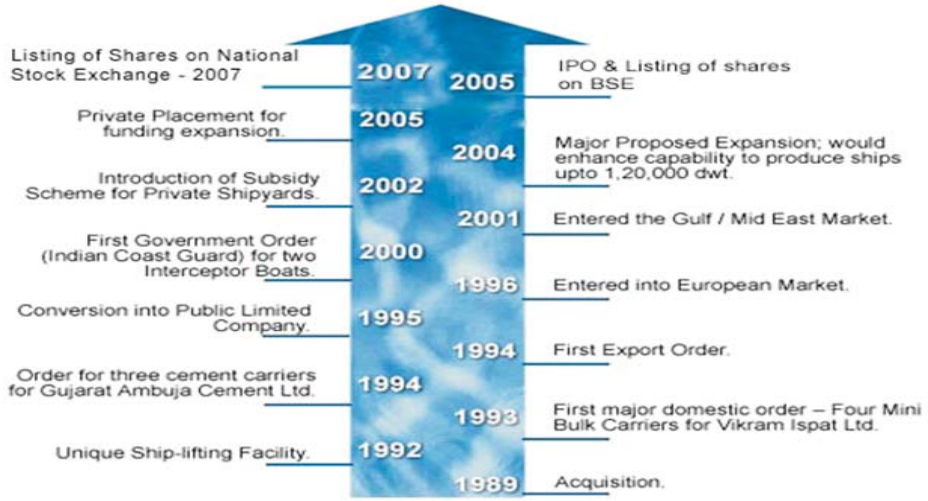
Source: Company, Angel Research

Company Background

ABG Shipyard, the flagship company of the ABG group, was incorporated in 1985 as Magdalla Shipyard Pvt. Limited and is engaged in the business of Shipbuilding and Ship repair. In a span of 15 years from 1991, the company achieved the status of being the largest private sector shipbuilding yard in India.

During the past decade, ABG has constructed and delivered over one hundred vessels including specialised and sophisticated vessels like interceptor boats, self loading and discharging bulk cement carriers, floating cranes, articouple tugs and flotilla, split barges, bulk carriers, newsprint carriers, offshore supply vessels, dynamic positioning ships, anchor handling tug supply vessels, multi-purpose support vessels, diving support vessels, etc., for companies in India and abroad.

Exhibit 1: ABG - Since inception



Source: Company, Angel Research

ABG's management has rich experience in shipbuilding, ship repair, naval architecture, port development and services and finance. It is a perfect combination of personnel to steer the company towards growth. This is also evident from the attractive order book and high number of deliveries that the company has made till date.

ABG became a publicly listed company after it made its IPO in December 2005. A total of 8.5mn shares were offered at Rs185 per share. Total IPO proceeds amounted to Rs157.2cr, which were utilised to finance the capex at new shipyard at Dahej.

The company's production facilities are situated at Surat, Dahej and Goa.

Surat

ABG's flagship shipbuilding yard is located at Magdalla near Surat. It is spread over 35 acres and has the capability to simultaneously manufacture 32 vessels of 20,000 DWT. This yard is currently operating at maximum capacity. To support production at this yard, ABG has acquired Vipul Shipyard, which is located nearby. This acquisition has brought in 8 acres of land from Vipul Shipyard. ABG has acquired another 12 acres of land taking the total size of this facility to 55 acres. Post completion and integration of these facilities, which is expected by end FY2009, the yard will have the capacity to manufacture 44 vessels simultaneously. This yard is used to manufacture all the vessels in the company's order book other than bulk carriers.

Dahej

The company's Dahej shipbuilding facility will be fully commissioned by the end of FY2010 when it will have the capacity to manufacture four off-shore rigs and ships up to 1,20,000 DWT. The capacity to manufacture ships became operational in 1QFY2009 while work on fully commissioning the yard continues. Dahej is located in Gujarat approximately 80km from ABG's Magdalla facility in Surat. The company is applying for SEZ status for the yard which if approved would save significantly on taxes for the company and thus would take care of the concerns over subsidy implementation. All the moveable equipment being commissioned at this yard has been procured from a Canadian yard. Thus, the capital cost of the yard has been kept competitive. ABG had raised money through an IPO in FY2006 for financing this yard. We have currently not built in Revenues from the company's Rig manufacturing business in our model.

ABG's Surat and Dahej facilities are located close to each other and will help it significantly save on costs

ABG's Surat and Dahej facilities are located close to each other, which will help it save on costs significantly over a long period of time. The facilities are close enough for the manpower to be switched across the facilities apart from moving certain equipment as and when needed. Also, the same set of managerial and supervisory staff would be able to handle the managerial tasks at both the locations.

Western India Shipyard (WIS) - Goa

ABG is in the process of acquiring WIS to foray into the lucrative business of ship repair. WIS was a sick company. ABG is currently in the process of restructuring WIS. The restructuring process may include takeover of partial debt of WIS and conversion of the remaining debt to equity. Some regulatory approvals are pending post which the acquisition process would be complete.

Ship repair is a lucrative business with OPMs of approximately 30%

Ship repair is a lucrative business with OPMs of approximately 30%. WIS is currently a loss making company due to its inability to optimally utilise its capacities. WIS is a leading ship repair yard in India with the capability to repair vessels up to 60,000DWT. The ship repair business does not follow any order book pattern. Revenues derived from this business can follow a fairly erratic pattern, but it registers high OPMs. We have currently not built in any revenue from the company's ship repair business into our model.

New shipyards announced at Hazira

ABG recently announced a new greenfield shipyard at Hazira in South Gujarat at an investment outlay of Rs1,200cr. This yard would be set up on a 300 acre land and would be larger than any of ABG's existing shipyards. The company believes that this new facility would take approximately three years to become operational and will have capacity to build larger ships compared to its existing facilities. The yard will be able to deliver six to eight large vessels each year and clock revenues of approximately Rs2,000cr. We have currently not factored in the Hazira Shipyard in our model.

ABG currently has 14 berths available for manufacturing a mix of vessels ranging of 45 to 120 metres length. It is possible to have 23 vessels at different stages of production at any given point in time. Two jetties can accommodate vessels from the stages between launching and delivery.

ABG has adopted the organic and inorganic approach to develop its manufacturing facilities through greenfield expansion at Dahej and acquisition of Vipul Shipyard and WIS. In addition to this, acquisition of used machinery for commissioning of its Dahej shipyard would keep costs low and make its operations competitive. Such expansion will go a long way in improving ABG's Top-line and Bottom-line, going ahead.

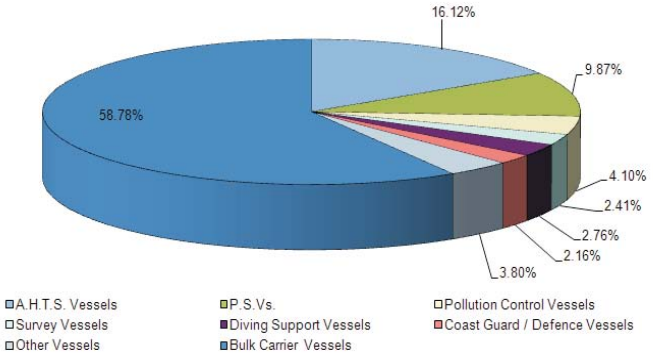
Strong order book

ABG's current order book is Rs8,985cr with an unexecuted portion of Rs7,135cr. This translates to 8.1x FY2008 Revenue. The company is also in negotiation with the Essar Group for a construction contract of two off-shore rigs. The contract is estimated to be worth approximately Rs1,800cr and would take the company's pending order book to over 9.0x its FY2008 turnover. ABG expects to execute its strong order book by FY2014.

Bulk carrier manufacturing capacity fully booked up to FY2012

Currently, more than half its order book comprises manufacture of bulk carrier vessels. Its bulk carrier manufacturing capacity is fully booked up to FY2012 and very few slots are available for FY2013. All orders for bulk carriers would be executed at the Dahej shipyard. Approximately, 29% (Rs2,582cr) of the order book comprises orders for AHTS, PSVs and diving support vessels. It has a few slots available to manufacture this class of vessels and most of the orders that ABG would procure during the next few quarters would pertain to AHTS and PSVs. These orders would primarily be executed at its Surat shipyard.

