

# October 21, 2013

# Sector Rating: NEUTRAL

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### Key Data

Avg.13E P/E (x)			11.99
Avg.13E P/B (x)			1.49
Avg.13E Dividen	d Yield (%)		2.06

Source(s): Company, Bloomberg, ABCI Securities

### 1H13 growth (% YoY)

Investment in:	
Roadway infrastructure	11.89
Railway infrastructure	25.73
Waterway infrastructure	(3.11)
Urban rail	38.81
Net income of:	
CRCC (1186 HK)	46.61
CRG (390 HK)	45.94
CCCC (1800 HK)	14.15
CSR (1766 HK)	(23.87)
CSR Times Electric (3898 HK)	(26.47)

### Sector performance (%)

	<u>Absolute</u>	Relative*
1-mth	(0.07)	0.61
3-mth	17.27	9.16
6-mth	8.88	4.11

Source(s): Companies, CRC, MOT, ABCI Securities

\* Relative to Hang Seng Index Source(s): Bloomberg, ABCI Securities

### 1-Year Sector performance



# Construction and Engineering Urban Rail - The Bright Spot in 2014-15

### **Investment Story**

With the rapid development in the first and second tier cities, urban rail development will remain fast in 2014-15 and will continue to be emphasized in the 13<sup>th</sup> Five-Year-Plan. Based on existing construction pipeline and development plan of NDRC, the urban rail industry will be the bright spot with total investment growing at 37.97% CAGR over 2013E-15E. We like contractors with high exposure in urban rail development, such as CRCC (BUY) and CRG (BUY). For CCCC (BUY), we estimate it would increase exposure in BOT/BOO projects to offset the slowdown in port and roadway construction, and recommend accumulating the counter on dips. As there is no explicit guidance on rolling stock procurement by the government and market competition is stiffening, earnings visibility of CSR (HOLD) and CSR Times Electric (HOLD) will remain opaque in FY14E-15E.

**2014-15 Outlook.** With the debt problem of China Railway Corporation (CRC), we expect infrastructure investment in railway transportation to stay flat in 2014-15. Urban rail, however, will be the bright spot as we expect total investment in urban rail industry to remain strong. Our valuations for FY13E-15E are based on the historical forward P/B in 2008-10, as both periods correspond to the last three years of the Five-Year Plan. To account for the expected slowdown in earnings growth in FY13E-15E compared to FY08-20, a discount is applied to the historical FY08-10 forward P/B to derive the TP.

**CRCC - BUY.** We like CRCC for its low gearing and leading position in urban rail construction industry. Its low gearing will help acquire capital at lower costs, allowing CRCC to undertake more urban rail projects. We estimate the CRCC's urban rail segment revenue to grow at 44.48% CAGR over FY13E-15E, mitigating impacts of the flat growth in its other businesses. We estimate overall net income to grow at 17.03% CAGR over FY13E-15E. Initiate **BUY**.

**CRG - BUY.** The largest urban rail builder in China will benefit from the urban rail system development. Based on the urban rail construction plan in major cities, we estimate CRG segment revenue to grow at 19.58% CAGR over FY13E-15E. Its high gearing, however, remains the major concern as it would drive up the group's financial costs. We expect overall net income to grow at 12.02% CAGR over FY13E-15E. Reiterate **BUY**.

CCCC - BUY. We believe the current valuation has reflected the negative factor on the suffering from slowdown in roadway and port construction, and we expect CCCC's exposure in BOT/BOO projects in the future to support the earnings growth. We estimate net income to grow at 7.74% CAGR in FY13E-15E. Its current valuation is undemanding at 0.85x FY13E P/B, lower than CRCC and CRG. initiate BUY.

**CSR - HOLD and CSR Times Electric - HOLD.** The largest losers in the railway slowdown. The lack of specific guidance on rolling stock purchases, CRC's poor financials, and the increased competition from domestic and international players prompt us to adopt a lukewarm outlook for the industry. Initiate **HOLD** on CSR and CSR Times Electrics.

**Risk factors:** 1) Prudent monetary policy affects capital inflow, which may delay construction; 2) Heavy debt burden of CRC limited growth in infrastructure investment and rolling stock purchases; 3) Change in willingness to grant loans by creditors.

Sector Valuation Summary (data as of October 20, 2013)

Company	Ticker	Rating	Price	TP	FY13E	FY14E	FY13E	FY14E	FY13E	FY14E
			(HK\$)	(HK\$)	P/E(x)	P/E (x)	P/B (x)	P/B (x)	Yield (%)	Yield (%)
Transport infrastruc	ture constr	uction contra	ctor							
CRCC	1186 HK	BUY	8.30	10.22	8.24	7.01	1.02	0.91	1.82	2.14
CRG	390 HK	BUY	4.25	5.14	8.30	7.23	0.85	0.77	1.81	2.07
CCCC	1800 HK	BUY	6.29	7.67	6.25	5.82	0.85	0.76	4.00	4.29
Rolling stock manuf	facturer									
CSR	1766 HK	HOLD	5.80	6.18	16.02	15.02	1.81	1.65	1.25	1.33
CSR Times Electric	3898 HK	HOLD	27.40	27.72	21.13	18.07	2.92	2.61	1.42	1.66

Source(s): Companies, ABCI Securities estimates



Transportation Sector											
Urban rail	* (	Growth in urban rail investment remains strong in 2014-15 based on existing construction pipeline and development plan of NDRC Urban rail development will be the growth driver of the transport infrastructure construction industry Comparing with developed country, the coverage ratio of urban rail in China is lagging. Under the government's initiatives to develop intra-city mass transportation, we expect the investment growth to accelerate in the mid to long run Total sector FAI will be RMB 891bn in 2014E-15E, or 37.97% CAGR over 2013E-15E									
Railway	* (	Comparing to menths to the long run Going forward, compensate for	eavy debt burden of CRC caps CAPEX growth in railway transportation in 2014-15. omparing to most developed countries, the coverage of railway in China is still relatively low. Thus, demand for railway is strong the long run is the long run forward, we expect CRC to introduce equity funding from private sector and raise fees for freight transportation fee to ompensate for the decelerating cash flow from investment otal sector FAI will be RMB 1,400bn in 2014E-15E, or 0.72% CAGR over 2013E-15E								
Roadway	<b>♦</b> L	ooking forward									
Waterway	<b>♦</b> F	Port construction	r transportation investment is expected to ren regain lies on export recovery triggered fi will be RMB 457bn in 2014E-15E, or 5.94		growth slowdown						
Major Players											
CRCC (1186 HK) Rating: BUY TP: HK\$ 10.22	* L * H * (	growth Low financial ge High backlog-to	earing (net gearing as at June 2013: 36.10% -revenue ratio (1H13: 3.48x), earnings visit								
			FY08-10 ROAE: 13.26% FY08-10 Net income CAGR: 40.08% 2008-10 average P/B: 2.10x	FY13E-15E ROAE: 13.67% FY13E-15E Net income CAGR: 17.03% Target P/B: 1.26x							
CRG (390 HK) Rating: BUY FP: HK\$ 5.14	<ul><li>♦ H</li><li>0</li><li>♦ E</li></ul>	over FY13E-15 High financial g costs could be l Expect GPM to	E earing (net gearing as at June 2013: 118.44 high rise as the construction projects proceed to revenue ratio (1H13: 2.95x), earnings visit	ility is high							
			FY08-10 ROAE: 11.01% FY08-10 Net income CAGR: 16.09% 2008-10 average P/B: 1.72x	FY13E-15E ROAE: 11.02% FY13E-15E Net income CAGR: 12.02% Target P/B: 1.03x							
CCCC (1800 HK) Rating: BUY FP: HK\$ 7.67	ا ÷ ا	ncreased expo net gearing will	sure in BOT/ BOO projects also implies that	ure to dilute the slowdown in roadway and port of the CCCC will require higher levels of working capulity is high							
			FY08-10 ROAE: 15.14% FY08-10 Net income CAGR: 25.70% 2008-10 average P/B: 2.06x	FY13E-15E ROAE: 13.80% FY13E-15E Net income CAGR: 7.74% Target P/B: 1.03x							
CSR (1766 HK) Rating: HOLD FP: HK\$ 6.18	v ❖ F r	risibility for FY1 Production volu narket	4E-15E is low	the 12 <sup>th</sup> Five-Year Plan and increased market M13. We expect profitability to stay low in 2H13-ering resume from CRC during 2H13							
			FY08-10 ROAE: 12.49% FY08-10 Net income CAGR: 35.09% 2008-10 average P/B: 2.76x	FY13E-15E ROAE: 11.68% FY13E-15E Net income CAGR: 9.81% Target P/B: 1.93x							
CSR Times Electric (3898 HK) Rating: HOLD IP: HK\$ 27.72	<ul><li>4</li><li>5</li><li>4</li><li>7</li></ul>	Although net ind 57.94% YoY un The group is g	der the tight liquidity in the industry chain	om the low base in 3Q12, receivables level rocke 1% of total issued shares before placing) exp ery equipment. Earnings will be diluted							
			FY08-10 ROAE: 16.08% FY08-10 Net income CAGR: 41.92%	FY13E-15E ROAE: 15.65% FY13E-15E Net income CAGR: 15.12%							

Source(s): ABCI Securities estimates



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## **Chapter 1: Strategies and Valuation**

### **Transport infrastructure construction contractors**

The recovery of infrastructure investment by the government has propelled earnings growth among the major transport infrastructure construction contractors. With the strong recovery in railway infrastructure construction, earnings growth of CRCC and CRG accelerated in 1H13. Due to the high base in 2H12, however, we expect revenue growth in both companies to moderate in 2H13. We also expect infrastructure investment in railway transport to stay flat in 2014-15 due to the high debt level of China Railway Corporation (CRC), increasing the likelihood of a slowdown in earnings growth in the companies.

Based on the construction pipeline of urban rail projects in China's major cities, we estimate the total investment in urban rail industry will remain strong in 2014-15, with urban rail investment growing at 37.97% CAGR in 2013-15. Our BUY ratings for CRCC and CRG are supported by their strong positions in the urban rail construction industry. For 2013, we project that market share of CRCC and CRG would reach 35% and 50%, respectively. In our view, growth in urban rail investment would help the companies to offset some of the unfavorable impacts brought by the slowing investments in roadway and railway in 2014-15.

CRCC, with better financial management and execution capability, achieved a higher ROAE and lower gearing than CRG. Low financial gearing in CRCC means that the group is able to obtain funding at lower costs that will help facilitate expansion of its urban rail construction business in the future. Based on these reasons, CRCC will continue to be valued at premiums over CRG in 2014-15.

For CCCC, we expect it to increase exposure on BOT/BOO business for the sake of diluting the impact of sluggish roadway and port construction investment expected in 2014-15. However, the Increased exposure in BOT/BOO projects implies that CCCC will require higher levels of working capital. Thus, we expect its FY14E-15E net gearing will increase.

Our valuations for CRCC, CRG and CCCC are mostly based on our financial projections in 2013-15, the last three years of the 12<sup>th</sup> Five-Year Plan. We apply the forward P/B in 2008-10, which is the last three years of the 11<sup>th</sup> Five-Year Plan, to derive our TP.

### CRCC (1186 HK): BUY

We set our target valuation at 1.26x of FY13E P/B, reflecting a 40% discount to the median of CRCC's 2008-10 forward P/B because we expect FY13E-15E earnings to grow at 17.03% CAGR, comparing with the 40.08% CAGR in FY08-10. The counter is currently trading at 1.02x of FY13E P/B, 19.05% below our target P/B. We initiate with a BUY recommendation on CRCC with TP at HK\$10.22, implying an upside potential of 24.95% (estimated share price gain and dividend yield).

### CRG (390 HK): BUY

Our target valuation at 1.03x of FY13E P/B, equivalent to a 40% discount to the median of CRG's 2008-10 forward P/B on the expectation of a slowing earnings growth at 12.02% CAGR in FY13E-15E, comparing with the 16.09% CAGR in FY08-10. The counter is currently trading at 0.85x of FY13E P/B, 17.48% below our target P/B. We have revised our earnings projections for CRG based on its latest financial results and economic data. We maintain BUY on CRG with TP at HK\$5.14 (previous TP: HK\$5.17), indicating an upside potential of 22.75% (estimated share price gain and dividend yield).



### **CCCC (1800 HK): BUY**

We expect CCCC to increase exposure in investment projects (BOT, BOO and BT projects) to counteract the weakening roadway and port construction businesses, we expect working capital requirement will increase, and FY14E-15E net gearing will rise. Our target valuation at 1.03x of FY13E P/B is based on a 50% discount to the median of CCCC's 2008-10 forward P/B as we expect earnings growth to slow to 7.74% CAGR over FY13E-15E, compared with 25.70% CAGR in FY08-10. CCCC's 50% P/B discount is higher than that of CRCC and CRG (both apply a 40% P/B discount) due to the lack of major urban rail construction projects in FY14E-15E in the latter. The counter is trading at 0.85x of FY13E P/B, 17.48% below our target P/B. We initiate with a BUY recommendation on CCCC with TP at HK\$7.76, denoting an upside potential of 25.94% (estimated share price gain and dividend yield).

### Rolling stock manufacturers

Although the resumption of tenders by CRC provides some relief in 2H13, we expect the increase in market competition from newcomers, including China Automation Group (CAG, 569 HK), and the poor financials of CRC will weaken the profitability of the rolling stock industry in FY14E-15E. Downside risks of CSR and CSR Times Electric thus increase.

### **CSR (1766 HK): HOLD**

Our target valuation at 1.93x of FY13E P/B reflects a 30% discount to the median of CRG's 2008-10 forward P/B based on earnings growth at 9.81% CAGR over FY13E-15E, compared with 35.09% CAGR in FY08-10, The counter is trading at 1.81x FY13E P/B, 6.22% below our target valuation only. We initiate with a HOLD recommendation on CSR with TP at HK\$6.18, suggesting an upside potential of 7.80% (estimated share price gain and dividend yield).

### CSR Times Electric (3898 HK): HOLD

CSR Times Electric, a subsidiary of CRS (with 56.17% of shareholding as of October 21, 2013 and becoming 51.81% after placing assuming all placing shares are placed by end-2013) and supplies train power converters, auxiliary power supply equipment to CSR, CSR Group (CSRG, the parent company) and other rolling stock manufacturers.

The average forward P/B premium of CSR Times Electric over CSR (1766 HK) since 2011 was 1.53x. The valuation premium was based on the higher margin of the train-borne electrical system business in the former. Our target valuation at 2.95x FY13E P/B is equal to 1.53x of our target valuation for CSR (1.93x FY13E P/B). Although the stock is trading at premium, we notice the group's profitability is declining. The counter is trading at 2.92x of FY13E P/B, or 1.02% below our target valuation. We initiate with a HOLD recommendation on CSR Times Electric with TP at HK\$27.72, providing an upside potential of only 2.59% (estimated share price gain and dividend yield).

### **Sector rating**

Based on our established TPs for the five Companies (CRCC, CRG, CCCC, CSR and CSR Times Electric), the average upside potential of the sector is 16.81% (estimated share price gain and dividend yield). Comparing with the market return, we expect the average return to be in line with the market performance. Thus, our rating for the sector is NEUTRAL.

Exhibit 1: Peer valuation table for construction contractors

		Mkt cap		As of 08/2013	P/E	( <u>x)</u>	EPS (%	<u>%YoY)</u>	P/B	1.02 0.91 13.11 13. 0.80 0.71 13.11 13. 0.85 0.77 10.74 11. 0.70 0.63 10.74 11. 0.85 0.76 14.26 13. 0.69 0.62 14.26 13. 1.33 1.23 11.25 11. 0.97 0.89 11.48 11. 0.79 0.69 14.80 14.		
Company	Ticker	(HK\$ mn)	CRY	Share Price	FY13E	FY14E	FY13E	FY14E	FY13E	FY14E	FY13E	FY14E
Domestic Transportation Project Contractor				Tille								
CRCC-H	1186 HK	17,231	HKD	8.30	8.24	7.01	17.78	17.56				13.74
CRCC-A	601186 CH	67,595	RMB	5.18	6.40	5.44	17.78	17.56		-		13.74
CRG-H	390 HK	17,880	HKD	4.25	8.30	7.23	19.17	14.72				11.19
CRG-A	601390 CH	60,862	RMB	2.80	6.81	5.93	19.17	14.72				11.19
CCCC-H	1800 HK	27,852	HKD	6.29	6.25	5.82	6.74	7.31				13.74
CCCC-A	601800 CH	61,693	RMB	4.13	5.11	4.76	6.74	7.31				13.74
CREGC	600528 CH	10,410	RMB	5.61	12.75	10.79	10.50	18.18				11.85
Shanghai Tunnel Eng Co	600820 CH	15,028	RMB	9.10	9.29	7.91	10.57	17.35				11.73
Xiangyu Dredging	871 HK	1,672	HKD	2.09	6.22	5.17	8.00	20.37				14.27
Sector Weighted Average					6.81	5.98	13.93	13.51	0.80	0.72	12.67	12.85
Domestic Infrastructure Construction Contractor												
CSCEC	601668 CH	123,224	RMB	3.23	5.29	4.59	17.50	15.22	0.82	0.71	18.04	16.59
Sinohydro Group	601669 CH	39,432	RMB	3.23	5.29 6.51	4.59 5.54	16.30	15.22	0.82	0.71	16.04	10.59
China Gezhouba Group	600068 CH	18,449	RMB	4.16	8.67	7.85	7.14	17.54	1.05	0.55	13.52	12.76
CSCI	3311 HK	51,643	HKD	13.28	18.89	14.63	22.64	29.16	3.25	2.79	18.71	20.91
CAMC	002051 CH	18,896	RMB	23.32	17.83	13.60	17.84	31.12	2.99	2.79	19.63	20.91
CMEC	1829 HK	20,257	HKD	4.91	8.81	6.52	(4.18)	35.01	1.42	1.22	17.29	20.16
Sector Weighted Average	1029 1110	20,237	TIND	4.31	9.41	7.62	16.01	20.46	1.46	1.26	17.63	16.75
International Transportation Construction Contractors												
Vinci S.A.	DG FP	295,413	EUR	46.36	13.50	12.80	(3.78)	5.47	1.81	1.70	13.66	13.39
Bouygues Construction	EN FP	98,489	EUR	29.10	12.58	11.54	15.34	9.04	1.04	1.01	8.64	9.10
Hochtief A.G.	HOT GR	52,675	EUR	64.50	19.40	17.98	54.60	7.94	1.64	1.59	8.98	9.83
Skanska A.B.	SKAB SS	62,717	SEK	123.50	14.36	13.42	24.28	7.03	2.46	2.31	18.51	19.63
Strabag S.E.	STR AV	22,852	EUR	18.90	17.78	14.58	83.28	21.92	0.66	0.66	3.74	4.46
FCC S.A.	FCC SM	19,618	EUR	14.53	(59.79)	31.93	(97.26)	(287.24)	2.26	2.03	(21.62)	6.90
Ferrovial S.A.	FER SM	106,425	EUR	13.68	28.62	30.07	(50.62)	(4.81)	1.79	1.81	5.59	5.73
BAM Groep	BAMNB NA	10,712	EUR	4.12	17.75	12.63	(129.37)	40.52	1.21	1.14	6.97	17.90
SNC-Lavalin	SNC CN	48,149	CAD	42.15	(155.54)	21.81	(113.22)	(813.28)	3.24	3.09	3.64	14.51
Obrascon Huarte	OHL SM	31,154	EUR	29.45	10.11	8.83	(71.10)	14.49	1.20	1.09	12.99	13.48
Sacyr S.A.	SYV SM	19,465	EUR	3.94	18.32 <b>3.65</b>	17.28 <b>16.49</b>	(109.68)	6.05 <b>(52.67)</b>	1.20 <b>1.77</b>	1.11 <b>1.69</b>	8.82 <b>9.90</b>	6.69 <b>11.58</b>
Sector Weighted Average					3.05	16.49	(15.35)	(32.67)	1.77	1.09	9.90	11.56
International Infrastructure Construction Contractors												
ACS	ACS SM	83,467	EUR	25.01	10.82	10.00	(134.96)	8.22	2.49	2.23	25.30	23.61
Jacobs Engineering Group	JEC US	61,131	USD	59.97	18.40	16.13	9.73	14.11	1.87	1.67	10.83	11.18
Hyundai Eng & Const	000720 KP	49,891	KRW	61,400	11.26	9.31	74.93	21.03	1.36	1.22	12.74	13.83
WorleyParsons Ltd	WOR AU	41,392	AUD	22.42	15.69	14.25	9.25	10.08	2.43	2.31	16.43	16.14
Abengoa S.A.	ABG SM	11,170	EUR	2.48	13.85	9.25	(22.17)	49.72	0.92	0.86	8.93	5.63
Daewoo Eng & Const	047040 KP	26,143	KRW	8,620	15.05	10.63	47.63	41.53	0.99	0.92	6.90	9.03
Impregilo SpA	IPG IM	17,793	EUR	4.12	20.79	13.11	(86.71)	58.59	1.26	1.32	6.19	9.83
Sector Weighted Average					14.29	11.99	(24.38)	19.58	1.89	1.72	15.39	15.42
0						40.05	(6.00)	(45.70)	. ==		46.00	42.25
Overall Weighted Average					7.09	12.35	(6.60)	(15.76)	1.57	1.45	12.68	13.36

Source(s): Bloomberg, ABCI Securities estimates

Exhibit 2: Peer valuation table for rolling stock manufacturer

		Mkt cap		As of 08/2013	P/E	<u>(x)</u>	EPS (%	%YoY)	P/B	<u>(x)</u>	ROAE	(%)
Company	Ticker	(HK\$ mn)	CRY	Share Price	FY13E	FY14E	FY13E	FY14E	FY13E	FY14E	FY13E	FY14E
Domestic Rolling Stock Maker												
CSR-H	1766 HK	11,739	HKD	5.80	16.02	15.02	(2.77)	6.64	1.81	1.65	11.76	11.49
CSR-A	601766 CH	62,785	RMB	4.19	14.40	13.51	(2.77)	6.64	1.63	1.48	11.76	11.49
CSR Times Electric	3898 HK	29,709	HKD	27.40	21.13	18.07	(7.49)	16.92	2.92	2.61	16.28	15.24
CNR	601299 CH	59,735	RMB	4.55	12.36	10.61	8.24	16.58	1.24	1.13	10.48	11.37
Zhuzhou Times	600458 CH	9,318	RMB	11.12	29.03	22.33	23.55	30.03	2.40	2.40	8.82	8.58
Changchun Eurasia Group	600697 CH	4,303	RMB	21.26	13.67	10.98	22.44	24.50	2.49	2.08	22.43	20.64
Jinxi Axle	600495 CH	7,434	RMB	13.93	30.28	21.77	15.00	39.13	1.37	1.85	11.00	7.24
Sector Weighted Average					16.29	14.12	2.65	14.40	1.77	1.64	12.14	11.95
International Rolling												
Stock Maker												
Alstom	ALO FP	85,312	EUR	26.07	8.74	7.79	12.11	12.27	1.41	1.25	19.78	16.34
Bombardier Inc	BBD/A CN	66,095	CAD	4.99	12.28	9.47	23.44	29.62	4.12	3.06	44.31	35.75
CAF	CAF SM	13,820	EUR	380.10	12.44	10.83	5.31	14.84	1.58	1.44	14.89	13.88
Vossloh A.G.	VOS GR	9,920	EUR	70.19	23.13	16.78	(38.56)	37.86	1.74	1.65	7.70	10.06
Faiveley Transport	LEY FP	8,449	EUR	54.51	12.32	11.34	6.12	8.66	1.33	1.22	13.11	11.26
Nippon Sharyo	7102 JP	6,439	JPY	554.00	11.76	14.15	325.47	(16.88)	1.26	1.16	2.03	8.55
Kinki Sharyo	7122 JP	1,784	JPY	326.00	(14.05)	112.41	(436.72)	(112.50)	0.66	0.66	(4.62)	0.59
Sector Weighted Average					11.02	10.39	18.98	17.46	2.36	1.90	26.14	21.89
	_	_		_					_		_	
Overall Weighted Average					13.60	12.22	10.96	15.96	2.07	1.77	19.27	17.01

1: EPS turns positive in FY14E Source(s): Bloomberg, ABCI Securities estimates



# **Chapter 2: Industrial Analysis**

Transport infrastructure is a key part of fixed assets investment (FAI). Transport FAI was RMB 3,030bn in 2012, accounting for 8.30% of total FAI in China during the year. Total transport FAI grew at a CAGR of 15.24% from RMB 552bn to RMB 3,030bn over 2000-12. With the rapid urbanization and development in western China, we expect the transport infrastructure development will remain an important task in China's 13<sup>th</sup> 5-Year Plan (2016-2020).

Exhibit 3: Breakdown of transport FAI, 2012 (%)

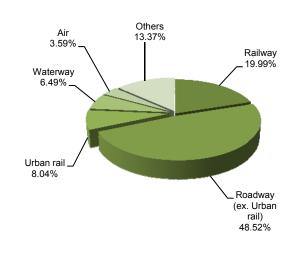
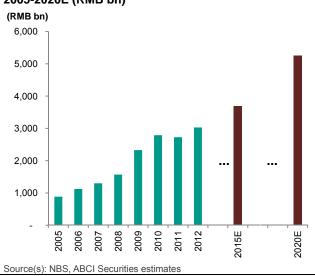


Exhibit 4 : Overall investment in China's transportation in 2005-2020E (RMB bn)



Source(s): NBS, MOT, ABCI Securities

## Recovering from trough in 2013, but ...

Capital investment in upstream production slowed in 2011-1H12 on uncertainties in the global economy. Overall transport FAI in 2011 and 1H12 was down 2.23% YoY and 1.96% YoY, respectively. With the support of the Chinese government, transportation investment started to rebound in 2H12. Furthermore, historical pattern suggests that growth in infrastructure development investment would usually peak in the third or fourth year of "Five-Year Plan", possibly due to the need to reach specific targets stipulated by the government.

Under these circumstances, we expect transport FAI and infrastructure construction to pick up in 2013. Due to the low base in 1H12, transport FAI jumped 21.49% YoY in 1H13. Since FAI has resumed momentum since 2H12, we expect Y-o-Y growth in 2H13 will slow comparing to 1H13. For 2013, we estimate transport FAI will grow 6.45% YoY.

Exhibit 5: Transport FAI in China, 1H11-2H13E

	1H11	2H11	2011	1H12	2H12	2012	1H13	2H13E	2013E
Transport FAI (RMB bn)	1,130	1,596	2,726	1,108	1,922	3,030	1,346	1,879	3,225
Growth (% YoY)	10.05	(9.39)	(2.23)	(1.96)	20.41	11.14	21.49	(2.22)	6.45

Source(s): NBS, ACBI Securities estimates



### Flat growth in 2014-15

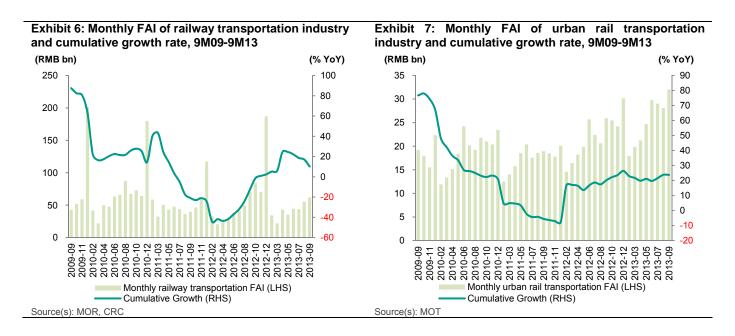
Looking forward, under the tepid recovery in the global economy and prudent monetary policy in China, we believe growth in transport FAI to slow in 2014-15.

### **Urban rail**

We believe the urban rail segment (mainly refers to underground railway in a city) would be the growth driver of transport infrastructure investment in 2014-15. Under the government's initiative to develop intra-city mass transportation, investment in urban rail (including subway) in the first and second tier cities would stay strong in 2014-15. Based on the existing construction pipeline among major cities, we estimate the aggregate investment for urban rail development to be RMB 1,171bn in 2013-15, or grow at 37.97% CAGR over 2013-15.

### Railway construction

According to NDRC, the targeted investment in railway construction for 2014-15 would be RMB 1,400bn. With the high debt level and poor profitability of China Railway Corporation (CRC), we believe the budgeted CAPEX is unlikely to increase in 2014-15. Based on the budgeted CAPEX of RMB 690bn in 2013, we expect the figure will remain largely unchanged in 2014-15.



### Rolling stock manufacturing

For the rolling stock industry, due to the lack of clear guideline for rolling stock procurement in the 12<sup>th</sup> Five-Year Plan and CRC's heavy debt problem, we believe the earnings visibility of rolling stock manufacturing industry will be lower than that of the infrastructure construction industry.

Production volume of locomotive, according to NBS, was declining. In 8M13, the figure dropped 52.70% YoY.

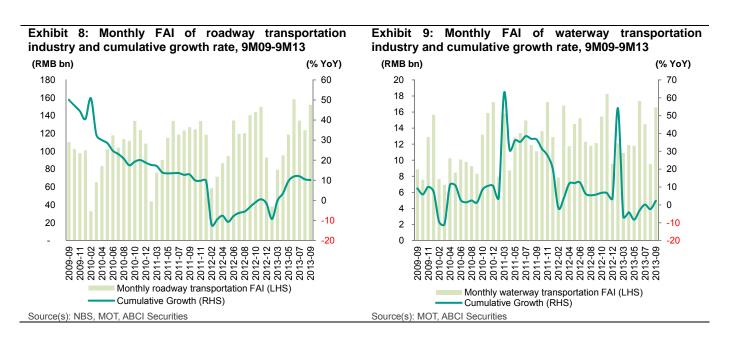


### Roadway construction

As profitability and asset return of downstream toll road operators has been shrinking since 2008, it is unlikely that these operators would increase CAPEX for roadway construction in 2014-15. Furthermore, with the exemption of road toll for passenger cars during major holidays in China, we expect the income of toll road operator will be 10% lower than if no such exemption exists. Overall, we expect growth in roadway investment to slow in 2014-15.

### Port construction

The International Monetary Fund (IMF) revised down the global economic growth projection in Oct 2013 to 2.9% in 2013 and 3.6% in 2014, down by 0.3ppt and 0.2ppt respectively compared to previous projections in July 2013. Amid a sluggish global economy, profitability and asset return of port operators have been decreasing. Growth in passage and freight throughputs in China's major ports are estimated to be under 10% p.a. by 2020, we expect the CAPEX growth to stay low in 2014-15.



# Benefit from long-term domestic economic growth and urbanization

We are positive on the long-term outlook of transport infrastructure construction industry based on the growth in the Chinese economy. The coverage ratios of railway and roadway in China are still low compared to the developed countries. Besides, we expect urban rail development in lower tier cities to remain prioritized in the 13<sup>th</sup> Five-Year Plan and continue to expand in 2015-20.

We estimate the total transport FAI in the 13<sup>th</sup> Five-Year Plan (2015-20) to be RMB 23,620bn, 46.88% higher than our estimate of RMB 16,082bn for the 12<sup>th</sup> Five-Year Plan (2011-15). Considering the stable growth in transport infrastructure development, we are positive on the sectors in the mid-to-long run.



### Overseas market - the upside catalyst

China, with the world's second largest economy, is increasingly influential in Asia and Africa. Huge demand for infrastructure development in developing countries will be an upside catalyst for China's domestic constructors in the long run.

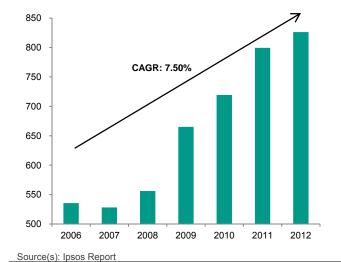
The Chinese government has been aiming to strengthen relationships with different countries since the new leaders were on board in March 2013. The Chinese President, Xi Jinping, and Premier Li Keqiang have visited different countries in Europe, Africa, Latin America, North America and Asia. Xi stated that China will continue to enhance cooperation with African countries in the fields of investment and financing. Over the next three years, China will offer US\$ 20bn worth of loans to Africa, in a bid to achieve mutual cooperation in the infrastructure development and manufacturing industries. In addition, China will also help African countries turn their resource advantage into independent and sustainable economic development. Separately in October 2013, Premier Li also visited Thailand to strengthen ties and exploring business opportunity for railway construction in Thailand.

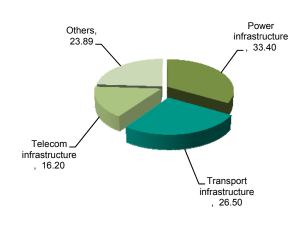
We expect the growth in infrastructure development among developing countries to remain strong in the future. According to the Ipsos report, total new contract value of infrastructure engineering projects in developing countries amounted to US\$ 826.3bn in 2012, 15 times higher than the developed countries at US\$ 54.9bn. In terms of growth, new contract value in developing countries grew at a CAGR of 7.50% over 2006-12, which was higher than that in developed countries that declined by 4.79% CAGR during the same period. Of which, transport infrastructure accounted for 26.50% of total new contract value.

Rapid growth in infrastructure development and strengthening relationship between China and the other developing countries would help domestic infrastructure builders in China expand their business overseas. We estimate the total market share of Chinese enterprises in overseas infrastructure construction market was 44.54% in 2012.

Exhibit 10: Total new contract value of infrastructure engineering projects in developing countries, 2006-2012 (US\$ bn)

Exhibit 11: Breakdown of new contract value of infrastructure engineering projects in developing countries, 2012 (%)





Source(s): Ipsos Report



Exhibit 12: Top 10 Chinese Enterprises in Contracted Projects Overseas, 2012

Rank	Total turnover of contracted projects overseas	Total value of newly-signed contracts				
1	Huawei Technologies Co., Ltd.	Huawei Technologies Co., Ltd.				
2	Sinohydro Group Ltd (601669 CH)	Sinohydro Group Ltd (601669 CH)				
3	China State Construction Engineering Corporation <sup>1</sup>	China State Construction Engineering Corporation <sup>1</sup>				
4	ZTE Corporation (763 HK)	CITIC Construction Co., Ltd.				
5	China Harbour Engineering Co., Ltd. <sup>2</sup>	China Gezhouba Group Co., Ltd. (600068 CH)				
6	CITIC Construction Co., Ltd.	China Harbour Engineering Co., Ltd. <sup>2</sup>				
7	China Machinery Engineering Corporation (1829 HK)	ZTE Corporation (763 HK)				
8	Shandong Electric Power Construction Corporation	China Civil Engineering Construction Corporation <sup>3</sup>				
9	China Gezhouba Group Co., Ltd. (600068 CH)	China Machinery Engineering Corporation (1829 HK)				
10	China Road and Bridge Corporation <sup>2</sup>	China Railway Int'l Economic Cooperation Co., Ltd 4				

- 1: Parent group of China State Construction Engineering Corp Ltd (601668 CH) and China State Construction International Holdings Ltd (3311 HK);
- 2: Subsidiaries of China Communications Construction Co Ltd (1800 HK; 601800 CH) 3: Subsidiary of China Railway Construction Corp Ltd (1186 HK; 601186 CH)
- 4: Subsidiary of China Railway Group Ltd (390 HK; 601390 CH)

Source: MOC, ABCI Securities

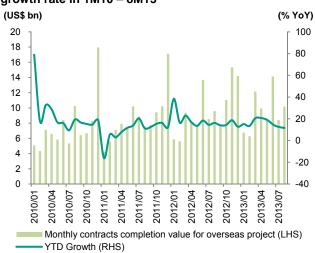
According to the Ministry of Commerce (MOC) in China, total new contract value of overseas project by Chinese enterprises has been increasing since 4Q2012. Total new contracts value in overseas market was up 25.7% YoY in 8M13. The growth in project delivery for overseas markets remains stable, with the value of completed projects increasing by 10.2% YoY in 8M13.

The "Going Out" policy of China creates opportunity for domestic contractors of infrastructure construction to diversify income sources and geographical coverage, which help buffer against the cyclical risk of construction industry in China.

Exhibit 13: Monthly new contracts value for overseas project by Chinese enterprises and cumulative growth rate in 1M10 - 8M13



Exhibit 14: Monthly contracts completion value for overseas project by Chinese enterprises and cumulative growth rate in 1M10 - 8M13



Source(s): MOC



### **Railway Transportation**

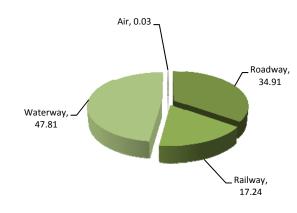
- Heavy debt burden of CRC caps CAPEX growth in railway transportation in 2014-15.
- We estimate total investment in railway industry to be RMB 1,400bn or grow at 0.72% CAGR over 2014-15
- Comparing to most developed countries, the coverage of railway in China is still relatively low. Thus, demand for railway is strong in the long run
- Going forward, we expect CRC to introduce equity funding from private sector and raise fees for freight transportation fee to compensate for the decelerating cash flow from investment

Railway is one the major means of transportation in China, accounting for 30.39% and 17.24% of passenger and freight transportation turnovers in China in 2012, respectively. Transportation cost of railway is lower than that of the roadway. According to our channel check, the average transportation fee for railway was RMB 0.10/ton-km, compared to RMB0.27/ton-km for roadway in 2012. Infrastructure investment in railway is expected to outpace that of the roadway through 2020, as we believe railway development will continue to be emphasized in the 13<sup>th</sup> Five-Year Plan.

Exhibit 15: Breakdown of passenger turnover by different way of transportation in China in 2012 (%)

Exhibit 16: Breakdown of freight turnover by different way of transportation in China in 2012 (%)





Source(s): NBS, MOT, ABCI Securities

Source(s): NBS, MOT, ABCI Securities

### Railway development in western China in 2016-2020

Railway construction was one of the focuses in the "China Western Development Strategy" that aims to develop the rural regions in western China, Chinese Premier Li Keqiang said at the State Council meeting in July 2013 that China would speed up railway construction in western parts of the country. Currently, the total length of railways in western China (from Lanzhou in Gansu province via Urumqi to Kashgar in Xinjiang and from Lanzhou to Lhasa in Tibet) is 3,790km.

Looking forward, with development and urbanization accelerating in western China, the Chinese government is targeting to build 20,000km of railway tracks to connect provinces and autonomous regions in western China, such as Sichuan and Xinjiang, to central China. We estimate the total construction cost of this railway infrastructure to be RMB 2,500bn. We believe it will be included in the 13<sup>th</sup> Five-Year Plan and will become the growth driver of railway construction industry in the medium term.



### Railway investment target for 2013

In order to expedite railway construction, the State Council increased the investment target for 2013 from RMB 650bn to RMB 690bn in July 2013, with construction of High-Speed Rail (HSR) being the major investment item.

Based on the current pipeline of railway projects, such as Beijing—Shenyang High-Speed Railway (part of the Beijing—Harbin HSR - one of the Four North-South HSR corridors and constituent lines) and Baoji—Lanzhou High-Speed Railway (part of the Xuzhou—Lanzhou HSR - one of the Four East-West HSR corridors and constituent lines), we estimate the total investment in railway infrastructure construction to be RMB 1,792bn in 2013 -2015 while the total FAI of railway transportation will amount to RMB 2,090bn.

With China's rapid urbanization and development in western China, we estimate the total railway FAI will be RMB 3,900bn in 2016-2020, up 17.57% from RMB 3,317bn in 2011-2015. Also, we expect railway construction in western and northern China will be higher than other parts of the country.

### Exhibit 17: China's major railway projects in 2013-2015

Four North-South HSR corridors and constituent lines

Railway	Project	Expected	Total	Estimated
	commence	Completion	Length	Investment
			(km)	(RMB bn)
Beijing-Shenyang 京沈客运专线(北京 - 沈阳)	2013	2016	705	121
Harbin-Dalian 盘营客运专线(盘锦 - 营口)	2009	2013	89	13
Guangzhou-Shenzhen 广深港高速铁路(广深段)	2008	2015	110	17
Hangzhou-Ningbo 杭甬客运专线(杭州 - 宁波)	2009	2013	152	21
Xiamen-Shenzhen 厦深铁路(厦门 - 深圳)	2008	2013	512	60

Four East-West HSR corridors and constituent lines

Railway	Project commence	Expected Completion	Total Length (km)	Estimated Investment (RMB bn)
Jinan-Shijiazhuang 石济客运专线(济南 - 石家庄)	2013	2017	319	44
Zhengzhou-Xuzhou 郑徐客运专线(郑州 - 徐州)	2012	2016	362	48
Baoji-Lanzhou 宝兰客运专线(宝鸡 - 兰州)	2012	2017	401	65
Lichuan-Chongqing 渝利铁路(利川 - 重庆)	2008	2013	264	26
Hangzhou-Changsha 杭长客运专线(杭州 - 长沙)	2009	2014	927	131
Changsha-Kunming 长昆客运专线(长沙 - 昆明)	2010	2014	139	162

Other High-Speed Rail lines

Railway	Project commence	Expected Completion	Total Length (km)	Estimated Investment (RMB bn)
Tianjin-Qinhuangdao 天津秦皇岛高铁(天津 - 秦皇岛)	2008	2013	261	26
Chengdu-Guiyang 成贵高铁 (成都 - 贵阳)	2010	2014	519	52
Guiyang-Guangzhou 贵广高铁(贵阳 - 广州)	2008	2014	857	86
Nanning-Qinzhou 南钦高铁(南宁 - 钦州)	2008	2013	99	10
Qinzhou-Fangchenggang 钦州防城港高铁(钦州 - 防城港)	2009	2013	100	10
Qinzhou-Beihai 钦北高铁(钦州 - 北海)	2009	2013	63	6

(Cont'd)



### (Cont'd)

Intercity High-Speed Rail lines

Intercity High-Speed Rail lines				
Railway	Project commence	Expected Completion	Total Length (km)	Estimated Investment (RMB bn)
Jilin-Hunchun Intercity Railway 吉珲客运专线(吉林- 琿春)	2010	2014	359	42
Nanjing-Hangzhou Intercity Railway 宁杭城际铁路(南京 - 杭州)	2008	2013	251	25
Chengdu-Leshan Intercity Railway 成绵乐客运专线(成都 - 乐山)	2008	2013	319	32
Liuzhou-Nanning Intercity Railway 柳南城际铁路(柳州 - 南宁)	2008	2013	223	22
Hankou-Xiaogan Intercity Railway 汉孝城际铁路(武汉 - 孝感)	2009	2014	61	11
Wuchang-Xianning Intercity Railway 武咸城际铁路(武汉 - 咸宁)	2009	2013	90	10
Wuhan-Huangshi Intercity Railway 武黄城际铁路(武汉- 黄石)	2009	2013	97	15
Wuhan-Huanggang Intercity Railway 武汉黄冈城际铁路(武汉 - 黄冈)	2009	2013	66	7
Zhengzhou–Jiaozuo Intercity Railway 郑焦城际铁路(郑州 - 焦作)	2009	2013	91	9
Zhengzhou-Xuchang Intercity Railway 郑许城际铁路(郑州 - 许昌)	2009	2013	116	12
Zhengzhou-Kaifeng Intercity Railway 郑开城际铁路(郑州 - 开封)	2009	2013	57	6
Changsha—Zhuzhou—Xiangtan Intercity Railway 长株潭城际铁路(长沙 - 株洲 - 湘潭)	2010	2014	98	10
Nanjing-Anging Intercity Railway 宁安城际铁路(南京 - 安庆)	2008	2014	257	23
Harbin-Qigihar Intercity Railway 哈齐客运专线(哈尔滨 - 齐齐哈尔)	2008	2014	286	36
Harbin-Jiamusi Intercity Railway 哈佳城际铁路(哈尔滨 - 佳木斯)	2011	2014	344	41
Harbin-Mudanjiang Intercity Railway 哈牡城际铁路(哈尔滨 - 牡丹江)	2011	2014	334	41
Dongguan—Huizhou Intercity Railway 莞惠城际轨道(东莞 - 惠州)	2009	2014	97	25
Foshan–Zhaoqing Intercity Railway 广佛肇城际轨道(佛山-肇庆)	2009	2014	85	9
Guangzhou-Foshan Intercity Railway 广佛肇城际轨道(佛山 - 广州)	2012	2016	87	10
Qingdao—Rongcheng Intercity Railway 青荣城际铁路(青岛 - 烟台)	2009	2014	299	37
Chengdu-Chongqing Intercity Railway 成渝城际客运专线(成都 - 重庆)	2009	2014	307	31
Chongqing—Wanzhou Intercity Railway 渝万城际铁路(渝北 - 万州)	2009	2016	236	28
Shenyang-Dandong Intercity Railway 沈丹客运专线(沈阳 - 丹东)	2010	2015	224	27
Dandong-Dalian Intercity Railway 丹大高速铁路 (丹东 - 大连)	2010	2015	289	29
Hainan Western Ring Railway 海南西环铁路(海口 - 三亚)	2012	2016	342	34
Beijing—Tangshan Intercity Railway 京唐城际铁路(北京 - 唐山)	2009	2015	160	16
Hangzhou-Huangshan Intercity Railway 黄山至杭州城际(黄山 - 杭州)	2013	2016	282	28
Tianjin - Binhai Intercity Railway 津滨城际铁路(天津 - 滨海新区)	2009	2014	45	11
Fuzhou-Changle Airport 福州至长乐机场铁路(福州 - 长乐机场)	2010	2015	54	5
Longyan-Xiamen 龙厦铁路(龙岩 - 厦门)	2006	2012	171	6
Nanchang – Putian 向莆铁路(南昌 - 莆田)	2007	2012	636	64
Chongqing—Lanzhou 兰州至重庆铁路客运专线(重庆 - 兰州)	2009	2015	832	83
Hengyang-Liuzhou 衡柳铁路(衡阳 - 柳州)	2008	2013	498	50
Zhangjiakou—Hohhot 呼张铁路客运专线(张家口 - 呼和浩特)	2011	2013	286	29
Hefei-Fuzhou 合福客运专线(合肥 - 福州)	2010	2014	806	81
Zhanjiang—Maoming 茂湛铁路(茂名 - 湛江)	2010	2014	103	10
Shenzhen—Maoming 深茂铁路(深圳 - 茂名)	2009	2016	371	37
Nanning—Guangzhou 南广铁路(南宁 - 广州)	2008	2013	571 577	30
	2010	2013	188	18
Jinhua—Wenzhou 金温铁路扩能改造工程(金华 - 温州)  Vian Changly 再代名法本级(两名,代表)	2010		511	71
Xi'an-Chengdu 西成客运专线(西安 - 成都)		2017		
Guiyang-Guangzhou 贵广客运专线(贵阳 - 广州)	2008	2014	862	86
Lanzhou-Ürümqi 兰新铁路第二线(兰州市 - 乌鲁木齐)	2009	2014	1,776	178
Leshan—Guiyang 成贵客运专线(乐山 - 贵阳)	2010	2014	519	52
Datong-Xian 大西客运专线(大同 - 西安)	2009	2014	678	68
Kunming—Nanning 云桂铁路(南宁 - 昆明)	2009	2015	716	90
Chengdu-Kunming 成昆铁路新线(成都 - 昆明)	2007	2014	737	55
Chongqing—Guiyang 渝黔铁路(重庆 - 贵阳)	2010	2015	345	45
Shanghai—Nantong 沪通铁路(上海 - 南通)	2013	2018	249	49
Hangzhou-Huangshan 杭黄客运专线(杭州 - 黄山)	2013	2018	264	37

Total investment amount 2,664 Amount expected to be delivered in 2013-15 1,792

Source(s): Media, China Railway Corporation, ABCI Securities



### Room for further railway development in China

Comparing to most developed countries, the coverage of railway in China is still relatively low. As at end-2011, the railway coverage ratio (total length of track / country area) of the U.S., England, Germany, French and Japan were 23.35km/km², 67.19 km/km², 117.56 km/km², 46.26 km/km² and 62.11 km/km², respectively, compared to China's 9.61 km/km². The room for railway expansion in China is still ample.

Exhibit 18: Railway coverage ratio of China vs. the developed countries in 2011 (km/km²)

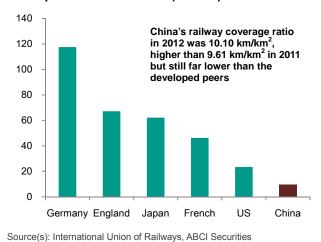
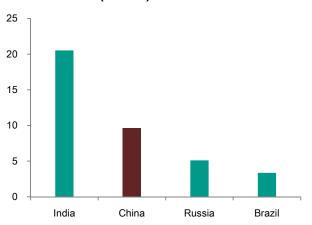


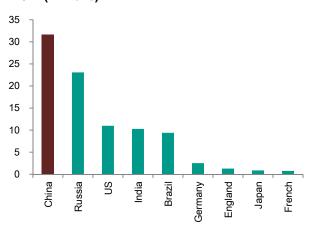
Exhibit 19: Railway coverage ratio of China vs. developing countries in 2011 (km/km²)



Source(s): International Union of Railways, ABCI Securities

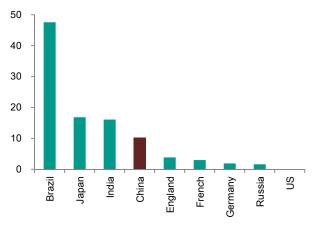
China's average load factors (annual turnover of railway / total length) for freight and passenger in 2011 were 31.60mn tons and 10.31mn person-times, respectively, higher than the ones in developed countries. The average load factor for freight in the US, England, Germany, French and Japan during the same period were 10.98mn tons, 1.30mn tons, 2.52mn tons, 0.77mn tons and 0.87mn tons, respectively. In the same country order, load factors for passenger were 0.08mn person-times, 3.84mn person-times, 1.89mn person-times, 2.97mn person-times and 16.83mn person-times.

Exhibit 20: Load factor for freight in different countries in 2011 (mn tons)



Source(s): International Union of Railways, ABCI Securities

Exhibit 21: Load factor for passenger in different countries in 2011 (mn person-times)



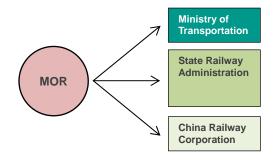
Source(s): International Union of Railways, ABCI Securities



### Formation of China Railway Corporation (CRC)

In order to simplify procedures, the Chinese government has established the China Railway Corporation (CRC) in March 2013 to replace the Ministry of Railway (MOR) as the operator of the state-owned railway lines. Approval for construction projects is administered by the Ministry of Transportation (MOT). Therefore, MOT has become an agency responsible for railway, road, air and water transportation regulations.

Exhibit 22: Reformation of railway system of China



Formulate development strategy on railway system and grant approval for construction projects on railway infrastructure

Newly establish State Railway Administration to:

- 1. Take over the daily administration work of MOR
- 2. Monitor the execution of railway transportation operation and the progress of infrastructure construction

Newly establish China Railway Corporation to operate and manage the railway system.

Source(s): www.gov.cn, ABCI Securities

With the reforms in railway industry and MOT's insufficient experience in railway development, we believe tasks such as project approval and tendering are likely to be delegated to the local levels. For example, the rolling stock tendering in June 2013 was supervised by different local railway bureaus. We believe this would expedite the approval process and will benefit the industry as a whole.

Exhibit 23: Bureaus and companies fully controlled by China Railway Corporation (CRC)

Bureau or Company	Railway Network in Provinces	Region	
Harbin Railway Bureau	Northeastern Inner Mongolia, Heilongjiang		
Shenyang Railway Bureau	Liaoning, Jilin, eastern Inner Mongolia (Hulunbuir), southern Heilongjiang, northeastern Hebei	Northeast China	
Beijing Railway Bureau	Beijing, Hebei, Tianjin, western Shandong, northern Henan, eastern Shanxi		
Hohhot Railway Bureau	Inner Mongolia	Northern China	
Taiyuan Railway Bureau	Shanxi		
Jinan Railway Bureau	Shandong		
Shanghai Railway Bureau	Shanghai, Jiangsu, Anhui, Zhejiang	Eastern China	
Nanchang Railway Bureau	Jiangxi, Fujian, parts of Hubei and Hunan		
Guangzhou Railway Group Co.,Ltd.	Guangdong, Hunan, Hainan		
Wuhan Railway Bureau	Hubei, southern Henan	South-central	
Zhengzhou Railway Bureau	Henan, Shanxi	China	
Nanning Railway Bureau	Guangxi, eastern Guangdong		
Chengdu Railway Bureau	Sichuan, Chongqing, Guizhou, parts of Yunnan and Hubei		
Kunming Railway Bureau	Yunnan, parts of Sichuan and Guizhou	Southwest China	
Qinghai-Tibet Railway Group Co., Ltd.	Qinghai, Tibet		
Lanzhou Railway Bureau	Gansu, Ningxia, parts of Inner Mongolia		
Ürümqi Railway Bureau	Xinjiang, parts of Gansu	Northwest China	
Xi'an Railway Bureau	Shaanxi, Sichuan		



### China Railway Corporation faces funding issues

Project funding has always been the major challenge for railway construction. The weak operating cash flow in CRC means that it would need to rely on debts to fund its projects.

CRC has inherited the financial obligations of MOR. As at June 2013, CRC's total debt was RMB 2,438bn; its debt-to-equity ratio was 139.72%; the net debt-to-equity ratio was 130.35%. In order to support the ongoing construction projects and rolling stock purchases, NRDC approved CRC to issue RMB 150bn in bonds back in July 2013. From July to October 2013, CRC has issued five batches of bonds totaling RMB 100bn with an interest rate of SHIBOR to SHIBOR + 1.20%.

