2 April 2012 | 19 pages

Global Engineering Sector in China

Step-Up in 'Go Global' – Revised Winners & Losers

Industry Overview

- **Going Global —** Following our detailed report last week, *Engineering Sector in China - Step-Up in 'Go Global' – Revised Winners & Losers*, this report expands the conclusions across Citi's Global Engineering Coverage.
- **New Targets to Go Global** — The new industrial plan (2011-2015) has a greater focus on improving China's international competitiveness in the Machinery sector. Specific targets include M&A (both domestic consolidation and foreign); R&D for the Machinery industry (the target has been raised to 3% from 2.5% vs. China's overall R&D target of 2%), and development of advanced equipment manufacturing industries.
- **Our Own Channel Checks Support Acceleration of 'Go Global'** — We see a recent increase in (1) M&A in China (especially domestic consolidation to gain scale); (2) Chinese engineering companies targeting to 'Go Global'; (3) orders outside of China won by Chinese engineering companies; (4) lending to aid overseas expansion; and (5) overseas production expansion. End markets where we see increasing risk of Chinese competition are construction equipment, bearings and mining (surface). This is in addition to already existing risk in power-related and rail end-markets.
- **M&A is in Focus** — The new industrial plan targets consolidation of 11 domestic industries and encourages acquisitions of foreign industrial companies. We see a step-up in M&A by Chinese companies (both in China and abroad) in construction, power T&D, mining equipment and bearings. Possible acquisition targets in our sector are more likely to be mid-cap names, with a possible bias towards German and UK companies.
- **End Markets – Be Selective** — Recent demand news flow from China has been more on the negative side. A notable deterioration is seen in Fixed Asset Investment-related industries (construction, rail, wind), as well as in the paper industry. On the positive side, supportive news flow is evident in agriculture equipment, food & beverage, nuclear and trucks in China.
- **Structural Growth** — As China undergoes a structural shift in its economy towards a more consumption-driven model, we see 3 areas of increased structural growth in food & beverage, healthcare, and automation (see our July report, *Engineering Sector in China - Considering the Risks of Chinese Industrial Weakening*, for more detail).
- **Revised Winners and Losers** — Considering both potential growth drivers and Chinese competition in the medium term, stocks we see as continuing net beneficiaries of the China theme include: in Europe, GEA, IMI and Siemens; in the US, Danaher, 3M, Honeywell, Emerson (Process), Caterpillar, Cummins, Eaton and Parker Hannifin; in Japan, Fanuc, SMC and Nabtesco; in China, Sany Int'l & China Resources Power. Stocks that have the least to gain, & perhaps more to lose, include: in Europe: Alstom, Metso, FLSmidth, SKF, RHI and Weir; in the US SPW, Emerson (Network Power), GWW; in Japan Hitachi CM, Komatsu and NSK; in China, Hong Kong & China Gas.

Natalia Mamaeva
+44-20-7986-4077
natalia.mamaeva@citi.com

Mark Fielding
+44-20-7986-4018
mark.fielding@citi.com

Martti R Palosuo, CFA
+44-020-7986-4244
martti.rafael.palosuo@citi.com

Bilal Aziz

Japan Capital Goods

Graeme McDonald
+81-3-6270-4732
graeme.mcdonald@citi.com

US Multi-Industry/Electrical Equipment

Deane M. Dray, CFA
+1-212-816-4030
deane.dray@citi.com

Matthew W. McConnell, CFA

Jessica Mullin

US Machinery & Diversified Equipment

Timothy Thein, CFA
+1-212-816-6706
timothy.thein@citi.com

China Utilities and Infrastructure

Pierre Lau, CFA
+852-2501-2716
pierre.lau@citi.com

Jenny N Zhen
+852-2501-2490
jenny.ni.zhen@citi.com

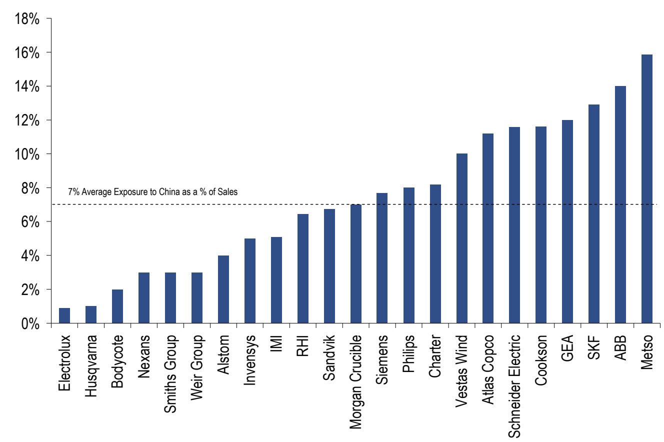
See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

Our Sector Exposure to China

Europe

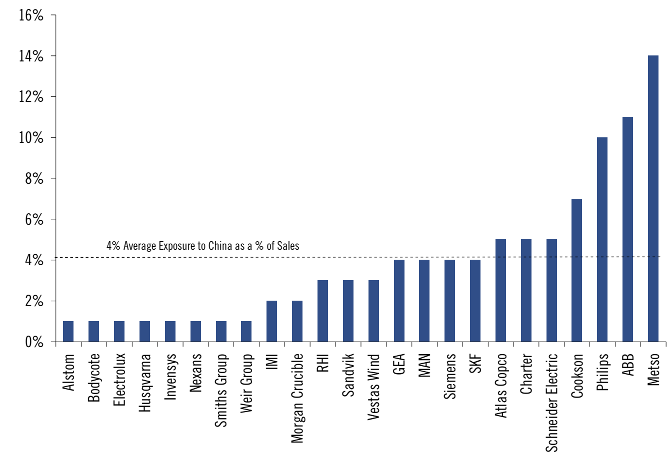
China and the wider Emerging Markets have been a key driver of organic growth for the sector over the last decade. Emerging Markets today represent on average 30% of sales within our coverage group, with China the largest at 7% on average. Over the 2003-08 upcycle, the average organic growth rate for our coverage group was c8% per annum. Growth in China was on average close to twice the level of the group growth. Today China represents on average 7% of sales for our group vs. 4% in 2004 (Figure 1).