Exhibit 2: Order book Break up



Source: Company, Angel Research

Diverse clientele

Over the last two decades, the company has built an attractive clientele. Large portions of its order book comprise repeat orders. It is owing to this that we believe that going ahead also orders would continue their strong inflow.

Oil Support Companies

- Consolidated Contractors International S.A.L., Abu Dhabi,
- Halul Offshore Co - Qatar, Doha
- Lamnalco Group - Sharjah (UAE)
- Maridive & Oil Services - Egypt
- Zamil Offshore & Maintenance Co - Saudi Arabia

Fleet service provider

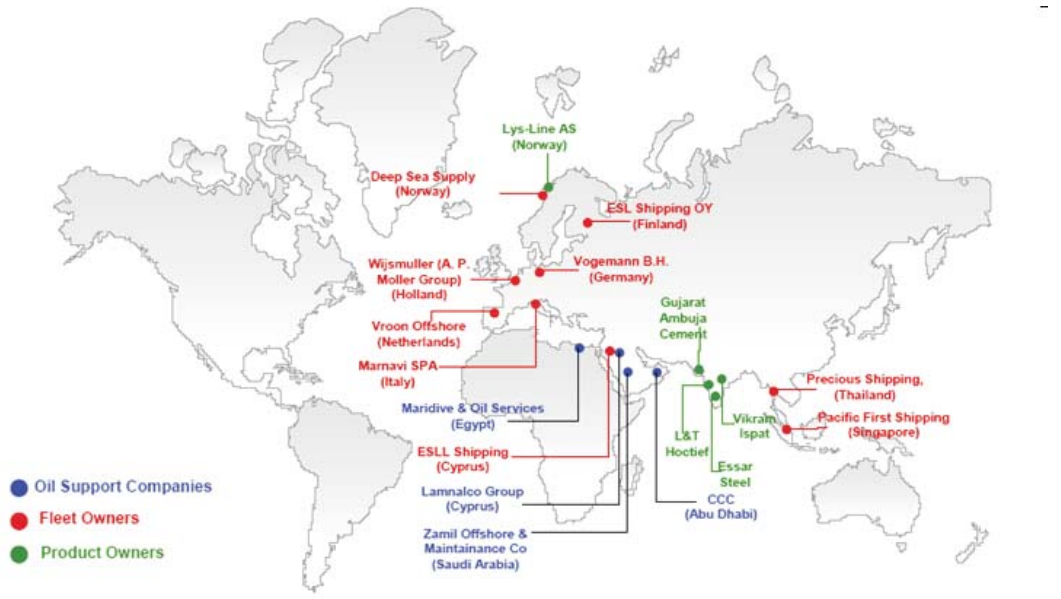
- Sea Tankers of John Fredriksen Group - Norway
- Wijsmuller (an A.P.Moller Group) - Holland
- Vroon B.V. - Holland

Indian Coast Guard

Product Owners

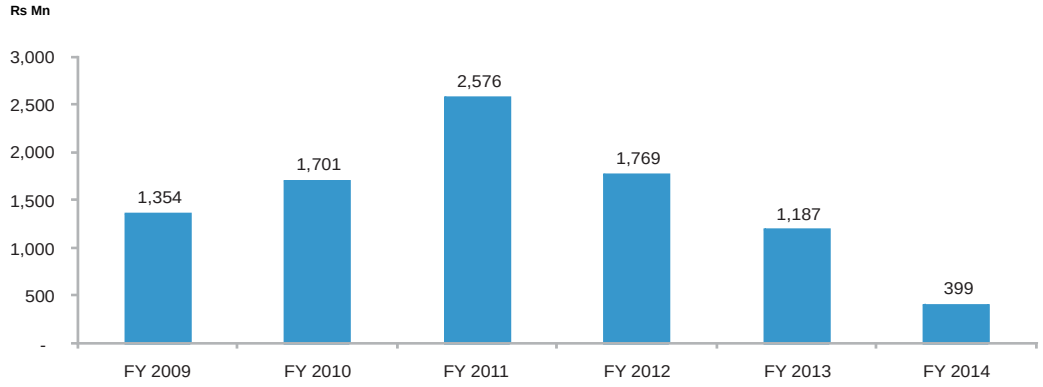
- Lys-Line AS - Norway
- Ambuja Cement International (part of the Gujarat Ambuja Group)
- L&T Hoctief (part of Larsen & Toubro)
- Vikram Ispat (part of the A V Birla Group)

Exhibit 3: Diverse clientele spread across different regions and segments



Source: Company, Angel Research

Exhibit 4: Order Book delivery schedule



Source: Company, Angel Research

The company's order book delivery schedule would be different from the Revenue booking cycle as the latter would constitute total value of the deliveries during the year. Revenues would be booked by ABG on a percentage completion basis as work progresses on the construction of the vessel. The time required by the company ranges between 18 to 30 months, and Revenue is booked on a pro-rata basis spanning the construction period of the vessels. ABG has all the delivery slots full up to FY2012 with only few slots available for the next year.

Investment Argument

Strong Order Book and repeat Clientele

44% of ABG's order book constitutes repeat clients

ABG has a strong order book of 94 vessels amounting to Rs8,985cr with deliveries spread over the next five years out of which Rs7,135cr of the order book would remain unexecuted. This order book is 8.1x FY2008 Revenue to an impressive Rs885.2cr (excluding Subsidy). ABG has a wide and elite clientele, which is spread cross geographies and businesses. Further, 44% of its order book constitutes repeat clients, which signifies ABG's ability to procure additional orders from them in the future as well. Repeat clientele would also ensure saving on brokerage as and when new orders from the respective clients are bagged. With brokerage in this business ranging between 1 - 3% of the order value, this is likely to translate into substantial savings, which may in turn have a positive impact on the company's OPMs.

Largest Shipbuilding company in India

ABG is the largest shipbuilding company in India. It has built 104 vessels till date for its domestic and overseas customers, and 56 of these deliveries have been after FY2000. The company has 0.34% of the world order book and ranks 66 among the world shipyards. ABG has 6.6% of the global OSV order book, which is the second largest in the world. This excellent order book and execution track record gives us confidence that the company will be able to register a better performance going ahead.

Rapid expansion to capture upswing in demand

ABG will have capacity to construct 68 vessels, four off-shore rigs and repair eight ships of various sizes and types simultaneously

The company is in the process of expanding its manufacturing capacity at Surat and Dahej to ramp up its production capacity and have a higher run rate of its order book. Post expansion of both its facilities, ABG will have capacity to construct 68 vessels, four off-shore rigs and repair eight ships of various sizes and types simultaneously, on a modular basis. This capacity expansion is estimated to be completed by FY2010E.

Efficient use of funds to power growth

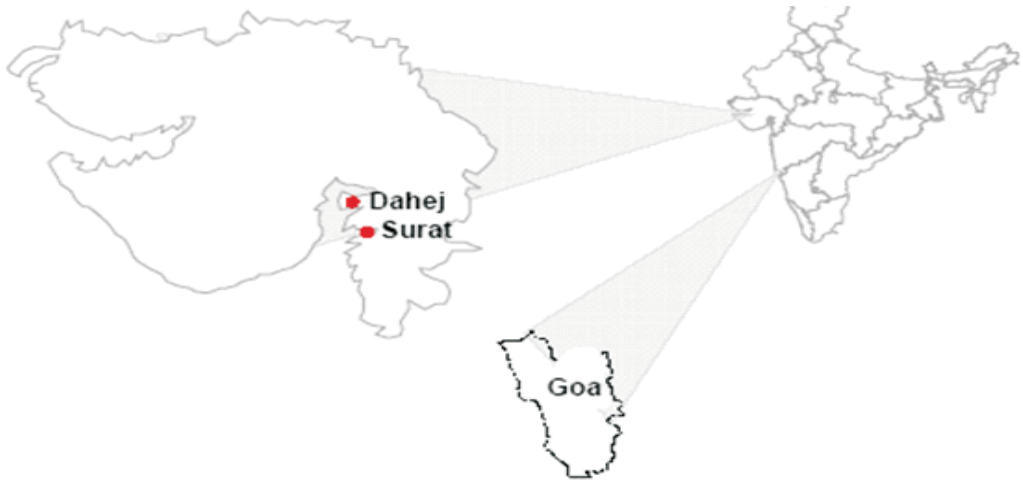
ABG has built its capacity at low capex. It has procured used machinery from a shipyard in Canada, which cost it approximately $23mn. Brand new equipment would have otherwise cost it approximately $150mn. Hence, procuring second-hand equipment has helped it save costs substantially. A suitable location at Dahej has also helped save on costs concerning channeling and dredging. Overall, procuring used machinery and selecting a suitable site for setting up its shipyard, has not only saved capital costs for the company but has improved its Return on Equity (RoE) as well.

