October 10, 2017

Cochin Shipyard (COCSHI)

₹ 570

Quality play; accelerating on fast lane...

Cochin Shipyard (CSL), a public sector enterprise, is one of the most stable companies in the Indian shipbuilding and ship repair sector. Over the years, the company has emerged as a premier player in the Indian shipbuilding segment with expertise in design, engineering and project implementation. CSL is also a market leader in the Indian ship repair segment with a market share of ~39% and has undertaken repairs of most complex ships of the country. As on FY17, shipbuilding constitutes 74% of the topline while ship repair comprises the remaining 26%. We believe CSL's strong order book (₹ 2,856 crore) plus L1 status of ₹ 5400 crore, bidding pipeline (~₹ 11900 crore), core competency in both shipbuilding & ship repair (especially defence), debt-free status, best-in-class working capital cycle, reliability in execution and being a natural beneficiary of large & critical government projects place it in a sweet spot.

Better business mix, strong order visibility and healthy B/S

CSL is consciously improving its business mix by increasing the share of ship-repairs orders (2x profitable than shipbuilding business) in its order book. Better business mix coupled with strong bidding pipeline of over ~₹ 11,900 crore augur well for the company. Currently, CSL has a healthy order book of ₹ 2,856 crore plus L1 status of ₹ 5400 crore. **It is also likely to receive order for phase III of IAC, which is likely to be ~₹ 10,900 crore.** We believe these orders give strong revenue visibility to CSL till FY23. Even during turbulent times in the global shipbuilding history, it has delivered topline, bottomline growth of 11.1%, 18.7% CAGR, respectively, in FY07-17. CSL has a strong balance sheet with debt of ₹ 123 crore and cash of ₹ 1,600 crore. With capex of ₹ 2,800 crore over the next three years (FY18-21E) and superior return profile (average RoEs, RoCEs of 15.5%, 16.5%, respectively, in FY12-17), we believe CSL is a quality play.

Strong moat, capacity additions through capex to boost growth

CSL enjoys strong competitive advantage due to its large dry dock capacity. This leads to large defence vessels like aircraft carriers coming only to CSL for its repairs/ refits. **CSL is also building a new larger size shipbuilding and ship repair facility at a cost of ₹ 2,768 crore. This new capacity is likely to enable the company to build larger ships and repair more vessels.** With newer capacity, healthy order pipeline and strong execution capabilities, we believe CSL will clock revenue, EBITDA and PAT CAGR of 17.5%, 13.8% and 8.1%, respectively, in F17-20E. **We value CSL at 25x FY19E earnings for existing business (₹ 655/share) plus 0.2x (₹ 26/share) and 0.6x (₹ 44/share) for its planned capex in shipbuilding and ship repair segment, respectively, to arrive at SOTP value of ₹ 725/ share.**

Exhibit 1: Valuation Metrics

(₹ crore)	FY16	FY17	FY18E	FY19E	FY20E
Revenues	2,107	2,222	2,415	2,799	3,606
EBITDA	355	379	387	433	559
Net Profit	273	322	334	357	406.7
EPS (₹)	20.1	23.7	24.6	26.2	29.9
P/E (x)	28.4	24.1	23.2	21.7	19.1
Price / Book (x)	4.4	4.0	2.4	2.3	2.1
EV/EBITDA (x)	17.3	15.7	13.4	13.3	11.2
RoCE (%)	16.8	18.7	13.3	13.1	13.0
RoE (%)	15.6	16.5	10.5	10.5	11.1

** Calculated using post-issue shares*

Source: Company, ICICIdirect.com Research

Rating Matrix

Rating Matrix		
Rating	:	Buy
Target	:	₹ 725
Target Period	:	12 - 15 months
Potential Upside	:	27%

Key Financials

₹ Crore	FY17	FY18E	FY19E	FY20E
Revenue	2,222	2,415	2,799	3,606
EBITDA	379	387	433	559
EBITDA (%)	18.4	17.3	16.5	16.1
Net Profit	322	334	357	407
EPS (₹)*	23.7	24.6	26.2	29.9

**Calculated using post-issue shares*

Valuation Summary

(x)	FY17	FY18E	FY19E	FY20E
P/E	20.0	23.2	21.7	19.1
Target P/E	25.5	29.5	27.6	24.2
EV / EBITDA	15.7	13.4	13.3	11.2
P/BV	4.0	2.4	2.3	2.1
RoNW (%)	16.5	10.5	10.5	11.1
RoCE (%)	18.7	13.3	13.1	13.0

Stock Data

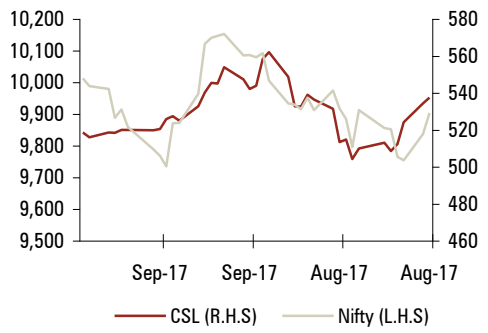
Stock Data	
Average Volumes (shares)	0.63 lakh
Market Capitalization	₹ 7748 Crore
Total Debt (FY17E)	₹ 123 Crore
Cash and Investments (FY17)	₹ 1927 crore
EV (FY17)	₹ 5945 Crore
52 week H/L (₹)	575 / 435
Equity capital	₹ 135.9 Crore
Face value	₹ 10
MF Holding (%)	2.0
FII Holding (%)	2.5
Promoter Holding (%)	75.0

Price Performance

Return (%)	1M	3M	6M	12M
Cochin Shipyard	(6.0)	NA	NA	NA
Bharat Electronics	(2.8)	7.5	9.1	44.3
Reliance Defence	(5.6)	(13.9)	(20.3)	(14.4)
ABG Shipyard	(3.7)	(27.0)	(51.5)	(68.3)

** Listed on August 11, 2017*

Price Movement



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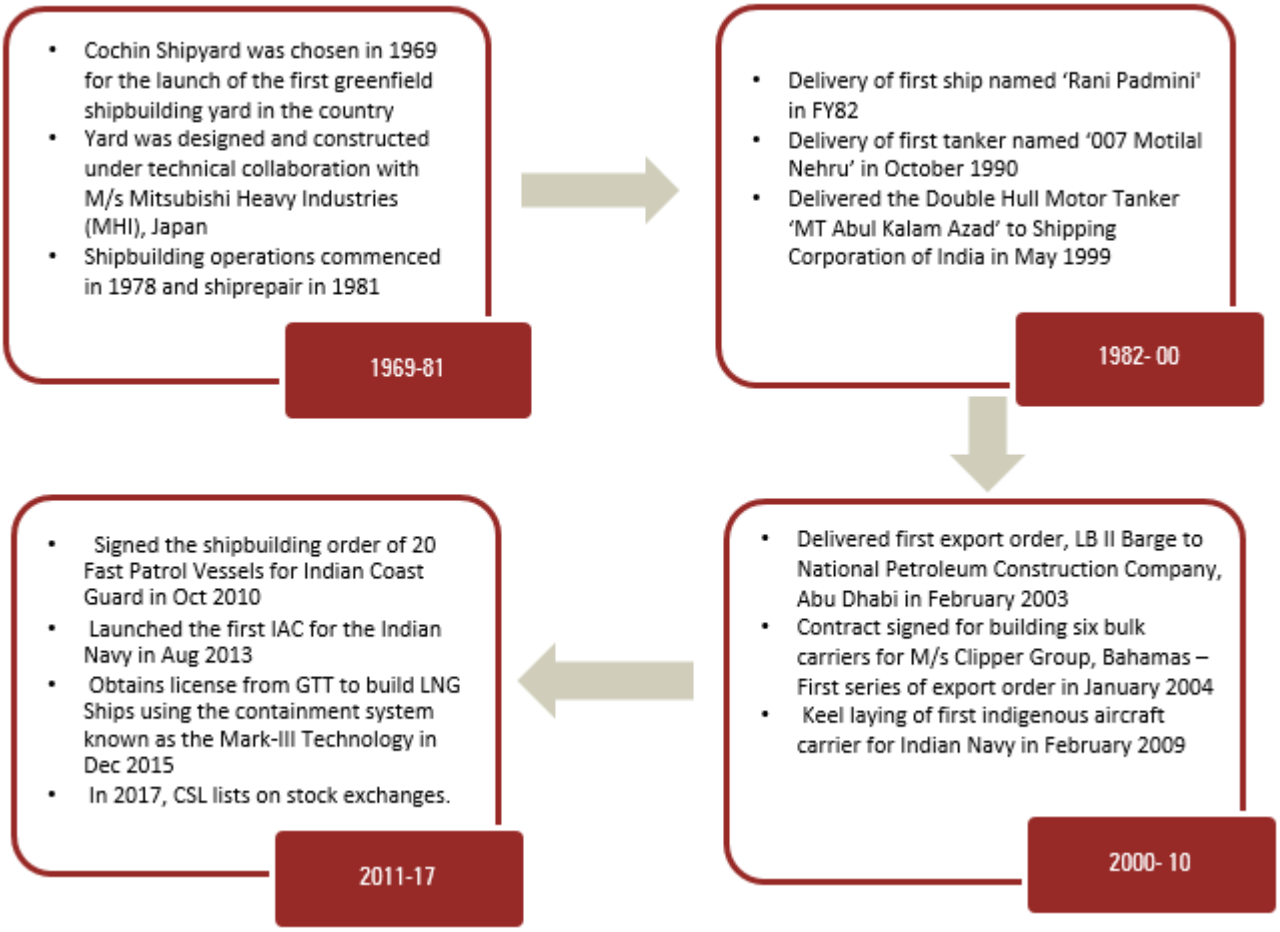
Shareholding pattern (Q1FY18)

Shareholder	Holding (%)
Promoter - Government of India	75.0
Institutional investors	4.5
General public	20.5

Company background

Cochin Shipyard (CSL) is the largest public sector shipyard in India in terms of dock capacity. The company caters to clients engaged in the defence sector in India along with clients engaged in the commercial sector worldwide. In addition to shipbuilding, ship repair, CSL also offers marine engineering training. The company was incorporated in 1972 and conferred **Miniratna** status in **2008**. CSL's shipyard is strategically located along the west coast of India, midway on the main sea route connecting Europe, West Asia and the Pacific Rim, a busy international maritime route. In addition, the shipyard is located close to the Kochi port as well as offshore oil fields on the western coast of India, relatively close to the Middle East.

Exhibit 2: Key milestones of CSL

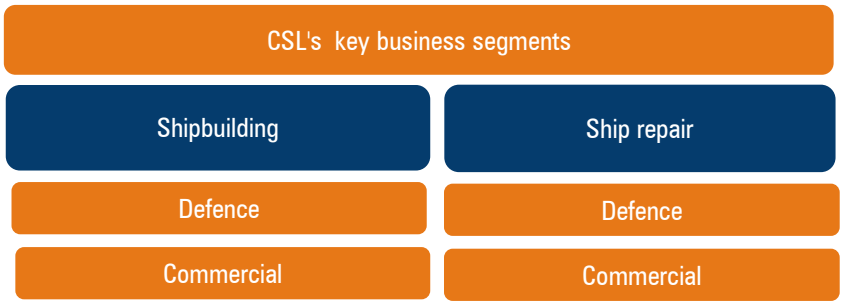


Source: Company, ICICIdirect.com Research

CSL's business segments, revenue break-up & clientele

CSL's business segments can broadly be categorised into two segments – shipbuilding and ship repair. In both segments, it caters to clients from the defence and commercial shipbuilding segments.