Exhibit 24: Key financial data of China Railway Corporation (or former MOR)

410,275	4E2 244							1H13
	452,241	517,093	535,296	665,123	796,258	938,569	447,621	477,941
177,973	195,880	208,810	223,202	265,120	289,506	300,001	147,446	161,625
72,794	82,393	92,996	109,047	134,491	160,697	177,131	85,369	100,134
35,562	38,794	41,770	46,025	49,469	53,758	53,381	26,564	27,095
123,946	135,174	173,517	157,022	216,043	292,297	408,056	188,242	189,087
6,602	10,575	13,509	15,292	25,030	36,935	45,630	13,221	15,455
36,205	40,996	45,454	54,600	70,475	85,605	92,277	44,902	51,695
3,228	8,720	(12,951)	2,743	15	31	196	(8,810)	(6,500)
16,047	24,568	4,619	21,788	30,474	43,449	52,069	7,373	12,104
52,252	65,564	50,073	76,388	100,949	129,054	144,346	52,275	63,799
1 502 358	1 552 290	1 855 315	2 456 639	3 293 738	3 979 637	4 487 700	4 134 933	4,663,159
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18,334	27,366	57,352	88,206	130,893	118,102	69,643	83,651	75,055
388,462	412,714	548,314	854,816	1,310,560	1,825,622	2,212,686	1,992,394	2,362,978
862,281	893,584	986,920	1,153,253	1,401,937	1,566,962	1,695,138	1,609,249	1,744,944
47 18	49 25	61.37	81 77	102 82	124 04	134 64	129 01	139.72
_								130.35
								4.13
_	35,562 123,946 6,602 36,205 3,228 16,047 52,252 1,502,358 88,238 1,240,253 362,649 640,077 18,334 388,462	35,562 38,794 123,946 135,174 6,602 10,575 36,205 40,996 3,228 8,720 16,047 24,568 52,252 65,564  1,502,358 1,552,290 88,238 83,310 1,240,253 1,321,852 362,649 386,054 640,077 658,706 18,334 27,366 388,462 412,714 862,281 893,584  47.18 49.25 36.94 39.93	35,562 38,794 41,770 123,946 135,174 173,517 6,602 10,575 13,509 36,205 40,996 45,454 3,228 8,720 (12,951) 16,047 24,568 4,619 52,252 65,564 50,073  1,502,358 1,552,290 1,855,315 88,238 83,310 59,177 1,240,253 1,321,852 1,621,385 362,649 386,054 600,903 640,077 658,706 868,395  18,334 27,366 57,352 388,462 412,714 548,314 862,281 893,584 986,920  47.18 49.25 61.37 36.94 39.93 55.37	35,562         38,794         41,770         46,025           123,946         135,174         173,517         157,022           6,602         10,575         13,509         15,292           36,205         40,996         45,454         54,600           3,228         8,720         (12,951)         2,743           16,047         24,568         4,619         21,788           52,252         65,564         50,073         76,388           1,502,358         1,552,290         1,855,315         2,456,639           88,238         83,310         59,177         59,806           1,240,253         1,321,852         1,621,385         2,199,557           362,649         386,054         600,903         842,230           640,077         658,706         868,395         1,303,386           18,334         27,366         57,352         88,206           388,462         412,714         548,314         854,816           862,281         893,584         986,920         1,153,253           47.18         49.25         61.37         81.77           36.94         39.93         55.37         76.58	35,562         38,794         41,770         46,025         49,469           123,946         135,174         173,517         157,022         216,043           6,602         10,575         13,509         15,292         25,030           36,205         40,996         45,454         54,600         70,475           3,228         8,720         (12,951)         2,743         15           16,047         24,568         4,619         21,788         30,474           52,252         65,564         50,073         76,388         100,949           1,502,358         1,552,290         1,855,315         2,456,639         3,293,738           88,238         83,310         59,177         59,806         95,291           1,240,253         1,321,852         1,621,385         2,199,557         2,937,442           362,649         386,054         600,903         842,230         1,278,203           640,077         658,706         868,395         1,303,386         1,891,801           18,334         27,366         57,352         88,206         130,893           388,462         412,714         548,314         854,816         1,310,560           862,281 <td< td=""><td>35,562         38,794         41,770         46,025         49,469         53,758           123,946         135,174         173,517         157,022         216,043         292,297           6,602         10,575         13,509         15,292         25,030         36,935           36,205         40,996         45,454         54,600         70,475         85,605           3,228         8,720         (12,951)         2,743         15         31           16,047         24,568         4,619         21,788         30,474         43,449           52,252         65,564         50,073         76,388         100,949         129,054           1,502,358         1,552,290         1,855,315         2,456,639         3,293,738         3,979,637           88,238         83,310         59,177         59,806         95,291         200,146           1,240,253         1,321,852         1,621,385         2,199,557         2,937,442         3,479,008           362,649         386,054         600,903         842,230         1,278,203         1,345,935           640,077         658,706         868,395         1,303,386         1,891,801         2,412,675           18,334</td><td>35,562         38,794         41,770         46,025         49,469         53,758         53,381           123,946         135,174         173,517         157,022         216,043         292,297         408,056           6,602         10,575         13,509         15,292         25,030         36,935         45,630           36,205         40,996         45,454         54,600         70,475         85,605         92,277           3,228         8,720         (12,951)         2,743         15         31         196           16,047         24,568         4,619         21,788         30,474         43,449         52,069           52,252         65,564         50,073         76,388         100,949         129,054         144,346           1,502,358         1,552,290         1,855,315         2,456,639         3,293,738         3,979,637         4,487,700           88,238         83,310         59,177         59,806         95,291         200,146         168,086           1,240,253         1,321,852         1,621,385         2,199,557         2,937,442         3,479,008         3,945,233           362,649         386,054         600,903         842,230         1,278,203</td></td<> <td>35,562         38,794         41,770         46,025         49,469         53,758         53,381         26,564           123,946         135,174         173,517         157,022         216,043         292,297         408,056         188,242           6,602         10,575         13,509         15,292         25,030         36,935         45,630         13,221           36,205         40,996         45,454         54,600         70,475         85,605         92,277         44,902           3,228         8,720         (12,951)         2,743         15         31         196         (8,810)           16,047         24,568         4,619         21,788         30,474         43,449         52,069         7,373           52,252         65,564         50,073         76,388         100,949         129,054         144,346         52,275           1,502,358         1,552,290         1,855,315         2,456,639         3,293,738         3,979,637         4,487,700         4,134,933           88,238         83,310         59,177         59,806         95,291         200,146         168,086         176,568           1,240,253         1,321,852         1,621,385         2,199,557</td>	35,562         38,794         41,770         46,025         49,469         53,758           123,946         135,174         173,517         157,022         216,043         292,297           6,602         10,575         13,509         15,292         25,030         36,935           36,205         40,996         45,454         54,600         70,475         85,605           3,228         8,720         (12,951)         2,743         15         31           16,047         24,568         4,619         21,788         30,474         43,449           52,252         65,564         50,073         76,388         100,949         129,054           1,502,358         1,552,290         1,855,315         2,456,639         3,293,738         3,979,637           88,238         83,310         59,177         59,806         95,291         200,146           1,240,253         1,321,852         1,621,385         2,199,557         2,937,442         3,479,008           362,649         386,054         600,903         842,230         1,278,203         1,345,935           640,077         658,706         868,395         1,303,386         1,891,801         2,412,675           18,334	35,562         38,794         41,770         46,025         49,469         53,758         53,381           123,946         135,174         173,517         157,022         216,043         292,297         408,056           6,602         10,575         13,509         15,292         25,030         36,935         45,630           36,205         40,996         45,454         54,600         70,475         85,605         92,277           3,228         8,720         (12,951)         2,743         15         31         196           16,047         24,568         4,619         21,788         30,474         43,449         52,069           52,252         65,564         50,073         76,388         100,949         129,054         144,346           1,502,358         1,552,290         1,855,315         2,456,639         3,293,738         3,979,637         4,487,700           88,238         83,310         59,177         59,806         95,291         200,146         168,086           1,240,253         1,321,852         1,621,385         2,199,557         2,937,442         3,479,008         3,945,233           362,649         386,054         600,903         842,230         1,278,203	35,562         38,794         41,770         46,025         49,469         53,758         53,381         26,564           123,946         135,174         173,517         157,022         216,043         292,297         408,056         188,242           6,602         10,575         13,509         15,292         25,030         36,935         45,630         13,221           36,205         40,996         45,454         54,600         70,475         85,605         92,277         44,902           3,228         8,720         (12,951)         2,743         15         31         196         (8,810)           16,047         24,568         4,619         21,788         30,474         43,449         52,069         7,373           52,252         65,564         50,073         76,388         100,949         129,054         144,346         52,275           1,502,358         1,552,290         1,855,315         2,456,639         3,293,738         3,979,637         4,487,700         4,134,933           88,238         83,310         59,177         59,806         95,291         200,146         168,086         176,568           1,240,253         1,321,852         1,621,385         2,199,557

Source(s): China Railway Corporation

In the short to medium term, we believe CRC will rely on debt financing to support its ongoing projects. The interest coverage ratio (EBITDA / Interest cost) was 3.16x in FY12 (1H13: 4.13x). With its state-owned background and the government's subsidy for its operating income, we believe the existing projects will be delivered promptly as scheduled in the 12<sup>th</sup> Five-Year Plan.

In the long term, we expect the construction and operation of railway in China will be marketized. In this way, CRC would be able to tap into new funding sources and raise transportation fees to support daily operation and repay loans.

On the other hand, funding from private sector will be introduced. Funding from private sector can reduce the financial burden of government and increase public monitoring of CRC, reducing the likelihood of resource misallocation and corruption- the two major problems of the former MOR.

In summary, we expect growth in railway construction will be impeded by the high debt and recent reformation of railway authority in the short term. Marketization of railway operation, however, will benefit the industry development significantly in the long run by expanding funding and income sources and increased public monitoring of CRC.

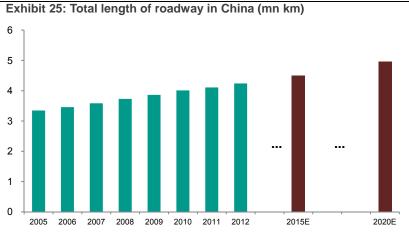


### **Roadway Transportation**

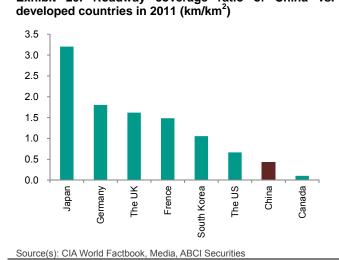
- Deteriorating profitability and asset return ratio of toll road operators impede CAPEX growth in the short run
- We estimate total investment in roadway industry to be RMB 2,575bn, or grow at 0.83% CAGR over 2013-15
- Looking forward, in order to develop the rural area in the western and northeast China, we expect the roadway construction in the regions will remain a priority in the 13<sup>th</sup> Five-Year Plan

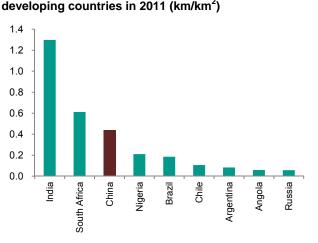
Roadway travel is the primary means of transportation in China that accounted for 56.90% and 34.91% of passenger and freight transportation turnovers, respectively, in 2012. The freight turnover for roadway transportation was 5,910bn ton-km in 2012; for railway, the freight turnover was 2,919bn ton-km.

Development of roadway network is relatively mature in China, and we expect the growth to moderate in the future on high base effect. For the same reason, new construction for roadway development will also be lower than that of the urban rail. Based on the economic growth projection and construction targets established by the provincial governments in 2013, we estimate the total length of roadway will increase to 4.50mn km by 2015 and further to 4.95mn km by 2020. Total investment for roadway construction will increase 14.78% to RMB 7,291mn in the 13<sup>th</sup> Five-Year Plan, from the estimated RMB 6,352bn in the 12th Five-Year Plan.



Source(s): MOT, ABCI Securities estimates Exhibit 26: Roadway coverage ratio of China vs. Exhibit 27: Roadway coverage ratio in China vs.

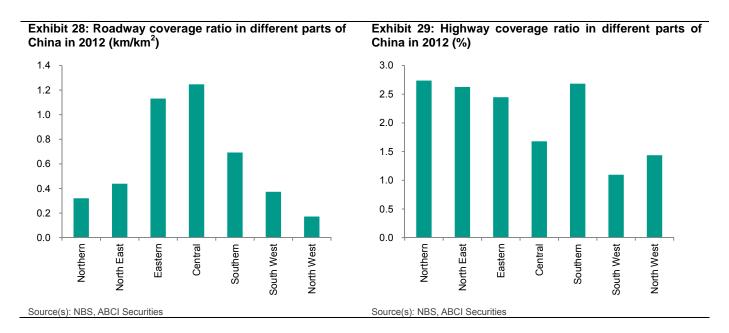




Source(s): CIA World Factbook, Media, ABCI Securities

Roadway coverage ratio (the total length of roadway / country area) in China was 0.44 km/km², lower than that of the US (0.67 km/km²) and Japan (3.20 km/km²). China, as a developing country, has yet to expand its roadway transportation network. Geographically, the roadway coverage ratios in northern and northwest China are the lowest at 0.32 km/km² and 0.17 km/km², respectively, as of end-2012. The roadway coverage ratios are also relatively low in the western and northern China.

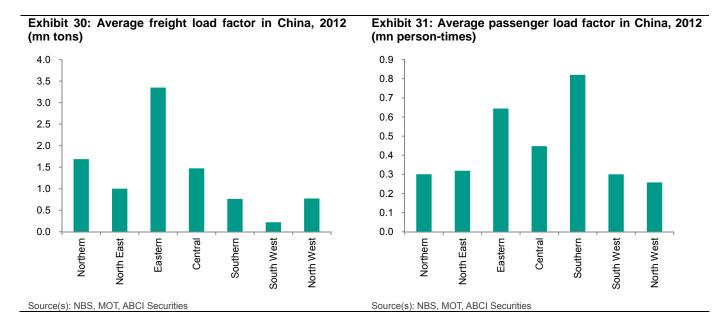
The highway ratio (length of highway / total length of roadway) in China was 2.27% as of end-2012, lower than that of the developed countries such as the U.S. (3.90%) and Canada (3.65%). Geographically, the highway ratio in southwest and northwest area is relatively lower than other parts of China. The highway ratios in southwest and northwest China were 1.01% and 1.44%, respectively, as of end-2012.



Passenger turnover of roadway increased from 0.66bn person-times in 2000 to 1.85bn person-times in 2012; freight turnover of roadway increased from 0.60bn tons in 2000 to and 5.99bn tons in 2012. The total passenger load factor (passenger turnover / total length of roadway) increased from 0.39mn person-times in 2000 to 0.44mn person-times in 2012. The total freight loading factor (freight turnover / total length of roadway) increased from 0.36mn tons in 2000 to 1.42mn tons in 2012.

Eastern China has the highest freight loading due to the high concentration of ports in the region. The freight load factor of the region was 3.35mn tons in 2012, higher than the average loading in China. Southern China has the highest passenger loading with a load factor at 0.82mn person-times.

Looking forward, growth in roadway infrastructure investment in eastern, southern and central parts of China will be rather limited, as the roadway networks in these regions have already been well established. Coverage ratios are higher in these regions than other parts of China.



Based on the direction of China's environmental policy, we expect the country's dependency of coal will gradually decrease, reducing the demand for freight transportation in northern China in the mid-to-long run. Thus, we expect roadway infrastructure investment growth in northern China will slow. On the other hand, In order to accelerate development in western and northeast China, we expect roadway construction in these regions will stay strong and will be emphasized in the 13<sup>th</sup> Five-Year Plan.

Exhibit 32: Total roadway investment breakdown by district in China

	Total roadway investment in 2006-10	Total roadway investment in 2011-15E	Growth	Total roadway investment in 2016-20E	Growth
	(RMB bn)	(RMB bn)	(%)	(RMB bn)	(%)
Northern	646	1,065	64.97	1,206	13.25
Northeast	335	390	16.61	486	24.50
Eastern	1,042	1,409	35.18	1,513	7.39
Central	571	903	58.16	1,006	11.42
Southern	387	620	60.36	710	14.39
Southwest	702	1,286	83.24	1,576	22.48
Northwest	393	677	64.15	794	17.25
Total	4,075	6,352	55.86	7,291	14.78

Source(s): MOT, ABCI Securities estimates

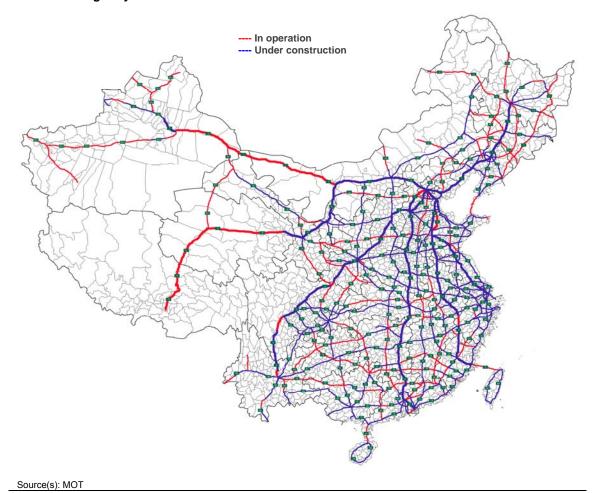


### State-owned roadway development

As of end-2012, total lengths of state-owned (developed by China's central government) roadway and highway were 173,000 km and 68,000 km, respectively, representing 4.08% of total roadway length and 70.69% of total highway length in China.

In order to support economic growth, The State Council initiated a long-term development strategy in 2004 concerning highway construction in the next 30 years. The State Council Information Office, the chief information officer of the Chinese government, reinforced the importance of the roadway construction in June 2013. It was explicitly expressed in the press conference that in order to effectively utilize the highway network, more highway ramps will be needed. Average traffic transition time for highway should be 30min, 60min and 120min for eastern, central and western China. In order to achieve these targets, we expect the overall national roadway network (including the highway) will be 400,000km by 2030. We expect that 50,000 km of highway and 295,000 km of non-highway roads will be built by the Chinese government. Total investment in highway network by the government will be RMB 4,700bn in 2013-2030.

Exhibit 33: Highway network in China





### **Deteriorating margins of toll road operators**

Although the roadway development will be steady in the long run, we expect roadway construction will only increase moderately in the short to medium term because of deteriorating margins in the toll road industry. Average GPM of toll road operators dropped from 57.09% in 2005-10 to 51.07% in 2010-12, while average net income margin dropped from 37.44% in 2005-10 to 31.50% in 2010-12.

With the exemption of toll charges for passenger vehicles during major festivals and holidays in China, we believe profit margins of the toll road operators are unlikely to recover in the short term.

Exhibit 34: Profitability of major listed toll road operators

		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2005-10	FY 2010-12
Guangdong Expressway (000429 CH)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)	<b>979</b> 70.06 28.88	<b>1,032</b> 63.62 33.32	<b>1,077</b> 68.64 45.85	<b>906</b> 60.62 44.68	<b>905</b> 47.14 36.67	<b>967</b> 46.39 40.18	<b>1,038</b> 39.39 20.88	<b>1,065</b> 39.04 16.51	(0.24) 59.41 38.26	4.95 41.61 25.86
Dongguan Development (000828 CH)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)	<b>447</b> 65.78 50.13	<b>464</b> 60.02 42.96	<b>476</b> 63.24 43.07	<b>416</b> 60.72 44.33	<b>450</b> 59.81 64.55	<b>615</b> 58.78 57.25	<b>694</b> 61.92 51.12	<b>711</b> 64.95 49.94	6.58 61.39 50.38	7.54 61.89 52.77
Xiandai Investment (000900 CH)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)	<b>1,016</b> 78.49 17.64	<b>1,089</b> 78.47 26.44	<b>1,537</b> 82.03 38.39	<b>1,463</b> 60.51 39.04	<b>1,702</b> 64.81 37.13	<b>1,765</b> 66.73 44.63	<b>1,882</b> 62.09 43.68	<b>1,626</b> 63.03 39.86	11.67 71.84 33.88	(4.02) 63.95 42.72
Huabei Expressway (000916 CH)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)	<b>703</b> 52.99 34.35	<b>763</b> 52.86 34.67	<b>774</b> 59.49 40.30	<b>778</b> 43.30 32.39	<b>791</b> 45.14 36.66	<b>918</b> 38.59 26.42	<b>689</b> 49.44 36.02	<b>610</b> 41.70 33.22	5.48 48.73 34.13	(18.49) 43.24 31.89
Henan Zhongyuan Exp (600020 CH)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)	<b>1,467</b> 67.75 37.77	<b>1,583</b> 62.04 35.73	<b>1,778</b> 59.21 33.19	<b>1,788</b> 52.26 14.42	<b>2,002</b> 61.61 22.22	<b>2,285</b> 63.87 23.04	<b>2,531</b> 54.57 11.76	<b>3,740</b> 50.52 13.90	9.27 61.12 27.73	27.94 56.32 16.23
Hubei Chutian Exp (600035 CH)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)	<b>492</b> 33.45 18.54	<b>600</b> 71.14 43.56	<b>701</b> 66.50 38.25	<b>691</b> 64.22 43.66	<b>744</b> 60.63 40.21	<b>933</b> 62.37 42.86	<b>916</b> 60.28 32.26	<b>921</b> 60.98 21.21	13.65 59.72 37.85	(0.64) 61.21 32.11
Shandong Hi-speed (600350 CH)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)	<b>2,529</b> 46.49 27.11	<b>2,463</b> 61.66 36.89	<b>3,057</b> 60.59 38.09	<b>3,556</b> 56.80 34.90	<b>3,565</b> 52.28 29.52	<b>5,397</b> 53.46 32.84	<b>5,758</b> 55.92 34.35	<b>5,026</b> 62.41 39.25	16.37 55.21 33.23	(3.50) 57.26 35.48
Jilin Expressway (601518 CH)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)						<b>561</b> 34.66 24.40	<b>783</b> 46.12 27.38	<b>736</b> 71.35 39.06		14.51 50.71 30.28
Yuexiu Transport (1052 HK)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)	<b>448</b> 53.18 72.00	<b>460</b> 54.79 102.81	<b>849</b> 57.41 56.49	<b>906</b> 65.58 59.89	<b>1,001</b> 60.62 38.21	<b>1,253</b> 61.61 42.67	<b>1,322</b> 67.06 42.22	<b>1,485</b> 66.20 28.74	22.86 58.86 62.01	8.89 64.96 37.88
Zhejiang Expressway (576 HK)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)	<b>3,456</b> 65.41 41.41	<b>4,764</b> 56.41 34.70	<b>7,030</b> 56.06 34.36	<b>6,323</b> 50.45 29.93	<b>6,036</b> 47.89 29.74	<b>6,769</b> 44.45 27.65	<b>6,781</b> 39.87 26.62	<b>6,700</b> 34.78 25.17	14.39 53.45 32.97	(0.51) 39.70 26.48
Shenzhen Expressway (548 HK / 600548 CH)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)	<b>911</b> 79.04 60.63	<b>769</b> 72.71 75.28	<b>3,846</b> 18.70 16.18	<b>4,242</b> 13.70 11.86	<b>2,475</b> 27.76 21.82	<b>3,042</b> 36.95 24.52	<b>2,846</b> 58.45 30.75	<b>3,022</b> 50.01 22.65	27.26 41.48 35.05	(0.33) 48.47 25.97
Sichuan Expressway (107 HK / 601107 CH)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)	<b>953</b> 64.11 26.03	<b>1,076</b> 49.02 28.85	<b>1,317</b> 70.99 37.61	<b>1,610</b> 69.64 36.74	<b>2,415</b> 48.06 34.26	<b>4,305</b> 34.51 26.60	<b>6,237</b> 27.72 20.91	<b>7,184</b> 22.80 16.44	35.20 56.06 31.68	29.17 28.34 21.32
Anhui Expressway (995 HK / 600012 CH)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)	<b>1,495</b> 72.60 45.90	<b>1,604</b> 71.26 50.83	<b>2,481</b> 48.88 21.90	<b>1,630</b> 69.85 42.54	<b>2,529</b> 45.92 26.39	<b>2,553</b> 51.91 30.91	<b>3,052</b> 47.49 28.22	<b>3,122</b> 41.76 24.09	11.30 60.07 36.41	10.60 47.05 27.74
Jiangsu Expressway (177 HK / 600377 CH)	Revenue (RMB mn) Gross profit margin (%) Net income margin (%)	<b>2,111</b> 54.38 31.65	<b>3,980</b> 56.92 28.64	<b>5,069</b> 57.07 32.40	<b>5,134</b> 51.31 31.01	<b>5,587</b> 54.97 36.73	<b>6,578</b> 54.74 38.46	<b>7,215</b> 49.61 33.68	<b>7,587</b> 46.56 30.76	25.52 54.90 33.15	7.40 50.30 34.30
Average	Growth of revenue (%) Gross profit margin (%) Net income margin (%)	N/A 61.83 37.85	21.40 62.38 44.21	45.26 59.14 36.62	(1.83) 55.30 35.80	2.58 52.05 34.93	23.76 50.64 34.46	10.03 51.42 31.42	4.29 51.15 28.63	15.33 57.09 37.44	5.96 51.07 31.50

Source(s): Bloomberg, ABCI Securities

Both income and utilization of new toll roads are low due to the weakening economic growth in China. Breakeven and payback periods of BOT roadway construction projects become longer. The asset return ratios of toll road operators are reducing. Average ROAA dropped from 7.04% in 2006-10 to 6.21% in 2010-12., while average ROAE also dropped from 11.37% in 2006-10 to 10.76% in 2010-12.

The low utilization and long breakeven periods deter operators from investing further in toll road infrastructure. Looking forward, with the global economy recovering, we expect utilization of roadway will increase gradually, driving up income and hence investment in the longer term.

Exhibit 35: Asset returns of major listed toll road operators

		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2006-10	FY 2010-12
Guangdong Expressway	<b>ROAA (%)</b>	5.48	8.45	6.20	4.10	4.00	1.94	1.41	5.65	2.45
(000429 CH)	ROAE (%)	10.33	15.50	12.06	9.50	9.86	5.16	4.19	11.45	6.40
Dongguan Development	<b>ROAA (%)</b>	6.02	6.02	4.66	6.53	7.89	7.72	7.09	6.22	7.57
(000828 CH)	ROAE (%)	7.81	7.88	6.95	10.58	12.06	11.46	10.83	9.06	11.45
Xiandai Investment	<b>ROAA (%)</b>	5.17	10.76	11.34	11.70	12.99	9.22	5.62	10.39	9.28
(000900 CH)	ROAE (%)	10.77	20.22	17.50	17.80	19.55	15.59	10.98	17.17	15.37
Huabei Expressway	<b>ROAA (%)</b>	8.07	8.44	6.62	7.49	5.81	6.04	4.86	7.29	5.57
(000916 CH)	ROAE (%)	8.50	9.07	7.06	7.97	6.25	6.45	5.23	7.77	5.98
Henan Zhongyuan Exp	<b>ROAA (%)</b>	6.21	4.17	1.44	2.17	2.09	1.01	1.69	3.22	1.60
(600020 CH)	ROAE (%)	12.81	11.95	4.83	7.91	8.74	4.73	7.91	9.25	7.13
Hubei Chutian Exp	<b>ROAA (%)</b>	8.40	8.88	10.19	8.90	8.20	3.80	1.83	8.92	4.61
(600035 CH)	ROAE (%)	12.11	11.88	12.52	11.61	14.14	9.53	5.97	12.45	9.88
Shandong Hi-speed	<b>ROAA (%)</b>	9.42	10.59	9.57	7.47	10.30	9.04	7.24	9.47	8.86
(600350 CH)	ROAE (%)	12.29	14.66	14.44	11.54	14.67	12.68	11.60	13.52	12.98
Jilin Expressway (601518 CH)	<b>ROAA (%)</b> ROAE (%)						8.33 12.37	9.07 14.80		8.70 13.58
Yuexiu Transport	<b>ROAA (%)</b>	9.67	6.17	5.09	3.35	4.11	3.72	2.45	5.68	3.43
(1052 HK)	ROAE (%)	11.68	8.42	7.43	5.09	6.93	7.09	5.33	7.91	6.45
Zhejiang Expressway	<b>ROAA (%)</b>	9.21	10.26	7.17	6.22	5.67	5.75	5.76	7.71	5.72
(576 HK)	ROAE (%)	14.32	19.24	14.07	12.89	12.95	12.08	10.99	14.69	12.00
Shenzhen Expressway	<b>ROAA (%)</b>	5.80	5.06	3.05	2.67	3.32	3.70	2.80	3.98	3.28
(548 HK / 600548 CH)	ROAE (%)	8.95	9.22	7.22	7.08	8.82	9.78	7.31	8.26	8.64
Sichuan Expressway	<b>ROAA (%)</b>	4.07	6.54	6.78	8.10	10.18	9.10	6.54	7.13	8.61
(107 HK / 601107 CH)	ROAE (%)	6.22	9.69	10.27	12.16	14.63	14.77	12.05	10.59	13.81
Anhui Expressway	<b>ROAA (%)</b>	11.14	7.57	8.59	7.29	8.19	8.56	6.83	8.56	7.86
(995 HK / 600012 CH)	ROAE (%)	16.07	11.66	14.15	12.81	13.98	13.96	11.48	13.73	13.14
Jiangsu Expressway	<b>ROAA (%)</b>	4.36	6.44	6.63	8.61	10.57	9.91	9.11	7.32	9.86
(177 HK / 600377 CH)	ROAE (%)	8.06	11.17	10.99	13.64	15.92	14.10	12.67	11.96	14.23
Average	ROAA (%)	7.16	7.64	6.72	6.51	7.18	6.28	5.16	7.04	6.21
	ROAE (%)	10.76	12.35	10.73	10.81	12.19	10.70	9.38	11.37	10.76

Source(s): Bloomberg, ABCI Securities

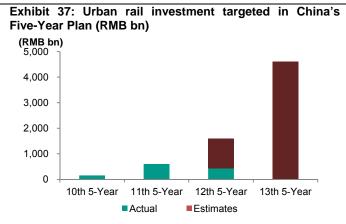


### **Urban Rail Transportation**

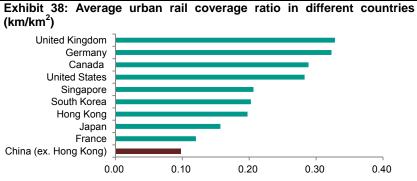
- Growth in urban rail investment remains strong in 2014-15 based on existing construction pipeline and development plan of NDRC
- We estimate total investment in urban rail industry to be RMB 891bn, or grow at 37.97% CAGR over 2013-15
- Urban rail development will be the growth driver of the transport infrastructure construction industry
- Comparing with developed country, the coverage ratio of urban rail in China is lagging. Under the government's initiatives to develop intra-city mass transportation, we expect the investment growth to accelerate in the mid to long run

Urban rail will become the growth driver of the transport infrastructure construction industry, especially since the railway and roadway sectors are expected to slow in the coming years. According to Ministry of Housing and Urban-Rural Development (MOHURD), the total urban rail investment surged significantly from RMB 157bn in the 10th Five-Year Plan (2001-05) to RMB 602bn in the 11th Five-Year Plan (2006-10). Based on the existing construction pipeline, we estimate investment will increase further to RMB 1,607bn in 12<sup>th</sup> Five-Year Plan (2011-15). Taking into account the approved projects by NDRC that are expected to commence by 2015 and the development plans of cities, we estimate the total investment in urban rail will soar to RMB 4,599bn in the 13<sup>th</sup> Five-Year Plan (2016-20). In terms of scale, China's urban rail transportation system lagged behind those in the developed cities. The average coverage ratio of urban rail (the length of the urban rail / urban area of the city) in China's major cities, including Shanghai, Beijing, Guangzhou, Shenzhen, Chongqing, Wuhan, and Nanjing, was 0.098km/km², lower than that in Hong Kong (0.197km/km<sup>2</sup>), the U.S. (0.283km/km<sup>2</sup>) and Japan (0.157km/km<sup>2</sup>), respectively.





Source(s): MOHURD, ABCI Securities estimates



Source(s): ABCI Securities, Statistic bureau of U.K./Cermany/Canada/U.S./Singapore/South Korea/Hong Kong/Japan/France/China

Exhibit 39: Details of main urban rail system(s) in the world's major cities

		Year of Operation	Number of Stations	Length (km)	Coverage ratio (km/km²)
United Kingdom				(KIII)	(KIII/KIII )
Glasgow	Glasgow Subway	1896	15	10.4	0.13
London	London Underground, Docklands Light Railway	1863	315	436	0.28
Newcastle/Sunderland	Tyne & Wear Metro	1980	60	77.7	0.58
Germany					
Berlin	Berlin U-Bahn, Berlin S-Bahn	1902	339	478	0.54
Frankfurt	Frankfurt U-Bahn	1968	85	58.6	0.24
Hamburg	Hamburg U-Bahn, Hamburg S-Bahn	1908	157	244.7	0.32
Munich	Munich U-Bahn	1971	100	103.1	0.33
Nuremberg	Nuremberg U-Bahn	1972	44	34.6	0.19
Canada					
Montreal	Montreal Metro	1966	68	69.2	0.16
Toronto	Toronto Subway and RT	1954	69	68.3	0.11
Vancouver	SkyTrain	1985	47	68.7	0.60
United States					
Atlanta	MARTA	1979	38	77	0.22
Baltimore	Metro Subway	1983	14	24.5	0.10
Boston	MBTA	1897	51	61	0.26
Chicago	Chicago 'L'	1897	145	173	0.29
Cleveland	RTA Rapid Transit	1955	18	31	0.14
Los Angeles	Los Angeles County Metro Rail	1993	16	28	0.02
Miami	Metrorail	1984	23	40.1	0.28
New York	New York City Subway, Staten Island Railway	1868	503	381.7	0.31
New York City/New Jersey	PATH	1908	13	22.2	0.01
Philadelphia	SEPTA, PATCO Speedline	1907	66	61.4	0.23
San Francisco Bay Area	BART	1972	44	167	0.28
Washington, D.C.	Washington Metro	1976	86	171	0.97
Singapore	Mass Rapid Transit	1987	89	146.5	0.21
South Korea					
Busan	Busan Subway	1985	128	130.2	0.17
Daegu	Daegu Subway	1997	59	57.3	0.06
Daejeon	Daejeon Subway	2006	22	22.7	0.04
Gwangju	Gwangju Subway	2004	20	20.1	0.04
Incheon	Incheon Subway	1999	29	29.4	0.03
Seoul	Seoul Metropolitan Subway	1974	397	526.3	0.87
Hong Kong	Mass Transit Railway (MTR)	1979	152	218	0.20
Japan					
Fukuoka	Fukuoka City Subway	1981	35	29.8	0.09
Kobe	Kobe Rapid Railway, Kobe Municipal Subway, Kyoto	1968	35	38.2	0.07
	Municipal Subway				
Nagoya	Nagoya Municipal Subway	1957	83	89.1	0.27
Osaka	Osaka Municipal Subway	1933	101	137.8	0.62
Sapporo	Sapporo Municipal Subway	1971	46	48	0.04
Sendai	Sendai Subway	1987	17	14.8	0.02
Tokyo	Tokyo Metro, Toei Subway, Tokyo Waterfront Area Rapid Transit	1925	322	363.3	0.17
Yokohama	Yokohama Municipal Subway, Minatomirai Line	1972	38	44.5	0.10
France					
Lille	Lille Metro	1983	60	45.2	0.10
Lyon	Lyon Metro	1978	42	30.5	0.03
Marseille	Marseille Metro	1977	30	22	0.09
Paris	Paris Métro	1900	303	219.9	0.08
	Rennes Metro	2002	15	9.4	0.19
Rennes					

Source(s): Companies, ABCI Securities

Exhibit 40: Details of main urban rail system(s) in China's major cities (ex. Hong Kong)

		Year of Opening	Number of Stations	Length	Coverage ratio
		Opening	Otations	(km)	(km <sup>-1</sup> )
China (ex. Hong Kon	ig)			,	•
Beijing `	Beijing Subway	1971	270	456	0.03
Chengdu	Chengdu Metro	2010	42	49.7	0.00
Chongging	Chongging Rail Transit	2005	35	67.7	0.00
Dalian	Dalian Metro	2003	20	63	0.01
Foshan	F-metro	2010	14	20.4	0.13
Guangzhou	Guangzhou Metro	1997	120	215	0.06
Hangzhou	Hangzhou Metro	2012	31	48	0.01
Kunming	Kunming Rail Transit	2012	14	40.1	0.02
Nanjing	Nanjing Metro	2005	58	87	0.01
Shanghai	Shanghai Metro	1995	288	439	0.07
Shenyang	Shenyang Metro	2010	41	49.7	0.01
Shenzhen	Shenzhen Metro	2004	137	178.4	0.43
Suzhou	Suzhou Rail Transit	2012	24	25.7	0.01
Tianjin	Tianjin Metro	1984	76	128.6	0.73
Wuhan	Wuhan Metro	2004	46	56.85	0.01
Xi'an	Xi'an Metro	2011	17	20.5	0.02

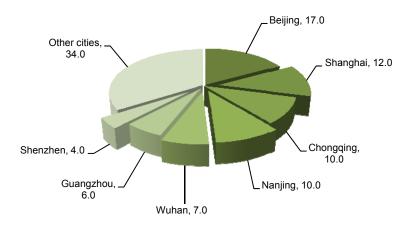
Source(s): Companies, ABCI Securities

Comparing to the more developed countries and Hong Kong, China's urban rail development has a late start. Most urban rail systems in China commenced operation after 2000, while those in the developed regions started operating in 1970-80s or as early as a century ago. To support economic growth in the first and second tier cities, as well as rapid urbanization in the lower tier ones, China would need to expand its urban rail network to meet the rising transportation demand.

### Development plans in major cities

We estimate the total investment in urban rail transportation of the seven major cities, namely Shanghai, Beijing, Guangzhou, Shenzhen, Chongqing, Wuhan and Nanjing, to be RMB 815bn in 2011-2015 (total investment in 2011 to 2012 was RMB 287bn), accounting for 50.72% of total investment in China during the period. We estimate the total investment in the seven cities will soar 55.95% to RMB 1,271bn in 2016-2020 based on existing projects and projects in plan.

Exhibit 41: Urban Rail Investment breakdown by cities, 2012 (%)



Source(s): ABCI Securities estimates



### Urban rail transportation development in Beijing

Among the cities in China, investment in urban rail transportation will be the highest in Beijing. We estimate that total investment will be RMB 199bn in 2011-2015, among RMB 190.6bn will be allocated for the ten urban rail lines currently under development in the city. These rail lines have a total length of 228.97 km, and are scheduled to be delivered in 2013-2017.

Seven other rail lines, which will be the major investment items in 2016-2020, are expected to commence operation after 2015. Total urban rail investment in Beijing will be up 9.22% to RMB 219bn in 2016-2020 given the existing construction pipeline.

Exhibit 42: Major construction pipeline of urban rail system in Beijing

Subway Line	Construction commenced	Expected Completion	Investment	Length
			(RMB bn)	(km)
No. 14	2010	2015E	50.00	47.70
No. 8 phase 2	2007	2013E	8.00	10.00
No. 8 phase 3	2013E	2016E	17.26	17.30
No. 6 phase 2	2012	2014E	9.92	12.40
No. 6 phase 3	2013E	2015E	7.12	8.90
No. 7	2009	2014E	15.00	23.67
Xijiao Line	2011	2014E	3.50	9.00
No. 3	2008	2014E	22.20	37.00
No. 12	2013E	2017E	21.60	27.00
No. 16	2013E	2016E	36.00	36.00
		Subtotal:	190.60	228.97
New airport express			29.60	37.00
No. 8 phase 3 (Southern Ex)			4.00	5.00
No. 8 phase 3	Exped		10.64	13.30
R1 Line	comm	ence ruction after	44.00	55.00
R2 Line	2015	uction after	39.20	49.00
Pínggu Line			41.60	52.00
S6 Line			27.20	34.00
		Subtotal:	196.24	245.30
		Total:	386.84	474.27

Source(s): Media, ABCI Securities estimate



### Urban rail transportation development in Shanghai

Shanghai is the second city with the highest urban rail investment in China, 2012. However, as the major projects (line 6, line 8, line 9 and line 11) with a total length of 164.1 km, or 37% of the total length of urban rail in operation as of end-2012, were completed in 2011 and 2012, the investment amount in 2013-15 will be slow. We estimate the total investment amount in 2013-15 will be RMB 55bn. Currently, there are seven major projects with a total length of 142km under construction and these are expected to be completed in 2015-16.

Looking forward, we expect nine more projects with a total investment of RMB 179bn will kick start in 2015-20.

Exhibit 43: Construction pipeline of urban rail system in Shanghai

Subway Line	Construction commenced	Expected Completion	Investment	Length
			(RMB bn)	(km)
No. 12	2008	2014E	23.48	40.40
No. 13	2007	2015E	19.87	33.60
No. 14	2013E	2016E	32.10	40.00
No. 11	2012	2015E	4.37	9.15
No. 8	2012	2015E	5.94	6.60
No. 10	2012	2015E	5.94	10.00
No. 2 West Ex phase 2	2012	2015E	1.35	2.00
		Subtotal:	93.05	141.75
No. 2 East Ex phase 2			8.00	10.00
No. 5 South Ex phase 1			16.56	20.70
No. 9 phase 3			13.60	17.00
No. 15	Expected	to	32.08	40.10
No. 16	commenc		15.20	19.00
No. 17 phase 1	construct	ion after 2015	13.76	17.20
No. 18			35.44	44.30
No. 19			16.48	20.60
No. 17 phase 2			28.16	35.20
		Subtotal:	179.28	224.10
		Total:	272.33	365.85

Source(s): Media, ABCI Securities estimate



### Urban rail transportation development in Nanjing

According to the city plan, we estimate the total urban rail investment in Nanjing will be RMB 118bn in 2011-2015; among which, RMB 75bn will be invested in 2013-15. There are six major projects arriving completion in 2014-15. The total length of the six projects is estimated to be 210.15 km.

Looking forward, we expect that 11 new projects with a total length of 334.62km and an investment amount of RMB 167bn will commence construction in 2016-2020.

Exhibit 44: Construction pipeline of urban rail system in Nanjing

Subway Line	Construction commenced	Expected Completion	Investment	Length
			(RMB bn)	(km)
No. 3	2010	2014E	22.40	44.80
No. 10 phase 1	2010	2014E	7.20	14.40
Ninggao Intra city S1 Line phase 1	2011	2014E	13.46	34.90
Ningtian Intra city S8 Line phase 1	2012	2014E	13.00	44.50
No. 4 phase 1	2011	2015E	20.07	33.75
Ninghe Intra city S3 Line phase 1	2012	2015E	18.90	37.80
		Subtotal:	95.03	210.15
No. 5			18.00	36.00
No. 7			17.80	35.60
No. 8			31.15	62.30
No. 9			8.55	17.10
No. 13	•	ted to	7.60	15.20
No. 14	comm	ence ruction after	17.10	34.20
No. 15	2015	detion after	12.75	25.50
No. 17			11.80	23.60
Ningyi Intra city Line 5			10.00	20.00
Ningju Intra city Line 6			17.71	35.42
Ningli Intra city Line 7			14.85	29.70
		Subtotal:	167.31	334.62
		Total:	262.34	544.77



### Urban rail transportation development in Wuhan

Based on the Wuhan's 12<sup>th</sup> Five-Year Plan, we estimate the total investment in Wuhan urban rail transportation will be RMB 82bn in 2013-15. Eight major projects with a total length of 185.87 km are scheduled to be completed in 2013-17.

Looking forward, we expect that five new projects with a total investment of RMB 63bn and a total length of 129.10 km will start construction in 2016-2020.

Exhibit 45: Construction pipeline of urban rail system in Wuhan

Subway Line	Construction commenced	Expected Completion	Investment	Length
			(RMB bn)	(km)
No. 3	2012	2015E	25.50	33.20
No. 4 phase 1	2008	2013E	9.06	16.49
No. 4 phase 2	2009	2014E	9.90	16.85
No. 6	2012	2016E	27.24	36.10
No. 7 phase 1	2013	2017E	32.10	29.80
No. 8 phase 1	2013	2017E	13.28	16.70
No. 1 (airport express)	2013	2017E	9.44	19.53
No. 24	2013	2016E	4.16	17.20
		Subtotal:	130.67	185.87
No. 21			15.00	30.00
No. 26	Exped		15.00	30.00
No. 27	comm	ence ruction after	10.30	20.60
No. 28	2015	uction after	14.00	28.00
No. 29			8.25	20.50
		Subtotal:	62.55	129.10
		Total:	193.22	314.97



### Urban rail transportation development in Chongqing

According to the city's 12<sup>th</sup> 5-Year Plan, total investment in Chongqing's urban rail transportation will be RMB 74bn; among which, RMB 38bn will be invested in 2013-2015. Three major projects are scheduled to be completed in 2014-2015. We expect six more projects will start construction by 2015 and be completed by 2020. Total length of the nine projects will be 227.76 km.

Looking forward, we expect that three new projects (No. 4 phase 1, No. 6 branch line phase 2 and No. phase 2) will start construction in 2016, and another nine projects will start construction in 2016-2020. We estimate the total investment of these 12 projects with a total length of 420.55 km will be RMB 209bn.

Exhibit 46: Construction pipeline of urban rail system in Chongqing

Subway Line	Construction commenced	Expected Completion	Investment	Length
Line	Commenced	Completion	(RMB bn)	(km)
No. 1	2013	2013E	0.95	1.90
No. 2	2010	2014E	6.05	12.10
No. 3	2013E	2015E	4.95	9.90
No. 6 phase 1	2008	2014E	2.30	4.60
No. 6 phase 2	2009	2013E	18.65	37.30
No. 5 phase 1	2013E	2017E	20.05	40.00
Circle Line	2013E	2020E	27.33	50.47
No. 9 phase 1	2015E	2019E	14.71	26.80
No. 10	2014E	2018E	23.72	44.69
		Subtotal:	118.71	227.76
No. 4 phase 1		- Cubician	6.45	14.97
No. 6 (branch line) phase 2			6.53	13.71
No. 9 phase 2			5.61	10.77
No. 7			22.95	45.90
No. 8	Fymaa	4-44-	30.05	60.10
No. 11	Exped		11.35	22.70
No. 12		ruction after	14.65	29.30
No. 13	2015		24.45	48.90
No. 14			27.65	55.30
No. 15			18.65	37.30
No. 16			10.00	20.00
No. 17			30.80	61.60
		Subtotal:	209.14	420.55
		Total:	327.85	648.31

Source(s): Media, ABCI Securities estimate



### Urban rail transportation development in Guangzhou

Guangzhou local government announced eight urban rail projects had started construction in 2013. Total investment of these projects will be RMB 136bn and are set to be delivered in 2016-18. We estimate the total investment in urban rail system will be RMB112bn in 2011-15.

As of October 2013, Guangzhou has 12 major urban rail projects under construction. These projects are set to be completed by 2018. We estimate the total investment on urban rail in Guangzhou will be RMB 89bn in 2013-15.

For 2016-2020, we expect construction of eleven projects will kick start, of which two will be in Foshan. Total length of these projects will be 316.90 km with a total investment of RMB 158bn.

Exhibit 47: Construction pipeline of urban rail system in Guangzhou

Subway Line	Construction commenced	Expected Completion	Investment	Length
			(RMB bn)	(km)
No. 4 (south extension)	2013	2017E	5.33	12.60
No. 6 phase 1	2005	2013E	12.24	34.00
No. 6 phase 2 (east extension)	2011 2012	2016E 2016E	10.42 10.19	17.60
No. 7 phase 1				18.60
No. 8	2013	2016E	11.08	16.80
No. 9 phase 1	2011	2017E	23.37	20.10
No. 11	2013	2018E	33.61	44.40
No. 13 phase 1	2013	2016E	18.24	28.30
No. 14	2013	2017E	18.91	51.20
No. 14 (branch line)	2013	2018E	11.31	21.40
No. 21	2013	2017E	29.12	58.00
Zhuhai circular line	2013	2017E	8.63	17.25
		Subtotal:	192.43	340.25
Foshan Metro Line No. 2 phase 1			16.00	32.00
Foshan Metro Line No. 3			35.10	70.20
No. 5			4.90	9.80
No. 6			12.25	24.50
No. 7 phase 2	•	ted to	5.65	11.30
No. 10	comm	ence ruction after	9.80	19.60
No. 12	2015	detion arter	15.05	30.10
No. 13 phase 2			15.75	31.50
No. 15			15.25	30.50
No. 16			15.85	31.70
No. 17			12.85	25.70
		Subtotal:	158.45	316.90
		Total:	350.88	657.15



### Urban rail transportation development in Shenzhen

Five urban rail lines to be completed in 2015-18 are currently under construction. The total length will amount to 121.85km and we estimate the overall investment amount to be RMB 85bn. Total investment in Shenzhen's urban rail system in Shenzhen will be RMB 71bn in 2011-2015, of which RMB 55bn will be invested in 2013-15 will be RMB 55bn.

In 2016-20, we expect nine new projects with a total length of 283.50km will start construction. Total investment in these rail lines will be RMB 227bn.

Exhibit 48: Construction pipeline of urban rail system in Shenzhen

Subway Line	Construction commenced	Expected Completion	Investment	Length
			(RMB bn)	(km)
No. 6 (Guangming Line)	2013	2017	16.80	37.85
No. 7 (Xili Line)	2012	2016	24.10	28.00
No. 8 (Yantian Line)	2014	2018	8.50	17.00
No. 9 (Meilin Line)	2013	2016	27.50	22.00
No. 11 (Airport Express)	2012	2015	8.50	17.00
		Subtotal:	85.40	121.85
Longgang Line East Extension			5.20	6.50
Longhua Line North Extension			5.84	7.30
Huanzhong Line West Extension			8.16	10.20
No. 10	•	ted to	31.12	38.90
No. 12	comm	ience ruction after	45.84	57.30
No. 13	2015	i detion after	38.48	48.10
No. 14			40.56	50.70
No. 15			19.76	24.70
No. 16			31.84	39.80
		Subtotal:	226.80	283.50
		Total:	312.20	405.35

Source(s): Media, ABCI Securities estimate



### Outlook of urban rail development in 2013-15 and 13th 5-Year Plan

We estimate the total urban rail investment for 2013-15 will be RMB 1,171bn. After the accelerated development in 2011-2015, we believe growth in investment in the seven major cities will slow. In contrast, urban rail investment in the lower tier cities will pace up. For example, based on Tianjin's city development plan, urban rail in the city will grow from 136 km as of end-2012 to 234 km by 2015, and further reach 608 km by 2020.

Exhibit 49: Urban rail development in different cities in China, as of 2012

Status	Cities	Number of cities
Urban rail currently in operation	Beijing, Tianjin, Shanghai, Guangzhou, Shenzhen, Chengdu, Shenyang, Nanjing, Wuhan, Chongqing, Foshan	11
Urban rail line under construction	Dalian, Changchun, Harbin, Xi'an, Suzhou, Wuxi, Hangzhou, Zhengzhou, Ma On Shan, Qingdao, Ningbo, Fuzhou, Nanchang, Changsha, Nanning, Kunming, Hefei	17
NDRC-approved construction	Fushun, Dongguan, Xiamen, Jinan, Guiyang, Quanzhou, Wenzhou, Changzhou	8

Source(s): Media, NDRC, ABCI Securities

By end-2012, there are only six cities where the urban rail in operation exceeded 100 km. In order to support economic growth and the surging demand for passenger transportation in urbanizing cities, we believe there will be 13 cities and 23 cities with urban rail exceeding 100km by end-2015 and 2020, respectively.

Aside from support from the Chinese government, demand for passenger transportation and economic activities of the cities would also determine development pace of the urban rail system. A high population means more potential users and a shorter payback period. Initial investment in urban rail is high (construction cost is estimated to be RMB 400mn-1,040mn per km). A city with a higher GDP is likely to have more financial resources for urban rail development.

Based on the cities' population and economic production, we estimate the total length of urban rail will increase from 3,452 km by end-2015 to 9,830 km by end-2020 among the top 40 cities with the highest GDP in China in 2012. We estimate the total investment in urban rail will be RMB 4,599bn in 2016-20, up 186.20% from RMB 1,607bn in 2011-15.