Figure 1. European Engineering – China as a % of Sales (2010)



Source: Company reports and Citi Investment Research and Analysis

Figure 2. European Engineering – China as a % of Sales (2004)



Source: Company reports and Citi Investment Research and Analysis

North America

Multi-Industry & Electrical Equipment

Emerging markets represent nearly 17% of revenue in the Multi-Industry & Electrical Equipment sector in North America, with China alone contributing 5% of sales, on average. China has been a large part of this growth story with companies such as General Electric and Danaher making investments "in China for China". US Multi-Industry companies have seen some end market slowdowns starting in the end of 2011 and this appears to have continued into early 2012. 3M has 9% exposure to China – among the most in the North America Multi-Industry & Electrical Equipment sector – and reported a slowdown to 5% growth in China in 4Q11 vs the 15% average from 1Q-3Q. Similar datapoints were reported by the other China-exposed companies including Emerson, Danaher, and United Technologies. Despite this near-term slowdown, companies remain almost uniformly optimistic about the long-term prospects for China growth and are incorporating expectations for a 2H12 demand acceleration into 2012 guidance. Key areas of growth in China cited by NA Multi-Industry & Electrical Equipment companies include Nuclear, non-resi construction, and eventually shale gas. Intense China competition from domestic Chinese competitors has been a growing headwind for North America Multi-Industry companies, particularly Emerson in its embedded power business (part of Network Power segment) and SPX for thermal cooling projects.

- **SPX** entered into a joint venture with Shanghai Electric for thermal cooling systems in Jan-12 and, in our view, appears likely to entirely exit this business at some point within the next few years.

- **Emerson** is evaluating its strategy in its embedded power business that is facing increased China competition, and could reach a "fix or sell" decision on business by the end of 2012. Somewhat offsetting to its Network Power woes, Emerson's Process Management business stands to benefit from increasing demand for energy and a strong installed base and local presence. It could also look to acquire medium-sized and established local players in this market.

- **United Technologies** has benefitted from the surge in non-residential construction in China due to its leading position in the elevator market; China now represents 60% of the global elevator market and has roughly doubled from 2007-2011. We see a slowdown to the China non-residential construction boom as one of the key risks to United Technologies, which is incorporating a re-acceleration in construction activity in 2H12 into its operating framework. The recurring service business is smaller than average in China, leaving United Technologies more exposed to new construction rates.

Machinery & Diversified Equipment

China continues to represent a significant source of growth – and investment – for the North American multinational Machinery and Diversified Equipment manufacturers, many of which have garnered increasing percentages of sales (and profits) from Emerging Markets. This is seen in both absolute terms (i.e. direct sales in China), but importantly also indirectly given China’s growing role in global commodities markets, therefore impacting reinvestment on a worldwide basis. On a percentage of sales basis, Cummins has the greatest direct exposure in China, with 14% of total (consolidated plus unconsolidated) sales coming from China in 2011. On an absolute basis, Caterpillar has the largest wholly-owned position in the country (nearly $3.5 billion in 2011), and should see significant growth now that its acquisition of Bucyrus and its sizable Chinese mining equipment business is complete, and as it expands its overall footprint.

CAT has also announced significant investment plans in China as it works towards its goal of “Winning in China” (one of its “Big 8” Imperatives outlined for the 2011-2015 period); the company expects to grow its total Asian machine population to 180 thousand units by 2015 – matching its entire global footprint at the end of 2010. Eaton exceeded $1 billion of sales in China in 2011, and through acquisition and investment has accumulated a significant employee base in the country (roughly 15% of company total). Leveraging the anticipated growth in the underlying market, plus market share gains as it grows its distribution base, Parker Hannifin has outlined a goal of expanding its Asia segment (~40% direct sales in China) revenues at a 22% CAGR through fiscal 2014 to $3 billion. Deere has identified China has one of its six key geographies it will look to grow as it moves towards its goal of reaching $50 billion in sales by 2018, and has announced several recent investments to expand in Ag and Construction / Forestry Equipment, as well as engines.

Japan

In FY3/12, we expect that Asia will make up approx 25% of total revenues of companies under our core coverage and we estimate that China will account for 2/3 of this regional total. Even allowing for the weakness in the market since April-May of 2011, with YoY declines in unit demand in the region of -40% in Q1 CY2012, China will still make up close to 1/2 of total global demand for hydraulic excavators . Hitachi CM and Komatsu are both highly dependent on this market, though the degree of dependence has declined over the past year as bubble-like conditions in