Exhibit 3: CSL's key business segments



Source: Company, ICICIdirect.com Research

Shipbuilding

- Only public shipyard in India, which can build ships up to 1,10,000 DWT
- Has built various types of vessels including tankers, bulk carriers, port crafts, passenger vessels, etc
- Reputed international clientele
- Currently building platform supply vessels for exports and aircraft carrier for the Indian Navy

As of May 31, 2017, CSL has two docks – 'ship repair dock' used for ship repair and 'shipbuilding dock' used for shipbuilding. A dry dock (sometimes dry-dock or drydock) is a narrow basin or vessel that can be flooded to allow a load to be floated in, then drained to allow that load to come to rest on a dry platform. Dry docks are used for the construction, maintenance and repair of ships, boats and other watercraft.

CSL's ship repair dock is one of the largest in India and enables it to accommodate vessels with a maximum capacity of 125,000 DWT. The company's shipbuilding dock can accommodate vessels with a maximum capacity of 110,000 DWT.

Ship-repair

- CSL can repeair ships up to 1,25,000 DWT. Thus, it can repair air craft carriers
- Yard can undertake complex and sophisticated repairs to oil rigs; & ships of Navy, coast guard & merchant navy
- Has executed three major projects from ONGC for repairs of mobile offshore drilling unit - Sagar Vijay, Mobile Offshore Drilling Unit - Sagar Bhushan and Jack Up Rig - Sagar Kiran in FY06

Exhibit 4: CSL's existing docks

CSL's Docks	Size	Capacity	Range
Dock 1	270 X 45 X 13M	125000 DWT	60,40,10 & 5t
Dock 2	255 X 43 X 9M	110000 DWT	300,150 & 50t

Source: Company, ICICIdirect.com Research

The company is also in the process of **constructing a new dock**, a 'stepped' dry dock. This stepped dock will enable CSL to build rigs and vessels of a larger size. CSL is also in the process of setting up an **international ship repair facility (ISRF)**, which includes setting up a ship-lift and transfer system. In the last two decades, CSL has built and delivered vessels across broad classifications including bulk carriers, tankers, platform supply vessels (PSVs), anchor handling tug supply vessels (AHTSs), barges, bollard pull tugs, passenger vessels and fast patrol vessels (FPVs). CSL is also currently building India's first indigenous aircraft carrier (IAC) for the Indian Navy. CSL has also grown its ship repair operations and is the only commercial shipyard to have undertaken repair work of the Indian Navy's aircraft carriers, the INS Viraat and INS Vikramaditya.

Over last five fiscals (FY13-17), the break-down of CSL's average operating revenues is as follows:

Exhibit 5: Operating revenues: Defence vs. Commercial

Activity	Defence sector	Commercial Sector	Total
Shipbuilding	69.4%	12.7%	**82.1%**
Ship repair	10.4%	6.9%	**17.3%**
Other operating revenue	0.5%	0.0%	0.5%
Total	**80.3%**	**19.7%**	100.0%

Source: Company, ICICIdirect.com Research

CSL has delivered two of India's largest double hull oil tankers, each of 92,000 DWT to Shipping Corporation of India (SCI). The company has evolved from building bulk carriers to building smaller and more technically sophisticated vessels such as PSVs and AHTSs. **CSL has also worked with several leading technology firms in this segment like Rolls Royce Marine (Norway), and Gaztransport & Technigaz (GTT) SA. CSL's key shipbuilding clients include the Indian Navy, the Indian Coast Guard and SCI.** CSL has also exported 45 ships to various commercial clients outside India like NPCC, the Clipper Group (Bahamas), Vroon Offshore (Netherlands) and SIGBA AS (Norway).

CSL began its ship repair operations in 1981 and has undertaken repairs of various types of vessels including upgradation of ships of the oil exploration industry as well as periodical maintenance, repairs and life extension of ships. CSL's shipyard has, over the years, developed capabilities to handle various repair jobs. For the ship repair jobs, CSL has entered into MoUs with various clients including the Lakshadweep Development Corporation (LDCL), Directorate General of Lighthouses and Lightships (DGLL) and Dredging Corporation of India (DCI) on a bulk volume basis.

CSL's key ship repair clients include the Indian Navy, the Indian Coast Guard, SCI, Oil & Natural Gas Corporation (ONGC) and DCI. CSL 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's clientele

In its core area of expertise i.e. shipbuilding, the company has built a variety of vessels ranging from bulk carriers, tankers and passengers ships to offshore support vessels and port craft. In the last five years, CSL has built and delivered over 35 vessels to clients worldwide. The company's Indian clients include the Indian Navy, the Indian Coast Guard, SCI, ONGC, DGLL, DCI, etc, while foreign clients include NPCC, the Clipper Group, Vroon and Sigba AS.

In the ship repair segment, CSL has developed adequate capabilities to handle complex and sophisticated repair jobs. The company has also entered into special MoU arrangements to enhance its ship repair business. For example, CSL repaired LDCL and DCI vessels under such MoUs arrangements. In FY16, major repair works for commercial clients included work on the GTV Samudra Sarvekshak and the WSV Samudra Nidhi for SCI, and on the Dredge VIII and Dredge XIX for the DCI and MV Kavaratti for LDCL. **In FY17, CSL's docks were running at full capacity due to which CSL had to turn away new requests.**

Exhibit 6: CSL's clientele

Foreign Clients	Indian Clients
• Aker DOF Supply A • ATCO, Saudi Arabia • Brage Supplier KS, Norway • Clipper Group, Denmark • Deep Sea Supply ASA, Norway • Brage Supplier KS, Norway • Clipper Group, Denmark • DOF ASA, Norway • Hellespont Steamship Corporation, Germany • NFC, AHTS, Cyprus • National Petroleum Construction Company, Abu Dhabi • Seatankers Management, Norway • Tidewater Marine International Inc. USA • Vroon Offshore B V, Netherlands	• Andaman & Nicobar Admin • Central Marine Fisheries • Chennai Port Trust • Coast Guard • Cochin Port Trust • Dredging Corporation of India • Fisheries Survey of India • GE Shipping, ONGC • Indian Navy • Integrated Fisheries Project • New Mangalore Port Trust • Shipping Corporation of India • Union Territory of Lakshadweep • Visakhapatnam Port Trust • Lakshadweep Development Corporation Limited • Directorate General of Lighthouses

Source: Company, ICICIdirect.com Research

CSL – India's largest public sector shipyard with integrated capability

CSL's infrastructure and integrated capabilities have helped the company build a strong reputation for quality and timely delivery over decades of doing business with both Indian and international clients. **For example, CSL has executed 13 re-fits for Indian aircraft carriers. In all instances, it has delivered this vessel before schedule.** Large capacity coupled with integrated capabilities has given the company a significant edge over domestic peers. CSL's shipbuilding infrastructure has allowed it to undertake structural, machinery and electrical design related work at commendable speed. The company's ship repair facilities include ship repair dock measuring 255 m x 43 m x 9 m that enable it to undertake the repair of vessels with a maximum capacity of 125,000 DWT. CSL's shipyard currently has one of the largest ship repair capacity among Indian public sector shipyards.

CSL – Shipyard with diverse competencies (defence, commercial)

CSL caters to both clients from the defence and commercial sector. It is one of the few yards to have capabilities in all four segments – shipbuilding, ship repair, commercial and the defence segment. Typically, shipbuilding for clients engaged in the defence sector is complex and time consuming whereas commercial shipbuilding, while relatively less complex, is subject to business cycles. As CSL has competence in both these areas, the company is able to address these issues relatively better.

Exhibit 7: Revenues: Client-wise

Client wise Contribution	FY14	FY15	FY16	FY17
Defence sector	87.6%	82.3%	89.9%	84.6%
Commercial sector	12.4%	17.7%	10.1%	15.4%

Source: Company, ICICIdirect.com Research

In FY14-17, CSL clocked ~85% revenue from the defence segment and the rest 15% from the commercial segment. Even historically, a majority of its revenues have come from the defence segment.

CSL's revenue segmentation FY14-17

Exhibit 8: Revenue segmentation (₹ crore)

Activity	FY14	FY15	FY16	FY17
Shipbuilding (% of Grand Total)	87.2%	87.3%	81.3%	73.5%
Defence sector	1457.2	1230.9	1502.9	1362.6
Commercial sector	99.2	133.2	117.9	151.1
Total	1556.4	1364.1	1620.8	1513.7
Ship repair (% of Grand Total)	12.8%	12.7%	18.3%	26.4%
Defence sector	106.2	53.8	281.8	378.9
Commercial sector	122.4	144.0	82.2	164.8
Total	228.7	197.8	364.0	543.7
Grand Total	1785.0	1561.9	1993.5	2058.8

Source: Company RHP, ICICIdirect.com Research

As seen in the above exhibit, CSL earns majority of its revenue from the defence shipbuilding segment. However, the company has significant competencies in ship repair of the vessels. **The current capacity allows CSL to repair ~80-100 vessels per year.** Though more voluminous and complex, the ship repair business is 2x more profitable compared to the shipbuilding business. By efficient docking of the vessels i.e. size of vessels vs. dimensions of the dockyard, the company optimally utilises its current capacity. **By executing over 2000 projects, CSL has emerged as a market leader in the ship repair segment with ~39% market share. The company also boasts of creating a best-in-class ecosystem in this segment.** This is primarily due to its material procurement system wherein it can source the required materials in the shortest possible time.

CSL has also developed strong contactor-vendor systems, with capabilities complimentary to that of its shipyard, helping speedy execution of contracts. For Indian Navy, the company has repaired about 15 Indian naval ships, on an average, in FY14, FY15 and FY16, respectively, where the scope of the work varied from normal wear and tear to complex repairs. CSL has also recently completed refits of INS Aditya, INS Sukanya, INS Shardul, INS Viraat and INS Vikramaditya for the Indian Navy. The company has also undertaken major revamping and refurbishing of oil rigs involving steel renewal, upgradation of drilling, cementing, mechanical, HVAC and piping systems in almost all major offshore vessels and rigs of ONGC.

Thus, CSL's diverse experience and multiple offerings put the company in a good position to benefit from opportunities in the defence sector.

Investment Rationale

Strong order book and bidding pipeline

Currently, CSL has an order book of ₹ 2,856 crore plus L1 status of ₹ 5400 crore as on 10th October 2017. The company's 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) and a vessel for one of Government of India's (GoI) projects. **It is also likely to receive an order for phase III of IAC (last phase), which is likely to be ~₹ 10,900 crore. Of the ₹ 10,900 crore contract, fixed price contract is likely to be ~₹ 3,000 crore while the remaining is likely to be cost plus contract.**

Exhibit 9: CSL's current order book

Sr.No.	Current order book	Nos	Client	Pending execution
1	Phase II of the IAC - Vikrant	1	Indian Navy	1225
2	500 passenger cum 150 ton cargo vessels	2	Admin	471
3	1,200 passenger cum 1,000 ton cargo vessels	2	A & N Admin	819
4	Research Vessel	1	GoI	341
5	L1 for ASW SWC project	8	Indian Navy	5400
	Total			8256

Source: Company, ICICIdirect.com Research

In case of IAC (which is currently under Phase II construction), CSL's work scope is partly covered under fixed-price contracts and partly under cost plus contracts. For the complete IAC, CSL has to execute ~₹ 7,008 crore of work (Phase I &II & III) under the fixed price contract while the rest, ₹ 12,300 crore is to be executed under the cost-plus contract. While phase I is over, work contracts of ~₹ 1,225 crore are pending under phase II of IAC. **CSL is expecting ~₹ 10,900 crore of order in phase III of IAC by 2019-20.**

Exhibit 10: IAC: Fixed price vs. Cost plus

S.No	IAC	Fixed price	Cost plus	Total
1	Phase I	1160		
2	Phase II	2848		
3	Phase III	3000	7900	10900
	Total	7008	12300	19308

Source: Company, ICICIdirect.com Research

CSL's gross margins under the fixed price contract are in the range of 25-35%. In the cost-plus segment, the company charges a mark-up of 12.5% on the bought items. In the fixed price portion, CSL forecasts all costs including labour and raw materials costs. In case of cost variances from such estimates, the company is permitted to retain all cost savings on contracts and is also liable for the full amount of all cost overruns.

