Regional Industry Focus
Steel

Refer to important disclosures at the end of this report

DBS Group Research . Equity

20 Apr 2018

Steel prices are poised to recover

- Steel prices in China and Asia are bottoming out, while surging in the US
- No winter production "cut" but winter production "growth" in China – key reason for price weakness
- Expect solid earnings in 1Q18 and no serious damage for 2Q18 despite the fall in prices
- Top pick: POSCO

On the mend. China's steel prices have weakened since Mar, with HRC price dropping 6% to RMB3,971/ton (US$632) on 16 Apr, from a high of RMB4,215/ton (US$667) on 27 Feb. Rebar posted a particularly large price fall due to weak demand during winter and significant inventory build-up. However, since the start of Apr, steel prices have been rebounding, backed by i) iron ore prices that stopped falling and are stabilising at US$60-65/ton; ii) expectation of higher steel demand, with intact fixed asset/infrastructure investment and solid outlook on global demand growth; and iii) the steel inventory built up during winter is starting to wind down. But HR prices in the US surged persistently to US$838/ton at end-Feb (prior to the Section 232 tariff announcement on 9 Mar) to US$941/ton on 9 Apr. As the EU is given temporary exemption from the tariff until 1 May, steel prices have followed suit. The impact of the US tariff is likely to be less intense than initially expected.

China to continue supply reform, but real impact is doubtful. Despite China's winter production cut and the 9% y-o-y output decline in Hebei province during 4Q17, China's total steel output still increased (+4% y-o-y). China's government remains committed to its supply reform through capacity cut, extended winter output restriction and ongoing efforts to avoid the return of IFF facilities (by providing incentives for reporting illegal operations). However, we think that Chinese steel mills are likely to continue increasing steel output, enticed by the currently attractive steel margins.

Steel margins holding up at favourable level. Despite the recent price retreat, we expect the steel players to post robust results for 1Q18 as the selling prices are estimated to be pegged to 4Q17 spot prices. Also, their margins are projected to remain at high levels, supported by the fall in iron ore and coking coal prices. From Mar till now, HRC price in China has fallen by US$24/ton, while input cost of iron ore and coking coal have dropped by US$27/ton. Steel stocks, however, have suffered excessive corrections as a result of steel price weakness. We recommend POSCO as our top pick in anticipation of a recovery in ROE and stable earnings.

CRY Index : 201.86

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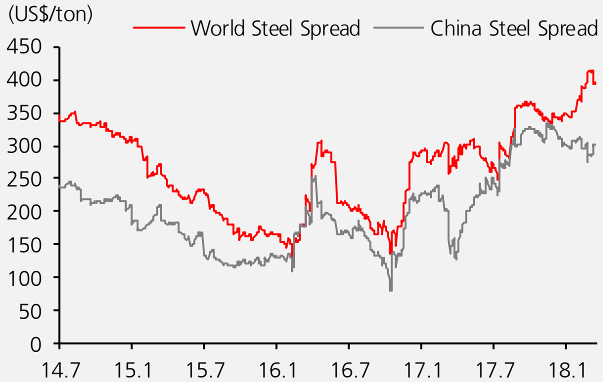
STOCKS

	Price LCY	Mkt Cap US$m	12-mth Target Price KRW	Performance (%) 3 mth	12 mth	Rating
POSCO	355,000	29,011	480,000	(7.8)	33.0	BUY
Hyundai Steel Company	54,300	6,792	70,000	(8.1)	0.7	BUY
SeAh Besteel Corporation	25,550	859	39,000	(13.7)	(1.7)	BUY
Angang Steel	8.29	7,648	8.60	1.2	59.7	BUY
Maanshan Iron & Steel	3.66	3,594	3.29	(6.9)	39.2	FULLY VALUED

Source: DBS Bank, Bloomberg Finance L.P.
Closing price as of 19 Apr 2018

World steel spread vs. China steel spread



Steel spread = Benchmark steel prices – Prices of iron ore & coking coal

Source: DBS Bank, Bloomberg Finance L.P.

