# US\$550,000 or higher DCR for UDW rigs looks inevitable

#### Reiterating our optimism on SGX-listed rigbuilders

We reiterate our optimism on rigbuilders as we expect them to benefit from further evidence of rising day charter rates (DCR) for ultra-deepwater (UDW) rigs. Keppel Corp and Sembcorp Marine are key beneficiaries of the fast-growing demand for new-generation semisubmersible rigs. The positive sentiment is expected to spill over to Yangzijiang, which is on track to win its maiden jackup rig orders in 1H12. But we are wary of any flow-through optimism on COSCO Corp, whose fortunes are compromised by the weak one-year newbuild backlog for dry bulk carriers.

#### More evidence of growing rig supply tightness in 2013

Our oil services analyst wrote in <u>Oil Services</u>, <u>01 February 2012</u> that the rig operators are increasingly concerned about the availability of UDW rigs to meet E&P demand in 2013. The rig tendering activities continue to grow YTD, while day rates rise even higher on recently concluded charter-out contracts for UDW rigs. Indeed, there are 18 new charter-out contracts for UDW rigs in the past 3 months.

#### Payback period for newbuild rigs on track to fall to <5 years

In line with the fast-rising DCR for UDW rigs since last October, the most recent charter-out contract saw US\$530,000 DCR for *ENSCO 8506* (drilling in 8,500ft water depth), a relatively lower specification unit among the new-generation UDW rigs. This is similar to the US\$530,000 DCR first secured by Seadrill's UDW rig (10,000ft) last November, followed by Noble Corp's unit (12,000ft) in mid-January. As per our 2012 rigbuilding outlook report, Offshore & Marine, 14 December 2011, we expect the newbuild semisubmersible rig payback period to drop to an attractive 4.3-4.9 years in 1H12 at current newbuild rig prices, and as DCR for the new-generation units (10,000-12,000ft) rises towards US\$600,000.

#### Back-to-back charter contract a norm for new rigs in 2H12

Our oil service analyst also observes a >30% jump in contract duration for UDW rigs to an average of 23 months in the past six months. In our view, this indicates the oil firms' growing preference to lock in longer-term charter-out contracts, as a hedge against fast-rising DCR over the same period. This is in line with our earlier prognosis that back-to-back charter-out contracts for newbuild rig orders in 2H12 would be the norm, as industry players conclude the DCR uptrend is sustainable. Our view is backed by anecdotal evidence of back-to-back charter-out contracts for newbuild rigs in the 2004-08 upcycle, when the DCR more than doubled.

#### Rig delivery slots in 2014 can be filled up easily

We estimate that both Keppel Corp and Sembcorp Marine have 22 available rig delivery slots in 2014, vs. 35 newbuild ex-Petrobras rig-equivalent orders in 2011. The available rig delivery slots will be further tightened to only 16 collectively, if we assume Sembcorp Marine's completion of Phase 1 yard expansion in the western part of Singapore is dedicated entirely to ship repair and conversion projects.

#### **Industry Overview**

Equity | Singapore | Offshore & Marine 02 February 2012

# Bank of America Merrill Lynch

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## Table 1: SGX-listed stocks with existing or potential exposure to rigbuilding activities

	Mkt cap	Price	PO	Rating
COSCO Corp	US\$13.6bn	S\$1.15	S\$0.91	U/P
Keppel Corp	US\$8.2bn	S\$10.61	S\$12.25	Buy
Sembcorp Industries	US\$6.8bn	S\$4.73	S\$5.13	Neutral
Sembcorp Marine	US\$2.1bn	S\$4.93	S\$5.59	Buy
Yangzijiang Shipbuilding	US\$3.4bn	S\$1.095	S\$2.08	Buy

Source: Bloomberg, BofA Merrill Lynch Global Research

Table 2: Sensitivity analysis on the newbuild and 6<sup>th</sup> generation semisubmersible rigs' payback periods to day charter rate changes

Day rates	Newbuild prices	Est. payback
(US\$)	(US\$ mn)	period (yrs)
430,000*	600	7.5
500,000	600	5.7
530,000	600	5.2
550,000	600	4.9
600,000	600	4.3
550,000	630	5.2
600,000	630	4.5
550,000	660	5.4
600,000	660	4.7

\*DCR for the 6<sup>th</sup> generation semisubmersible rig charter-out contract secured in mid-2011.