In addition to the existing order book and upcoming order from IAC, CSL has also bid for one tender from the Home Ministry worth ~₹ 1000 crore. These tenders are mostly likely to be opened over the next year. The company expects healthy inflows to its order book from the same. CSL recently lost bids for diving support vessel, survey vessel (~₹ 2,000 crore each). The same was won by Hindustan Shipyard and GRSE Ltd, respectively.

Exhibit 11: CSL's bidding pipeline

Sr.No.	Current Bids	Nos	₹ crore	Tender
1	Small boats	250	1000	Home Affairs

Source: Company, ICICIdirect.com Research

Over the next few years, CSL is also likely to bid for larger upcoming defence opportunities like anti submarine warfare & sallow water craft, next generation corvettes, next generation missile vessels, indigenous aircraft carrier (IAC 2), etc, making it eligible for opportunities worth over ₹ 1,04,500 crore.

We believe CSL is a strong contender for IAC 2, given its strong competence in serving and building aircraft carriers. As stated earlier, the company is the only commercial shipyard to have undertaken repair work of Indian Navy's aircraft carriers, INS Viraat and INS Vikramaditya. CSL is also currently building India's first indigenous aircraft carrier – Vikrant.

Exhibit 12: Large upcoming defence opportunities (shipbuilding)

Sr.No.	Type	Nos	₹ crore	Construction time
1	Anti Submarine Warfare & Shallow Water Craft	8	10000	5 years
2	Next Generation Corvette	7	17500	5 years
3	Next Generation Missile Vessels	6	12000	5 years
4	Indigenous Aircraft Carrier (IAC 2)		65000	10 years
	Total		104500	

Source: Company, ICICIdirect.com Research

Ship repair

According to a report published by the Ministry of Shipping at the India Maritime Summit 2016, the **global ship repair market is ~US$12 billion (~₹ 76,800 crore).** 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. This has enabled these shipyards to attract demand from other low cost locations like India, Malaysia and Indonesia.

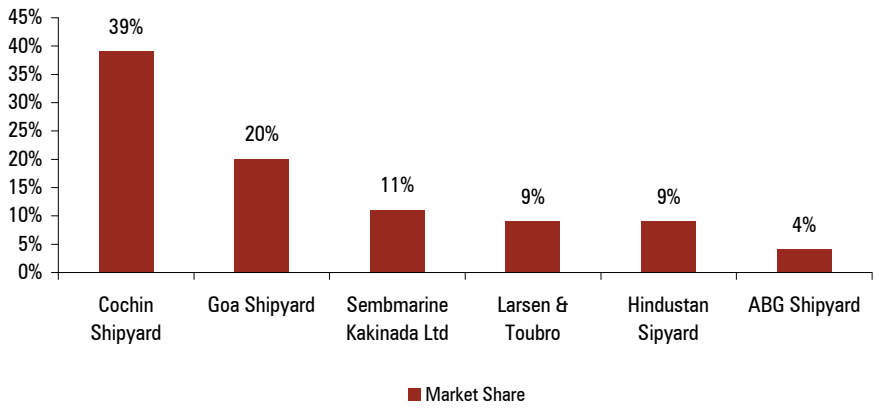
Exhibit 13: Overview of ship repair industry

Source: Ministry of Shipping, Company, ICICIdirect.com Research

Indian ship repair industry

As per the Ministry of Shipping (India Maritime Summit 2016), the Indian ship repair industry's market potential is ~US$1.5 billion (₹ 10,200 crore) whereas the Indian yards currently repair ships worth only ~₹ 1400 crore (FY17). The share of the public sector in revenues earned through ships repaired is much higher compared to the private-sector. As seen in the exhibit below, ~63% of the ship repair activities are carried out by public sector shipyards. CSL leads the segment with 39% market share. Overall, the company has repaired over 2000 ships at its yard.

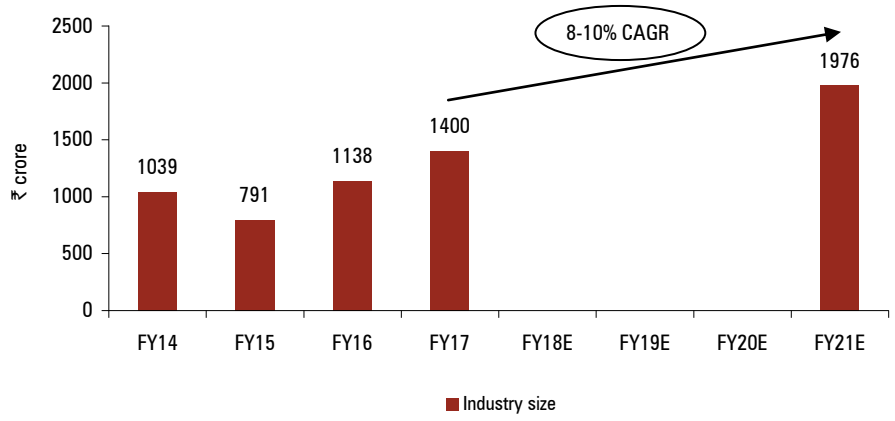
Exhibit 14: Majors players – Ship repair industry



Source: Company, ICICIdirect.com Research

Going forward, the ship repair industry is likely to grow at a CAGR of 8-10% in FY17-21E. Indian yards are expected to benefit from the existing strength of the Indian Navy and the Coast Guard's operational and support fleet, which will drive the repairs business. Moreover, higher indigenisation in ships for clients engaged in the defence sector is expected to augment the revenue per refit and repair, driving growth and increasing the proportion of defence repairs over the next five years.

Exhibit 15: Ship repair industry to grow 8-10% till FY21E



Source: Ministry of Shipping, Company, ICICIdirect.com Research

For CSL, we expect ship repair revenues to grow at 8.9% CAGR in FY18E-20E. We expect muted growth in the ship repair segment, as its ship repair yard is currently operating at full capacity while **higher revenues are likely only through optimised docking of vessels**. CSL currently repairs ~80-100 vessels per year. By efficient docking of vessels i.e. size of

vessels vs. dimensions of the dockyard, the company plans to marginally increase its revenue in FY18E-20E. The company also boasts of creating a best-in-class ecosystem in this segment. This is primarily due its material procurement systems wherein it can source the required materials in the shortest possible time. CSL has also developed strong contactor-vendor systems, with capabilities complimentary to that of its shipyard, helping speedy execution of contracts. **As per the management, public sector shipyards like Mazgaon Docks and Goa Shipyard have benchmarked CSL for improving their ecosystems.**

With a strong ecosystem, CSL has over 2000 projects in this segment. Accordingly, the company has emerged as a market leader in the ship repair segment with ~39% market share. As stated earlier, though more voluminous and complex, the ship repair business is 2x more profitable compared to the shipbuilding business. For Indian Navy, CSL has repaired about 15 Indian naval ships, on an average in FY14, FY15 and FY16, where the scope of work varied from normal wear and tear to complex repairs. The company also recently completed refits of INS Aditya, INS Sukanya, INS Shardul, INS Viraat and INS Vikramaditya for the Indian Navy. CSL has also undertaken major revamping and refurbishing of oil rigs involving steel renewal, upgradation of drilling, cementing, mechanical, HVAC and piping systems in almost all major offshore vessels and rigs of ONGC.

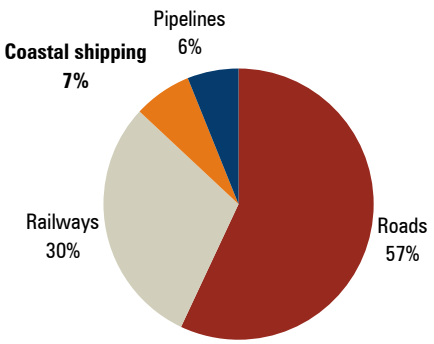
As highlighted earlier, CSL is in the process of adding one more ship repair facility**, international ship repairing facility (ISRF), which** will enable it to undertake repairs of vessels like LNG carriers, semi-submersibles, jack up rigs, and drill ships. **Full commissioning of the international ship repairing facility is likely to enable the company to increase its ship repair capability by 70-90 ships per annum.** CSL currently repairs 80-100 vessels per annum. As the completion of the international ship repair facility (ISRF) is likely in 2022, we expect this facility to contribute in revenues post FY22.

Coastal transport/inland waterways to open new opportunities for CSL

The Government of India plans to promote coastal transportation and inland waterways in a significant way. As per the 'Vision document of Ministry of Shipping', India's coastal trade is in its infancy stage despite India having a long coastal line of over 7500 km. With an array of ports on the east and the west coast, coastal shipping can emerge as a cost effective medium for transportation of goods. The cost of coast-to-coast transportation of goods by coastal shipping is a fifth of that of road transport and two-fifth that of rail transport.

Despite this, the quantum of domestic traffic moved through water transportation is merely 7% in India compared to other larger economies such as China (47%), US (12.4%) and Japan (34%). It is estimated that diversion of 5% of cargo transportation to waterborne mode can result in annual savings of ₹ 2,500 crore. **Accordingly, the Ministry of Shipping aims to increase the share of modal mix of coastal shipping and inland water transport from 7% currently (FY17) to ~10% by 2020.**

Exhibit 16: Mode-wise share of domestic cargo (FY17)



Source: Ministry of Shipping, ICICIdirect.com, Research

We believe such an increase in share from coastal shipping/IWT will lead to increased demand for fleet/transportation vessels. As on November 30, 2016, India had a total fleet strength of 1297 ships with gross tonnage (GT) of 11.29 million. Of these 1297 vessels, 400 ships with 9.77 million GT cater to India's overseas trade while **the rest (897 vessels with 1.52 million GT) cater to coastal trade** (source: Annual report 2017, Ministry of Shipping).