ed: CK / sa:AS, PY, CS

Winter production cut? Winter production growth in reality

Reason for sluggish steel prices – production increase in China even amid winter output restrictions. Steel prices have been heading down in most regions, especially China, in March. This is owing to slower-than-expected demand, especially in the construction sector, and higher-than-expected production growth despite China's winter production cut. While steel production in its biggest steel producing province of Hebei declined 9% y-o-y in 4Q17, production in other regions climbed 8% y-o-y, resulting in China's total steel production growing 5% y-o-y in the same period. In 2017, China's total crude steel output rose 4.8% to 845m tons. Hebei, on the other hand, saw positive results from the supply-side measures, with output falling 0.8% y-o-y to 190.6m tons in 2017. In addition, steel demand in China had also deteriorated somewhat, as evidenced by its fixed asset investment (FAI) growth of 7.2% in 2017, which is at the lowest level since 1999.

Steel production continued to expand in 1Q18. Crude steel output and finished steel production in China in 1Q18 increased by 5.4% y-o-y and 4.7% y-o-y, respectively. In summary, the winter production cut was a storm in a tea cup, and the price strength riding on the news of production cut had led steel mills to ramp up output to enjoy favourable margins, and eventually resulted in declining steel prices. This also explains why iron ore prices have remained much stronger than expectations throughout winter.

High steel inventories weighing on prices and iron ore demand. Besides, iron ore prices have also dropped considerably. Iron ore price fell to as low as US$60.7/ton (62% Fe) on 8 Apr from US$79.4/ton on 1 Mar, and is stabilising at around US$60-65/ton. Market had been expecting sound demand for iron ore, with steel mills resuming production after the winter output restriction measures. However, iron ore demand has yet to pick up, as steel production actually expanded during winter contrary to market expectations, and consequently, there is sufficient supply to satisfy steel demand at the moment. Accordingly, China's steel inventory build-up in preparation for a demand pick-up since Dec 2017, is weighing on prices. Notably, the inventory level at the middleman stage suddenly surged in the first week of Mar, which is suspected to be due to the delay in reporting statistics because of CNY holidays.

Steel prices are bottoming out as demand returns and inventories decline

Steel prices to bottom out and gradually recover in 2Q18. The positive developments of late are that steel inventories at the middleman stage have started to fall, and spot and future prices of steel products have rebounded since end-March. China's domestic HR price rose 4.2% to RMB3,971/ton (US$632/ton) on 16 Apr, from RMB3,810/ton (US$606/ton) on 26 Mar. China's export HRC price is also up 0.9% to US$579/ton on 16 Apr, from its recent low on 28 Mar. We expect prices to slowly recover, following a demand recovery and inventory drawdown going forward, but prices are unlikely to surge as steel demand growth is unlikely to exceed expectations, and there is ample inventory of steel and iron ore.

US trade barriers to be milder than initially feared. The US's imposition of Section 232 tariff and the trade conflict between China and the US are overall negative for steel demand, given that the US is the largest steel importing country and a trade war may weaken global economic growth. However, the US's section 232 tariff now appears less onerous than earlier expectations, which implies lower steel volume being diverted to outside the US.