Source: BofA Merrill Lynch Global Research

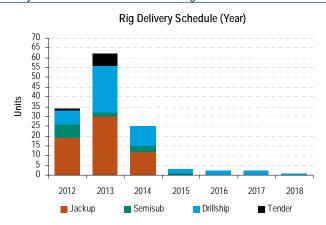
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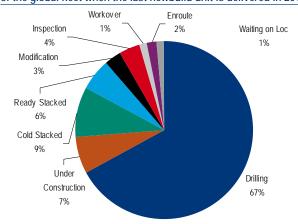
Refer to important disclosures on page 6 to 10. Analyst Certification on Page 5. Price Objective Basis/Risk on page 3. Link to Definitions on page 5.11132365

Chart 1: The small number of newbuild semisubmersible rigs for delivery in 2012-13 is insufficient to fulfill global demand in 2013



Source: RigLogix, BofA Merrill Lynch Global Research

Chart 2: Semisubmersible rigs under construction is equivalent to 7% of the global fleet when the last newbuild unit is delivered in 2015



Source: RigLogix, BofA Merrill Lynch Global Research

Table 3: The average number of newbuild rig orders per annum in 2005-08 was 55 units

	<u> </u>				
	Total	Jackup rig	Semisubmersible rig	Drillship	Tender rig
Total newbuild rig orders (since 2004)	348	180	60	90	18
Average newbuild rig orders p.a. (2005-08)	55	28	13	12	2
2011	87	40	6	35	6
2010	26	19	0	6	1
2009	4	2	1	0	1
2008	56	21	11	21	3
2007	61	32	11	16	2
2006	56	23	20	10	3
2005	48	34	11	2	1
2004	10	9	0	0	1

Source: RigLogix, BofA Merrill Lynch Global Research

Table 4: Sembcorp Marine has 8 options left with rig operators (with an estimated worth of S\$2.3bn), vs zero for Keppel Corp

Period in which	Option holders	Type of option holders	Options	Options	Options	Options	Options
option is secured		•	secured	remaining	exercised	expired	extended
4Q10	Atwood Oceanics	Offshore drilling rig operator	Х		Х	•	
4Q10	Atwood Oceanics	Offshore drilling rig operator	Χ			Х	Х
4Q10	Atwood Oceanics	Offshore drilling rig operator	Χ			Х	Х
4Q10	Seadrill	Offshore drilling rig operator	Χ	Χ			
4Q10	Seadrill	Offshore drilling rig operator	Χ	Χ			
4Q10	Seadrill	Offshore drilling rig operator	Χ	Χ			
4Q10	Seadrill	Offshore drilling rig operator	Χ	Χ			
4Q10	Noble Corporation	Offshore drilling rig operator	Х		Χ		
4Q10	Noble Corporation	Offshore drilling rig operator	Х		Χ		
4Q10	Noble Corporation	Offshore drilling rig operator	Х		Χ		
4Q10	Noble Corporation	Offshore drilling rig operator	Х		Χ		
4Q10	Noble Corporation	Offshore drilling rig operator	Χ		X		
4Q10	Noble Corporation	Offshore drilling rig operator	Х		Χ		
3Q11	Noble Corporation	Offshore drilling rig operator	Х	Χ			
3Q11	Noble Corporation	Offshore drilling rig operator	Χ	Χ			
4Q11	Prosafe	Accommodation semisubmersible rig operator	Χ	Χ			
4Q11	Prosafe	Accommodation semisubmersible rig operator	Χ	Х			
		· .	17	8	7	2	2

Source: BofA Merrill Lynch Global Research



# Price objective basis & risk COSCO Corp Singapore (COIVF)

We value COSCO at S\$0.91 PO, using a sum-of-the-parts methodology. This is based on the use of a 12x FY12E PE on COSCO's fledging shipyard business, which is one std deviation below avg. mean, and the RNAV of its fleet of dry bulk carriers. We believe the market valuation premium ascribed to COSCO's fledging potential as a shipyard and rig builder is not justified. COSCO's key offshore engineering strength lies in its collaboration with Sevan Drilling to build the world's first cylindrical offshore rigs, which have yet to gain global acceptance. We see COSCO as a greenfield yard for the proven conventional offshore rig designs, where it could not draw on Sevan's technical expertise to assist in the construction, unlike the cylindrical rigs.