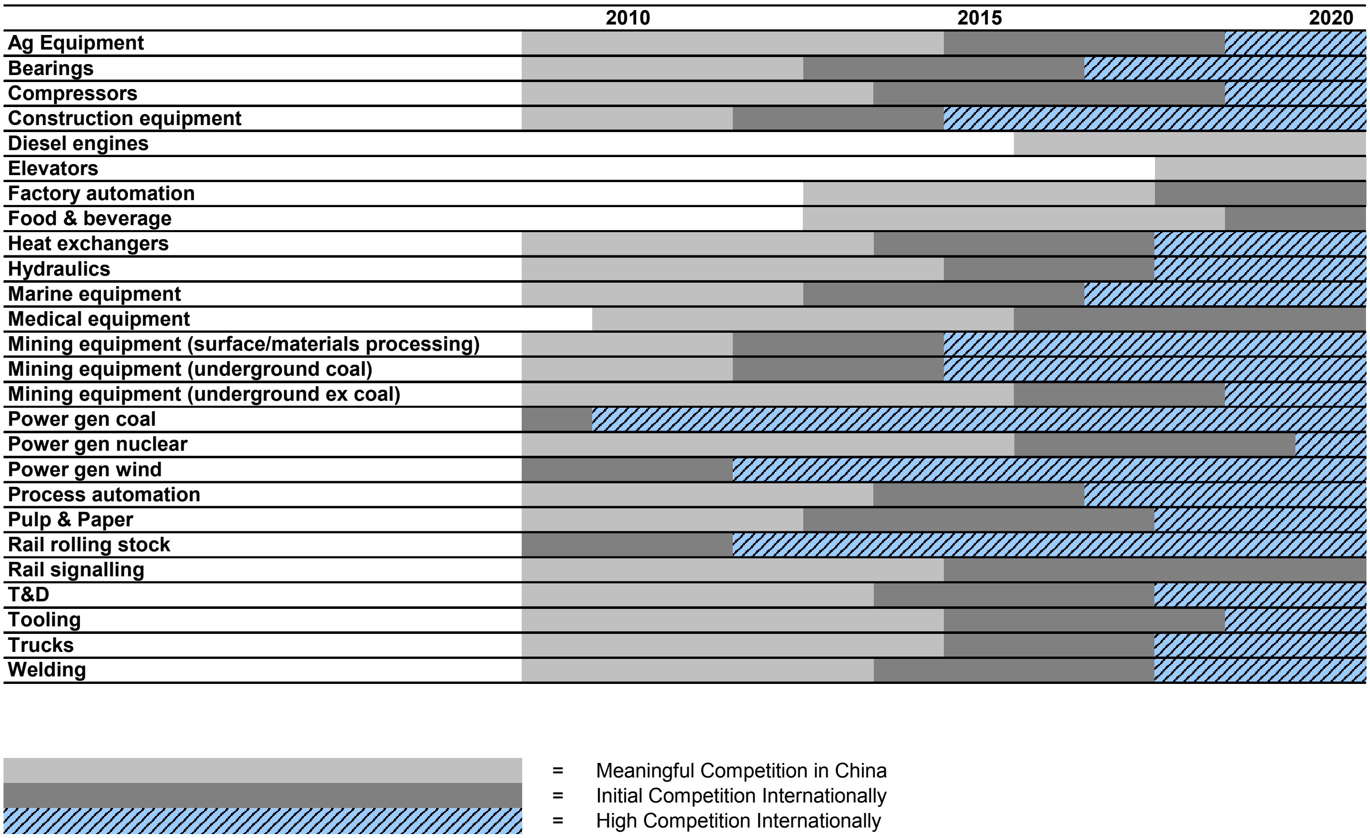
Chinese excavator demand has deflated, and demand in Japan has rebounded strongly following the tsunami damage of March 2011; the rebound in demand in the US; and the on-going strength of global demand for mining equipment. In terms of revenues, in FY3.12, we estimate that HCM should generate around 15% of its revenues from China (down from 25% last year), while Komatsu should derive around 12% of total sales from China (down from 20% last fiscal year).

Elsewhere, exposure to China remains is high at Fanuc (we estimate at least 30% of sales) where the company supplies CNCs to machine tool builders, small-scale machining centers called robo-drills to EMS companies such as Hon Hai and also industrial robots. Nabtesco also has a high dependence on China at approx 1/4 of sales China including hydraulic components to makers of excavators, braking systems for makers of railway carriages (both subways and high speed rail) and precision speed reducers to robot makers. As a leading supplier of a/cs, Daikin now generates approx 20% of revenues from China (and possibly more than 40% of OP). CY2011 saw growth in excess of 20% YoY but sales in Q1 CY12 are weak and we estimate could be down by at least 10% YoY .

Timeline of Rising Chinese Competition

In Figure 3, we show our estimated timeline of risk from rising Chinese competition across our key end-markets & industries.

Figure 3. Timeline of Risk from Rising Chinese Competition by Key End Markets/Industries



Source: Citi Investment Research and Analysis

Europe

End-markets that we see as more protected in the medium-term are diesel engines, elevators (equipment), factory automation, food & beverage, medical equipment and nuclear power. Companies within our coverage operating within these fields are **GEA**, **Siemens** and to a lesser degree **ABB**, **IMI, Invensys, Sandvik, Schneider** and **Phillips.**

End-markets that we see as more at risk in the medium-term are power generation (ex nuclear), rail (rolling stock), construction equipment and mining (surface/materials processing equipment). Companies within our coverage operating within these fields are **Alstom**, **Metso, FLSmidth** and **Sandvik**.

End-markets where we think the risk is greater than the market anticipates include bearings, paper equipment and pumps. Companies within our coverage operating within these fields are **Metso, SKF** and **Weir Group**.

While all of our companies are not immune from increasing competition in China, we believe the timing of the impact will be different. The risk is already visible for some companies, such as **Alstom** (Neutral Rated), **Vestas** (Neutral Rated) and to a lesser degree **ABB** (Buy Rated). Companies such as are **Metso** (Sell Rated), **RHI** (Buy Rated), **SKF** (Sell Rated) and **Weir Group** (Sell Rated) may

see an increasing threat in the medium-term. On the other hand, we see companies such as **GEA** (Buy Rated), **IMI** (Buy Rated), **Schneider** (Sell Rated) and **Smiths Group** (Neutral Rated) as more protected.

North America

Multi-Industry & Electrical Equipment

Based on the timeline in Figure 3, end markets that we expect to be the most protected from rising competition include diesel engines, elevators, factory automation, food & beverage, medical equipment and nuclear power generation equipment. Companies which operate in these markets include United Technologies for elevators; Honeywell and Emerson for factory automation; SPX Corp and Pentair for food & beverage; and General Electric for medical equipment.