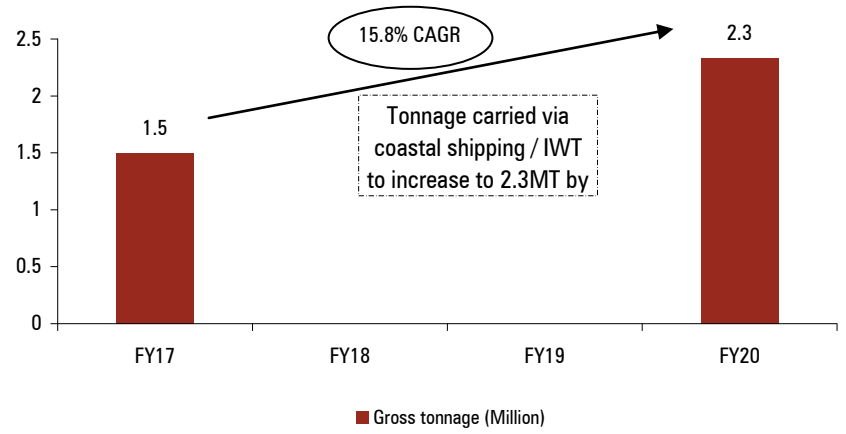
Exhibit 17: Coastal shipping carries only ~13.5% of the total tonnage

Sr. No.	Fleet strength	Quantity	Million GT
1	Overseas trade	400	9.77
2	Coastal trade	897	1.52
		1297	11.29

Source: Company, ICICIdirect.com Research

With an increase in share of costal trade, we estimate significant demand for cargo carrying vessels over the next two or three years. **As per the vision document on coastal shipping, 145 new cargo carrying coastal vessels will be required to meet this incremental demand. This entails an incremental spend of ₹ 6200 crore over the next three years for augmenting the existing fleet and repairing/refurbishing the existing fleet.**

Exhibit 18: Estimated growth in coastal shipping by FY20



Source: Ministry of Shipping, ICICIdirect.com, Research

Our interaction with industry experts suggests that apart from the new opportunity of ₹ 6200 crore, the ship repair opportunity for the existing fleet - high speed ferry craft, dredgers, ropax vessels, passenger ships and small bulk carriers is likely to open up. This is likely to bring in **additional business opportunities worth ~₹ 6000 crore** for players operating in this segment. For catering to this upcoming demand, CSL **recently acquired Hooghly Dock & Port Engineers (HDPEL)** and **planned a capex of ₹ 22 crore** at two of its shipyards at **Salkia** and **Nazirgunge in Howrah, West Bengal.** CSL is also looking at similar capacity in **Andaman & Nicobar, Gujarat and Mumbai** whereby it can increase its ship repair capacity without incurring much capex. Over the next 3-4 years, CSL is planning to spend ~₹ 100 crore to build capabilities in this segment.

Expansion (dry dock, ISRF) to augment growth

CSL is in the process of developing a new dry dock and international ship repair facility (ISRF). Once developed, these new facilities will expand existing capabilities significantly. **The new facilities will help 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 medium to long term.** We reiterate that the company considers itself the best candidate for the IAC II (new air craft carrier), the order value of which is likely to be upwards of ₹ 50,000 crore. The process of setting up an ISRF will allow CSL to undertake repair of a broader range of vessels.

Dry dock

In addition to the existing dock, CSL is in the process of building a dry dock at an estimated cost of ₹ 1800 crore. Construction of this dock will commence from January 2018. It is scheduled to get completed in 30 months. The dry dock will be on the existing site premises of the company. Accordingly, there will be no additional cost, in relation to lease/purchase of land, for setting up the new dry dock. The length of the dry dock will be greater than the length of existing docks. The new dry dock is proposed to be a stepped dock with a minimum clear length of 310 metre, width of 75 metre at the wider part, and width of 60 metre at the narrower part. The dock depth would be 13 metre with a draught of up to 9.5 metre. This stepped dock is proposed to be used for enabling longer vessels to fill the length of the dry dock and wider, shorter vessels and maritime equipment like rigs to be constructed or repaired at the wider part of the dry dock.

Exhibit 19: CSL's new dry dock vs. existing dry dock

CSL's Docks	Size	Crane capacity (max)
Existing dry dock	255 X 43 X 9M	300 T
New dry dock	310 X 75 / 60 X 13M	600 T

Source: Company, ICICIdirect.com Research

International ship repair facility (ISRF)

The company has entered into an agreement for development and operation of an international ship repair facility with Cochin Port Trust (CoPT). For ISRF, CSL has leased ~ 8.12 hectares of land and 15 hectares of water body from CoPT, including their existing ship repair facility, for a period of 30 years. The company has also begun using the existing dry dock and allied facilities in the leased area for carrying out ship repair in a limited way.

The ISRF envisages the construction of a ship lift for vessels, a transfer system, six work stations, approximately eight afloat berths (depending on the availability and size of vessels for repair), jetties, etc. The envisaged ship lift would be designed for vessels up to a length of 130 metre with a lifting capacity of 6,000 tonnes. The cost of development of the ISRF is estimated to be ₹ 969.4 crore.

CSL has appointed a consortium of Inros Lackner SE and Tata Consulting Engineers as project consultants for the same. **Post completion of the capex (estimated by FY22), ISRF is likely to help CSL expand its ship repair revenues by 80-90% (i.e. incremental 80-90 ships vs. existing capacity of 80-100 ships).**

Capex spending, schedule of implementation and means of finance

CSL plans to spend for the aforesaid purposes (₹ 2768 crore) in accordance with the following estimated schedule;

Exhibit 20: Capex pending pattern for ~₹ 2770 crore

No	Particulars	Total estimated cost	Amount deployed as on June 30, 2017	Estimated utilisation					
				FY18	FY19	FY20	FY21	FY22	FY23
1	For dry dock within existing premises of CSL	1,799	14	273	650	600	262	-	-
2	For ISRF at Cochin Port Trust area	969	32	150	200	300	200	80	8
3	General corporate purposes	-	-	100	66	-	-	-	-
Total		2,768	46	523	916	900	462	80	8

Source: Company, ICICIdirect.com Research

As seen in the above exhibit, CSL has already spent ₹ 46 crore from internal accruals for the planned capex. The company also has ₹ 941.3 crore from its initial public offering. Of this amount, CSL plans to utilise ₹ 510 crore and ₹ 265 crore for the new dry dock and ISRF, respectively. Thus, ₹ 7750 crore is likely to come from IPO proceeds.

CSL has already commenced awarding contracts for its new ship repair facility. The commencement of construction activity is likely to happen soon (November 2017). An estimated schedule of implementation is exhibited below;

Exhibit 21: Schedule of Implementation

Sr.No	Project activity particulars	Estimated date
	A. Setting up of Dry Dock	
1	Commencement of Construction activities	Jan-18
2	Commencement of RCC piling works	Jun-18
3	Commencement of Dock Wall works	Jul-18
4	Completion of Dock Wall and associated works	Apr-19
5	Completion of Dock Floor	Oct-19
6	Completion of Mechanical & Electrical Works	Apr-20
7	Completion of Installation of Cranes	May-20
8	Completion of Dock Commissioning	Jun-20
	B. Setting up of ISRF	
1	Commencement of construction activities at site	Nov-17
2	Completion of casting of RCC piles	Jan-19
3	Completion of Shiplift & transfer system, yard for 2	Feb-20
4	vessels and berths for aflaot repair	Aug-21
5	Completion of Additional yard for 2 more vessels	Aug-22

Source: Company, ICICIdirect.com Research

As stated earlier, the total estimated cost for setting up dry dock and ISRF is ₹ 2768 crore. Out of this, CSL intend to utilise ₹ 775 crore from the IPO proceeds. The remaining cost of setting up dry dock and ISRF, other than amounts deployed as on June 30, 2017, is to be financed through existing internal accrual of the company. The IPO proceeds plus internal accruals is likely to take care of over ~70% of planned capex requirements (₹ 775 crore + ₹ 1132 crore). For the remaining ~₹ 860 crore, CSL has made requisite debt raising arrangements. **However, we believe, given the existing free cash of ₹ 1600 crore on the books of the company, debt requirements of CSL are likely to remain minimal.**

Exhibit 22: Estimated means of finance for setting up of Dry Dock and ISRF

	Particulars	Dry Dock	ISRF	Total
A	Total estimated cost	1799	969	2768.4
B	*Minus:* Amounts already deployed as on June 30, 2017	14.1	31.7	45.8
C	Minus: Amount proposed to be financed from the IPO Proceeds	510	265	775.0
D	Funds required excluding funding through Net Proceeds and amount already deployed **(D=A-B-C)**	1274.9	672.7	1947.6
E	Funds from the existing identifiable internal accruals			1132.4
F	Sanction of credit facilities/term loan from State Bank of India	419.0	442.0	861.0
G	Cash and Bank Balances as on June 30, 2017			2003.2
H	Net fund surplus **(H=D-E-F+G)**			1957.4

Source: Company, ICICIdirect.com Research

Additional capacity to witness considerable utilisation levels

We believe the additional capacity set up by CSL is likely to witness demand from its key customers. CSL's key clients – **Indian Navy** and **the coast guard** have a large fleet size **(295 surface units and 166 surface units, respectively)**. Historically, CSL has been the partner shipyard for both the Indian Navy and the Indian Coast Guard. Both these top customers together accounted for 82.4%, 89.9% and 84.5% of its revenue FY15, FY16 and FY17, respectively. With both clients having considerable expansion plans, we believe CSL's additional capacity is likely to see considerable utilisation, going forward.

Exhibit 23: Shipbuilding opportunity from key clients – Indian Navy and the Coast Guard

S.No	Type	Nos	₹ crore	Construction time
	Indian Navy			
1	Anti Submarine Warfare & Sallow Water Craft	8	10000	5 years
2	Next Generation Corvette	7	17500	5 years
3	Next Generation Missile Vessels	6	12000	5 years
4	Indigenous Aircraft Carrier (IAC 2)	1	65000	10 years
	Total		104500	
	Indian Coast Guard			
1	Ships	43	5375	5 years
2	Boats	20	600	5 years
	Total		5975	

Source: Company, ICICIdirect.com Research

CSL's newly built facilities are also likely to witness demand from its customers for maintenance of its existing fleet. Our interaction with the management suggests that most sea vessels (especially large ones) periodically undergo refits. These refits may be short refits, medium refits and/or normal refits depending on the wear and tear of the vessel. **As the company's key clients own a large fleet of ships, their continuous maintenance is likely to augur well for the company, going forward.**

Exhibit 24: Existing fleet - Indian Navy and the Coast Guard

Indian Navy	
Surface units (Vessels)	No. of Units
Aircraft Carriers	2
Submarines	15
Frigates	14
Destroyers	11
Corvettes	23
Mine Warfare Craft	6
Patrol Craft	139
Others	85
Total	295
Indian Coast Guard	
Pollution control vessels	3
Offshore patrol vessels	16
Patrol vessels	42
Patrol boats	60
Patrol craft	27
Hovercraft	18
Total	166

Source: Global firepower.com, Company, ICICIdirect.com Research

Additionally, CSL has also entered into MoUs with other clients like Lakshadweep Development Corporation (LDCL), Directorate General of Lighthouses and Lightships (DGLL) and Dredging Corporation of India (DCI) on a bulk volume basis for maintenance of their fleet.

Moreover, both new facilities are likely to be capable of both - building as well as repair of ships. CSL intends to capitalise on this flexibility of business operations by picking and choosing orders that will maximise the operating performance of the company.

Total opportunity for CSL pegged at ₹ 1, 36,731 crore in FY18E-25E

Overall, for CSL, we envisage opportunities of ₹ 1, 36,731 crore in FY18E-25E.

Exhibit 25: Total opportunity for CSL in FY18E-25E

	Existing Opportunity	Upcoming Opportunity	Total
Current order book	8256	-	8256
IAC Phase III	10800	-	10800
Bidding Pipeline	1000	-	1000
Indian Navy	-	104500	104500
Caost Guard	-	5975	5975
Caostal Shipping	-	6200	6200
Total	20056	116675	136731

Source: Company, ICICIdirect.com Research

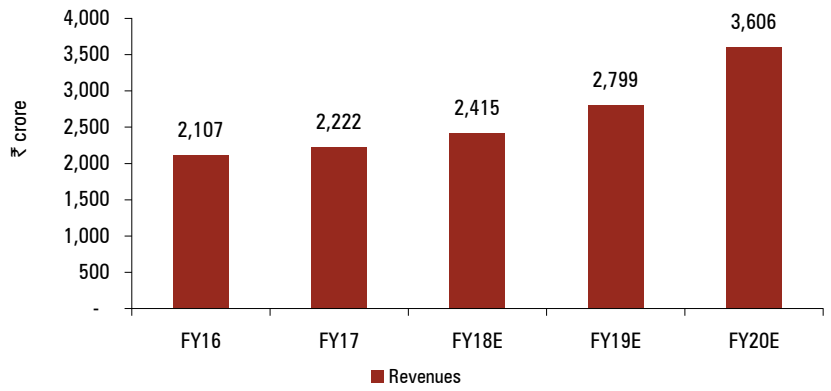
Financials

Revenues to grow at 17.5% CAGR in FY17-20E

We expect CSL to report revenue growth of 17.5% CAGR over FY17-20E on the back of accelerated growth in the shipbuilding segment. We expect this segment to grow at 23.5% CAGR in FY17-20E.