Upside risks to our PO are: 1) Faster-than-expected improvement for shipbuilding profit margins. 2) Stronger newbuild offshore marine engineering orders. 3) Strong rebound in freight rates to significantly above operating breakeven levels.

Downside risks: 1) Faster drop in newbuild prices for dry bulk carriers, which negate any productivity gains from the shortening in construction life cycle for newbuild dry bulk carriers. This results in weaker-than-expected profit margins. 2) Sudden unexpected rise in steel prices. 3) Poor operational results for the new cylindrical rigs fail to convince oil companies of their purported superior performance vs. conventional rigs, resulting in slower-than-expected new offshore engineering orders.

#### **Keppel Corporation (KPELF)**

Our SOTP valuation derives a PO of S\$12.25 for KEP. The O&M business is the biggest contributor, at 69% of our PO. Our SOTP PO includes: 1) the valuation for 53%-owned Keppel Land, which BofAML analysts arrive at by discounting their RNAV/sh estimate by 35%, 2) share prices for listed associates Keppel T&T, K1 Venture, K-REIT Asia, and K-Green Trust, 3) RNAVs for Sino-Singapore Tianjin Eco-City projects and Keppel Bay projects, 4) FCFF valuation to derive the fair values for O&M, and the unlisted Infrastructure business, and 5) 10% conglomerate discount.

We believe DCF is an appropriate valuation methodology to capture the intrinsic value of KEP's O&M business, due to the high FCF-generative nature of this business. Key assumptions used for the O&M business are: 1) 7.3% WACC, 2) 1.6% risk-free rate, 3) 7.0% market risk premium, 4) 1.27 beta, 5) 40% target debt to asset ratio, and 6) 1% terminal growth rate.

Downside risks: 1) weaker-than-expected newbuild orders for offshore rigs and units due to an unexpected credit crunch, including the failure to win the Petrobras tender, 2) severe property price declines in China and Singapore, affecting new property launches, and 3) W-shaped global economic recession, resulting in a poorer outlook for all businesses. Upside risks: 1) stronger offshore newbuild orders as rig operators decide to invest in the physical replacement of their ageing fleets, and 2) steady property prices in China and Singapore.

#### Sembcorp Industries (SCRPF)

We have an SOTP-based Price Objective of S\$5.13 for Sembcorp Industries (SCI). This is driven largely by our above-consensus PO for its 61%-owned subsidiary, Sembcorp Marine (SMM), which is based on the DCF valuation

model. We also use the DCF model to value the utilities business of SCI, which is the second-largest division of the group. We believe that the DCF valuation model will best capture the good cash-flow-generative nature of SCI's two main businesses.

Our DCF valuation model for SCI's utilities business uses a WACC of 5.3%, based on a risk-free rate of 1.6 and a market risk premium of 6.5%. We have assumed a terminal growth rate of 1%. Downside risks to our PO are: 1) sudden unexpected reduction in global oil demand and E&P activities, which would reduce the incentive to build new offshore drilling rigs and production units, 2) SMM's failure to win newbuild rig/FPSO contracts from Petrobras, 3) weaker-than-expected margin execution at the new yards of SMM in Singapore and Brazil, and 4) SCI's expansion of power plants in Singapore and overseas falters, removing the long-term growth potential of its utilities business.

Upside risks are: 1) faster-than-expected new offshore construction order upswing, and 2) opportunities to make overseas acquisitions of established utilities companies at a reasonable price.

#### Sembcorp Marine (SMBMF)

Our PO for SMM is S\$5.59. This is based on the DCF valuation model on SMM, and the value of the group's equity investments at forward P/E. We expect SMM to achieve a series of record earnings from FY12 onward, after enduring a short-term earnings decline during FY11. Hence, we believe the DCF model is the most appropriate valuation metric to capture the intrinsic value of this world-leading shipyard in a transition phase, and the high free cash flow generative nature of the group's business. The implied FY12E P/E at our PO is 17x.

