# **Cochin Shipyard Limited**

## **Issue Snapshot:**

Issue Open: August 01 - August 03 2017

Price Band: Rs. 424 – 432 (Rs 21 discount

for Retail and Employees)

Issue Size: 33,984,000 Equity Shares (including Fresh issue of 22,656,000 Equity Shares + Offer for sale 11,328,000 equity shares)

Offer Size: Rs.1440.92 crs - 1468.11 crs

QIB atleast 16,580,000 eq sh Retail Upto 11,606,000 eq sh Non Institutional atleast 4,974,000 eq sh Employee Upto 824,000 eq sh

Face Value: Rs 10

Book value: Rs 179.29 (March 31, 2017)

Bid size: - 30 equity shares and in

multiples thereof

100% Book built Issue

# **Capital Structure:**

Pre Issue Equity: Rs. 113.28 cr Post issue Equity: Rs. 135.94 cr

Listing: BSE & NSE

Book Running Lead Manager: SBI Capital Markets Ltd, Edelweiss Financial Services Limited, JM Financial Institutional Securities Ltd

Registrar to issue: Link Intime India Pvt Ltd

# **Shareholding Pattern**

	Pre	Post	
Shareholding Pattern	issue %	issue %	
Promoter and	100.0	75.0	
Promoter Group			
Public	0	25.0	
Total	100.0	100.0	
Source for this Note: RHP			

# **Background & Operations:**

Cochin Shipyard Limited (CSL) is the largest public sector shipyard in India in terms of dock capacity, as of March 31, 2015. It caters to clients engaged in the defence sector in India and clients engaged in the commercial sector worldwide. In addition to shipbuilding and ship repair, it also offers marine engineering training. As of May 31, 2017, it has two docks – dock number one, primarily used for ship repair ("Ship Repair Dock") and dock number two, primarily used for shipbuilding ("Shipbuilding Dock"). Its Ship Repair Dock is one of the largest in India and enables it to accommodate vessels with a maximum capacity of 125,000 DWT. Its Shipbuilding Dock can accommodate vessels with a maximum capacity of 110,000 DWT. It is in the process of constructing a new dock, a 'stepped' dry dock ("Dry Dock"). This stepped dock will enable longer vessels to fill the length of the dock and wider, shorter vessels and rigs to be built or repaired at the wider part. CSL is also in the process of setting up an International Ship Repair Facility ("ISRF"), which includes setting up a shiplift and transfer system.

CSL's diversified offerings to the Indian clients engaged in the defence sector and to clients engaged in the commercial sector worldwide has allowed to successfully adapt to the cyclical fluctuations of its industry. Its current shipbuilding order book includes Phase-II of the IAC for the Indian Navy, two 500 passenger cum 150 ton cargo vessels and two 1,200 passenger cum 1,000 ton cargo vessels for the Andaman and Nicobar Administration ("A&N Administration"), two Roll-On/Roll-Off ("Ro-Ro") vessels for the Kochi Municipal Corporation and a vessel for one of the Government of India's ("Gol") projects. Its current ship repair order book includes vessels from its key clients. CSL recently delivered a large deck cargo cum launch barge to the National Petroleum Construction Company, Abu Dhabi ("NPCC") and the last FPV (in a series of 20) to the Indian Coast Guard.

Over the years, CSL has successfully responded to fluctuations in the shipbuilding requirements of the markets its operate in and has evolved from building bulk carriers to building smaller and more technically sophisticated vessels such as PSVs and AHTSs. It has worked with several leading technology firms in its industry including Rolls Royce Marine (Norway), and GTT (Gaztransport & Technigaz) SA ("GTT"). Its key ship repair clients include the Indian Navy, the Indian Coast Guard, SCI, the Oil & Natural Gas Corporation ("ONGC") and DCI. It has also partnered with Techcross Inc. for technical support, engineering, service support and sharing of information in relation to the Ballast Water Treatment System ("BWTS") products.

CSL also operates a material testing laboratory, which was established in 1972. Its material testing laboratory has been accredited by the National Accreditation Board for Testing and Calibration Laboratories ("NABL") and is one of the leading laboratories in Kerala in the field of chemical, mechanical and non-destructive testing of various materials including metals, welds and alloys.

Over the last five Fiscals, the break-down of average operating revenues is set out below:

Activity	Clients engaged in the defence sector	Commercial clients
Shipbuilding	69.44%	12.68%
Ship repair	10.42%	6.94%
Other operating revenue	0.48%	0.04%

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# **Objects of Issue:**

The Offer comprises the Fresh Issue and the Offer for Sale. CSL will not receive any proceeds from the Offer for Sale. The Company proposes to utilize the Net Proceeds towards funding the following objects:

- Setting up of a new dry dock within the existing premises of the Company ("Dry Dock") Rs.4430 mn;
- Setting up of an international ship repair facility at Cochin Port Trust area ("ISRF") Rs.2295 mn; and
- General corporate purposes.

In addition, CSL expects to receive the benefits of listing of the Equity Shares on the Stock Exchanges which will result in the enhancement of Company's brand and creation of a public market for its Equity Shares in India.

# **Competitive Strengths**

India's leading public-sector shipyard: CSL is the largest public sector shipyard in India in terms of dock capacity, as of March 31, 2015. It has catered to both commercial clients and clients engaged in the defence sector evidenced by its revenues from shipbuilding and ship repair operations in recent Fiscals. Catering to both commercial clients and clients engaged in the defence sector has helped the company to address these issues relatively better. It is currently building India's first IAC for the Indian Navy and has recently delivered the last FPV (in a series of 20) to the Indian Coast Guard prior to the delivery date. CSL has also built two of India's largest double hull oil tankers, each of 92,000 DWT (Source: CRISIL Report) for SCI and recently delivered a large deck cargo cum jacket launch barge for NPCC. In addition to shipbuilding, it also undertakes ship repair for the Indian Navy. Its top customers include the Indian Navy and the Indian Coast Guard. These top two customers together accounted for 82.43%, 89.92% and 84.57% of its revenue from operations in Fiscals 2015, 2016 and 2017 respectively. The Indian Navy has praised CSL for its high production standards, quality construction and timely delivery. Its diverse experience and multiple offerings put CSL in a good position to benefit from the recent 'Make in India' initiative introduced by the Gol pursuant to which a steady pipeline of future orders and opportunities is expected from Indian clients engaged in the defence sector as well as the Indian PSUs.

Modern facilities and infrastructure and integrated capabilities to deliver quality products and services: The state of the art infrastructure and facilities available at CSL's shipyard combined with its vast expertise gives it a significant edge over its domestic peers. While its proposed Dry Dock project will be set up on its existing shipyard premises, the ISRF will be set up on land near its shipyard leased from the Cochin Port Trust ("CoPT"). Its modern facilities and infrastructure and integrated capabilities has helped it to build a strong reputation for quality and timely delivery over decades of doing business with both its Indian and international clients. Its integrated shipbuilding infrastructure at the shipyard allows it to undertake structural, machinery and electrical design and to prepare detailed production engineering drawings. CSL's ship repair facilities include its Ship Repair Dock measuring 270m x 45m x 12m that enables it to undertake the repair of vessels with a maximum capacity of 125,000 DWT. Its shipyard currently has one of the largest ship repair capacities among the Indian public sector shipyards. Additionally, it has two quays, Quay I with a length of 290m and a 15T cranage and Quay II with a length of 208m and a 10T cranage.