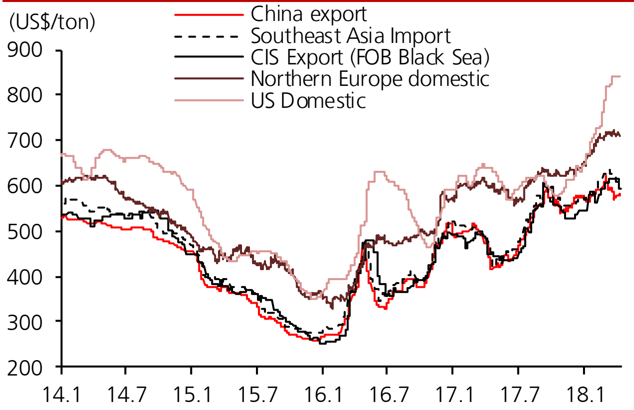
Positives in China's steel sector

i) **Demand recovery:** China's steel demand is coming back, as signalled by its FAI growth rebounding to 7.8% y-o-y for Jan-Feb 2018, before retreating slightly in Mar (+7.5% y-o-y for Jan-Mar 2018). We expect steel demand to also get a boost from increased liquidity, as China announced on 17 Apr that it would cut the reserve-requirement ratio for some banks, which could be positive for the property market. Besides, China's solid infrastructure spending plan for 2018 to improve its transportation system (by budgeting RMB732bn for railways, RMB1.8tr for road/waterways and RMB1tr for renovations, including the 92.4km-long rail link between Beijing and Xiongan) should underpin steel demand.

ii) **Supply constraint on environmental protection measures:** Meanwhile, the steel sector in China continues to face polices that could impact production. Notably, its environmental tax which came into effect on 1 Jan 2018, is stricter and expected to be more effective than the previous "pollution discharge fees" in restricting pollution from manufacturing activities. Along with the existing measures such as capacity cut and extended winter production cut, this should limit excessive output growth from steel mills regardless of the market situation.

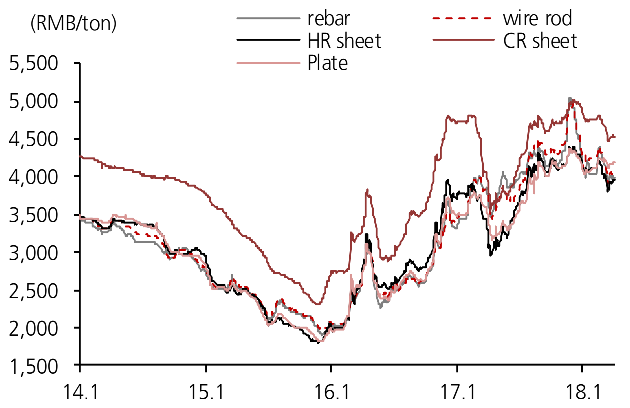
Global steel demand forecast to remain on growth path in 2018 and 2019. According to the short-range outlook for the steel sector released by the World Steel Association (WSA) on 17 Apr, the global steel market is expected to continue expanding in 2018 and 2019, albeit at a decelerated rate of 1.8% and 0.7% y-o-y, respectively. Despite the concerns over a slowdown in China, WSA expects its steel demand to be stable in 2018 (flat y-o-y). Also, resilient demand from the rest of the world will partially offset the impact of slowing China demand. Global steel demand excluding China is forecast to grow 3.4% y-o-y in 2018 (up from 1.8% y-o-y in 2017).

HR prices by region



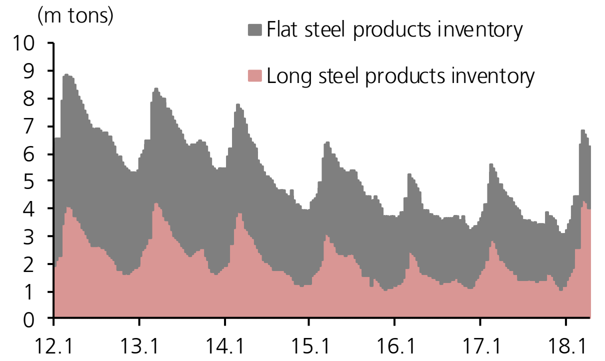
Source: Bloomberg Finance L.P., DBS Bank

China: Domestic prices by product type



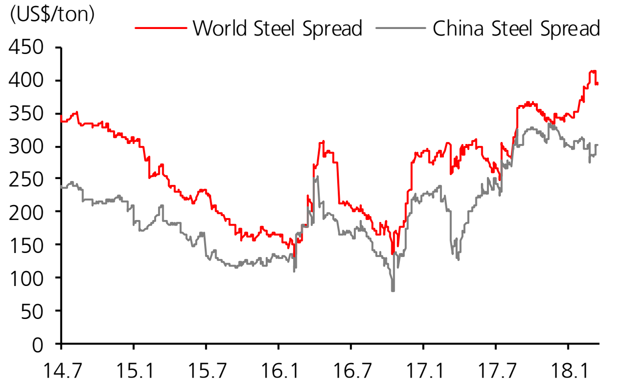
Source: Bloomberg Finance L.P., DBS Bank