Concentrated facilities, with scope of Scalability

The company's shipyards are situated close to each other at a distance of less than 100km, which facilitates shifting of men, material and equipment conveniently from one facility to

another as per the requirement. Further, the managerial staff required to supervise the functioning of the yard is common, which once again leads to substantial saving in operational costs. Considering that these are large yards with combined capacity to manufacture approximately 60 vessels by FY2010, such inter-changeability would have substantial cost savings impact on the company's financial performance.

Exhibit 5: Location of ABG's shipbuilding facilities



Source: Company, Angel Research

Entry into the niche business of Off-shore Rig manufacture

ABG is in the process of setting up a Rig yard at its Dahej facility

ABG is currently in the process of negotiating with Essar Shipping to bag the deal to manufacture two off-shore rigs. This order would catapult ABG into the niche list of shipyards having the capability to manufacture off-shore rigs. Total size of the deal is estimated to be over Rs1,800cr. ABG is in process of setting up a rig yard at its Dahej facility, which would have capacity to simultaneously manufacture four rigs as well as deliver two rigs per year on completion.

Capability to manufacture ships up to 1,20,000DWT

ABG is currently in the process of setting up capacity at Dahej to manufacture up to 12 ships of 1,20,000 DWT simultaneously. This would be a large achievement for the company. Further, it has orders to manufacture 38 bulk carriers, which would be manufactured at this facility with delivery dates spanning up to March 2014. Thus, this facility is fully booked and almost all the slots have been sold. This would lead to the facility being used to full capacity over the next several years. The company has a few slots available for delivery of OSVs, and this is where we believe that the orders would add up during the ensuing quarters.

Concerns

Open position in Metal: Metals, particularly steel, constitutes approximately 15% of the company's total shipbuilding cost. Recently, there has been substantial volatility in the metal prices whereas the contracts to manufacture vessels are at fixed prices with no escalation clause. Though ABG places back-to-back orders for all equipment and parts to be procured from other parties while booking an order for building a ship, it leaves the metal position open and exposes itself to the risks of metal price fluctuations. Hence, any adverse movement in the prices of metals would adversely impact its Profitability.

Execution risks: ABG has a huge order book of approximately Rs8,985cr, which is approximately 8.1x its FY2008 Revenues. At the same time, ABG is increasing its manufacturing capacities at Dahej and Surat as well. Any delay on its part to ramp up capacities could lead to delays and cancellation of orders coupled with delay penalties. This would severely impact its Profits and Valuation.

Decline in Oil prices: A major portion of ABG's order book comprises OSVs and PSVs. It is developing capacity to manufacture off-shore rigs. Overall, it is heavily dependent on the E&P companies for its Revenues. Thus, a substantial decline in the price of crude oil would impact cash flow of the E&P companies, which would in turn hit ABG's order book.

Risk of penalties: While accepting orders, shipyards commit on a delivery date. Failure to adhere to the delivery schedule would result in the buyer imposing penalty on the vendor to the tune of 5% of the value of the contract. Invoking these penalties could lead to severe erosion in Profitability of the company.

Removal of Subsidies coupled with non-grant of EoU status: GoI has not announced fresh Subsidy scheme after the previous scheme expired in August 2007. The new scheme is expected to allow 20% Subsidy to the shipbuilding companies. However, the scheme is still awaited. Further, many shipbuilding companies have been applying for EoU status but the applications have still not been cleared. Pertinently, the shipbuilding companies in India may find it difficult to compete with their Korean and Chinese counterparts if the shipbuilding subsidy is not reinstated.

Financial Performance

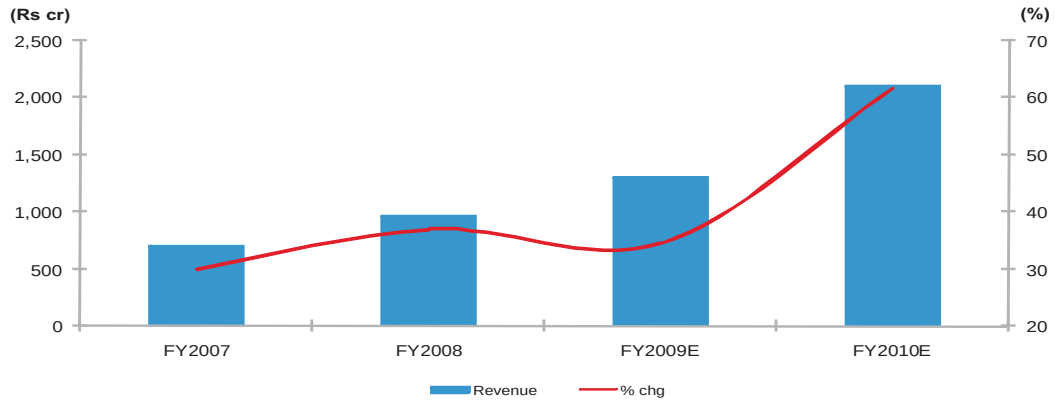
Capacity expansion, strong order book position to boost Revenues

ABG has an excellent unexecuted order book position of Rs7,135 or 8.1x FY2008 Revenue. Leveraging its excellent order book position, ABG is in the process of expanding capacity at its Surat and Dahej shipyards and funding for the same has been fully tied up. The company has also acquired Vipul Shipyard, which is located close to its Surat facility, to further augment its capacity. Thus, the company is enhancing capacity for which it has already booked orders.

Based on strong order book and ramping up of production capacity at Surat and Dahej shipyard, we estimate Revenue to register a CAGR of 47.4% over FY2008-10E. Total Revenues estimated for FY2009 and FY2010 is Rs1,299.4cr and Rs2099.5cr representing a yoy growth of 34.4% and 61.6%, respectively. The upswing in Revenue growth during FY2010E would be on account of expansion at the Surat and Dahej shipyards.

ABG is in the process of acquiring WIS, which is a ship repair yard based in Goa, and which is undergoing financial restructuring. The ship repair business fetches higher Operating Margins compared to shipbuilding. We have not built in Revenues from this acquisition in our model as we await further clarity on the acquisition scheme and schedule. Any revenues and profits from this acquisition would entail upside risks to our estimates.

Exhibit 6: Revenue Growth



Source: Company, Angel Research

OPMs to dwindle owing to withdrawal of Subsidy

ABG's OPMs stood at a strong 30.2% in FY2008. We estimate that the company booked subsidy amounting to Rs81.7cr during FY2008 due to which its Operating Profit came in at Rs291.7cr. Operating Profit excluding subsidy stood at Rs210.0cr, which is 23.7% of the adjusted Revenue of Rs885.2cr (ex subsidy). We have assumed that no new Subsidy scheme would be declared by the government of India as it has not made any announcement on the same for more than a year after the previous scheme expired in August 2007. ABG would be eligible for claiming subsidy on all the orders that it has booked up to August 2007. After this, we have assumed that ABG will not be able to claim any subsidy. This would impact its Margins negatively. According to our estimates, Subsidy adds approximately 7-9% to the company's OPM. As we have built in no new implementation scheme in our model, we estimate OPM to decline from 30.2% in FY2008 to 28.9% in FY2009 and 27.5% in FY2010 on account of less subsidy being booked by the company in proportion to Total Sales. No subsidy is assumed to be received by the company after the order book, which is eligible for subsidy, gets exhausted. However, Operating Profit would continue to grow despite the fall in OPMs on account of

improvement in Revenues. Any Subsidy scheme implemented by GoI in the future would have a positive impact on Margins and Profitability of the company over our estimates.

Exhibit 7: Operating Profit

Source: Company, Angel Research

Net Profit to post CAGR of 37.8% over FY2008-10E

We estimate ABG's Net Profit to grow at a CAGR of 37.8% over FY2008-10E on account of increase in Net Sales, which to some extent would be offset by declining OPMs. The decline in OPMs would primarily be owing to no fresh Subsidy scheme being introduced by the government. The company would avail Subsidy only for the orders that it has booked before the end of the scheme in August 2007.