# Order book with a strong customer base of reputable ship owners and marquee clients:

Shipbuilding: CSL has built a variety of vessels ranging from bulk carriers, tankers and passengers ships to offshore support vessels and port crafts. In the last five years, it has built and delivered over 35 vessels to clients worldwide. It has built and repaired vessels and provided other offshore project services to some of the biggest corporates, both in India and globally. Its key foreign clients include NPCC, the Clipper Group, Vroon and SIGBA AS CSL is currently building India's first IAC for the Indian Navy. It is also currently constructing two 500 passenger cum 150 ton cargo vessels and two 1200 passenger cum1000 ton cargo vessels for the A&N Administration, two Ro-Ro vessels for the Kochi Municipal Corporation and a vessel for one of Gol's projects.

Ship repair: CSL commenced ship repair operations in 1978 and has, over the years, developed adequate capabilities to handle complex and sophisticated repair jobs. It has also entered into special MoU arrangements to enhance its ship repair business. In Fiscal 2016, major repair works for commercial clients included work on the GTV Samudra Sarvekshak and the WSV Samudhra Nidhi for SCI, and on the Dredge VIII and Dredge XIX for the DCI and MV Kavaratti for LDCL. In the last Fiscal its docks were running at full capacity due to which it had to turn away certain new requests.

Competitive cost structure and efficient operations: CSL offers its clients competitive cost structures for their shipbuilding and ship repair needs. It has implemented measures to help ensure that its operations run efficiently. It seeks to achieve optimum utilisation of its full capacity through effective production planning and scheduling and has delivered or are in the process of delivering all the vessels it has contracted for, including in certain cases, delivery ahead of schedule such as some of the FPVs for the Indian Coast Guard and deck cargo cum launch barge for NPCC. CSL is committed to the timely delivery of vessels and place great emphasis on the quality of its construction. This helps to minimise the need to undertake rectification works for defects or non-compliance with its customers' specifications, and reduces its exposure to liquidated and other damages under shipbuilding contracts. CSL operates an efficient system of sub-contracting



which aids multiple repair projects and production planning. It also seeks to manage the cost of the engines and other equipment used in its vessels by obtaining quotes from its approved vendors and the cost of its raw materials and components through the selection of suppliers and subcontractors based on several criteria, including the pricing and the quality of their products and reliability of their services. CSL's shipyard is strategically located along the west coast of India, on the main sea route connecting the Persian Gulf to Asia, and is approximately 610 nautical miles from Mumbai, a busy international maritime route that is conveniently located for ships travelling on this route in need of repair. In addition, CSL's shipyard is located close to the offshore oil fields on the western coast of India and relatively close to the Middle East, which will be an advantage in tapping the offshore rig market. Due to its shipyard's proximity to the Kochi port, it is well-positioned to benefit from the port's infrastructure facilities such as its approach channel and navigation facilities.

Led by a dedicated board, long serving and experienced senior management backed by a strong pool of experienced professionals: CSL is one of India's leading shipyards, making it an employer of choice and providing a better incentive to its management to continue to pursue excellence in its businesses. Each of its key management staff has, on average, more than 25 years of experience in the industry and has been with the company for an average of two decades. Itsr organisational culture and experienced board and senior management has been instrumental in helping to achieve a low cost structure, continuous profit margins, efficient operations, short delivery schedules, relatively lower attrition and fewer employee disputes. Its employees are instrumental to its success including for the quality of its products and services and its ability to operate in a cost-efficient manner.

Continuous profits leading to robust financial performance: CSL is a profitable and dividend paying shipyard. It has posted profits continuously in the last five Fiscals. Additionally, it has continuously delivered positive RoE margins over the last five Fiscals. CSL paid dividends to its shareholders at rates of 15%, 15%, 15% and 76.50% in Fiscals 2013, 2014, 2015 and 2016, respectively and declared dividend of 89.70% in Fiscal 2017 Its strong liquidity position in terms of total cash and bank balance of Rs. 20,032.06 million as of June 30, 2017, enables it to continue to stay invested in its business and to consistently pay its suppliers on time and benefit from supplier goodwill. The strength of the balance sheet in terms of liquidity and indebtedness provides it with a number of competitive advantages, such as lower finance costs and better financial terms for its future borrowing needs. As of June 30, 2017, CSL had fund based indebtedness in the form of tax free infrastructure bonds amounting to Rs.1,230 million (excluding interest due on these bonds). Apart from this, CSL has availed of nonfund based facilities of Rs. 2,152.92 million, USD 2.04 million and EUR 4.69 million. Its listed debentures has been rated AA+ since 2014 by various agencies including IRRPL and CARE.

## **Business Strategy:**

**Expand capabilities through proposed Dry Dock and International Ship Repair Facility:** CSL is in the process of developing its Dry Dock and ISRF. Once developed, these new facilities will expand its existing capabilities significantly and help it to build and repair a broader variety of vessels including new generation aircraft carriers and oil rigs, which are expected to be key growth drivers in the short to near long term. The process of setting up an ISRF will allow CSL to undertake repair of a broader range of vessels. The larger size of its proposed Dry Dock will enable it to build and repair ships of higher capacity and large naval vessels such as aircraft carriers. Further, the greater width of its Dry Dock will also enable it to undertake building and repair of rigs, within its shipyard.

Build a strong order book by bidding vigorously for projects to be awarded by the Indian PSUs and defence sector: CSL is well-positioned to benefit from the recent 'Make in India' initiative pursuant to which the GoI is keen to encourage defence manufacturing in India. Policy initiatives such as granting infrastructure status to shipbuilding, granting right of first refusal to Indian shipyards for shipbuilding and ship repair work of the Indian PSUs and support through the new financial assistance scheme are expected to provide a steady pipeline of orders and become key drivers of growth. CSL has an advantage over other defence PSUs, as they currently do not have the capacity to construct certain types of ships especially those of bigger dimensions such as the IAC. The GoI also plans to promote inland water transportation and coastal shipping. this will present several opportunities including building high speed ferry crafts, dredgers, ropax vessels and large capacity passenger ships. This will create demand for shipbuilding and ship repair services, which CSL is well equipped to deliver.

Continue to enhance construction quality and delivery time and enhance price competitiveness in order to increase market share: CSL's emphasis on quality of construction and timely delivery has been a key factor in its ability to attract new customers and to retain existing customers. It is achieving the highest standards in India across in many areas of shipbuilding, such as plate preparation and cutting processes, block fabrication, hull erection, outfitting, design and engineering, sourcing, procurement, and project management. With its inhouse fabrication workshops, CSL intends to continue to develop in-house capabilities in various manufacturing processes, thereby enabling it to lower its costs of production and maintain price competitiveness. CSL's operations will benefit from its business partnerships with firms like GTT. Continuing to enhance production planning and sequencing processes and inventory management will also help CSL to maintain cost competitiveness and further reduce the construction period of ships.

To strengthen market leadership: Leveraging CSL's experience in building other vessels, it plans to expand its product offerings. It is strong contenders for building the next aircraft carrier for the Indian Navy, due to its unique experience in constructing such vessels. With this



experience it will also be able to bid for other defence projects. Furthermore, CSL is well-positioned to pitch for opportunities in the rig building and repair business owing to its proximity to offshore locations. With the construction of its proposed Dry Dock and ISRF, CSL will also be able to build and repair new vessel models. It is well-positioned to follow the latest domestic and international standards for its new offerings. It also plans to expand its operations to cover the entire life cycle of a broader range of vessels

Continue to leverage market position and relationships with customers, suppliers and other business partners to support growth and improve competitiveness: CSL plans to use its leading position in the Indian shipbuilding and ship repair industry to develop new relationships with banks, suppliers, universities and colleges, technical schools, classification societies, ship design institutes, as well as companies in upstream and downstream, oil and offshore services industries, and to create a favorable environment for its sustainable development. It plans to further strengthen its long-term cooperation with well-known universities, such as CUSAT, to jointly provide training, carry out research and development, and develop a potential workforce to support its future growth. These initiatives will also help CSL in attracting the best talent to Kochi by creating a network of shipbuilding and ship repair experts and helping Kochi to become as an important center for shipping and related businesses.