China: Middlemen steel inventories



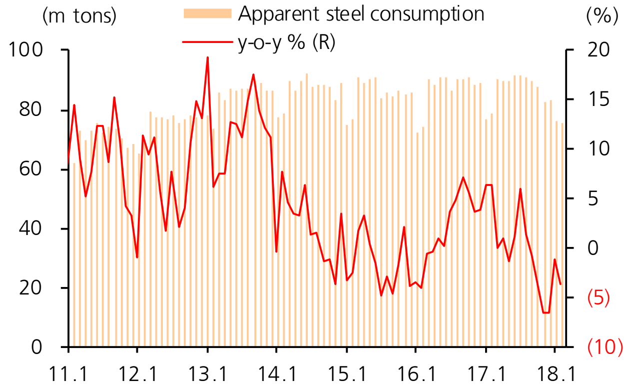
Source: Bloomberg Finance L.P., DBS Bank

World steel spread vs. China steel spread



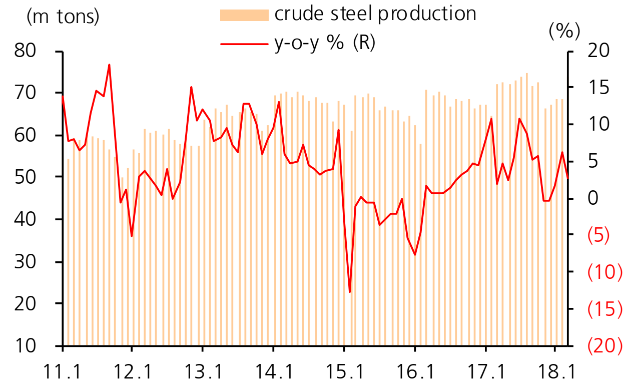
Steel spread = Benchmark steel price – iron ore & coking coal prices
Source: Bloomberg Finance L.P., DBS Bank

China: Apparent steel demand



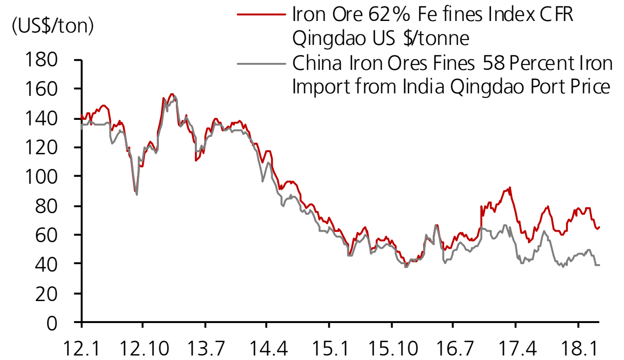
Source: Bloomberg Finance L.P., DBS Bank

China: Crude steel production



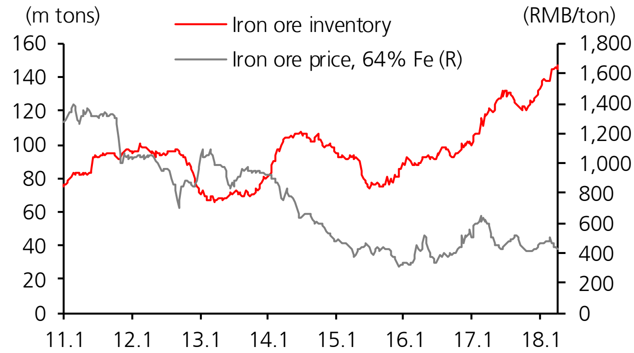
Source: Bloomberg Finance L.P., DBS Bank