Robust Capex plans to support growth

Another greenfield project has also been announced at Hazira at a capital cost of Rs1,200cr

The company has robust capex plans to expand its shipbuilding capacity over the next two years. It recently incurred Rs400cr capex towards expanding its shipbuilding capacity at Dahej. ABG is also in the process of setting up a Rig yard in Dahej at the cost of Rs675cr. This part of the capex is fully funded as the company has tied up loans for the same. It also proposes to expand capacity of its Surat facility at an approximate cost of Rs480cr. The company plans to avail of debt to the tune of Rs320cr for developing this yard while the balance would be funded through internal accruals. Another greenfield project has also been announced at Hazira at a capital cost of Rs1,200cr which would take approximately three years to commission and would have capacity to build larger vessels compared to its existing yards. It is also confident of procuring more orders if a new facility comes up as earlier slots always fetch a premium compared to the distant slots.

Outlook and Valuation

ABG Shipyard is the largest private sector shipyard in India with an impressive order book. It has the capability to build a wide variety of vessels and is in process of gaining a foothold in the lucrative Rig business. ABG's facilities are located in close proximity to each other which gives it cost advantages over other Indian shipyards. The company has robust growth plans to capitalize on the strong demand for shipbuilding. The company has a large unexecuted order book of 8.1x its FY2008 Revenues, which provides high Revenue visibility.

The stock is trading at 9.8x and 6.6x FY2009E and FY2010E Earnings, respectively. We see value in the stock on account of its strong Order Book and robust prospects of the global Shipbuilding market. **We maintain a Buy on the stock, with a 12-month Target Price of Rs445 per share.**

Profit & Loss Statement

Rs crore

Y/E March	FY2007	FY2008	FY2009E	FY2010E
Net Sales	**706.2**	**966.8**	**1,299.4**	**2,099.5**
% chg	*30.0*	*36.9*	*34.4*	*61.6*
Total Expenditure	510.8	675.2	923.2	1,522.0
EBITDA	**195.4**	**291.7**	**376.2**	**577.5**
(% of Net Sales)	*27.7*	*30.2*	*28.9*	*27.5*
Depreciation & Amortization	7.9	7.4	16.0	27.6
Interest	26.7	45.7	74.7	112.7
Other Income	5.4	7.4	7.9	0.0
PBT	**166.2**	**246.0**	**293.3**	**437.2**
(% of Net Sales)	*23.5*	*25.4*	*22.6*	*20.8*
Tax	51.8	85.3	89.6	132.0
(% of PBT)	*31.2*	*34.7*	*30.5*	*30.2*
PAT	**114.4**	**160.7**	**203.7**	**305.2**
% chg	*40.1*	*40.5*	*26.8*	*49.8*

Balance Sheet

Rs crore

Y/E March	FY2007	FY2008	FY2009E	FY2010E
SOURCES OF FUNDS				
Equity Share Capital	50.9	50.9	50.9	50.9
Reserves & Surplus	536.9	683.5	880.3	1,178.5
Shareholders Funds	**587.8**	**734.5**	**931.2**	**1,229.4**
Total Loans	409.6	553.3	1,053.3	1,383.3
Deferred Tax Liability	108.0	167.5	167.5	167.5
Total Liabilities	**1,105.5**	**1,455.3**	**2,152.0**	**2,780.2**
APPLICATION OF FUNDS				
Gross Block	178.6	257.6	1,193.0	1,743.0
Less: Acc. Depreciation	47.5	58.5	74.5	102.1
Net Block	**131.1**	**199.1**	**1,118.5**	**1,640.9**
Capital Work-in-Progress	165.2	385.3	0.0	0.0
Investments	**0.0**	**9.9**	**9.9**	**9.9**
Current Assets	1,342.8	2,493.2	3,312.8	4,819.8
Current liabilities	533.6	1,632.3	2,289.1	3,690.3
Net Current Assets	**809.2**	**860.9**	**1,023.7**	**1,129.4**
Miscellaneous Exp.	0.0	0.0	0.0	0.0
Total Assets	**1,105.5**	**1,455.3**	**2,152.0**	**2,780.2**

Cash Flow Statement

Rs crore

Y/E March	FY2007	FY2008	FY2009E	FY2010E
Core PBT	161.0	238.6	285.4	437.2
Other Income	5.3	7.4	7.9	0.0
Depreciation & Amortization	7.9	7.4	16.0	27.6
Other Operating cash flows	26.5	45.7	74.7	112.7
Change in Working Capital	(584.5)	(110.9)	(213.4)	(15.5)
Direct taxes paid	(12.0)	(85.3)	(89.6)	(132.0)
Cash from Operations	**(395.8)**	**102.9**	**81.0**	**430.0**
Inc./ (Dec.) in Fixed Assets	148.0	299.2	550.0	550.0
Free Cash Flow	**(543.8)**	**(196.2)**	**(469.0)**	**(120.0)**
Inc./ (Dec.) in Investments	0.0	83.7	0.0	0.0
Issue of Equity	0.0	0.0	0.0	0.0
Inc./(Dec.) in loans	309.6	111.9	500.0	330.0
Dividend Paid (Incl. Tax)	(7.0)	(7.0)	(7.0)	(7.0)
Others/Extra ordinary items	(24.0)	(45.7)	(74.7)	(112.7)
Cash from Financing	**278.7**	**142.8**	**418.3**	**210.3**
Inc./(Dec.) in Cash	(265.1)	(53.4)	(50.7)	90.3
Opening Cash balances	405.3	140.2	86.8	36.1
Closing Cash balances	140.2	86.8	36.1	126.4

Key Ratios

Y/E March	FY2007	FY2008	FY2009E	FY2010E
Per Share Data(Rs)				
Diluted EPS	22.5	29.3	37.1	55.6
Diluted Cash EPS	24.0	30.6	40.0	60.6
DPS	1.4	1.4	1.3	1.3
Book Value	115.4	144.2	182.9	241.4
Operating Ratio				
Inventory (days)	380.2	702.4	672.6	600.0
Debtors (days)	4.2	3.2	4.5	4.0
Creditor days	295.9	198.4	224.2	230.0
Debt / Equity (x)	69.7	71.0	109.7	109.9
Returns (%)				
RoE	19.5	21.9	21.9	24.8
RoCE	14.1	16.4	14.3	16.2
RoIC (Pre tax)	19.3	22.6	18.5	21.0
Dividend Payout (%)	6.1	4.3	3.4	2.3
Valuation Ratio (x)				
P/E	16.3	12.5	9.8	6.6
P/BV	3.2	2.5	2.0	1.5
EV / Sales	1.7	1.2	0.9	0.6
EV / EBITDA	6.0	4.0	3.1	2.0

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BUY

Price	**Rs296**
Target Price	**Rs346**
Investment Period	**12 Months**

Stock Info

Sector	Shipbuilding
Market Cap (Rs cr)	817
Beta	0.5
52 Week High / Low	865/260
Avg Daily Volume	23149
Face Value (Rs)	10
BSE Sensex	14,401
Nifty	4,327
BSE Code	532609
NSE Code	BHARTISHIP
Reuters Code	BHAR.BO
Bloomberg Code	BHSL IN

Shareholding Pattern (%)

Promoters	36.3
MF / Banks / Indian FIs	35.8
FII / NRIs / OCBs	18.5
Indian Public / Others	9.4

Abs.	3m	1yr	3yr
Sensex (%)	(14.8)	1.1	85.8
Bharati (%)	(39.5)	(45.0)	19.6

Sulabh Agrawal

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Safe Sailing

Bharati Shipyard is an established shipyard in India with expertise in the Off-shore business. It is in the process of building a jack-up rig, which would catapult it into the elite list of shipyards manufacturing offshore rigs. The company has a hedge over forex and raw material price fluctuations. Thus, its Profitability is secured to a large extent. We estimate the company's Top-line and Bottom-line to grow at a CAGR of 36.3% and 21.4% over FY2008-10E, respectively. The stock is currently trading at 7.7x and 6.0x FY2009E and FY2010E Earnings, respectively. ***We Initiate Coverage on the stock, with a 12-month Target Price of Rs346 per share.***

- **Hedge to secure Profits:** Bharati stocks up its entire requirement of steel and other materials shortly after booking an order. This works as a hedge against fluctuations in the commodity prices. Bharati also places back-to-back orders for equipment to be fitted to the tune of 50-55% of the manufacturing cost of the ship while taking the order from the buyer, which is insulated from the risks of price fluctuation. Approximately, 67% of Bharati's order book pertains to exports compared to import of parts and equipment amounting to 50-55%. Hence, Bharati is secured from forex fluctuations to a large extent.