# **Industry:**

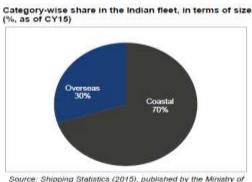
# **Global Shipping Industry**

According to a 2016 UNCTAD report, global seaborne trade increased by 2.1% to 10,048 million tonnes in 2015. Dry bulk cargo comprised the largest share at 54%. Developing economies accounted for the largest share of seaborne trade, in volume terms, at an estimated 60%. Developing countries have become global manufacturing centres with growing demand for capital and consumer goods, and are no longer viewed as only suppliers of raw materials. In terms of a regional comparison, Asia was the largest loading and unloading region, followed by the Americas, Europe, Oceania and Africa. As of January 2016, the global commercial fleet stood at 90,917 vessels, totalling 1.8 billion DWT. Dry bulk carriers comprised the largest share at 43.1% followed by the oil tanker segment with a share of approximately 27.9%. The respective shares of oil tankers and general cargo vessels in the global fleet have declined over the years, while those of dry bulk carriers and container ships have increased. As of January 2016, the dry bulk carriers, with a 43% contribution in terms of gross registered tonnage (GRT), was the largest vessel category in the global fleet. The share of oil tankers, which made up for 50% of the global fleet in 1980, has declined to 28% in 2016. Over this period, the share of container vessels' increased from 2% to 14%, following China's manufacturing-led growth as well as the shipping industry's strategy to reduce costs using economies of scale. The fall in the oil tanker share was due to a change in the pattern of trade and demand, primarily due to a decline in the refining capacity in Europe and a corresponding increase in Asia and the Middle East.

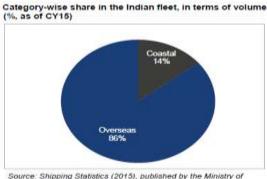
# **Indian Shipping Industry**

Fleet

The Indian commercial fleet saw an addition of 42 vessels with approximately 0.2 million GRT in 2015. In 2015, India's total fleet strength was 1,246 vessels with a GRT of 10.51 million. The majority of the Indian fleet is deployed for costal trade, with approximately 70% of the registered vessels used for coastal trade, while the remaining 373 vessels are engaged in overseas trade. However, in tonnage terms, the fleet deployed for coastal trade is approximately 1.5 million GRT, while that for overseas trade is approximately 9 million GRT.



Shipping; CRISIL Research

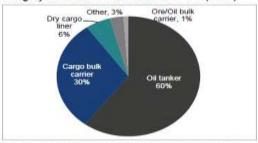


Source: Shipping Statistics (2013), published by the Ministry of Shipping; CRISIL Research

In terms of GRT, more than half of the fleet's tonnage is accounted for by oil tankers. Over the past decade, oil tankers have continued to account for a majority share.

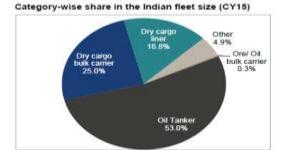


# Category-wise share in the Indian fleet size (CY05)



Source: Shipping Statistics (2015), published by the Ministry of

Shipping: CRISIL Research



Source: Shipping Statistics (2015), published by the Ministry of

Shipping: CRISIL Research

According to the Indian Ministry of Shipping, the total overseas cargo handled at Indian ports was approximately 879.6 million tonnes in 2014-15. The vessels carrying Indian flags contributed approximately 7.5% of overseas cargo tonnage. Even as the total overseas cargo handled at Indian ports increased, the contribution of vessels carrying Indian flags in terms of tonnage declined in absolute terms as well as in percentage terms. Meanwhile, ships above the age of 20 years comprised over 40% of the Indian fleet, as ship owners preferred to maintain the existing fleet due to uncertainty in global trade. However, approximately 20% of the ships in the Indian fleet are below the age of five years, indicating that new vessels have been added during the recent past.

#### **Indian Shipbuilding Industry**

#### Overview

Based on the types of ships built, the Indian shipbuilding industry can be broadly categorized as follows:

- (i) Large ocean-going vessels catering to overseas as well as coastal trade;
- (ii) Medium size specialized vessels such as port crafts, fishing trawlers, offshore vessels, inland and other smaller crafts and;
- (iii) Defence/ naval crafts and vessels for the coast guard.

# Sector-wise classification

The Indian shipbuilding industry can be divided into three segments:

- (i) Public-sector shipyards [in the commercial segment]: Historically India's major shipyards have been public-sector shipyards, which primarily build merchant-class ships and naval vessels. Public-sector shipyards include Cochin Shipyard, Hooghly Dock & Port Engineers.
- (ii) Defence shipyards: Four naval shipyards come under the purview of the Indian Ministry of Defence, namely Hindustan Shipyard, Mazagon Dock, Goa Shipyard and Garden Reach Shipbuilders & Engineers.
- (iii) Private-sector shipyards: The three publicly listed private-sector shipyards are Bharati Defence and Infrastructure Ltd., ABG Shipyard and Reliance Defence and Engineering ("RDEL") Shipyard (formerly Pipavav). Larsen & Toubro Ltd is another major private sector shipyard. In addition, there are a number of smaller private shipyards building smaller ships and vessels, including coastal vessels, barges, tugs, patrol ships and fishing ships.

As of March 2015, the private sector accounted for approximately two-thirds of the total shipbuilding order book in terms of the number of ships with outstanding orders for 199 ships amounting to a combined tonnage of 2,567 thousand DWT. In fiscal 2015, private sector shipyards delivered 24 ships with a combined tonnage of approximately 98 thousand DWT.

Among public-sector shipyards, key names include Cochin Shipyard, Hindustan Shipyard and Mazagaon Dock. Large private-sector shipyards include ABG Shipyard, Bharati Defence and Infrastructure Ltd. and RDEL Shipyard and Larsen & Toubro Shipyard.

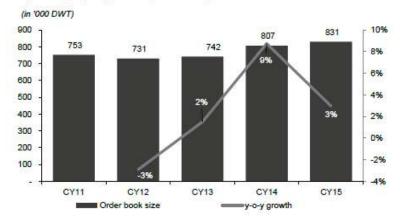
# **Capacity Trends**

The shipbuilding capacity of public-sector shipyards marginally declined between fiscal 2011 to fiscal 2015. In fiscal 2015, Goa Shipyard increased its capacity by more than double from 4,500 DWT to 10,000 DWT. The private-sector's shipbuilding capacity, on the other hand, increased at a CAGR of approximately 3% between fiscal 2011 and fiscal 2015. The capacity enhancement of the private-sector was due to new shipyards such as Larsen & Toubro who entered in 2014 with a capacity of 30,000 DWT, Sembmarine Kakinada who started operations in 2015, with a capacity of 50,000 DWT, and Chidambaranar Shipcare who set up a shipbuilding facility with a capacity of 3,500 DWT.