Exhibit 50: Urban rail coverage ratio in 40 Chinese cities with the highest GDP in 2012

City	GDP 2012	Population	Land Area	By 2012 Length	By 2015E Length	By 2020E Length	Coverage ratio	Coverage ratio
	(RMB bn)	(mn people)	(km²)	(km)	(km)	(km)	(by 2012)	(by 2020E)
Shanghai	2,010	22.32	6,219	439	513	805	0.071	0.129
Beijing	1,780	18.83	16,411	456	605	930	0.028	0.057
Canton	1,350	11.07	7,434	236	270	893	0.032	0.120
Shenzhen	1,295	10.36	1,953	178	195	583	0.091	0.299
Tianjin	1,289	11.09	11,920	136	234	608	0.011	0.051
Suzhou	1,200	5.35	8,488	25	200	380	0.003	0.045
Chongging	1,146	17.17	82,400	143	209	791	0.002	0.010
Chengdu	814	7.42	12,121	50	108	399	0.004	0.033
Wuhan	810	9.79	8,494	57	124	372	0.007	0.044
Hangzhou	780	6.24	16,596	48	150	300	0.003	0.018
Wuxi	757	3.54	4,788	_	10	55	-	0.011
Qingdao	730	4.59	24,454	_	50	288	_	0.012
Nanjing	720	8.00	6,582	85	295	630	0.013	0.096
Dalian	700	4.09	13,237	63	217	314	0.005	0.024
Foshan	671	7.20	3,798	15	117	209	0.004	0.055
Shenyang	670	6.26	12,980	50	87	400	0.004	0.031
Ningbo	652	3.49	19,574	_	_	124	-	0.006
Changsha	640	3.62	11,819	-	_	23	-	0.002
Zhengzhou	555	4.25	7,446	_	_	102	_	0.014
Dongguan	501	8.22	2,465	-	-	19	-	0.008
Jinan	481	4.34	8,177	_	_	_	_	_
Quanzhou	471	1.15	11,015	-	-	-	-	-
Harbin	459	5.88	53,068	-	-	125	-	0.002
Nantong	456	1.61	8,001	-	-	-	-	-
Changchun	451	4.19	20,604	48	48	48	0.002	0.002
Shijiazhuang	450	2.83	15,848	-	-	85	-	0.005
Xi'an	437	6.50	10,108	21	21	294	0.002	0.029
Fuzhou	422	2.92	13,066	-	-	97	-	0.007
Hefei	416	3.31	11,408	-	-	162	-	0.014
Xuzhou	400	3.05	11,258	-	-	76	-	0.007
Baotou	341	1.90	27,768	-	-	-	-	-
Kunming	301	3.86	21,015	-	-	301	-	0.014
Luoyang	300	1.58	15,230	-	-	-	-	-
Nanchang	300	2.36	7,402	-	-	74	-	0.010
Nanning	250	3.43	22,112	-	-	53	-	0.002
Taiyuan	231	3.43	6,959	-	-	117	-	0.017
Urumqi	206	3.03	14,216	-	-	-	-	-
Guiyang	170	3.03	8,046	-	-	74	-	0.009
Lanzhou	156	2.63	13,100	-	-	101	-	0.008
Zhuhai	150	1.37	1,711	-	-	-	-	-
Total				2,050	3,452	9,830		

Source(s): NBS, MOHURD, Media, ABCI Securities estimates



### **Water Transportation**

- Growth of water transportation investment is expected to remain lukewarm in 2014-15 under the throughput growth slowdown
- We estimate water transport FAI will be RMB 457bn, or 5.94% CAGR in 2014-15
- Port construction regain lies on export recovery triggered from global economy

Water transport infrastructure construction mainly comprises two parts: 1) port construction and 2) waterway construction. Total FAI in water transportation was RMB 197bn in 2012, or 6.49% of the total transport FAI during the year in China. Growth on freight turnover for waterway transportation is expected to slow in 2013-15, and we estimate the total water transport FAI will be RMB 667bn for the period. We expect the investment will be back on track after 2015. We estimate the total water transport FAI for 2016-2020 will be RMB 1,391bn, up 31.77% from RMB 1,056bn for 2011-2015.

CCCC is the largest construction contractor of water transport infrastructure in terms of volume of project delivery. Total revenue of CCCC from water transportation construction was RMB 88bn in FY12, or 44.67% of the total FAI on water transportation in China during the year. Following the rapid growth in waterway transportation development in the previous 5-Year Plan, we expect the growth of waterway FAI will slow down in 2013-15.

#### Port construction prospect in mid run

Due to the geographic limitation of China, the utilization of water transportation is dominant in eastern China. Under the high base effect, the growth of port development is expected to slow. Throughput growth in China's major ports in has been decelerating since 2010.

Passenger throughput in China was stable during 2000-12 with an average of 195mn person-times (range 177mn-208mn person-times). We expect passenger throughput growth will remain stable in the future. Thus, demand for new infrastructure will be low. Freight throughout growth decreased from 17.09% CAGR in 2001-05 to 12.97% CAGR in 2006-10. Throughput growth was 9.84% CAGR in 2010-12. We expect growth in freight throughput will continue to decelerate in 2015-20 as water transport network saturates.

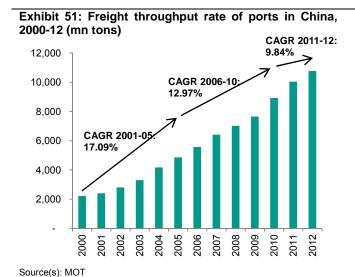
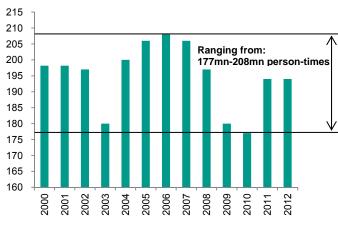


Exhibit 52: Passenger throughput rate of ports in China, 2000-12 (mn person-times)



Source(s): MOT



### Growth of throughput of major ports

As passenger throughput is stable in China, the infrastructure investment in port construction will be mainly geared towards the growing demand for freight transportation. Total throughput of the 16 major ports in China was 4,955mn tons in 2012, or 45.98% of total throughput in China. We estimate the total throughput of major ports will be 5,962mn tons in 2015, and 8,262mn tons in 2020.

We expect the CAPEX growth in Ningbo Port, Shanghai Port, Tianjin Port and Guangzhou Port will decelerate on the high base effect and the limited growth in freight throughput estimated at 3.44-5.57% CAGR in 2013-15. We expect the CAPEX growth in Zhanjiang Port, Shenzhen Port (including Yantian Port and Chiwan Port), Lianyungang Port, Qingdao Port and Jinzhou Port will remain at high levels in order meet the throughput growth estimated at 9.58%-17.73% CAGR in 2013-15.

Going forward, we estimate the overall throughput growth among major ports in China in to grow at 6.36% CAGR over 2013-15. The low throughput growth will cap growth of port operators.

Exhibit 53: Throughput projection of China's major ports in 2015E and 2020E

Province	Ports	Throughput	Throughput	Throughput	CAGR	CAGR
Province	Ports	2012	2015E	2020E	2012-15E	2015-20E
		(mn tons)	(mn tons)	(mn tons)	(%)	(%)
<b>.</b>						
Zhejiang	Ningbo Port (宁波舟山港)	630	730	900	5.03	4.28
Shanghai	Shanghai Port (上海港)	502	556	600	3.44	1.54
Tianjin	Tianjin Port (天津港)	476	560	1,161	5.57	15.70
Guangdong	Guangzhou Port (广州港)	316	366	467	5.00	5.00
	Zhanjiang Port (湛江港)	73	100	130	11.03	5.39
Shenzhen	Shenzhen Port (深圳港)	228	300	378	9.58	4.71
Jiangsu	Suzhou Port (苏州港)	428	500	882	5.32	12.03
	Lianyungang Port (连云港)	185	250	350	10.56	6.96
Shandong	Qingdao Port (青岛港)	400	600	800	14.47	5.92
	Rizhao Port (日照港)	284	300	430	1.84	7.47
Liaoning	Dalian Port (大连港)	250	300	393	6.27	5.55
	Yingkou Port (营口港)	310	400	511	8.87	5.03
	Jinzhou Port (锦州港)	74	120	160	17.73	5.92
Hubei	Qinhuangdao Port (秦皇岛港)	263	280	300	2.11	1.39
	Tangshan Port (唐山港)	364	400	500	3.19	4.56
Fujian	Xiamen Port (厦门港)	172	200	300	5.16	8.45
	Total:	4,955	5,962	8,262	6.36	6.74

Source(s): MOT, companies, ABCI Securities estimates



Exhibit 54: Expansion plan of the major ports in China

Province	Ports	Expansion Target
Shanghai	Shanghai Port	Shanghai lies in the middle of the coast of China that stretches for 18,000 km, in the Yangtze delta. The Yangtze-Kiang is China's longest river, and also the most important waterway for domestic transportation. The freight throughput of Shanghai Port reached 502.38mn tons, and the throughput for containers was 32.53mn TEUs in 2012. The throughput target of the port for freight and container are 600mn tons and 37mn TEUs by 2020.
Zhejiang	Ningbo Port	The freight throughput of Zhoushan, Ningbo Port reached 700mn tons, and container throughput was 15mn TEUs in 2012. The throughput target of the port for freight and container are 900mn tons and 30mn TEUs by 2020, respectively. The zone is also expected to become a fresh growth driver for the entire Yangtze River Delta region and bolster Shanghai's goal of becoming an international shipping hub by 2020.
Tianjin	Tianjin Port	The freight throughput of Tianjin Port reached 476mn tons, and the container throughput was 12.3mn TEUs in 2012. The throughput target of the port for container is targeted to increase to 30mn TEUs by 2020. Tianjin Port would extend from north (Hangu) to south (Dagang) for a distance of almost 90 km, with five independent shipping channels extending to the east all the way to the 23 m isobath line by 2020. The planned land area of the Port will be 245 km², with 200 km of quays and a staggering 390 deep-water production berths by 2030.
Guangdong	Guangzhou Port	Based on the economic development in the regions, Guangzhou Port will become a multi-functional and comprehensive modern hub port for large bulk cargoes such as energy resources and raw materials. It is estimated that by the year 2020, Guangzhou Port will handle 467mn tons of freight throughput with container throughput of 25mn TEUs. The freight throughput was 315.8mn tons with container throughput of 12.21mn TEUs in 2012.
	Zhanjiang Port	Zhanjiang Port is located at the southernmost tip of mainland China's Guangdong Province. It is north-east of the Leizhou Peninsula and is situated in Guangzhou Bay. After nearly 50 years of construction, the existing 39 wharves are able to handle containers, general cargo and bulk cargo. It also has facilities for dangerous goods such as , petroleum and liquid chemicals. The freight throughput was 73.06mn tons in 2012, and targets to reach 130mn tons by 2020.
Shenzhen	Shenzhen Port	Shenzhen Port is one of the busiest ports in southern China. Thirty-nine shipping companies who have launched 131 international container routes based in Shenzhen Port. The port is spread along the 260 km coastline. Shenzhen Port consists of facilities in the following areas: Da Chan Bay, Shekou, Chiwan, Mawan, Yantian, Dongjiaotou, Fuyong, Xiadong, Shayuchong and Neihe. The freight throughput was 228mn tons with container throughput of 22.94mn TEUs in 2012. It targets to increase the throughput for container to 38mn TEUs by 2020.
Jiangsu	Lianyungang Port	Lianyungang port is located in the center of the coast, linking eastern sea routes with western land routes. Both Japan and South Korea can be reached economically and conveniently from Lianyungang, which is also part of the worldwide network of sea transport. The New Eurasia Continental Landbridge and the railway networks in Western Europe continue by land, connecting Lianyungang with over 40 countries and regions in Europe, South Asia and the Middle East. The throughput of freight was 185mn tons with container throughput of 5.02mn TEUs in 2012. It targets to increase the throughput for container to 10mn TEUs by 2020.
	Suzhou Port	Suzhou Port is situated in Jiangsu province. It consists of three ports in Zhangjiagang, Changshu and Taicang on the lower reaches of the Yangtze River. The total freight throughput was 428mn tons with container throughput of 5.86mn TEUs in 2012. It is the busiest inland river port in the world by annual cargo tonnage and container volume, as well as the seventh busiest port by annual cargo tonnage. The majority of the port trade is in coal, ore, steel, and construction materials such as cement. Suzhou Port consists of 224 production berths in total, 106 of them being above ten thousand tons in tonnage. The port has traded with over 400 international and domestic shipping lines. It targets to increase the throughput for container to 12mn TEUs by 2020.
Shandong	Qingdao Port	Qingdao Port is a seaport on the Yellow Sea in the vicinity of Qingdao, Shandong. It is one of the ten busiest ports in the world in 2012. The freight throughput was 400mn tons in 2012, and the port targets to increase the freight throughput to 800mn tons by 2020.
	Rizhao Port	Rizhao Port is one of major seaports in China located 620 km north of Shanghai, 170 km southwest of Qingdao, and 120 km north of Lianyungang. The seaport serves as a site for loading and unloading iron ore and coal. Other products passing through the harbor include cement, nickel, bauxite, and the like. Rizhao Port, together with the cities of Qingdao, Weihai and Yantai in Shandong, signed a strategic alliance with Busan, the largest port of South Korea. The alliance aims at building a shipping and logistics center in Northeast Asia. The freight throughput was 284mn tons in 2012. The port targets to increase to 430mn tons by 2020.

(Cont'd)



(Cont'd)

Province	Ports	Expansion Target
Liaoning	Dalian Port	Dalian Port lies at the southern tip of Liaodong Peninsula in Liaoning province and is a northern ice-free port in China. It is also the largest multi-purpose port in Northeast China serving the seaports North Asia, East Asia and the Pacific Rim. It is the trade gateway to the Pacific. It is the second largest container transshipment hub in mainland China. Dalian Port consists of Daliangang, Dalianwan, Xianglujiao, Nianyuwan, Ganjinzi, Heizuizi, Si'ergou and Dayaowan port areas. Port of Dalian is owned and managed by the state-owned Dalian Port Corporation Limited. It has established trading and shipping links with more than 300 ports in 160 countries and regions of the world. There are 68 international and domestic container shipping routes. Port of Dalian handles at least 100 million in cargo throughput annually. The freight throughput was 303mn tons with throughput for container of 8.01mn TEUs in 2012, and it targets to increase freight throughput to 393mn tons with container throughput of 17mn TEUs by 2020.
	Yingkou Port	Yingkou Port is located in the northwestern portion of the Liaodong Peninsula, and on the left bank of the Daliao River. It is an international seaport in Liaoning. It is the second-largest port in northeast China and the tenth-largest nationwide. It includes two separate dockland areas, the Yingkou old port at the mouth of the Liao River, and the Bayuquan port located directly on Liaodong Bay on the Bohai Sea. The port is a major import facility for northeastern China and parts of Mongolia with an annual trade volume of more than 21mn metric tons through 27 shipping berths. Principal port activities include grain, coal, steel and minerals, and vehicle imports. The freight throughput was 301.07mn tons with container throughput of 4.85mn TEUs in 2012. It targets to increase the container throughput to 8mn TEUs by 2020.
	Jinzhou Port	Jinzhou Port is a seaport in the Bohai Sea in the vicinity of Liaoning. The freight throughput was 73.55mn tons with 0.87mn TEUs in 2012. It targets to increases the throughput to 160mn tons by 2020.
Hubei	Qinhuangdao Port	Qinghuangdao Port is a seaport on the Bohai sea in vicinity of Hebei. Together with the Port of Huanghua, Qinghuangdao Port is a major port for coal transportation. Qinhuangdao is the nation's coal shipping center which is also seen as a barometer of the economy. The daily transport capacity was at least 50 vessels per day in the past. The freight throughput was 263.28mn tons in 2012, with container throughput of 0.8mn TEUs. It targets to increase the throughput of freight to 300mn tons by 2020 with container throughput of 1mn TEUs.
	Tangshan Port	Tangshan Port is the State's first class opening port. It was in 2003 that No.1 and No.2 port areas had been completed, which own 16 deep-water berths of 15000-ton-class to 50000-ton-class with coal, ore, shipping container, petrol, liquefied gas and bulk cement. The construction and operation of Tangshan Port open up wide space for the development of its advantage of seaport. The freight throughput was 364mn tons with throughput for container of 2.4mn TEUs in 2012. It targets to go to 500mn tons of freight throughput with 3mn TEUs of container throughput by 2020.
Fujian	Xiamen Port	Xiamen Port is an important deep water port located in the mouth of the Jiulongjiang River on the southern coastline of Fujian. It is one of the trunk line ports in the Asia-Pacific region. It is ranked the 8th largest container port in China, and ranks 30th among the world's top 100. The port is owned and operated by Xiamen Port Authority, and comprises six areas: Heping, Dongdu, Haitian, Shihushan, Gaoqi and Liuwudian (in Tong'an District). The world's top 20 shipping companies have all established major shipping routes and operations in Xiamen. A total of 68 shipping routes serve over 50 countries to almost all the major ports in the world, yielding an average 469 ship calls at the port each month. The port offers 74 berths. One can handle vessels of 100,000 or more tonnages, 23 berths are for 10,000 or more tonnages, and two handle vessels between berths for 5,000 and 10,000 tonnages. There are nine container terminals. The freight throughput was 172mn tons with container throughput of 7.2mn TEUs. It targets to increase the throughput to 300mn tons with 15mn TEUs of container throughput by 2020.

Source(s): Companies, Media, ABCI Securities



### Deteriorating profitability and earnings growth

After the strong growth in 2005-10, earnings of the listed port operators slowed in 2011 and 2012. Average revenue growth dropped from 21.49% CAGR in 2005-10 to 16.46% CAGR in 2010-12.

Profitability is deteriorating at the same time, with the average GPM dropping from 41.02% in 2005-10 to 35.49% in 2010-12; net income margin also declined from 37.83% to 32.51% in the same period.

Weakening global economy has been hindering exports in China since 2008. We expect limited recovery in Europe in 2013-2015, thus earnings growth of port operators will continue to diminish, discouraging expansion of the industry in the short to medium term.

Exhibit 55: Profitability of listed port operators

2005   2006   2007   2008   2009   2010   2011   2012   2005-10   2010-12			FY	FY								
Geodo   Geod			2005								2005-10	
Geodo   Geod	Shanghai Int'l Port	Revenue (RMB mn)	10,627	12,354	15,770	17,486	16,046	18,769	21,415	28,151	12.05	22.47
Shenzhen Chiwan Wharf   Revenue (RMB mr)   1,708   1,882   1,934   1,848   1,415   1,677   1,637   1,723   (0.37)   1,378   3,378   31,200   (0.00022 CH)   Net income margin (%)   50.00   33.00   33.20   34.32   34.79   29.61   35.59   30.98   27.11   33.78   31.20   (0.00088 CH)   Revenue (RMB mr)   622   698   680   414   387   402   347   304   (6.38)   (12.98)   (6.00088 CH)   Revenue (RMB mr)   NA   3,628   4,055   4,421   4,705   5,812   6,749   7,538   110.88   119.97   (6.01018 CH)   Gross profit margin (%)   NA   44.25   39.75   39.90   38.65   37.84   36.57   35.51   40.08   36.64   (6.01018 CH)   Revenue (RMB mr)   A4.25   39.75   39.90   38.65   37.84   36.57   35.51   40.08   36.64   (6.01018 CH)   Revenue (RMB mr)   A4.25   39.75   39.90   38.65   37.84   36.57   35.51   40.08   36.64   (6.0017 CH)   Revenue (RMB mr)   A4.25   39.75   39.90   38.65   37.84   36.57   35.51   40.08   36.64   (6.0017 CH)   Revenue (RMB mr)   A4.25   39.75   39.90   38.65   37.84   36.57   35.51   40.08   36.64   (6.0017 CH)   Revenue (RMB mr)   A4.25   39.75   39.90   38.65   37.84   36.57   35.51   40.08   36.64   (6.0017 CH)   Revenue (RMB mr)   A4.27   A4.69   25.86   22.12   22.16   21.25   21.35   22.24   22.51   21.53   22.24   22.51   21.53   22.24   22.51   21.53   22.24   22.51   21.53   22.24   22.51   22.52   22.54   22.5	(600018 CH)										46.60	40.94
Cross profit margin (%)   67-33   61.17   59.04   55.12   51.77   55.73   53.04   59.97   58.36   53.25	,	Net income margin (%)	23.56	24.00	23.08	26.42	23.43	28.86	22.06	17.65	24.89	22.86
Net income margin (%) 35.06 33.30 34.32 34.79 29.61 35.59 30.89 27.11 33.78 31.20 (8.38) (7.296) (000088 CH) Revenue (RMB mn) 622 698 680 414 387 402 347 304 (6.38) (7.296) 60.37 Net income margin (%) 49.77 46.10 52.66 62.08 64.73 102.14 122.94 134.82 110.88 1119.97 Ningbo Port Revenue (RMB mn) (%) N/A 59.52 58.59 58.59 53.0 51.30 46.37 46.55 44.83 53.82 45.92 Net income margin (%) N/A 44.25 39.75 39.90 38.65 37.84 36.57 35.51 40.08 36.66 (600717 CH) Gross profit margin (%) N/A 44.25 39.75 39.90 38.65 37.84 36.57 35.51 40.08 36.66 (600717 CH) Gross profit margin (%) N/A 44.25 39.75 39.90 38.65 37.84 36.57 35.51 40.08 36.64 37 46.55 44.83 53.82 45.92 10.08 10.09 10	Shenzhen Chiwan Wharf	Revenue (RMB mn)	1,708	1,882		1,848		1,677	1,637		(0.37)	
Shenzhen Yantian Port   Gross profit margin (%)   49.77   46.10   52.66   62.08   64.73   63.64   60.16   57.31   56.50   60.37     Net income margin (%)   49.77   46.10   52.66   62.08   64.73   63.64   60.16   57.31   56.50   60.37     Ningbo Port   Revenue (RMB mn)   60.037   60.37   60.037   60.037   60.037   60.037     Ningbo Port   Gross profit margin (%)   N/A   43.62   40.55   44.21   4.705   5.812   6.749   7.538   12.50   13.89     Gross profit margin (%)   N/A   44.25   39.75   39.90   38.65   37.84   63.57   34.83   33.82   44.92     Ningbo Port   Revenue (RMB mn)   2.287   2.474   8.385   11.076   9.624   11.282   12.495   13.295   37.61   8.56     G600717 CH)   Gross profit margin (%)   31.46   20.82   11.66   8.50   6.88   7.12   7.44   7.55   14.37   7.37     Lianyungang Port   Revenue (RMB mn)   246   772   818   949   956   1.181   1.453   1.577   36.82   15.53     G601008 CH)   Gross profit margin (%)   34.54   35.55   31.36   30.23   27.65   26.22   25.04   24.19   32.73   25.15     Net income margin (%)   16.81   10.93   12.27   10.72   7.68   9.36   10.11   9.60   11.29   9.69     Jinzhou Port   Gross profit margin (%)   62.72   56.59   51.23   52.53   54.65   50.54   40.63   33.48   54.71   43.03     Net income margin (%)   27.13   28.84   21.64   29.16   28.13   20.66   28.09   28.80   28.83   28.65     Net income margin (%)   27.13   28.84   21.64   29.16   28.13   20.66   28.09   28.80   28.83   26.65     Net income margin (%)   7.73   28.84   21.64   29.16   28.13   20.66   28.09   28.80   28.83   26.65     Net income margin (%)   7.73   28.84   21.64   29.16   28.13   20.66   28.09   28.80   28.83   26.65     Net income margin (%)   7.73   28.84   21.64   29.16   28.13   20.66   28.09   28.80   28.83   26.65     Net income margin (%)   7.73   28.84   21.64   29.16   28.13   20.66   28.09   28.80   28.83   26.65     Net income margin (%)   7.74   7.74   7.75   7.75   7.75   7.75   7.75   7.75   7.75   7.75   7.75   7.75   7.75   7.75   7.75   7.75   7.75   7.75   7.75   7.75   7.75	(000022 CH)		67.33			55.12			53.04	50.97		
(000088 CH) Gross profit margin (%) 110.04 101.13 94.72 138.26 18.73 63.64 60.16 57.31 56.50 60.37 Net income margin (%) 110.04 101.13 94.72 138.26 18.75 102.14 122.94 134.82 110.88 119.97 Ningbo Port Revenue (RMB mn) Gross profit margin (%) N/A 3,628 4,055 4,421 4,705 5,812 6,749 7,538 12.50 13.89 (601018 CH) Gross profit margin (%) N/A 44.25 39.75 39.90 53.00 51.30 46.37 46.55 44.83 53.82 45.92 (6000717 CH) Gross profit margin (%) 43.97 41.69 25.86 22.12 22.16 21.25 21.35 22.24 29.51 21.62 Net income margin (%) 43.97 41.69 25.86 22.12 22.16 21.25 21.35 22.24 29.51 21.62 Net income margin (%) 45.41 35.52 31.36 30.23 27.65 26.22 25.04 24.19 32.73 26.15 Net income margin (%) 45.41 35.52 31.36 30.23 27.65 26.22 25.04 24.19 32.73 26.15 Net income margin (%) 62.72 56.59 51.23 52.53 54.65 50.54 45.06 33.48 54.71 11.29 96.00 19.		Net income margin (%)	35.06	33.30	34.32	34.79	29.61	35.59	30.89	27.11	33.78	31.20
Net income margin (%) 110.04 101.13 94.72 138.26 118.97 102.14 122.94 134.82 110.88 119.97 Ningbo Port Revenue (RMB mn) N/A 3,628 4,055 4,421 4,705 5,812 6,749 7,538 12.50 13.89 (601018 CH) Gross profit margin (%) N/A 44.25 39.75 39.90 38.65 37.84 36.57 35.51 40.08 38.64 Tianjin Port Revenue (RMB mn) 2,287 2,474 8,985 11,076 9,624 11,282 12,495 13,295 37.61 8.56 (600717 CH) Gross profit margin (%) 31.46 20.82 11.66 8.50 6.68 7.12 7.44 7.55 14.37 7.37 (1.37 1.38 1.39 1.39 1.39 1.39 1.39 1.39 1.39 1.39	Shenzhen Yantian Port											
Ningbo Port   Revenue (RMB mn)   N/A   3,628   4,055   4,421   4,705   5,812   6,749   7,538   12,50   13,89   13,95   13,95   14,83   14,83   15,362   14,83   14,8	(000088 CH)	Gross profit margin (%)				62.08					56.50	
Gerional Chi   Gross profit margin (%)   N/A   59.52   58.59   53.30   51.30   46.37   46.55   44.83   53.82   45.92		Net income margin (%)	110.04	101.13	94.72	138.26	118.97	102.14	122.94	134.82	110.88	119.97
Net income margin (%)	Ningbo Port	Revenue (RMB mn)	N/A		4,055	4,421						
Tianjin Port   Revenue (RMB mn)   2,287   2,474   8,985   11,076   9,624   11,282   12,495   13,295   37.61   8.56   (600717 CH)   Gross profit margin (%)   31.46   20.82   11.66   8.50   22.12   22.16   21.25   21.35   22.24   29.51   21.62   21.60	(601018 CH)											
(600717 CH) Gross profit margin (%) 43.97 41.69 25.86 22.12 22.16 21.25 21.35 22.24 29.51 21.62 (600717 CH) Net income margin (%) 31.46 20.82 11.66 8.50 6.68 7.12 7.44 7.55 14.37 7.37 7.37 (601008 CH) Revenue (RMB mn) 246 772 818 949 956 1.181 1.453 1.577 36.82 15.53 (601008 CH) Gross profit margin (%) 45.41 35.52 31.36 30.23 27.65 26.22 25.04 24.19 32.73 25.15 Net income margin (%) 62.72 56.59 51.23 52.53 54.65 50.54 45.06 33.48 54.71 43.03 Net income margin (%) 62.72 56.59 51.23 52.53 54.65 50.54 45.06 33.48 54.71 43.03 Net income margin (%) 27.61 21.80 12.06 21.49 22.87 26.11 21.76 11.58 21.99 19.82 (600017 CH) Gross profit margin (%) 27.61 21.80 12.06 21.49 22.87 26.11 21.76 11.58 21.99 19.82 (600017 CH) Gross profit margin (%) 26.65 18.94 15.42 15.26 16.16 14.00 14.93 16.99 17.74 15.31 (601000 CH) Gross profit margin (%) 26.65 18.94 15.42 15.26 16.16 14.00 14.93 16.99 17.74 15.31 (601000 CH) Gross profit margin (%) N/A N/A 41.59 38.14 36.20 31.48 31.92 37.00 36.85 33.48 54.53 (601000 CH) Gross profit margin (%) N/A N/A 41.59 38.14 36.20 31.48 31.92 37.00 36.85 33.45 Net income margin (%) N/A N/A 41.59 38.14 36.20 31.48 31.92 37.00 36.85 33.50 (601000 CH) Gross profit margin (%) N/A N/A 41.59 38.14 36.20 31.48 31.92 37.00 36.85 33.45 Net income margin (%) N/A N/A 15.99 12.15 13.53 13.83 15.85 16.90 13.88 15.53 (601000 CH) Gross profit margin (%) N/A N/A 41.59 38.14 36.20 31.48 31.92 37.00 36.85 33.45 Net income margin (%) N/A N/A 41.59 38.14 36.20 31.48 31.92 37.00 36.85 33.45 Net income margin (%) 18.02 36.22 21.02 38.27 10.63 26.09 16.16 18.28 15.67 20.18 Net income margin (%) 18.02 36.22 21.02 38.27 10.63 26.09 16.16 18.28 15.67 20.18 Net income margin (%) 18.02 36.22 21.02 38.27 10.63 26.09 16.16 18.28 15.67 20.18 Net income margin (%) 18.02 36.22 21.02 38.27 10.63 39.20 38.49 31.49 49.34 49.34 49.34 49.34 49.34 49.34 49.34 49.34 49.34 49.35 Net income margin (%) 18.02 36.50 39.85 47.69 42.71 37.34 42.23 42.87 49.34 49.30 64.11 15.00 67.05 profit margin (%) 24.90 37.85 34.89 50.85 47.69 42.71 37.34 42.2		Net income margin (%)	N/A	44.25	39.75	39.90	38.65	37.84	36.57	35.51	40.08	36.64
Net income margin (%)   31.46   20.82   11.66   8.50   6.68   7.12   7.44   7.55   14.37   7.37	Tianjin Port	Revenue (RMB mn)	2,287	2,474	8,985	11,076	9,624	11,282	12,495	13,295	37.61	8.56
Lianyungang Port (601008 CH)  Revenue (RMB mn) (72 818 949 956 1,181 1,453 1,577 36.82 15.53 (601008 CH)  Gross profit margin (%) 45.41 35.52 31.36 30.23 27.65 26.22 25.04 24.19 32.73 25.15 Net income margin (%) 16.81 10.93 12.27 10.72 7.68 9.36 10.11 9.60 11.29 9.69 11.20 11.29 9.69 11.20 11.29 9.69 11.20 11.29 9.69 11.20	(600717 CH)		43.97									
Geolious CH    Gross profit margin (%)   45.41   35.52   31.36   30.23   27.65   26.22   25.04   24.19   32.73   25.15		Net income margin (%)	31.46	20.82	11.66	8.50	6.68	7.12	7.44	7.55	14.37	7.37
Net income margin (%)   16.81   10.93   12.27   10.72   7.68   9.36   10.11   9.60   11.29   9.69	Lianyungang Port	Revenue (RMB mn)	246		818	949	956		1,453	1,577	36.82	15.53
Jinzhou Port   Revenue (RMB mn)   490   486   509   764   713   834   1,151   1,134   11.20   16.61	(601008 CH)	Gross profit margin (%)	45.41	35.52	31.36	30.23	27.65	26.22	25.04	24.19	32.73	25.15
(600190 CH) Gross profit margin (%) 62.72 56.59 51.23 52.53 54.65 50.54 45.06 33.48 54.71 43.03 Net income margin (%) 27.61 21.80 12.06 21.49 22.87 26.11 21.76 11.58 21.99 19.82 Rizhao Port Revenue (RMB mn) 573 956 1,161 1,714 2,327 3,049 4,284 4,629 39.69 25.80 Net income margin (%) 26.65 18.94 15.42 15.26 16.16 14.00 14.93 16.99 17.74 15.31 16.00 CH) Gross profit margin (%) 26.65 18.94 15.42 15.26 16.16 14.00 14.93 16.99 17.74 15.31 16.00 CH) Gross profit margin (%) N/A N/A 822 1,303 1,869 2,486 2,912 3,821 44.60 23.98 (601000 CH) Gross profit margin (%) N/A N/A 15.99 12.15 13.63 13.83 15.85 16.90 13.88 15.53 15.00 13.88 15.53 15.00 13.88 15.53 15.00 13.88 15.53 15.00 COSCO Pacific Revenue (RMB mn) Cross profit margin (%) 16.02 63.62 22.10 5.21 21.75 15.05 65.67 24.11 29.96 46.94 (19.94 H). Net income margin (%) 113.29 97.85 143.09 81.29 49.37 80.92 64.89 46.53 94.30 64.11 China Merchants Int'l Revenue (RMB mn) Gross profit margin (%) 27.76 31.89 50.85 47.69 42.71 37.34 43.23 42.87 49.34 41.15 Net income margin (%) 27.76 31.89 50.85 47.69 42.73 47.94 42.79 39.33 41.48 43.35 Net income margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.90 Dalian Port Revenue (RMB mn) Cross profit margin (%) 27.76 31.89 50.85 47.69 42.73 47.94 42.79 39.33 41.48 43.35 Net income margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.90 Dalian Port Revenue (RMB mn) Cross profit margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.93 Dalian Port Cross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23		Net income margin (%)	16.81	10.93	12.27	10.72	7.68	9.36	10.11	9.60	11.29	9.69
Net income margin (%)   27.61   21.80   12.06   21.49   22.87   26.11   21.76   11.58   21.99   19.82	Jinzhou Port	Revenue (RMB mn)	490	486	509	764		834	1,151	1,134	11.20	
Rizhao Port   Gross profit margin (%)   27.13   28.84   21.64   29.16   28.13   26.06   28.09   25.80   26.83   26.65   28.09   25.80   26.83   26.65   28.09   25.80   26.83   26.65   28.09   25.80   26.83   26.65   28.09   25.80   26.83   26.65   28.09   25.80   26.83   26.65   28.09   25.80   26.83   26.65   28.09   25.80   26.83   26.65   28.09   25.80   26.83   26.65   28.09   25.80   26.83   26.65   28.09   25.80   26.83   26.65   28.09   25.80   26.83   26.65   28.09   25.80   26.83   26.65   26.6	600190 CH)	Gross profit margin (%)	62.72		51.23	52.53		50.54	45.06	33.48	54.71	43.03
(600017 CH) Gross profit margin (%) 27.13 28.84 21.64 29.16 28.13 20.06 28.09 25.80 26.83 26.65 Net income margin (%) 26.65 18.94 15.42 15.26 16.16 14.00 14.93 16.99 17.74 15.31 15		Net income margin (%)	27.61	21.80	12.06	21.49	22.87	26.11	21.76	11.58	21.99	19.82
Net income margin (%) 26.65 18.94 15.42 15.26 16.16 14.00 14.93 16.99 17.74 15.31  TangShan Port Revenue (RMB mn) N/A N/A 822 1,303 1,869 2,486 2,912 3,821 44.60 23.98 (601000 CH) Gross profit margin (%) N/A N/A 15.99 38.14 36.20 31.48 31.92 37.00 36.85 33.47 Net income margin (%) N/A N/A 15.99 12.15 13.53 13.83 15.85 16.90 13.88 15.53  Zhuhai Port Revenue (RMB mn) 160 209 638 1,664 496 391 445 644 19.64 28.30 (600507 CH) Gross profit margin (%) 24.90 11.83 12.30 8.27 10.63 26.09 16.16 18.28 15.67 20.18 Net income margin (%) 16.02 63.62 22.10 5.21 21.75 51.05 65.67 24.11 29.96 46.94  COSCO Pacific Revenue (RMB mn) 2,422 2,372 2,274 2,349 2,387 3,022 3,873 4,641 4.53 23.92 (1199 HK) Gross profit margin (%) 60.92 55.07 48.98 51.05 42.71 37.34 43.23 42.87 49.34 41.15 Net income margin (%) 113.29 97.85 143.09 81.29 49.37 80.92 64.89 46.53 94.30 64.11 (144 HK) Gross profit margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.93  Dalian Port Revenue (RMB mn) 1,269 1,160 1,486 1,506 3,018 3,317 3,795 4,454 21.18 15.88 (2880 HK / 601880 CH) Gross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23	Rizhao Port		573		1,161	1,714		-,				
TangShan Port (601000 CH) Gross profit margin (%) N/A N/A 41.59 38.14 36.20 31.48 31.92 37.00 36.85 33.47 Net income margin (%) N/A N/A 15.99 12.15 13.53 13.83 15.85 16.90 13.88 15.53    Zhuhai Port (300507 CH) Gross profit margin (%) 24.90 11.83 12.30 8.27 10.63 26.09 16.16 18.28 15.67 20.18 Net income margin (%) 16.02 63.62 22.10 5.21 21.75 51.05 65.67 24.11 29.96 46.94 (1199 HK) Gross profit margin (%) 60.92 55.07 48.98 51.05 42.71 37.34 43.23 42.87 49.34 41.15 Net income margin (%) 113.29 97.85 143.09 81.29 49.37 80.92 64.89 46.53 94.30 64.11 China Merchants Int'I Revenue (RMB mn) 3,131 4,065 3,261 3,691 3,162 5,063 7,863 8,966 10.09 33.08 (144 HK) Gross profit margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.93 Dalian Port (2880 HK / 601880 CH) Gross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23	(600017 CH)											
(601000 CH) Gross profit margin (%) N/A N/A 15.99 38.14 36.20 31.48 31.92 37.00 36.85 33.47 Net income margin (%) N/A N/A 15.99 12.15 13.53 13.83 15.85 16.90 13.88 15.53    Zhuhai Port Revenue (RMB mn) 160 209 638 1,664 496 391 445 644 19.64 28.30 (000507 CH) Gross profit margin (%) 16.02 63.62 22.10 5.21 21.75 51.05 65.67 24.11 29.96 46.94    COSCO Pacific Revenue (RMB mn) 2,422 2,372 2,274 2,349 2,387 3,022 3,873 4,641 4.53 23.92 (1199 HK) Gross profit margin (%) 113.29 97.85 143.09 81.29 49.37 80.92 64.89 46.53 94.30 64.11    China Merchants Int'I Revenue (RMB mn) 3,131 4,065 3,261 3,691 3,162 5,063 7,863 8,966 10.09 33.08 (144 HK) Gross profit margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.93    Dalian Port Revenue (RMB mn) 1,269 1,160 1,486 1,506 3,018 3,317 3,795 4,454 21.18 15.88 (2880 HK / 601880 CH) Gross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23		Net income margin (%)	26.65	18.94	15.42	15.26	16.16	14.00	14.93	16.99	17.74	15.31
Net income margin (%) N/A	TangShan Port											
Zhuhai Port   Revenue (RMB mn)   160   209   638   1,664   496   391   445   644   19.64   28.30   (000507 CH)   Gross profit margin (%)   24.90   11.83   12.30   8.27   10.63   26.09   16.16   18.28   15.67   20.18   Net income margin (%)   16.02   63.62   22.10   5.21   21.75   51.05   65.67   24.11   29.96   46.94	(601000 CH)											
(000507 CH) Gross profit margin (%) 11.83 12.30 8.27 10.63 26.09 16.16 18.28 15.67 20.18 Net income margin (%) 16.02 63.62 22.10 5.21 21.75 51.05 65.67 24.11 29.96 46.94 (11.99 HK) Gross profit margin (%) 60.92 55.07 48.98 51.05 42.71 37.34 43.23 42.87 49.34 41.15 Net income margin (%) 113.29 97.85 143.09 81.29 49.37 80.92 64.89 46.53 94.30 64.11 (144 HK) Gross profit margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.93 (2880 HK / 601880 CH) Gross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23		Net income margin (%)	N/A	N/A	15.99	12.15	13.53	13.83	15.85	16.90	13.88	15.53
Net income margin (%) 16.02 63.62 22.10 5.21 21.75 51.05 65.67 24.11 29.96 46.94  COSCO Pacific Revenue (RMB mn) 2,422 2,372 2,274 2,349 2,387 3,022 3,873 4,641 4.53 23.92 (1199 HK) Gross profit margin (%) 60.92 55.07 48.98 51.05 42.71 37.34 43.23 42.87 49.34 41.15 Net income margin (%) 113.29 97.85 143.09 81.29 49.37 80.92 64.89 46.53 94.30 64.11  China Merchants Int'I Revenue (RMB mn) 3,131 4,065 3,261 3,691 3,162 5,063 7,863 8,966 10.09 33.08 (144 HK) Gross profit margin (%) 27.76 31.89 50.85 47.69 42.73 47.94 42.79 39.33 41.48 43.35 Net income margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.93  Dalian Port Revenue (RMB mn) 1,269 1,160 1,486 1,506 3,018 3,317 3,795 4,454 21.18 15.88 (2880 HK / 601880 CH) Gross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23	Zhuhai Port	Revenue (RMB mn)	160		638	1,664		391	445		19.64	
COSCO Pacific Revenue (RMB mn) 2,422 2,372 2,274 2,349 2,387 3,022 3,873 4,641 4.53 23.92 (1199 HK) Gross profit margin (%) 60.92 55.07 48.98 51.05 42.71 37.34 43.23 42.87 49.34 41.15 Net income margin (%) 113.29 97.85 143.09 81.29 49.37 80.92 64.89 46.53 94.30 64.11 (144 HK) Gross profit margin (%) 27.76 31.89 50.85 47.69 42.73 47.94 42.79 39.33 41.48 43.35 Net income margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.93 (2880 HK / 601880 CH) Gross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23	(000507 CH)											
(1199 HK) Gross profit margin (%) Net income margin (%) 113.29 97.85 143.09 81.29 49.37 80.92 64.89 42.71 37.34 43.23 42.87 49.34 41.15 Net income margin (%) 113.29 97.85 143.09 81.29 49.37 80.92 64.89 46.53 94.30 64.11  China Merchants Int'I Revenue (RMB mn) Gross profit margin (%) 27.76 31.89 50.85 47.69 42.73 47.94 42.79 39.33 41.48 43.35 Net income margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.93  Dalian Port Revenue (RMB mn) 1,269 1,160 1,486 1,506 3,018 3,317 3,795 4,454 21.18 15.88 (2880 HK / 601880 CH) Gross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23		Net income margin (%)	16.02	63.62	22.10	5.21	21.75	51.05	65.67	24.11	29.96	46.94
Net income margin (%) 113.29 97.85 143.09 81.29 49.37 80.92 64.89 46.53 94.30 64.11  China Merchants Int'I Revenue (RMB mn) 3,131 4,065 3,261 3,691 3,162 5,063 7,863 8,966 10.09 33.08 (144 HK) Gross profit margin (%) 27.76 31.89 50.85 47.69 42.73 47.94 42.79 39.33 41.48 43.35 Net income margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.93  Dalian Port Revenue (RMB mn) 1,269 1,160 1,486 1,506 3,018 3,317 3,795 4,454 (2880 HK / 601880 CH) Gross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23	COSCO Pacific	Revenue (RMB mn)	2,422	2,372	2,274	2,349	2,387	3,022	3,873	4,641	4.53	23.92
China Merchants Int'I Revenue (RMB mn) 3,131 4,065 3,261 3,691 3,162 5,063 7,863 8,966 (10.09 33.08 (144 HK) Gross profit margin (%) 27.76 31.89 50.85 47.69 42.73 47.94 42.79 39.33 41.48 43.35 Net income margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.93 (2880 HK / 601880 CH) Gross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23	(1199 HK)	Gross profit margin (%)	60.92									
(144 HK) Gross profit margin (%) 27.76 31.89 50.85 47.69 42.73 47.94 42.79 39.33 41.48 43.35 Net income margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.93  Dalian Port Revenue (RMB mn) 1,269 1,160 1,486 1,506 3,018 3,317 3,795 4,454 (21.18 15.88 (2880 HK / 601880 CH) Gross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23		Net income margin (%)	113.29	97.85	143.09	81.29	49.37	80.92	64.89	46.53	94.30	64.11
Net income margin (%) 79.54 64.13 105.98 89.63 90.25 101.12 59.02 34.64 88.44 64.93  Dalian Port Revenue (RMB mn) 1,269 1,160 1,486 1,506 3,018 3,317 3,795 4,454 21.18 15.88 (2880 HK / 601880 CH) Gross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23	China Merchants Int'l	Revenue (RMB mn)	3,131	4,065	3,261	3,691	3,162	5,063	7,863	8,966	10.09	33.08
Dalian Port (2880 HK / 601880 CH)         Revenue (RMB mn)         1,269         1,160         1,486         1,506         3,018         3,317         3,795         4,454         21.18         15.88           (2880 HK / 601880 CH)         Gross profit margin (%)         50.86         50.39         43.99         42.81         37.26         39.87         34.45         31.37         44.20         35.23	(144 HK)	Gross profit margin (%)	27.76			47.69			42.79		41.48	
(2880 HK / 601880 CH) Gross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23		Net income margin (%)	79.54	64.13	105.98	89.63	90.25	101.12	59.02	34.64	88.44	64.93
(2880 HK / 601880 CH) Gross profit margin (%) 50.86 50.39 43.99 42.81 37.26 39.87 34.45 31.37 44.20 35.23	Dalian Port	Revenue (RMB mn)	1,269	1,160	1,486	1,506	3,018	3,317	3,795	4,454	21.18	15.88
Net income margin (%) 33.06 54.44 39.44 48.41 24.96 25.15 17.56 13.47 37.58 18.73	(2880 HK / 601880 CH)		50.86	50.39	43.99	42.81	37.26	39.87	34.45	31.37	44.20	35.23
	•											

(Cont'd)

		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2005-10	FY 2010-12
Xiamen Port	Revenue (RMB mn)	1,301	1,534	2,891	3,412	2,066	2,242	3,070	3,642	11.50	27.46
(3378 HK)	Gross profit margin (%)	42.72	39.38	22.16	17.93	21.19	25.20	19.15	15.92	28.10	20.09
,	Net income margin (%)	18.73	18.32	12.95	11.04	9.93	14.53	9.26	7.82	14.25	10.54
Tianjin Port Development	Revenue (RMB mn)	917	1,031	1,164	1,124	10,815	12,881	13,474	14,353	69.62	5.56
(3382 HK)	Gross profit margin (%)	48.46	51.82	52.95	45.22	23.12	21.70	21.71	22.51	40.54	21.97
,	Net income margin (%)	16.91	30.25	20.14	10.35	3.02	3.86	4.40	4.00	14.09	4.08
Average	Growth of revenue (%) Gross profit margin (%) Net income margin (%)	N/A 46.24 42.21	30.55 44.15 43.13	35.71 41.26 40.20	15.66 40.23 36.89	11.66 37.09 31.79	20.71 37.72 36.77	17.34 35.58 33.56	16.37 33.18 27.22	21.49 41.02 37.83	16.46 35.49 32.51

Source(s): Bloomberg, ABCI Securities

Asset return ratios of the major listed port operators have been declining since 2006. Average ROAA dropped from 6.84% in 2006-10 to 5.60% in 2010-12, while average ROAE dropped from 11.92% to 9.89% for the same period.

Exhibit 56: Asset returns summary of major listed port operators

		FY	FY	FY	FY	FY	FY	FY	FY	FY
		2006	2007	2008	2009	2010	2011	2012	2006-10	2010-12
Shanghai Int'l Port	ROAA (%)	6.12	6.80	8.06	6.14	8.38	6.33	5.83	7.10	6.85
(600018 CH)	ROAE (%)	12.94	13.79	15.91	12.14	16.06	11.71	10.68	14.17	12.81
Shenzhen Chiwan Wharf	ROAA (%)	13.65	13.19	12.12	7.84	10.17	7.94	7.01	11.40	8.37
(000022 CH)	ROAE (%)	28.67	27.39	24.07	14.94	19.59	15.08	13.07	22.93	15.91
Shenzhen Yantian Port	ROAA (%)	17.41	15.67	13.19	9.76	8.34	8.21	7.66	12.87	8.07
(000088 CH)	ROAE (%)	21.59	19.06	15.42	11.54	9.78	9.54	8.86	15.48	9.39
Ningbo Port	ROAA (%)	N/A	10.17	9.06	7.73	7.35	7.27	7.70	8.58	7.44
(601018 CH)	ROAE (%)	N/A	14.66	13.58	12.84	11.79	10.31	10.27	13.22	10.79
Tianjin Port	ROAA (%)	7.57	8.68	5.12	3.12	3.67	4.13	4.16	5.63	3.99
(600717 CH)	ROAE (%)	12.36	19.05	12.02	6.88	8.00	8.67	8.72	11.66	8.46
Lianyungang Port	ROAA (%)	5.43	5.34	4.53	3.03	4.01	4.36	3.63	4.47	4.00
(601008 CH)	ROAE (%)	11.90	8.78	6.37	4.40	6.34	6.92	6.01	7.56	6.42
Jinzhou Port	ROAA (%)	3.15	1.61	3.98	3.43	3.69	3.47	1.45	3.17	2.87
(600190 CH)	ROAE (%)	8.19	4.50	11.12	6.36	5.92	6.47	3.26	7.22	5.22
Rizhao Port	ROAA (%)	5.62	4.08	4.61	5.35	5.28	5.93	5.89	4.99	5.70
(600017 CH)	ROAE (%)	11.19	7.51	8.49	9.74	9.90	10.48	9.62	9.37	10.00
TangShan Port	ROAA (%)	N/A	N/A	4.68	5.86	5.77	5.12	5.96	5.44	5.62
(601000 CH)	ROAE (%)	N/A	N/A	11.93	15.53	12.03	10.74	13.16	13.16	11.98
Zhuhai Port	ROAA (%)	8.09	6.03	3.99	5.86	10.13	10.77	4.47	6.82	8.45
(000507 CH)	ROAE (%)	12.95	13.03	7.46	8.43	13.61	17.87	8.58	11.10	13.35
COSCO Pacific	ROAA (%)	10.01	12.62	6.70	3.90	7.38	6.67	4.98	8.12	6.34
(1199 HK)	ROAE (%)	14.45	17.71	10.26	6.52	11.99	11.19	9.09	12.19	10.76
China Merchants Int'l	ROAA (%)	8.18	8.87	7.59	6.29	9.09	6.77	4.67	8.00	6.84
(144 HK)	ROAE (%)	13.79	14.99	12.78	10.15	16.34	13.58	8.64	13.61	12.85
Dalian Port	ROAA (%)	<b>7.72</b> 16.40	<b>6.09</b> 10.18	<b>7.12</b> 11.35	<b>5.50</b> 9.48	<b>4.25</b> 7.91	<b>2.69</b> 5.43	<b>2.18</b> 4.69	<b>6.14</b> 11.06	<b>3.04</b> 6.01
(2880 HK / 601880 CH)	ROAE (%)									
Xiamen Port (3378 HK)	ROAA (%)	<b>4.89</b> 9.11	<b>5.78</b> 10.83	<b>5.52</b> 10.25	<b>3.14</b> 5.39	<b>4.95</b> 8.38	<b>4.28</b> 7.26	<b>3.94</b> 7.08	<b>4.85</b> 8.79	<b>4.39</b> 7.58
,	ROAE (%)									
Tianjin Port Development	ROAA (%)	11.56	<b>6.52</b> 7.59	<b>2.92</b> 3.66	<b>2.14</b> 5.52	<b>1.87</b> 6.06	<b>2.19</b> 7.46	<b>2.01</b> 6.95	<b>5.00</b> 7.34	<b>2.02</b> 6.82
(3382 HK)	ROAE (%)	13.89								
Average	ROAA (%)	8.42 14.42	7.96 13.50	6.61 11.64	5.27 9.32	6.29 10.91	5.74 10.18	4.77 8.58	6.84 11.92	5.60 9.89
	ROAE (%)	14.42	13.50	11.04	9.32	10.91	10.10	0.06	11.92	9.09

Source(s): Bloomberg, ABCI Securities



### **Strong Cash Flow of the Port Operators**

Although investment in port construction is expected to slow in the short term, we believe construction for port and waterway transportation infrastructure will be back on track after 2015 as earnings of port operators rise on recovery in Europe.

Average operating cash flow / net income ratio of the major listed port operators was 117.01% in 2005-10 and increased to 129.15% in 2010-12. Strong cash flow of the operators lowers the risk of delay in port construction due to insufficient funds. Looking forward, we believe the scale of port construction can be restored when the global economy regains strength sustainably.