Power generation (ex nuclear) has exposure to medium-term risk. Within our coverage, SPX Corp has the most exposure to coal power generation competition in China.

The timing of increasing competition from China is a significant factor in the performance of our companies. Aggressive competition has already forced Emerson (Buy Rated) to consider exiting the local telecom data center market. SPX Corp (Neutral Rated) also appears at risk due to competitive threats against its dry cooling technology used in power plants. Other companies in the space such as Cooper Industries (Neutral Rated), United Technologies (Neutral Rated), and Ingersoll-Rand (Neutral Rated) may also begin to see increasing competition.

Machinery & Diversified Equipment

Among the North American Machinery and Diversified Equipment manufacturers, we see construction equipment manufacturers as having the greatest risk, with many Chinese manufacturers planning on selling into – if not establishing production in – developed markets like the US and Western Europe. Certain manufacturers have already broken ground on production sites in the U.S., and added dealers, along with medium size acquisitions made in Europe. We note that development of the construction equipment industry has been outlined as a key focus area since the 9th Five Year Plan (1996-2000). While they will no doubt play a role in the growth of the Chinese markets, construction equipment companies such as Caterpillar and Deere are also at risk from future growth of China-based equipment companies as they look to expand beyond their home boundaries, in our view.

Based on the timeline in Figure 3, we see diesel engine production less at risk, with certain major Chinese manufacturers partnering with Western companies for their domestic market and distribution capabilities as opposed to establishing in-roads overseas. Increasing levels of technology and investment required to meet ever increasing fuel efficiency and emission standard targets further limits the risk of competitive encroachment, in our view. We see Cummins as well-positioned in this regard.

Electrical products along with motion control technologies, while having lower price points, are likely more insulated from Chinese competition due to the branding and reliability that companies like Eaton and Parker Hannifin have established with their offerings, enabling them to expand further into emerging markets, including China. Differing electrical codes, plus the barriers resulting from well-established

distribution networks, are also major inhibitors to overseas players penetrating the North American electrical distribution market.

Japan

End markets that we see as more protected in the long-term are CNCs for machine tools, pneumatics, discrete components for factory automation such as PLCs and sensors, and industrial robots. Companies within our coverage operating within these fields are Fanuc, SMC, Keyence, Omron and to some extent Nabtesco.

One notable change over the past year is the growing competitive threat of some Taiwanese component suppliers to the Japanese makers in China. Names include Hiwin (a supplier of linear guides and ball screws) and Airtac (a supplier of pneumatics). Growth at both companies outpaced their Japanese peers during CY2011 but both saw a sharp slowdown in business from Q4. In our view, Hiwin could continue to take share from THK and NSK in China, but the very high regard that SMC has with its customers for reliability means that it may be harder for Airtac to match its progress. End markets that we see as more at risk in the near-term are construction equipment, bearings and air-conditioners. Companies within our coverage operating within these fields are Komatsu, Hitachi CM, NSK and Daikin.

As before, all of the companies we cover are under threat from increasing competition in China. Moreover, the slower economy during the second half of CY2011 and expectations of slower growth in 2012 mean that most companies are less positive now than they were twelve months ago on near-term prospects. In addition, higher wage costs are a growing issue for one and all. But on the basis that the potential for growth is still larger than most other economies, there is no change to expansion plans. For example, Daikin will open its first room a/c manufacturing plant in Suzhou in April, while NSK will open its 12th plant in China in Hefei (for ball bearings) in August. Nabtesco will also open a new hydraulics plant for travel motors for 30-ton excavators in Changzhou in late 2012.

China End-Markets Update – Be Selective

Recent demand news flow from China has been more on the negative side; a notable deterioration has been seen in Fixed Asset Investment-related industries (construction, rail, wind), as well as the paper industry. On the positive side, supportive news flow is evident in agriculture equipment, food & beverage, nuclear and trucks in China (Figure 4). Below we provide more details.

Figure 4. China – Outlook by End Market

End Market	Key Drivers
Positive	
Agriculture	23% increase in government investment in agricultural related projects and support of farmers in 2012. Government urging financial institutions to increase lending to ag related businesses
Food & Beverage	New targets to improve food safety standards (strive to reach international standards); rebound in food and beverage PMI components, focus on food quality and shift to consumption driven economy
Nuclear Power	Chinese government will resume approval of new nuclear power projects in April 2012
Trucks	Citi analysts project a return to growth in the heavy truck market of 10% in 2012 following 13% decline in 2011
Negative	
Construction	2012 YTD excavator sales down 34%Y/Y, Citi analysts recently downgraded 2012E unit demand by 20%
Pulp & paper	Lack of availability of financing for new capex, Citi pulp and paper capex model and company commentary point to decline in investment, excess capacity
Rail	2012 government train procurement budget down 14 Y/Y, further downside risks to railway FAI, collapse of HSR under construction negative for sentiment
Wind Power	Overcapacity – Vestas not participating due to price competition, installations to decline in 2012, no material price recovery expected

Source: Company Reports and Citi Investment Research and Analysis

Companies with exposure to the above end markets that are likely to be impacted are:

Europe

- **Agriculture** – Fiat Industrial (CNH)
- **Food and Beverage** – GEA, IMI
- **Nuclear Power** – Sandvik, Invensys, IMI, GEA, Alstom, Weir Group
- **Trucks** – Fiat Industrial, MAN, Volvo, Scania
- **Construction** – Volvo, Metso, Atlas Copco, Sandvik, FLSmidth
- **Pulp & Paper** – Metso
- **Rail** – Alstom, Siemens, SKF
- **Wind Power** – Vestas, Siemens, SKF