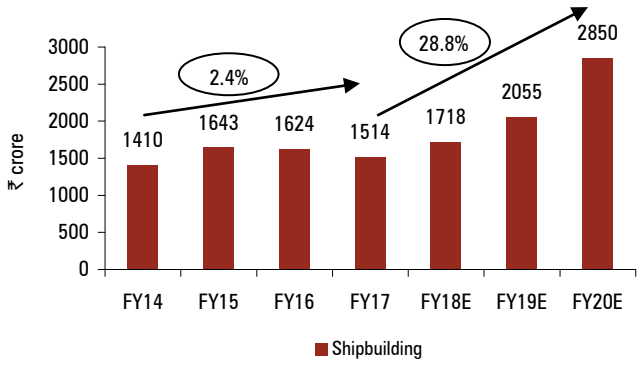
We expect revenues to increase from ₹ 2222 crore in FY17 to ₹ 3606 crore in FY20E at a CAGR of 17.5% in FY17-20E, mainly on the back of accelerated growth in the shipbuilding segment. Over FY13-17, CSL registered muted revenue CAGR of 7.3% on the back of growing higher share of revenues in the ship repair segment. Contribution to revenue from the ship repair segment increased from 13.8% in FY14 to 26.4% in FY17. Accordingly, revenues from the ship repair segment grew 17.4% CAGR in FY13-17 whereas it grew only 4.5% during the same period in the shipbuilding segment.

Exhibit 26: Revenue trend



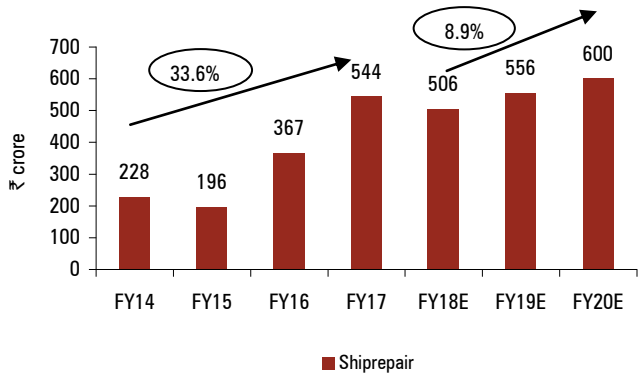
Source: Company, ICICIdirect.com Research

Exhibit 27: Shipbuilding revenue trend



Source: Company, ICICIdirect.com, Research

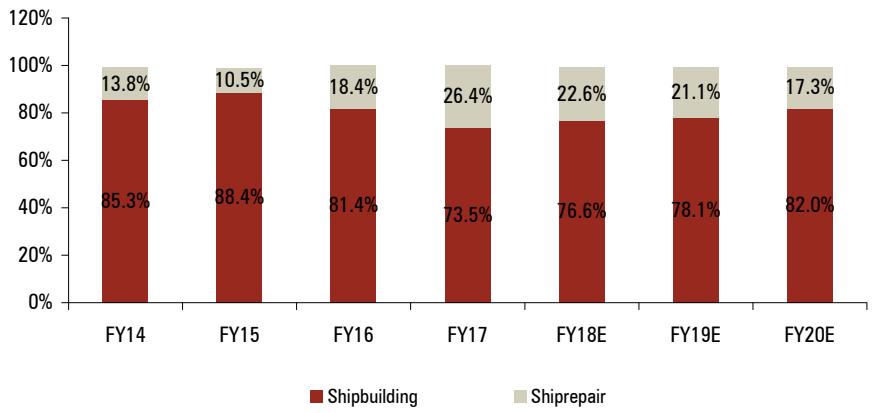
Exhibit 28: Ship repair revenue trend



Source: Company, ICICIdirect.com, Research

However, going ahead, we expect revenues from shipbuilding to grow at an accelerated rate of 23.5% in FY17-20E. This is on the back of strong order book of ₹ 2856 crore in this segment and ensuing fixed price contract for IAC phase III of ~₹ 3000 crore. In the ship repair segment, we expect muted growth of 3.3% in FY17-20E due to current ship repair capacity running at almost full utilisations. Accordingly, we expect revenue contribution from the shipbuilding segment to increase from 73.4% in FY17 to 82% in FY20. Thus, we expect overall revenues to grow at 17.5% CAGR in FY17-20E to ₹ 3606 crore.

Exhibit 29: Revenue segmentation (%)



Source: Company, ICICIdirect.com Research

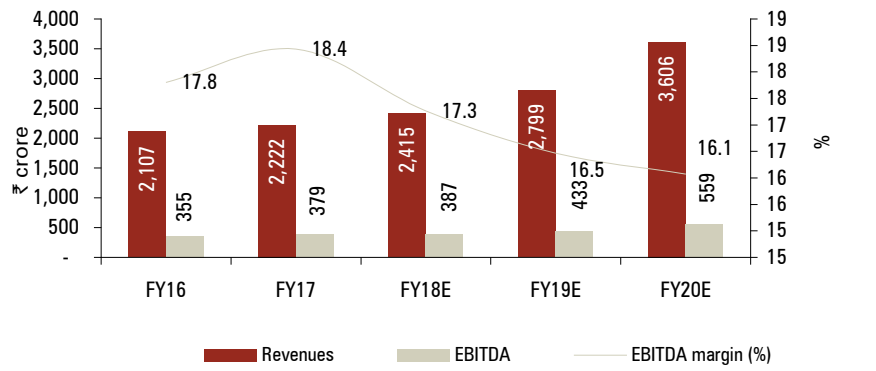
EBITDA to grow at 13.8% CAGR in FY17-20E; margins to decline

We expect CSL to report a decline in EBITDA margins, going forward. This is mostly due to increasing contribution from the shipbuilding segment. We expect EBITDA margins to decline from 18.4% in FY17 to 16.1% in FY20E

The operating income grew at 13.2% CAGR over FY13-17. This was despite subdued growth of 7.9% in revenue over the same period. This was mainly due to accelerated growth of 17.4% in the ship repair segment. As stated earlier, contribution to revenue from the ship repair segment increased from 13.8% in FY14 to 26.4% in FY17. Ship repair business, depending on the vessel mix, can earn EBITDA margins up to 40%. The shipbuilding segment, on the other hand, earns 5-15% EBITDA margins. Higher growth in the ship repair segment helped CSL post better margins of 18.4% in FY17 vs. 14.8% in FY13.

Going forward, we expect this trend to reverse primarily due to increasing contribution of the shipbuilding segment. We expect the shipbuilding segment to grow at 23.5% CAGR in FY17-20E and contribute 82% to the total topline by FY20E. **This is likely to lead to a decline in the operating margin from 18.4% in FY17 to 16.1% in FY20E.** Higher employee expenses due to implementation of the Seventh Pay Commission are also likely to put pressure on margins, going forward. We estimate a 16.3% increase in employee expenses in FY17-20E. However, despite a decline in EBITDA margins, we expect absolute EBITDA to grow at 13.8% CAGR in FY17-20E vs. 13.4% in FY13-17. Thus, we expect CSL to report absolute EBITDA of ₹ 599 crore in FY20E.

Exhibit 30: EBITDA and EBITDA margin trend



Source: Company, ICICIdirect.com Research

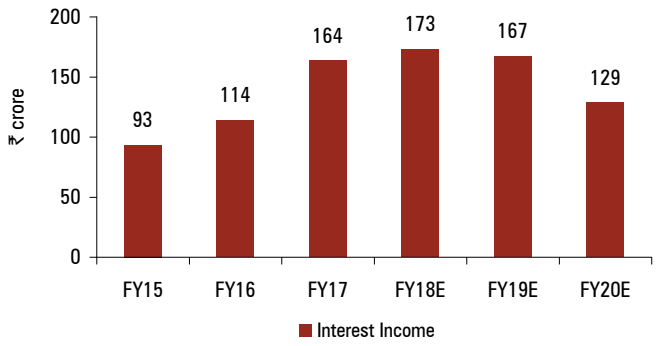
We expect PAT to grow at a CAGR of 8.1% from ₹ 322 crore in FY17 to ₹ 407 crore in FY20E

PAT to grow at 8.1% CAGR over FY17-20E

Net profit grew at 14.9% CAGR in FY13-17. This was higher than revenue growth during the same period (7.9% CAGR in FY13-17) due to operating leverage (ship repair business) and accelerated growth in other income of the company. Other income of the company grew at 17.1% contributing to higher PAT growth of 14.8% CAGR in FY13-17. Higher interest income was due to growing cash balance on the books of the company. Cash balance grew from ₹ 573 crore in FY14 to ₹ 1931 crore in FY17. **However, going forward, we expect this trend to reverse due to depletion in cash reserves on account of capex expenditure of ₹ 523 crore, ₹ 916 crore and ₹ 900 crore in FY18E, FY19E and FY20E, respectively. Accordingly, we expect the cash balance to decline from ₹ 1931 crore to ₹ 1702 crore in FY20E. CSL's management intends to keep cash levels of 40-50% of the topline to meet any delays/cost overruns in new and existing projects. Thus, a reducing cash balance scenario coupled with a declining interest rate is likely to lower other income and consequently net profit growth of the company.**

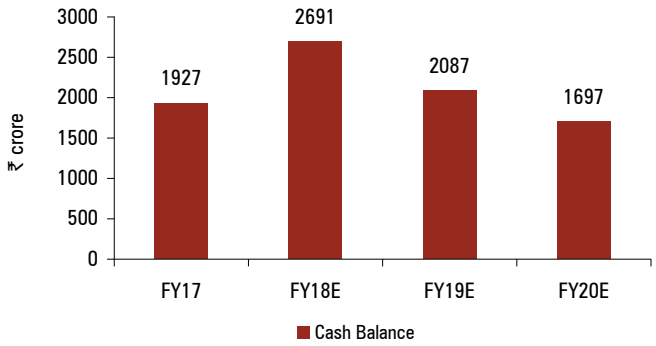
Accordingly, we expect PAT to grow at a CAGR of 8.1% from ₹ 322 crore in FY17 to ₹ 407 crore in FY20E.