Exhibit 57: Operating cash flow (OCF) summary of major listed port operators

		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2005-10	FY 2010-12
Chanabai latil Dart	Not in a sure (DMD non)	0.504	0.005	2.040	4.040	0.700	F 447	4 704	4.000	00.000	45 444
Shanghai Int'l Port (600018 CH)	Net income (RMB mn) OCF (RMB mn)	<b>2,504</b> 1,858	<b>2,965</b> 3.963	<b>3,640</b> 3,600	<b>4,619</b> 1,945	<b>3,760</b> 90	<b>5,417</b> 6,957	<b>4,724</b> 5,818	<b>4,969</b> 4,853	<b>22,906</b> 18,413	<b>15,111</b> 17,627
(000010 011)	OCF / Net income (%)	74.20	133.64	98.90	42.11	2.40	128.42	123.15	97.65	80.39	116.65
Shenzhen Chiwan Wharf	` ,	599	627	664	643	419	597	506	467	3.548	1.569
(000022 CH)	Net income (RMB mn) OCF (RMB mn)	1,180	610	768	948	559	690	583	705	4,756	1,978
(000022 011)	OCF / Net income (%)	197.08	97.36	115.69	147.47	133.40	115.72	115.24	150.86	134.04	126.02
Shenzhen Yantian Port	Net income (RMB mn)	684	706	645	573	460	410	426	410	3,479	1,247
(000088 CH)	OCF (RMB mn)	836	1,150	697	473	483	449	516	324	4,087	1,288
,	OCF / Net income (%)	122.11	162.92	108.07	82.60	104.87	109.39	121.01	78.91	117.50	103.34
Ningbo Port	Net income (RMB mn)	N/A	1,605	1,612	1,764	1,819	2,199	2,468	2,677	8,999	7,344
(601018 CH)	OCF (RMB mn)	N/A	1,666	1,583	1,295	748	903	1,281	842	6,195	3,026
	OCF / Net income (%)	N/A	103.80	98.20	73.44	41.15	41.05	51.92	31.45	68.85	41.20
Tianjin Port	Net income (RMB mn)	719	515	1,047	942	643	803	930	1,004	4,670	2,737
(600717 CH)	OCF (RMB mn)	940	518	260	1,119	723	1,501	1,461	1,474	5,061	4,436
	OCF / Net income (%)	130.74	100.62	24.79	118.82	112.33	186.87	157.10	146.77	108.37	162.05
Lianyungang Port	Net income (RMB mn)	41	84	100	102	73	111	147	151	512	409
(601008 CH)	OCF (RMB mn)	81	(62)	40	48	113	109	55	136	327	300
	OCF / Net income (%)	195.08	(73.66)	39.39	46.82	153.46	98.37	37.71	89.74	63.91	73.37
Jinzhou Port	Net income (RMB mn)	135	106	61	164	163	218	250	131	848	599
(600190 CH)	OCF (RMB mn)	187	124	133	270	352	318	410	303	1,384	1,031
	OCF / Net income (%)	138.30	116.69	216.33	164.65	216.14	146.05	163.78	230.99	163.32	172.06
Rizhao Port	Net income (RMB mn)	153	181	179	262	376	427	640	787	1,577	1,853
(600017 CH)	OCF (RMB mn)	256	162	116	266	368	346	700	816	1,514	1,862
	OCF / Net income (%)	167.45	89.33	64.97	101.61	97.85	81.06	109.48	103.71	95.96	100.49
TangShan Port	Net income (RMB mn)	N/A	N/A	132	158	253	344	461	646	887	1,451
(601000 CH)	OCF (RMB mn)	N/A	N/A	92	(17)	364	583	450	939	1,021	1,971
	OCF / Net income (%)	N/A	N/A	69.59	(10.80)	143.85	169.51	97.42	145.40	115.18	135.86
Zhuhai Port	Net income (RMB mn)	26	133	141	87	108	200	292	155	693	647
(000507 CH)	OCF (RMB mn)	(1)	87	447	73	154	97	590	5	858	693
	OCF / Net income (%)	(4.02)	65.55	317.32	84.55	142.97	48.68	202.13	3.31	123.70	107.05
COSCO Pacific	Net income (RMB mn)	2,744	2,321	3,254	1,909	1,179	2,445	2,513	2,159	13,852	7,117
(1199 HK)	OCF (RMB mn)	2,902	2,145	2,473	2,747	1,634	2,061	2,717	3,464	13,962	8,242
	OCF / Net income (%)	105.76	92.43	76.01	143.86	138.63	84.28	108.13	160.42	100.79	115.80
China Merchants Int'l	Net income (RMB mn)	2,490	2,607	3,456	3,308	2,854	5,119	4,641	3,106	19,834	12,866
(144 HK)	OCF (RMB mn)	1,319	1,676	2,625	2,787	1,853	1,992	3,163	4,130	12,251	9,286
	OCF / Net income (%)	52.96	64.29	75.94	84.24	64.92	38.92	68.17	132.98	61.77	72.18
Dalian Port	Net income (RMB mn)	420	632	586	729	753	834	666	600	3,954	2,101
(2880 HK / 601880 CH)	OCF (RMB mn)	448	892	714	376	1,072	1,352	956	717	4,853	3,024
	OCF / Net income (%)	106.86	141.17	121.70	51.55	142.27	162.01	143.41	119.45	122.72	143.96
											(Cont'd)



#### (Cont'd)

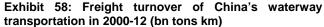
		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2005-10	FY 2010-12
Xiamen Port	Net income (RMB mn)	244	281	374	377	205	326	284	285	1,807	895
(3378 HK)	OCF (RMB mn)	608	390	361	578	522	657	309	485	3,116	1,451
,	OCF / Net income (%)	249.79	138.90	96.34	153.50	254.28	201.79	108.59	170.12	172.51	162.10
Tianjin Port Development	Net income (RMB mn)	155	312	234	116	326	497	592	574	1,641	1,663
(3382 HK)	OCF (RMB mn)	243	420	334	220	993	1,502	1,965	1,608	3,712	5,075
,	OCF / Net income (%)	156.73	134.63	142.68	188.78	304.25	302.12	331.83	280.13	226.17	305.11
Average	OCF / Net income (%)	130.23	97.69	111.06	98.21	136.85	127.62	129.27	129.46	117.01	129.15

Source(s): Bloomberg, ABCI Securities

Source(s): MOT

### Waterway construction

After the global economic downturn in 2008-09, the freight turnover recovered in 2011. Waterway will become the backbone of an integrated transport system in the future. We expect the long-term growth of inland waterway construction investment will be in tandem with growth of the port construction, but with less fluctuation thanks to the stable dredging demand. We estimate the FAI on waterway construction including dredging expenses to grow at 5% p.a. in 2014-15.



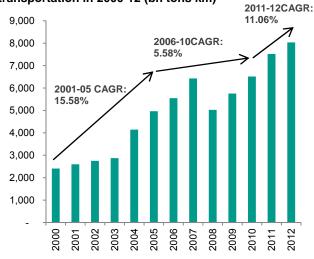
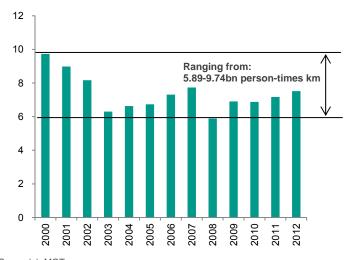


Exhibit 59: Passenger turnover of China's waterway transportation in 2000-12 (bn person-times km)



Source(s): MOT



# **Chapter 3: Financial Comparison**

### **Transport Infrastructure construction contractors**

We expect revenue and net income of the three major transportation contractors (CRCC, CRG and CCCC) to regain momentum in FY13E-15E, as infrastructure investment increases in the last three years (2013-15) of the 12th 5-Year Plan (2011-15). Although growth in railway and roadway investments will moderate under CRC's heavy debts and tightening liquidity of toll road operators, we believe urban rail investment will stay strong in 2013-15 to become the growth driver of infrastructure construction industry. The two largest urban rail builders in China, CRCC and CRG, will be the largest beneficiaries of the urban rail expansion in China's major cities in 2013-15.

In response to the slowdown in roadway and port infrastructure investments, we expect CCCC will increase its exposure in BOT/BOO projects, which usually have higher GPMs compared to cash projects. We expect GPMs of CCCC will improve in the future. On the other hand, the expected increase in BOT/BOO exposure will lower liquidity and drive up gearing in CCCC.

Exhibit 60: Financial performance summary of CRCC, CRG, CCCC and domestic & international peers

	CRCC (1186HK)	CRG (390HK)	CCCC (1800HK)	Average of domestic transport infrastructure constructor	Average of domestic infrastructure (ex. transport) constructor	Average of international transport infrastructure constructor
Earnings growth:						_
FY10-12 CAGR of revenue (%)	1.49	1.03	4.06	16.38	24.56	(0.22)
FY13E-15E CAGR of revenue (%)	12.74	9.92	7.16	12.82	16.86	2.56
FY10-12 CAGR of net income (%)	8.90	(0.30)	12.96	14.63	25.27	(4.92)
FY13E-15E CAGR of net income (%)	17.03	12.02	7.74	14.80	17.16	9.85
Profitability						
Average GPM during FY11-12 (%)	7.77	7.47	10.26	7.95	11.26	N/A
Average GPM during FY13-15E (%)	7.73	7.58	11.31	8.42	12.21	N/A
GPM improvement (ppt)	(0.04)	0.12	1.05	0.46	0.94	N/A
Average net income margin during FY11-12 (%)	1.79	1.55	4.07	2.79	5.15	2.85
Average net income margin during FY13E-15E (%)	1.89	1.67	4.01	2.76	5.27	2.82
Net income margin improvement (ppt)	0.10	0.12	(0.06)	(0.03)	0.12	(0.03)
Assets return						
Average ROAA during FY11-12 (%)	1.95	1.49	3.26	4.46	4.16	1.42
Average ROAA during FY13E-15E (%)	2.15	1.54	2.86	3.23	4.46	1.85
ROAA enhancement (ppt)	0.20	0.04	(0.40)	(1.23)	0.30	0.44
Average ROAE during FY11-12 (%)	12.62	9.72	16.38	14.47	17.16	14.28
Average ROAE during FY13E-15E (%)	13.67	11.02	13.80	12.41	16.20	9.22
ROAE enhancement (ppt)	1.05	1.29	(2.58)	(2.06)	(0.96)	(5.05)
Liquidity & Gearing						
Overall OCF / Net income ratio FY05-12 (%)	126.52	49.82	108.05	98.85	64.72	249.90
Average receivables turnover days FY05-12 (days)	50.48	70.97	57.31	85.06	62.03	93.43
Net gearing as of June 2013 (%)	36.10	118.44	106.82	78.36	14.51	213.06

Source(s): Companies, Bloomerbg, ABCI Securities estimates



# **Rolling stock manufacturers**

The lack of clear guidance for rolling stock procurement in the 12<sup>th</sup> 5-Year Plan and the poor profitability of CRC prompt lower the earnings visibility of rolling stock manufacturing industry. We expect the revenue and net income growth in CSR and CSR Times Electric to decelerate in FY13E-15E compared to FY10-12.

As rolling stock investment slows in 2013-15, we expect that competition in the domestic rolling stock industry will intensify. We expect GPMs and net income margins of CSR and CSR Times Electric will decline.

In addition, with the prudent monetary policy expected to remain in place in 2014-15, receivables turnover days of rolling stock makers are unlikely to improve significantly. CSR, with its high bargaining power over its suppliers, including CSR Times Electric, can leverage its supplier credit to maintain its liquidity level. Thus, we believe operating cash level and receivables turnover of CSR will be better than that of CSR Times Electric.

We compare China CNR Corporation limited (CNR) and Bombardier Inc (Bombardier) with CSR and CSR Times Electric because the first two companies are the largest competitors in domestic and international markets (CNR is the largest rolling stock manufacturers in the domestic market based on the sales revenue in 2012, while Bombardier focuses mainly on the international market)

Exhibit 61: Financial performance of CSR, CSR Times Electric and domestic & international peers

	CSR (1766HK)	CSR Times Electric (3898HK)	CNR (601299CH)	Bombardier (BBD/ACN)	Average of domestic rolling stock manufacturers	Average of international rolling stock manufacturers
Earnings growth:						
FY10-12 CAGR of revenue (%)	17.82	10.32	19.74	(6.95)	17.16	(6.07)
FY13E-15E CAGR of revenue (%)	10.01	14.62	12.54	9.84	13.74	5.18
FY10-12 CAGR of net income (%)	25.97	19.82	32.62	(8.22)	34.46	(18.51)
FY13E-15E CAGR of net income (%)	9.81	15.12	18.60	20.25	19.16	32.79
Profitability:						
Average GPM during FY10-12 (%)	18.20	34.10	13.55	15.36	18.56	18.49
Average GPM during FY13-15E (%)	17.07	33.40	15.10	15.10	19.30	18.10
GPM improvement (ppt)	(1.13)	(0.70)	1.55	(0.27)	0.74	(0.39)
Average net income margin during FY11-12 (%)	4.68	16.90	3.52	4.03	6.66	4.72
Average net income margin during FY13E-15E (%)	4.22	16.15	4.06	4.25	6.73	4.56
Net income margin improvement (ppt)	(0.47)	(0.75)	0.54	0.22	0.08	(0.16)
Assets return:						
Average ROAA during FY11-12 (%)	4.35	14.21	3.36	3.01	6.17	3.40
Average ROAA during FY13E-15E (%)	3.71	10.60	3.41	2.80	4.69	3.45
ROAA enhancement (ppt)	(0.64)	(3.60)	0.05	(0.21)	(1.49)	0.05
Average ROAE during FY11-12 (%)	15.83	22.60	11.47	24.61	13.36	13.40
Average ROAE during FY13E-15E (%)	11.68	15.65	11.22	27.90	14.59	11.55
ROAE enhancement (ppt)	(4.15)	(6.95)	(0.25)	3.29	1.23	(1.85)
Liquidity:						
Overall OCF / Net income ratio FY05-12 (%)	148.67	85.54	11.74	192.47	83.46	167.86
Average receivables turnover days FY05-12 (days)	65.50	140.76	76.04	37.36	80.52	96.79
Net gearing as of June 2013 (%)	Net Cash	Net Cash	72.97	216.37	0.39	58.99

Source(s): Companies, Bloomerbg, ABCI Securities estimates



# Financial Comparison – Revenue Growth

#### Transport infrastructure construction contractors

Revenue growth of the three major transportation contractors have slowed since 2010 after the rapid expansion in railway and roadway construction investment during 2000-10 (investment CAGR for railway construction: investment CAGR for roadway construction: 17.37%).

Over-capacity drove down utilization rate of toll roads, thus lengthening the breakeven period of new projects. Roadway investment reduced as a result. Furthermore, corruption scandal of the Ministry of Railway (MOR) in 2011 curtailed investments in railway construction. Since then, infrastructure construction in China has experienced a sharp decline and the two railway constructors (CRCC and CRG) suffered. CRG's net income, which grew at 35.14% CAGR in FY05-10, declined at 0.3% CAGR in FY10-12. For CRCC, excluding the effect of one-off provision for the Makkah ('Mecca') Mass Rail Transit Project that resulted in a loss of RMB 4.15bn (est. US\$ 600mn) in 2010, The Group's net income CAGR dropped form 82.9% over FY05-10 to 8.90% over FY11-12. For CCCC, its net income slowed more mildly than CRG's and CRCC's owing to its relatively stable business in ports and waterway construction.

With the reorganization of the authority structure in China's railway industry approaching completion, project delivery pace should be back on track. In addition, the fast-growing urban rail construction in major cities with high GDPs, will propel growth in China's top two urban rail infrastructure builders, CRCC and CRG. We expect their earnings growth will accelerate in 2013-15.

We expect the toll road industry to remain sluggish in the short to medium term due to the less-than-optimistic global economic outlook, while scale of ports construction in 2013-15 will stay flat after the high growth in 2011-12. We expect the earnings growth of CCCC will be lower than that of CRG and CRCC in 2013-15.

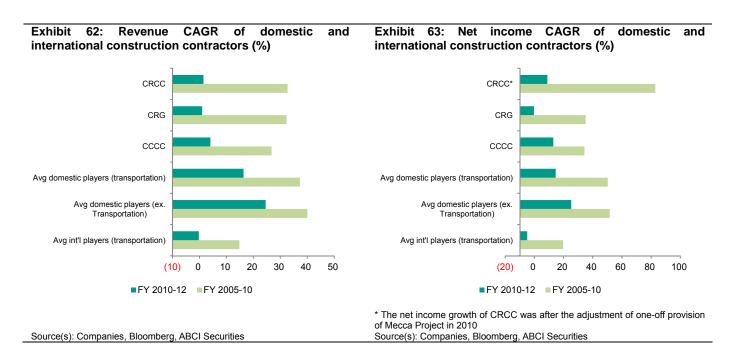


Exhibit 64: Revenue mix of construction contracting business of CCCC, CRCC and CRG over 2005-12

(RMB bn)	2005	2006	2007	2008	2009	2010	2011	2012	CAGR 2005-10(%)	CAGR 2010-12(%)
CRCC										
Railway construction	32,434	61,497	73,951	100,487	177,365	257,227	215,711	195,852	51.31	(12.74)
Roadway construction	47,565	56,925	54,865	55,889	65,093	85,351	79,794	75,795	12.40	(5.76)
Urban rail construction	2,691	4,824	5,179	4,093	10,490	19,367	26,783	36,125	48.40	36.58
Municipal & Others	21,444	23,114	28,937	40,505	61,990	66,552	85,252	99,828	25.42	22.47
Total revenue from construction contracting	104,134	146,360	162,932	200,973	314,937	428,497	407,541	407,601	32.70	(2.47)
CRG										
Railway construction	37,891	61.373	82.395	126,971	180,194	228.435	182,852	165,188	43.23	(14.96)
Roadway construction	33.131	42,051	38.939	41.284	50,250	66.736	70.899	68.560	15.03	1.36
Urban rail construction	9,515	7.718	8.287	6.548	16.784	29.280	36.731	47,530	25.21	27.41
Municipal & Others	18,667	29,257	38,941	36,602	66,909	92,062	102,058	115,628	37.60	12.07
Total revenue from construction contracting	99,204	140,399	168,562	211,406	314,136	416,513	392,540	396,906	33.24	(2.38)
cccc										
Railway construction	5,540	6,052	7,775	11,675	18,627	32,181	26,494	24,099	42.17	(13.46)
Roadway construction	13,611	20,278	29,411	35,663	73,412	92,121	99,941	96,395	46.59	2.29
Port construction	20,003	26,511	32,118	34,278	38,629	54,044	59,283	55,889	21.99	1.69
Dredging project	6,823	10,450	14,553	18,986	24,506	28,113	32,321	32,027	32.74	6.73
Municipal & Others	15,568	23,379	32,401	40,491	34,895	34,616	41,350	53,018	17.33	23.76
Total revenue from construction contracting <sup>1</sup>	61,546	86,670	116,258	141,093	190,069	241,075	259,389	261,428	31.40	4.14

Revenue composition (%)	2005	2006	2007	2008	2009	2010	2011	2012	Total 2005-10	Total 2010-12
CRCC										
Railway construction	31.15	42.02	45.39	50.00	56.32	60.03	52.93	48.05	51.77	53.78
Roadway construction	45.68	38.89	33.67	27.81	20.67	19.92	19.58	18.60	26.93	19.37
Urban rail construction	2.58	3.30	3.18	2.04	3.33	4.52	6.57	8.86	3.44	6.62
Municipal & Others	20.59	15.79	17.76	20.15	19.68	15.53	20.92	24.49	17.86	20.23
Total revenue from construction contracting	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
CRG										
Railway construction	38.20	43.71	48.88	60.06	57.36	54.84	46.58	41.62	53.12	47.80
Roadway construction	33.40	29.95	23.10	19.53	16.00	16.02	18.06	17.27	20.17	17.10
Urban rail construction	9.59	5.50	4.92	3.10	5.34	7.03	9.36	11.98	5.79	9.42
Municipal & Others	18.82	20.84	23.10	17.31	21.30	22.10	26.00	29.13	20.92	25.68
Total revenue from construction contracting	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
cccc										
Railway construction	9.00	6.98	6.69	8.27	9.80	13.35	10.21	9.22	9.78	10.86
Roadway construction	22.12	23.40	25.30	25.28	38.62	38.21	38.53	36.87	31.61	37.86
Port construction	32.50	30.59	27.63	24.29	20.32	22.42	22.85	21.38	24.57	22.21
Dredging project	11.09	12.06	12.52	13.46	12.89	11.66	12.46	12.25	12.36	12.14
Municipal & Others	25.30	26.97	27.87	28.70	18.36	14.36	15.94	20.28	21.67	16.93
Total revenue from construction contracting <sup>1</sup>	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

<sup>1:</sup> Including the revenue from dredging business Source(s): Companies, ABCI Securities

Exhibit 65: Earnings growth of domestic and international construction contractors in FY05-12

		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	CAGR 2005-10	CAGR 2010-12
lajor domestic transport	ation construction contrac	tors								(%)	(%)
<b>CRCC</b> (1186 HK / 601186 CH)	Revenue (RMB mn) Net income (RMB mn)	<b>110,795</b> 349	<b>153,609</b> 1,213	<b>171,997</b> 2,301	<b>219,410</b> 3,644	<b>344,976</b> 6,599	<b>456,187</b> 7,150 <sup>1</sup>	<b>443,319</b> 7,854	<b>469,872</b> 8,479	<b>32.72</b> 82.90	<b>1.49</b> 8.90
<b>CRG</b> (390 HK / 601390 CH)	Revenue (RMB mn) Net income (RMB mn)	<b>112,398</b> 1,641	<b>153,568</b> 2,046	<b>177,391</b> 2,488	<b>225,029</b> 5,489 <sup>2</sup>	<b>334,075</b> 6,875	<b>456,162</b> 7,398	<b>442,216</b> 6,690	<b>465,625</b> 7,354	<b>32.33</b> 35.14	<b>1.03</b> (0.30)
CCCC (1800 HK / 601800 CH)	Revenue (RMB mn) Net income (RMB mn)	<b>83,265</b> 2,195	<b>114,881</b> 3,199	<b>150,601</b> 6,032	<b>178,889</b> 6,075	<b>226,920</b> 7,200	<b>272,734</b> 9,599	<b>294,281</b> 11,761	<b>295,321</b> 12,248	<b>26.78</b> 34.33	<b>4.06</b> 12.96
<b>CREC</b> (600528 CH)	Revenue (RMB mn) Net income (RMB mn)	<b>8,208</b> 78	<b>13,570</b> 55	<b>17,576</b> 377	<b>23,394</b> 510	<b>39,395</b> 672	<b>53,304</b> 977	<b>58,125</b> 523	<b>65,281</b> 581	<b>45.38</b> 65.71	<b>10.67</b> (22.88)
Shanghai Tunnel (600820 CH)	Revenue (RMB mn) Net income (RMB mn)	<b>6,215</b> 105	<b>5,769</b> 123	<b>8,294</b> 190	<b>12,132</b> 233	<b>14,627</b> 361	<b>14,725</b> 553	<b>19,090</b> 1,128	<b>21,376</b> 1,151	<b>18.83</b> 39.35	<b>20.49</b> 44.24
Xiangyu Dredging (871 HK)	Revenue (RMB mn) Net income (RMB mn)				<b>133</b> 46	<b>347</b> 89	<b>375</b> 95	<b>1,137</b> 303	<b>966</b> 199	<b>67.67</b> 44.26	<b>60.53</b> 44.89
Average growth	Revenue (%) Net income (%)		34.28 60.99	26.38 168.19	30.52 47.46	44.30 42.30	24.99 29.62	8.14 16.06	7.18 7.02	37.28 50.28	16.38 14.63
ajor domestic infrastruc	cture (ex. Transportation) o	onstruction									
<b>CSCEC</b> (601668 CH)	Revenue (RMB mn) Net income (RMB mn)		<b>128,850</b> 2,412	<b>161,942</b> 4,917	<b>194,407</b> 2,746	<b>250,346</b> 6,092	<b>355,531</b> 9,240	<b>472,109</b> 13,644	<b>549,459</b> 15,735	<b>28.88</b> 39.91	<b>24.32</b> 30.50
Sinohydro Group (601669 CH)	Revenue (RMB mn) Net income (RMB mn)				<b>59,138</b> 1,266	<b>73,381</b> 2,290	<b>99,054</b> 2,911	<b>110,647</b> 3,619	<b>124,051</b> 4,094	<b>29.42</b> 51.65	<b>11.91</b> 18.59
China Gezhouba (600068 CH)	Revenue (RMB mn) Net income (RMB mn)	<b>1,613</b> 61	<b>9,117</b> 231	<b>11,669</b> 604	<b>18,873</b> 811	<b>25,945</b> 1,323	<b>35,719</b> 1,377	<b>45,266</b> 1,550	<b>52,081</b> 1,563	<b>85.80</b> 86.71	<b>20.75</b> 6.53
<b>CSCI<sup>3</sup></b> (3311 HK)	Revenue (RMB mn) Net income (RMB mn)	<b>8,073</b> 160	<b>11,386</b> 421	<b>9,977</b> 442	<b>9,838</b> 437	<b>8,554</b> 594	<b>10,440</b> 903	<b>13,600</b> 1,252	<b>16,078</b> 1,734	<b>5.28</b> 41.33	<b>24.10</b> 38.58
<b>CAMA</b> (002051 CH)	Revenue (RMB mn) Net income (RMB mn)	<b>644</b> 71	<b>1,123</b> 88	<b>1,141</b> 111	<b>1,871</b> 144	<b>4,235</b> 392	<b>5,052</b> 364	<b>7,165</b> 463	<b>10,146</b> 635	<b>50.97</b> 38.68	<b>41.72</b> 32.15
Average growth	Revenue (%) Net income (%)		193.48 155.76	10.73 74.46	36.10 4.48	40.72 94.77	31.20 25.54	28.66 30.12	20.68 20.97	40.07 51.66	24.56 25.27
	oortation construction con										
Vinci (DG FP)	Revenue (USD mn) Net income (USD mn)	<b>26,176</b> 1,084	<b>32,207</b> 1,596	<b>42,322</b> 1,995	<b>49,908</b> 2,341	<b>43,476</b> 2,226	<b>45,109</b> 2,356	<b>52,419</b> 2,652	<b>50,385</b> 2,465	<b>11.50</b> 16.80	<b>5.69</b> 2.28
Bouygues (EN FP)	Revenue (USD mn) Net income (USD mn)	<b>29,952</b> 1,035	<b>33,179</b> 1,576	<b>40,593</b> 1,886	<b>47,744</b> 2,208	<b>43,720</b> 1,839	<b>41,424</b> 1,421	<b>45,540</b> 1,490	<b>43,137</b> 814	<b>6.70</b> 6.54	<b>2.05</b> (24.31)
Hochtief (HOT GR)	Revenue (USD mn) Net income (USD mn)	<b>16,988</b> 84	<b>19,484</b> 112	<b>22,552</b> 193	<b>27,510</b> 231	<b>25,332</b> 267	<b>26,744</b> 382	32,418 (223)	<b>32,825</b> 203	<b>9.50</b> 35.32	<b>10.79</b> (27.06)
Skanska (SKAB SS)	Revenue (USD mn) Net income (USD mn)	<b>16,648</b> 520	<b>17,062</b> 494	<b>20,563</b> 607	<b>22,032</b> 476	<b>18,306</b> 555	<b>17,006</b> 560	<b>18,309</b> 1,170	<b>19,110</b> 421	<b>0.43</b> 1.46	<b>6.01</b> (13.21)
Strabag (STR AV)	Revenue (USD mn) Net income (USD mn)	<b>8,655</b> 62	<b>11,849</b> 240	<b>13,542</b> 233	<b>17,986</b> 231	<b>17,503</b> 225	<b>16,426</b> 232	<b>19,095</b> 272	<b>16,695</b> 78	<b>13.67</b> 30.14	<b>0.82</b> (42.03)
FCC (FCC SM)	Revenue (USD mn) Net income (USD mn)	<b>8,821</b> 524	<b>11,912</b> 673	<b>18,400</b> 1,011	<b>20,616</b> 496	<b>17,709</b> 413	<b>15,797</b> 400	<b>16,367</b> 151	14,340 (1,322)	<b>12.36</b> (5.29)	<b>(4.72)</b> N/A
Ferrovial (FER SM)	Revenue (USD mn) Net income (USD mn)	<b>866</b> 42	<b>1,111</b> 196	<b>979</b> (36)	<b>19,336</b> (1,194)	16,866 (128)	<b>12,449</b> 2,869	<b>10,368</b> 1,731	<b>9,883</b> 913	<b>70.41</b> 132.72	<b>(10.90)</b> (43.59)
BAM Groep	Revenue (USD mn)	9,238	10,863	12,274	12,995	11,648	9,818	10,718	9,521	1.22	(1.52)
(BAMNB NA)	Net income (USD mn)	191	172	478	238	44	20	175	(241)	(36.10)	N/A
SNC-Lavalin (SNC CN)	Revenue (USD mn) Net income (USD mn)	<b>2,851</b> 107	<b>4,542</b> 140	<b>6,298</b> 143	<b>6,702</b> 295	<b>5,373</b> 316	<b>6,133</b> 424	<b>7,293</b> 383	<b>8,097</b> 309	<b>16.56</b> 31.65	<b>14.90</b> (14.63)
Obrascon Huarte (OHL SM)	Revenue (USD mn) Net income (USD mn)	<b>3,039</b> 127	<b>4,119</b> 132	<b>5,160</b> 193	<b>5,896</b> 222	<b>6,121</b> 231	<b>6,513</b> 260	<b>5,155</b> 311	<b>5,182</b> 1,293	<b>16.47</b> 15.31	<b>(10.81)</b> 123.20
Sacyr SA (SYV SM)	Revenue (USD mn) Net income (USD mn)	<b>5,197</b> 514	<b>5,886</b> 681	<b>7,178</b> 1,297	7,913 (377)	<b>8,123</b> 723	<b>6,395</b> 271	<b>5,319</b> (2,234)	<b>4,647</b> (1,257)	<b>4.24</b> (12.01)	<b>(14.76)</b> N/A
Average growth	Revenue (%)		25.17	22.34	183.81	(9.04)	(5.69)	4.42	(4.13)	14.82	(0.22)

Net income of CRCC adjusted to exclude the impact of one-off provision for Mecca Project in 2010
 Net income of CRG adjusted to exclude FX-loss relevant to the IPO proceeds in 2008
 Converted from HKD to RMB for comparison
 Source(s): Companies, Bloomberg, ABCI Securities



#### Rolling stock manufacturers

Although revenue of CSR grew at 17.82% CAGR in FY10-12, lower than CNR (19.74% CAGR) but higher than the average growth among domestic players (17.16% CAGR) and international players at (-6.07% CAGR). CSR's net income CAGR was 25.97% in FY10-12, lower than CNR (32.62% CAGR) and domestic players (34.46% CAGR), but higher than the international players (-18.51% CAGR).

CSR Times Electric, a subsidiary of CRS (with 56.17% of shareholding as of October 21, 2013 and becoming 51.81% after placing assuming all placing shares are placed by end-2013), supplies train power converters, auxiliary power supply equipment to CSR, CSR Group (CSRG, the parent company) and other rolling stock manufacturers. We estimate that 50.82% of FY12 revenue and 45.14% of 1H13 revenue in CSR Times Electric was contributed by CSRG (including CSR). As an upstream supplier, earnings of CSR Times Electric's earnings growth was significantly impacted by the downturn in rolling stock industry during 2011-12. Revenue CAGR dropped 32.24ppt from 42.56% in FY05-10 to 10.32% in FY10-12, whereas the declines in CSR and CNR were 8.70ppt and 12.64ppt, respectively, when comparing the revenue CAGR in FY05-10 and FY10-12.

For 2013, we expect earnings will decline in the rolling stock manufacturing industry in 2013 with the dissolution of MOR. In 1H13, the CRC was still undergoing internal restructuring and halted tendering for rolling stock.

With CRC's resumption of rolling stock tendering in 2H13, which we estimate the total tender value will reach over RMB 100bn, and the growing urban rail investment, we expect sales of rolling stock will, improve in 2H13 compared to 1H13. Going forward, as the debt problem of CRC is the major hindrance to development in the rolling stock industry, we expect the growth in net income for CSR and CSR Times Electric to decelerate in FY13E-15E compared to FY10-12.

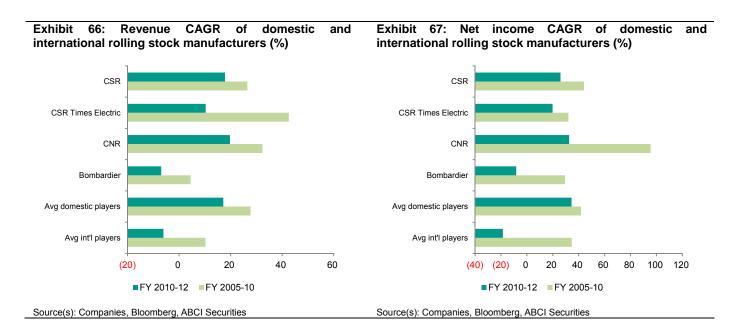




Exhibit 68: Earnings growth of domestic and international rolling stock manufacturers in FY05-12

		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average 2005-10 (%)	Average 2010-12 (%)
Major domestic rolling st	ock manufacturer										(7-7)
<b>CSR</b> (1766 HK / 601766 CH)	Revenue (RMB mn) Net income (RMB mn)	<b>19,785</b> 407	<b>23,047</b> 545	<b>26,804</b> 613	<b>35,093</b> 1,384	<b>45,621</b> 1,678	<b>64,132</b> 2,526	<b>79,517</b> 3,864	<b>89,019</b> 4,009	<b>26.52</b> 44.06	<b>17.82</b> 25.97
CSR Times Electric (3898 HK)	Revenue (RMB mn) Net income (RMB mn)	<b>998</b> 212	<b>1,256</b> 297	<b>1,542</b> 347	<b>2,119</b> 422	<b>3,327</b> 531	<b>5,877</b> 851	<b>7,079</b> 1,184	<b>7,153</b> 1,221	<b>42.56</b> 32.06	<b>10.32</b> 19.82
<b>CNR</b> (601299 CH)	Revenue (RMB mn) Net income (RMB mn)		<b>20,888</b> 132	<b>26,279</b> 742	<b>34,578</b> 1,131	<b>40,407</b> 1,316	<b>64,142</b> 1,924	<b>89,055</b> 2,985	<b>91,962</b> 3,384	<b>32.38</b> 95.52	<b>19.74</b> 32.62
Zhuzhou Times (600458 CH)	Revenue (RMB mn) Net income (RMB mn)	<b>404</b> 23	<b>573</b> 24	<b>709</b> 35	<b>1,039</b> 47	<b>1,518</b> 95	<b>2,311</b> 199	<b>3,413</b> 233	<b>3,702</b> 158	<b>41.75</b> 54.62	<b>26.56</b> (11.06)
Baotou Beifang (600967 CH)	Revenue (RMB mn) Net income (RMB mn)	<b>821</b> (10)	<b>1,248</b> 10	<b>1,929</b> 28	<b>2,046</b> 35	<b>2,397</b> 45	<b>2,884</b> 57	<b>2,949</b> 115	<b>3,058</b> 170	<b>28.57</b> 54.16	<b>2.97</b> 72.12
Jinxi Axle (600495 CH)	Revenue (RMB mn) Net income (RMB mn)	<b>279</b> 24	<b>1,019</b> 52	<b>1,046</b> 61	<b>1,940</b> 89	<b>1,504</b> 36	1, <b>731</b> 44	<b>2,155</b> 100	<b>2,728</b> 122	<b>(5.53)</b> (29.81)	<b>25.53</b> 67.26
Average growth	Revenue (%) Net income (%)		34.04 (29.47)	28.66 142.89	30.52 52.34	33.39 38.37	49.71 58.93	26.65 53.02	5.68 7.07	27.71 41.77	17.16 34.46
Major International rolling	g stock manufacturer									İ	
ALSTOM <sup>1</sup> (ALO FP)	Revenue (USD mn) Net income (USD mn)	<b>16,332</b> 314	<b>18,233</b> 702	<b>23,970</b> 1,208	<b>26,669</b> 1,578	<b>27,781</b> 1,721	<b>27,681</b> 611	<b>27,469</b> 1,009	<b>26,105</b> 1,033	<b>11.13</b> 14.24	<b>(2.89)</b> 30.00
Bombardier (BBD/A CN)	Revenue (USD mn) Net income (USD mn)	15,546 (85)	<b>14,726</b> 249	<b>14,882</b> 268	<b>17,506</b> 317	<b>19,721</b> 1,008	<b>19,366</b> 698	<b>18,347</b> 837	<b>16,768</b> 588	<b>4.49</b> 29.39	<b>(6.95)</b> (8.22)
CAF (CAF SM)	Revenue (USD mn) Net income (USD mn)	<b>847</b> 23	<b>1,012</b> 44	<b>1,199</b> 120	<b>1,478</b> 156	<b>1,754</b> 173	<b>2,091</b> 172	<b>2,402</b> 204	<b>2,213</b> 128	<b>19.81</b> 50.09	<b>2.88</b> (13.76)
Vossloh AG (VOS GR)	Revenue (USD mn) Net income (USD mn)	<b>1,173</b> 56	<b>1,275</b> 26	<b>1,403</b> 98	<b>1,784</b> 205	<b>1,637</b> 123	<b>1,793</b> 129	<b>1,667</b> 78	<b>1,598</b> 76	<b>8.86</b> 18.18	<b>(5.58)</b> (23.28)
Faiveley Transport <sup>1</sup> (LEY FP)	Revenue (USD mn) Net income (USD mn)	<b>693</b> 21	<b>794</b> 37	<b>982</b> 51	<b>1,213</b> 73	<b>1,238</b> 101	<b>1,209</b> 100	<b>1,241</b> 65	<b>1,272</b> 76	<b>11.78</b> 36.05	<b>2.57</b> (12.68)
Nippon Sharyo <sup>1</sup> (7102 JP)	Revenue (USD mn) Net income (USD mn)	<b>770</b> (15)	<b>749</b> 8	<b>807</b> (48)	<b>861</b> 16	<b>1,063</b> 41	<b>1,110</b> 43	<b>1,079</b> 57	<b>1,005</b> 19	<b>7.59</b> 51.60	<b>(4.85)</b> (33.21)
Kinki Sharyo <sup>1</sup> (7122 JP)	Revenue (USD mn) Net income (USD mn)	<b>266</b> 9	<b>313</b> 4	<b>397</b> 12	<b>657</b> 29	<b>596</b> 51	<b>615</b> 57	<b>381</b> 23	<b>270</b> 6	<b>18.28</b> 43.34	<b>(33.76)</b> (68.41)
Average growth	Revenue (%) Net income (%)		8.06 (45.46)	14.87 6.90	21.87 30.53	5.47 58.21	3.97 (9.05)	(4.55) 0.02	(7.38) (23.95)	10.24 34.70	(6.07) (18.51)

<sup>1:</sup> Fiscal year of the Company ended on March 31 Source(s): Companies, Bloomberg, ABCI Securities



# Financial Comparison – Profitability

### Transport infrastructure construction contractors

Thanks to increased exposure in BT/BOT projects with higher GPMs than cash projects and zealous cost control, profitability of CRCC, CRG and CCCC improved in the past three years. The gross profit margin (GPM) of CRCC, CRG and CCC improved by 1.83ppt, 1.69ppt and 2.52ppt from the average GPM in 2010-12,respectively, higher than the average improvement among domestic transport infrastructure contractors at 1.34ppt and domestic infrastructure construction (ex. transportation) contractors whose GPM fell 0.25ppt during the same period.

Exhibit 69: Gross profit margin of the three transport infrastructure construction contractors (%)

		FY	FY	FY
		2010	2011	2012
CRCC	Construction contracting	4.86	5.92	6.18
	Survey, Design & Consultancy	26.43	30.40	30.60
	Equipment Manufacturing	15.74	17.92	18.57
	Property Development	29.95	30.57	27.87
	Overall GPM	6.04	7.67	7.87
CRG	Construction contracting	4.50	5.40	5.70
	Survey, Design & Consultancy	32.40	32.40	31.40
	Equipment Manufacturing	15.80	19.60	21.00
	Property Development	19.70	25.40	27.50
	Overall GPM	5.95	7.29	7.64
CCCC	Construction contracting	6.98	8.02	9.66
	Survey, Design & Consultancy	28.09	24.26	25.74
	Port Machinery Manufacturing	2.77	5.24	5.03
	Dredging services	14.42	14.07	14.20
	Overall GPM	8.52	9.48	11.04

Source(s): Companies, ABCI Securities

Among the three major contractors, CCCC has the highest GPM due to the higher profitability of port construction projects at 12%-15% in FY10-12, compared to 7%-10% for railway and 4%-6% for roadway construction projects for the same period.

Looking forward, we expect the GPM of the contractors will increase in FY13E-15E, as we expect more BT/BOT projects will be undertaken in the future with the tightening liquidity in local governments and CRC.

Exhibit 70: Gross profit margin of major domestic transportation construction contractors (%)

	FY	FY	FY	FY	FY	FY	FY	FY	Average	Average
	2005	2006	2007	2008	2009	2010	2011	2012	2005-10	2011-12
									(%)	(%)
CRCC	7.15	6.25	6.63	7.20	6.54	6.04	7.67	7.87	6.63	7.77
CRG	7.44	7.76	7.18	7.33	6.12	5.95	7.29	7.64	6.96	7.47
CCCC	9.79	10.28	10.34	9.98	9.57	8.52	9.48	11.04	9.75	10.26
CREC	7.30	6.08	4.36	6.15	4.23	4.27	4.06	3.52	5.40	3.79
Shanghai Tunnel	6.47	8.35	6.93	5.39	6.63	8.98	10.55	10.39	7.12	10.47
Average	7.63	7.74	7.09	7.21	6.62	6.75	7.81	8.09	7.17	7.95



Exhibit 71: Gross profit margin of major domestic infrastructure (ex. Transportation) construction contractors (%)

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average 2005-10 (%)	Average 2011-12 (%)
CSCEC		7.32	9.10	7.82	8.62	8.34	8.47	8.44	8.24	8.45
Sinohydro Group				9.77	11.26	10.17	11.91	11.50	10.40	11.70
China Gezhouba	24.95	12.83	14.37	13.71	12.91	12.08	11.37	10.85	15.14	11.11
CSCI	4.76	7.65	11.17	10.38	7.72	10.98	10.98	12.19	8.78	11.59
CAMA	26.31	17.76	11.69	11.87	14.65	16.91	12.66	14.28	16.53	13.47
Average	18.67	11.39	11.59	10.71	11.03	11.70	11.08	11.45	11.82	11.26

Source(s): Companies, Bloomberg, ABCI Securities

While the three major transport infrastructure contractors focus on transportation construction projects in China, most international players focus on construction projects in developed countries, such as America, French and Germany where profit margins are usually higher. Although profitability of CRCC, CRG and CCCC was lower than the international players mainly because of the difference in geographic business area, we see the gap is closing.

Since not all international players disclose gross profit margin, we use EBITDA margin and net income margin as measurements of performance:

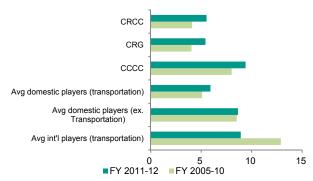
### Average EBITDA margin (FY05-10 vs. FY11-12)

- Average EBITDA margin of CRCC improved from 4.10% in FY05-10 to 5.53% in FY11-12;
- Average EBITDA margin of CRG improved from 4.04% in FY05-10 to 5.42% in FY11-12;
- Average EBITDA margin of CCCC improved from 8.02% in FY05-10 to 9.39% in FY11-12:
- Average EBITDA margin of international players dropped from 12.89% in FY05-10 to 8.92% in FY11-12

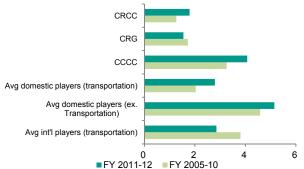
### Average net income margin (FY05-10 vs. FY11-12)

- \* Average net income margin of CRCC improved from 1.26% in FY05-10 to 1.79% in FY11-12:
- Average net income margin of CRG dropped from 1.72% in FY05-10 to 1.55% in FY11-12;
- Average net income margin of CCCC improved from 3.25% in FY05-10 to 4.07% in FY11-12;
- Average net income margin of international players dropped from 3.81% in FY05-10 to 2.85% in FY11-12.

Exhibit 72: **EBITDA** margin of domestic and Exhibit 73: Net income margin of international construction contractors (%)



domestic international construction contractors (%)



Note 1: Net income of CRCC adjusted to exclude the impact of one-off provision for Mecca Project in 2010;

(2) Net income of CRG adjusted to exclude FX-loss relevant to the IPO proceeds Source(s): Companies, Bloomberg, ABCI Securities

Exhibit 74: Profitability of domestic and international construction contractors, FY05-12

		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average 2005-10	Average 2011-12
Major domestic transport	ation construction contracto	rs								(%)	(%)
CRCC (1186 HK / 601186 CH)	EBITDA margin (%) Net income margin (%)	<b>2.86</b> 0.32	<b>3.69</b> 0.79	<b>5.11</b> 1.34	<b>4.79</b> 1.66	<b>4.71</b> 1.91	<b>3.43</b> 1.57 <sup>1</sup>	<b>5.36</b> 1.77	<b>5.69</b> 1.80	<b>4.10</b> 1.26	<b>5.53</b> 1.79
<b>CRG</b> (390 HK / 601390 CH)	EBITDA margin (%) Net income margin (%)	<b>3.35</b> 1.46	<b>3.09</b> 1.33	<b>4.80</b> 1.40	<b>3.95</b> 2.44 <sup>2</sup>	<b>4.95</b> 2.06	<b>4.09</b> 1.62	<b>5.07</b> 1.51	<b>5.78</b> 1.58	<b>4.04</b> 1.72	<b>5.42</b> 1.55
CCCC (1800 HK / 601800 CH)	EBITDA margin (%) Net income margin (%)	<b>6.46</b> 2.64	<b>7.99</b> 2.78	<b>9.10</b> 4.01	<b>9.10</b> 3.40	<b>7.82</b> 3.17	<b>7.65</b> 3.52	<b>8.84</b> 4.00	<b>9.95</b> 4.15	<b>8.02</b> 3.25	<b>9.39</b> 4.07
CREC (600528 CH)	EBITDA margin (%) Net income margin (%)	<b>3.88</b> 0.95	<b>2.61</b> 0.40	<b>2.09</b> 2.14	<b>4.08</b> 2.18	<b>3.48</b> 1.71	<b>3.12</b> 1.83	<b>2.78</b> 0.90	<b>2.09</b> 0.89	<b>3.21</b> 1.54	<b>2.44</b> 0.90
Shang Tunnel (600820 CH)	EBITDA margin (%) Net income margin (%)	<b>6.41</b> 1.69	<b>6.93</b> 2.14	<b>7.39</b> 2.29	<b>5.95</b> 1.92	<b>5.42</b> 2.47	<b>4.54</b> 3.76	<b>7.06</b> 5.91	<b>6.50</b> 5.38	<b>6.10</b> 2.38	<b>6.78</b> 5.65
Xiangyu Dredging <sup>3</sup> (871 HK)	EBITDA margin (%) Net income margin (%)				<b>48.73</b> 34.24	<b>36.52</b> 25.64	<b>40.25</b> 25.35	<b>40.08</b> 26.66	<b>36.31</b> 20.65	<b>N/A<sup>3</sup></b> N/A <sup>3</sup>	<b>N/A</b> <sup>3</sup> N/A <sup>3</sup>
Average margin	EBITDA margin (%) Net income margin (%)	4.59 1.41	4.86 1.49	5.70 2.24	5.57 2.32	5.27 2.26	4.57 2.46	5.82 2.82	6.00 2.76	5.09 2.03	5.91 2.79
Major domestic infrastruc	cture (ex. Transportation) cor										
<b>CSCEC</b> (601668 CH)	EBITDA margin (%) Net income margin (%)		<b>4.12</b> 1.87	<b>7.02</b> 3.04	<b>4.90</b> 1.41	<b>6.01</b> 2.43	<b>5.86</b> 2.60	<b>6.26</b> 2.89	<b>6.18</b> 2.86	<b>5.58</b> 2.27	<b>6.22</b> 2.88
Sinohydro Group (601669 CH)	EBITDA margin (%) Net income margin (%)				<b>9.45</b> 2.14	<b>10.18</b> 3.12	<b>9.25</b> 2.94	<b>10.34</b> 3.27	<b>9.92</b> 3.30	<b>9.63</b> 2.73	<b>10.13</b> 3.29
China Gezhouba (600068 CH)	EBITDA margin (%) Net income margin (%)	<b>22.10</b> 3.76	<b>9.84</b> 2.53	<b>12.14</b> 5.18	<b>11.74</b> 4.30	<b>11.40</b> 5.10	<b>9.99</b> 3.85	<b>9.19</b> 3.42	<b>8.57</b> 3.00	<b>12.87</b> 4.12	<b>8.88</b> 3.21
<b>CSCI</b> (3311 HK)	EBITDA margin (%) Net income margin (%)	<b>2.38</b> 1.98	<b>4.47</b> 3.70	<b>4.72</b> 4.43	<b>4.88</b> 4.44	<b>4.95</b> 6.94	<b>7.85</b> 8.65	<b>9.02</b> 9.20	<b>10.37</b> 10.78	<b>4.88</b> 5.02	<b>9.69</b> 9.99
<b>CAMA</b> (002051 CH)	EBITDA margin (%) Net income margin (%)	<b>14.96</b> 11.00	<b>10.74</b> 7.80	<b>6.81</b> 9.77	<b>6.42</b> 7.70	<b>9.86</b> 9.24	<b>9.09</b> 7.20	<b>8.01</b> 6.46	<b>8.60</b> 6.26	<b>9.65</b> 8.79	<b>8.30</b> 6.36
Average margin	EBITDA margin (%) Net income margin (%)	13.15 5.58	7.29 3.98	7.67 5.60	6.99 4.46	8.06 5.93	8.20 5.57	8.12 5.50	8.43 5.73	8.52 4.59	8.65 5.15
Major International transp	portation construction contra										
Vinci (DG FP)	EBITDA margin (%) Net income margin (%)	<b>10.61</b> 4.14	<b>15.02</b> 4.96	<b>14.86</b> 4.71	<b>14.76</b> 4.69	<b>15.44</b> 5.12	<b>15.19</b> 5.22	<b>14.47</b> 5.06	<b>14.06</b> 4.89	<b>14.31</b> 4.81	<b>14.26</b> 4.98
Bouygues (EN FP)	EBITDA margin (%) Net income margin (%)	<b>11.72</b> 3.46	<b>11.89</b> 4.75	<b>11.54</b> 4.65	<b>10.90</b> 4.62	<b>10.31</b> 4.21	<b>10.09</b> 3.43	<b>9.88</b> 3.27	<b>8.19</b> 1.89	<b>11.07</b> 4.19	<b>9.03</b> 2.58
Hochtief (HOT GR)	EBITDA margin (%) Net income margin (%)	<b>3.13</b> 0.50	<b>3.12</b> 0.57	<b>2.18</b> 0.86	<b>3.33</b> 0.84	<b>5.66</b> 1.06	<b>7.34</b> 1.43	<b>7.19</b> (0.69)	<b>5.79</b> 0.62	<b>4.13</b> 0.87	<b>6.49</b> (0.03)
Skanska (SKAB SS)	EBITDA margin (%) Net income margin (%)	<b>4.69</b> 3.13	<b>4.41</b> 2.89	<b>4.52</b> 2.95	<b>3.15</b> 2.16	<b>5.11</b> 3.03	<b>5.09</b> 3.29	<b>4.10</b> 6.39	<b>3.53</b> 2.21	<b>4.50</b> 2.91	<b>3.81</b> 4.30
Strabag (STR AV)	EBITDA margin (%) Net income margin (%)	<b>4.93</b> 0.72	<b>4.97</b> 2.03	<b>5.33</b> 1.72	<b>5.31</b> 1.28	<b>6.14</b> 1.29	<b>6.26</b> 1.41	<b>5.80</b> 1.42	<b>4.86</b> 0.47	<b>5.49</b> 1.41	<b>5.33</b> 0.94
FCC (FCC SM)	EBITDA margin (%) Net income margin (%)	<b>13.75</b> 5.94	<b>14.30</b> 5.65	<b>14.43</b> 5.50	<b>12.49</b> 2.41	<b>11.66</b> 2.33	<b>10.85</b> 2.53	<b>9.72</b> 0.92	<b>5.20</b> (9.22)	<b>12.91</b> 4.06	<b>7.46</b> (4.15)
Ferrovial (FER SM)	EBITDA margin (%) Net income margin (%)	<b>65.10</b> 4.85	<b>65.65</b> 17.60	<b>74.23</b> (3.64)	<b>19.36</b> (6.18)	<b>21.00</b> (0.76)	<b>42.31</b> 23.05	<b>10.99</b> 16.69	<b>12.06</b> 9.24	<b>47.94</b> 5.82	<b>11.52</b> 12.97
BAM Groep (BAMNB NA)	EBITDA margin (%) Net income margin (%)	<b>4.60</b> 2.07	<b>4.11</b> 1.58	<b>4.94</b> 3.90	<b>5.99</b> 1.83	<b>3.13</b> 0.37	<b>2.67</b> 0.21	<b>3.14</b> 1.64	2.54 (2.53)	<b>4.24</b> 1.66	<b>2.84</b> (0.45)
Snc-Lavalin (SNC CN)	EBITDA margin (%) Net income margin (%)	<b>7.02</b> 3.76	<b>6.48</b> 3.07	<b>4.26</b> 2.28	<b>8.83</b> 4.40	<b>12.06</b> 5.89	<b>13.93</b> 6.92	<b>10.21</b> 5.25	<b>8.21</b> 3.82	<b>8.76</b> 4.39	<b>9.21</b> 4.54
Obrascon Huarte <sup>3</sup> (OHL SM)	EBITDA margin (%) Net income margin (%)	<b>10.80</b> 4.19	<b>13.48</b> 3.21	<b>14.13</b> 3.73	<b>15.16</b> 3.76	<b>17.02</b> 3.77	<b>19.28</b> 3.98	<b>20.74</b> 6.03	<b>20.62</b> 24.95	<b>14.98</b> 3.77	<b>20.68</b> N/A <sup>3</sup>
Sacyr SA <sup>3</sup> (SYV SM)	EBITDA margin (%) Net income margin (%)	<b>20.47</b> 9.89	<b>22.39</b> 11.57	<b>15.70</b> 18.07	8.12 (4.76)	<b>2.57</b> 8.90	<b>11.64</b> 4.24	<b>10.96</b> (41.99)	3.92 (27.05)	<b>13.48</b> 7.99	<b>7.44</b> N/A <sup>3</sup>
Average margin	EBITDA margin (%) <sup>3</sup> Net income margin (%) <sup>3</sup>	14.26 3.88	15.07 5.26	15.10 4.07	9.76 1.37	10.01 3.20	13.15 5.07	9.74 0.36	8.09 0.84	12.89 3.81	8.92 2.85

Net income of CRCC adjusted to exclude the impact of one-off provision for Mecca Project in 2010
 Net income of CRG adjusted to exclude FX-loss relevant to the IPO proceeds
 The average margin excludes Xiangyu Dredging, Obrascon Huarte and Sacyr SA as outliers Source(s): Companies, Bloomberg, ABCI Securities



ROAA and ROAE among domestic and international construction contractors trended downwards, as expanded business size and the global economic downturn drove down assets return. Nevertheless, declines in assets return of CRCC, CRG and CCCC were lower than peers.

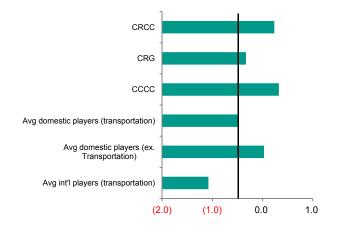
Comparing the average ROAE in FY06-10 and FY11-12, CRCC dropped 0.04ppt to 12.62%; CRG dropped 0.59ppt to 9.72%; CCCC improved 2.36ppt to 16.38%.