- **Entry into niche Rig manufacturing business:** Bharati is currently in the process of manufacturing an off-shore rig, which it expects to deliver by the end of FY2009. With this, Bharati would join the elite club of companies who manufacture off-shore rigs. Approximately, 430 rigs commissioned globally are more than 27 years old and need to be scrapped. This would lead to huge demand for new rigs across the globe. There is currently a dearth of rig manufacturing capacity. We believe that more orders for manufacturing off-shore rigs would start flowing into Bharati's books once the first rig is completed.

- **Efficient usage of funds to power its growth:** To develop its Dhabole shipbuilding facility, Bharati has procured used machinery from the Swan Hunter Shipyard in Europe. Equipment costs including installation was $250mn. Usage of new machinery would have resulted in cost escalating by almost 25%. This has resulted in substantial saving in capital costs for the company and will help keep profitability high. Thus, Bharati Shipyard is using funds judiciously and efficiently to power its growth.

Key Financials

Y/E March (Rs cr)	FY2007	FY2008	FY2009E	FY2010E
Net Sales	**421.9**	**699.8**	**949.8**	**1,299.4**
% chg	*43.8*	*65.9*	*35.7*	*36.8*
Net Profit	**73.2**	**107.3**	**124.0**	**158.2**
% chg	*43.3*	*46.6*	*15.6*	*27.6*
Diluted EPS (Rs)	**32.5**	**33.5**	**38.7**	**49.4**
EBITDA Margin (%)	30.1	26.9	25.8	24.9
P/E (x)	9.1	8.8	7.7	6.0
RoE (%)	29.9	18.8	17.9	18.8
RoCE (%)	10.9	14.3	15.9	15.6
P/BV (x)	2.7	1.4	1.2	1.0
EV/Sales (x)	1.0	0.6	0.4	0.3
EV/EBITDA (x)	3.3	2.3	1.7	1.3

Source: Company, Angel Research

Company Background

Bharati Shipyard was originally formed as a partnership firm in 1968 and had a small shipyard at Ratnagiri. Later, in 1976, it converted into a private limited company. Thereon, the company has graduated to own and develop five yards at various locations in India while simultaneously enhancing its manufacturing capabilities tremendously.

The product range has been upgraded from simple inland cargo barges through sophisticated deep-sea fishing trawlers and state-of-the-art dredgers to technological marvel of the highly maneuverable and power-packed Ocean Going Tractor Tugs, Cargo/Container Ships and Tankers.

Promoters of the company P C Kapoor and Vijay Kumar are both naval architects from the Indian Institute of Technology (IIT) Kharagpur. Both have over three decades of experience in the field of shipbuilding. Vijay Kumar was on the panel of the Eighth, Ninth and Tenth Five-Year Plans for the Shipbuilding and Repair industry.

Yards and manufacturing capabilities

Ghodbunder Shipyard: Ghodbunder is located near Mumbai in Maharashtra. Spread over 12 acres of land to carry out fabrication work up to hull construction, it is a feeder yard to the Ratnagiri yard. The hull constructed at this yard is towed to Ratnagiri for completion. The yard is equipped with four slipways, which can carry vessels up to 100m in length, cranes of 125tonne capacity, sophisticated welding equipment and cutting machines, etc.

Goa Shipyard: The Goa yard is owned by Pinky Shipyard, a subsidiary of Bharati Shipyard. It is spread over 2.5 acres of land, equipped with side launching facility and sophisticated hi-tech production machinery for blasting, painting and steel fabrication, and cranes with 120 ton capacity, etc. The Goa yard can build vessels up to 120m in length.

Kolkata Shipyard: The Kolkata yard is located on the East coast of India and is spread over seven acres of land. This yard is currently under expansion. Post expansion, this yard will have two 125m long and 25m wide dry docks, two gantry cranes of 40 ton each, various other 25 - 75 ton cranes, CNC cutting equipment, etc. The yard is capable of building ships up to 120m in length and 22m in width.

Dabhole Shipyard: The Dabhole Shipyard is expected to be completed by FY2011. This greenfield expansion will involve capex of Rs600cr. The yard is spread over 250 acres and can be used to build vessels up to 1,00,000DWT and jack-up drill rigs. Bharati has acquired equipment of Swan Hunter Shipyard of UK and most of this equipment would be installed at the Dabhole facility.

Mangalore Shipyard: This shipyard situated on the banks of Gurpur river is under construction. Total capex for commissioning the yard is estimated at Rs400cr. The Mangalore Shipyard is expected to be completed by FY2010. On completion, the yard will have capacity to build vessels up to 60,000DWT. Bharati expects to build tankers, bulk carriers, container ships,

chemical carriers, product carriers and several other vessels at the yard. It will have a slipway of 160m x 62m, a dry dock of 210m in length and 42m in width and a deep-water jetty of 220m in length. Part of the machinery acquired from Swan Hunter Shipyard is proposed to be set up at the Mangalore Yard. With this facility, Bharati proposes to build a world class shipyard with sophisticated and automatic machinery and modern production techniques comparable to renowned foreign shipyards.

Joint Venture with Apeejay: Bharati Shipyard is setting up a joint venture (JV) with Apeejay to commission a shipyard in West Bengal. This Rs2,000cr project would be capable of manufacturing and repairing ships up to very large crude carriers (VLCC) class. This is an excellent opportunity for Bharati.

Capabilities for manufacturing ships of various types can be used inter-changeably. A yard capable of manufacturing large vessels can be used to manufacture smaller vessels, but a yard capable of manufacturing smaller vessels cannot be used to manufacture larger vessels. Similarly, the capability to manufacture more advanced vessels can be used to manufacture less sophisticated vessels, but not vice-è-versa. Bharati's capacity to manufacture rigs can be used to manufacture other vessels and the capacity to manufacture one large vessel can be used to manufacture several small vessels. Thus, the company may not have to wait to bag an order for one large ship but can utilise the facility to build PSVs from its order books or procure orders to build more number of smaller vessels in its domain of expertise, which is PSVs.

Order book position (Imports v/s Domestic, PSVs v/s Cargo)

Bharati has orders for Rs4,867cr. Of this, approximately Rs3,663cr worth of orders are unexecuted with deliveries expected to be completed by FY2012 or beyond. The unexecuted order book is around 5.7x its FY2008 Revenue. Around 33% of its order book, by value, comprises domestic clients while the balance 67% constitutes international clients. Over 70% of the order book, by value, pertains to manufacturing of rigs and platform support vessels and the remaining relates to other kind of vessels, which mostly includes cargo vessels. With the oil prices currently ruling firm and with no expectations of them correcting sharply in the near future, we believe that Bharati will not face problems in ramping up its order book in future.