Exhibit 31: Interest income trend



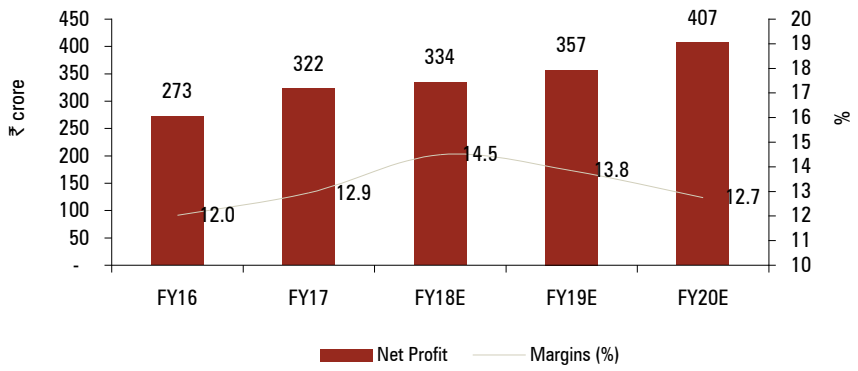
Source: Company, ICICIdirect.com, Research

Exhibit 32: Cash balance trend



Source: Company, ICICIdirect.com, Research

Exhibit 33: PAT and PAT margin trend



Source: Company, ICICIdirect.com Research

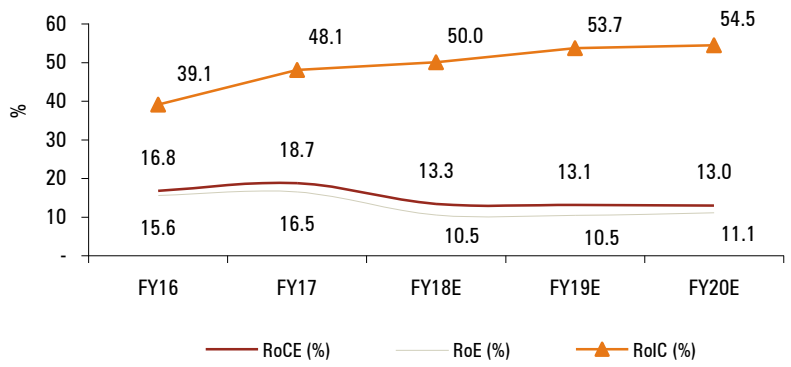
CSL is one of those few public sector companies that have a consistent history of delivering superior returns on capital employed. We believe that despite huge capex plans in FY18E-20E, CSL will report double digit return ratios in FY18E, FY19E and FY20E, respectively

Return ratios to remain stable

In the last few years (FY13-17), the RoE, RoCE have improved from 15.3%, 15.8% in FY13 to 16.5%, 18.7%, respectively, in FY17. This was due to an improving operating performance due to higher contribution from the high margin ship repair business of the company. The company also incurred marginal capex spending of less than ₹ 50 crore per year over the same period.

However, going forward, we expect return ratios (RoEs & RoCEs) to moderate to 11.1% and 13%, respectively, in FY20E due to declining operating margins and heavy capex spending of ₹ 2340 crore in FY18E-20E. **However, we highlight that RoICs are likely to improve, going forward, from 48.1% in FY17 to 54.5% in FY20E. This is due to productive use of cash lying idle on the books of the company. Post completion of the capex, we expect CSL to deliver its historical return ratios of 15-20%. We reiterate that over the past 10 years, the company has delivered average RoEs of 18.5%.**

Exhibit 34: Return ratios to improve



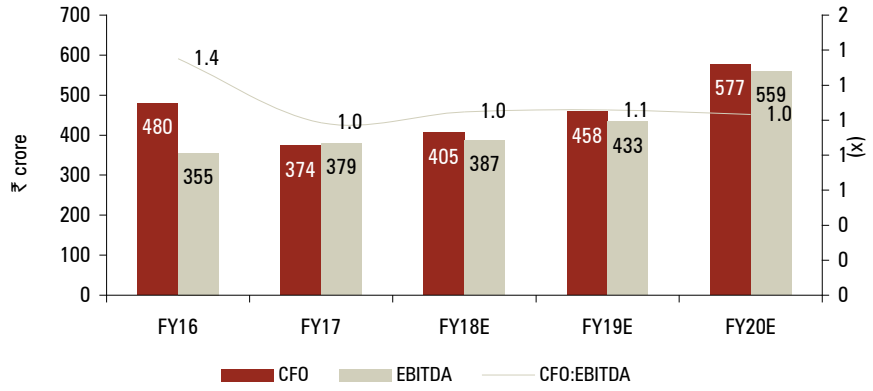
Source: Company, ICICIdirect.com Research

We expect CSL to report healthy CFO/EBITDA of ~1x in FY20E

Cash flows set to improve; CFO/EBITDA healthy at 1x

The company is expected to generate healthy cash flows with cash flow from operations (CFO) increasing from ₹ 374 crore in FY17 to ₹ 577 crore in FY20E. The CFO/EBITDA ratio is likely to be healthy at ~1x in FY20E.

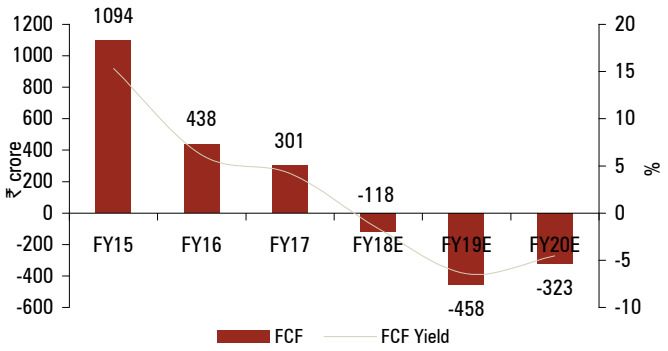
Exhibit 35: CFO/EBITDA trend



Source: Company, ICICIdirect.com Research

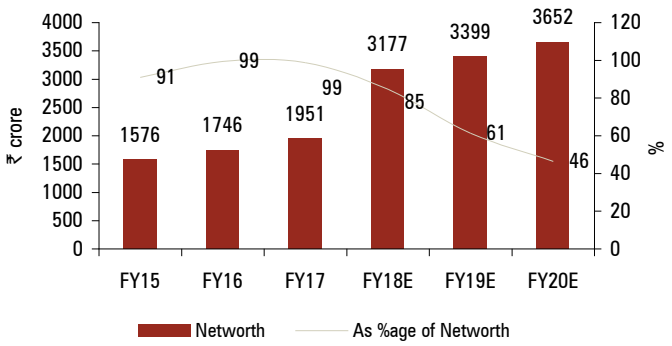
The free cash flow (FCF) generation is likely to be impacted by capex expenditure of ₹ 523 crore, ₹ 916 crore and ₹ 900 crore in FY18E, FY19E and FY20E, respectively. Thus, we expect CSL to report negative cash flows of ₹ 117 crore, ₹ 458 crore, ₹ 323 crore in FY18E, FY19E and FY20E, respectively. Heavy capex spending is likely to reduce the cash balance of the company. Accordingly, we expect the cash balance to decline from ₹ 1931 crore to ₹ 1702 crore in FY20E (Exhibit 32). Accordingly, net cash as a percentage of net worth is also likely to reduce from ~100% in FY17 to 46% in FY20E.

Exhibit 36: Strong FCF generation, FCF yield



Source: Company, ICICIdirect.com Research

Exhibit 37: Net cash as percentage of net worth (47% in FY20E)

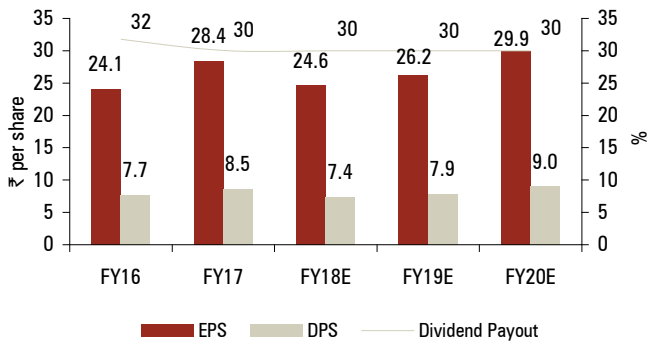


Source: Company, ICICIdirect.com Research

Our interaction with the management suggests CSL's working capital is likely to remain stable at 45-50 days in FY17-20E. This is mostly on account of defence orders where the company sometimes receives advance payments for its orders (15% of the total contract value). On the commercial side, to mitigate any strain on the balance sheet of the company for delays/cost overruns, CSL prefers to have a cash balance which is 40-50% of the contract value.

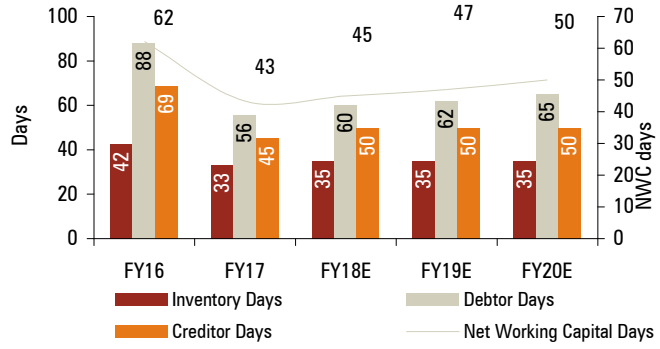
Going forward, CSL is also likely to pay healthy dividends of ~30% of earnings in line with the government policy on dividends for profitable PSUs. Thus, we expect healthy dividends payouts over FY17-20E.

Exhibit 38: Dividend payout to be 30%, going forward



Source: Company, ICICIdirect.com, Research

Exhibit 39: Working capital, best-in-class despite large and lumpy orders



Source: Company, ICICIdirect.com, Research

We expect Indian private sector shipyards to act as key competitors to CSL. This is mostly due to government emphasis on building capability in the private sector. The Government of India (GoI) has also started reserving large orders for exclusively private sector players. A case in point is the order for landing platform docks (~₹ 20,000 crore) and P75I submarine order (~₹ 60,000 crore) where the GoI has short-listed private shipyards for awarding contracts. This is likely to act as a major hindrance for established public sector players like CSL

Risks & concerns

Competition from other shipyards (especially private sector) in India

CSL currently receives primarily from government organisations like Indian Navy & Indian Coast Guard, DGLL, DCI, etc. CSL receives orders for DGLL for dry docks repairs of their vessels on a nomination basis. It also receives repair of DCI's dredgers on a nomination basis. Also, in the large vessels category, it receives vessel repairs & building orders on a nomination basis. **We believe ordering on nomination is likely to decline, going forward, and is likely to be replaced on a competitive bidding basis.** In some cases, large orders may also be exclusively opened for private players. **A case in point is the order for landing platform docks (~₹ 20,000 crore) and P75I submarine order (~₹ 60,000 crore) where the Government of India has shortlisted private shipyards for awarding the contract.**

Apart from private players, CSL also faces competition from public sector shipyards like Hindustan Shipyard, Goa Shipyard, Garden Reach Shipbuilders and Engineering and Mazagon Dock Shipbuilders. Aggressive pricing by public sector shipyards hampers the company in gaining business in the domestic market. **For example, recently CSL lost orders to GRSE and Hindustan Shipyard for survey vessels and diving support vessels due to aggressive pricing practices.** The company also faces competition from foreign shipyards like Colombo Dockyard, Dubai dry dock, Arab ship repair yard and Keppel, Singapore. Major players, which offer CSL competition in various segments are summarised below;

Exhibit 40: Segment-wise competition from several players

Area of competition		
Ship Building		
Defence	Governement	Mazagon Dock Shipbuilders Limited, Goa Shipyard Limited, Garden Reach Shipbuilders and Engineering Limited
	Private	L&T Shipyard, Reliance Defence and Engineering Ltd
Commercial	Private	Bharati Shipyard, ABG Shipyard, Reliance Defence and Engineering and L&T Shipyard.
Ship Repair		
Defence	Governement	Hindustan Shipyard
	Private	L&T Shipyard, Reliance Defence and Engineering Limited
Commercial	Foreign	Colombo dockyard, Dubai dry dock, Arab ship repair yard and Keppel, Singapore

Source: Company, ICICIdirect.com Research

CSL also faces competition in commercial shipbuilding segment from South Korea, Japan and China. Some of its global competitors have more resources while certain competitors have lower cost of operations. Such a competitive disadvantage hampers CSL's ability in gaining large orders in international markets.