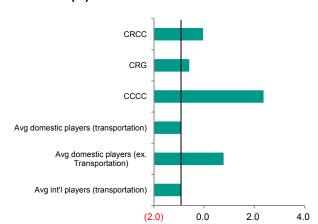
On the other hand, average ROAE of major domestic transportation construction contractors dropped 0.91ppt from 15.38% in FY06-10 to 14.47% in FY11-12. For of major domestic infrastructure (ex. transportation) construction contractors, the return increased 0.77ppt from 16.39% in FY06-10 to 17.16% in FY11-12; for major International transportation construction contractors, the return was down 0.90ppt from 15.18% in FY06-10 to 14.28% in FY11-12.

Looking forward, railway and roadway construction market in China will remain lukewarm and profitability is unlikely to improve. However, we expect contribution from urban rail construction business will increase for CRCC and CRG, driving up the GPMs in both. Therefore we expect the asset return ratios of CRCC and CRG will improve more significantly than CCCC in FY13E-15E.

Exhibit 75: Changes in average ROAA during FY11-12 vs. FY05-10 among domestic and international construction contractors (%)

Exhibit 76: Changes in average ROAE during FY11-12 vs. FY05-10 among domestic and international construction contractors (%)





Source(s): Companies, Bloomberg, ABCI Securities

Exhibit 77: Assets return ratios of domestic and international construction contractors in FY06-12

		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Overall 2006-10 (%)	Overall 2011-12 (%)
Major domestic transport	ation construction	contractors						,	(///	(70)
CRCC (1186 HK / 601186 CH)	ROAA (%) ROAE (%)	<b>1.08</b> 54.98	<b>1.64</b> 59.79	<b>1.93</b> 13.79	<b>2.62</b> 13.06	<b>2.26</b> 12.92	<b>2.03</b> 12.86	<b>1.88</b> 12.40	<b>1.72</b> 12.66	<b>1.95</b> 12.62
<b>CRG</b> (390 HK / 601390 CH)	ROAA (%) ROAE (%)	<b>1.66</b> 36.73	<b>1.38</b> 7.92	<b>2.34</b> 9.81	<b>2.42</b> 11.69	<b>2.09</b> 11.51	<b>1.56</b> 9.64	<b>1.44</b> 9.83	<b>1.82</b> 10.31	<b>1.49</b> 9.72
CCCC (1800 HK / 601800 CH)	ROAA (%) ROAE (%)	<b>3.11</b> 15.69	<b>4.10</b> 15.67	<b>3.15</b> 14.08	<b>2.99</b> 15.03	<b>3.34</b> 16.32	<b>3.51</b> 17.66	<b>3.09</b> 15.62	<b>2.94</b> 14.02	<b>3.26</b> 16.38
CREC (600528 CH)	<b>ROAA (%)</b> ROAE (%)	<b>0.65</b> 2.90	<b>2.73</b> 13.46	<b>2.54</b> 13.49	<b>2.74</b> 16.57	<b>3.34</b> 21.54	<b>1.47</b> 10.30	<b>1.39</b> 10.60	<b>2.31</b> 13.07	<b>1.44</b> 10.44
Shang Tunnel (600820 CH)	<b>ROAA (%)</b> ROAE (%)	<b>1.32</b> 6.14	<b>1.80</b> 8.84	<b>1.79</b> 7.95	<b>2.21</b> 9.51	<b>2.92</b> 13.21	<b>3.51</b> 15.78	<b>2.46</b> 11.02	<b>1.89</b> 8.58	<b>3.01</b> 13.50
Xiangyu Dredging (871 HK)	ROAA (%) ROAE (%)				<b>32.61</b> 72.11	<b>18.01</b> 31.48	<b>27.14</b> 36.39	<b>9.59</b> 14.85	<b>18.90</b> 33.63	<b>15.61</b> 24.15
Average margin	ROAA (%) ROAE (%)	1.56 23.29	2.33 21.14	2.35 11.83	7.60 22.99	5.33 17.83	6.54 17.10	3.31 12.39	4.93 15.38	4.46 14.47
Major domestic infrastru							-	1		
<b>CSCEC</b> (601668 CH)	ROAA (%) ROAE (%)	<b>2.07</b> 49.28	<b>3.48</b> 55.57	<b>1.48</b> 19.48	<b>2.44</b> 13.89	<b>2.66</b> 12.36	<b>2.99</b> 16.36	<b>2.70</b> 16.44	<b>2.15</b> 13.91	<b>2.82</b> 16.41
Sinohydro Group (601669 CH)	ROAA (%) ROAE (%)					<b>2.61</b> 28.27	<b>2.54</b> 19.02	<b>2.38</b> 14.07	<b>2.90</b> 31.40	<b>2.48</b> 16.77
China Gezhouba (600068 CH)	<b>ROAA (%)</b> ROAE (%)	<b>1.90</b> 6.11	<b>2.93</b> 12.70	<b>2.80</b> 16.23	<b>3.56</b> 20.77	<b>2.83</b> 14.96	<b>2.57</b> 14.52	<b>2.19</b> 13.24	<b>2.46</b> 12.26	<b>2.37</b> 13.81
<b>CSCI</b> (3311 HK)	<b>ROAA (%)</b> ROAE (%)	<b>6.87</b> 54.61	<b>5.99</b> 32.81	<b>5.63</b> 20.62	<b>5.55</b> 22.36	<b>6.16</b> 25.77	<b>6.67</b> 21.55	<b>6.72</b> 18.68	<b>5.18</b> 23.13	<b>6.64</b> 19.92
<b>CAMA</b> (002051 CH)	<b>ROAA (%)</b> ROAE (%)	<b>6.57</b> 13.86	<b>5.93</b> 12.38	<b>5.43</b> 14.90	<b>10.55</b> 27.30	<b>7.76</b> 18.20	<b>5.45</b> 19.91	<b>4.36</b> 18.79	<b>6.74</b> 16.25	<b>4.82</b> 18.53
Average margin	ROAA (%) ROAE (%)	4.35 30.96	4.58 28.37	3.84 17.81	5.52 21.08	4.85 17.82	4.42 18.09	3.99 16.79	4.13 16.39	4.16 17.16
Major International trans	portation construct	ion contractors						i		
Vinci (DG FP)	ROAA (%) ROAE (%)	<b>3.43</b> 20.19	<b>2.95</b> 18.72	<b>3.23</b> 20.59	<b>3.06</b> 17.25	<b>3.17</b> 15.45	<b>3.45</b> 16.00	<b>3.08</b> 14.37	<b>3.00</b> 16.79	<b>3.26</b> 15.12
Bouygues (EN FP)	ROAA (%) ROAE (%)	<b>4.61</b> 24.90	<b>4.29</b> 21.72	<b>4.49</b> 21.30	<b>3.75</b> 16.15	<b>2.95</b> 11.51	<b>3.21</b> 12.79	<b>1.74</b> 7.35	<b>3.79</b> 17.16	<b>2.45</b> 9.99
Hochtief (HOT GR)	ROAA (%) ROAE (%)	<b>1.09</b> 5.14	<b>1.45</b> 6.73	<b>1.42</b> 7.63	<b>1.54</b> 9.22	<b>2.01</b> 10.82	<b>(1.10)</b> (6.09)	<b>0.95</b> 5.93	<b>1.40</b> 7.27	<b>(0.05)</b> (0.28)
Skanska (SKAB SS)	ROAA (%) ROAE (%)	<b>5.09</b> 19.27	<b>5.37</b> 20.32	<b>4.17</b> 17.00	<b>4.97</b> 21.25	<b>4.81</b> 19.07	<b>9.92</b> 39.71	<b>3.29</b> 14.61	<b>4.90</b> 19.35	<b>6.43</b> 26.99
Strabag (STR AV)	<b>ROAA (%)</b> ROAE (%)	<b>3.58</b> 27.97	<b>2.50</b> 8.78	<b>1.85</b> 5.67	<b>1.64</b> 5.50	<b>1.68</b> 5.55	<b>1.99</b> 6.84	<b>0.58</b> 2.06	<b>1.85</b> 6.72	<b>1.29</b> 4.47
FCC (FCC SM)	<b>ROAA (%)</b> ROAE (%)	<b>3.77</b> 22.10	<b>3.44</b> 27.47	<b>1.59</b> 13.28	<b>1.38</b> 11.70	<b>1.32</b> 11.53	<b>0.52</b> 4.66	<b>(4.80)</b> (56.18)	<b>2.21</b> 17.17	<b>(2.08)</b> N/A <sup>1</sup>
Ferrovial (FER SM)	<b>ROAA (%)</b> ROAE (%)	<b>1.41</b> 10.37	<b>(0.21)</b> (2.25)	<b>(3.02)</b> (60.33)	<b>(0.21)</b> (3.81)	<b>4.74</b> 49.97	<b>3.95</b> 22.33	<b>3.09</b> 11.26	<b>0.77</b> 9.10	<b>3.39</b> 16.93
BAM Groep (BAMNB NA)	<b>ROAA (%)</b> ROAE (%)	<b>2.40</b> 21.48	<b>5.14</b> 40.50	<b>2.43</b> 18.10	<b>0.46</b> 3.58	<b>0.21</b> 1.49	<b>1.86</b> 11.79	<b>(2.66)</b> (17.70)	<b>2.15</b> 16.43	<b>(0.36)</b> (2.35)
SNC-Lavalin (SNC CN)	ROAA (%) ROAE (%)	<b>3.17</b> 19.17	<b>2.41</b> 16.72	<b>4.87</b> 32.19	<b>5.11</b> 28.09	<b>5.48</b> 27.59	<b>4.54</b> 21.46	<b>3.46</b> 15.71	<b>3.92</b> 22.40	<b>3.92</b> 18.36
Obrascon Huarte (OHL SM)	ROAA (%) ROAE (%)	<b>2.02</b> 19.12	<b>2.13</b> 24.05	<b>2.11</b> 30.02	<b>1.90</b> 25.88	<b>1.70</b> 17.70	<b>1.85</b> 18.77	<b>7.87</b> 58.86	<b>1.80</b> 20.10	<b>4.84</b> 39.24
Sacyr SA (SYV SM)	ROAA (%) ROAE (%)	<b>2.58</b> 26.90	<b>3.28</b> 37.41	<b>(0.91)</b> (10.29)	<b>2.11</b> 19.62	<b>0.94</b> 5.99	<b>(8.96)</b> (54.47)	<b>(6.07)</b> (49.05)	<b>1.61</b> 14.51	<b>(7.52)</b> N/A <sup>1</sup>
Average margin	ROAA (%) ROAE (%)	3.01 19.69	2.98 20.02	2.02 8.65	2.34 14.04	2.64 16.06	1.93 8.53	0.96 0.66	2.49 15.18	1.42 14.28

<sup>1:</sup> The average ROAE excludes FCC and Sacyr SA due to outlying data Source(s): Companies, Bloomberg, ABCI Securities

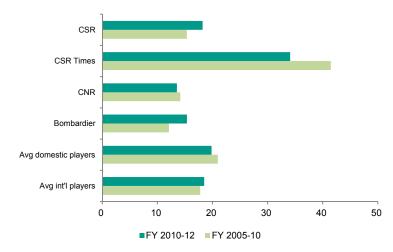


### Rolling stock manufacturers

Due to differences in product mix and the higher weight of locomotive and MUs businesses in CSR (in terms of revenue), GPM of CSR was higher than that of CNR. Average GPM of CSR was 18.20% in FY11-12, higher CNR's 13.55% but is similar to the international players whose average GPM was 18.49% in FY11-12.

CSR Times Electric, as a supplier of train power supply equipment, has a higher GPM compared to downstream rolling stock maker such as CSR, CNR and Bombardier. Its GPM, however, has been thinning due to intensifying competition. Since the Wenzhou train collision, CRC has placed more emphasis on safety and increases imports of train components and equipment to ensure quality, affecting businesses of domestic suppliers. We believe the proportion of imported items will rise in the future. Thus, GPM of domestic players including CSR Times Electric will be pressured.

Exhibit 78: Average gross profit margin of the domestic and international rolling stock manufacturer in FY05-12 (%)



Source(s): Companies, Bloomberg, ABCI Securities

GPM of CSR Times Electric, as the supplier and subsidiary of CSR, was dropping. Bargaining power of CSR over CSR Times Electric is increasing as competition stiffens in the upstream component industry. As we expect more newcomers, such as China Automation Group, to enter the rolling stock component market, GPM of CSR Times Electric could drop further.

Exhibit 79: Gross profit margin of major domestic rolling stock manufacturer (%)

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average 2005-10 (%)	Average 2011-12 (%)
CSR	13.60	14.07	14.99	16.57	15.71	17.13	18.70	17.70	15.35	18.20
CSR Times Electric	45.66	49.01	43.87	37.14	36.29	36.90	35.04	33.16	41.48	34.10
CNR	N/A	15.04	15.93	14.66	12.23	12.88	12.99	14.10	14.15	13.55
Zhuzhou Times	24.53	20.27	24.41	25.00	25.51	24.25	19.71	17.43	24.00	18.57
Baotou Beifang	6.18	7.61	8.35	10.13	8.92	9.67	12.92	16.60	8.47	14.76
Jinxi Axle	19.03	14.15	12.99	14.37	11.88	11.46	12.73	11.60	13.98	12.16
Average	21.80	20.03	20.09	19.65	18.42	18.72	18.68	18.43	19.57	18.56

Exhibit 80: Gross profit margin of major international rolling stock manufacturer (%)

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average 2005-10 (%)	Average 2011-12 (%)
ALSTOM1	17.39	18.45	18.61	18.75	18.67	19.05	19.01	19.46	18.49	19.24
Bombardier	8.00	9.93	11.40	13.64	15.81	13.77	15.82	14.90	12.09	15.36
Vossloh AG	19.37	18.37	22.00	20.93	21.93	21.86	19.52	20.01	20.74	19.76
Faiveley Transport <sup>1</sup>	27.14	29.18	28.59	28.44	28.20	28.61	25.96	25.14	28.36	25.55
Nippon Sharyo <sup>1</sup>	10.06	8.43	5.07	10.77	13.67	14.67	14.61	10.88	10.45	12.75
Kinki Sharyo <sup>1</sup>	11.10	9.86	11.88	18.93	23.75	23.35	22.46	14.09	16.48	18.28
Average	15.51	15.70	16.26	18.58	20.34	20.22	19.56	17.42	17.77	18.49

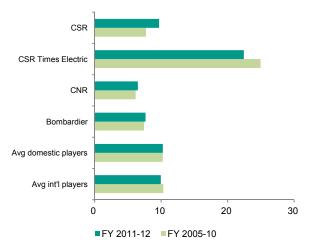
<sup>1:</sup> Fiscal year of the Company ended on March 31 Source(s): Companies, Bloomberg, ABCI Securities

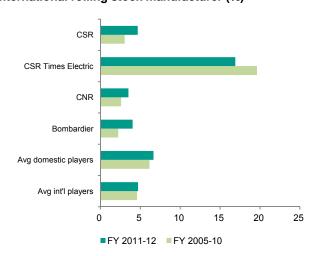
Although EBITDA and net income margins of CSR Times Electric were declining in FY11-12 compared to FY05-10, its profit margins were the highest comparing to domestic and international peers. Average EBITDA margin of CSR Times Electric was 22.43% in FY11-12, and the average net income margin was 16.90% during the same period. The average EBITDA margin and net income margin of domestic players in FY11-12 were 10.25% and 6.66% respectively, while that of the international players were 9.95% and 4.72%, respectively.

On the other hand, with zealous cost control and optimized product-mix, profit margins of CSR increased significantly in FY11-12. Its average EBITDA margin rose 1.96ppt from 7.72% in FY05-10 to 9.68% in FY11-12, while average EBITDA margins of domestic and international players edged up 0.02ppt and decline 0.37ppt, respectively. Average net income margin of CSR increased 1.63ppt from 3.05% in FY05-10 to 4.68% in FY11-12, higher than that of domestic and international players at 0.51ppt and 0.13ppt, respectively.

Exhibit 81: EBITDA margin of domestic and international rolling stock manufacturer (%)

Exhibit 82: Net income margin of domestic and international rolling stock manufacturer (%)





Source(s): Companies, Bloomberg, ABCI Securities

Exhibit 83: Profitability of domestic and international rolling stock manufacturer, FY05-12

		FY	FY	FY	FY	FY	FY	FY	FY	Average	Average
		2005	2006	2007	2008	2009	2010	2011	2012	2005-10 (%)	2011-12 (%)
Major domestic rolling st	ock manufacturer									. (70)	(70)
CSR	EBITDA margin (%)	6.29	7.16	7.41	9.07	8.08	8.30	10.14	9.22	7.72	9.68
(1766 HK / 601766 CH)	Net income margin (%)	2.06	2.36	2.29	3.94	3.68	3.94	4.86	4.50	3.05	4.68
<b>CSR Times Electric</b>	EBITDA margin (%)	25.59	28.26	25.82	26.27	21.68	22.03	22.85	22.00	24.94	22.43
(3898 HK)	Net income margin (%)	21.22	23.63	22.53	19.93	15.96	14.47	16.73	17.07	19.62	16.90
CNR	EBITDA margin (%)		5.30	7.41	7.40	5.15	5.56	6.28	6.71	6.16	6.50
(601299 CH)	Net income margin (%)		0.63	2.82	3.27	3.26	3.00	3.35	3.68	2.60	3.52
Zhuzhou Times	EBITDA margin (%)	10.22	8.25	10.34	8.50	9.69	12.54	10.58	8.26	9.92	9.42
(600458 CH)	Net income margin (%)	5.59	4.15	4.91	4.54	6.29	8.63	6.83	4.26	5.68	5.55
Baotou Beifang	EBITDA margin (%)	0.52	3.38	3.45	5.45	4.45	4.92	7.12	7.80	3.70	7.46
(600967 CH)	Net income margin (%)	-1.28	0.82	1.45	1.73	1.86	1.99	3.92	5.57	1.10	4.74
Jinxi Axle	EBITDA margin (%)	15.68	9.71	10.26	8.75	4.65	4.59	6.07	6.01	8.94	6.04
(600495 CH)	Net income margin (%)	8.68	5.15	5.79	4.57	2.42	2.53	4.63	4.48	4.86	4.56
Average margin	EBITDA margin (%)	11.66	10.34	10.78	10.91	8.95	9.66	10.50	10.00	10.23	10.25
Major International rolling	Net income margin (%)	7.25	6.12	6.63	6.33	5.58	5.76	6.72	6.59	6.15	6.66
ALSTOM <sup>1</sup>	-	0.40	0.00	0.04	10.52	44.00	40.70	40.40	0.04	40.00	40.05
(ALO FP)	EBITDA margin (%) Net income margin (%)	<b>9.49</b> 1.92	<b>9.28</b> 3.85	<b>9.21</b> 5.04	5.92	<b>11.26</b> 6.19	<b>10.73</b> 2.21	<b>10.19</b> 3.67	<b>9.91</b> 3.96	<b>10.08</b> 4.19	<b>10.05</b> 3.81
,	3 , ,	5.05	6.72		7.53	9.59	8.11	8.37	6.92		7.65
Bombardier (BBD/A CN)	EBITDA margin (%) Net income margin (%)	-0.55	1.69	<b>7.48</b> 1.80	1.81	<b>9.59</b> 5.11	3.60	4.56	3.51	<b>7.41</b> 2.25	4.03
CAF	EBITDA margin (%)	5.86	7.56	11.57	12.22	12.74	13.21	13.69	10.57	10.53	12.13
(CAF SM)	Net income margin (%)	2.67	4.30	10.02	10.52	9.88	8.22	8.47	5.78	7.60	7.13
Vossloh AG	EBITDA margin (%)	12.56	11.68	13.79	13.86	13.32	14.13	11.13	11.17	13.22	11.15
(VOS GR)	Net income margin (%)	4.78	2.00	6.98	11.50	7.49	7.22	4.69	4.76	6.66	4.73
Faiveley Transport1	EBITDA margin (%)	14.80	13.02	13.04	13.44	13.57	15.90	12.17	13.02	13.96	12.60
(LEY FP)	Net income margin (%)	3.10	4.72	5.24	6.04	8.12	8.28	5.27	6.00	5.92	5.63
Nippon Sharyo <sup>1</sup>	EBITDA margin (%)	4.82	3.61	0.98	6.88	10.46	11.14	10.61	5.66	6.32	8.14
(7102 JP)	Net income margin (%)	-1.97	1.10	-5.95	1.86	3.84	3.90	5.25	1.92	0.46	3.59
Kinki Sharyo <sup>1</sup>	EBITDA margin (%)	3.95	4.06	7.13	14.72	17.70	16.85	12.88	2.96	10.74	7.92
(7122 JP)	Net income margin (%)	3.57	1.43	2.98	4.45	8.57	9.34	6.09	2.12	5.06	4.11
Average margin	EBITDA margin (%)	8.08	7.99	9.03	11.31	12.66	12.86	11.29	8.60	10.32	9.95
	Net income margin (%)	1.93	2.73	3.73	6.01	7.03	6.11	5.43	4.01	4.59	4.72

<sup>1:</sup> Fiscal year of the Company ended on March 31 Source(s): Companies, Bloomberg, ABCI Securities

Due to the high margins of its train power supply equipment (30%-40%), asset return ratios of CSR Times Electric was the highest among domestic and international peers. Average ROAA and ROAE of CSR Time Electric were 14.21% and 22.60%, respectively, in FY11-12, higher than the average returns among domestic players.

As intensive capital investment is required for rolling stock manufacturing facilities, asset return ratios of downstream rolling stock makers, CSR and CNR, are relatively low. Among the major rolling stock makers, ROAA of CSR is the highest, averaging at 4.35% in FY11-12, higher than CNR's 3.36% and Bombardier's 3.01% for the same period.

ROAE of Bombardier in FY11-12 was 24.61%, but the high return is mainly supported by borrowings, while CSR and CNR were in net cash positions at end-2012 and end-1H13. FY11-12 average ROAE of CSR was 15.83%, higher than CNR's 11.47%.

Exhibit 84: Change of average ROAA during FY11-12 vs. FY05-10 of domestic and international rolling stock manufacturer (%)

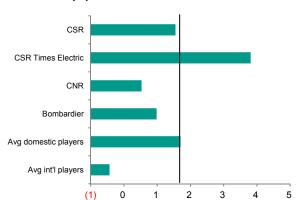
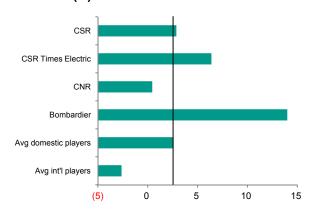


Exhibit 85: Change of average ROAE during FY11-12 vs. FY05-10 of domestic and international rolling stock manufacturer (%)



Source(s): Companies, Bloomberg, ABCI Securities

Exhibit 86: Assets return ratios of domestic and international construction contractors, FY05-12

		FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Overall 2006-10 (%)	Overall 2011-12 (%)
Major domestic rolling st	ock manufacturer							1	. ,	
<b>CSR</b> (1766 HK / 601766 CH)	<b>ROAA (%)</b> ROAE (%)	<b>2.23</b> 17.98	<b>2.08</b> 15.78	<b>3.54</b> 13.62	<b>3.33</b> 10.06	<b>3.92</b> 13.81	<b>4.64</b> 18.48	<b>4.05</b> 14.49	<b>2.79</b> 11.36	<b>4.35</b> 15.83
CSR Times Electric (3898 HK)	<b>ROAA (%)</b> ROAE (%)	<b>11.26</b> 17.07	<b>9.35</b> 11.57	<b>10.81</b> 12.86	<b>11.09</b> 14.77	<b>13.62</b> 20.61	<b>15.05</b> 24.20	<b>13.34</b> 21.24	<b>10.40</b> 14.54	<b>14.21</b> 22.60
<b>CNR</b> (601299 CH)	<b>ROAA (%)</b> ROAE (%)			<b>2.73</b> 16.58	<b>2.51</b> 9.43	<b>2.68</b> 8.62	<b>3.36</b> 12.31	<b>3.32</b> 11.32	<b>2.83</b> 10.19	<b>3.36</b> 11.47
Zhuzhou Times (600458 CH)	<b>ROAA (%)</b> ROAE (%)	<b>3.52</b> 6.39	<b>4.43</b> 8.86	<b>4.73</b> 11.16	<b>6.78</b> 19.89	<b>8.77</b> 20.03	<b>7.09</b> 14.79	<b>3.97</b> 9.10	<b>5.36</b> 11.82	<b>5.42</b> 11.87
Baotou Beifang (600967 CH)	<b>ROAA (%)</b> ROAE (%)	<b>0.84</b> 2.13	<b>1.87</b> 5.12	<b>1.78</b> 4.87	<b>2.00</b> 5.15	<b>2.54</b> 6.30	<b>4.42</b> 11.81	<b>5.41</b> 11.45	<b>1.51</b> 3.90	<b>4.94</b> 10.95
Jinxi Axle (600495 CH)	<b>ROAA (%)</b> ROAE (%)	<b>8.14</b> 12.66	<b>7.29</b> 13.22	<b>7.34</b> 15.70	<b>2.05</b> 3.65	<b>2.14</b> 3.20	<b>4.45</b> 6.93	<b>4.97</b> 7.92	<b>3.93</b> 6.52	<b>4.76</b> 7.44
Average margin	ROAA (%) ROAE (%)	5.20 11.25	5.00 10.91	5.16 12.47	4.63 10.49	5.61 12.09	6.50 14.75	5.84 12.59	4.47 9.72	6.17 13.36
Major International rolling	g stock manufactur	er						ĵ		
ALSTOM <sup>1</sup> (ALO FP)	ROAA (%) ROAE (%)	<b>2.94</b> 52.72	<b>4.05</b> 45.83	<b>4.80</b> 43.44	<b>5.12</b> 36.96	<b>1.58</b> 10.82	<b>2.42</b> 17.50	<b>2.52</b> 16.94	<b>3.22</b> 28.90	<b>2.47</b> 17.06
Bombardier (BBD/A CN)	ROAA (%) ROAE (%)	<b>1.32</b> 10.54	<b>1.49</b> 10.39	<b>1.56</b> 10.84	<b>4.64</b> 35.61	<b>3.28</b> 22.35	<b>3.71</b> 31.39	<b>2.37</b> 23.60	<b>2.03</b> 14.60	<b>3.01</b> 24.61
CAF (CAF SM)	<b>ROAA (%)</b> ROAE (%)	<b>4.05</b> 16.76	<b>7.31</b> 32.76	<b>6.82</b> 32.95	<b>5.74</b> 29.80	<b>5.43</b> 24.36	<b>6.72</b> 25.22	<b>3.87</b> 14.31	<b>5.26</b> 23.90	<b>5.19</b> 19.57
Vossloh AG (VOS GR)	<b>ROAA (%)</b> ROAE (%)	<b>1.78</b> 5.69	<b>5.57</b> 17.92	<b>10.78</b> 32.06	<b>6.47</b> 18.29	<b>6.81</b> 18.29	<b>4.08</b> 11.66	<b>3.83</b> 12.18	<b>6.08</b> 17.72	<b>3.96</b> 11.65
Faiveley Transport <sup>1</sup> (LEY FP)	<b>ROAA (%)</b> ROAE (%)	<b>3.86</b> 21.91	<b>4.56</b> 22.23	<b>5.11</b> 22.46	<b>5.98</b> 22.81	<b>5.49</b> 18.13	<b>3.38</b> 10.55	<b>3.96</b> 11.68	<b>4.55</b> 18.31	<b>3.69</b> 11.10
Nippon Sharyo <sup>1</sup> (7102 JP)	<b>ROAA (%)</b> ROAE (%)	<b>0.68</b> 1.70	<b>(3.80)</b> (10.18)	<b>1.24</b> 3.55	<b>3.31</b> 8.61	<b>3.44</b> 7.83	<b>4.02</b> 9.03	<b>1.33</b> 3.06	<b>0.60</b> 1.52	<b>2.69</b> 6.11
Kinki Sharyo <sup>1</sup> (7122 JP)	<b>ROAA (%)</b> ROAE (%)	<b>1.12</b> 2.23	<b>2.23</b> 5.15	<b>4.66</b> 11.66	<b>8.16</b> 18.40	<b>9.89</b> 16.40	<b>4.25</b> 5.82	<b>1.13</b> 1.47	<b>5.09</b> 10.20	<b>2.77</b> 3.70
Average margin	ROAA (%) ROAE (%)	2.25 15.94	3.06 17.73	5.00 22.42	5.63 24.35	5.13 16.88	4.08 15.88	2.72 11.89	3.83 16.45	3.40 13.40

<sup>1:</sup> Fiscal year of the Company ended on March 31 Source(s): Companies, Bloomberg, ABCI Securities



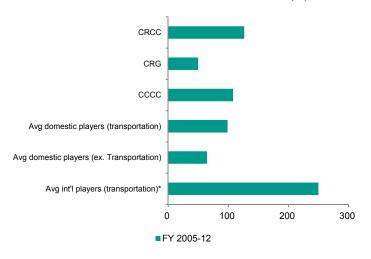
# Financial Comparison – Receivables and liquidity

### Transport infrastructure construction contractors

Operating cash flow (OCF) of construction contractors, domestic or international, is volatile. Although project owners make periodic payment to contractors based on completion progress, about 10%-20% of payment in general is typically retained for performance warranty. Besides, an upfront working capital, equivalent to 20%-30% of total contract value, is paid by the contractors upon project initiation. Therefore net operating cash flow of contractors are usually low (or even becomes negative) when a large batch of projects commence construction. Operating cash flow of domestic contractors has been declining since 2010. The average operating cash flow / net income ratio in 2005-10 was 173.94%, and the figure declined to -10.84% in 2010-12.

For CRCC and CCCC, the average OCF / net income ratio in FY05-12 was 126.52% and 108.05%, respectively, higher than the domestic players averaging at 98.85%. The average OCF / net income ratio of major domestic transportation construction contractors and major domestic infrastructure (ex. Transportation) construction contractors in FY05-12 were 98.85% and 64.72%, respectively. Cash flow of CRG is the weakest - its average OCF / net income ratio was 49.82% in FY05-12.

Exhibit 87: Average Operating cash flow / net income ratio of domestic and international construction contractors in FY05-12 (%)



\*Average OCF / Net income ratio of international players excludes Sacyr SA due to its outlying nature

Source(s): Companies, Bloomberg, ABCI Securities

Looking forward, as most urban rail projects follow the BT model in lower tier cities in which a large proportion of repayment is made by owners upon completion (vs. periodic payment based on completion progress), therefore burden of the upfront working capital investment falls almost exclusively on the contractors. We expect CRCC and CRG will undertake more urban rail projects in 2013-15 and consequently, liquidity pressure in both companies will increase.

For CCCC, the weighting of investment projects in BT/BOT modes increased in terms of new contract value. New BT/BOT projects accounted for 6.83% of total new contract value in FY10. The figure rose to 18.32% in FY11, and further to 29.55% in FY12. We expect the proportion will continue to rise in FY13E-15E.



We believe the cash flow of CRCC, CRG and CCCC will be strained by the increased capital required by BT/BOT projects. Nonetheless, under the encouraging policy on real economy investment, paid-in capital and project loans from the government are expected to increase, relieving some of the impacts of the tightened liquidity.

On average, cash collectability of the three transportation construction contractors are relatively higher than the domestic and international players. Average receivables turnover days of CRCC and CCCC in FY11-12 were 57.17 days and 61.97 days, respectively, shorter than the major domestic transportation construction contractors at 99.11 days and major domestic infrastructure (ex. Transportation) construction contractors at 64.87 days. Receivable turnover days of CRG was 78.32 days in FY11-12, higher than that of CRCC and CCCC but similar to the other domestic players.

Thanks to the availability of supply credits, cash conversion cycle of CRCC, CRG and CCCC were 22.39 days and -35.61 days, respectively shorter than other domestic players at, -18.85 days in FY11-12. The figures for major domestic transportation and major domestic infrastructure (ex. Transportation) construction contractors were 35.02 days and 72.78 days, respectively.

Exhibit 88: Receivable turnover period of domestic and international construction contractors (days)

Exhibit 89: Cash conversion cycle of domestic and international construction contractors (days)



Source(s): Companies, Bloomberg, ABCI Securities



Exhibit 90: Operating cash flow (OCF) of domestic and international construction contractors in FY05-12

		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Overall 2005-12
Major domestic transport	ation construction contract	ors								(%)
CRCC (1186 HK / 601186 CH)	OCF (RMB mn) OCF / Net income (%)	<b>4,060</b> 1,162.08	<b>6,337</b> 522.44	<b>10,035</b> 436.16	<b>8,601</b> 236.04	<b>18,472</b> 279.92	<b>7,083</b> 99.06	<b>(12,576)</b> (160.12)	<b>5,545</b> 65.40	<b>47,556</b> 126.52
<b>CRG</b> (390 HK / 601390 CH)	OCF (RMB mn) OCF / Net income (%)	<b>2,867</b> 174.69	<b>8,243</b> 402.88	<b>654</b> 26.29	<b>2,013</b> 36.67	<b>19,682</b> 286.28	<b>1,921</b> 25.97	<b>(12,719)</b> (190.12)	<b>(2,744)</b> (37.31)	<b>19,917</b> 49.82
CCCC (1800 HK / 601800 CH)	OCF (RMB mn) OCF / Net income (%)	<b>3,126</b> 142.41	<b>5,088</b> 159.05	<b>3,542</b> 58.72	<b>1,668</b> 27.46	<b>17,439</b> 242.21	<b>15,802</b> 164.62	<b>2,271</b> 19.31	<b>14,065</b> 114.84	<b>63,001</b> 108.05
CREC (600528 CH)	OCF (RMB mn) OCF / Net income (%)	<b>353</b> 451.72	<b>(472)</b> (859.55)	<b>(156)</b> (41.39)	<b>705</b> 138.29	<b>(292)</b> (43.46)	<b>408</b> 41.71	<b>(2,110)</b> (403.17)	<b>(1,014)</b> (174.49)	<b>(2,578)</b> (68.33)
Shang Tunnel (600820 CH)	OCF (RMB mn) OCF / Net income (%)	<b>(30)</b> (28.69)	<b>679</b> 550.92	<b>1,697</b> 891.39	<b>1,577</b> 676.80	<b>2,444</b> 677.59	<b>279</b> 50.42	<b>3,777</b> 334.75	<b>2,435</b> 211.51	<b>12,858</b> 334.38
Xiangyu Dredging (871 HK)	OCF (RMB mn) OCF / Net income (%)				<b>44</b> 95.49	<b>44</b> 49.43	<b>72</b> 75.82	<b>(35)</b> (11.60)	<b>188</b> 94.22	<b>312</b> 42.66
Average	OCF / Net income (%)	380.44	155.15	274.23	201.79	248.66	76.27	(68.49)	45.69	98.85
lajor domestic infrastruc	cture (ex. Transportation) co	nstruction co	ntractors						i	
<b>CSCEC</b> (601668 CH)	OCF (RMB mn) OCF / Net income (%)		<b>415</b> 17.19	<b>(2,644)</b> (53.78)	<b>949</b> 34.56	<b>11,481</b> 188.46	<b>(4,569)</b> (49.45)	<b>(10,756)</b> (78.83)	<b>(5,137)</b> (32.64)	<b>(10,262)</b> (18.73)
Sinohydro Group (601669 CH)	OCF (RMB mn) OCF / Net income (%)					<b>2,384</b> 104.13	<b>12</b> 0.42	<b>2,579</b> 71.25	<b>(2,387)</b> (58.31)	<b>2,588</b> 18.25
China Gezhouba (600068 CH)	OCF (RMB mn) OCF / Net income (%)	<b>166</b> 273.00	<b>(73)</b> (31.51)	<b>(37)</b> (6.06)	<b>(58)</b> (7.19)	<b>(627)</b> (47.41)	<b>(410)</b> (29.80)	<b>(448)</b> (28.91)	<b>(2,414)</b> (154.50)	<b>(3,902)</b> (51.89)
<b>CSCI</b> (3311 HK)	OCF (RMB mn) OCF / Net income (%)	<b>176</b> 109.92	<b>668</b> 158.52	<b>(345)</b> (78.02)	<b>280</b> 64.03	<b>124</b> 20.84	<b>495</b> 54.80	<b>(636)</b> (50.81)	<b>(2,506)</b> (144.56)	<b>(1,745)</b> (29.37)
<b>CAMA</b> (002051 CH)	OCF (RMB mn) OCF / Net income (%)	<b>236</b> 333.06	<b>23</b> 26.53	<b>638</b> 572.63	<b>597</b> 414.52	<b>445</b> 113.72	<b>125</b> 34.43	<b>5,182</b> 1,118.86	<b>889</b> 140.01	<b>8,136</b> 358.85
Average	OCF / Net income (%)	238.66	42.68	108.69	126.48	68.90	2.50	240.08	(47.92)	64.72
lajor International transp	portation construction conti	ractors							i	
Vinci (DG FP)	OCF (USD mn) OCF / Net income (%)	<b>2,155</b> 198.78	<b>3,150</b> 197.37	<b>4,947</b> 248.03	<b>6,136</b> 262.12	<b>5,487</b> 246.56	<b>4,491</b> 190.61	<b>5,483</b> 206.77	<b>4,970</b> 201.63	<b>36,818</b> 220.29
Bouygues (EN FP)	OCF (USD mn) OCF / Net income (%)	<b>2,743</b> 265.02	<b>3,679</b> 233.49	<b>4,603</b> 244.04	<b>3,530</b> 159.89	<b>4,260</b> 231.61	<b>3,132</b> 220.45	<b>3,611</b> 242.34	<b>2,766</b> 339.81	<b>28,324</b> 230.87
Hochtief (HOT GR)	OCF (USD mn) OCF / Net income (%)	<b>791</b> 939.22	<b>1,139</b> 1,017.81	<b>835</b> 433.06	<b>391</b> 169.79	<b>1,324</b> 495.30	<b>1,374</b> 359.68	<b>1,428</b> (639.99)	<b>1,293</b> 636.07	<b>8,577</b> 686.64
<b>Skanska</b> (SKAB SS)	OCF (USD mn) OCF / Net income (%)	<b>900</b> 172.91	<b>505</b> 102.26	<b>1,348</b> 222.14	<b>85</b> 17.86	<b>998</b> 179.91	<b>868</b> 155.10	<b>38</b> 3.23	<b>(13)</b> (3.19)	<b>4,728</b> 98.44
Strabag (STR AV)	OCF (USD mn) OCF / Net income (%)	<b>333</b> 536.18	<b>561</b> 233.26	<b>677</b> 290.19	<b>1,015</b> 439.36	<b>1,555</b> 690.65	<b>916</b> 394.85	<b>698</b> 257.00	<b>346</b> 443.34	<b>6,100</b> 387.69
FCC (FCC SM)	OCF (USD mn) OCF / Net income (%)	<b>1,240</b> 236.50	<b>1,330</b> 197.72	<b>1,226</b> 121.25	<b>931</b> 187.68	<b>1,798</b> 435.68	<b>876</b> 219.22	<b>863</b> 572.55	<b>1,803</b> (136.42)	<b>10,068</b> 429.19
Ferrovial (FER SM)	OCF (USD mn) OCF / Net income (%)	<b>350</b> 832.26	<b>310</b> 158.30	<b>467</b> (1,311.5)	<mark>(93)</mark> 7.76	<b>1,415</b> (1,103.3)	<b>1,451</b> 50.58	<b>384</b> 22.20	<b>1,078</b> 118.03	<b>5,363</b> 122.09
BAM Groep (BAMNB NA)	OCF (USD mn) OCF / Net income (%)	<b>(216)</b> (113.04)	<b>316</b> 183.59	<b>(29)</b> (5.97)	<b>261</b> 109.48	<b>571</b> 1,310.12	<b>(136)</b> (669.07)	<b>(471)</b> (268.47)	( <b>333</b> ) 138.06	<b>(36)</b> (3.36)
SNC-Lavalin (SNC CN)	OCF (USD mn) OCF / Net income (%)	<b>419</b> 390.15	<b>(53)</b> (37.95)	<b>746</b> 520.26	<b>295</b> 100.24	<b>351</b> 110.88	<b>475</b> 111.85	<b>930</b> 242.78	<b>505</b> 163.15	<b>3,667</b> 173.12
Obrascon Huarte (OHL SM)	OCF (USD mn) OCF / Net income (%)	<b>314</b> 246.92	<b>691</b> 523.53	<b>264</b> 137.02	<b>509</b> 229.44	<b>846</b> 366.25	<b>730</b> 281.23	<b>482</b> 155.01	<b>429</b> 33.14	<b>4,264</b> 154.06
Sacyr SA (SYV SM)	OCF (USD mn) OCF / Net income (%)	<b>526</b> 102.42	<b>7</b> 1.09	<b>1,304</b> 100.53	<b>2,284</b> (606.47)	<b>2,597</b> 359.19	<b>1,271</b> 468.78	<b>597</b> (26.74)	<b>402</b> (31.99)	<b>8,990</b> N/A
Average	OCF / Net income (%)	346.12	255.50	90.82	97.92	302.08	162.11	69.70	172.88	249.90

Exhibit 91: Receivables turnover of domestic and international infrastructure construction contractors, FY05-12

		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average 2005-10	Average 2011-12
lajor domestic transport	ation construction contractors									(%)	(%)
CRCC (1186 HK / 601186 CH)	Receivables (RMB mn) Receivables turnover (days)	12,713	<b>24,001</b> 43.62	<b>31,299</b> 58.68	<b>34,010</b> 54.32	<b>46,801</b> 42.75	<b>57,939</b> 41.90	<b>73,438</b> 54.08	<b>81,707</b> 60.26	48.25	57.17
<b>CRG</b> (390 HK / 601390 CH)	Receivables (RMB mn) Receivables turnover (days)	25,528	<b>31,276</b> 67.51	<b>40,484</b> 73.83	<b>50,685</b> 73.94	<b>69,521</b> 65.67	<b>84,526</b> 61.63	<b>99,094</b> 75.78	<b>107,234</b> 80.87	68.51	78.32
CCCC (1800 HK / 601800 CH)	Receivables (RMB mn) Receivables turnover (days)	13,655	<b>19,288</b> 52.33	<b>24,647</b> 53.24	<b>33,603</b> 59.43	<b>37,435</b> 57.13	<b>47,189</b> 56.63	<b>50,909</b> 60.84	<b>51,196</b> 63.10	55.75	61.97
<b>CREC</b> (600528 CH)	Receivables (RMB mn) Receivables turnover (days)	985	<b>1,261</b> 30.22	<b>3,691</b> 51.42	<b>4,361</b> 62.81	<b>6,461</b> 50.13	<b>8,489</b> 51.18	<b>11,115</b> 61.55	<b>11,225</b> 62.45	49.15	62.00
Shang Tunnel (600820 CH)	Receivables (RMB mn) Receivables turnover (days)	1,250	<b>1,666</b> 92.25	<b>1,674</b> 73.50	<b>1,976</b> 54.91	<b>2,435</b> 55.04	<b>4,555</b> 86.63	<b>8,413</b> 123.97	<b>8,784</b> 146.83	72.46	135.40
Xiangyu Dredging (871 HK)	Receivables (RMB mn) Receivables turnover (days)				61	<b>216</b> 145.55	<b>258</b> 230.64	<b>551</b> 129.86	<b>877</b> 269.75	188.10	199.80
Average	Receivables turnover (days)		57.19	62.13	61.08	69.38	88.10	84.35	113.88	80.37	99.11
	cture (ex. Transportation) const	ruction con								I	
<b>CSCEC</b> (601668 CH)	Receivables (RMB mn) Receivables turnover (days)		27,388	<b>31,049</b> 65.86	<b>32,998</b> 60.12	<b>39,543</b> 52.88	<b>48,750</b> 45.32	<b>69,767</b> 45.81	<b>88,353</b> 52.52	56.05	49.17
Sinohydro Group (601669 CH)	Receivables (RMB mn) Receivables turnover (days)					<b>13,468</b> 66.99	<b>15,896</b> 54.10	<b>16,937</b> 54.15	<b>19,262</b> 53.25	60.55	53.70
China Gezhouba (600068 CH)	Receivables (RMB mn) Receivables turnover (days)	395	<b>722</b> 22.37	<b>1,124</b> 28.88	<b>1,352</b> 23.94	<b>2,283</b> 25.56	<b>2,501</b> 24.44	<b>3,737</b> 25.15	<b>4,166</b> 27.69	25.04	26.42
<b>CSCI</b> (3311 HK)	Receivables (RMB mn) Receivables turnover (days)	1,602	<b>2,899</b> 72.14	<b>3,287</b> 113.16	<b>3,646</b> 128.62	<b>3,015</b> 142.11	<b>3,676</b> 116.97	<b>4,306</b> 107.11	<b>6,127</b> 118.43	114.60	112.77
<b>CAMA</b> (002051 CH)	Receivables (RMB mn) Receivables turnover (days)	154	<b>253</b> 66.13	<b>140</b> 62.76	<b>85</b> 21.86	<b>480</b> 24.33	<b>1,481</b> 70.83	<b>1,888</b> 85.82	<b>2,489</b> 78.74	49.18	82.28
Average	Receivables turnover (days)		53.55	67.66	58.64	62.38	62.33	63.61	66.13	61.08	64.87
lajor International transp	portation construction contract	ors								İ	
Vinci (DG FP)	Receivables (USD mn) Receivables turnover (days)	9,862	<b>7,318</b> 97.35	<b>9,486</b> 72.46	<b>9,269</b> 68.58	<b>7,723</b> 71.33	<b>7,691</b> 62.36	<b>7,695</b> 53.57	<b>7,870</b> 56.38	74.42	54.97
Bouygues (EN FP)	Receivables (USD mn) Receivables turnover (days)	6,411	<b>8,246</b> 80.62	<b>10,078</b> 82.38	<b>9,902</b> 76.38	<b>8,788</b> 78.02	<b>8,243</b> 75.03	<b>8,734</b> 68.03	<b>8,399</b> 72.48	78.49	70.26
Hochtief (HOT GR)	Receivables (USD mn) Receivables turnover (days)	3,996	<b>4,387</b> 78.52	<b>5,383</b> 79.06	<b>5,279</b> 70.73	<b>4,883</b> 73.21	<b>5,326</b> 69.67	<b>6,067</b> 64.14	<b>7,006</b> 72.68	74.24	68.41
Skanska (SKAB SS)	Receivables (USD mn) Receivables turnover (days)	2,383	<b>2,776</b> 55.18	<b>2,687</b> 48.48	<b>2,598</b> 43.78	<b>2,622</b> 52.04	<b>2,538</b> 55.38	<b>2,622</b> 51.43	<b>2,907</b> 52.80	50.97	52.12
Strabag (STR AV)	Receivables (USD mn) Receivables turnover (days)	2,306	<b>3,054</b> 82.55	<b>3,570</b> 89.27	<b>3,958</b> 76.38	<b>3,442</b> 77.15	<b>3,407</b> 76.09	<b>3,408</b> 65.13	<b>3,346</b> 73.83	80.29	69.48
FCC (FCC SM)	Receivables (USD mn) Receivables turnover (days)	3,520	<b>6,023</b> 146.21	<b>6,896</b> 128.13	<b>6,943</b> 122.50	<b>7,015</b> 143.84	<b>6,601</b> 157.29	<b>6,420</b> 145.19	<b>5,598</b> 152.94	139.59	149.06
Ferrovial (FER SM)	Receivables (USD mn) Receivables turnover (days)	134	<b>207</b> 56.00	<b>233</b> 82.04	<b>4,392</b> 43.65	<b>3,858</b> 89.27	<b>4,225</b> 118.50	<b>3,464</b> 135.35	<b>2,907</b> 117.65	77.89	126.50
BAM Groep (BAMNB NA)	Receivables (USD mn) Receivables turnover (days)	1,205	<b>1,401</b> 43.78	<b>1,686</b> 45.90	<b>1,707</b> 47.65	<b>1,552</b> 51.06	<b>1,329</b> 53.55	<b>1,327</b> 45.23	<b>1,217</b> 48.76	48.39	46.99
SNC-Lavalin (SNC CN)	Receivables (USD mn) Receivables turnover (days)	673	<b>976</b> 66.27	<b>1,533</b> 72.71	<b>1,376</b> 79.21	<b>1,402</b> 94.36	<b>1,683</b> 91.78	<b>1,137</b> 70.55	<b>1,181</b> 52.24	80.87	61.40
Obrascon Huarte (OHL SM)	Receivables (USD mn) Receivables turnover (days)	1,278	<b>1,911</b> 141.31	<b>2,547</b> 157.66	<b>2,490</b> 155.89	<b>2,698</b> 154.68	<b>2,806</b> 154.22	<b>2,766</b> 197.29	<b>2,932</b> 200.70	152.75	198.99
Sacyr SA (SYV SM)	Receivables (USD mn) Receivables turnover (days)	1,883	<b>2,415</b> 133.28	<b>2,791</b> 132.35	<b>2,778</b> 128.44	<b>3,292</b> 136.37	<b>3,069</b> 181.53	<b>3,049</b> 209.92	<b>2,751</b> 227.82	142.39	218.87
Average	Receivables turnover (days)		89.19	90.04	83.02	92.85	99.58	100.53	102.57	90.94	100.89

<sup>\*</sup> The receivables is including current and non-current trade and bill receivables Source(s): Companies, Bloomberg, ABCI Securities

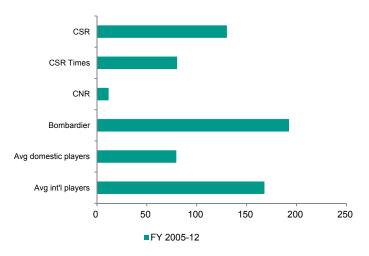


#### Rolling stock manufacturer sector

Liquidity of CSR is relatively better than its domestic peers. Its average operating cash flow (OCF)-to-net income ratio in FY05-12 was 148.67%, the highest among domestic players and is similar to that of the international players at 167.86%. The cash flow of CSR has been strong, as reflected by its OCF-to-net income ratio persisting above 100% for most of the period in FY05-12. For CNR, the ratio averages at 11.74% in FY05-12.

Liquidity of CSR Times Electric, as measured by the average OCF-to-net income ratio, was healthy at 85.54% in FY05-12 though it is not as strong as CSR's.

Exhibit 92: Average Operating cash flow / net income ratio of the domestic and international rolling stock manufacturer in FY05-12 (%)



Source(s): Companies, Bloomberg, ABCI Securities

Cash collectability, as measured by the receivables turnover days, weakens in FY11-12 due to the tight liquidity of CRC. Average receivables turnover days of CSR increased by 25.72 days from 59.07 days in FY05-10 to 84.79 days in FY11-12, similar to that of the major international rolling stock manufacturers (88.74 days in FY11-12). Looking forward, with the CRC's high debts, we expect receivables turnover days of CSR to stay long in FY13E-15E.

Leveraging on supplier credits, cash conversion cycle of CSR averages at 21.79 days in FY11-12, shorter than CNR's 59.23 days. Average cash conversion cycle of domestic and international players during the same period were 47.96 days and 119.48 days, respectively. Average receivables turnover days of CSR Times Electric, one of CSR's suppliers, was 123.78 days in FY11-12, while its average cash conversion cycle was 126.80 days for the same period. We believe CSR's short cash conversion cycle illustrates its strong bargaining power over its suppliers.