Our DCF valuation model uses a WACC of 10.5%, based on a risk-free rate of 1.6% and a market risk premium of 7.0%. We have assumed a terminal growth rate of 1%. Downside risks to our PO are 1) sudden unexpected reduction in global oil demand and E&P activities on persistent global credit crunch, which would reduce the incentive to build new offshore drilling rigs and production units, 2) failure to win newbuild rig/FPSO contracts from Petrobras, and 3) weaker-than-expected margin execution at new yards in Singapore and Brazil. The upside risks are 1) faster-than-expected new order upswing, and 2) better profit margins, as operational efficiency gains at new and existing yards are better than expected.

#### Yangzijiang Shipbuilding (YSHLF)

We value Yangzijiang at a PO of S\$2.08, at 9x FY12 P/E. This is slightly below the 10x average forward P/E since listing in 2007. We believe the consistently above-average profit margins of Yangzijiang, good revenue visibility for the next three years, and proven strong cash flow management should justify a rerating of the stock toward the average share-price valuation of its peers.

The rerating of Yangzijiang's share price should come from its leadership of the Chinese yards' structural breakthrough for newbuild 10,000-TEU containerships in 2H11E, and possible inroads into rigbuilding. The yard has prepared for this via a staggered increase in shipbuilding capacity, and its development of new technological capabilities for the next industry upturn. Indeed, Yangzijiang has reinforced its in-house ship design abilities by taking a 40% stake in Shanghai Yangzijiang Ship and Marine Engineering R&D Center Co., Ltd for the provision of design services for shipbuilding and marine engineering projects. We expect Yangzijiang to collaborate with existing rigbuilders for its inroad into rigbuilding.

Downside risks to our PO are: (1) a sharp plunge in freight rates, which result in high cancellation risk on existing shipbuilding orders, (2) a steeper-than-expected increase in steel prices, and (3) an unexpected plunge in the Chinese stock market by more than 70% from current levels, which greatly reduces the collateral value for the financial investments of Yangzijiang.

# Link to Definitions Industrials

Click <u>here</u> for definitions of commonly used terms.

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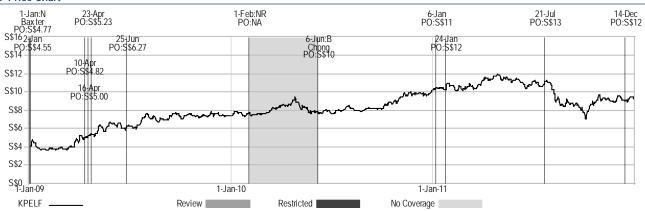
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	Siam Cement	SCVQF	SCC TB	Jiraporn Linmaneechote
	Siam Cement -F	SCVPF	SCC/F TB	Jiraporn Linmaneechote
	Yangzijiang Shipbuilding	YSHLF	YZJ SP	Wee Lee, Chong, CFA
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	Thai Oil - L	TOIJF	TOP TB	Komsun Suksumrun
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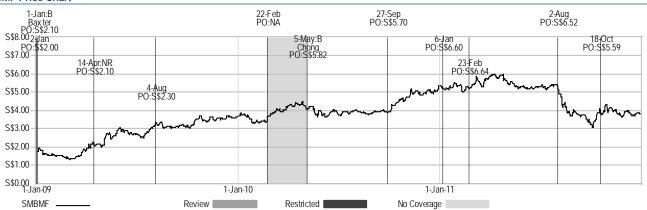
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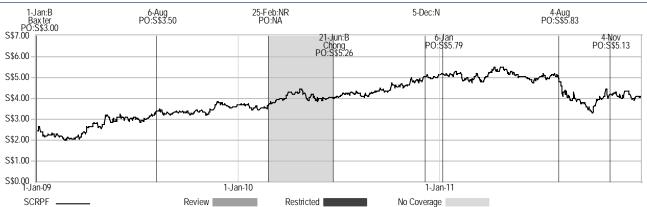
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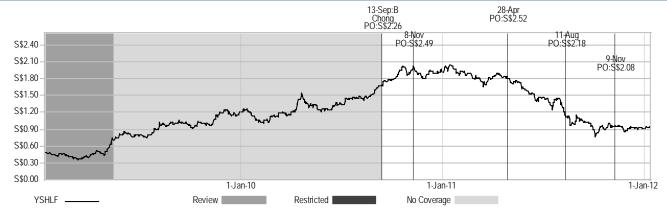
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