Exhibit 1: Statistical break up of order book

EXIM	Percentage	Amount (Rscr)
Export	67	3,260.4
Domestic	33	1606.4
Total	**100**	**4866.8**
Type of Vessels		
PSV	58	2,799.3
Others	27	1,303.2
Rigs	16	764.3
Total	**100**	**4,866.8**

Source: Company, Angel Research

Exhibit 2: Bharati Shipyard - Order book breakup (Rs cr)

Type of Vessel	Client	Quantity of Vessel	Contract Value (Rs cr)
Pallet/Container Vessel	Sea Cargo Skip - Norway	2	123.5
Pallet/Container Vessel	Nor lines AS - Norway	2	127.0
Multi-purpose carriers	MK Shipping BV	6	297.0
Multi-purpose Supply/Support vessel	Great Offshore	1	266.3
60.Mtr Multi-purpose PSV	Bourbon Supply Investment	2	78.6
Twin Screw Pilot cm survey vessel	Kolkata Port trust	1	13.7
120 Tons Bollard Pull AHTS	Bourbon Supply Investment	5	390.5
Pilot boat	Reliance Industries	2	17.1
Diving Support vessel	Reliance Industries	1	42.1
54 Tons Bollard Pull Tug	Reliance Industries	3	66.7
Jack-up Rig	Great Offshore	1	764.3
20,000DWT Bulk carrier	Clipper Group (Mgt)	6	579.3
Platform Support Vessel	UP Offshore (Bahamas)	2	195.6
Platform Support Vessel	Man Ferristaal	2	418.7
150 Tons Bollard Pull AHTS	Norwegian Offshore Shipping	2	260.4
RoRo/Pallet/Container	Sea Cargo Skips- Norway	2	176.5
Platform Support Vessel	Up Offshore	2	177.1
AHTS	Shipping Corporation of India	4	351.0
UT 755 LN Platform supply vessel	Opielok Bereederungs GMBH & Co.	2	208.2
Tugs	Mumbai Port Trust	2	20.3
AHTSVs		2	293.0
	Total	**52**	**4,866.8**

Source: Company, Angel Research

First Indian shipyard building a Jack-up rig

Existing capacities for rig manufacturing across the world are fully tied up for next several years

Bharati Shipyard is the first Indian shipyard to manufacture a jack-up rig. It is building this rig for Great Offshore and expects to deliver by 1QFY2010. This would then catapult Bharati into the elite class of rig manufacturers. Bharati Shipyard has the capacity to manufacture two jack-up rigs simultaneously and deliver one rig every year. We believe that more orders for constructing rigs would flow in once this rig is delivered, as the owners of rigs and vessels generally like to see the capability of the manufacturer by seeing an actual completely built product. Moreover, the existing rig manufacturing capacities across the world are fully tied up for the next several years. With Bharati being in position to offer earlier delivery slot, this would definitely be advantageous for negotiating further deals after the first rig is delivered.

Order book position to be sustained

75% of the rigs around the world are more than 22 years old and several have crossed their viable age

The global Rig PSV market is expected to remain strong over the next several years. This would primarily be supported by the firm crude oil prices. High crude oil prices translate into higher profits and cash flows for the oil E&P companies, which in turn pushes them to increase their oil producing capacity. Currently, approximately 75% of the rigs around the world are more than 22 years old and several have crossed their viable age. The PSV market also follows the rig manufacturing market with most of the PSVs as old as the rigs that they are supporting. Thus, the PSVs are also due for replacement. As a result, the market for rigs and PSVs would remain strong over the next several years.

There is general aversion to placing orders with companies not having the requisite experience

PSVs are expensive equipment and the global ship-owners are a closed community. There is general aversion to placing orders with companies not having the requisite experience in the field. In case of Bharati Shipyard, it has rich experience in the manufacture of ships, barges and PSVs. This is evident from the past orders executed by the company. Thus, we believe that with its experience in manufacturing various kinds of vessels and PSVs in particular, the global ship-owners would not be averse to placing their orders with Bharati Shipyard.

At the company's end, its order intake has been low in the last 2-3 quarters as it is awaiting completion of setting up of the Swan Hunter machines at its shipyards. Management has stated that it intends to take further orders only when it has greater clarity on the possible delivery schedules from the new manufacturing capacities. It recently announced that it expects to increase its order book by 35-40% over the next one year on account of order intake for this new capacity. Most of the new orders are expected to be in the Off-shore segment where the company has expertise.

Exhibit 3: Orders Executed

Particulars	Nos
Mini Bulk Carriers	4
65.0 M long General Cargo/Container Ships	2
55.0 M long General Cargo/Container Ships	2
80m long geared bulk carrier [Coastal Service]	4
Lime Shell Carriers	2
Deck/Tank Vessel of dimension 76.0 x 22.0 x 5.30M for Mazgaon Dock (undertaken by sister concern Bharti Offshore Services)	1
Tanker cum Deck Loaders exported to Yemen	4
Sullage Oil Tanker	1
Flat Top Pontoons (for export)	2
Salt Barges (for export)	5
Coaster (Tanks cum Deck Loaders)	5
Twin Screw Ocean Going Tugs equipped with Schottel Rudder	5
Propeller units with total installed power of approx.2250 Hp	1
Dismountable Cutter Suction Dredgers	2
Tanker	1
Deep Sea Trawlers	20
Fixed Nozzle Tugs	5
Swiveling Nozzle Tug	1
Highly Maneuverable Tugs with Aquamaster Rudder	3
Propellers with installed power of 1100 Hp	1
Steerable Rudder Propeller Tugs	4
Twin screw Cycloidal Tractor Propulsion Tugs	7
45 Ton Ballard Pull Tractor Tugs with Azimuthal Propulsion system	6
54 Ton Bollard Pull Reverse Tractor Tug	2
65.0 M Long Grab Hopper Dredgers.	1
35 Ton Bollard Pull Tug.	1
68.0 M Long Multi Support Vessels	1
45 Tons Bollard Pull Tugs	4
55 Tons Bollard Pull Tugs	4
40 Ton Bollard Pull Tug	1
Azimuthal Stern Drive Tugs (each 5000 HP)	4
Azimuthal Tractor Tugs (each 4000 HP)	6
Azimuthal Stern Tugs (each 5000 HP)	7
Reverse Tractor Tugs (5000 HP)	1
100 M long Bitumen Tanker-Cum-Ro Ro Vessel	1
55 M long Offshore Supply Vessel-cum-wireline support vessel	1
Deep Sea Fishing Trawlers	20
Total	**142**

Source: Company, Angel Research, Note: Orders shaded in grey are PSVs

Hedge for Raw material cost and Forex exposure

Bharati hedges itself from the raw material price fluctuations

Shipbuilding is a fairly complex process and takes 1-3 years to build a ship. The time duration depends on the kind of ship being built and capabilities and available slots of the shipbuilding yard where it is being manufactured. Most of the shipbuilding contracts are fixed priced and almost no financial/trading market in the world provides tools to hedge the costs over such a long period. To counter this problem, Bharati Shipyard procures all the required material and stores it for the entire period till the vessel is assembled. Orders for all the parts are also placed back-to-back. This way, Bharati hedges itself from the raw material price fluctuations. However, on the flip side, inventory would remain high.

Approximately, 65% of the company's order book comprises orders procured from its international clients. Around 50-55% of the raw material and components are also imported. Thus, Bharati gets a natural hedge from the forex fluctuation to that extent. Bharati leaves the rest of the exposure uncovered.

Acquisition of Swan Hunter Shipyard's equipment

Bharati shipyard would have incurred approximately 25% additional cost had it used new machinery

Bharati has acquired entire machinery of Swan Hunter Shipyard, UK. The machinery was refurbished four years ago. Apart from this, Swan Hunter Shipyard delivered their last ship six months before being purchased by Bharati Shipyard. Thus, the equipment is in proper working condition. This equipment would be mostly installed at Bharati's Dhabole Shipyard and would enhance its capabilities to build vessels of up to 1,00,000DWT. The cost of the equipment including installation works out to $250mn for Bharati Shipyard. Bharati would have incurred approximately 25% additional cost had it used new machinery. This saving of approximately 25% on capex would lead to lower depreciation cost and hence higher Net Profit Margins and RoE would be achieved.

Investment Argument

Strong unexecuted Order Book position at over 5.7x FY2008 Revenue

Bharati Shipyard has a strong unexecuted order book position of over 5.7x its FY2008 Revenue. The company has massive capex plans and its order book is expected to be executed over the next 3-4 years. Currently, the company is not accepting orders for its new shipyard at Dhabole. Orders would be taken once commissioning of the shipyard is complete.

Niche Rig manufacturing business

Bharati is currently in the process of manufacturing an off-shore rig for Great Offshore to be delivered by end FY2009. On completion of the same, Bharati would join the elite club of companies who have the capability to manufacture off-shore rigs. We believe that more orders for manufacturing off-shore rigs would start flowing in when work on this initial rig is completed. Further, earlier delivery slots would be available with the company in the initial phase of booking orders for the rigs and would provide it additional advantage, considering that all the existing rig manufacturing capacities are fully tied up for the next several years. Bharati has the capability to manufacture two rigs simultaneously and can deliver one rig every year.