Exhibit 93: Operating cash flow (OCF) of domestic and international rolling stock manufacturer in FY05-12

		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Overall 2005-12 (%)
Major domestic rolling st	ock manufacturer								1	(79)
<b>CSR</b> (1766 HK / 601766 CH)	OCF (RMB mn) OCF / Net income (%)	<b>365</b> 89.71	<b>1,712</b> 314.19	<b>1,439</b> 234.70	<b>1,365</b> 98.63	<b>4,403</b> 262.36	<b>3,721</b> 147.30	<b>6,941</b> 179.63	<b>2,395</b> 59.74	<b>22,341</b> 148.67
CSR Times Electric (3898 HK)	OCF (RMB mn) OCF / Net income (%)	<b>55</b> 26.01	<b>198</b> 66.71	<b>111</b> 31.95	<b>273</b> 64.65	<b>452</b> 85.22	<b>754</b> 88.69	<b>1,242</b> 104.84	<b>1,247</b> 102.13	<b>4,333</b> 85.54
<b>CNR</b> (601299 CH)	OCF (RMB mn) OCF / Net income (%)				<b>2,254</b> 199.36	<b>613</b> 46.57	<b>971</b> 50.47	<b>(3,322)</b> (111.30)	<b>746</b> 22.03	<b>1,261</b> 11.74
Zhuzhou Times (600458 CH)	OCF (RMB mn) OCF / Net income (%)	<b>(26)</b> (115.60)	<b>38</b> 159.95	<b>62</b> 176.84	<b>56</b> 119.47	<b>158</b> 165.16	<b>161</b> 80.85	<b>(205)</b> (87.85)	<b>158</b> 100.20	<b>402</b> 49.39
Baotou Beifang (600967 CH)	OCF (RMB mn) OCF / Net income (%)	<b>(169)</b> 1,609.99	<b>97</b> 955.62	<b>(44)</b> (155.82)	<b>79</b> 223.83	<b>46</b> 103.60	<b>333</b> 579.28	<b>383</b> 331.76	<b>(235)</b> (137.69)	<b>492</b> 109.11
Jinxi Axle (600495 CH)	OCF (RMB mn) OCF / Net income (%)	<b>22</b> 88.79	<b>142</b> 271.27	<b>(97)</b> (160.56)	<b>35</b> 39.79	<b>110</b> 302.78	<b>93</b> 213.56	<b>342</b> 342.76	<b>(139)</b> (113.43)	<b>508</b> 96.29
Average	OCF / Net income (%)	339.78	353.55	25.42	124.29	160.95	193.36	126.64	5.50	83.46
Major International rolling	g stock manufacturer								1	_
ALSTOM <sup>1</sup> (ALO FP)	OCF (USD mn) OCF / Net income (%)	<b>956</b> 304.26	<b>1,398</b> 199.09	<b>2,966</b> 245.54	<b>3,040</b> 192.61	<b>1,139</b> 66.23	<b>306</b> 50.00	<b>298</b> 29.51	<b>1,403</b> 135.79	<b>11,504</b> 140.71
Bombardier (BBD/A CN)	OCF (USD mn) OCF / Net income (%)	<b>768</b> (903.53)	<b>314</b> 126.10	<b>954</b> 355.97	<b>2,380</b> 750.79	<b>909</b> 90.18	<b>552</b> 79.08	<b>243</b> 29.03	<b>1,348</b> 229.25	<b>7,468</b> 192.47
CAF (CAF SM)	OCF (USD mn) OCF / Net income (%)	<b>24</b> 105.35	<b>(84)</b> (193.65)	<b>92</b> 76.39	<b>320</b> 205.53	<b>66</b> 38.31	<b>(31)</b> (18.28)	<b>66</b> 32.33	<b>90</b> 70.19	<b>541</b> 53.16
Vossloh AG (VOS GR)	OCF (USD mn) OCF / Net income (%)	<b>63</b> 111.53	<b>216</b> 847.78	<b>93</b> 95.10	<b>209</b> 102.15	<b>44</b> 35.49	<b>176</b> 136.10	<b>173</b> 221.71	<b>191</b> 250.34	<b>1,165</b> 147.31
Faiveley Transport <sup>1</sup> (LEY FP)	OCF (USD mn) OCF / Net income (%)	<b>97</b> 451.53	<b>77</b> 204.40	<b>103</b> 199.43	<b>152</b> 206.94	<b>127</b> 126.77	<b>124</b> 123.75	<b>93</b> 141.57	<b>92</b> 120.81	<b>864</b> 164.23
Nippon Sharyo <sup>1</sup> (7102 JP)	OCF (USD mn) OCF / Net income (%)	<b>(79)</b> 521.75	<b>49</b> 592.91	<b>1</b> (1.44)	<b>79</b> 492.82	<b>37</b> 90.94	<b>251</b> 579.18	<b>181</b> 319.74	<b>(173)</b> (897.56)	<b>345</b> 284.65
Kinki Sharyo <sup>1</sup> (7122 JP)	OCF (USD mn) OCF / Net income (%)	<b>(7)</b> (73.65)	<b>102</b> 2,281.09	<b>(106)</b> (899.11)	<b>97</b> 332.99	<b>29</b> 56.89	<b>148</b> 256.93	<b>49</b> 210.05	<b>59</b> 1,027.84	<b>371</b> 192.46
Average	OCF / Net income (%)	73.89	579.67	10.27	326.26	72.11	172.39	140.56	133.81	167.86

1: Fiscal year ends on March 31 Source(s): Companies, Bloomberg, ABCI Securities

Exhibit 94: Receivables turnover of domestic and international rolling stock manufacturer in FY05-12

		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average 2005-10 (%)	Average 2011-12 (%)
Major domestic rolling st	ock manufacturer									1	(/
<b>CSR</b> (1766 HK / 601766 CH)	Receivables (RMB mn) Receivables turnover (days)	4,627	<b>3,851</b> 67.14	<b>4,508</b> 56.92	<b>6,395</b> 56.70	<b>7,637</b> 56.14	<b>12,900</b> 58.44	<b>17,891</b> 70.67	<b>30,355</b> 98.91	59.07	84.79
CSR Times Electric (3898 HK)	Receivables (RMB mn) Receivables turnover (days)	568	<b>652</b> 177.28	<b>760</b> 167.12	<b>1,039</b> 154.95	<b>1,433</b> 135.67	<b>1,693</b> 97.08	<b>2,171</b> 99.60	<b>3,628</b> 147.95	146.42	123.78
<b>CNR</b> (601299 CH)	Receivables (RMB mn) Receivables turnover (days)				<b>7,530</b> 79.49	<b>12,234</b> 89.27	<b>11,433</b> 67.34	<b>16,768</b> 57.79	<b>22,718</b> 78.36	78.70	68.08
Zhuzhou Times (600458 CH)	Receivables (RMB mn) Receivables turnover (days)	159	<b>183</b> 109.05	<b>170</b> 90.82	<b>190</b> 63.14	<b>332</b> 62.67	<b>409</b> 58.49	<b>1,196</b> 85.83	<b>1,511</b> 133.46	76.84	109.65
Baotou Beifang (600967 CH)	Receivables (RMB mn) Receivables turnover (days)	287	<b>270</b> 81.47	<b>264</b> 50.51	<b>269</b> 47.55	<b>304</b> 43.67	<b>386</b> 43.67	<b>490</b> 54.20	<b>544</b> 61.69	53.37	57.94
Jinxi Axle (600495 CH)	Receivables (RMB mn) Receivables turnover (days)	80	<b>105</b> 33.06	<b>227</b> 57.88	<b>343</b> 53.60	<b>335</b> 82.31	<b>415</b> 79.10	<b>380</b> 67.30	<b>456</b> 55.90	61.19	61.60
Average	Receivables turnover (days)		93.60	84.65	75.91	78.29	67.35	72.57	96.04	79.26	84.31
Major International rolling	g stock manufacturer									- 	
ALSTOM <sup>1</sup> (ALO FP)	Receivables (USD mn) Receivables turnover (days)	2,781	<b>3,859</b> 66.46	<b>5,593</b> 71.96	<b>5,124</b> 73.34	<b>4,663</b> 64.29	<b>8,589</b> 87.37	<b>7,589</b> 107.48	<b>6,775</b> 100.42	72.69	103.95
Bombardier (BBD/A CN)	Receivables (USD mn) Receivables turnover (days)	1,513	<b>1,684</b> 39.62	<b>1,789</b> 42.59	<b>1,998</b> 39.48	<b>1,981</b> 36.82	<b>1,897</b> 36.55	<b>1,408</b> 32.88	<b>1,525</b> 31.92	39.01	32.40
CAF (CAF SM)	Receivables (USD mn) Receivables turnover (days)	385	<b>530</b> 164.94	<b>488</b> 154.99	<b>897</b> 170.90	<b>1,167</b> 214.66	<b>895</b> 179.91	<b>1,007</b> 144.46	<b>1,182</b> 180.51	177.08	162.48
Vossloh AG (VOS GR)	Receivables (USD mn) Receivables turnover (days)	378	<b>437</b> 116.53	<b>578</b> 132.06	<b>366</b> 96.62	<b>428</b> 88.58	<b>482</b> 92.68	<b>457</b> 102.85	<b>422</b> 100.46	105.29	101.65
Faiveley Transport <sup>1</sup> (LEY FP)	Receivables (USD mn) Receivables turnover (days)	199	<b>202</b> 92.09	<b>237</b> 81.53	<b>198</b> 65.38	<b>223</b> 61.98	<b>261</b> 72.97	<b>239</b> 73.52	<b>236</b> 68.19	74.79	70.85
Nippon Sharyo <sup>1</sup> (7102 JP)	Receivables (USD mn) Receivables turnover (days)	321	<b>311</b> 153.99	<b>314</b> 141.30	<b>213</b> 111.75	<b>274</b> 83.59	<b>266</b> 88.80	<b>243</b> 86.06	<b>230</b> 85.92	115.89	85.99
Kinki Sharyo <sup>1</sup> (7122 JP)	Receivables (USD mn) Receivables turnover (days)	110	<b>112</b> 129.27	<b>167</b> 128.35	<b>191</b> 99.49	<b>191</b> 116.89	<b>91</b> 83.64	<b>57</b> 70.96	<b>27</b> 56.79	111.53	63.87
Average	Receivables turnover (days)		108.99	107.54	93.85	95.26	91.70	88.32	89.17	99.47	88.74

<sup>\*</sup> The receivables is including current and non-current trade and bill receivables 1: Fiscal year ends on March 31 Source(s): Companies, Bloomberg, ABCI Securities



# Financial Comparison - Debt gearing

### Transport infrastructure construction contractors

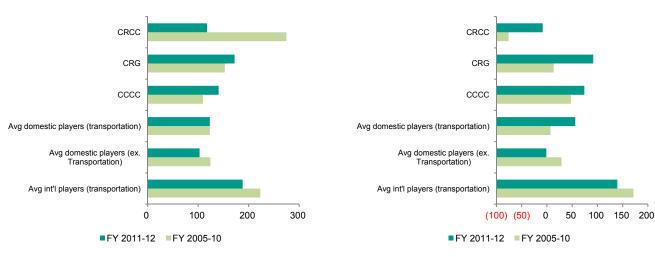
With the expansion of infrastructure construction in China, gearing (debt / equity) and net gearing (net debt / equity) of domestic transportation construction contractors, including CRCC, CRG and CCCC, have been increasing since 2010.

CRCC's gearing has been the lowest among the three major transportation construction contractors. It was in a net cash position during 2005-12. Net gearing of CRG and CCCC are higher than the domestic players but lower than the international players. Average gearing of CRG and CCCC in FY11-12 were 171.99% and 140.58%, respectively, lower than the international players at 188.00%. Average net gearing of CRG and CCCC in FY11-12 were 91.64% and 74.10%, lower than the international players at 139.48%.

Looking forward, as the three transportation construction contractors would increase exposure in BT/BOT projects, we expect working capital required will increase. Demand for short-term financial facilities will grow. We expect CRCC, CRG and CCCC will rely on debt financing to meet the higher working capital requirement. However, with prudent financial management, their debt ratios should be lower than that of the international players.

Exhibit 95: Gearing of domestic and international construction contractors (%)

Exhibit 96: Net gearing of domestic and international construction contractors (%)



Source(s): Companies, Bloomberg, ABCI Securities

Exhibit 97: Debt ratios of domestic and international infrastructure construction contractors in FY05-12

		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average 2005-10	Average 2011-12
Major domestic transport	ation construction cont	ractors								(%)	(%)
CRCC (1186 HK / 601186 CH)	Gearing (%) Net gearing (%)	<b>526.37</b> (115.27)	<b>467.47</b> (122.80)	<b>492.29</b> (28.92)	<b>45.82</b> (73.16)	<b>49.40</b> (70.71)	<b>66.39</b> (45.59)	<b>109.98</b> (16.41)	<b>125.52</b> (0.32)	<b>274.62</b> (76.08)	117.75 (8.36)
<b>CRG</b> (390 HK / 601390 CH)	Gearing (%) Net gearing (%)	<b>237.16</b> 32.94	<b>325.21</b> 28.01	<b>64.89</b> (33.77)	<b>87.59</b> 6.64	<b>86.39</b> 9.02	<b>114.86</b> 37.67	<b>160.26</b> 81.93	<b>183.73</b> 101.34	<b>152.68</b> 13.42	<b>171.99</b> 91.64
CCCC (1800 HK / 601800 CH)	Gearing (%) Net gearing (%)	<b>180.36</b> 93.62	<b>83.56</b> (1.55)	<b>63.86</b> 21.34	<b>110.94</b> 59.30	<b>106.81</b> 54.69	<b>110.02</b> 56.53	<b>131.01</b> 74.13	<b>150.14</b> 74.08	<b>109.26</b> 47.32	<b>140.58</b> 74.10
<b>CREC</b> (600528 CH)	Gearing (%) Net gearing (%)	<b>56.35</b> 2.81	<b>84.44</b> 22.20	<b>97.80</b> 19.83	<b>97.79</b> 9.98	<b>69.30</b> 10.47	<b>97.44</b> 55.02	<b>140.23</b> 73.91	<b>149.82</b> 78.03	<b>83.85</b> 20.05	<b>145.03</b> 75.97
Shang Tunnel (600820 CH)	Gearing (%) Net gearing (%)	<b>120.11</b> 76.28	<b>159.05</b> 114.95	<b>113.29</b> 44.34	<b>87.45</b> (2.26)	<b>68.17</b> (67.49)	<b>86.86</b> 1.63	<b>143.05</b> 88.03	<b>145.24</b> 93.59	<b>105.82</b> 27.91	<b>144.14</b> 90.81
Xiangyu Dredging (871 HK)	Gearing (%) Net gearing (%)				<b>9.52</b> 8.29	<b>16.41</b> 15.36	<b>9.17</b> 6.30	<b>2.03</b> (8.19)	<b>35.70</b> 33.74	<b>11.70</b> 9.98	<b>18.87</b> 12.77
Average	Gearing (%) Net gearing (%)	224.07 18.08	223.94 8.16	166.42 4.56	73.19 1.46	66.08 (8.11)	80.79 18.59	114.43 48.90	131.69 63.41	122.99 7.10	123.06 56.16
Major domestic infrastruc	cture (ex. Transportation	) construction co	ntractors							I	
<b>CSCEC</b> (601668 CH)	Gearing (%) Net gearing (%)		<b>127.90</b> 6.04	<b>108.34</b> 8.46	<b>119.89</b> 8.70	<b>32.78</b> (54.08)	<b>42.91</b> (36.61)	<b>60.71</b> (14.57)	<b>67.85</b> (16.24)	<b>86.36</b> (13.50)	<b>64.28</b> (15.40)
Sinohydro Group (601669 CH)	Gearing (%) Net gearing (%)					<b>295.67</b> 204.13	<b>357.84</b> 260.94	<b>197.76</b> 93.59	<b>202.41</b> 124.73	<b>326.76</b> 232.54	<b>200.09</b> 109.16
China Gezhouba (600068 CH)	Gearing (%) Net gearing (%)	<b>88.72</b> 69.95	<b>100.50</b> 75.76	<b>170.64</b> 133.70	<b>250.69</b> 191.08	<b>168.38</b> 121.09	<b>139.94</b> 95.99	<b>146.68</b> 87.70	<b>140.07</b> 100.11	<b>153.14</b> 114.59	<b>143.37</b> 93.90
<b>CSCI</b> (3311 HK)	Gearing (%) Net gearing (%)	<b>0.57</b> (197.89)	<b>9.65</b> (268.53)	<b>2.43</b> (71.53)	<b>46.66</b> (38.83)	<b>120.54</b> (61.06)	<b>136.52</b> 41.36	<b>81.25</b> 10.39	<b>90.19</b> 29.92	<b>52.73</b> (99.42)	<b>85.72</b> 20.15
<b>CAMA</b> (002051 CH)	Gearing (%) Net gearing (%)	<b>0.00</b> (53.61)	<b>0.00</b> (72.54)	<b>0.00</b> (110.56)	<b>0.72</b> (134.44)	<b>7.72</b> (90.93)	<b>3.58</b> (73.87)	<b>15.44</b> (268.91)	<b>25.07</b> (158.56)	<b>2.00</b> (89.32)	<b>20.25</b> (213.73)
Average	Gearing (%) Net gearing (%)	29.76 (60.52)	59.51 (64.82)	70.35 (9.98)	104.49 6.63	125.02 23.83	136.16 57.56	100.37 (18.36)	105.12 15.99	124.20 28.98	102.74 (1.18)
Major International transp	portation construction c	ontractors								I	
Vinci (DG FP)	Gearing (%) Net gearing (%)	<b>137.92</b> 51.45	<b>249.28</b> 233.48	<b>264.17</b> 220.17	<b>233.71</b> 199.59	<b>191.27</b> 158.43	<b>153.34</b> 118.14	<b>153.29</b> 104.36	<b>143.53</b> 111.78	<b>204.95</b> 163.54	<b>148.41</b> 108.07
Bouygues (EN FP)	Gearing (%) Net gearing (%)	<b>88.46</b> 77.35	<b>107.52</b> 97.38	<b>89.49</b> 78.46	<b>84.63</b> 75.60	<b>68.81</b> 51.43	<b>73.01</b> 54.37	<b>72.57</b> 59.16	<b>83.88</b> 39.36	<b>85.32</b> 72.43	<b>78.22</b> 49.26
Hochtief (HOT GR)	Gearing (%) Net gearing (%)	<b>49.40</b> 1.21	<b>44.51</b> (15.04)	<b>65.54</b> 18.80	<b>103.56</b> 40.31	<b>87.11</b> 32.90	<b>75.58</b> 18.10	<b>92.31</b> 37.21	<b>105.01</b> 45.75	<b>70.95</b> 16.04	<b>98.66</b> 41.48
<b>Skanska</b> (SKAB SS)	Gearing (%) Net gearing (%)	<b>18.86</b> (38.08)	<b>17.77</b> (27.94)	<b>17.66</b> (50.90)	<b>16.40</b> (24.54)	<b>27.85</b> (18.80)	<b>18.74</b> (13.27)	<b>35.22</b> 8.11	<b>57.37</b> 27.55	<b>19.55</b> (28.92)	<b>46.30</b> 17.83
Strabag (STR AV)	Gearing (%) Net gearing (%)	<b>104.02</b> 42.63	<b>88.77</b> 32.17	<b>22.09</b> (41.39)	<b>72.73</b> 22.67	<b>63.76</b> 6.22	<b>61.70</b> 1.30	<b>67.94</b> 13.97	<b>64.99</b> 21.52	<b>68.84</b> 10.60	<b>66.47</b> 17.74
FCC (FCC SM)	Gearing (%) Net gearing (%)	<b>62.97</b> 23.04	<b>216.38</b> 174.53	<b>225.13</b> 189.89	<b>262.99</b> 218.91	<b>302.86</b> 249.45	<b>297.85</b> 245.50	<b>312.62</b> 233.63	<b>487.43</b> 419.69	<b>228.03</b> 183.55	<b>400.03</b> 326.66
Ferrovial (FER SM)	Gearing (%) Net gearing (%)	<b>432.36</b> 394.75	<b>600.35</b> 547.57	<b>747.97</b> 692.97	<b>604.87</b> 541.72	<b>555.32</b> 500.90	<b>337.65</b> 298.07	<b>120.97</b> 85.04	<b>134.42</b> 85.85	<b>546.42</b> 495.99	<b>127.69</b> 85.44
BAM Groep (BAMNB NA)	Gearing (%) Net gearing (%)	<b>181.86</b> 106.90	<b>272.22</b> 162.97	<b>218.91</b> 187.02	<b>249.67</b> 173.37	<b>239.09</b> 157.53	<b>206.18</b> 123.23	<b>188.37</b> 101.31	<b>190.24</b> 123.13	<b>227.99</b> 151.84	<b>189.30</b> 112.22
SNC-Lavalin (SNC CN)	Gearing (%) Net gearing (%)	<b>119.66</b> (26.00)	<b>199.18</b> 85.31	<b>210.72</b> 101.81	<b>182.74</b> 97.32	<b>171.48</b> 91.06	<b>184.24</b> 113.11	<b>118.57</b> 53.32	<b>136.34</b> 79.82	<b>178.00</b> 77.10	<b>127.46</b> 66.57
Obrascon Huarte (OHL SM)	Gearing (%) Net gearing (%)	<b>212.32</b> 194.67	<b>281.14</b> 236.12	<b>226.73</b> 156.12	<b>500.76</b> 429.16	<b>374.82</b> 317.21	<b>303.14</b> 235.64	<b>350.27</b> 291.46	<b>209.50</b> 180.73	<b>316.48</b> 261.49	<b>279.88</b> 236.09
Sacyr SA (SYV SM)	Gearing (%) Net gearing (%)	<b>470.26</b> 451.31	<b>638.00</b> 614.38	<b>602.85</b> 570.03	<b>572.16</b> 554.08	<b>428.08</b> 403.50	<b>322.92</b> 302.25	<b>376.01</b> 353.07	<b>635.11</b> 592.74	<b>505.71</b> 482.59	<b>505.56</b> 472.91
Average	Gearing (%) Net gearing (%)	170.73 116.29	246.83 194.63	244.66 193.00	262.20 211.65	228.22 177.26	184.94 136.04	171.65 121.88	204.35 157.08	222.93 171.48	188.00 139.48



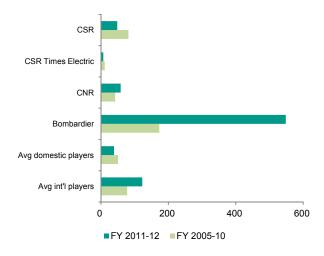
### Rolling stock manufacturers

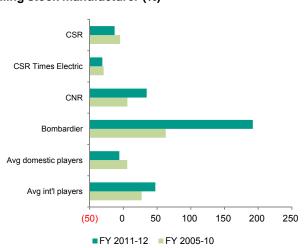
Both CSR and CSR Times Electric were in net cash positions in FY11-12, while their average gearings (debt / equity) in FY11-12 were 48.16% and 6.88%, respectively, lower than the average of international players at 122.55%. The average gearing of domestic players in FY11-12 was 36.40%.

In the future, with more market competition and lukewarm development in railway industry, we expect cash flow of rolling stock makers, CSR and CSR Times Electric, to weaken.

Exhibit 98: Gearing of domestic and international rolling stock manufacturer (%)

Exhibit 99: Net gearing of domestic and international rolling stock manufacturer (%)





Source(s): Companies, Bloomberg, ABCI Securities

Exhibit 100: Debt ratios of domestic and international rolling stock manufacturer, FY05-12

		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Average 2005-10 (%)	Average 2011-12 (%)
Major domestic rolling st	ock manufacturer									l	(/
<b>CSR CORP LTD</b> (1766 HK / 601766 CH)	Gearing (%) Net gearing (%)	<b>162.68</b> 70.11	<b>102.44</b> (5.95)	<b>131.10</b> 1.47	<b>23.67</b> (39.21)	<b>26.40</b> (37.04)	<b>41.96</b> (18.95)	<b>72.72</b> (11.77)	<b>23.60</b> (14.48)	<b>81.38</b> (4.93)	<b>48.16</b> (13.13)
ZHUZHOU CSR (3898 HK)	Gearing (%) Net gearing (%)	<b>38.55</b> 13.41	<b>12.80</b> (66.70)	<b>0.00</b> (47.78)	<b>0.71</b> (22.63)	<b>3.20</b> (26.90)	<b>10.99</b> (25.80)	12.67 (27.01)	<b>1.09</b> (35.64)	<b>11.04</b> (29.40)	<b>6.88</b> (31.32)
CHINA CNR CORP-A (601299 CH)	Gearing (%) Net gearing (%)				<b>46.98</b> 12.45	<b>44.25</b> (8.27)	<b>34.96</b> 13.45	<b>73.48</b> 50.52	<b>43.44</b> 18.64	<b>42.06</b> 5.88	<b>58.46</b> 34.58
ZHUZHOU TIMES -A (600458 CH)	Gearing (%) Net gearing (%)	<b>39.07</b> 23.90	<b>56.75</b> 34.47	<b>69.09</b> 36.25	<b>94.06</b> 68.19	<b>141.36</b> 111.99	<b>49.60</b> 16.82	<b>43.37</b> 20.00	<b>76.95</b> 55.80	<b>74.99</b> 48.60	<b>60.16</b> 37.90
BAOTOU BEIFANG-A (600967 CH)	Gearing (%) Net gearing (%)	<b>53.35</b> 28.46	<b>93.83</b> 53.00	<b>85.46</b> 51.84	<b>64.09</b> 5.85	<b>31.22</b> (3.55)	<b>26.70</b> (31.21)	<b>38.02</b> (56.93)	<b>22.97</b> (47.44)	<b>59.11</b> 17.40	<b>30.50</b> (52.18)
<b>JINXI AXLE -A</b> (600495 CH)	Gearing (%) Net gearing (%)	<b>21.85</b> (12.56)	<b>36.26</b> (10.48)	<b>34.23</b> 20.31	<b>66.53</b> 35.86	<b>24.46</b> (31.12)	<b>20.81</b> (22.94)	<b>32.58</b> (14.03)	<b>21.55</b> (10.30)	<b>34.02</b> (3.49)	<b>27.06</b> (12.16)
Average	Gearing (%) Net gearing (%)	63.10 24.67	60.42 0.87	63.98 12.42	49.34 10.09	45.15 0.85	30.84 (11.44)	45.47 (6.54)	31.60 (5.57)	50.43 5.68	38.54 (6.05)
Major International rolling	g stock manufacturer									ı	
ALSTOM (ALO FP)	Gearing (%) Net gearing (%)	<b>296.70</b> 131.60	<b>146.39</b> 7.29	<b>55.23</b> (38.98)	<b>26.73</b> (75.31)	<b>49.77</b> (56.33)	<b>94.51</b> 29.46	<b>101.42</b> 54.26	<b>87.77</b> 44.77	<b>111.56</b> (0.38)	<b>94.60</b> 49.52
BOMBARDIER INC (BBD/A CN)	Gearing (%) Net gearing (%)	<b>248.74</b> 146.74	<b>195.75</b> 75.46	<b>185.88</b> 88.99	<b>140.89</b> 25.37	<b>155.35</b> 18.95	<b>110.43</b> 20.96	<b>707.60</b> 205.07	<b>389.25</b> 178.94	<b>172.84</b> 62.74	<b>548.43</b> 192.00
CAF (CAF SM)	Gearing (%) Net gearing (%)	<b>32.40</b> 31.41	<b>42.91</b> 38.53	<b>61.53</b> 53.58	<b>46.89</b> 15.95	<b>43.05</b> 25.75	<b>60.96</b> 51.24	<b>54.00</b> 41.08	<b>97.44</b> 86.61	<b>47.96</b> 36.08	<b>75.72</b> 63.84
VOSSLOH AG (VOS GR)	Gearing (%) Net gearing (%)	<b>59.78</b> 45.87	<b>51.71</b> 13.96	<b>42.10</b> 25.67	<b>35.15</b> (15.14)	<b>34.08</b> 2.31	<b>32.24</b> 19.38	<b>39.53</b> 21.75	<b>36.56</b> 23.53	<b>42.51</b> 15.34	<b>38.05</b> 22.64
FAIVELEY TRANSPO (LEY FP)	Gearing (%) Net gearing (%)	<b>114.95</b> 53.96	<b>58.99</b> 20.58	<b>38.25</b> 0.50	<b>161.46</b> 115.22	<b>117.53</b> 76.18	<b>86.87</b> 53.01	<b>88.74</b> 55.26	<b>67.42</b> 40.10	<b>96.34</b> 53.24	<b>78.08</b> 47.68
NIPPON SHARYO (7102 JP)	Gearing (%) Net gearing (%)	<b>67.61</b> 45.55	<b>62.79</b> 38.96	<b>75.74</b> 50.28	<b>72.84</b> 41.52	<b>44.35</b> 40.62	<b>27.02</b> 22.68	<b>25.27</b> 15.07	<b>20.68</b> 11.82	<b>58.39</b> 39.94	<b>22.98</b> 13.44
KINKI SHARYO (7122 JP)	Gearing (%) Net gearing (%)	<b>13.70</b> (1.89)	<b>0.00</b> (47.42)	<b>29.28</b> 14.46	<b>27.57</b> (12.09)	<b>13.76</b> (13.57)	<b>0.00</b> (44.59)	<b>0.00</b> (51.46)	<b>0.00</b> (64.05)	14.05 (17.51)	<b>0.00</b> (57.76)
Average	Gearing (%) Net gearing (%)	119.13 64.75	79.79 21.05	69.71 27.79	73.08 13.65	65.41 13.42	58.86 21.73	145.22 48.72	99.88 45.96	77.66 27.06	122.55 47.34



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# October 21, 2013 Company Report Rating: BUY TP: HK\$ 10.22

H-Share price (HK\$)
Est. share price return
Est. dividend yield
Est. total return

8.30 23.13% 1.82% 24.95%

Previous Rating &TP Previous Report Date

(Initiation)

Analyst: Steve Wong Tel: (852) 2147 8869 Email: stevecwwong@abci.com.hk

#### **Key Data**

rto y Bata	
52Wk H/L(HK\$)	9.54 / 5.97
Issued shares (mn)	12,337
H-Shares (mn)	2,076
A-Shares (mn)	10,261
Market cap	
H-shares (HK\$ mn)	17,231
A-Shares (RMB mn)	53,152
3-mth avg daily turnover (HK\$ mn)	109.8
Major shareholder(s) (%):	
CRCCG	61.33

Source(s): Company, Bloomberg, ABCI Securities

## 1H13 Revenue breakdown (%)

Inter-segment sales	(5.26)
Others	14.62
Property Development	1.95
Equipment Manufacturing	2.35
Survey, Design & Consultancy	1.39
Construction operation	84.95

Source(s): Company, ABCI Securities

#### Share performance (%)

	<u>Absolute</u>	Relative*
1-mth	(0.12)	(0.70)
3-mth	11.89	2.80
6-mth	13.42	7.38

\*Relative to HSI

Source(s): Bloomberg, ABCI Securities



Source(s): Bloomberg, ABCI Securities

# **CRCC (1186 HK)**

# Biggest winner in urban rail expansion

Urban rail development in 2014-15 is expected to stay strong with NDRC's support. Based on the construction pipelines in major cities, we expect urban rail investment to grow at 37.97% CAGR in 2013-15. We prefer CRCC for its low net gearing that enables low-cost funding. We expect CRCC's revenue in urban rail segment will grow at 44.48% CAGR in 2013-15, higher than that of the overall urban rail industry. Its increased participation in urban rail projects will also help offset the slowdown in other sub-segments. We expect net income to grow at 17.03% CAGR in FY13E-15E. We initiate with BUY on CRCC with TP at HK\$ 10.22, representing 1.26x FY13E P/B. The counter is currently trading at 1.02x FY13E P/B, and has an upside potential of 24.95% that incorporates an estimated share price return of 23.13% and FY13E dividend yield of 1.82%.

Low gearing - huge advantage in expanding urban rail development. The net gearing of CRCC is lower than its main competitors in urban rail construction industry including CRG, Sinohydro and Shanghai Tunnel. This enables the Group to obtain funding at lower costs. We expect CRCC's market share in urban rail construction industry to increase. Based on its construction pipeline in seven major cities (Shanghai, Beijing, Guangzhou, Shenzhen, Chongqing, Wuhan and Nanjing), we estimate the urban rail projects have a total track of 1,678.45km to be completed by 2015. We estimate the total investment to grow at 37.97% CAGR in 2013-15, mitigating the investment slowdown in railway and roadway industry. CRCC's revenue in urban rail business will grow at 44.48% CAGR in 2013-15, higher than that of the urban rail industry in China.

**Huge backlog enhances earnings visibility.** Total backlog as of June 2013 was RMB 1,594.5bn. The backlog-to-revenue ratio is 3.48x in 1H13, the highest since 2006. Considering the accelerated investment in 2013-15, we expect most projects in the backlog to be delivered in 2H13-2015. We estimate overall revenue to grow at 12.74% CAGR in FY13E-15E.

**Cost ratio improvement.** We expect the CAPEX–to-revenue ratio to decrease after the high growth in FY07-11, and the depreciation and amortization expenses-to-revenue will trend down in the future. We expect net income margin to rise and net income to grow at 17.03% CAGR in FY13E-15E.

**Initiate with BUY with TP at HK\$10.22.** Our target valuation at 1.26x of FY13E P/B reflects 40% discount to the median of its forward P/B in 2008-10. The high discount is justified by our assumption that earnings growth in 2013-15 will slow compared to 2008-10. The counter is trading at 1.02x of FY13E P/B, 19.05% below our target P/B. We initiate our coverage on CRCC with a **BUY** rating, and TP is set at HK\$10.22. Potential upside, including the dividend yield is 24.95%.

**Risk factors:** 1) Lower-than-expected rise in GPM in FY14E-15E under prudent monetary policy; 2) Heavy debt in CRC may reduce railway investment; 3) Earnings growth may slow in 2H13 due to high base in 2H12.

#### **Results and Valuation**

recounts and variable	<b>,</b> , ,				
FY ended Dec 31	2011A	2012A	2013E	2014E	2015E
Revenue (RMB mn)	443,319	469,872	546,817	626,312	694,977
Chg (%,YoY)	(2.82)	5.99	16.38	14.54	10.96
Net Income (RMB mn)	7,854	8,479	9,987	11,740	13,678
Chg (%,YoY)	84.97	7.96	17.78	17.56	16.50
EPS (RMB)	0.637	0.687	0.809	0.952	1.109
P/E (x)	-	9.70	8.24	7.01	6.01
BVPS (RMB)	5.248	5.833	6.513	7.343	8.309
P/B (x)	-	1.14	1.02	0.91	0.80
DPS(RMB)	0.100	0.110	0.121	0.143	0.166
Yield (%)	-	1.65	1.82	2.14	2.49
ROAE (%)	12.86	12.40	13.11	13.74	14.17
Net gearing (%)	Net Cash	Net Cash	11.68	13.54	20.98

\*Net gearing=Net debt/Total equity

Source(s): Bloomberg, ABCI estimates



# Benefited from national development of urban rail

#### Strong growth in urban rail

We estimate the total FAI on urban rail to grow at 37.97% CAGR in 2013-15, and the investment in the corresponding infrastructure construction to grow at 35.95% CAGR. With the support of the Chinese government, we expect urban rail development in second and third tier cities will pace up in 2016-20.

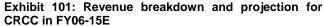
CRCC is the second largest urban rail builder in China with an estimated market share of 30% in 2012 (estimated to increase to 35% in 2013). With its low gearing, the Group can obtain funds at lower costs. We expect growth in the Group's urban rail construction business will outpace the industry. Its segmental revenue will grow at 44.48% CAGR in 2013-15.

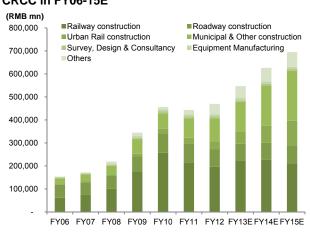
#### Mitigating the slowdown in railway and roadway investment

With China Railway Corporation (CRC)'s heavy debts and declining profitability of toll road operators, we expect the fixed asset investment (FAI) in railway and roadway transportation segments to slow in FY13E-15E. We estimate segments to grow at -2.68% and 3.14% CAGR in 2013-15 (last three years of the 12<sup>th</sup> Five-Year Plan), respectively, as opposed to their respective CAGRs at 59.99% and 23.58% 2008-10 (last three years of the 11<sup>th</sup> Five-Year Plan). However, thanks to the urban development of China, we expect urban rail investment to surge in the future and mitigate the impact from the slowdown of railway and roadway investment.

#### Diversified via increased exposure to non-railway-and-roadwaytransport infrastructure construction

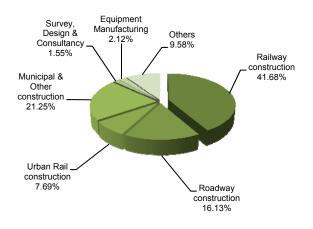
We expect CRCC's exposure to municipal construction projects, including affordable housing, government building construction projects, and urban rail projects to increase as roadway and railway investments slow. Contribution from non-core business segments (businesses excluding railway and roadway constructions), as a percentage of total revenue, increased from 24.90% in FY10 to 42.19% in FY12 (1H13: 45.13%). New contracts of non-core businesses accounted for 29.35% in FY10, and increased to 61.47% in FY12, of total new contracts (1H13: 60.79%).





Source(s): Company. ABCI Securities estimates

Exhibit 102: Revenue breakdown of CRCC in FY12 (%)



Source(s): Company, ABCI Securities



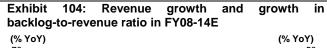
# Huge backlog enhancing earnings visibility

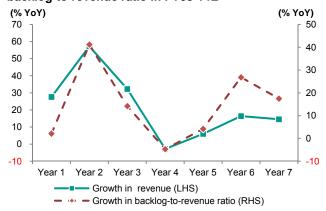
The backlog-to-revenue ratio increased from 1.33x in FY06 to 3.18x in FY12 (1H13: 3.48x), while the contract backlog value increased from RMB 1,492bn at end-2012 to RMB 1,595bn at end-June 2013. The high backlog of CRCC indicates a clear construction pipeline in upcoming years. For CRCC, growth in revenue is strongly correlated to change in backlog-to-revenue ratio with a two-year lag time. For example, acceleration of backlog-to-revenue ratio in FY11-12 indicates growth acceleration of revenue in FY13E-14E.

Exhibit 103: Correlation of revenue growth and growth in backlog -to-revenue ratio in FY06-FY14E

		Revenue	Growth		backlog-to- revenue ratio	Growth
		(Rmb mn)	(% YoY)		(x)	(% YoY)
Year 1	FY08	219,410	27.57	FY06	1.33	1.01
Year 2	FY09	344,976	57.23	FY07	1.88	42.68
Year 3	FY10	456,187	32.24	FY08	2.15	14.18
Year 4	FY11	443,319	(2.82)	FY09	2.05	(4.72)
Year 5	FY12	469,872	5.99	FY10	2.13	4.20
				С	orrelation(%)1	90.81
Year 6	FY13E	546,817	16.38	FY11	2.70	26.80
Year 7	FY14E	626,312	14.54	FY12	3.18	17.47

<sup>1:</sup> The correlation is calculated from "growth in revenue in FY08-12" and "growth in backlog-to-revenue ratio in FY06-10"





Source: Company, ABCI Securities estimates

Source(s): Company, ABCI Securities estimates

Source(s): Company

Although the pace of expansion in China's high-speed rail has slowed in 2011 after the Chinese Railways Minister, Liu Zhijun, was arrested for corruption and a fatal high-speed railway accident near Wenzhou in July 2011, declines in railway construction was offset by growth in urban rail segment, reflecting CRCC's strong technological capability enables it to diversify into other segments to drive growth.

Exhibit 105: Growth in overall new contracts railway

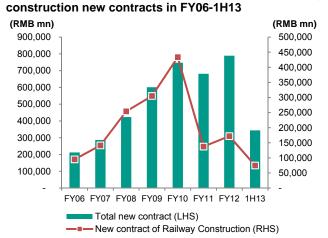
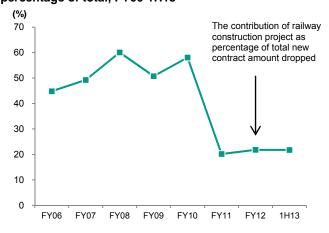


Exhibit 106: New contracts from railway construction as a percentage of total, FY06-1H13



Source(s): Company

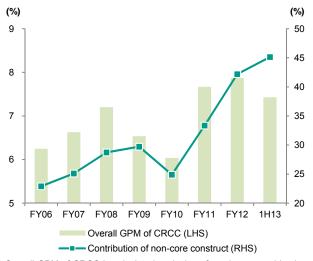


# **GPM** expected to regain in FY14E-15E

We expect GPM to increase gradually in FY14E-15E with the increased contribution from urban rail segment. GPM of urban rail construction is higher than that of railway and roadway constructions. We estimate that GPMs (ex. surcharges and business tax) of urban rail construction projects were 7%-9% in FY10-12, while that of railway and roadway construction project were 4%-7% and 3%-6%.

To diversify income, contribution from non-core businesses segments has been increasing since FY06. We expect its contribution will continue to rise in FY13E-15E. As non-transportation construction projects have higher margins at 7%-10% and that for properties development and consultancy businesses are even higher at 25%-30%, we expect CRCC's GPM of CRCC to rise in FY13E-15E due to change of product-mix.

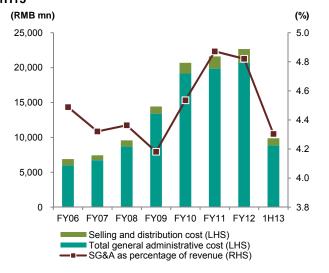
Exhibit 107: CRCC's GPM and contribution from non-core construction businesses as a percentage of total revenue in FY06-1H13



<sup>\*</sup> Overall GPM of CRCC is calculated exclusion of surcharges and business tax

tax
Source(s): Company, ABCI Securities

Exhibit 108: Selling & distribution cost, general administrative cost and SG&A-to-revenue ratio in FY06-1H13



Source(s): Company

# **Cost ratio improvement**

CRCC's selling and distribution expenses (SG&A) has been improving since FY12. The SG&A-to-revenue ratio declined from 4.87% in FY11 to 4.82% in FY12. The ratio dropped to 4.30% in 1H13, down 0.47ppt YoY.

Going forward, CAPEX as percentage of revenue will lessen after escalating in FY07-11. The ratio was 3.08%-5.44% in FY07-11, and dropped to 2.39% in FY12. We expect the CAPEX-to-revenue ratio to stay below 2.5% in FY13E-15E. The slowdown in CAPEX ratio would help to the reduction in total cost ratio as the drop in depreciation and amortization expenses as percentage of revenue. The depreciation-and-amortization-expenses-to-revenue ratio dropped from 2.26% in FY11 to 2.13% in FY12.

Under these backdrops, we estimate that the SG&A-to-revenue ratio will spiral down from 4.82% in FY12 to 4.63% in 4.63% in FY15E.



#### Outlook and recommendation

#### **Outlook of CRCC**

CRCC's 1H13 results improved on recovery in railway investment since 2H12, Net income was up 46.61% YoY in 1H13. For 2H13, however, we expect the Y-o-Y revenue growth to slow due to the high base in 2H12. Looking forward, infrastructure investment in railway transportation will stay flat in 2014-15. On the other hand, we believe development and investment in urban rail infrastructure construction will remain strong with NDRC's support, which in turn will help CRCC offset the declining revenue from railway construction. Furthermore, CRCC's lower-than-peer gearing (1H13 net gearing: 36.10%) allow the company to obtain lower-cost funding for urban rail construction projects. We expect growth in CRCC's urban rail segment to outpace the industry. We estimate the overall net income of CRCC to grow 17.03% CAGR in FY13E-15E.

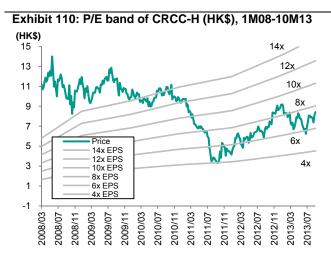
Exhibit 109: Debt position and net gearing of the major domestic transport infrastructure builders, as at June 2013

	CRCC (1186 HK)	CRG (390 HK)	CCCC (1800 HK)	CREC (600528 CH)	Sinohydro (601669 CH)	Shanghai Tunnel (600528 CH)
Total Debt (RMB mn)	123,867	189,316	167,526	11,565	65,182	16,226
Cash (RMB mn)	96,162	82,328	63,160	6,205	29,330	4,894
Net Debt (RMB mn)	27,705	106,988	104,366	5,360	35,852	11,332
Total Equity (RMB mn)	76,740	90,334	97,700	5,687	31,850	11,323
Net gearing (%)	36.10	118.44	106.82	94.25	112.57	100.08

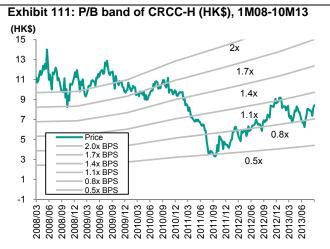
Source(s): Companies, Bloomberg

#### Valuation and recommendation: BUY

We set our target valuation at 1.26x of FY13E P/B, equivalent to 40% discount to the median of forward P/B of CRCC in 2008-10. The discount is justified by our assumption that earnings growth in FY13E-15E will be lower than that of FY08-10 (17.03% CAGR vs. 40.08% CAGR). The counter is currently trading at 1.02x of FY13E P/B, 19.05% below our target P/B. We initiate BUY on the counter with TP at HK\$ 10.22, reflecting an upside potential of 24.95% (share price gain and FY13E dividend yield).



The net income of CRCC was after the adjustment of one-off provision of Mecca Project in 2010 Source(s): Company, Bloomberg, ABCI Securities estimates



The net income of CRCC was after the adjustment of one-off provision of Mecca Project in 2010

Source(s): Company, Bloomberg, ABCI Securities estimates



Exhibit 112: 1H13 results summary of CRCC

	1H11	2H11	1H12	2H12	1H13	Change (% YoY)	Change (% HoH)
Revenue (RMB mn)	205,160	238,159	179,290	290,582	229,369	27.93	(21.07)
Construction operation	191,220	216,321	163,635	243,966	194,854	19.08	(20.13)
Survey, Design & Consultancy	3,267	4,197	2,800	4,487	3,178	13.50	(29.17)
Equipment Manufacturing	4,393	4,522	4,075	5,909	5,384	32.12	(8.88)
Property Development	1,214	12,324	1,360	16,777	4,468	228.53	(73.37)
Others	17,363	15,559	16,565	36,153	33,543	102.49	(7.22)
Inter-segment sales	(12,297)	(14,764)	(9,145)	(16,710)	(12,058)	31.85	(27.84)
Gross Profit (RMB mn)	14,407	19,585	13,997	22,986	17,035	21.71	(25.89)
Construction operation	11,727	14,486	11,035	16,438	12,619	14.36	(23.23)
Survey, Design & Consultancy	998	1,047	885	1,126	967	9.23	(14.18)
Equipment Manufacturing	658	672	670	885	923	37.88	4.38
Property Development	386	3,346	412	4,098	1,068	159.09	(73.94)
Others	781	101	547	537	614	12.19	14.20
Inter-segment sales	(143)	(67)	448	(98)	844	88.35	(959.29)
GPM (%)	7.02	8.22	7.81	7.91	7.43	(0.38ppt)	(0.48ppt)
Construction operation	6.13	6.70	6.74	6.74	6.48	(0.27ppt)	(0.26ppt)
Survey, Design & Consultancy	30.55	24.94	31.61	25.10	30.42	(1.19ppt)	5.31ppt
Equipment Manufacturing	14.98	14.85	16.44	14.97	17.15	0.72ppt	2.18ppt
Property Development	31.76	27.15	30.31	24.42	23.90	(6.41ppt)	(0.52ppt)
Others	4.50	0.65	3.30	1.49	1.83	(1.47ppt)	0.34ppt
Inter-segment sales	1.16	0.45	(4.90)	0.59	(7.00)	(2.10ppt)	(7.59ppt)
Major cost (RMB mn)							
Selling and distribution cost	776	970	667	1,279	996	49.33	(22.13)
Administrative cost <sup>1</sup>	8,602	11,249	7,889	12,817	8,876	12.51	(30.75)
Cost ratio (%)							
Selling and distribution cost	0.38	0.41	0.37	0.44	0.43	0.06ppt	(0.01ppt)
Administrative cost <sup>1</sup>	4.19	4.72	4.40	4.41	3.87	(0.53ppt)	(0.54ppt)
Net profit (RMB mn)	3,639	4,215	3,188	5,291	4,674	46.61	(11.66)
Net profit margin (%)	1.77	1.77	1.78	1.82	2.04	0.26ppt	0.22ppt

<sup>1:</sup> Including research and development expenses Source(s): Company



Consolidated income statement (2011A-2015E)

FY Ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Revenue <sup>1</sup>	443,319	469,872	546,817	626,312	694,977
Construction operation	407,541	407,601	477,873	550,216	614,096
Survey, Design & Consultancy	7,464	7,287	7,411	7,525	7,233
Equipment Manufacturing	8,915	9,984	10,036	10,175	9,506
Property Development	13,538	18,137	23,266	28,331	31,178
Others	32,922	52,718	57,872	63,536	69,760
Inter-segment sales and surcharges	(27,060)	(25,855)	(29,641)	(33,471)	(36,795)
COGS	(409,327)	(432,889)	(504,760)	(577,812)	(641,052)
Gross profit	33,992	36,983	42,057	48,500	53,926
SG&A	(21,597)	(22,652)	(26,361)	(29,748)	(32,211)
Other income and gains	(2,339)	(3,435)	(2,649)	(3,414)	(3,847)
Pre-tax profit	10,056	10,896	13,047	15,337	17,867
Income tax	(2,174)	(2,375)	(2,870)	(3,374)	(3,931)
Net profit	7,882	8,521	10,176	11,963	13,937
Profit attributable to:					
Minority interests	28	42	189	223	259
Equity shareholders of the Company	7,854	8,479	9,987	11,740	13,678
Basic EPS (RMB)	0.637	0.687	0.809	0.952	1.109
DPS (RMB)	0.100	0.110	0.121	0.143	0.166
EBIT	13,739	16,736	19,050	21,718	24,779
EBITDA	23,752	26,756	29,491	32,289	35,709

<sup>1:</sup> Revenue is excluding business tax and surcharges Source(s): Company, ABCI Securities estimates

Consolidated balance sheet (2011A-2015E)

As of Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Current assets	360,324	416,287	451,810	498,195	546,237
Cash and equivalent	83,058	92,274	88,627	91,514	88,643
Trade and bill receivables	64,933	74,013	88,834	97,687	109,283
Construction contracts	74,176	86,555	93,220	112,691	115,795
Inventories	76,006	84,782	94,600	101,121	127,816
Other current assets	62,151	78,663	86,529	95,182	104,700
Non-current assets	62,659	64,374	68,509	71,250	75,305
Property, plant and equipment	40,572	40,271	41,017	41,498	42,896
Intangible assets	6,791	8,304	9,118	9,622	10,115
Long term investments	4,445	5,626	6,189	6,807	7,488
Long term receivables	8,504	7,694	9,235	10,155	11,360
Other non-current assets	2,346	2,479	2,951	3,168	3,445
Total assets	422,983	480,661	520,318	569,445	621,542
Current liabilities	318,742	368,812	399,124	437,888	477,789
Trade and bill payables	160,371	180,875	186,693	202,436	218,752
Receipts in advance	53,414	62,098	72,734	81,700	89,665
Short term borrowings	41,665	60,649	66,714	73,385	80,724
Other current liabilities	63,291	65,190	72,983	80,367	88,649
Non-current liabilities	38,522	38,520	39,314	39,245	39,303
Long-term payables	1,472	140	145	157	169
Long-term borrowings	30,611	31,390	31,480	30,630	29,830
Other non-current liabilities	6,439	6,990	7,689	8,458	9,304
Total liabilities	357,264	407,332	438,437	477,132	517,092
Minority interests	970	1,365	1,526	1,716	1,936
Shareholders' equities BVPS (RMB)	64,749 5.248	71,964 5.833	80,355 6.513	90,597 7.343	102,514 8.309



Consolidated cash flow statement (2011A-2015E)

FY ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Profit before tax	10,056	10,896	13,047	15,337	17,867
Changes in depreciation and amortization	10,013	10,020	10,440	10,571	10,930
Changes in working capital	(34,588)	(9,460)	(15,769)	(17,313)	(16,938)
Financial cost	3,422	5,518	4,983	5,296	5,737
Income tax paid	(1,008)	(1,405)	(2,263)	(2,706)	(3,196)
Others	(471)	(10,024)	-	<u>-</u>	-
CF Operating	(12,576)	5,545	10,438	11,185	14,400
Increase in PP&E	(13,051)	(9,540)	(11,000)	(10,856)	(12,121)
Increase in intangible assets	(588)	(1,692)	(1,000)	(700)	(700)
Others	3,036	2,923	-	-	-
CF Investing	(10,603)	(8,309)	(12,000)	(11,556)	(12,821)
Capital injection	116	437	-	-	-
Net debt financing	33,618	19,763	6,155	5,821	6,539
Dividend payout	(617)	(1,234)	(1,385)	(1,531)	(1,800)
Interest paid	(3,422)	(5,518)	(4,983)	(5,296)	(5,737)
Others	11,954	(2,525)	(1,872)	4,264	(3,452)
CF Financing	41,649	10,923	(2,086)	3,259	(4,450)
Net change in cash	18,470	8,159	(3,647)	2,887	(2,871)
Cash at the beginning	65,207	83,058	92,274	88,627	91,514
Adjustment (Time deposit & FX effect)	(619)	1,057	-	-	-
Cash at the end	83,058	92,274	88,627	91,514	88,643

Source(s): Company, ABCI Securities estimates

Consolidated cash flow statement (2011A-2015E)

FY ended Dec 31	2011A	2012A	2013E	2014E	2015E
Sales mixed (%)					
Construction operation	91.93	86.75	87.39	87.85	88.36
Survey, Design & Consultancy	1.68	1.55	1.36	1.20	1.04
Equipment Manufacturing	2.01	2.12	1.84	1.62	1.37
Property Development	3.05	3.86	4.25	4.52	4.49
Others	7.43	11.22	10.58	10.14	10.04
Inter-segment sales and surcharges	(6.10)	(5.50)	(5.42)	(5.34)	(5.29)
Profit & loss ratios (%)					
Gross margin	7.67	7.87	7.69	7.74	7.76
Net profit margin	1.77	1.80	1.83	1.87	1.97
Effective tax rate	21.62	21.80	22.00	22.00	22.00
Growth (%)					
Revenue	(2.82)	5.99	16.38	14.54	10.96
Gross profit	23.43	8.80	13.72	15.32	11.19
EBIT	78.26	21.82	13.83	14.00	14.10
EBITDA	51.81	12.65	10.22	9.49	10.59
Net profit					
Balance sheet ratios					
Current ratio (x)	1.13	1.13	1.13	1.14	1.14
Quick ratio (x)	0.89	0.90	0.89	0.91	0.88
Cash ratio (x)	0.26	0.25	0.22	0.21	0.19
Trade and bill receivables days	54.08	60.26	60.00	60.00	60.00
Trade and bill payables turnover days	135.75	144.54	133.00	123.00	120.00
Inventory turnover days	60.46	67.79	64.86	61.82	65.18
Total debt / equity ratio (%)	109.98	125.52	119.92	112.68	105.84
Net debt / equity ratio (%)	Net Cash	Net Cash	11.68	13.54	20.98
Returns (%)					
ROAE	12.86	12.40	13.11	13.74	14.17
ROAA	2.03	1.88	2.00	2.15	2.30
Payout ratio	15.71	16.00	15.00	15.00	15.00

# October 21, 2013 Company Report Rating: BUY TP: HK\$ 5.14

H-Share price (HK\$) 4.25
Est. share price return 20.94%
Est. dividend yield 1.81%
Est. total return 22.75%

Previous Rating &TP Previous Report Date

BUY; HK\$ 5.17 Sept 4, 2013

Analyst: Steve Wong Tel: (852) 2147 8869 Email: stevecwwong@abci.com.hk

#### **Key Data**

110 y Bulu	
52Wk H/L(HK\$)	4.98 / 3.17
Issued shares (mn)	21,300
H-Shares (mn)	4,207
A-Shares (mn)	17,093
Market cap	
H-shares (HK\$ mn)	17,880
A-Shares (RMB mn)	47,860
3-mth avg daily turnover (HK\$ mn)	93.35
Major shareholder(s) (%):	
CRECG	56.10

Source(s): Company, Bloomberg, ABCI Securities

#### 1H13 Revenue breakdown (%)

Construction operation	85.56
Survey, Design & Consultancy	1.77
Equipment Manufacturing	2.64
Property Development	3.17
Others	12.67
Inter-segment sales	(5.81)

Source(s): Company, ABCI Securities

#### Share performance (%)

	<u>Absolute</u>	Relative*
1-mth	(1.86)	(2.44)
3-mth	8.18	(0.63)
6-mth	11.02	5.09

\*Relative to HSI

Source(s): Bloomberg, ABCI Securities



Source(s): Bloomberg, ABCI Securities

# CRG (390 HK) Urban rail development to drive momentum

Urban rail development in 2014-15 is expected to stay strong with NDRC's support. CRG is the largest builder of urban rail in China, and we believe the increasing income from urban rail development will be able to compensate partially for the declining income from railway segment. However, we believe CRG's high gearing (1H13 net gearing: 118.44%) may increase its financial costs, posting limits on its ability to obtain funds for working capital expansion. We maintain our **BUY** recommendation for CRG with our TP at HK\$ 5.14, representing 1.03x FY13E P/B. The counter is trading at 0.85x FY13E P/B, and has an upside potential of 22.75% (share price gain and FY13E dividend yield).