North America

Multi-Industry & Electrical Equipment

- **Food and Beverage (Capital Equipment)** – SPX Corporation, Pentair
- **Nuclear Power** – General Electric and SPX Corp. (primary nuclear component is squib valves.)
- **Trucks** – Actuant, although exposure is very small

- **Construction** – United Technologies through Otis elevators and smaller exposure via Carrier HVAC systems
- **Rail** – General Electric has small exposure

Machinery & Diversified Equipment

- **Agriculture** – Deere has been a beneficiary of growth in Ag equipment sales in China, where it holds a top three position in both tractors and combines. Its newest factory, to manufacture large Ag equipment in northeast China, is slated to begin production later in 2012. The market is expected to continue to grow in 2012 on the back of rising crop production. In addition, Deere is benefiting from favorable governmental support of overall agriculture development, which in part includes the targeted growth of mechanization levels (i.e. higher horsepower levels).
- **Trucks** – Cummins has developed a solid position in the overall on-highway market in China, due in large part to its joint venture with Dongfeng (DCEC), which is its largest global JV. DCEC is adding capacity in 2012, which should position it well in 2013 and beyond when we expect the overall truck market to resume growth. The most recent figures point to continued deceleration in the overall market, as it cycles against extremely difficult year/year comparisons. We expect flat-to-slightly up total deliveries in 2012, with growth being very much back-end weighted.
- **Construction** – CAT has done well in holding on to its overall share in key product segments, though still in the mid single digit range, but is in the early stages of a major multi-year investment cycle, which we highlight above. Cummins (largely through its consolidated operations) is a major supplier to the domestic excavator makers, serving both their domestic as well as export needs. It recently announced a joint venture with one of its long-time customers (LiuGong), which will produce engines beginning in late 2014. Deere is stepping-up its investment in the equipment market in China, but is doing so at a very gradual (and modest) pace, especially compared to CAT.

Japan

- **Agriculture** – Kubota is a late entrant into the tractor market, selling only 1,500 units a year but building on the success of its head-feeding type combines, China is now the second largest Asian market after Thailand – excluding Japan.
- **Construction** – The market for excavators hit an all-time high in March 2012 at more than 44,000 units. Since then, there has been a sharp slowdown due to tighter monetary policy, the slowing property market and the slowdown in infrastructure investment. We think that unit demand for excavators will be down by at least 40% YoY in Q1 2012, and there is little likelihood that demand will see a strong pick-up any time soon. The situation is exacerbated by too much capacity, too much inventory of finished units and parts and too many players. These problems have now manifested themselves in talk of lower prices and easier terms of credit. Notwithstanding the strength of demand from the mining industry for dump trucks and larger excavators, and relatively upbeat demand for smaller-sized units for work in rural areas (irrigation) and for flood defenses, we think that the best case for 2012 could be a YoY decline of 15%. Most foreign makers remain committed to the market but even allowing for the consolidation of some smaller players, the prospect of further margin erosion cannot be ruled out.

- **Rail** – The Wenzhou derailment in July 2011 has pushed back expansion plans for the high speed network. This has hit Nabtesco, as a supplier of braking systems to carriage makers. On the other hand, the subway system continues to expand in many cities across China, and this work continues to hold up relatively well. According to Nabtesco, the main overseas competitors in this field include Knorr (Germany) and Faiveley (France).

- **Wind Power –** According to NSK, demand for large scale bearings from the wind turbine industry have fallen sharply and we do not envisage any recovery in the next twelve months or so.

Global Winners and Losers

Figure 5. Global Engineering Sector in China – Winners and Losers

Winners	Losers
Europe	
GEA	Alstom
IMI	FLSmidth
Siemens	Metso
	RHI
	SKF
	Weir Group
US	
Multi-Industry & Electrical Equipment	
DHR	SPW
MMM	EMR (Network Power)
HON	GWW
EMR (Process)	
Machinery & Diversified Equipment	
CAT	
CMI	
ETN	
PH	
Japan	
Fanuc	Hitachi CM
SMC	Komatsu
Nabtesco	NSK
China	
China Resources Power	Hong Kong & China Gas
Sany Heavy Equipment International	

Source: Citi Investment Research and Analysis

Valuation

Figure 6. Citi Investment Research and Analysis Global Engineering Coverage – Comparable Data