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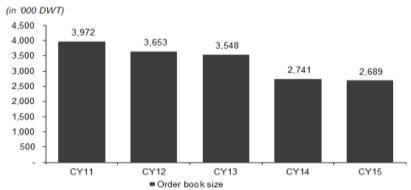
# Shipbuilding capacity in India (in '000 DWT)



Source: Statistics of India's shipbuilding and ship repairing industry (2014-15), published by the Ministry of Shipping; CRISIL Research

## **Commercial Order book Trends**

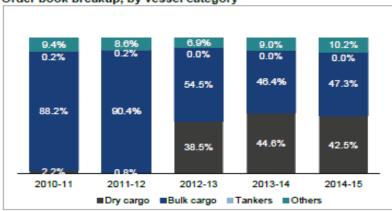
# Indian shipbuilding order book



Source: Statistics of India's shipbuilding and ship repairing industry (2014-15), published by the Ministry of Shipping; CRISIL Research

# I. Vessel -wise

# Order book breakup, by vessel category



Source: Statistics of India's shipbuilding and ship repairing industry (2014-15), published by the Ministry of Shipping; CRISIL Research

The share of dry cargo segment rose significantly in fiscal 2013, mainly because RDEL Shipyard's orders were reclassified from bulk cargo to dry cargo. Between fiscal 2011 and fiscal 2015, the order book of public sector shipyards was lower than that of private sector shipyards due to the vessels for clients engaged in the defence sector in their order book. However, execution of the order book of private shipyards remains uncertain due to the stressed financial position of major shipyards like ABG Shipyard, RDEL Shipyard and Bharati Defence and Infrastructure Ltd.



According to industry interactions, some orders of commercial vessels placed with private-sector shipyards have either been cancelled or put on hold. Additionally, the majority of orders of ships for clients engaged in the defence sector have been placed with the public-sector shipyards.

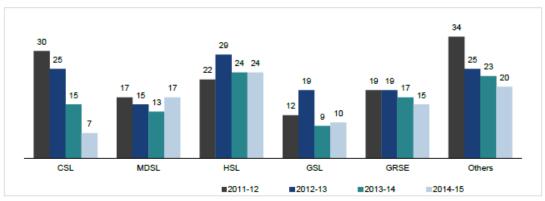
As of fiscal 2015, Indian shipbuilders had orders for 292 ships, with an aggregate tonnage capacity of 2.68 million DWT. Of these, 57 ships, with an aggregate capacity of 1.385 million DWT, were export orders. In DWT terms, domestic orders comprised a greater share of the order book of the public-sector, while the private-sector order book is more evenly distributed. Domestic orders contributed a major part of the order book for public-sector in terms of number of ships, however, the order book was equally shared by domestic and export orders in terms of DWT. Considering the order book as of March 2015, the average capacity (in DWT) of export orders is more than that of the domestic orders.

The public-sector shipyards were limited in their ability to take up large export orders due to inadequate capacity and pending orders.

As of March 31, 2015 Goa Shipyard and Cochin Shipyard are the only public-sector shipyards who have received export orders. In the public-sector, Cochin Shipyard has the largest export order book. In the Dry bulk and offshore segment, ABG Shipyard has the largest domestic order book among private-sector shipyards.

# II. Public-sector company-wise



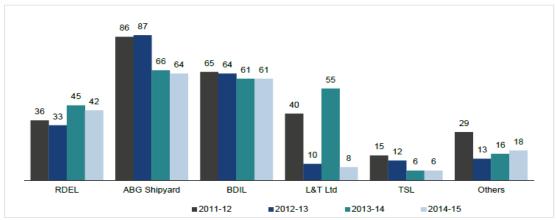


Source: Statistics of India's shipbuilding and ship repairing industry (2014-15), published by the Ministry of Shipping; CRISIL Research

As of March 31, 2015 Hindustan Shipyard has typically contributed approximately half of the public-sector's order book. However, its order book size (in DWT) saw a sharp decline during fiscal 2014 and remained at similar level in fiscal 2015. The order book size (in DWT) of Cochin Shipyard and Mazagaon Dock increased marginally from fiscal 2012 to fiscal 2015. Among public-sector shipyards, the average tonnage (DWT) per ship on order is highest for Cochin Shipyard followed by Hindustan Shipyard.

# III. Private-sector company-wise

Private sector company-wise annual trend in the order book (number of ships)



Source: Statistics of India's shipbuilding and ship repairing industry (2014-15), published by the Ministry of Shipping; CRISIL Research



#### **Commercial Delivery Trends**

The number of ships delivered by the private-sector, as well as in DWT terms, declined after fiscal 2012. With the exception of fiscal 2014, public-sector deliveries outpaced those of private-sector shipyards in DWT terms. Among public-sector shipyards, GRSB delivered the most ships, in DWT terms, from fiscal 2011 to fiscal 2015.

#### **Defence Order Book Trends**

Naval shipbuilding is a sub-segment of the Indian shipbuilding sector. It is characterised by a value addition of 65% during the construction of ships, which is contributed by ancillary industries including steel producers, main engine builders and equipment suppliers. Growth of the domestic shipbuilding sector, which imports 45% of its input requirement, can become a significant factor for large-scale indigenisation of heavy-engineering products and ancillaries.

Traditionally, even as naval ancillary components have been acquired from outside India, the shipbuilding activity has been carried out indigenously. However, over the years, the Indian government has pursued a policy towards greater indigenisation of defence equipment. The domestic defence shipbuilding industry primarily caters to two sub-segments, the Indian Navy and the Indian Coast Guard. Both Indian Navy and the Indian Coast Guard currently possess a large fleet.

Defence Public-Sector Units (DPSUs) account for the major portion of the scheduled new fleet additions to the naval fleet. These DPSUs currently have a large order book for ships for clients engaged in the defence sector. Mazagaon Dock, Goa Shipyard, Garden Reach Shipping & Engineers and Hindustan Shipyard are major PSUs catering to the defence sector sub-segment. A significant number of orders have been placed with these DPSUs over the past two years.

In fiscal 2015, Goa Shipyard's order book had five offshore patrol vessels and was also nominated to build 12 mine counter measure vessels for Rs.326 billion. Mazagaon Dock is executing orders for three destroyers of project P15-A, four destroyers of plan 15-B, four frigates of project P17-A, and six Scorpene-class submarines. Cochin Shipyard is executing the order for one aircraft carrier and a series of fast patrol vessels. Garden Reach Shipping & Engineers has an order book that includes three stealth frigates under project P-17A, four Anti-Submarine Warfare Corvettes (ASCs), four Water Jet Fast Attack Crafts (WJFACs) and eight Landing Craft Utilities (LCUs).

The order book for the Indian shipbuilding industry is expected to receive a boost on account of the ship acquisition plans of Indian Navy and Coast Guard. Ship orders for clients engaged in the defence sector are expected to increase between fiscal 2016 and fiscal 2021, with the Indian Navy's and Coast Guard's ambitious plans for a 200-ship fleet each.

The Indian shipbuilding industry is expected to deliver 14,000 to 17,000 DWT by fiscal 2021 through the partial or full execution of orders for both the Indian Navy and Indian Coast Guard. CRISIL Research expects delivery of some of the most important orders, such as, Scorpeneclass submarines, P15-A, P15-B and P17-A vessels within this timeframe. Most of these ships are currently at various stages of completion.