Delay or cost overruns in building new dry dock and ISRF

The anticipated cost of construction of the proposed dry dock and ISRF will be ₹ 1,798 crore and ₹ 969 crore, respectively (based on a $/₹ conversion rate of 67.83). These costs are based on the detailed project report (DPR) prepared by project consultants based on their estimates, budgets and numerous assumptions. However, actual costs of construction of facilities may exceed such budgeted amounts due to a variety of factors such as construction delays, adverse changes in raw material costs, interest rates, labour costs, foreign exchange rates, regulatory and environmental factors, weather conditions and CSL's financing needs, which may eventually lead to an adverse impact on the profitability of the company.

Loss of business from key clients – Indian Navy & Indian Coast Guard

CSL's top two customers accounted for 87.7%, 82.5%, 89.9% and 73.2% of its revenue from operations in FY14, FY15, FY16 and H1FY17, respectively. Further, the company is currently building India's first indigenous aircraft carrier for the Indian Navy. This forms a significant part of its current order book. As there are no contractual arrangements with these key customers or GoI, CSL faces uncertainty on loss of orders to other shipyards.

Increases in price of raw materials

The major components of CSL's expenditure include raw materials like steel and other materials, equipment and other components such as pumps, propellers and engines. In FY15, FY16 and FY17, CSL's material consumption costs constituted 64.5%, 64% and 58.4% of its total costs, respectively. In the event of a price rise in raw materials increase, CSL may be unable to pass this increase in existing fixed-price contracts, leading to adverse impact on its profitability.

Natural disasters may adversely impact business operations

The company's entire business operations are based out of a single shipyard at Kochi. The loss of, or shutdown of CSL's operations at its shipyard due to unexpected interruptions, including from natural and manmade disasters in Kochi will have a material adverse effect on its business, financial condition and results of operations. The company, however, is trying to mitigate this risk as it looks to set up shipbuilding and repair facilities in Andaman and Nicobar, Gujarat, Kolkata and Mumbai. As stated earlier, CSL has already acquired Hooghly Dock & Port Engineers (HDPEL) in Howrah, West Bengal and is planning a capex of ₹ 22 crore at its shipyards.

Commercial shipbuilding industry - Highly cyclical in nature

The commercial shipbuilding industry is highly cyclical in nature and is sensitive to the cyclical nature of the industries it serves such as oil, natural gas, shipping, transportation and other trade-related industries. The demand and pricing of CSL vessels are highly sensitive to global and regional economic conditions, particularly in India, China, South Korea, Middle East, Western Europe and the US as well as seasonal and regional changes in demand and changes in the global fleet size. This leads to an adverse impact on business and financial prospects of the company.

CSL is the prime large shipbuilder of Government of India. The company enjoys a near-monopoly in shipbuilding and ship repair of large vessels. CSL also possesses a wide moat in the form of its infrastructure capabilities. It has two large dry docks and India's largest hull fabrication shop that can process 2,000 tonnes of steel every month

We believe CSL is an excellent combination of strong business model, healthy order pipeline, efficient working capital management, healthy dividends and high quality management

We value the company on a SOTP basis. With regards to the existing business, we ascribe a P/E multiple of 25x on FY19E EPS of ₹ 26.2, which will fetch a value of ₹ 655 per share. On the other hand, we try to capture the long-term potential of the capex that CSL is undertaking. We value the shipbuilding capex at 0.2x its capital employed (₹ 1799 crore) given the long gestation nature of the capex and lumpiness of the shipbuilding industry. The value of the same is pegged at ₹ 26 per share. On the ship repair capex, we ascribe a higher multiple of 0.6x its capital employed (₹ 969 crore) given its lucrative characteristics like high asset turns and EBITDA margins, the value of which is pegged at ₹ 44 per share. Accordingly, we arrive at an aggregate fair value of the company of ₹ 725 per share.

Valuation

CSL is the prime large shipbuilder of Government of India. The company enjoys a near monopoly in shipbuilding and ship repair of large vessels. A case in point is the shipbuilding order of IAC I – Vikrant, which was awarded to CSL on a nomination basis. Similarly, the company has the only commercial shipyard to have undertaken repair work of Indian Navy's aircraft carriers, the INS Viraat and INS Vikramaditya. In any such large projects where national security coupled with strong experience is required, CSL is likely to emerge as the frontrunner. Being a government company, it receives a number of orders on a nomination basis. Of the domestic order book of ~₹ 2856 crore, the company has received substantial orders on a nomination basis. We believe this trend is likely to continue, going forward, also.

CSL also possesses a wide moat in the form of its infrastructure capabilities. It currently has two large dry docks, three quays and a steel stockyard that can hold 60,000 tonnes of steel. It also has India's largest hull fabrication shop that can process 2,000 tonnes of steel every month. It has two gallantry cranes 150 tonnes & 300 tonnes and is in the process of adding one more of 600 tonnes in its new facility. Strong infrastructure capabilities coupled diverse competencies in the defence segment (both – shipbuilding and ship repair) gives the company a significant edge over any upcoming competition. CSL is one of the few companies among large Indian public sector enterprises that have delivered consistent business performance. The company delivered a topline, bottomline CAGR of 11.1%, 18.7%, respectively, in the past 10 years (FY07-17). It has also clocked average RoEs, RoCEs of 15.5%, 16.5%, respectively, over FY12-17. This is despite turbulent times in the global shipbuilding industry and slow pace of decision making in the Indian defence industry.

Going forward, with improved decision making from the central government, we expect significant business opportunities to open for the company. **Accordingly, we expect CSL to deliver revenue, EBITDA and PAT CAGR of 17.5%, 13.8% and 8.1%, respectively, in F17-20E. CSL is also likely to pay healthy dividends, going forward (in line with the government's new dividend policy) at ~30% of earnings. Thus, we believe CSL is an excellent combination of strong business model, healthy order pipeline, efficient working capital management, healthy dividends and high quality management. We value the company on an SOTP basis. With regard to the existing business, we ascribe a P/E multiple of 25x on FY19E EPS of ₹ 26.2, which will fetch a value of ₹ 655 per share. On the other hand, we try to capture the long-term potential of the capex that CSL is undertaking. We value the shipbuilding capex at 0.2x its capital employed (₹ 1799 crore) given the long gestation nature of the capex and lumpiness of the shipbuilding industry. The value of the same is pegged at ₹ 26 per share. On the ship repair capex, we ascribe a higher multiple of 0.6x its capital employed (₹ 969 crore) given its lucrative characteristics like high asset turns and EBITDA margins, the value of which is pegged at ₹ 44 per share. Accordingly, we arrive at an aggregate fair value of the company of ₹ 725 per share.**

Exhibit 41: SOTP Value of CSL

Sr.No.	SOTP Valuation		Multiplication factor	Value (₹ per share)
1	Base business	FY19E EPS of ₹ 26.2	25	655
2	For new dry dock	1799	0.2	26
3	For new ISRF	969	0.6	44
				725

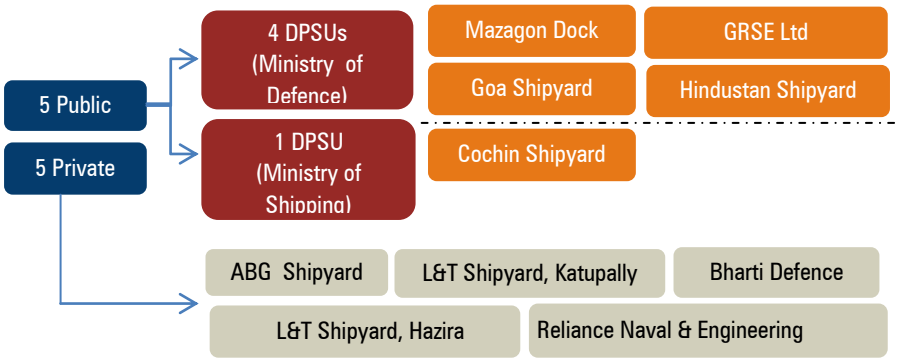
Source: Company, ICICIdirect.com Research

Relative valuations

Brief overview of major Indian shipyards

The Indian shipbuilding industry consists of 10 major shipyards (and ~19 minor shipyards). Of the 10 major shipyards, five belong to the public sector whereas the rest are in the private domain.

Exhibit 42: Major shipyards - Private and Public



Source: Company, ICICIdirect.com Research

In the private sector, the largest shipyard is at Reliance Defence and Engineering (RDEL), Bhavnagar district, Gujarat, with shipbuilding capacity of 400000 DWT. In the public sector, Cochin Shipyard (CSL) is the largest with a capacity of 110000 DWT. The other prominent private sector shipyards are owned by ABG group at Dahej, L&T Shipyards at Hazira (Gujarat) and Kattupalli (Tamil Nadu) and Bharati Shipyard at Dabhol in Ratnagiri district, Maharashtra. Most private sector shipyards, except RDEL are engaged in building of medium-sized vessels such as offshore supply vessels (OSV), pollution control vehicles (PCVs) and anchor handling tugs (AHT). Reliance Defence has the capacity to build all categories of vessels. In public sector shipyards, in large ship segment, CSL and HSL, virtually hold a monopoly. The other DPSU shipyards are primarily engaged in building high value, niche segment warships and submarines of highly complex design, with MDL at the vanguard.

Exhibit 43: Capacity /Capabilities of Indian peers - Public and private shipyards

Company	Dry dock capacity (L x W) meters	DWT (tonnes)	Capability
Public Shipyards			
Cochin Shipyard	270 x 45	1,10,000	Aircraft carriers, Destroyers, Frigates
Mazgaon Docks	155 x 19	30,000	Submarines
GRSE	162 x 25	26,000	Frigates, Corvettes
Private Shipyards			
Pipavav Shipyard	662 x 65	4,00,000	All types of vessels, especially large vessels
ABG Shipyard	155 x 30	20,000	Interceptor Boats, Pollution Control Vessels,
Bharti Shipyard	176 x 33	15,000	Naval Cadet Training Vessels
L & T (Hazira)	160 x 4	20,000	Landing platform docks
L & T (Katupally)	260 x 46	23,000	Submarines, Complex vessels

Source: Company, ICICIdirect.com Research

CSL's business performance and financials considerably superior to any other domestic player

We have compared CSL's financials with major domestic shipyards in both the private and public sector. As highlighted in exhibits below, CSL stands out among all shipyards in terms of operating performance of the company. After studying the past financials of other shipyards, we understand that CSL is the only shipyard that is able to clock double EBITDA digits during most years. Mazgaon Docks, Goa Shipyard and GRSE are able to deliver positive EBITDA performance. However, EBITDA margins, on an average, are between -10% and +10%. **Thus, we believe a strong operating performance coupled with strong financial competence is likely to give CSL a consistent edge over its competitors.**

Exhibit 44: CSL vs. Indian peers

					Sales			EBITDA			EBITDA Margin			PAT		
Company	Market Cap	Debt	Cash	Networth	FY15	FY16	FY17	FY15	FY16	FY17	FY15	FY16	FY17	FY15	FY16	FY17
Reliance Defence and Engg	3894	8951	120	1450	912	312	564	86	-128	73	9.5	-41.0	13.0	-371	-592	-577
ABG Shipyard Ltd	59	6953	NA	NA	450	34	NA	-266	-1190	NA	-59.0	-3472.2	NA	-901	-3705	NA
Bharati Defence and Infrastructure Ltd	63	5583	NA	NA	29	47	NA	-118	NA	NA	-404.0	NA	NA	-865	-1898	NA
Cochin Shipyard Ltd	7748	123	1913	2900	1953	2107	2227	331	355	377	17.8	16.8	16.9	235	274	323
Mazagon Dock Ltd	NA	85	8806	3166	3619	4141	NA	222	217	NA	6.1	5.2	NA	515	664	NA
Goa Shipyard Ltd	NA	0	231	670	680	786	NA	62	120	NA	9.1	15.3	NA	78	62	NA
Hindustan Shipyard Ltd	NA	461	203	-1023	282	649	NA	-213	147	NA	-75.5	6.8	NA	-202.8	19.0	NA
Garden Reach Shipbuilders Engineers	NA	23	2482	1064	1678	1881	NA	21	79	NA	1.3	4.6	NA	43.5	160.7	NA

Source: Company, Bloomberg, ICICIdirect.com Research

Global peers

We have compared CSL with global majors whose revenues come from both naval (defence) and the commercial segment or majority from the naval (defence) segment. Among shipyards, we believe CSL's business model is more stable compared to its multinational peers. This is because of the high probability of CSL receiving business from established government organisations like Indian Navy & Indian Coast Guard, DGLL, DCI, etc. CSL has worked with most organisations over the past three decades. With long-standing relationships and strong local knowledge – regulatory, climatic conditions, geographical, etc, CSL is placed with a firm footing.