Company				Share	Target	Adjusted PE			EV/EBIT (Adj)			EV/Sales			EBIT (Adj) Margin		
European Capital Goods	**Rating**		**Curr**	**Price**	**Price**	**2011E**	**2012E**	**2013E**	**2011E**	**2012E**	**2013E**	**2011E**	**2012E**	**2013E**	**2011E**	**2012E**	**2013E**
ABB (ABBN.VX)	Buy	(1)	USD	20.26	25.38	14.6	13.3	11.6	9.3	8.7	7.3	1.2	1.1	1.0	13.3%	13.0%	14.1%
Alstom (ALSO.PA)	Neutral	(2)	EUR	29.76	32.00	8.0	7.4	6.8	7.5	6.4	5.4	0.6	0.5	0.4	7.6%	7.8%	8.1%
Invensys (ISYS.L)	Buy	(1)	GBP	1.99	2.35	10.7	8.2	7.5	9.2	6.7	5.9	0.7	0.6	0.6	7.7%	9.8%	10.0%
Nexans (NEXS.PA)	Neutral	(2)	EUR	50.89		13.0	10.6	9.1	7.3	6.8	na	0.4	0.4	na	5.6%	5.7%	5.9%
Philips (PHG.AS)	Sell	(3)	EUR	15.22	12.00	22.1	13.9	10.9	8.4	9.2	7.7	0.6	0.6	0.6	7.8%	7.0%	7.9%
Schneider Electric (SCHN.PA)	Sell	(3)	EUR	49.69	43.00	13.6	12.4	11.1	12.5	11.1	9.8	1.5	1.4	1.3	12.7%	12.9%	13.4%
Siemens AG (SIEGn.DE)	Buy	(1)	EUR	75.49	95.00	9.7	10.0	9.7	9.8	8.5	5.6	1.0	0.9	0.9	10.5%	11.4%	16.3%
Atlas Copco (ATCOa.ST)	Sell	(3)	SEK	160.10	135.00	15.0	15.9	16.1	11.9	12.0	12.0	2.6	2.4	2.3	21.6%	20.0%	19.2%
Fiat Industrial (FI.MI)	Buy	(1)	EUR	7.97	8.50	15.6	10.9	9.1	6.9	5.7	5.1	0.5	0.5	0.4	6.9%	8.1%	8.2%
FLSmidth (FLS.CO)	Neutral	(2)	DKK	391.60	400.00	13.2	11.8	12.7	9.0	7.3	7.4	0.9	0.8	0.7	10.6%	10.8%	9.8%
IMI (IMI.L)	Buy	(1)	GBP	9.73	12.00	11.9	10.9	9.6	9.5	8.5	7.0	1.5	1.4	1.3	16.0%	16.7%	18.4%
Kone (KNEBV.HE)	Sell	(3)	EUR	40.95	36.50	16.3	18.8	17.7	13.7	13.6	12.5	1.9	1.8	1.7	13.9%	13.0%	13.3%
MAN (MANG.DE)	Neutral	(2)	EUR	99.06	87.00	19.1	17.2	15.2	11.7	12.5	11.1	1.0	1.1	1.0	9.0%	8.8%	9.2%
Metso (MEO1V.HE)	Sell	(3)	EUR	33.33	24.00	14.0	13.9	14.7	10.0	9.7	10.3	0.9	0.8	0.8	8.6%	8.2%	7.6%
RHI (RHIV.VI)	Buy	(1)	EUR	19.11	22.00	7.4	6.4	5.7	8.9	8.3	7.1	0.8	0.7	0.6	8.6%	8.5%	9.0%
Sandvik (SAND.ST)	Buy	(1)	SEK	95.50	110.00	14.1	11.7	11.0	10.6	9.0	8.3	1.5	1.4	1.3	14.5%	15.4%	15.2%
Scania (SCVb.ST)	Sell	(3)	SEK	137.60	95.00	12.3	16.4	14.0	12.1	16.7	15.1	1.7	1.9	1.9	14.1%	11.5%	12.4%
Schindler (SCHN.S)	Neutral	(2)	CHF	107.20	115.00	22.9	19.5	18.0	12.1	12.0	10.7	1.4	1.3	1.2	11.8%	11.0%	11.6%
SKF AB (SKFb.ST)	Sell	(3)	SEK	161.50	120.00	12.2	13.8	12.7	9.7	10.5	9.6	1.4	1.3	1.3	14.5%	13.0%	13.4%
Smiths Group (SMIN.L)	Neutral	(2)	GBP	10.47	9.60	11.3	10.4	0.1	10.1	9.0	8.1	1.7	1.6	1.4	16.7%	17.4%	17.8%
Volvo AB (VOLVb.ST)	Neutral	(2)	SEK	96.40	85.00	11.0	13.8	11.5	8.2	7.6	6.3	0.7	0.6	0.5	8.7%	7.5%	8.4%
Bodycote (BOY.L)	Neutral	(2)	GBP	3.85	4.15	11.7	10.2	9.7	9.1	7.2	6.5	1.3	1.2	1.1	14.1%	16.2%	16.5%
Cookson Group (CKSN.L)	Buy	(1)	GBP	6.93	8.00	9.8	9.0	8.3	8.4	7.7	7.0	0.8	0.8	0.8	10.3%	10.9%	11.5%
Electrolux (ELUXb.ST)	Sell	(3)	SEK	139.90	115.00	13.1	12.0	11.1	15.3	10.8	10.0	0.5	0.5	0.5	3.1%	4.6%	5.0%
GEA (G1AG.DE)	Buy	(1)	EUR	25.90	30.00	12.7	11.3	10.2	10.4	8.9	7.7	1.0	0.9	0.8	10.0%	10.6%	11.1%
Husqvarna AB (HUSQb.ST)	Neutral	(2)	SEK	39.91	38.00	23.1	13.8	12.0	19.3	12.4	10.8	1.0	1.0	0.9	5.3%	7.8%	8.6%
Morgan Crucible (MGCR.L)	Buy	(1)	GBP	3.21	3.80	10.7	10.5	9.8	9.2	8.6	8.0	1.1	1.1	1.0	13.0%	13.1%	13.2%
Vestas Wind (VWS.CO)	Neutral	(2)	EUR	7.61	8.07	-9.3	27.4	12.7	nm	15.0	9.5	0.4	0.3	0.3	-0.7%	2.0%	3.0%
Weir Group (WEIR.L)	Sell	(3)	GBP	17.64	16.40	13.2	11.5	11.9	10.8	9.0	9.0	1.9	1.7	1.6	18.0%	18.6%	17.7%