# **Defence Delivery Trends**

The defence fleet has seen significant additions from the domestic shipbuilding industry in the past two years. Goa Shipyard handed over one naval offshore patrol vessel and Mazagaon Dock delivered INS Kochi, the second ship of plan 15-A. Cochin Shipyard delivered a series of FPVs to the Indian Coast Guard. Cochin Shipyard and Garden Reach Shipping & Engineers received and executed orders for ships for foreign clients engaged in the defence sector. The Garden Reach Shipping & Engineers delivered one ASC, INS Kamorta, and also completed its export order of CGS Barracuda, an offshore patrol vessel to the government of Mauritius. As of fiscal 2016, Goa Shipyard has an export order book of approximately Rs.12,000 million, comprising patrol vessels and interceptor boats for Mauritius and the Sri Lankan Navy. Among private shipyards, ABG Shipyard completed its delivery of one pollution control vehicle to the Indian Coast Guard.

## **Global Ship-repair Industry**

According to a report published by the Ministry of Shipping at the India Maritime Summit 2016, the global ship repair market is approximately US\$ 12 billion. Shipyards in Singapore, Bahrain, Dubai and Middle East account for a major share of this market. These locations have achieved a dominant position despite higher cost of ship repair services compared to other Asian countries, largely due to the availability of a skilled workforce and the latest technology, which allows these shipyards to attract demand from other low cost locations like India, Malaysia and Indonesia. According to the Ministry of Shipping at the India Maritime Summit 2016, Indian ship repair industry's market potential is approximately US\$1.5 billion (Rs.102 billion).

# Indian Ship-repair Industry

# Market size

According to the Statistics of India's Ship Building and Ship Repair Industry, published by the Ministry of Shipping, the total market size of the Indian ship-repair industry in fiscal 2015 was approximately Rs.5,043 million. From fiscal 2011 to fiscal 2015, the market size has remained



constant except for during fiscal 2013, when it crossed the Rs.10,000 million level in part due to Mazagaon Dock's high value orders. This was an isolated case, as Mazagon Dock does not typically undertake ship repairing.

The share of the public-sector in the revenues earned through ships repaired is much higher compared to the private-sector. The average realisation per ship repaired by the public-sector is higher compared to that of the private-sector.

Cochin Shipyard, accounting for approximately 39% of the total revenues earned in fiscal 2015 through ship-repair, is the leading shipyard in the ship-repair industry. It is followed by Goa Shipyard with a share of approximately 20% in the revenues earned in fiscal 2015 through ship-repair. The private-sector shipyards in this segment are Sembmarine Kakinada, Larsen & Toubro and ABG Shipyard.

In terms of market size, the share of the public-sector remained higher than the private-sector from fiscal 2011 to fiscal 2015. The number of ships repaired by the public and private-sectors increased at a CAGR of 18% and 52% respectively, during this period.

## **Capacity Trends**

The public-sector had a largely stable ship-repair capacity between fiscals 2011 and 2015. GSL contributed with a major capacity addition in fiscal 2015, which more than doubled its capacity from 4,500 DWT to 10,000 DWT. The ship-repair capacity of the private-sector improved following the commencement of operations of two new shipyards viz. Larsen & Toubro Ltd with 30,000 DWT and Sembmarine Kakinada with 54,000 DWT capacity.

## Key drivers

Strategic positional advantage

India's strategic position along the east bound and west bound international trade routes offers an opportunity to cater to vessels plying on these routes. A main container route connecting America and Europe to the East passes very close to the Indian coastline presenting a major opportunity for repairs.

#### Capacity additions

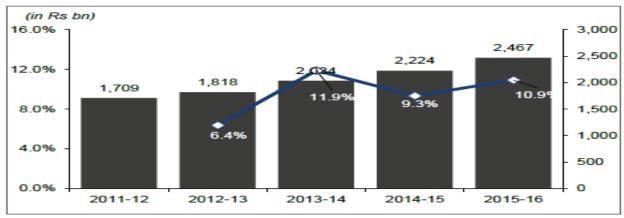
- Cochin Shipyard is in the process of adding one more dry dock of size 310 x 75/60 x 13 M, which will enable it to undertake repairs of vessels like LNG carriers, semi-submersibles, jack up rigs, and drill ships.
- Full commissioning of the international ship repairing facility at Cochin port with state of the art ship repair facilities will enable Cochin to position itself as a major ship repair hub. The target is to enhance Cochin Shipyard's ship-repair capability by 70-90 ships per annum.
- Phase 3 and 4 of development (the expansion and upgradation of infrastructure at Goa Shipyard) are under progress. This development is expected to enhance its capabilities for the repair of ships for clients engage in the defence sector.
- The construction of a floating dry dock facility at V O Chidambaranar port is in the feasibility study phase. This facility would enhance its capacity to carry out underwater repairs of tugs, launch boats and other watercrafts.
- The project to modernise ship repairing facilities at Kolkata dock is expected to improve its capabilities to service both Indian and foreign vessels. The project is still in the planning stages.
- There is a proposal underway for refurbishment of the existing Hughes dry dock at Mumbai port. This project aims to provide adequate wet berth facilities to complement dry docks to cater to afloat repairs.
- In order to create adequate dry docking facilities and maintenance capacities for vessels plying through Andaman and Nicobar waters, a project to create a ship repair facility (ship lift/slipway) capable of handling 5000 DWT vessels is underway and is in the pre-feasibility stage, according to a report published at the Maritime India Summit 2016.

## **Indian Defence Sector**

**Budgetary allocation trends** 



# Budgetary allocation for the defence sector



Source: Ministry of Defence, CRISIL Research

The Indian budgetary allocation for defence in 2015-16 was Rs.2,467 billion, which is approximately 1.75% of the country's GDP. From fiscal 2011 to fiscal 2016, the allocation for defence increased at a CAGR of 9%. During this period, revenue expenditure remained largely constant while capital expenditure increased at a CAGR of approximately 11%.

# Defence budget (fiscal 2016)

In fiscal 2016, the Indian Army accounted for the highest share of the defence budget followed by the Indian Air Force and then the Indian Navy, which accounted for approximately 18% of the total defence budget.

#### **Indian Navy**

During fiscal 2012 to fiscal 2016, the budgetary allocation for the Indian Navy was in the range of between 14-17% of the total budget. The allocation to the Indian Navy has declined over the last two years in absolute terms.

# **Key Gol Initiatives**

The Indian government has taken the following key initiatives to develop and promote the domestic shipbuilding industry: *New Shipbuilding Policy (December 2015)* 

The Indian cabinet approved the new shipbuilding policy in December 2015, granting financial assistance and infrastructure status to the industry. The government has set aside Rs.40 billion to implement the scheme over the next 10 years.

## Key policy features include:

- Granting financial assistance to both state-owned and private shipbuilders on each ship they build, except for smaller boats and fishing vessels. However, financial assistance given would be scaled down by three percentage points every three years, starting with 20% in the first three years, down to 11% in the 10th year;
- The assistance will be given on the contract price or fair price, whichever is lower;
- Both state-owned and private shipyards will get the assistance only after they construct and hand over to the ship to the buyer;
- Indian shipyards will have the right of first refusal for government purchases, implying that even if the shipyard is not the lowest bidder, an option is provided to the shipyard to match the lowest foreign bid and secure the contract; and
- Granting infrastructure status to the shipbuilding and ship-repair industry, making it entitled to various government incentives and tax benefits.

## Make in India Initiative

Gas Authority of India has signed contracts to buy LNG from suppliers in the US. Transporting this gas will require large specialised LNG carriers. As part of the 'Make in India' campaign, the Government of India is keen that one-third of the total number of ships should be built by Indian shipyards.