Below, we enumerate such companies along with their area of expertise,

Exhibit 45: Global majors and their areas of operations

Shipbuilder	Country	Area of operations
Norfolk Naval Shipyard	USA	The largest and oldest industrial facility in US, in Portsmouth, Virginia. It has facilities for repair and modernisation services for every type of ship that the US Navy has in service, which includes amphibious vessels, submarines, guided missile cruisers and supercarriers
Huntington Ingalls Industries (HII)	USA	HII is US' largest military shipbuilding company and is the sole designer, builder, and refueller of nuclear-powered aircraft carriers for the country. It is also one of two nuclear-powered submarine builders (the other being General Dynamics Electric Boat). Total 70% of the current, active US Navy fleet has been built by HII's shipyards
General Dynamics Electric Company / National Steel and Shipbuilding Company (NASSCO)	USA	General Dynamics Electric Company is one of the master builders of nuclear powered submarines. NASSCO builds amphibious assault ships and auxiliary vessels for the US Navy
United Shipbuilding Corporation (USC)	Russia	USC is the largest shipbuilding company in Russia.The corporation includes around 40 shipbuilding companies with various shipbuilding and ship repair yards facilities that build and repair submarines, corvettes, frigates & aircraft carriers
Shanghai Waigaoqiao (China Statebuilding Corporation)	China	Shanghai Waigaoqiao shipyard is the No. 1 shipbuilding company in China with total gross tonnage production until date of 15,096,900 GT, which includes164 ships of various types and sizes
Hyundai Heavy Industry (HHI)	South Korea	The leader in the shipbuilding sector, Hyundai Heavy Industry is based on Ulsan with a record of 93,893,700 GT, which includes 1428 ships of various types and sizes
Japan Marine United Corporation	Japan	Japan's second largest shipbuilder that manufactures variety of ships both in the naval and merchant segment
Fincantieri SpA	Italy	Fincantieri is an Italian shipbuilding company and is the largest shipbuilder in Europe. The company builds both commercial and military vessels
Colombo Dockyard PLC	Sri Lanka	Colombo Dockyard PLC is the largest and oldest ship building company in Sri Lanka. It has built both military and civilian vessels for both local and overseas clients.
Keppel Corp Ltd	Singapore	Keppel is a reputable player in offshore rig design, construction and repair, ship repair and conversion, and specialised shipbuilding.

Source: Company, ICICIdirect.com Research

Exhibit 46: Peer Matrix: Global

Company	Country	Mcap (US$ B)	Net Sales (US$ B)	EBITDA (US$ B)	PAT (US$ B)	EBITDA Margins (%)	ROCE (%)	ROE (%)	Debt:Equity	P/E TTM	P/E 1 yr fwd	P/B TTM	P/B 1 yr fwd
Cochin Shipyard Ltd	India	1.1	0.3	0.1	0.0	18.3	19.0	17.3	0.1	22.1	20.0	2.2	2.1
Huntington Ingalls Inc	United States	10.0	7.1	1.0	0.6	14.8	22.3	36.5	0.8	19.1	17.1	6.1	4.6
General Dynamics Corp	United States	61.4	31.4	4.8	3.0	15.2	51.9	27.2	0.4	20.4	18.1	5.6	5.0
China State Shipbuilding	China	NA	29.8	0.6	0.4	2.0	2.1	4.0	1.5	NA	NA	NA	NA
Hyundai Heavy Industries	South Korea	7.3	33.9	2.2	0.5	6.4	3.8	3.5	1.0	44.6	22.9	0.7	0.7
Fincantieri SpA	Italy	2.2	4.8	0.2	0.0	4.8	5.4	2.3	1.6	59.8	13.1	1.6	1.5
Keppel Corp Ltd	Singapore	8.6	4.9	0.7	0.6	14.8	7.3	6.9	0.8	14.9	12.6	1.0	0.9
Sumitomo Heavy Industries Lt	Japan	4.9	6.2	0.6	0.3	9.4	7.7	9.0	0.2	14.7	13.5	1.4	1.2
Mitsubishi Heavy Industries Lt	Japan	13.5	36.2	4.0	0.5	11.0	4.2	3.7	0.6	14.4	12.2	0.8	0.8
China Shipbuilding Industry Co	China	NA	7.8	0.2	0.1	2.2	0.1	1.2	1.1	NA	NA	NA	NA
Average						9.9	12.4	11.2	0.8	26.2	16.2	2.4	2.1

Source: Company, ICICIdirect.com Research

Tables and ratios:

Exhibit 47: Profit & loss account

(₹ Crore)	FY16	FY17	FY18E	FY19E	FY20E
Net Sales	1,991.0	2,062	2,224	2,611	3,450
Operating income	4.8	-	18	21	28
Revenue	1,993.5	2,059	2,241	2,632	3,477
% Growth		*3.3*	*8.9*	*17.4*	*32.1*
Other income	113.9	163.6	173.2	167.2	128.7
Total	2,107.4	2,226	2,423	2,799	3,606
% Growth		*5.6*	*8.9*	*15.5*	*28.8*
Raw Mtl costs	1,231.9	1,314	1,434	1,723	2,339
Employee Expenses	226.7	217	256	285	345
other expenses	142.8	135	142	164	200
Total Operating Exp.	1,638.5	1,679	1,854	2,198	2,918
Operating Profit (EBITDA)	354.9	379	387	433	559
% Growth		*6.9*	*2.0*	*12.0*	*28.9*
Interest	12.0	11	11	10	14
PBDT	456.8	533	549	591	674
Depreciation	37.2	39	38	45	57
PBT & Except. items	419.7	494	511	546	616
Total Tax	147.0	172	177	189	210
PAT before MI	272.7	322	334	357	407
Minority Interest	-	-	-	-	-
PAT	272.7	322	334	357	407
% Growth		*18.1*	*3.8*	*6.7*	*14.0*
EPS	24.1	28.4	24.6	26.2	29.9
EPS (Post IPO dilution)	20.1	23.7	24.6	26.2	29.9

Source: Company, ICICIdirect.com Research

Exhibit 48: Balance sheet

(₹ Crore)	FY16	FY17	FY18E	FY19E	FY20E
Equity Capital	113.3	113.3	135.9	135.9	135.9
Reserve and Surplus	1,633.1	1,837	3,041	3,263	3,515
Total Shareholders funds	1,746.3	1,951	3,177	3,399	3,652
Minority Interest	-	-	-	-	-
Total Debt	123.0	123	123	123	223
Total Liabilities	1,871.9	2,076	3,303	3,524	3,877
Gross Block	662.2	700	756	757	857
Acc: Depreciation	292.0	328	366	410	468
Net Block	370.2	372	391	346	389
Capital WIP	24.2	56	523	1,439	2,239
Total Fixed Assets	394.4	429	914	1,785	2,628
Non Current Assets	69.4	53	53	53	53
Inventory	231.6	186	215	252	333
Debtors	481.8	314	368	447	619
Loans and Advances	286.6	234	224	263	348
Other Current Assets	60.6	120	119	139	184
Cash	1,737.4	1,927	2,691	2,087	1,697
Total Current Assets	2,798.1	2,781	3,617	3,189	3,182
Current Liabilities	374.3	255	307	360	476
Provisions	243.4	247	297	349	461
Net Current Assets	1,408.0	1,595	2,325	1,675	1,185
Total Assets	1,871.9	2,076	3,303	3,524	3,877

Source: Company, ICICIdirect.com Research

Exhibit 49: Cash flow statement

(₹ Crore)	FY16	FY17	FY18E	FY19E	FY20E
Profit after Tax	272.7	322	322	357	407
Depreciation	37.2	39	39	45	57
Interest	12.0	11	11	10	14
Cash Flow before WC changes	321.9	371	371	412	478
Changes in inventory	71.5	45	(29)	(37)	(81)
Changes in debtors	103.2	168	(55)	(79)	(172)
Changes in loans & Advances	(71.7)	52	10	(39)	(85)
Changes in other CA	(6.7)	(59)	1	(21)	(45)
Net Increase in Current Assets	96.2	206	(72)	(176)	(383)
Changes in creditors	202.4	(119)	52	53	116
Changes in provisions	(153.8)	4	50	52	112
Net Inc in Current Liabilities	61.4	(204)	106	222	482
Net CF from Operating activities	479.6	374	405	458	577
Changes in deferred tax assets	(41.6)	33	-	-	-
(Purchase)/Sale of FA	(41.4)	(73)	(523)	(916)	(900)
Net CF from Inv.activities	(62.2)	(56)	(523)	(916)	(900)
Dividend and Dividend Tax	(104.3)	(118)	(120)	(128)	(146)
Net CF from Financing Activities	(114.6)	(128)	882	(146)	(67)
Net Cash flow	302.8	189	764	(604)	(390)
Opening Cash/Cash Equivalent	1,434.6	1,737	1,927	2,691	2,087
Closing Cash/ Cash Equivalent	1,737.4	1,927	2,691	2,087	1,697

Source: Company, ICICIdirect.com Research

Exhibit 50: Ratio analysis

(Year-end March)	FY16	FY17	FY18E	FY19E	FY20E
Per Share Data					
EPS	20.1	23.7	24.6	26.2	29.9
Cash per Share	153.4	170.1	198.0	153.5	124.8
BV	128.5	143.5	233.7	250.0	268.6
Dividend per share	7.7	8.5	7.4	7.9	9.0
Dividend payout ratio	0.3	0.3	0.3	0.3	0.3
Operating Ratios					
EBITDA Margin	17.8	18.4	17.3	16.5	16.1
PAT Margin	12.9	14.5	13.8	12.7	11.3
Return Ratios					
RoE	15.6	16.5	10.5	10.5	11.1
RoCE	16.8	18.7	13.3	13.1	13.0
RoIC	39.1	48.1	50.0	53.7	54.5
Valuation Ratios					
EV / EBITDA	17.3	15.7	13.4	13.3	11.2
P/E	28.4	24.1	23.2	21.7	19.1
EV / Net Sales	3.1	2.9	2.3	2.2	1.8
Sales / Equity	1.1	1.1	0.7	0.8	1.0
Market Cap / Sales	3.9	3.8	3.5	2.9	2.2
P/BV	4.4	4.0	2.4	2.3	2.1
Turnover Ratios					
Asset Turnover Ratio	3.0	2.9	3.0	3.5	4.1
Debtors Turnover Ratio	3.7	5.2	6.6	6.5	6.5
Creditors Turnover Ratio	7.3	6.5	8.0	7.9	8.3
Solvency Ratios					
Debt / Equity	0.1	0.1	0.0	0.0	0.1
Current Ratio	1.7	1.7	1.5	1.5	1.6
Quick Ratio	1.3	1.3	1.1	1.2	1.2

Source: Company, ICICIdirect.com Research

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