Japan																	
Amada (6113.T)	Neutral	(2)	JPY	558		33.3	21.7	16.0	12.4	9.0	6.5	0.7	0.7	0.6	5.8%	7.5%	9.5%
Daikin Inds (6367.T)	Neutral	(2)	JPY	2253	2200	13.6	11.5	10.4	11.3	8.5	7.1	0.7	0.6	0.5	6.3%	7.3%	7.6%
Fanuc (6954.T)	Buy	(1)	JPY	14680	17500	20.0	16.9	15.9	10.0	8.4	7.4	4.2	3.5	3.1	42.2%	42.0%	42.3%
HCM (6305.T)	Neutral	(2)	JPY	1831	1750	15.3	11.8	9.2	14.6	11.7	9.5	0.8	0.8	0.7	7.2%	8.0%	8.9%
Keyence (6861.T)	Sell	(3)	JPY	19460	19000	19.4	18.6	17.4	8.6	8.8	7.5	4.0	4.0	3.5	46.9%	46.0%	46.8%
Komatsu (6301.T)	Neutral	(2)	JPY	2359	2600	12.3	10.9	9.9	9.9	8.2	7.0	1.3	1.1	1.0	13.5%	14.3%	14.9%
MHI (7011.T)	Neutral	(2)	JPY	401	400	49.9	18.4	13.2	19.5	14.5	12.9	0.8	0.8	0.7	4.0%	5.2%	5.4%
Nabtesco (6268.T)	Buy	(1)	JPY	1698	1700	13.4	14.6	13.1	9.5	9.5	8.1	1.0	0.9	0.8	11.5%	10.8%	11.2%
NSK (6471.T)	Neutral	(2)	JPY	637	600	13.2	10.9	9.8	11.1	9.6	8.4	0.6	0.6	0.6	6.0%	6.6%	7.0%
Omron (6645.OS)	Buy	(1)	JPY	1780	1800	14.6	25.9	13.2	7.6	9.4	7.3	0.6	0.6	0.5	7.8%	6.1%	7.5%
SHI (6302.T)	Neutral	(2)	JPY	460	480	14.1	9.5	9.4	6.6	5.3	4.8	0.5	0.4	0.4	7.2%	7.7%	7.7%
SMC (6273.T)	Neutral	(2)	JPY	13160	14500	16.3	14.7	13.5	7.7	7.1	6.1	2.1	1.9	1.7	27.6%	27.5%	28.3%
THK (6481.T)	Buy	(1)	JPY	1683	1850	21.7	16.0	11.7	8.8	8.5	5.8	0.8	0.8	0.7	9.7%	10.0%	12.0%
Yaskawa (6506.T)	Neutral	(2)	JPY	778	700	25.1	15.6	11.2	16.4	11.7	8.2	0.7	0.7	0.6	4.4%	5.8%	7.3%
US																	
Actuant Corp (ATU.N)	Buy	(1)	USD	29.29	35.00	16.1	12.8	11.7	13.0	9.9	8.5	1.7	1.4	1.3	13.4%	14.4%	14.8%
Caterpillar Inc (CAT.N)	Neutral	(2)	USD	106.43	120.00	13.9	11.0	9.3	11.8	9.2	7.7	1.5	1.2	1.1	12.4%	13.2%	14.1%
Cooper Inds (CBE.N)	Neutral	(2)	USD	63.29	63.00	16.2	14.6	12.9	12.4	11.1	9.4	1.9	1.8	1.5	13.9%	14.3%	15.0%
Crane (CR.N)	Neutral	(2)	USD	48.49	55.00	14.1	12.4	11.2	9.4	7.9	7.1	1.2	1.0	1.0	12.3%	13.1%	13.8%
Cummins Inc (CMI.N)	Buy	(1)	USD	119.22	132.00	13.1	11.6	10.4	9.1	7.5	6.6	1.2	1.0	0.9	14.0%	14.6%	14.8%
Danaher Corp (DHR.N)	Buy	(1)	USD	55.46	64.00	19.4	16.8	14.9	16.2	12.8	11.1	2.8	2.3	2.1	16.7%	17.2%	18.3%
Deere and Co (DE.N)	Buy	(1)	USD	81.04	96.00	12.0	9.9	9.0	9.0	7.1	6.4	1.1	0.9	0.8	12.5%	13.2%	13.2%
Eaton Corp (ETN.N)	Buy	(1)	USD	49.15	58.00	12.2	10.9	9.2	12.5	10.4	8.3	1.3	1.2	1.0	10.3%	11.4%	12.5%
Emerson Electric (EMR.N)	Buy	(1)	USD	52.17	60.00	15.7	14.9	13.0	10.4	9.5	8.4	1.7	1.6	1.5	16.8%	17.5%	18.5%
General Electric (GE.N)	Buy	(1)	USD	20.08	24.00	14.6	13.0	11.1	4.7	4.6	4.1	1.4	1.3	1.2	29.3%	29.3%	29.4%
WW Grainger (GWW.N)	Sell	(3)	USD	215.63	190.00	22.9	20.6	19.4	15.4	13.7	12.7	2.0	1.8	1.7	13.3%	13.6%	13.6%
Honeywell Intl (HON.N)	Buy	(1)	USD	61.00	69.00	15.0	13.5	12.2	12.5	10.4	9.0	1.5	1.4	1.2	12.1%	13.3%	13.8%
Illinois Tool (ITW.N)	Neutral	(2)	USD	57.01	60.00	15.1	13.8	12.6	11.0	10.5	9.3	1.7	1.6	1.5	15.4%	15.6%	16.0%
Ingersoll Rand (IR.N)	Neutral	(2)	USD	41.24	42.00	14.4	13.6	11.7	10.6	9.7	8.2	1.1	1.0	0.9	10.2%	10.4%	10.9%
Paccar Inc (PCAR.O)	Neutral	(2)	USD	46.81	50.00	16.3	13.7	12.0	14.2	12.3	10.9	1.3	1.2	1.1	9.0%	9.6%	9.8%
Parker-Hannifin (PH.N)	Buy	(1)	USD	84.13	90.00	12.9	11.5	10.3	9.8	8.7	7.4	1.2	1.1	1.0	12.1%	12.5%	13.0%
Pentair Inc (PNR.N)	Buy	(1)	USD	47.03	53.00	19.2	17.5	15.0	15.0	12.9	11.2	1.7	1.5	1.4	11.7%	12.1%	12.9%