**Urban rail development to mitigate railway slowdown.** We believe CRG's railway segment will decline at 2.01% CAGR in FY14E-15E on slowing railway infrastructure investment from CRC. Strong growth in China's urban rail development can support CRG's growth in FY14-15. We estimate that its urban rail segment will grow at 19.58% CAGR in FY14E-15E.

**High gearing - a heavy burden.** CRG's net gearing was 118.44% as at end-June 2013, much higher than CRCC's 36.10%. The high gearing limits the room for CRG to seek funding in the future. It may restrict the number of projects to be undertaken as financial costs could be high.

**Huge backlog enhances earnings visibility.** The backlog-to-revenue ratio was 2.95x as of end-June 2013, Our statistical analysis shows that growth in backlog-to-revenue ratio is a leading indicator of revenue growth. Based on growth in backlog-to-revenue ratio in FY12-13E, we estimate CRG's overall revenue of will grow at 9.92% CAGR in FY13E-15E.

**Cost ratio improvement.** We believe GPM will recover gradually in 2H13 as the construction projects proceed to further stages of development. Furthermore, we expect CRG to maintain an effective control on expenses. CRG's SG&A-to-revenue ratio was improving from 5.74% in FY06 to 3.72% in FY12 (1H13: 3.60%). We expect the Group's net income margin to rise in FY13E-15E while net income will grow at 12.02% CAGR over FY13E-15E.

**Maintain BUY with.** Our target valuation at 1.03x of FY13E P/B, 40% discount on the median of its forward P/B during 2008-10, for the slowdown on earnings growth comparing with that in the previous Five-Year Plan. The counter is trading at 0.85x of FY13E P/B, 17.48% below our target P/B. We maintain BUY on CRG with TP at HK\$5.14 for the upside potential of 22.75%.

**Risk factors:** Risk factors: 1) YoY growth of 2H13 net income may slow due to high base in 2H12; 2) Higher gearing than peers; 3) Liquidity strained by increased exposure to BT projects.

#### **Results and Valuation**

recounts and valuatio	••				
FY ended Dec 31	2011A	2012A	2013E	2014E	2015E
Revenue (RMB mn)	442,216	465,625	536,177	601,767	647,830
Chg (%, YoY)	(3.06)	5.29	15.15	12.23	7.65
Net Income (RMB mn)	6,690	7,354	8,763	10,054	10,997
Chg (%, YoY)	(9.57)	9.93	19.17	14.72	9.39
EPS (RMB)	0.314	0.345	0.411	0.472	0.516
P/E (x)	-	9.89	8.30	7.23	6.61
BVPS (RMB)	3.373	3.652	4.012	4.422	4.867
P/B (x)	-	0.93	0.85	0.77	0.70
DPS(RMB)	0.048	0.052	0.062	0.071	0.077
Yield (%)	-	1.52	1.81	2.07	2.27
ROAE (%)	9.64	9.83	10.74	11.19	11.12
Net gearing (%)	81.93	101.34	112.13	124.05	128.06

\*Net gearing=Net debt/Total equity

Source(s): Bloomberg, ABCI estimates



### Urban rail: Growth driver for FY13E-15E

We estimate total investment in urban rail infrastructure construction will grow at 35.95% from 2013-15. Looking forward, we expect that the urban rail development in second and third tier cities will pace up in 13<sup>th</sup> 5-Year under the government's support. Accelerated growth in urban rail can partially offset the slowdown in railway and roadway transportation investments.

#### Urban rail to offset slowdown in railway and roadway investments

With CRC's high debts and declining profitability of toll road operators, we expect fixed asset investment in railway and roadway transportation to decline in FY13E-15E. Revenue from railway and roadway construction will grow at 0.83% and 0.72% CAGRs over 2013-15, respectively, as opposed to their respective revenue CAGRs of 29.18% and 36.80% over 2008-10. Accelerated development in urban rail is expect to partially offset the slowdown in railway and roadway investments,

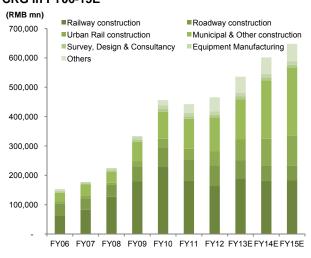
#### High gearing may restrict funding and lower business growth

CRG's high gearing (1H13 net gearing: 118.44%) compared to CRCC (1186 HK) and Shanghai Tunnel (600820 CH) hinders it from expanding its coverage in lower-tier cities.

CRG is the largest urban rail builder in China with an estimated market share of 50% in 2012. CRG's bidding for projects in lower tier cities, which usually follows the BT mode, will be limited as a large amount of upfront capital is usually required. The Group's high gearing could drive up its financial costs and reduce profitability. We estimate revenue from urban rail construction segment to growth at 19.58% CAGR over 2012-15, lower than CRCC's 44.48%.

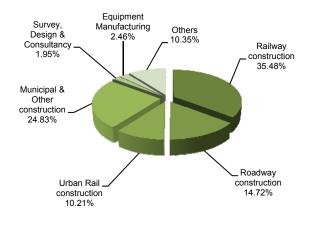
All in all, we estimate CRG's overall revenue to grow at 9.92% CAGR over FY12-15.

Exhibit 113: Revenue breakdown and projections for CRG in FY06-15E



Source(s): Company, ABCI Securities estimates

Exhibit 114: Revenue breakdown of CRG in FY12 (%)



Source(s). C



#### Income-mix diversification

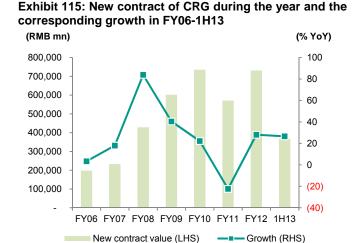
Aside from urban rail, we expect the exposure of municipal construction projects, including affordable housing and government building construction projects, and hydraulic and electric engineering projects will outpace that of the roadway and railway investment in the future.

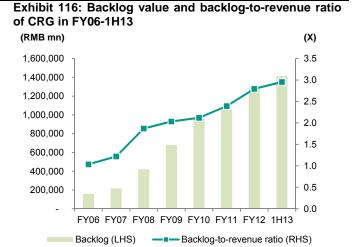
We estimate contribution from non-core businesses (non-railway-and-roadway transportation infrastructure construction), as percentage of total revenue, to rise from 35.29% in FY10 to 49.80% in FY12 (1H13: 48.62%). The new contracts value of non-core businesses increased from 34.29% in FY10 to 72.38% in FY12 (1H13: 60.24%).

# High backlog on hand

The backlog-to-revenue ratio was increasing from 1.04x in FY06 to 2.79x in FY12 (1H13: 2.95x). Although the CRG's backlog-to-revenue ratio is lower than that of CRCC at 3.48x in 1H13, the figure is above one, showing that the Group's business is expanding. Value of contract backlog increased from RMB 1,301bn at end- 2012 to RMB 1,412bn at end-1H13. Based on our statistical analysis, growth in backlog-to-revenue ratio is a leading indicator of revenue growth in CRG.

For CRG, revenue growth lags behind the growth in backlog-to-revenue ratio by one year. Growth in backlog- to-revenue ratio during FY12-13E indicates that project delivery will accelerate and drive up revenue in FY13E-14E.





Source(s): Company

Source(s): Company, ABCI Securities

Exhibit 117: Correlation of the revenue growth and growth in backlog-to-revenue ratio, FY05-FY14E

		Revenue	Growth		backlog-to-	Growth
					revenue ratio	
		(RMB mn)	(% YoY)		(X)	(% YoY)
Year 1	FY07	177,391	15.51	FY06	1.04	(11.72)
Year 2	FY08	225,029	26.85	FY07	1.22	17.87
Year 3	FY09	334,075	48.46	FY08	1.87	53.23
Year 4	FY10	456,162	36.54	FY09	2.03	8.78
Year 5	FY11	442,216	(3.06)	FY10	2.12	4.19
Year 6	FY12	465,625	5.29	FY11	2.39	12.90
					Correlation(%) <sup>1</sup>	67.28
Year 7	FY13E	536,177	15.15	FY12	2.79	16.78
Year 8	FY14E	601,767	12.23	FY13E	2.64	(5.56)

1: The correlation is calculated from "growth of revenue from FY07-12" and "growth of backlog-to-revenue ratio from FY06-11" Source: Company, ABCI Securities estimates

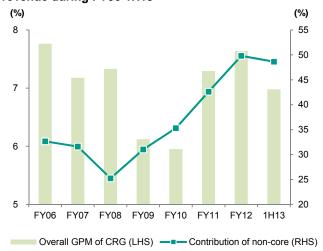


# **Higher GPM in FY14E-15E**

Due to the large amount of new railway construction contracts in 2H12 and 1H13 (RMB 213bn in total, or 1.12x of FY13E railway construction segment revenue) and most were in the initial construction stage, 1H13 GPM dropped 0.41ppt YoY to 6.98%. We believe the GPM will recover gradually in 2H13 as the construction projects proceed to further stages of development.

Looking forward, we expect the GPM to regain strength in FY14E-15E with the increased contribution from urban rail and other municipal infrastructure construction projects. For 2013-15, GPMs of urban rail and municipal construction projects are expected to be at 7%-9% and 7%-10%, higher than that of railway and roadway construction projects at 4%-5.5% and 3.5%-5.5%, respectively.

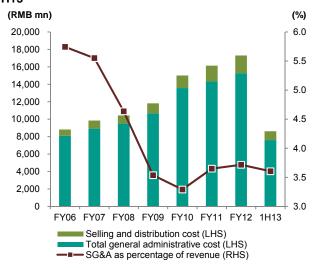
Exhibit 118: CRG's GPM and contribution from non-core construction business as a percentage of total revenue during FY06-1H13



<sup>\*</sup> The overall GPM of CRCC is calculated exclusion of surcharges and business tax

Source(s): Company, ABCI Securities

Exhibit 119: Selling & distribution cost, administrative cost and SG&A-to-revenue ratio in FY06-1H13



Source(s): Company

### Cost ratio to stay low in FY13E-15E

SG&A-to-revenue ratio of CRG improved from 5.74% in FY06 to 3.72% in FY12, and further to 3.60% in 1H13, lower than CRCC's 4.30% in and CCCC's 4.44% during the same period.

Excluding the depreciation and amortization expenses, the cash cost ratio of CRG was stable at 2.2%-2.4% during FY09-1H13, and we expect the trend to be sustained in FY14E-15E. Based on its depreciation schedule for PP&E, we estimate the SG&A-to-revenue ratio to stay at relatively low levels at be 3.50%-3.71% in FY13E-15E.

Exhibit 120: SG&A-to-revenue ratio in FY06-1H13 (%)

(%)	FY06	FY07	FY08	FY09	FY10	FY11	FY12	1H13
CRCC (1186 HK)	4.49	4.32	4.36	4.18	4.54	4.87	4.82	4.30
CRG (390 HK)	5.74	5.55	4.64	3.54	3.29	3.65	3.72	3.60
CCCC (1800 HK)	5.01	4.29	4.44	4.48	3.95	4.61	4.97	4.44

Source: Companies

#### **Outlook and recommendation**

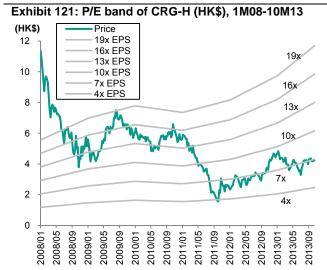
#### **Outlook of CRG**

We expect CRG's net income growth will be lower than that of 1H13 (up 45.94% YoY) due to the high base in 2H12 when railway and roadway construction investments recovered. We expect China will continue to adopt a prudent monetary policy in 2014-15 and CRC's debt problem will persist, thus roadway and railway FAI in 2014-15 will be similar to that of 2013. Hence, CRG's businesses in the relevant domain will be limited.

CRG, as the largest player of urban rail construction contractor in China with an estimated market share of 50% in 2012, will benefit from the growth in China's urban rail development of China. However, due to the high financial leverage of CRG (1H13 net gearing: 118.44%) compared to its closest competitor, CRCC (1H13 net gearing: 36.10%), we believe its financing capability could be weaker than CRCC's, especially in terms of low-cost funding. We estimate its revenue CAGR in urban rail construction segment to be 19.58% in FY13E-15E, lower than CRCC's 44.48% for the same period. CRG's net income will grow at 12.02% CAGR over FY13E-15E.

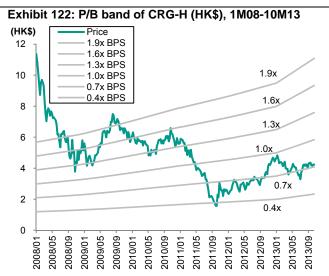
#### Recommend BUY with TP at HK\$5.14

Our target valuation at 1.03x of FY13E P/B represents a 40% discount to the median of forward P/B of CRG in 2008-10. Such discount is justified by our assumption of earnings slowdown in FY13E-15E (the last three years of China's 12<sup>th</sup> 5-Year Plan) at 12.02% CAGR, compared to FY08-10 (the last three years of China's 11<sup>th</sup> 5-Year Plan of China)'s growth at 16.09% CAGR (excluding the FX loss relevant to H share IPO proceeds in FY08), The counter is trading at 0.85x FY13E P/B, 17.48% below our target P/B. We have made a minor adjustment on the earnings projection for CRG based on CRG's 1H13 results in the updated economic data. We maintain our **BUY** rating on CRG with new TP at HK\$5.14 (previous TP: HK\$5.17). The upside potential is 22.75% (share price gain and FY13E dividend yield).



\*FY08 EPS excludes FX loss of RMB 4,139mn due to the H share IPO proceeds

Source(s): Company, Bloomberg, ABCI Securities estimates



\*FY08 BPS excludes the FX loss of RMB 4,139mn due to the H share IPO proceeds

Source(s): Company, Bloomberg, ABCI Securities estimates



Exhibit 123: 1H13 results summary of CRG

	1H11	2H11	1H12	2H12	1H13	Change (% YoY)	Change (% HoH)
Revenue (RMB mn)	214,571	227,645	190,915	274,710	238,956	25.16	(13.02)
Construction operation	192,556	199,984	164,235	232,671	204,450	24.49	(12.13)
Survey, Design & Consultancy	4,484	4,442	4,106	4,963	4,226	2.92	(14.85)
Equipment Manufacturing	6,029	5,118	4,900	6,564	6,316	28.90	(3.78)
Property Development	4,487	12,648	4,227	15,948	7,579	79.30	(52.48)
Others	19,002	23,209	23,871	32,561	30,276	26.83	(7.02)
Inter-segment sales	(11,987)	(17,756)	(10,424)	(17,997)	(13,891)	33.26	(22.81)
Gross Profit (RMB mn)	13,041	19,212	14,103	21,458	16,676	18.24	(22.29)
Construction operation	9,146	12,051	9,312	13,510	10,652	14.39	(21.16)
Survey, Design & Consultancy	1,317	1,575	1,055	1,801	1,188	12.57	(34.06)
Equipment Manufacturing	912	1,273	1,032	1,111	1,076	4.24	(3.16)
Property Development	1,219	3,134	1,340	4,343	2,127	58.72	(51.01)
Others	1,478	2,996	2,184	3,154	2,407	10.20	(23.69)
Inter-segment sales	(1,031)	(1,816)	(821)	(2,462)	(774)	(5.72)	(68.55)
GPM (%)	6.08	8.44	7.39	7.81	6.98	(0.41ppt)	(0.83ppt)
Construction operation	4.75	6.03	5.67	5.81	5.21	(0.46ppt)	(0.60ppt)
Survey, Design & Consultancy	29.38	35.45	25.70	36.30	28.11	2.41ppt	(8.19ppt)
Equipment Manufacturing	15.12	24.88	21.07	16.93	17.04	(4.03ppt)	0.11ppt
Property Development	27.16	24.78	31.71	27.23	28.07	(3.64ppt)	0.84ppt
Others	7.78	12.91	9.15	9.69	7.95	(1.20ppt)	(1.74ppt)
Inter-segment sales	8.60	10.23	7.88	13.68	5.57	(2.30ppt)	(8.11ppt)
Major cost (RMB mn)							
Selling and distribution cost	794	1,019	681	1,350	1,010	48.31	(25.19)
Administrative cost <sup>1</sup>	6,959	7,366	7,188	8,083	7,604	5.79	(5.93)
Cost ratio (%)							
Selling and distribution cost	0.37	0.45	0.36	0.49	0.42	0.07ppt	(0.07ppt)
Administrative cost <sup>1</sup>	3.24	3.24	3.77	2.94	3.18	(0.58ppt)	0.24ppt
Net profit (RMB mn)	2,444	4,246	2,390	4,964	3,488	45.94	(29.73)
Net profit margin (%)	1.14	1.87	1.25	1.81	1.46	0.21ppt	-0.35ppt

<sup>1:</sup> Including research and development expenses Source(s): Company

Exhibit 124: Major changes in our FY13E-15E forecasts

		FY13E			FY14E			FY15E	
	Previous	New	Chg (%)	Previous	New	Chg (%)	Previous	New	Chg (%)
Revenue (RMB mn)	536,177	536,177	-	601,767	601,767	-	688,247	647,830	(5.87)
Construction operation	458,732	458,732	-	523,719	523,719	-	609,313	566,968	(6.95)
Survey, Design & Consultancy	9,644	9,644	-	9,357	9,357	-	9,315	9,315	-
Equipment Manufacturing	13,275	13,275	-	12,734	12,734	-	12,749	12,749	-
Property Development	26,228	26,228	-	30,162	30,162	-	34,686	34,686	-
Others	62,213	62,213	-	62,713	62,713	-	63,213	63,213	-
Inter-segment sales	(33,913)	(33,913)	-	(36,917)	(36,917)	-	(41,029)	(39,101)	(4.70)
Gross profit (RMB mn)	39,749	39,749	-	45,900	45,900	-	52,704	49,933	(5.26)
GPM (%)	7.41	7.41	-	7.63	7.63	-	7.66	7.71	0.05ppt
Net income (RMB mn)	8,763	8,763	(0.01)	9,858	10,054	1.98	11,215	10,997	(1.94)
Net margin (%)	1.63	1.63	(0.01ppt)	1.59	1.67	0.08ppt	1.63	1.70	0.06ppt
EPS (RMB)	0.411	0.411	(0.01)	0.463	0.472	1.94	0.527	0.516	(2.09)
BVPS (RMB)	4.012	4.012	(0.01)	4.413	4.422	0.20	4.870	4.867	(0.06)
DPS (RMB)	0.062	0.062	(0.01)	0.069	0.071	2.90	0.079	0.077	(2.53)

Source(s): ABCI Securities estimates

Consolidated income statement (2011A-2015E)

FY Ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Revenue	442,216	465,625	536,177	601,767	647,830
Construction operation	392,540	396,906	458,732	523,719	566,968
Survey, Design & Consultancy	8,926	9,069	9,644	9,357	9,315
Equipment Manufacturing	11,147	11,464	13,275	12,734	12,749
Property Development	17,135	20,175	26,228	30,162	34,686
Others	42,211	56,432	62,213	62,713	63,213
Inter-segment sales	(29,743)	(28,421)	(33,913)	(36,917)	(39,101)
COGS	(409,963)	(430,064)	(496,428)	(555,867)	(597,897)
Gross profit	32,253	35,561	39,749	45,900	49,933
SG&A	(16,138)	(17,302)	(18,750)	(22,326)	(23,977)
Other income (loss)	(6,117)	(7,174)	(7,327)	(7,893)	(8,808)
Pre-tax profit	9,998	11,085	13,672	15,681	17,148
Income tax	(2,758)	(3,052)	(3,760)	(4,312)	(4,716)
Net profit	7,240	8,033	9,912	11,369	12,433
Profit attributable to:					
Minority interests	550	679	1,149	1,315	1,435
Equity shareholders of the Company	6,690	7,354	8,763	10,054	10,997
Basic EPS (RMB)	0.314	0.345	0.411	0.472	0.516
DPS (RMB)	0.048	0.052	0.062	0.071	0.077
EBIT	16,210	20,827	25,403	27,788	29,671
EBITDA	22,430	26,890	32,657	35,514	37,924

Source(s): Company, ABCI Securities estimates

Consolidated balance sheet (2011A-2015E)

As of Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Current assets	360,099	434,855	516,518	549,226	540,101
Cash and equivalent	63,583	72,491	87,599	73,912	67,001
Trade and bill receivables	95,758	100,556	114,334	117,567	115,441
Construction contracts	56,747	78,522	91,880	96,070	84,968
Inventories	94,952	119,506	152,548	184,503	187,799
Other current assets	49,059	63,780	70,158	77,174	84,891
Non-current assets	108,461	115,806	124,178	130,979	137,613
Property, plant and equipment	37,668	41,513	44,949	48,249	51,942
Intangible assets	42,756	42,108	42,418	42,428	42,438
Long term investments	15,834	16,156	17,772	19,549	21,504
Long term receivables	3,336	6,678	7,593	7,808	7,667
Other non-current assets	8,867	9,351	11,446	12,946	14,062
Total assets	468,560	550,661	640,696	680,205	677,714
Current liabilities	305,572	366,119	429,558	456,840	441,068
Trade and bill payables	158,458	179,608	200,262	209,900	185,523
Receipts in advance	35,282	49,685	67,833	70,656	64,235
Short term borrowings	56,490	73,762	89,865	97,351	105,587
Other current liabilities	55,342	63,064	71,598	78,933	85,723
Non-current liabilities	81,809	96,552	114,516	116,886	119,458
Long-term payables	632	450	502	526	465
Long-term borrowings	73,606	87,899	106,073	108,653	111,491
Other non-current liabilities	7,571	8,203	7,941	7,707	7,501
Total liabilities	387,381	462,671	544,074	573,726	560,526
Minority interests	9,330	10,197	11,176	12,293	13,513
Shareholders' equities	71,849	77,793	85,446	94,186	103,675
BVPS (RMB)	3.373	3.652	4.012	4.422	4.867



Consolidated cash flow statement (2011A-2015E)

FY ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Profit before tax	9,998	11,085	13,672	15,681	17,148
Changes in depreciation and amortization	6,220	6,063	7,254	7,725	8,253
Changes in working capital	(30,314)	(20,939)	(29,359)	(25,394)	(17,269)
Financial cost	4,148	6,360	7,625	7,870	8,139
Income tax paid	(2,712)	(3,705)	(3,883)	(4,447)	(4,864)
Others	(59)	(1,608)	-	-	-
CF Operating <sup>1</sup>	(12,719)	(2,744)	(4,691)	1,435	11,408
Increase in PP&E	(10,877)	(10,288)	(11,000)	(11,335)	(12,257)
Increase in intangible assets	(10,637)	(494)	(1,000)	(700)	(700)
Others	9,040	(2,636)	-	-	-
CF Investing <sup>1</sup>	(12,474)	(13,418)	(12,000)	(12,035)	(12,957)
Capital injection	195	610	_	-	-
Net debt financing	44,961	31,565	34,277	10,067	11,073
Dividend payout	(1,407)	(1,253)	(1,280)	(1,512)	(1,723)
Interest paid	(5,799)	(9,686)	(11,731)	(12,108)	(12,522)
Others	(7,350)	2,437	10,534	466	(2,190)
CF Financing	30,600	23,673	31,799	(3,086)	(5,362)
Net change in cash	5,407	7,511	15,108	(13,687)	(6,911)
Cash at the beginning	57,218	63,583	72,491	87,599	73,912
Adjustment (Time deposit & FX effect)	958	1,397	-	-	-
Cash at the end	63,583	72,491	87,599	73,912	67,001

<sup>1:</sup> Operating cash flow is including interest received, while investing cash flow is excluding interest received Source(s): Company, ABCI Securities estimates

Consolidated cash flow statement (2011A-2015E)

FY ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Sales mixed (%)					
Construction operation	88.77	85.24	85.56	87.03	87.52
Survey, Design & Consultancy	2.02	1.95	1.80	1.55	1.44
Equipment Manufacturing	2.52	2.46	2.48	2.12	1.97
Property Development	3.87	4.33	4.89	5.01	5.35
Others	9.55	12.12	11.60	10.42	9.76
Inter-segment sales	(6.73)	(6.10)	(6.32)	(6.13)	(6.04)
Profit & loss ratios (%)					
Gross margin	7.29	7.64	7.41	7.63	7.71
Net profit margin	1.51	1.58	1.63	1.67	1.70
Effective tax rate	27.59	27.53	27.50	27.50	27.50
Growth (%)					
Revenue	(3.06)	5.29	15.15	12.23	7.65
Gross profit	18.83	10.26	11.78	15.47	8.79
EBIT	18.77	28.48	21.97	9.39	6.77
EBITDA	20.27	19.88	21.45	8.75	6.79
Net profit	(9.57)	9.93	19.17	14.72	9.39
Balance sheet ratios					
Current ratio (x)	1.18	1.19	1.20	1.20	1.22
Quick ratio (x)	0.87	0.86	0.85	0.80	0.80
Cash ratio (x)	0.21	0.20	0.20	0.16	0.15
Trade and bill receivables days	75.78	80.87	78.00	75.00	70.00
Trade and bill payables turnover days	131.69	143.92	140.00	135.00	121.00
Inventory turnover days	72.73	91.01	100.01	110.66	113.64
Total debt / equity ratio (%)	160.26	183.73	202.79	193.47	185.24
Net debt / equity ratio (%)	81.93	101.34	112.13	124.05	128.06
Returns (%)					
ROAE	9.64	9.83	10.74	11.19	11.12
ROAA	1.56	1.44	1.47	1.52	1.62
Payout ratio	15.28	15.07	15.00	15.00	15.00

# October 21, 2013 Company Report Rating: BUY TP: HK\$ 7.67

H-Share price (HK\$) 6.29
Est. share price return 21.94%
Est. dividend yield 4.00%
Est. total return 25.94%

Previous Rating &TP (Initiation)
Previous Report Date N/A

Analyst: Steve Wong Tel: (852) 2147 8869 Email: stevecwwong@abci.com.hk

#### Key Data

ito y Bata	
52Wk H/L(HK\$)	8.43 / 5.27
Issued shares (mn)	16,175
H-Shares (mn)	4,428
A-Shares (mn)	11,747
Market cap	
H-shares (HK\$ mn)	27,852
A-Shares (RMB mn)	48,515
3-mth avg daily turnover (HK\$ mn)	122.2
Major shareholder(s) (%):	
CCCG	63.83

Source(s): Company, Bloomberg, ABCI Securities

## 1H13 Revenue breakdown (%)

Construction operation	79.07
Survey, Design & Consultancy	5.49
Port Machinery Manufacturing	7.66
Dredging services	9.82
Others	0.82
Inter-segment sales	(2.84)

Source(s): Company, ABCI Securities

#### Share performance (%)

	<u>Absolute</u>	Relative*
1-mth	0.16	(0.42)
3-mth	10.65	1.66
6-mth	(15.13)	(19.64)

\*Relative to HSI

Source(s): Bloomberg, ABCI Securities



Source(s): Bloomberg, ABCI Securities

# **CCCC (1800 HK)**

# An undervalued BUY

We expect CCCC to increase exposure in BOT/BOO projects in FY14E-15E to offset the impacts of declining growth in roadway and port infrastructure construction investments. GPM is expected to rise on greater involvement in BOT/BOO projects but working capital requirement will increase at the same time, driving up the Group's net gearing in FY14E-15E. Nevertheless, we recommend investors to accumulate shares based as the counter is currently trading 15.50% below book. We initiate **BUY** with TP at HK\$ 7.67, equivalent to 1.03x FY13E P/B or at a 50% discount to the median of CCCC's forward P/B in 2008-10.

**Slowdown in major business segments.** Due to the declining profitability in downstream toll road and port operation industries, we expect roadway and port construction to remain sluggish in 2014-15. Contribution from roadway and port construction business in CCCC was estimated to be 51.57% in FY12 (1H13E: 46.55%).

**Increased exposure in BOT projects.** In order to maintain the earnings growth amid slowdown in roadway investment, we expect CCCC to increase exposure in BOT projects in FY14E-15E. The CAPEX for BOT projects as a percentage of total CAPEX increased from 57.31% in FY12 to 59.91% in 1H13. With the higher GPM of BOT/BOO projects (estimated at 10%-15%) than the Group's average, we expect the GPM will rise in the future due to change of product-mix.

**Net gearing to increase in FY14-15.** Increased exposure in BOT/ BOO projects also implies that CCCC will require higher levels of working capital. Thus, we expect its FY14E-15E net gearing will increase.

**Huge backlog enhances earnings visibility.** The backlog-to-revenue ratio increased from 2.37x in FY12 to 2.70x in 1H13, indicating that the Group's business has been expanding. We believe revenue growth to recover from the trough (FY11-12) in FY13E-15E although the growth (CAGR: 7.16%) will be less than that in FY08-10 (CAGR: 23.47%).

**Initiate BUY with TP at HK\$7.67.** Our target valuation at 1.03x of FY13E P/B represents a 50% discount to the median of forward P/B of CCCC in 2008-10. The 50% discount is justified by our assumption that net income growth in FY13E-15E will be lower than that in FY08-10. The discount applied is higher than that of CRCC and CRG (40%) mainly because CCCC's low involvement in urban rail construction projects, hence its growth prospect in FY14E-15E will be weaker in comparison. Nonetheless, the counter is currently trading below book at by 15.50% and we believe it is undervalued. We initiate with a **BUY** rating on CCCC with TP at HK\$7.67, reflecting an upside potential of 25.94% (share price gain and FY13E dividend yield).

**Risk factors:** 1) Y-o-Y growth of 2H13 net income may slow; 2) Gearing may increase with increased exposure in BOT/BOO projects; 3) Lack of exposure in policy-supported industry, such as urban rail construction.

#### **Results and Valuation**

recounts and valuation	••				
FY ended Dec 31	2011A	2012A	2013E	2014E	2015E
Revenue (RMB mn)	294,281	295,321	325,071	355,870	373,261
Chg (%,YoY)	7.90	0.35	10.07	9.47	4.89
Net Income (RMB mn)	11,761	12,248	13,074	14,030	15,175
Chg (%,YoY)	22.52	4.14	6.74	7.31	8.17
EPS (RMB)	0.793	0.767	0.808	0.867	0.938
P/E (x)	-	6.67	6.25	5.82	5.38
BVPS (RMB)	4.736	5.355	5.979	6.644	7.365
P/B (x)	-	0.94	0.85	0.76	0.69
DPS(RMB)	0.196	0.185	0.202	0.217	0.235
Yield (%)	-	3.66	4.00	4.29	4.64
ROAE (%)	17.66	15.62	14.26	13.74	13.39
Net gearing (%)	74.13	74.08	77.69	81.70	88.49

\*Net gearing=Net debt/Total equity Source(s): Bloomberg, ABCI estimates



## Revenue growth in major segments are slowing

We expect roadway and port construction will remain sluggish in 2014-15 as profitability in downstream toll road and port operation industries are declining. Total infrastructure investment in roadway and port transportation will grow by 1.27% CAGR from 2013-15 decelerated from 26.70% CAGR from 2008-10. Contribution of roadway and port construction as a percentage of revenue was 51.57% in FY12 (1H13: 46.55%). The major business sub-segments of CCCC are suffering.

Furthermore, although railway construction was recovering from the trough in 1H12, we expect its growth to stay flat in 2014-15, partly due to CRC's major debt problem. The net gearing of CRC as of 1H13 was 130.35%. CCCC's growth in railway construction sub-segment will therefore be restricted. We expect the Group's revenue in this sub-segment to grow at 8.67% CAGR in FY13E-15E, slower than that in FY08-10 at 66.03%.

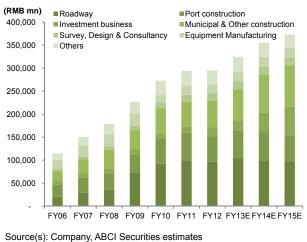
#### **BOT** investment to increase

In order to maintain the earnings growth amid the slowdown in roadway investment, CCCC has increased its exposure in BOT projects since FY11. The new contract from investment projects (BT/BOT/BOO projects), as percentage of total new contract, increased from 5.55% in FY10 to 24.28% in FY12 (1H13: 17.71%).

The CAPEX for BOT projects, as a percentage of total CAPEX, increased from 15.61% in FY06 to 57.31% in FY12 (1H13: 59.91%). GPMs of BOT/BOO/BT projects are higher than that of turnkey project. We estimate the GPM of BOT projects to be  $\sim$ 10%-15% in FY06-12, higher than the Group's overall GPM of 8.52%-11.04% for the same period. Although the GPMs of BOT projects are relatively higher, the upfront liquidity requirements of BOT projects are also higher than that of turnkey projects.

Looking forward, we expect roadway and port construction will maintain sluggish in FY14E-15E. Under these circumstances, we estimate the revenue CAGR of CCCC in FY13E-15E to be 7.16%, lower than the revenue CAGR of 23.47% in FY08-10.

Exhibit 125: Revenue breakdown and projection for CCCC in FY06-15E



Source(s): Company, ABCI Securities

6.34%

Equipment Manufacturing Others Survey 6.54% 10.20% Design & Roadway Consultancy 32.64% 5.58% Municipal & Other construction 19.78% Port nstruction Investment 18.92% business

Exhibit 126: Revenue breakdown of CCCC in FY12 (%)



# High backlog on hand

CCCC's backlog-to-revenue ratio increased from 1.35x in FY06 to 2.37x in FY12 (1H13: 2.70x), showing that CCCC is in expansion. Value of the contract backlog increased from RMB 701bn at end-2012 to RMB 761bn at end-1H13, of which RMB 133bn was contributed by roadway construction based on our estimates.

The correlation of growth in backlog-to-revenue ratio (backlog ratio) and revenue growth was 49.70% in FY06-10 with a two-year lag time, lower than CRCC's 90.81% and CRG's 67.28%. We believe the weak correlation can be attributed to the deferred delivery in port machinery manufacturing business. Excluding its port machinery manufacturing business, the correlation between growth of backlog-to-revenue and revenue of CCCC's construction segment, the main revenue contributor of CCCC's revenue, was 77.78% in FY06-10. For the port machinery manufacturing business, the ratio was -11.36% for the same period, which dragged down the overall correlation.

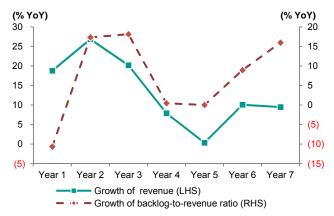
Backlog ratio of construction business increased from 2.03x in FY10 to 2.70x in FY12 (1H13: 3.02x). Thus, we believe revenue from construction business will recover starting from 2013.

Exhibit 127: Correlation of the growth of overall revenue and growth in overall backlog-to-revenue ratio, FY06-FY14E

		Revenue	Growth		backlog-to- revenue ratio	Growth
		(Rmb mn)	(% YoY)		(x)	(% YoY)
Year 1	FY08	178,889	18.78	FY06	1.35	(10.64)
Year 2	FY09	226,920	26.85	FY07	1.58	17.32
Year 3	FY10	272,734	20.19	FY08	1.87	18.13
Year 4	FY11	294,281	7.90	FY09	1.88	0.46
Year 5	FY12	295,321	0.35	FY10	1.88	0.01
				Correlation(%) <sup>1</sup>		49.70
Year 6	FY13E	325,071	10.07	FY11	2.05	8.93
Year 7	FY14E	355,870	9.47	FY12	2.37	15.97

<sup>1:</sup> The correlation is calculated from "growth of revenue from FY07 to FY11" and "growth of backlog-to-revenue ratio from FY05 to FY09"

Exhibit 128: Growth of revenue and backlog-to-revenue ratio of the Group, FY08-13E



Source: Company, ABCI Securities estimates

# Exhibit 129: Correlation of the revenue growth and growth in backlog-to-revenue ratio (construction business segment), FY06-FY14E

		Revenue	Growth		acklog-to- renue ratio	Growth
		(Rmb mn)	(% YoY)		(x)	(% YoY)
Year 1	FY08	122,107	20.06	FY06	1.35	(11.36)
Year 2	FY09	165,563	35.59	FY07	1.71	27.10
Year 3	FY10	212,962	28.63	FY08	2.17	27.00
Year 4	FY11	227,068	6.62	FY09	2.16	(0.67)
Year 5	FY12	229,401	1.03	FY10	2.03	(5.99)
				Corre	77.78	
Year 6	FY13E	254,449	10.92	FY11	2.25	11.03
Year 7	FY14E	285,393	12.16	FY12	2.70	19.82

<sup>1:</sup> The correlation is calculated from "growth of revenue from FY08 to FY12" and "growth of backlog-to-revenue ratio from FY06 to FY10"

Source(s): Company, ABCI Securities estimates

Source(s): Company, ABCI Securities estimates

Exhibit 130: Correlation of the growth of revenue and growth of backlog-to-revenue ratio (port machinery manufacturing), FY06-FY14E

		Revenue	Growth		backlog-to-	Growth
				re	evenue ratio	
		(Rmb mn)	(% YoY)		(x)	(% YoY)
Year 1	FY08	26,858	12.95	FY06	1.50	(8.58)
Year 2	FY09	27,070	0.79	FY07	1.46	(3.02)
Year 3	FY10	17,221	(36.38)	FY08	1.32	(9.12)
Year 4	FY11	20,166	17.10	FY09	1.11	(16.28)
Year 5	FY12	19,317	(4.21)	FY10	1.59	43.34
				Cor	relation(%) <sup>1</sup>	(11.36)
Year 6	FY13E	21,483	11.21	FY11	1.38	(13.22)
Year 7	FY14E	21,477	(0.03)	FY12	0.84	(38.98)

1: The correlation is calculated from "growth of revenue from FY08 to FY12" and "growth of backlog-to-revenue ratio from FY06 to FY10"

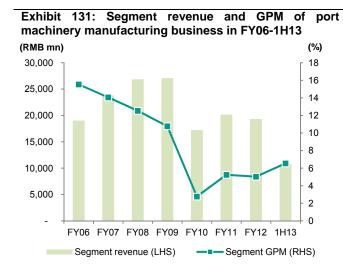


# Port machinery manufacturing business

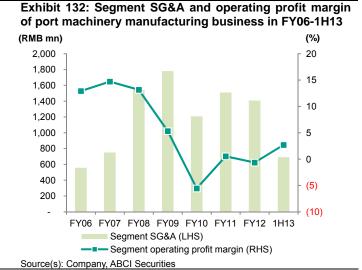
Most of the revenue from port machinery manufacturing business was contributed by Shanghai Zhenhua Heavy Industry Company Limited (ZPMC, 600320 CH), the subsidiary of CCCC with a 46.1% equity interest as of June 2013

After the global financial crisis in 2007-08, revenue from port machinery manufacturing business suffered a sharp decline. Due to the large capital investment required for offshore heavy machinery purchases, customers were relatively cautious in procurement. Thus, CCCC new orders slowed. The segment revenue was RMB 19,317mn in FY12, compared to its peak at RMB 27,070mn in FY09. Moreover, the increasing fixed cost resulted in declines in profitability. The segment GPM dropped from 10.77% in FY09 to 5.03% in FY12 (1H13: 6.54%)

Going forward, we believe it will take time for ZPMC's profitability to recover, and it is unlikely that it would be as high as the ones in FY06-08. ZPMC suffered a net loss of RMB 1,044mn in FY12 (1H13: net gain of RMB 43mn).



Source(s): Company



# **GPM** increased with exposure in BOT/BOO

Due to the higher GPM of BOT/BOO (estimated at 10-15% vs. 3-5% for railway and roadway construction projects and 8-10% for port construction). CCCC increases in exposure in BOT/BOO. The amount of concessional assets has been increasing since 2006. With increased exposure in BOT projects, the segment GPM for construction contracting business increased from 6.40% in FY06 to 9.66% in FY12 (1H13: 8.75%). Looking forward, we expect contribution from BOT/BOO projects will increase, raising the overall GPM in FY14E-15E. However, the major drawback of BOT/BOO project is the liquidity. We expect the gearing of CCCC will surge under liquidity pressure.

Exhibit 133: Concessional assets and overall GPM of CCCC, FY06-1H13 (%)

	FY06	FY07	FY08	FY09	FY10	FY11	FY12	1H13
Overall GPM (%)	10.28	10.34	9.98	9.57	8.52	9.48	11.04	10.11
Concessional assets (RMB mn)	2,249	4,822	6,152	10,011	15,078	23,112	35,705	40,773
Concessional assets/total assets (%)	1.77	2.88	2.82	3.79	4.85	6.44	8.23	8.60
Concessional assets/total revenue (%)	1.96	3.20	3.44	4.41	5.53	7.85	12.09	14.45 <sup>1</sup>

<sup>1:</sup> The concessional assets/total revenue ratio for 1H13: (Concessional assets as at June 2013 / revenue in 1H13) / 2 Source: Companies



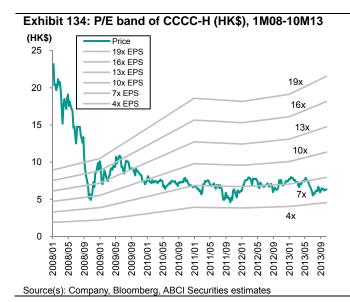
#### **Outlook and recommendation**

#### **Outlook of CCCC**

Based on the lukewarm global economy and deteriorating profitability of port and toll road operators, the corresponding CAPEX growth is expected to decline in 2014-15. We expect sub-segments' revenue from port and roadway construction businesses to decline at 4.48% and 2.68% CAGRs in FY13E-15E, respectively. In order to offset the weakening roadway and port construction businesses, we expect CCCC to increase exposure in BOT, BOO and BT projects, such as the integrated development projects for local governments. Concession assets increased from RMB 2,249mn at end-2006 to RMB 35,705mn at end-2012 (end-1H13: RMB 40,773mn). However, increased exposure in these investment projects will add to the financial burden of CCCC, thus we expect its net gearing will increase in FY14E-15E in order to raise sufficient working capital.

#### Recommend BUY with TP at HK\$7.67

Our target valuation at 1.03x of FY13E P/B reflects a 50% discount to the median of forward P/B of CCCC in 2008-10. The 50% is justified by our assumption that net income growth in FY13E-15E (the last three years of the 12<sup>th</sup> 5-Year Plan of China) will be lower at 7.74% CAGR compared to the net income CAGR at 25.70% in FY08-10 (the corresponding three years in the previous 5-Year Plan of China). The discount for CCCC at 50% is higher than that of CRCC and CRG (40%) mainly because of the Group's low exposure in urban rail construction projects, which will affect its growth prospect in FY14E-15E. The counter is currently trading at 0.85x FY13E P/B, 17.48% below our target P/B. We initiate with a **BUY** rating on CCCC with TP at HK\$7.67 and an upside of 25.94% (share price gain and FY13E dividend yield).



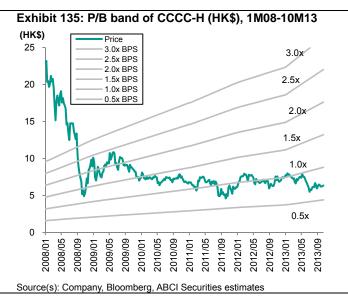




Exhibit 136: 1H13 results summary of CCCC

	1H11	2H11	1H12	2H12	1H13	Change	Change
. (242		151050		1=2 122		(% YoY)	(% HoH)
Revenue (RMB mn)	139,925	154,356	124,829	170,492	141,037	12.98	(17.28)
Construction operation	107,834	119,234	94,330	135,071	111,514	18.22	(17.44)
Survey, Design & Consultancy	5,963	9,045	6,065	10,403	7,737	27.57	(25.63)
Port Machinery Manufacturing	8,965	11,201	10,526	8,791	10,797	2.57	22.82
Dredging services	15,586	16,735	14,194	17,833	13,847	(2.44)	(22.35)
Others	3,952	2,733	2,867	3,595	1,151	(59.85)	(67.98)
Inter-segment sales	(2,375)	(4,592)	(3,153)	(5,201)	(4,009)	27.15	(22.92)
Gross Profit (RMB mn)	12,014	15,894	13,549	19,049	14,256	5.22	(25.16)
Construction operation	7,706	10,509	8,870	13,287	9,757	10.00	(26.57)
Survey, Design & Consultancy	1,420	2,221	1,515	2,724	1,790	18.15	(34.29)
Port Machinery Manufacturing	259	797	913	58	706	(22.67)	1,117.24
Dredging services	2,325	2,223	1.966	2,582	1,968	0.10	(23.78)
Others	304	345	264	319	74	(71.97)	(76.80)
Inter-segment sales	0	(201)	21	79	(39)	(285.71)	(149.37)
GPM (%)	8.59	10.30	10.85	11.17	10.11	(0.75ppt)	(1.06ppt)
Construction operation	7.15	8.81	9.40	9.84	8.75	(0.65ppt)	(1.09ppt)
Survey, Design & Consultancy	23.81	24.56	24.98	26.18	23.14	(1.84ppt)	(3.05ppt)
Port Machinery Manufacturing	2.89	7.12	8.67	0.66	6.54	(2.13ppt)	5.88ppt
Dredging services	14.92	13.28	13.85	14.48	14.21	0.36ppt	(0.27ppt)
Others	7.69	12.62	9.21	8.87	6.43	(2.78ppt)	(2.44ppt)
Inter-segment sales	0.00	4.38	(0.67)	(1.52)	0.97	1.64ppt	2.49ppt
Major cost (RMB mn)							
Selling and distribution cost	286	339	273	338	204	(25.27)	(39.64)
Administrative cost <sup>1</sup>	5,163	7,780	5,681	8,388	6,052	6.53	(27.85)
Cost ratio (%)							
Selling and distribution cost	0.20	0.22	0.22	0.20	0.14	(0.07ppt)	(0.05ppt)
Administrative cost <sup>1</sup>	3.69	5.04	4.55	4.92	4.29	(0.26ppt)	(0.63ppt)
Net profit (RMB mn)	5.829	5,932	5,018	7,230	5,728	14.15	(20.77)
Net profit margin (%)	4.17	3.84	4.02	4.24	4.06	0.04ppt	(0.18ppt)

<sup>1:</sup> Including research and development expenses Source(s): Company



Consolidated income statement (2011A-2015E)

FY Ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Revenue	294,281	295,321	325,071	355,870	373,261
Construction operation	227,068	229,401	254,449	285,393	306,043
Survey, Design & Consultancy	15,008	16,468	17,314	17,622	17,716
Port Machinery Manufacturing	20,166	19,317	21,483	21,477	20,160
Dredging services	32,321	32,027	33,759	33,275	30,801
Others	6,685	6,462	6,785	7,124	7,481
Inter-segment sales	(6,967)	(8,354)	(8,719)	(9,021)	(8,940)
COGS	(266,373)	(262,723)	(289,475)	(315,613)	(329,736)
Gross profit	27,908	32,598	35,595	40,257	43,524
SG&A	(13,568)	(14,680)	(16,231)	(19,377)	(21,050)
Other income (loss)	684	(2,403)	(2,909)	(3,022)	(3,185)
Pre-tax profit	15,024	15,515	16,455	17,857	19,289
Income tax	(3,047)	(3,783)	(3,291)	(3,571)	(3,858)
Net profit	11,977	11,732	13,164	14,286	15,431
Profit attributable to:					
Minority interests	216	(516)	90	256	256
Equity shareholders of the Company	11,761	12,248	13,074	14,030	15,175
Basic EPS (RMB)	0.793	0.767	0.808	0.867	0.938
DPS (RMB)	0.196	0.185	0.202	0.217	0.235
EBIT	19,518	22,399	24,110	26,027	28,004
EBITDA	26,010	29,386	31,615	34,088	36,793

Source(s): Company, ABCI Securities estimates

Consolidated balance sheet (2011A-2015E)

As of Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Current assets	223,414	271,186	294,917	316,686	325,094
Cash and equivalent	46,043	73,073	77,493	75,248	69,176
Trade and bill receivables	44,972	44,247	48,119	52,998	53,061
Construction contracts	54,261	57,983	59,577	69,122	74,047
Inventories	22,603	26,675	33,599	35,576	36,695
Other current assets	55,535	69,208	76,129	83,742	92,116
Non-current assets	135,571	162,668	178,204	197,466	218,366
Property, plant and equipment	55,163	56,811	58,928	61,630	64,938
Intangible assets	32,040	44,480	53,153	64,790	77,885
Long term investments	17,390	20,315	22,347	24,581	27,039
Trade and other receivables	5,937	6,949	7,557	8,323	8,333
Other non-current assets	25,041	34,113	36,220	38,141	40,171
Total assets	358,985	433,854	473,121	514,152	543,460
Current liabilities	219,088	253,805	269,606	294,985	306,955
Trade and bill payables	95,668	106,226	115,837	126,277	126,671
Receipts in advance	32,715	38,019	42,135	45,613	46,423
Short term borrowings	54,289	69,187	72,536	79,790	87,769
Other current liabilities	36,416	40,373	39,097	43,305	46,091
Non-current liabilities	58,877	83,978	97,290	101,989	107,468
Long-term borrowings	51,756	75,058	87,478	91,196	95,595
Other non-current liabilities	7,121	8,920	9,812	10,793	11,873
Total liabilities	277,965	337,783	366,896	396,974	414,422
Minority interests	10,789	9,454	9,522	9,714	9,906
Shareholders' equities	70,231	86,617	96,703	107,464	119,132
BVPS (RMB)	4.736	5.355	5.979	6.644	7.365



Consolidated cash flow statement (2011A-2015E)

FY ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Profit before tax	15,024	15,515	16,455	17,857	19,289
Changes in depreciation and amortization	6,492	6,987	7,505	8,062	8,788
Changes in working capital	(16,713)	(9,637)	(16,808)	(10,920)	(17,598)
Financial cost	3,355	5,411	6,281	6,667	7,077
Income tax paid	(2,606)	(3,219)	(2,905)	(3,147)	(3,391)
Others	(3,281)	(992)	(1,200)	(1,320)	(1,452)
CF Operating <sup>1</sup>	2,271	14,065	9,328	17,199	12,714
Increase in PP&E	(8,277)	(8,209)	(9,030)	(9,933)	(10,926)
Increase in intangible assets	(9,147)	(12,866)	(9,265)	(12,468)	(14,265)
Others	2,883	845	-	-	-
CF Investing <sup>1</sup>	(14,541)	(20,230)	(18,295)	(22,401)	(25,191)
Capital injection	142	5,026	-	-	-
Net debt financing	24,716	38,200	15,769	10,971	12,379
Dividend payout	(2,511)	(3,037)	(3,011)	(3,333)	(3,571)
Interest paid	(4,016)	(6,432)	(6,281)	(6,667)	(7,077)
Others	511	(4,835)	6,908	1,986	4,674
CF Financing	18,842	28,922	13,386	2,958	6,405
Net change in cash	6,572	22,757	4,420	(2,244)	(6,072)
Cash at the beginning	39,545	46,043	73,073	77,493	75,248
Adjustment (Time deposit & FX effect)	(74)	4,273	-	-	-
Cash at the end	46,043	73,073	77,493	75,248	69,176

<sup>1:</sup> Operating cash flow is including interest received, while investing cash flow is excluding interest received Source(s): Company, ABCI Securities estimates

Consolidated cash flow statement (2011A-2015E)

FY ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Sales mixed (%)					
Construction operation	77.16	77.68	78.27	80.20	81.99
Survey, Design & Consultancy	5.10	5.58	5.33	4.95	4.75
Port Machinery Manufacturing	6.85	6.54	6.61	6.04	5.40
Dredging services	10.98	10.84	10.39	9.35	8.25
Others	2.27	2.19	2.09	2.00	2.00
Inter-segment sales	(2.37)	(2.83)	(2.68)	(2.53)	(2.40)
Profit & loss ratios (%)					
Gross margin	9.48	11.04	10.95	11.31	11.66
Net profit margin	4.00	4.15	4.02	3.94	4.07
Effective tax rate	20.28	24.38	20.00	20.00	20.00
Growth (%)					
Revenue	7.90	0.35	10.07	9.47	4.89
Gross profit	20.05	16.81	9.19	13.10	8.12
EBIT	29.10	14.76	7.64	7.95	7.60
EBITDA	24.65	12.98	7.59	7.82	7.93
Net profit	22.52	4.14	6.74	7.31	8.17
Balance sheet ratios					
Current ratio (x)	1.02	1.07	1.09	1.07	1.06
Quick ratio (x)	0.92	0.96	0.97	0.95	0.94
Cash ratio (x)	0.21	0.29	0.29	0.26	0.23
Trade and bill receivables days	60.84	63.10	60.00	60.00	60.00
Trade and bill payables turnover days	119.38	140.25	140.00	140.00	140.00
Inventory turnover days	30.24	34.23	38.00	40.00	40.00
Total debt / equity ratio (%)	131.01	150.14	150.64	145.92	142.10
Net debt / equity ratio (%)	74.13	74.08	77.69	81.70	88.49
Returns (%)					
ROAE	17.66	15.62	14.26	13.74	13.39
ROAA	3.51	3.09	2.88	2.84	2.87
Payout ratio	24.67	24.40	25.00	25.00	25.00

# October 21, 2013 Company Report Rating: HOLD TP: HK\$ 6.18

H-Share price (HK\$) 5.80
Est. share price return 6.55%
Est. dividend yield 1.25%
Est. total return 7.80%

Previous Rating &TP (Initiation)
Previous Report Date N/A

Analyst: Steve Wong Tel: (852) 2147 8869 Email: stevecwwong@abci.com.hk

#### **Key Data**

52Wk H/L(HK\$)	7.20 / 4.16
Issued shares (mn)	13,803
H-Shares (mn)	2,024
A-Shares (mn)	11,779
Market cap	
H-shares (HK\$ mn)	11,739
A-Shares (RMB mn)	49,354
3-mth avg daily turnover (HK\$ mn)	95.9
Major shareholder(s) (%):	
CSRG	56 46

Source(s): Company, Bloomberg, ABCI Securities

#### 1H13 Revenue breakdown (%)

Locomotives	17.57
Passenger carriages	5.50
Freight wagons	11.00
MUs	13.85
Rapid transit vehicles	8.32
New Businesses	17.38
Others	26.38

Source(s): Company, ABCI Securities

### Share performance (%)

	<u>Absolute</u>	Relative*
1-mth	0.70	0.12
3-mth	17.72	8.16
6-mth	12.45	6.47

\*Relative to HSI

Source(s): Bloomberg, ABCI Securities



Source(s): Bloomberg, ABCI Securities

# **CSR (1766 HK)**

# Shadowed by lukewarm sector outlook; initiate HOLD

With CRC's heavy debt problem, we expect growth in rolling stock orders to slow in 2014-15. Competition from domestic and international players, such as CNR and Bombardier, will increase. CSR's GPM is expected to stay flat at relatively low levels in FY13E-15E compared to FY11-12. The counter is currently trading at 80.99% above book. Our TP at HK\$ 6.18 reflects 1.93x FY13E P/B and a 30% discount to the median of CSR's forward P/B in 2008-10 We initiate with a **HOLD** rating on CSR for the less-than-optimistic industry outlook and its limited upside potential.