# Deregulation

The Ministry of Shipping has taken steps to improve the ease of doing businesses, such as:



- rescinding 13 obsolete and unnecessary rules under the Merchant Shipping Act. Of these 13 rules, six have been rescinded and seven have been pre-published before rescindment.
- eliminating the requirement for registration of ship repair units with the Directorate General of Shipping. The Ministry of Finance and the Ministry of Commerce and Industry have now been instructed to extend concessions and facilities to ship repair units without such registration.
- allowing re-rolled steel from re-cycling yards and ship breaking units to be certified for use in the construction of inland barges, river sea
  vessels (type 1 and 2) and port and harbour crafts, after ascertaining its sourcing and processing, which will help lower the cost of
  construction.

# **Defence Procurement Policy (DPP 2016)**

The new defence procurement policy was introduced in March 2016 to initiate a new procurement regime for defence equipment. The following are some of the key features:

- 'Buy (Indian-IDDM)' Procurement Category: Pursuant to the 'Make in India' initiative in defence production, DPP 2016 has introduced a new procurement category, Buy (Indian Indigenously-Designed, Developed and Manufactured), or 'Buy (Indian-IDDM)'. In terms of prioritisation, the new category, which would also be used for procurement of all locally designed and developed items under the revamped 'Make' procedures, is placed above the existing 'Buy (Indian)' category which, in turn, is placed above the other categories, namely the 'Buy and Make (Indian)', 'Buy and Make' and 'Buy (Global)'.
- Under the new category, indigenously designed equipment with a 40% Indigenous Content ("IC"), or equipment not necessarily designed in house but having a 60% IC, is intended for procurement from the domestic industry.
- The new DPP has divided the 'Make' projects into two categories, Make-I (Government Funded) and Make-II (Industry Funded), apart from giving a decisive say to the Micro, Small and Medium Enterprises (MSMEs). For Make-I projects, the government would lead in funding prototype development by the industry; whereas for Make-II projects, which are largely confined to import substitution, the industry that would bear the full costs of development.
- Introduction of L1-T1 methodology for award of contracts: In a significant change from the past, DPP 2016 has introduced the L1-T1 methodology for selecting the supplier of military goods under the 'Buy' and 'Buy and Make' schemes. Under this methodology the final bidder would not necessarily be selected on the basis of lowest price quoted by the technically compliant vendors (the so-called L1 methodology), but by a combination of price and superior technology offered by the qualified vendors.
- An increase in the offset threshold limit: DPP 2016 has raised the offset threshold limit from Rs.3 billion to Rs.20 billion.

# **Key Concerns**

Worldwide demand and pricing in the commercial shipbuilding industry are highly dependent upon global economic conditions: The commercial shipbuilding industry is highly cyclical in nature and is also sensitive to the cyclical nature of the industries it serves such as the oil, natural gas, shipping, transportation and other trade-related industries. The demand and pricing of CSL's vessels are highly sensitive to global and regional economic conditions particularly in India, China, South Korea, the Middle East, Western Europe and the USA, as well as seasonal and regional changes in demand and changes in the global fleet size. CRISIL has noted that there has been a sharp decline in the global shipbuilding order book after 2011. Particularly in relation to CSL's commercial shipbuilding business, continued economic growth in the world economy that exceeds growth in the global fleet size will be necessary to sustain a continued demand for new ships. Any future deterioration in global economic conditions as well as downward trends in trade-related industries, and its failure to accurately predict these cycles could have a material adverse effect on its business, financial condition, results of operations and prospects.

Loss of any of CSL's major customers or a reduction in their orders will have a material adverse impact on its business, financial condition, results of operations: CSL's top two customers accounted for 82.43%, 89.92% and 84.57% of its revenue from operations in Fiscals 2015, 2016 and 2017 respectively. Further, it is currently building India's first Indigenous Aircraft Carrier ("IAC") for the Indian Navy and this forms a significant part of its current order book. Although part of its business strategy includes focusing on the expected growth in the requirements of the Indian Navy for new ships, it do not have any contractual arrangements with the Indian Navy or GoI to construct or repair naval ships. Its customer, in the ship building and ship repair industry, follow the competitive bidding process and due to such procurement policy and competition it may suffer loss of new business from existing clients. If any of its major customers ceases to have business dealings with it or materially reduces the level or frequency of their orders for new vessels from CSL and it is unable to secure new orders from other sources to replace such a loss or reduction, its business, financial condition, results of operations and prospects will be adversely affected.

It cannot be assured that its proposed Dry Dock or International Ship Repair Facility will become operational as scheduled: CSL has not obtained certain licenses or approvals from various authorities for its proposed ISRF project for which funds are being raised through the



Issue. In relation to ISRF project, it has obtained environmental clearance dated June 22, 2017 from MoEFCC. However, the environmental clearance is subject to certain conditions including obtaining prior clearance of the wildlife from the Standing Committee of the National Board for Wildlife and the outcome of an on-going litigation in the Supreme Court of India. The implementation of Dry Dock project and the ISRF is contingent upon the receipt of the pending approvals. However, it cannot be assured that the construction of its proposed Dry Dock or ISRF, will be completed as scheduled, or will become operational as soon, or operate as efficiently, as planned.

The cost estimates by the Dry Dock Project Consultant and the ISRF Project Consultant have been derived from and benchmarked against similar maritime and dry dock/shipyard projects carried out by the Dry Dock Project Consultant and the ISRF Project Consultant respectively in recent years and may not be accurate: The anticipated cost of construction of CSL's proposed Dry Dock will be Rs. 17,989.91 million (based on a conversion rate of Rs.67.83 for one USD). The anticipated cost of the ISRF will be Rs. 9,694.1 million. Its anticipated costs for its proposed Dry Dock and the ISRF are based on the DPRs prepared by the project consultants based on their estimates, budgets and numerous assumptions, and has not been appraised by any bank, financial institution or other independent organisation. The cost estimate for proposed Dry Dock project has been carried out by the Dry Dock Project Consultant in February 2016. It shall tender work in relation to the civil work and plant and machinery on the basis of the DPR and thus the final cost incurred by the Company may vary from the cost estimate provided by the Dry Dock Project Consultant. The actual cost of the project may vary from the cost estimate provided by the Dry Dock Project Consultant due to inflation and change in price of the equipment/ raw material/ man-power. Further, it cannot be assured that the construction of its proposed Dry Dock or ISRF, will be completed as scheduled, or will become operational as soon, or operate as efficiently, as planned. If there are delays in the construction of its proposed Dry Dock or the ISRF is not optimal, it may not be able to take additional orders to produce anticipated or desired revenue as planned. As a result CSL's business, financial condition, results of operations and prospects could be materially and adversely affected.

CSL could incur losses under its fixed price contracts as a result of cost overruns, delays in delivery or failures to meet contract specifications which may have an adverse effect on the business, financial condition and results of operations: CSL's shipyard operations are subject to risks including, among others, the breakdown, failure or sub-standard performance of machinery, natural disasters like floods, tsunamis, earthquakes, other natural disasters, long periods of adverse weather, social unrest, disruptions in transportation and strikes, which may result in operational disruptions. It is dependent on its suppliers for the timely delivery of raw materials, the most important of the raw materials being steel, bought out equipment and components such as pumps, propellers and engines. Additionally, CSL outsource certain aspects of its shipbuilding work scope, such as fabrication work, vessel sub-assemblies etc., from time to time, to its subcontractors. It also rely heavily on imports of steel and marine equipment and other shipping related components that are not manufactured domestically or due to pricing advantages. In addition, CSL is also dependent on subcontract labour and production workers for the construction of its vessels. If it is unable to source such raw materials, equipment and components from alternative suppliers on a timely basis, its production schedule may be delayed, thereby delaying the delivery of the vessel to its customers. In addition, profitability may also be adversely affected if CSL is unable to secure alternative sources of such raw materials, equipment and components in a cost efficient manner or if it is unable to recover liquidated damages from the defaulting suppliers.