Roper Industries (ROP.N)	Neutral	(2)	USD	99.67	102.00	22.4	20.1	17.9	15.7	13.3	11.3	3.7	3.3	2.8	23.6%	24.5%	25.0%
SPX Corp (SPW.N)	Neutral	(2)	USD	77.22	85.00	17.4	15.4	12.8	13.8	13.5	10.8	0.9	1.0	0.8	6.4%	7.2%	8.0%
Thomas & Betts (TNB.N)	Neutral	(2)	USD	71.78	72.00	19.8	16.9	15.5	13.4	11.2	9.6	1.7	1.5	1.3	12.7%	13.6%	14.0%
Tyco Intl (TYC.N)	Neutral	(2)	USD	56.26	63.00	17.2	15.6	13.7	14.1	11.4	9.8	1.7	1.5	1.3	11.9%	12.8%	13.3%
United Tech (UTX.N)	Neutral	(2)	USD	82.90	89.00	15.4	15.0	12.1	10.9	10.9	8.1	1.4	1.4	1.2	14.0%	14.1%	15.4%
3M Co (MMM.N)	Neutral	(2)	USD	88.97	93.00	14.7	14.0	12.9	10.3	9.6	8.7	2.1	2.0	1.8	20.9%	21.0%	21.2%

Source: Powered by dataCentral; dataCentral is CIRA's proprietary database, which includes Citi estimates, data from company reports and feeds from Reuters, DataStream, First Call, IBES and Toyo Keizai

Figure 7. China Engineering

				Share	Target	Adjusted PE			EV/EBIT (Adj)			EV/Sales			EBIT (Adj) Margin		
Company	**Rating**		**Curr**	**Price**	**Price**	**2011E**	**2012E**	**2013E**	**2011E**	**2012E**	**2013E**	**2011E**	**2012E**	**2013E**	**2011E**	**2012E**	**2013E**
China																	
Anhui Express (0995.HK)	Buy	(1)	HKD	4.28	5.50	8.4	8.3	7.8	7.1	6.9	5.6	3.3	3.8	3.0	50.6%	60.9%	58.5%
CN Railway Const (1186.HK)	Sell	(3)	HKD	4.83	3.20	8.3	9.1	10.4	6.2	8.2	9.5	0.1	0.2	0.2	2.2%	2.0%	1.9%
CN Railway Grp (0390.HK)	Sell	(3)	HKD	2.49	1.50	9.5	10.9	10.7	11.2	13.3	13.3	0.2	0.3	0.3	2.2%	2.2%	2.3%
China Res Power (0836.HK)	Buy	(1)	HKD	14.38	18.00	15.1	11.2	9.8	25.9	17.4	15.5	2.4	2.2	2.0	11.6%	14.0%	15.6%
Jiangsu Exp (0177.HK)	Sell	(3)	HKD	7.51	6.80	15.5	15.3	13.9	12.8	12.5	11.0	5.9	5.5	4.9	46.9%	45.1%	45.4%
Weichai Power (2338.HK)	Sell	(3)	HKD	36.25	30.35	10.9	9.7	8.2	8.3	6.6	5.0	1.0	0.8	0.6	13.8%	14.0%	14.2%
Dongfang Elec (1072.HK)	Buy	(1)	HKD	18.82	28.00	12.6	11.3	9.6	20.9	19.0	16.5	1.7	1.6	1.5	8.2%	8.6%	9.2%
Harbin Electric (1133.HK)	Buy	(1)	HKD	8.14	9.80	9.1	8.9	8.6	15.4	9.7	9.7	0.6	0.4	0.4	4.9%	5.1%	4.8%
HK & China Gas (0003.HK)	Sell	(3)	HKD	19.90	17.00	23.9	21.0	19.6	32.1	25.6	24.1	7.7	7.1	6.4	27.2%	29.2%	29.1%
Shanghai Electric (2727.HK)	Buy	(1)	HKD	3.95	4.60	15.5	13.9	12.7	10.5	8.9	7.4	0.5	0.4	0.3	6.5%	6.5%	6.5%
Sichuan Express (0107.HK)	Buy	(1)	HKD	2.81	3.80	7.2	7.2	6.9	8.4	8.5	6.8	2.4	2.4	1.8	29.1%	29.3%	27.3%
South Locomotive (1766.HK)	Sell	(3)	HKD	5.30	4.50	16.3	14.6	12.1	16.5	13.7	11.3	0.9	0.8	0.7	6.6%	7.0%	7.3%
Sinotruk (3808.HK)	Sell	(3)	HKD	4.50	3.70	8.8	9.1	7.4	6.6	5.9	5.1	0.4	0.3	0.3	6.2%	5.5%	6.0%
Techtronic (0669.HK)	Buy	(1)	HKD	10.50	12.80	14.3	10.9	9.2	nm	11.3	9.2	0.8	0.8	0.7	6.0%	6.8%	7.4%
XJ Goldwind (2208.HK)	Sell	(3)	HKD	4.21	3.20	14.8	19.0	14.9	12.5	13.6	11.6	1.0	1.0	1.0	8.8%	8.1%	9.5%
Zoomlion (1157.HK)	Neutral	(2)	HKD	10.34	11.90	10.2	10.1	9.7	8.1	8.8	8.5	1.7	1.5	1.3	20.7%	17.0%	15.3%
Lonking (3339.HK)	Neutral	(2)	HKD	2.73	2.70	8.2	10.7	10.3	6.6	9.3	8.0	1.2	1.4	1.1	18.4%	14.6%	14.0%

Source: Powered by dataCentral; dataCentral is CIRA's proprietary database, which includes Citi estimates, data from company reports and feeds from Reuters, DataStream, First Call, IBES and Toyo Keizai. Also under CIRA coverage: Sany Heavy Equipment International (0631.HK; HK$5.87; 1)

Appendix A-1

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