**Slowdown in major business segments.** Although we expect revenue of CSR's railway rolling stock segment to bottom out, the growth in railway rolling stock market will remain sluggish in 2014-15 on declining profitability and high debts in CRC. We expect CSR's revenue in the railway rolling stock manufacturing segments, which contributed to 60.76% of revenue in FY12 (1H13: 47.91%), will be below 10% p.a. in FY14E-15E

**Growth in urban rail rolling stock.** Based on the existing construction pipeline of urban rail in major cities, we estimate that the total length of new urban rail line to be completed by 2015 to be 1,678.45km, and the aggregate demand for urban rail rolling stock will be 10,172 units in 2013-15. Segment revenue will grow at 26.13% CAGR in FY13E-15E.

**GPM to decline.** We expect the GPM of railway rolling stock to decrease with CRC's low profitability and competition from China North Locomotive and Rolling Stock Industry Corporation (CNR), the largest competitor of CSR in China. We estimate the Group's GPM to decrease from 17%-19% in FY10-12 to 16%-17% in FY13E-15E.

Net income growth in 2H13 to turn positive but overall momentum will remain sluggish in FY14-15. As CRC resumes rolling stock tendering, we estimate CSR's net income to turn around from a decline of 23.87% YoY in 1H13 to a growth of 22.20% YoY in 2H13. However, we expect the growth in rolling stock tenders to stay sluggish in 2014-15 with the tight liquidity in CRC. Hence, we estimate the overall net income to grow at 9.81% CAGR in FY13E-15E from 35.09% CAGR in FY08-10.

**Lukewarm market affecting profitability.** The production volume of locomotive in China is spiraling down. The total production volume in 8M13 was down 52.7% YoY. While the rolling stock market will be recovering mildly going forward, we believe it would take some time for the profit margin to recover. In general, we expect profitability to stay low in 2H13E-1H14E.

**Initiate with HOLD recommendation.** Our target valuation at 1.93x FY13E P/B is equivalent to a 30% discount to the median of forward P/B in 2008-10. The counter is trading at 1.81x FY13E P/B, 6.22% below our target valuation only. We initiate with a **HOLD** rating on CSR with TP at HK\$6.18 for its limited upside potential.

**Risk factors:** 1) Increased competition from CNR and international players; 2) Slowdown in rolling stock purchases from CRC due to its heavy debt problem

#### **Results and Valuation**

recounts and valuation	· · ·				
FY ended Dec 31	2011A	2012A	2013E	2014E	2015E
Revenue (RMB mn)	79,517	89,019	94,262	103,412	113,962
Chg (%,YoY)	23.99	11.95	5.89	9.71	10.20
Net Income (RMB mn)	3,864	4,009	4,015	4,281	4,841
Chg (%,YoY)	52.96	3.75	0.15	6.64	13.07
EPS (RMB)	0.326	0.299	0.291	0.310	0.351
P/E (x)	-	15.57	16.02	15.02	13.28
BVPS (RMB)	1.906	2.444	2.574	2.826	3.115
P/B (x)	-	1.91	1.81	1.65	1.50
DPS(RMB)	0.210	0.093	0.058	0.062	0.070
Yield (%)	-	1.99	1.25	1.33	1.51
ROAE (%)	18.48	14.49	11.76	11.49	11.81
Net gearing (%)	Net Cash	Net Cash	Net Cash	Net Cash	Net Cash

\*Net gearing=Net debt/Total equity

Source(s): Bloomberg, ABCI estimates



## Revenue growth is slowing down

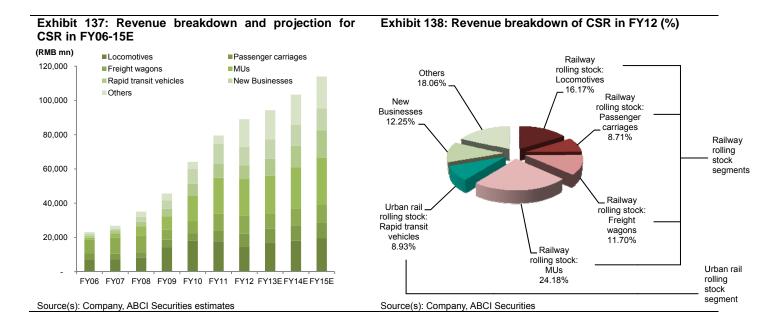
#### Slowdown in domestic railway rolling stock

After the Wenzhou train collision and the corruption scandal of the former Ministry of Railway, investment in railway transportation and purchases of the rolling stock declined. FAI in railway transportation from CRC (or former MOR) has been decelerating since 2010. Based on our estimates, total rolling stock investment in China dropped 4.41% YoY from RMB 131bn in 2010 to RMB 125bn in 2011, and further decreased to RMB 112bn in 2012, down 10.18% YoY (1H13: -0.29% YoY). Revenue of CSR, as one of the major rolling stock manufacturers in China with an estimated market share of 48.09% in 2012, suffered.

Growth in total revenue from railway rolling stock segment (including locomotives, passenger carriages, freight wagons and multiple units) decelerated from 36.54% YoY in FY10 to 24.13% YoY in FY11, and declined to -1.35% YoY in FY12 and -39.52% YoY in 1H13. Looking forward, with the railway construction investment increasing from 2012, we expect CSR's segment revenue will bottom out in 2H13-1H14, considering that rolling stock purchases usually lag behind infrastructure construction by a year. However, with CRC's weak profitability and high debts, we believe the growth in railway rolling stock market will be tepid in 2013-15 compared to 2008-10 (the last three years of the 11<sup>th</sup> Five-Year Plan). We estimate revenue of railway rolling stock segment in CSR to stay below 10% p.a. in FY13E-15E

#### Growth in urban rail rolling stock

Under the existing construction pipeline of urban rail in major cities, we estimate that the total length of new urban rail line by 2015 will be 1,678.45km. Assuming a rolling stock demand of 6.06 units/km, we estimate the aggregate demand for urban rail rolling stock will be 10,172 units in 2013-15. Thus, CSR's revenue from urban rail segment (i.e. rapid transit vehicles) will grow at 26.13% CAGR over FY13E-15E.





# Income diversification: A measure for diluting impacts of rolling stock market slowdown

#### Slowdown expectation of railway rolling stock segments

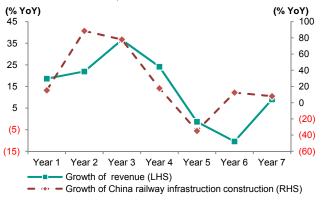
Railway rolling stocks revenue is strongly correlated with development of railway transportation in China (81.39% in FY07-12). Considering that rolling stock purchases are usually made a year after railway construction commences, we expect the revenue growth in railway rolling stock segment is limited in the coming years given that the slowdown of railway infrastructure development in FY11-13E.

Exhibit 139: Correlation of the growth of railway rolling stock segments revenue and railway infrastructure construction investment in China, FY08-14E

		Segment Revenue	Growth		Infrastructure Construction	Growth
		(RMB mn)	(% YoY)		(RMB mn)	(% YoY)
Year 1	FY08	26,532	18.62	FY07	178,999	15.28
Year 2	FY09	32,351	21.93	FY08	337,554	88.58
Year 3	FY10	44,173	36.54	FY09	600,564	77.92
Year 4	FY11	54,831	24.13	FY10	707,459	17.80
Year 5	FY12	54,092	(1.35)	FY11	461,084	(34.83)
				C	correlation(%) <sup>1</sup>	81.39
Year 6	FY13E	48,451	(10.43)	FY12	518,506	12.45
Year 7	FY14E	52,816	9.01	FY13E	560,000	8.00

1: The correlation is calculated from "growth of segment revenue from FY08 to FY12" and "growth of railway infrastructure construction investment from FY07 to FY11"

Exhibit 140: Growth of railway rolling stock segments revenue and railway infrastructure construction investment in China, FY08-14E



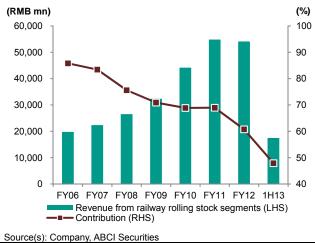
Source: Company, CRC, ABCI Securities estimates

Source(s): Company, CRC, ABCI Securities estimates

# Contribution decreasing of railway rolling stock

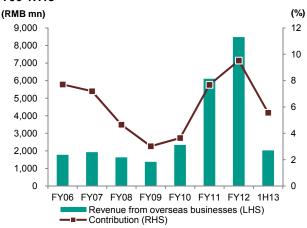
In order to offset impacts of the slowdown in railway rolling stock segments, the Group places more emphasis on its urban rail segment and new businesses (such as new energies, new materials, and new energy automobiles). With the rapid development of urban rail system in China, we expect contribution from CSR's railway rolling stock segment will further reduce in FY13E-15E. Moreover, with its active expansion overseas, contribution from overseas business will be increasing to buffer against the slowdown in domestic market.

Exhibit 141: Revenue from CSR's railway rolling stock segment and contribution as a percentage of total revenue in FY06-1H13



Source(s): Company, ABCI Securities

Exhibit 142: Revenue from CSR's overseas business and contribution as a percentage of total revenue in FY06-1H13



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## **GPM** expected to shrink

With the contribution of urban rail and new businesses, CSR's GPM improved from 14.07% in FY06 to 17.70% in FY12 (1H13: 16.77%). We expect profit margins of urban rail to stay flat at 18%-20% in FY13E-15E, while that of railway rolling stock to decrease from 15%-20% in FY11-12 to 14%-18% in FY13E-15E under the market competition. We estimate the Group's GPM to decrease from 17%-19% in FY10-12 to ~17% in FY13E-15E.

#### Stable cost ratio

The Group's SG&A, as a percentage of total revenue, has been stable during FY06-1H13, ranging between 10.44%-12.26% and was higher than that of CNR at 8.21%-11.52. We believe the Group could improve its cost structure further in the future.

Exhibit 143: Gross profit and gross profit margin of CSR in FY06-1H13

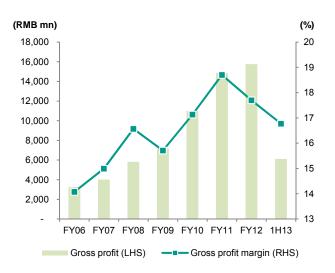
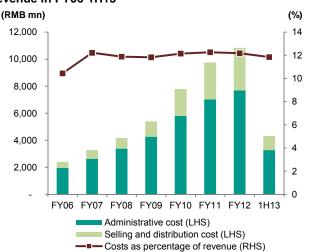


Exhibit 144: Selling and distribution cost and administrative cost of CSR and the costs as percentage to revenue in FY06-1H13



Source(s): Company, ABCI Securities

Source(s): Company, ABCI Securities

Exhibit 145: Profitability comparison of CSR and CNR, FY06-1H13

		FY06	FY07	FY08	FY09	FY10	FY11	FY12	1H13
Revenue (RMB mn)	CSR	23,047	26,804	35,093	45,621	64,132	79,517	89,019	36,441
	CNR	20,888	26,279	34,578	40,407	64,142	89,055	91,962	36,672
Gross profit margin (%)	CSR	14.07	14.99	16.57	15.71	17.13	18.70	17.70	16.77
	CNR	15.04	15.93	14.66	12.23	12.88	12.99	14.10	16.78
SG&A-to-revenue (%)	CSR	10.44	12.22	11.88	11.83	12.15	12.26	12.18	11.85
	CNR	11.52	11.02	9.76	9.51	9.15	8.21	9.13	10.00
Net income margin (%)	CSR	2.36	2.29	3.94	3.68	3.94	4.86	4.50	4.01
	CNR	0.63	2.82	3.27	3.26	3.00	3.35	3.68	4.26

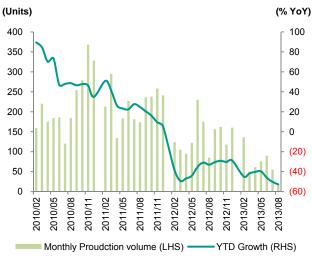
Source(s): Companies



# 1H13 results fell on sluggish market demand

In 1H13, CSR's revenue dropped 12.92% YoY (22.74% HoH) and net income fell 23.87% YoY (30.10% HoH). Domestic demand of locomotive, according to NBS, has been spiraling down. Under the weakening business environment, CSR's profitability therefore weakened in 1H13. GPM dropped 2.13ppt YoY, and net margin dropped 0.58ppt YoY. While the rolling stock market will be recovering mildly going forward, we believe it would take some time for the profit margin to recover. In general, we expect profitability to stay low in 2H13-1H14.

Exhibit 146: Production volume of locomotive and the cumulative YoY growth, 2M10-8M13



Source(s): NBS

Exhibit 147: 1H13 results summary of CSR

	1H11	2H11	1H12	2H12	1H13	Change (% YoY)	Change (% HoH)
Revenue (RMB mn)	39,563	39,954	41,850	47,169	36,441	(12.92)	(22.74)
Locomotives	•	· ·	•	8,187		(12. <del>92)</del> 3.14	. ,
	10,943	6,860	6,209		6,404		(21.78)
Passenger carriages	2,644	3,710	3,062	4,691	2,003	(34.59)	(57.30)
Freight wagons	5,033	4,659	5,809	4,610	4,007	(31.02)	(13.08)
MUs	10,012	10,969	13,789	7,735	5,046	(63.41)	(34.76)
Rapid transit vehicles	2,856	5,361	3,090	4,857	3,033	(1.84)	(37.55)
New Businesses	5,764	5,873	5,408	5,494	6,334	17.12	15.29
Others	2,311	2,521	4,483	11,595	9,614	114.45	(17.08)
Gross Profit (RMB mn) GPM (%)	7,085 17.91	7,785 19.49	7,909 18.90	7,846 <i>16.63</i>	6,112 <i>16.77</i>	(22.72) (2.13ppt)	( <mark>22.10)</mark> 0.14ppt
, ,				10100		(Extelpt 9	******
Major cost (RMB mn)							
Selling and distribution cost	1,214	1,521	1,354	1,799	1,044	(22.90)	(41.97)
Administrative cost <sup>1</sup>	2,908	4,109	3,694	3,993	3,273	(11.40)	(18.03)
Cost ratio (%)							
Selling and distribution cost	3.07	3.81	3.24	3.81	2.86	(0.37ppt)	(0.95ppt)
Administrative cost <sup>1</sup>	7.35	10.28	8.83	8.47	8.98	0.15ppt	0.52ppt
Net profit (RMB mn)	2,045	1,819	1,919	2,090	1,461	(23.87)	(30.10)
Net profit margin (%)	5.17	4.55	4.59	4.43	4.01	(0.58ppt)	(0.42ppt)

1: Including research & development expenses Source(s): Company



#### **Outlook and recommendation**

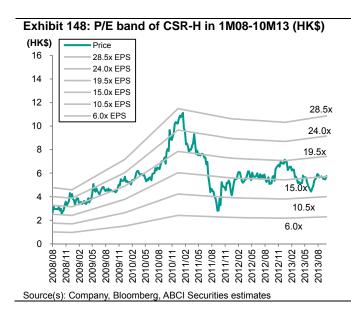
#### **Outlook of CSR**

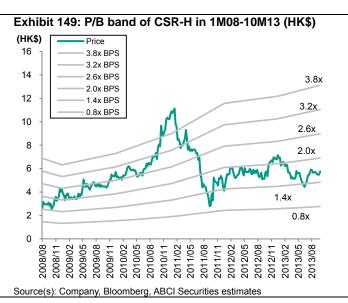
With CRC's internal restructuring coming to completion, tendering for rolling stock resumed in September 2013. Considering CRC's total railway FAI investment of RMB 660bn budgeted for 2013, we expect the total investment in rolling stock will be RMB 105.6bn for the year. We estimate that the first batch of tenders in September amounted to RMB 49.5bn, of which RMB 27.2bn, or 54.89% of the total tender, has been won by CSR. We believe the resumption of tendering signifies a recovering railway rolling stock manufacturing market, which we expect to bottom out in 2H13-1H14. Looking forward, however, growth in rolling stock tendering will be limited in 2014-15 as China's prudent monetary policy and CRC's low profitability persist.

Thanks to increased completion of urban rail by 2015, we expect delivery of urban rail rolling stock to accelerate in 2014-15. We estimate the segment revenue of CSR to grow at a CAGR of 26.13% over FY13E-15E. We estimate net income will grow at a CAGR of 9.81% over FY13E-15E, lower than that in FY08-10.

#### Initiate HOLD with TP at HK\$6.18

Our target valuation at 1.93x of FY13E P/B, equivalent to a 30% discount to the median of CSR's forward P/B in 2008-10. The discount is justified by our assumption that net income in FY13E-15E (the last three years of China's 12<sup>th</sup> Five-Year Plan) will grow at 9.81% CAGR, compared to 35.09% CAGR in FY08-10 (the last three years of China's 11<sup>th</sup> Five-Year Plan). The counter is currently trading at 1.81x of FY13E P/B, 6.22% below our target valuation. We believe the current valuation fully reflects the positive impacts of CRC's resumed tendering. Considering the lukewarm development in the railway rolling stock industry expected in 2014-15, we initiate with a **HOLD** rating on CSR with TP at HK\$6.18.







Consolidated income statement (2011A-2015E)

FY Ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Revenue	79,517	89,019	94,262	103,412	113,962
Locomotives	17,803	14,396	16,762	18,019	19,382
Passenger carriages	6,354	7,753	8,291	8,858	9,467
Freight wagons	9,692	10,419	9,084	9,728	10,420
MUs	20,981	21,524	21,806	24,398	27,313
Rapid transit vehicles	8,217	7,947	9,957	12,532	15,839
New Businesses	11,637	10,902	11,482	12,152	12,929
Others	4,832	16,078	16,882	17,726	18,612
COGS	(64,647)	(73,264)	(77,982)	(85,844)	(94,660)
Gross profit	14,870	15,755	16,280	17,569	19,303
SG&A	(9,752)	(10,840)	(11,393)	(12,412)	(13,499)
Other income and gains	324	678	679	791	920
Pre-tax profit	5,442	5,593	5,566	5,948	6,724
Income tax	(699)	(741)	(724)	(773)	(874)
Net profit	4,743	4,852	4,843	5,175	5,850
Profit attributable to:					
Minority interests	879	843	828	894	1,009
Equity shareholders of the Company	3,864	4,009	4,015	4,281	4,841
EPS (RMB)	0.326	0.299	0.291	0.310	0.351
DPS (RMB)	0.210	0.093	0.058	0.062	0.070
EBIT	6,503	6,422	6,358	6,783	7,599
EBITDA	8,062	8,205	8,275	8,796	9,704

Source(s): Company, ABCI Securities estimates

Consolidated balance sheet (2011A-2015E)

As of Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Current assets	63,607	72,261	80,256	84,625	89,748
Cash and equivalent	23,730	15,044	17,008	20,590	22,191
Trade and bill receivables	17,891	30,355	34,208	33,789	34,901
Inventories	17,842	18,770	20,542	21,322	23,285
Other current assets	4,144	8,092	8,498	8,924	9,372
Non-current assets	29,179	32,956	35,106	37,137	38,580
Property, plant and equipment	21,390	22,996	24,306	25,531	26,677
Intangible assets	5,003	5,367	5,514	5,589	5,611
Long-term investments	2,340	3,099	3,409	3,750	4,125
Other non-current assets	446	1,494	1,877	2,268	2,168
Total assets	92,786	105,217	115,362	121,762	128,328
Current liabilities	59,185	61,538	64,909	66,437	67,464
Trade and bill payables	27,946	39,663	41,524	40,792	39,604
Receipts in advance	7,409	7,272	8,223	8,776	9,957
Short term borrowings	18,099	8,596	8,554	9,600	9,908
Other current liabilities	5,732	6,007	6,608	7,268	7,995
Non-current liabilities	5,513	4,169	7,508	8,187	8,933
Long-term borrowings	2,325	727	3,722	4,022	4,352
Other non-current liabilities	3,188	3,442	3,786	4,165	4,581
Total liabilities	64,698	65,707	72,417	74,624	76,397
Minority interests	5,526	6,754	7,416	8,131	8,939
Shareholders' equities	22,562	32,756	35,529	39,007	42,992
BVPS (RMB)	1.906	2.444	2.574	2.826	3.115



Consolidated cash flow statement (2011A-2015E)

FY ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Profit before tax	5,442	5,593	5,566	5,948	6,724
Changes in depreciation and amortization	1,559	1,783	1,917	2,013	2,105
Changes in working capital	58	(4,764)	(3,551)	(1,079)	(3,981)
Financial cost	994	764	752	793	831
Income tax paid	(568)	(855)	(722)	(772)	(873)
Others	(544)	(126)	-	-	-
CF Operating	6,941	2,395	3,961	6,903	4,806
Increase in PP&E	(5,611)	(3,165)	(3,000)	(3,000)	(3,000)
Increase in intangible assets	(646)	(581)	(374)	(314)	(273)
Others	(1,286)	(499)	-	-	-
CF Investing	(7,543)	(4,245)	(3,374)	(3,314)	(3,273)
Capital injection	278	9,310	-	-	-
Net debt financing	10,408	(11,101)	2,953	1,346	637
Dividend payout	(719)	(2,782)	(1,242)	(803)	(856)
Interest paid	(931)	(970)	(752)	(793)	(831)
Others	(138)	(129)	418	241	1,117
CF Financing	8,898	(5,672)	1,377	(8)	67
Net change in cash	8,296	(7,522)	1,964	3,581	1,601
Cash at the beginning	14,541	23,730	15,044	17,008	20,590
Adjustment (Time deposit & FX effect)	894	(1,164)	-	-	-
Cash at the end	23,730	15,044	17,008	20,590	22,191

Source(s): Company, ABCI Securities estimates

Consolidated cash flow statement (2011A-2015E)

FY ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Sales mixed (%)					
Locomotives	22.39	16.17	17.78	17.42	17.01
Passenger carriages	7.99	8.71	8.80	8.57	8.31
Freight wagons	12.19	11.70	9.64	9.41	9.14
MUs	26.39	24.18	23.13	23.59	23.97
Rapid transit vehicles	10.33	8.93	10.56	12.12	13.90
New Businesses	14.63	12.25	12.18	11.75	11.34
Others	6.08	18.06	17.91	17.14	16.33
Profit & loss ratios (%)					
Gross margin	18.70	17.70	17.27	16.99	16.94
Net profit margin	4.86	4.50	4.26	4.14	4.25
Effective tax rate	12.84	13.25	13.00	13.00	13.00
Growth (%)					
Revenue	23.99	11.95	5.89	9.71	10.20
Gross profit	35.34	5.95	3.33	7.91	9.87
EBIT	62.10	(1.25)	(1.00)	6.69	12.03
EBITDA	51.55	1.77	0.85	6.30	10.32
Net profit	52.96	3.75	0.15	6.64	13.07
Balance sheet ratios					
Current ratio (x)	1.07	1.17	1.24	1.27	1.33
Quick ratio (x)	0.77	0.68	0.71	0.77	0.81
Cash ratio (x)	0.40	0.24	0.26	0.31	0.33
Trade and bill receivables days	70.67	98.91	125.00	120.00	110.00
Trade and bill payables turnover days	149.38	168.41	190.00	175.00	155.00
Inventory turnover days	100.60	91.20	92.00	89.00	86.00
Total debt / equity ratio (%)	72.72	23.60	28.59	28.90	27.46
Net debt / equity ratio (%)	Net Cash	Net Cash	Net Cash	Net Cash	Net Cash
Returns (%)					
ROAE	18.48	14.49	11.76	11.49	11.81
ROAA	4.64	4.05	3.64	3.61	3.87
Payout ratio	64.30	30.98	20.00	20.00	20.00

# October 21, 2013 Company Report Rating: HOLD TP: HK\$ 27.72

 H-Share price (HK\$)
 27.40

 Est. share price return
 1.17%

 Est. dividend yield
 1.42%

 Est. total return
 2.59%

Previous Rating &TP (Initiation)
Previous Report Date N/A

Analyst: Steve Wong Tel: (852) 2147 8869 Email: stevecwwong@abci.com.hk

#### **Key Data**

52Wk H/L(HK\$)	30.25 / 15.34
Issued shares (mn)	1,084
H-Shares (mn)	456
Domestic Share (mn)	628
Market cap	
H-shares (HK\$ mn)	12,494
Domestic Shares (HK\$ mn)	17,207
3-mth avg daily turnover (HK\$ mn)	65.3
Major shareholder(s) (%):	
CSR (1766 HK)	56.17

Source(s): Company, Bloomberg, ABCI Securities

# 1H13 Revenue breakdown (%)

Electrical systems (Locomotives)	31.12
Electrical systems (EMUs)	12.02
Electrical systems (Metro)	16.17
Electrical systems (Others)	25.82
Electric components and others	14.87
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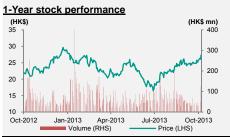
Source(s): Company, ABCI Securities

#### Share performance (%)

	<u>Absolute</u>	Relative*
1-mth	9.84	9.20
3-mth	40.46	29.05
6-mth	25.23	18.56

\*Relative to HSI

Source(s): Bloomberg, ABCI Securities



Source(s): Bloomberg, ABCI Securities

# **CSR Times Electric (3898 HK)**

# Increased competition slash margins; initiate HOLD

Although railway investment will recover from trough in 2013, rolling stock investment in 2014-15 is expected to remain sluggish due to tightened liquidity in CRC. Furthermore, with the increasing number of industry newcomers, profitability of CSR Times Electric is weakening. Our target valuation at 2.95x of FY13E P/B, equivalent to a 53% premium over CSR's target valuation at 1.93x FY13E P/B. Considering its thinning profit margin, we initiate with a **HOLD** rating on the counter with TP at HK\$ 27.72.

**Slowdown in major business segments.** Although we expect the rolling stock industry to bottom out with the recovery of railway construction, the growth in railway rolling stock market will remain sluggish in 2014-15 on declining profitability and high debts in CRC. We estimate that the railway rolling stock segments' revenue to grow at 7.48% CAGR in FY13E-15E.

Competition is expected to stay keen in the future. GPM is weakening under the increasing number of newcomers in the rolling stock electrical system market including China Automation Group (CAG, 569 HK) as well as the lukewarm industry sentiment. Considering the slowdown in rolling stock purchases from CRC, we believe profitability of CSR Times Electric will not improve significantly in FY13E-15E compared to that in FY11-12.

**Profitability is weakening.** Net margin dropped from 23.63% in FY06 to 17.07% in FY12 (1Q-3Q13: 17.68%). Weakening contribution from CSR means that CSR Times Electric will be increasingly subject to market competition in the future. We expect its profitability will continue to be under pressure going forward. Furthermore, although revenue was up 10.11% YoY in the 9M13, the trade and bill receivables increased 57.94% YoY to RMB 5,599mn at end-September 2013. It reflects the CSR Times Electric to loosen the credit sales toward its customers. The measure of trading off earning quality to quantity is not sustainable.

**Stock placing for expand working capital.** On Oct 21, the Group announced that it would issue 91.2mn new H-shares. The placing is expected to be completed by end-2013. A total of HK\$ 2,263mn will be raised for the procurement of raw materials and machinery equipment. The Group's decision to utilize equity financing instead of borrowings may reflect its tight liquidity resulted from its high receivables level – a situation which we believe will not improve in the short term.

**Initiate with HOLD recommendation.** The average forward P/B premium of CSR Times Electric over CSR (1766 HK) since 2011 was 53%. Our target valuation at 2.95x of FY13E P/B is equivalent to a 53% premium over CSR's target valuation at 1.93x FY13E P/E. The counter is currently trading at 2.92x of FY13E P/B (fully diluted), 1.02% below our target P/B only. Considering the shrinking profitability and the increased exposure to market competition, we initiate with a **HOLD rating on** CSR Times Electric with TP at HK\$27.72.

**Risk factors:** 1) Increased competition from domestic newcomers; 2) Shrinking GPM due to stiffening business environment; 3) Liquidity tightening under prudent monetary policy

#### **Results and Valuation**

recounts and valuation	<b>,</b> , ,				
FY ended Dec 31	2011A	2012A	2013E	2014E	2015E
Revenue (RMB mn)	7,079	7,153	7,693	8,745	10,048
Chg (%,YoY)	20.45	1.05	7.55	13.68	14.90
Net Income (RMB mn)	1,184	1,221	1,225	1,432	1,623
Chg (%,YoY)	39.26	3.09	0.29	16.92	13.35
EPS (RMB)	1.092	1.126	1.042	1.218	1.381
P/E (x)	-	19.54	21.13	18.07	15.94
BVPS (RMB)	4.904	5.698	7.539	8.444	9.460
P/B (x)	-	3.86	2.92	2.61	2.33
DPS(RMB)	0.340	0.350	0.313	0.365	0.414
Yield (%)	-	1.59	1.42	1.66	1.88
ROAE (%)	24.20	21.24	16.28	15.24	15.42
Net gearing (%)	Net Cash	Net Cash	Net Cash	Net Cash	Net Cash

\*Net gearing=Net debt/Total equity

Source(s): Bloomberg, ABCI estimates



# Quick expansion of urban rail

Business of electrical system for urban rail (reported as train-borne electrical systems (Metro) segment) grew strongly under China's rapid urban railway development. The segment revenue grew 63.26% CAGR from RMB 49mn in FY06 to RMB 928mn in FY12 (1H13: RMB 421mn). With the high base in FY12, we believe growth would slow slightly but remain healthy in the future. We estimate the segment to grow at 39.19% CAGR over FY13E-15E. Contribution of the segment, as a percentage of total revenue, increased from 3.90% in FY06 to 12.97% in FY12 (1H13: 16.17%). Its contribution is expected to further increase, outpacing the overall revenue growth in CSR Times Electric over FY13E-15E. Growth in urban rail-related business is expected to be partially offset by the slowdown in railway rolling stock segment (train-borne electrical system for locomotive and EMUs).

Exhibit 150: Segment revenue and contribution as percentage of total revenue of urban rail segment in FY06-1H13

	FY06	FY07	FY08	FY09	FY10	FY11	FY12	1H13
Segment revenue (RMB mn)	49	66	130	155	312	495	928	421
Contribution (%)	3.90	4.31	6.12	4.67	5.31	6.99	12.97	16.17

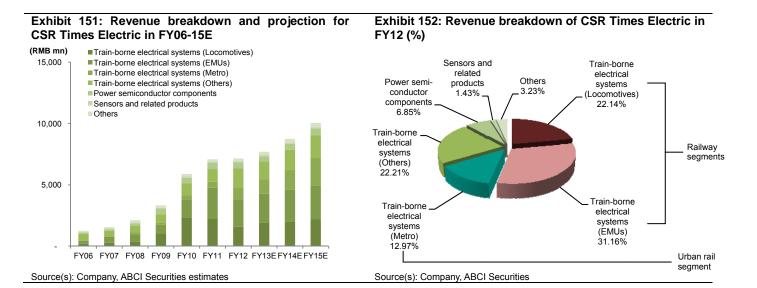
Source(s): Company

# Sluggish railway segments

As railway investment has been recovering in 2013, we expect the railway business segments, which mainly comprises train-borne electrical system for locomotive and EMUs, to bottom out. We estimate the total revenue of the railway business segment to recover from -22.87% YoY in 1H13 to 33.57% YoY in 2H13. Looking forward, With CRC's financial problems, we believe rolling stock purchases in 2014-15 would not increase significantly. We estimate that the segment revenue to grow only at 7.48% CAGR over FY13E-15E, offsetting much of the growth in urban rail segment.

### Overall revenue growth to slow

As railway segment slows, we believe the Group's overall revenue growth to decelerate in FY13E-15E, comparing with that in FY08-10. We estimate the overall revenue of the Group to grow at 14.29% CAGR over FY13E-15E vs. that in FY08-10 at 66.52% CAGR





#### Positive correlation with CSR

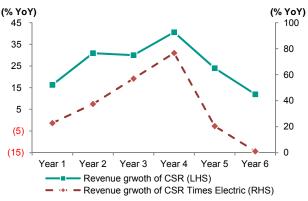
CSR Times Electric, as one of the suppliers of its parent company, CSR Corporation Limited (CSR, 1766 HK), we see its revenue growth is highly correlated with that of CSR. The correlation between the revenue growth of revenue of CSR and CSR Times Electric was 93.33% in FY06-12. With contribution from CSR Group reducing with time (see more details in the following part), the correlation is expected to weaken in the future.

Exhibit 153: Correlation of revenue growth in CSR and CSR Times Electric in FY07-12

		CSR	Growth		CSR Times	Growth
		Revenue		Elect	ric Revenue	
		(RMB mn)	(% YoY)		(RMB mn)	(% YoY)
Year 1	FY07	26,804	16.30	FY07	1,542	22.76
Year 2	FY08	35,093	30.93	FY08	2,119	37.46
Year 3	FY09	45,621	30.00	FY09	3,327	56.96
Year 4	FY10	64,132	40.58	FY10	5,877	76.67
Year 5	FY11	79,517	23.99	FY11	7,079	20.45
Year 6	FY12	89,019	11.95	FY12	7,153	1.05
				Co	rrelation(%)1	93.33

<sup>1:</sup> The correlation is calculated from "growth of revenue of CSR from FY07-12" and "growth of revenue of CSR Times Electric from FY07-12"

Exhibit 154: Revenue growth in revenue of CSR and CSR Time Electric in FY07-12



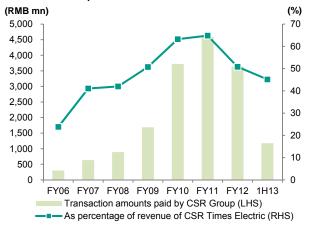
Source: Companies, ABCI Securities

Source(s): Companies, ABCI Securities

# **Diminishing contribution from CSR Group**

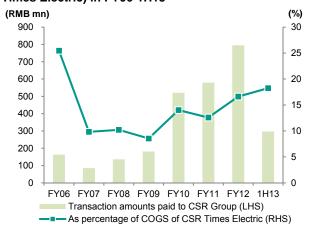
CSR Times Electric is mainly engaged in the manufacturing and sales of locomotive train power converters, control systems and other train-borne electrical systems of urban rail and railway rolling stocks. It is one of the component suppliers of the CSR Group (including CSR). CSR Times Electric has been supplying certain parts/components and services to the CSR Group for years. However, the amount of orders from CSR Group has been declining since FY11, showing that its reliance on CSR Times Electric as a supplier is lessening.

Exhibit 155: Payment by CSR Group (excluding CSR Times Electric) to CSR Times Electric in FY06-1H13



Source(s): Company, ABCI Securities

Exhibit 156: Payment to CSR Group (excluding CSR Times Electric) in FY06-1H13



Source(s): Company, ABCI Securities



## Cost ratio is improving

SG&A as percentage of revenue in CSR Times Electric has been improving from 27.35% in FY06 to 16.64% in FY12 (1H13: 19.09%). Selling and distribution cost ratio improved from 9.45% in FY06 to 4.63% in FY12 (1H13: 5.03%). General administrative cost ratio improved from 17.90% in FY06 to 12.01% in FY12 (1H13: 14.06%). Under zealous cost control, we expect the cost ratio of CSR Times Electric to stay flat in the range of 15%-17% in FY13E-15E.

## **Profitability is thinning**

Although the SG&A cost ratio is improving, profitability of CSR Times Electric is weakening. Gross profit margin (GPM) reduced from 49.01% in FY06 to 33.16% in FY12 (1H13: 37.46%), while net margin dropped from 23.63% in FY06 to 17.07% in FY12 (1H13: 15.37. Shrinking contribution from CSR will subject the Group more to market competition in the future, which may be detrimental to its profitability.

Exhibit 157: Gross profit and gross profit margin of CSR Times Electric in FY06-1H13

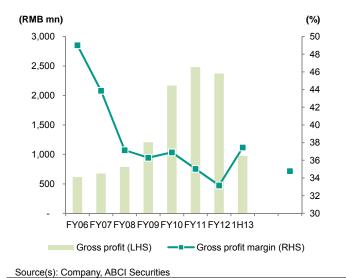
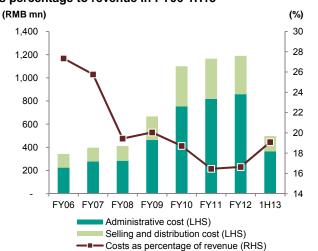


Exhibit 158: Selling and distribution cost and administrative cost of CSR Times Electric and the costs as percentage to revenue in FY06-1H13



Source(s): Company, ABCI Securities

Exhibit 159: Profitability comparison of CSR Times Electric and CSR in FY06-1H13

		FY06	FY07	FY08	FY09	FY10	FY11	FY12	1H13
Revenue (RMB mn)	CSR Times Electric	1,256	1,542	2,119	3,327	5,877	7,079	7,153	2,603
	CSR	23,047	26,804	35,093	45,621	64,132	79,517	89,019	36,441
Gross profit margin (%)	CSR Times Electric	49.01	43.87	37.14	36.29	36.90	35.04	33.16	37.46
	CSR	14.07	14.99	16.57	15.71	17.13	18.70	17.70	16.77
SG&A-to-revenue (%)	CSR Times Electric	27.35	25.77	19.44	20.05	18.72	16.46	16.64	19.09
. ,	CSR	10.44	12.22	11.88	11.83	12.15	12.26	12.18	11.85
Net income margin (%)	CSR Times Electric	23.63	22.53	19.93	15.96	14.47	16.73	17.07	15.37
	CSR	2.36	2.29	3.94	3.68	3.94	4.86	4.50	4.01

Source(s): Companies



## Receivable rocket

Although revenue and net income were up 10.11% YoY and 34.98% YoY in 1-3Q13, respectively, the trade and bill receivables increased 57.94% YoY from RMB 3,545mn at end Sept 2012 to RMB 5,599mn at end Sept 2013 (End 2012: RMB 3,627mn). It reflects the CSR Times Electric to loosen the credit sales toward its customers. The measure of trading off earning quality to quantity is not unsustainable. We believe it believe it will limit the earnings growth of CSR Times Electric in FY14E-15E.

Exhibit 160: Key financial summary of CSR Times Electric in 1-3Q13

	1-3Q12	FY12	1-3Q13	(% YoY)
Revenue (RMB mn)	4,362	7,153	4,803	10.11
Gross Profit (RMB mn)	1,417	2,372	1,795	26.68
GPM (%)	32.49	33.16	37.37	4.89ppt
Net profit (RMB mn)	629	1,221	849	34.98
Net profit margin (%)	14.42	17.07	17.68	3.26ppt
Trade and bill receivables (RMB mn)	3,545	3,627	5,599	57.94
Trade and bill receivables / revenue (%)	81.27	50.71	116.57	35.30ppt

Source(s): Company

Exhibit 161: 1H13 results summary of CSR Times Electric

	1H11	2H11	1H12	2H12	1H13	Change	Change
						(% YoY)	(% HoH)
Revenue (RMB mn)	4,233	2,846	3,174	3,979	2,603	(17.99)	(34.58)
Train-borne electrical systems (Locomotives)	1,480	734	352	1,232	810	130.11	(34.25)
Train-borne electrical systems (EMUs)	1,628	910	1,104	1,125	313	(71.65)	(72.18)
Train-borne electrical systems (Metro)	246	249	482	446	421	(12.66)	(5.61)
Train-borne electrical systems (Others)	454	583	759	830	672	(11.46)	(19.04)
Electric components and others	425	370	477	346	387	(18.87)	11.85
Gross Profit (RMB mn)	1,620	860	1,104	1,268	975	(11.68)	(23.11)
GPM (%)	38.27	30.23	34.78	31.87	37.46	2.67ppt	5.59ppt
Major cost (RMB mn)							
Selling and distribution cost	199	148	143	188	131	(8.39)	(30.32)
Administrative cost <sup>1</sup>	381	437	434	425	366	(15.67)	(13.88)
Cost ratio (%)							
Selling and distribution cost	4.70	5.22	4.51	4.72	5.03	0.53ppt	0.31ppt
Administrative cost <sup>1</sup>	9.00	15.35	13.67	10.68	14.06	0.39ppt	3.38ppt
Net profit (RMB mn)	938	246	546	675	400	(26.74)	(40.74)
Net profit margin (%)	22.16	8.66	17.20	16.96	15.37	(1.84ppt)	(1.60ppt)

<sup>1:</sup> Including research and development expenses Source(s): Company



#### **Outlook and recommendation**

#### Subdued outlook for CSR Times Electric

Although we expect the Group's revenue to grow in 2H13 on new orders from CRC, we expect growth in the rolling stock market to remain weak in 2014-15 due to CRC's weak financials.

Although effective cost control is lowering the SG&A cost ratio, GPM is weakening with more newcomers, including China Automation Group, entering the rolling stock electrical system market. Considering the slowdown in rolling stock purchases from CRC, we believe profitability of CSR Times Electric will not improve significantly in FY13E-15E compared to FY11-12.

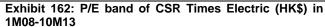
#### Stock placing to expand working capital

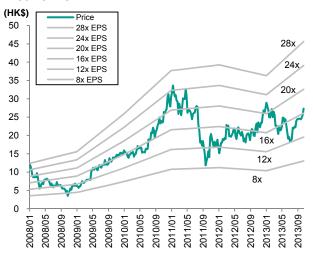
On Oct 21, the Group announced that it would issue 91.2mn new H-shares. The placing is expected to be completed by end-2013. A total of HK\$ 2,263mn will be raised for the procurement of raw materials and machinery equipment. The Group's decision to utilize equity financing instead of borrowings may reflect its tight liquidity resulted from its high receivables level — a situation which we believe will not improve in the short term.

#### Initiate HOLD with TP at HK\$27.72

The average forward P/B premium of CSR Times Electric over CSR (1766 HK) since 2011 was 53%. We believe the premium has been driven by higher margin of the train-borne electrical system business in CSR Times Electric. Our target valuation at 2.95x of FY13E P/B reflects a 53% premium over our target valuation for CSR at 1.93x FY13E P/B.

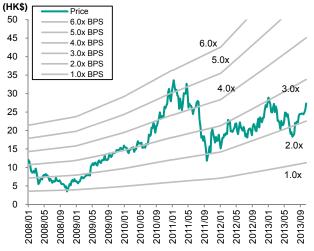
Although the stock is trading at premium, the profitability is trending downwards The counter is currently trading at 2.92x of FY13E P/B (fully diluted), only 1.02% below our target P/B. Based on its the lukewarm industry outlook and stiffening market competition, we initiate with a **HOLD** rating on CSR with TP at HK\$27.72.





Source(s): Company, Bloomberg, ABCI Securities estimates

Exhibit 163: P/B band of CSR Times Electric (HK\$) in 1M08-10M13



Source(s): Company, Bloomberg, ABCI Securities estimates



Consolidated income statement (2011A-2015E)

FY Ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Revenue <sup>1</sup>	7,079	7,153	7,693	8,745	10,048
Train-borne electrical systems (Locomotives)	2,214	1,584	1,896	2,032	2,178
Train-borne electrical systems (EMUs)	2,538	2,229	2,375	2,558	2,756
Train-borne electrical systems (Metro)	495	928	1,163	1,614	2,253
Train-borne electrical systems (Others)	1,037	1,589	1,461	1,651	1,866
Electric components and others	795	823	798	891	996
COGS	(4,599)	(4,781)	(5,111)	(5,817)	(6,718)
Gross profit	2,480	2,372	2,582	2,929	3,330
SG&A	(1,165)	(1,190)	(1,287)	(1,402)	(1,593)
Other income and gains	66	219	238	265	293
Pre-tax profit	1,381	1,401	1,533	1,792	2,031
Income tax	(194)	(178)	(307)	(358)	(406)
Net profit	1,187	1,223	1,226	1,433	1,624
Profit attributable to:					
Minority interests	3	2	1	1	1
Equity shareholders of the Company	1,184	1,221	1,225	1,432	1,623
EPS (RMB)	1.092	1.126	1.042	1.218	1.381
DPS (RMB)	0.340	0.350	0.313	0.365	0.414
EBIT	1,414	1,417	1,540	1,797	2,035
EBITDA	1,618	1,574	1,759	2,025	2,271

<sup>1:</sup> Revenue is excluding business tax and surcharges Source(s): Company, ABCI Securities estimates

Consolidated balance sheet (2011A-2015E)

As of Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Current assets	6,538	7,203	10,704	10,790	11,939
Cash and equivalent	2,158	2,319	3,490	3,222	3,889
Trade and bill receivables	2,171	3,628	4,803	5,021	5,440
Inventories	1,669	1,110	2,251	2,371	2,415
Other current assets	541	146	161	177	194
Non-current assets	2,116	2,447	2,618	3,252	4,390
Property, plant and equipment	1,503	1,701	1,801	1,873	1,938
Intangible assets	259	266	274	285	297
Long-term investments	203	255	281	309	339
Other non-current assets	151	225	262	785	1,815
Total assets	8,654	9,650	13,321	14,041	16,328
Current liabilities	2,920	3,032	3,964	3,603	4,672
Trade and bill payables	1,355	1,988	2,773	2,326	3,195
Receipts in advance	351	292	404	411	525
Short term borrowings	639	41	5	5	5
Other current liabilities	574	711	782	860	946
Non-current liabilities	297	305	360	375	399
Long-term borrowings	50	28	55	40	30
Other non-current liabilities	247	277	305	335	369
Total liabilities	3,216	3,337	4,323	3,978	5,070
Minority interests	121	135	136	137	138
Shareholders' equities	5,317	6,178	8,862	9,926	11,120
BVPS (RMB)	4.904	5.698	7.539	8.444	9.460



Consolidated cash flow statement (2011A-2015E)

FY ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Profit before tax	1,381	1,401	1,533	1,792	2,031
Changes in depreciation and amortization	204	157	219	228	236
Changes in working capital	(368)	(341)	(1,495)	(803)	431
Financial cost	35	16	7	6	4
Income tax paid	(110)	(106)	(279)	(328)	(373)
Others	100	120	-	-	-
CF Operating	1,242	1,247	(15)	895	2,329
Increase in PP&E	(312)	(337)	(300)	(280)	(280)
Increase in intangible assets	(56)	(25)	(27)	(30)	(33)
Others	(250)	378	-	-	-
CF Investing	(618)	16	(327)	(310)	(313)
Capital injection	24	10	1,818	-	_
Net debt financing	187	(620)	(9)	(15)	(10)
Dividend payout	(331)	(369)	(380)	(367)	(430)
Interest paid	(35)	(16)	(7)	(6)	(4)
Others	16	(24)	91	(464)	(905)
CF Financing	(139)	(1,019)	1,513	(853)	(1,349)
Net change in cash	484	244	1,171	(268)	668
Cash at the beginning	1,681	2,158	2,319	3,490	3,222
Adjustment (Time deposit & FX effect)	(8)	(83)	-	-	-
Cash at the end	2,158	2,319	3,490	3,222	3,889

Source(s): Company, ABCI Securities estimates

Consolidated cash flow statement (2011A-2015E)

FY ended Dec 31 (RMB mn)	2011A	2012A	2013E	2014E	2015E
Sales mixed (%)					
Train-borne electrical systems (Locomotives)	31.28	22.14	24.65	23.23	21.67
Train-borne electrical systems (EMUs)	35.85	31.16	30.87	29.25	27.43
Train-borne electrical systems (Metro)	6.99	12.97	15.11	18.45	22.42
Train-borne electrical systems (Others)	14.65	22.21	18.99	18.88	18.57
Electric components and others	11.23	11.51	10.38	10.19	9.91
Profit & loss ratios (%)					
Gross margin	35.04	33.16	33.56	33.49	33.14
Net profit margin	16.73	17.07	15.92	16.37	16.15
Effective tax rate	14.04	12.71	20.00	20.00	20.00
Growth (%)					
Revenue	20.45	1.05	7.55	13.68	14.90
Gross profit	14.37	(4.37)	8.84	13.45	13.71
EBIT	41.55	0.24	8.68	16.71	13.22
EBITDA	24.94	(2.69)	11.77	15.12	12.13
Net profit	39.26	3.09	0.29	16.92	13.35
Balance sheet ratios					
Current ratio (x)	2.24	2.38	2.70	2.99	2.56
Quick ratio (x)	1.67	2.01	2.13	2.34	2.04
Cash ratio (x)	0.74	0.76	0.88	0.89	0.83
Trade and bill receivables days	99.60	147.95	200.00	205.00	190.00
Trade and bill payables turnover days	101.75	127.61	170.00	160.00	150.00
Inventory turnover days	129.34	106.06	120.00	145.00	130.00
Total debt / equity ratio (%)	12.67	1.09	0.67	0.45	0.31
Net debt / equity ratio (%)	Net Cash	Net Cash	Net Cash	Net Cash	Net Cash
Returns (%)					
ROAE	24.20	21.24	16.28	15.24	15.42
ROAA	15.05	13.34	10.66	10.47	10.69
Payout ratio	31.12	31.08	30.00	30.00	30.00



# **Disclosures**

#### **Analyst Certification**

I, Steve Wong, being the person primarily responsible for the content of this research report, in whole or in part, hereby certify that all of the views expressed in this report accurately reflect my personal view about the subject company or companies and its or their securities. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report. I and/or my associates have no financial interests in relation to the listed company (ies) covered in this report, and I and/or my associates do not serve as officer(s) of the listed company (ies) covered in this report.

#### **Disclosures of Interests**

ABCI Securities Company Limited and/or its affiliates, within the past 12 months, have investment banking relationship with one or more of the companies mentioned in the report.

### **Definition of equity rating**

Rating	Definition
Buy	Stock return ≥ Market return rate
Hold	Market return – 6% ≤ Stock return < Market return rate
Sell	Stock return < Market return – 6%

Stock return is defined as the expected % change of share price plus gross dividend yield over the next 12 months

Market return: 5-year average market return rate from 2007-2011

Time horizon of share price target: 12-month

#### Definition of share price risk

Rating	Definition
Very high	2.6 ≤180 day volatility/180 day benchmark index volatility
High	1.5 ≤ 180 day volatility/180 day benchmark index volatility < 2.6
Medium	1.0 ≤180 day volatility/180 day benchmark index volatility < 1.5
Low	180 day volatility/180 day benchmark index volatility < 1.0

We measure share price risk by its volatility relative to volatility of benchmark index. Benchmark index: Hang Seng Index.

Volatility is calculated from the standard deviation of day to day logarithmic historic price change. The 180-day price volatility equals the annualized standard deviation of the relative price change for the 180 most recent trading days closing price.

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