All of CSL' fixed price contracts provide for liquidated damages for late delivery. It also has to pay liquidated damages for delay in delivery and for quality issues. There can be no assurance that its customers in future will not rescind their shipbuilding contracts with it if there is a delay in delivery beyond the time stipulated in the contract or it may need to renegotiate some of its shipbuilding contracts. This may have an impact on CLS's reputation, which could effect on its financial condition, results of operations and prospects.

Future growth and expansion is limited by production capacities and the location at which CSL operates: CSL's production capacity is limited by, amongst other things, the size of its shipyard, the number, size and capacities of its berths, docks and its plant and equipment. In addition, the size and capacity of the vessels it constructs is limited by its location at which it operates. CSL's proposed Dry Dock will be constructed within its current premises and the new ISRF facility will be constructed on land leased from Cochin Port Trust. Post the construction of its proposed Dry Dock CSL will not be able to undertake any further expansion activities on its premises due to a lack of additional space. It cannot be assured that it will be able to manage the future expansion of its facilities effectively. Any failure on its part to do so will have a material adverse effect on its business, financial condition, results of operations and prospects.

Entire business operations are based out of a single shipyard at Kochi: CSL's shipbuilding and other facilities are based out of single premises in its shipyard in Kochi. It rely exclusively on its facilities at its shipyard in Kochi to earn revenues, pay its operating expenses and service its debt. Any significant interruption to, or loss or shutdown of, operations at its shipyard in Kochi would adversely affect its business. In addition, any disruption in basic infrastructure, such as in the supply of electricity from the State of Kerala or in its water supply could substantially increase its manufacturing costs. Any disruption of CSL's existing supply of basic infrastructure services such as power or water, its failure to obtain such additional supplies as required by its or an increase in the cost of such supplies may result in additional costs to it.



In such situations, CSL's production capacity may be materially and adversely impacted. In the event its facilities are forced to shut down for a significant period of time, its earnings, financial condition and results of operation would be materially and adversely affected.

The delivery of IAC which forms a significant portion of current order book has been delayed: CSL is building India's first IAC for the Indian Navy. The publicly available CAG report on this matter titled 'Union Defence Services Navy and Coast Guard' tabled on July 26, 2016 states that IAC's delivery with completion of all delivery-related activities is likely to be achieved only by 2023. This delay has been attributed by the CAG Report to several reasons including late procurement of key parts, further delayed supply of key raw materials including steel and other bought out components and frequent changes to and lack of design information. The Indian Navy has claimed that many changes to the design which led to the delay were proposed by it. The CAG report also cites CSL's lack of experience both in relation to vessel type and size and the complexity of the project. While CSL do not agree with CAG's assessment of this matter, further delay and disagreements in relation to this project may materially and adversely affect its reputation, results of operations and financial condition.

CSL's growth rate, the number of orders it has received in the past and its current order book may not be indicative of its future growth rate or the number of orders it will receive in the future: CSL's order book on hand, as of a certain date, represents the total nominal value of the contracts that has not been completed, excluding the portion of revenue in respect of those orders that it has recognized as of such date. The successful conversion of these orders into its revenue depends on a number of factors including, among other things, absence of adverse changes in the Indian and global shipping markets, the availability of funds to ship-owners, competition, its production capacity, its research and development and its ability to deliver the vessels on time. Some of the factors are beyond CSL's control and by nature, are subject to uncertainty. Going forward, its order book may be affected by delays, cancellations and the renegotiations of the contracts, if any, therefore it cannot be assured that it will be able to deliver all of its existing orders on schedule and successfully turn them into its revenue. Furthermore, CSL face risks of a low growth rate of orders because the shipbuilding orders placed by its customers are typically non-recurring in nature. As a result, it cannot be assured that it will receive the same number of orders as or more orders than it has received in the past or that the contract value of the order book will remain the same or increase.

CSL may not be able to secure new contracts if it is unable to issue the requisite performance guarantees: The shipbuilding industry is a capital intensive industry and as the contract prices for new vessels are generally high, CSL is usually required to furnish its customers with performance guarantees as security for the fulfilment of its contractual obligations under its shipbuilding contracts. In order for CSL to secure performance guarantees, banks and financial institutions review, among other things, its financial standing and creditworthiness. If CSL do not have available banking facilities to issue the performance guarantees, it approach other banks or financial institutions to issue the performance guarantee. While it has been able to procure performance guarantees for new contracts to date, in the event that it is unable to do so and it is unable to satisfy the financial requirements prescribed by banks and financial institutions, CSL will not be able to procure the requisite performance guarantees and as a result, it may be unable to secure new contracts, which would have a material adverse effect on its business, financial condition, results of operations and prospects.

CSL cannot assure that it will be able to compete successfully against its competitors and new entrants to the industry: CSL's business is highly competitive. It faces competition from existing competitors located both in India and elsewhere, and in particular in South Korea, Japan and China, as well as new entrants to this industry. It competes on the basis of its ability to fulfil itsr contractual obligations including the timely delivery of vessels constructed by it, its yard's capacity and operational efficiencies and the price and quality of the vessels it construct. Some of CSL's competitors has more resources than it has and some of its competitors may have lower costs of operations, including lower costs of raw materials and manpower, than it has. In addition, some of its competitors may have competitive advantages in building certain types of vessels compared to it given its current dock size and other facility constraints. Its competitors, particularly those in India, from time to time, may engage in aggressive and unviable pricing and delivery schedules in order to gain market share. Further, due to recent liberalisation policies, private companies have been allowed to bid for vessels used in defence-related projects. This may lead to increased competition and there can be no assurance that it will be able to compete successfully against its competitors as well as new entrants in its industry in the future, or that the shipbuilding and ship-repair companies that are not directly in competition with it now will not compete with it in the future. Accordingly, CSL's business, financial condition, results of operations and prospects would be adversely and materially affected if it is unable to maintain its competitive advantage and compete successfully against its competitors and any new entrants to its industry in the future.

Business is expected to become more diversified and historical results of operations may not be indicative of its future performance: CSL is presently constructing the first IAC for the Indian Navy. It has also obtained a licence to aid it in building LNG carriers using the patented membrane containment system. As part of its growth strategy, it intends to diversify its product offerings to include vessels for inland water transportation. As it do not have sufficient experience in manufacturing these new products and since its contracts typically provide for liquidated damages for late delivery, it may encounter greater risks of cost overruns and delays in delivery on these contracts than on those for the vessels it built in the past. CSL do not yet have all the technological know-how or intellectual property rights to build these vessels and may have to spend large amounts of fees to obtain licenses or invest a substantial amount of capital and human resources in



conducting research and designing and building prototypes. Development costs of these new products may be excessive and may adversely affect the business, financial condition and results of operations. CSL's expansion within a short period of time has imposed on it new operational, management and planning demands, which are significantly different from those it encountered in operating business and for which it may require different expertise and experience. There can be no assurance that its revenues or profits will continue to increase or that its profit margin will not significantly decrease or that it will not experience losses from new businesses. As a result, CSL's historical results of operations may not be indicative of its future performance.

Dependent on the Cochin Port Trust ("CoPT") for certain basic services required for daily operations: CSL outsource certain basic services which are key to its daily operations such as pilotage, tugs and voyage permits to CoPT. Timely availability of these services is a critical factor for successful execution of its daily operations. There can be no assurance that CoPT will continue to provide it these services in the future on terms favourable to it, or at all. If CSL's relationship with CoPT is negatively affected in any manner or if CoPT is unable to provide these services in the future, it may have an adverse impact on its operations.