Experienced management

Bharati Shipyard has an excellent management at the helm of affairs having vast experience in ship designing and building. The promoters have excellent contacts in the field of shipping and shipbuilding, which helps the company procure orders. We believe that an experienced management will go a long way in adding value to the company.

Rich experience in manufacture of support vessels to help procure new orders

Bharati Shipyard has an excellent track record and experience of manufacturing and delivering OSVs and PSVs

Bharati intends to build a niche for itself in the manufacture of PSVs, OSVs and Rigs. This is evident from the fact that over 70% of its current order book consists of these classes of vessels. Bharati till date has delivered totally 143 vessels out of which 64 have been in the above-mentioned categories. Bharati thus has an excellent track record and experience of manufacturing and delivering OSVs and PSVs. This experience would be helpful in developing its intended niche business.

Hedge to secure Profits

Bharati is insulated from the risks of price fluctuation

The company usually places back-to-back orders for equipment to be fitted on the ships while taking the order from the buyer. This equipment consists of engines, propellers, etc., and constitutes 50-55% of the manufacturing cost of a ship and is mostly imported. Due to this practice of booking back-to-back orders, Bharati is insulated from the risks of price fluctuation. Approximately, 67% of Bharati's order book is export orders for which revenue is realised in foreign exchange. Close to 50-55% of the payment is required to be made in foreign exchange

on account of import of parts and equipment for manufacturing the ship. Thus, Bharati is insulated from fluctuations in forex rates.

Bharati also has the tendency to stock up its entire requirement of steel and other materials short while after booking the order. It has approximately 85% of the materials required for executing its entire book in its inventory. This leads to hedge from fluctuations in the commodity prices.

Bharati also does not take exposure in any kind of derivatives and has taken several measures to hedge itself from the various risks in a natural manner. Part of the risk, which is not hedged in the above manner, is not substantial and is left uncovered. Thus, Bharati Shipyard has a hedge available to cover most of the risks posed by foreign currency exposure and commodity price fluctuations.

Efficient usage of funds to power growth

To develop its Dhabole shipbuilding facility, Bharati procured used machinery from Swan Hunter Shipyard in Europe. This has resulted in substantial savings in capital costs for the company and will also go a long way in keeping its Profitability levels high. This machinery had been used in the previous shipyard for up to 6-8 months and was recently refurbished before being purchased by Bharati. The equipment is in good working condition and installation of the used equipment has significantly reduced capex for Bharati towards the yard development. Thus, Bharati is judiciously and efficiently using funds to power its growth.

Concerns

Decline in global oil prices: The global rig and PSV market is highly sensitive to the international oil prices. A substantial decline in Crude oil prices would reduce interest of oil E&P companies to look for fresh reserves and consequently procurement of new rigs and support vessels would reduce.

Global commodity prices: The global commodity prices continue to be volatile. Sudden spikes in the prices of steel and other metals, which are the primary raw materials required for building ships, would reduce Margins of the shipyards.

Global slowdown: Global slowdown where by the EXIM trade gets impacted would reduce the requirement of movement of cargo where by the Shipping industry would be directly hit. Thus, in turn, the Shipping industry would respond by placing fewer orders with the shipbuilders.

High Inventory: Bharati has high inventory at 350 days as it stocks almost its entire requirement of raw material as soon as it procures its orders. Though this provides the company with a natural hedge against volatility in the raw material prices, it ends up blocking huge amount of funds in working capital.

Scattered facilities: The company has manufacturing facilities scattered across several distant locations across the country, which may lead to extra time and costs for the company. Significant time is spent by the company in towing parts and semi-finished vessels, which increases the construction period.

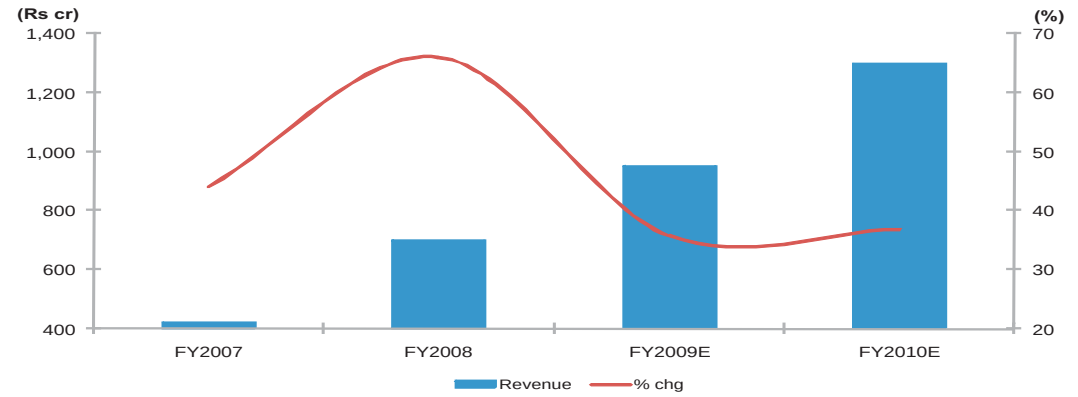
Execution risk: While accepting orders, shipyards commit a delivery date and have to adhere to it. On failure to meet the delivery schedule, the buyer is penalised by the vendor for approximately 5% of the contract value. Invoking these penalties could lead to severe erosion of the Profitability for the company.

Financials

Revenue

We estimate Bharati's Revenue to grow at a CAGR of 36.3% over FY2008-10E. Revenue is expected to grow primarily owing to the increase in manufacturing capacity at its shipyards. Bharati has an order book pending execution amounting to Rs3,663.5cr with deliveries spanning over the next 3-4 years. No delivery slots are free for the next two years. The company has stopped taking new orders since the last 2-3 quarters, except for few stray cases. This is because it awaits completion of its Dabhole shipyard when it would have better clarity of delivery schedules. We have currently not built in the enhanced order book into our model.

Exhibit 4: Revenue Growth



Source: Company, Angel Research

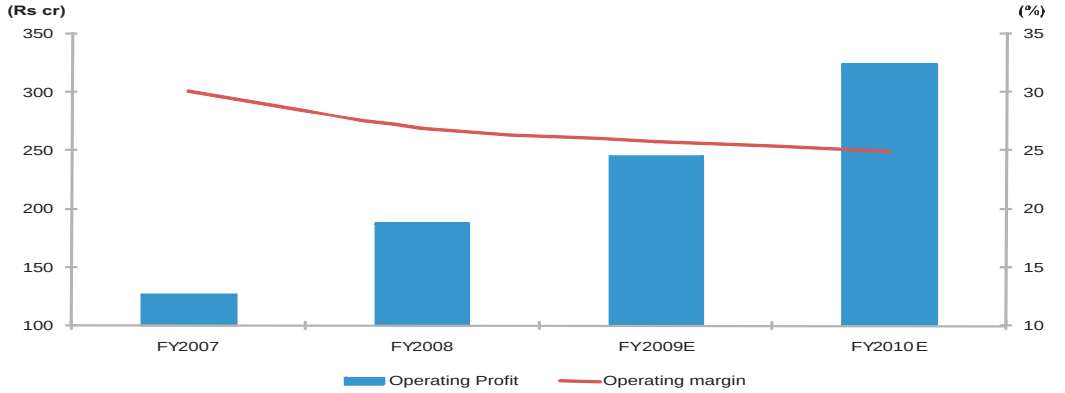
Revenue recognition- Percentage completion method

Bharati follows a contract accounting system with a practice of booking revenues on percentage completion method. This accounting system recognises Revenue on the contract achieving its pre-decided milestone. Delivery of vessels can be irregularly spread across the quarters and years while work and expenses on the same are usually spread out evenly. But, this accounting method spreads Revenue from operations evenly across the time intervals regardless of the delivery schedule. Also, high revenue during a quarter or a year may not mean high number of deliveries in the respective period

Operating Margins

We estimate Bharati's Operating Margins to reduce marginally to 24.9% in FY2010E compared to 26.9% in FY2008. Almost Bharati's entire order book was procured before August 2007. Hence, it enjoys the benefits of the same as its order book will last at least over the next 2-3 years of its entire turnover. We have assumed no further Subsidy scheme being announced by the GoI. Only the orders booked before August 2007 would be eligible for subsidy. GoI has also announced that the shipyards can apply for EoU status, which would take care of the subsidy issues if it is implemented. This would have an additional upside to our valuation if any of Bharati's shipyards is awarded EoU status.