CSL is subject to risks arising from currency exchange rate fluctuations, which could adversely affect the business, financial condition and results of operations: Changes in currency exchange rates may influence CSL's results of operations. Globally, a substantial part of all worldwide ship sales transactions and purchase of offshore structures is generally conducted in USD. Since a significant part of its costs are incurred in Rupee, depreciation of Rupee versus USD and EUR will result in lower revenues in Rupee terms, which could adversely affect CSL's profitability. The exchange rates between Rupee and USD and between Rupee and EUR have changed substantially in recent years and may continue to fluctuate significantly in the future. Although it may in the future enter into hedging arrangements against currency exchange rate risks, there can be no assurance that these arrangements will successfully protect CSL from losses due to fluctuations in currency exchange rates.

Failure or delays in obtaining required certification from classification societies may cause delays in delivery schedules and disruptions in business: CSL is required to construct its vessels in accordance with contractual specifications and requirements and the rules and regulations of the classification societies. Depending on the requirements of its customers, it needs to obtain certification from a particular classification society that is allowed to conduct statutory surveys on behalf of the register of shipping subject to the latter's authorisation for each vessel. The classification society may refuse to allow CSL to use the certificate if it fails to resolve issues it raises. As a result, CSL may experience delays and disruptions in its shipbuilding process which may adversely affect the business, financial condition and results of operations.

Changing laws, rules and regulations and legal uncertainties, including adverse application of tax laws and regulations, may adversely affect the business, results of operations and cash flows: CSL's business, results of operations and cash flows could be adversely affected by unfavourable changes in or interpretations of existing, or the promulgation of new laws, rules and regulations applicable to the business and operations. There can be no assurance that the GoI may not implement new regulations and policies which will require CSL to obtain approvals and licenses from the GoI or other regulatory bodies or impose onerous requirements and conditions on its business and operations. Any such changes and the related uncertainties with respect to the implementation of the new regulations may have an adverse effect on the business, results of operations and cash flows.

Highly dependent on the growth of India and global trade activities for raw materials such as crude oil, coal and iron ore: The commercial shipbuilding industry has traditionally experienced fluctuations in freight and charter rates and vessel values, depending on factors including the demand for, and supply of, shipping capacity, which in turn has been largely influenced by global demands for, and supplies of raw materials such as crude oil, coal and iron ore. CSL's product offerings are concentrated on IAC, FPVs, PSVs, barges and bulk carriers. The price and supply of crude oil is unpredictable and fluctuates based on events outside its control, including geopolitical developments, supply and demand for oil and gas, actions by Organisation of the Petroleum Exporting Countries and other oil and gas producers, war and unrest in oil-producing countries and regions, regional production patterns and environmental concerns. As a result, an increase in the price of crude oil may adversely affect CSL's profitability. As far as the commercial ships like bulk carriers and PSVs are concerned, it is expected that sustained economic growth in the India and worldwide would create a growing demand for these raw materials, the prices and volumes of which has largely determined the growth of the global shipping industry. A decrease in demand in India or globally may cause a reduction in demand for the bulk carriers, and offshore support vessels which CSL builds and this decrease may adversely affect its business, financial condition and results of operations.

CSL's costs may increase due to changes in regulations pertaining to the shipbuilding industry: The shipbuilding industry is heavily regulated by both Indian and international regulations. Among other things, the vessels CSL constructs for its customers are required to meet the standards and requirements of the classification society specified by its customer and the rules applicable to the type and size of vessels promulgated by the relevant regulatory authorities that may comprise maritime authorities of the country of registry and of nations which the vessel is likely to trade or transit through, such as the Panama and Suez canals. If Indian or international regulations applicable to



the shipping industry become more stringent in the future or additional regulations or controls requiring the adoption of new construction requirements are introduced that it cannot satisfy in a cost efficient manner or CSL is unable to pass any additional costs resulting from these new requirements to its customers, its costs will increase. Any significant increase in cost due to changes in regulations in the shipbuilding industry may adversely affect its business, financial condition and results of operations.

Profit & Loss

Rs in million

Particulars	FY17	FY16	FY15
Revenue from Operations	20594.9	19900.1	15832.6
Other Income	1490.1	1068.7	771.9
Total Income	22085.0	20968.8	16604.5
Total Expenditure	16792.8	15981.0	14939.9
Cost of materials consumed	10087.3	10543.2	10008.1
Sub contract and other direct expenses	3193.7	1916.7	1597.8
Changes in Inventories	-139.6	-164.4	-192.3
Employee benefits expense	2166.7	2090.8	2128.5
Other expenses	1344.0	1425.4	1129.7
Provision for anticipated losses and expenditure	140.8	169.3	268.0
PBIDT	5292.2	4987.9	1664.6
Interest	105.4	119.4	183.2
PBDT	5186.8	4868.5	1481.4
Depreciation	385.1	371.9	377.0
PBT	4801.7	4496.5	1104.4
Tax (incl. DT & FBT)	1679.9	1579.0	411.6
Tax	1601.1	1664.4	485.3
Deferred Tax	78.8	-85.4	-73.7
Reported Profit After Tax	3121.8	2917.5	692.8
Adj. Profit	3121.8	2917.5	692.8
EPS (Rs.)	27.6	25.8	6.1
Equity	1132.8	1132.8	1132.8
Face Value	10.0	10.0	10.0
OPM (%)	18.5	19.7	5.6
PATM (%)	15.2	14.7	4.4

Balance Sheet:

Particulars	FY17	FY16	FY15
ASSETS			
Non-current assets	5110.1	6623.9	4723.3
Property, Plant and Equipment	3028.5	2964.4	2894.4
Capital work-in-progress	539.2	241.7	127.8
Intangible assets	677.6	737.8	806.6
Financial Assets	15.5	1992.8	311.9
Income tax assets (net)	360.1	266.6	250.1
Deferred tax assets (net)	243.3	322.1	236.7
Other non-current assets	245.8	98.4	95.8
Current assets	28054.3	26864.7	24189.6
Inventories	1864.7	2316.9	3033.8
Financial Assets			
Trade receivables	3069.9	4541.0	5825.4
Cash and cash equivalents	6759.8	5114.7	4566.0
Bank balances other than (ii) above	13153.1	13089.4	9628.5
Loans	4.7	4.0	4.4
Other Financial assets	2326.9	1192.4	324.4
Current Tax Assets (Net)	169.5	0.0	0.0
Other current assets	705.7	606.3	807.2
Total Assets	33164.4	33488.6	28912.9
EQUITY AND LIABILITIES			
Equity	20310.2	18242.0	15539.3
Equity Share capital	1132.8	1132.8	1132.8



Other Equity	19177.4	17109.2	14406.5
Liabilities			
Non-current liabilities	1470.28	1445.77	1449.34
Financial Liabilities			
Borrowings	1,230.00	1,230.00	1,230.00
Other financial liabilities	26.12	26.12	26.12
Provisions	214.16	189.65	193.22
Current liabilities	11,383.91	13,800.80	11,924.22
Financial Liabilities			
Trade payables	1,613.16	2,098.77	1,709.84
Other financial liabilities	1,019.68	1,644.42	1,209.63
Other current liabilities	6,646.19	7,723.00	6,472.46
Provisions	2,104.88	2,150.71	2,282.13
Current Tax Liabilities (Net)	0	183.9	250.16
Total Equity and Liabilities	33,164.37	33,488.61	28,912.85



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