Exhibit 5: Operating Profit



Source: Company, Angel Research

Net Profit

The company's Net Profit is estimated to grow at a CAGR of 21.4% over FY2008-10E. The increase in Net Profit would primarily be on account of the increase in Revenue and major part of its current order book being procured before August 2007. Due to this, the company would continue to avail subsidy for the next 2-3 years. Post this, if no new Subsidy scheme is announced, the company's net profit margins (NPM) could decline.

Capex plans

Bharati will not face any problems with its capacity expansion plans at its various yards

Bharati has chalked out capex of Rs1,000cr for its Mangalore and Dabhole shipyards spread over the next 2-3 years. Of this, capex of Rs200cr has already been incurred and Rs300cr is expected to be deployed over the next 1-2 years. Bharati currently has cash to the tune of Rs200cr and has tied up for another Rs250cr through debt. Rest of the funding would be done through internal accruals. We believe that Bharati will not face any problems with its capacity expansion plans at its various yards.

Outlook and Valuation

Bharati Shipyard is an established player in the Indian Shipbuilding industry. It is ramping up its production capacity to leverage on the boom in demand for new ships across the globe. It currently has expertise in the field of manufacturing offshore vessels and is also in the process of building a jack-up rig, the completion of which would elevate the company into the niche club of yards having the capability to build an offshore rig. The company, with the commissioning of its new yards, would have capability to build larger and wider variety of vessels. Apart from this, Bharati has a well hedged business, which is relatively immune to forex and raw material price fluctuations, which leads to safety of Margins and Profitability. Bharati has not taken any substantial new orders since the last 2-3 quarters as it intends to play safe and awaits better clarity on its delivery slots that can be achieved from its upcoming capacities. Bharati has a smaller order book compared to ABG and also has comparitively less aggressive growth plans. For this reason, we believe that our Target PE multiple of 7x FY2010E Earnings is justified for Bharati, which is at a discount to ABG.

The stock is currently trading at 7.7x and 6.0x its FY2009E and FY2010E Earnings respectively, and we see value in the stock on account of strong global shipbuilding demand and the play safe stance of the company, which leads to assurance of steady Revenue and Earnings growth. **We Initiate Coverage on the stock, with a 12-month Target Price of Rs346.**

Profit & Loss Statement

Rs crore

Y/E March	FY2007	FY2008	FY2009E	FY2010E
Net sales	**421.9**	**699.8**	**949.8**	**1,299.4**
% chg	*43.8*	*65.9*	*35.7*	*36.8*
Total Expenditure	294.8	511.7	704.5	975.5
EBITDA	**127.1**	**188.1**	**245.3**	**323.8**
(% of Net Sales)	*30.1*	*26.9*	*25.8*	*24.9*
Depreciation & Amortization	5.1	8.1	17.5	31.7
Interest	14.4	21.5	39.1	51.3
Other Income	3.2	3.3	0.0	0.0
PBT	**110.8**	**161.8**	**188.7**	**240.8**
(% of Net Sales)	*26.3*	*23.1*	*19.9*	*18.5*
Tax	37.6	54.5	64.7	82.6
(% of PBT)	*34.0*	*33.7*	*34.3*	*34.3*
PAT	**73.2**	**107.3**	**124.0**	**158.2**
% chg	*43.3*	*46.6*	*15.6*	*27.6*

Balance Sheet

Rs crore

Y/E March	FY2007	FY2008	FY2009E	FY2010E
SOURCES OF FUNDS				
Equity Share Capital	22.5	27.6	27.6	27.6
Reserves& Surplus	222.3	542.3	664.4	814.3
Shareholders Funds	**244.8**	**569.9**	**691.9**	**841.9**
Total Loans	555.0	330.8	334.5	499.5
Deffered Tax Liability	28.7	28.7	28.7	28.7
Total Liabilities	**828.5**	**929.4**	**1,055.2**	**1,370.1**
APPLICATION OF FUNDS				
Gross Block	158.5	306.0	606.0	906.0
Less: Acc. Depreciation	18.6	26.7	44.2	75.8
Net Block	**139.9**	**279.3**	**561.8**	**830.2**
Capital Work-in-Progress	97.5	0.0	0.0	0.0
Investments	**3.4**	**3.4**	**3.4**	**3.4**
Current Assets	956.9	1,053.8	932.9	1,026.5
Current liabilities	373.2	410.9	446.7	493.7
Net Current Assets	**583.8**	**642.9**	**486.1**	**532.8**
Miscellaneous Exp.	3.9	3.8	3.8	3.8
Total Assets	**828.5**	**929.4**	**1,055.2**	**1,370.1**

Cash Flow Statement

Rs crore

Y/E March	FY2007	FY2008	FY2009E	FY2010E
Core PBT	107.6	158.5	188.7	240.8
Other income	3.2	3.3	0.0	0.0
Depreciation & Amortization	5.1	8.1	17.5	31.7
Other Operating cash flows	15.5	21.5	39.1	51.3
Change in Working Capital	66.7	15.9	(172.0)	(178.8)
Direct taxes paid	(0.4)	(54.5)	(64.7)	(82.6)
Cash from Operations	**197.7**	**152.9**	**8.6**	**62.4**
Inc./ (Dec.) in Fixed Assets	141.3	50.0	300.0	300.0
Free Cash Flow	**56.3**	**102.9**	**(291.4)**	**(237.6)**
Inc./ (Dec.) in Investments	(1.0)	0.0	0.0	0.0
Issue of Equity	0.0	224.2	6.3	0.0
Inc./(Dec.) in loans	8.0	(224.2)	3.7	165.0
Dividend Paid (Incl. Tax)	(6.4)	(6.4)	(8.3)	(8.3)
Others/Extra ordinary items	(126.8)	(21.5)	(39.1)	(51.3)
Cash from Financing	**(126.2)**	**(28.0)**	**(37.3)**	**105.4**
Inc./(Dec.) in Cash	(69.8)	74.9	(328.8)	(132.1)
Opening Cash balances	471.3	401.5	476.4	147.6
Closing Cash balances	401.5	476.4	147.6	15.5

Key Ratios

Y/E March	FY2007	FY2008	FY2009E	FY2010E
Per Share Data(Rs)				
Diluted EPS	32.5	33.5	38.7	49.4
Diluted Cash EPS	34.8	36.0	44.2	59.3
DPS	2.9	2.3	3.0	3.0
Book Value	108.8	206.7	251.0	305.4
Operating Ratio				
Inventory (days)	373.5	350.0	349.5	340.0
Debtors (days)	119.0	85.6	83.2	70.0
Creditor days	74.6	74.0	74.7	75.0
Debt / Equity (x)	2.3	0.6	0.5	0.6
Returns (%)				
ROE	29.9	18.8	17.9	18.8
ROCE	10.9	14.3	15.9	15.6
ROIC (Pre tax)	15.7	20.4	20.1	20.3
Dividend Payout (%)	8.8	6.0	6.7	5.2
Valuation Ratio (x)				
P/E	9.1	8.8	7.7	6.0
P/BV	2.7	1.4	1.2	1.0
EV / Sales	1.0	0.6	0.4	0.3
EV / EBITDA	3.3	2.3	1.7	1.3

Glossary

AHT	Anchor Handling Tug
AHTS	Anchor Handling Tug Supply
BDI	Baltic Dry Index
BP	British Petroleum
CESA	Community of European Shipyards Associations
CGT	Compensated Gross Tonnage
DWT	Dead Weight Ton
E&P	Exploration & Production
EU	European Union
EXIM	Export and Import
FDI	Foreign Direct Investment
GoI	Government of India
GT	Gross Tonnage
HP	Horse Power
IMF	International Monetary Fund
IMO	International Maritime Organisation
MoD	Ministry of Defence
OPEC	Oil Producing and Exporting Countries
OSV	Offshore Support Vessel
PPP	Public-Private-Partnership
PSV	Platform Support Vessel
UNCTAD	United Nations Conference on Trade And Development
VLCC	Very Large Crude Carriers

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Ratings (Returns) :	**Buy (Upside > 15%)**	**Accumulate (Upside upto 15%)**	**Neutral (5 to -5%)**
	Reduce (Downside upto 15%)	**Sell (Downside > 15%)**	

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