Iron ore prices



Source: Bloomberg Finance L.P., DBS Bank

China: Iron ore inventory vs. price



Source: Bloomberg Finance L.P., DBS Bank

Steel demand forecast (finished steel)

				y-o-y growth rates, %		
(m tons, % growth)	2017	2018F	2019F	2017	2018F	2019F
European Union (28)	162	166	167	2.5	2.0	0.8
Other Europe	42	44	46	4.1	4.5	4.4
CIS	53	54	55	6.1	2.3	1.8
NAFTA	141	145	147	6.4	3.0	1.6
Central and South America	41	44	46	3.8	6.2	4.9
Africa	35	37	38	-6.8	4.5	4.6
Middle East	53	56	58	0.4	4.6	3.7
Asia and Oceania	1,060	1,071	1,070	5.5*	1.1	-0.2
World	**1,587**	**1,616**	**1,627**	**4.7***	**1.8**	**0.7**
World excl. China	851	879	905	1.8	3.4	2.9
Developed Economies	410.7	418	423	2.9	1.8	1.1
China	**737**	**737**	**722**	**8.3***	**0.0**	**-2.0**
Em. and Dev. Economies excl. China	439.9	461	482	0.8	4.9	4.5
ASEAN (5)	70	75	80	-5.2	6.6	6.4
MENA	72	75	79	-1.1	5.0	4.2

**Reflects the statistical base effect arising from the closure of China's Intermediate Frequency Furnaces (IFF)*
Source: World Steel Association, DBS Bank

Expect solid 1Q18 earnings on favourable steel margins

Despite the recent price retreat, we expect the steel players to post robust results for 1Q18 as the selling prices are estimated to be pegged to 4Q17 spot prices. Also, their margins are projected to remain at high levels, supported by the fall in iron ore and coking coal prices. From Mar till now, HRC price in China has fallen US$24/ton, while input cost of iron ore and coking coal have dropped by US$27/ton. Steel stocks, however, have suffered excessive corrections as a result of steel price weakness.

We recommend POSCO as our top pick, in anticipation of a recovery in ROE and stable earnings.

Coverage earnings estimates

POSCO (KRW bn)	FY2014	FY2015	FY2016	FY2017	FY2018F	FY2019F
Total Revenue	65,098	58,192	53,084	60,655	63,574	65,481
Operating Profit	3,214	2,410	2,844	4,622	4,891	5,056
EBITDA	6,452	5,628	6,058	7,807	8,110	8,220
EBIT	3,214	2,410	2,844	4,622	4,891	5,056
Profit Before Tax (After-EI)	1,378	181	1,433	4,179	4,286	4,486
Net Profit (After-EI)	626	181	1,363	2,790	3,129	3,275
EV/ EBITDA (X)	8.2	8.2	7.7	5.9	5.3	4.9
Return on Average Equity (ROAE) %	1.5%	0.4%	3.3%	6.4%	6.9%	6.7%
EPS (After-EI)	7,181	2,072	15,637	32,001	35,883	37,559
EPS (After EI) Growth (%) (YoY)	-55%	-71%	655%	105%	5%	0%
P/E (X)	48.7	168.7	22.4	10.9	9.7	9.3
Price/ BVPS (X)	0.7	0.7	0.7	0.6	0.6	0.6
Hyundai Steel Co. (KRW bn)	FY2014	FY2015	FY2016	FY2017	FY2018F	FY2019F
Total Revenue	16,762	16,133	16,692	19,166	19,965	20,453
Operating Profit	1,491	1,464	1,445	1,371	1,451	1,507
EBITDA	2,672	2,569	2,807	2,725	2,865	2,912
EBIT	1,483	1,295	1,419	1,336	1,458	1,492
Profit Before Tax (After-EI)	1,099	927	1,130	1,078	1,221	1,275
Net Profit (After-EI)	765	734	819	726	823	859
EV/ EBITDA (X)	5.9	6.5	5.6	5.9	5.4	5.1
Return on Average Equity (ROAE) %	5.7%	5.1%	5.2%	4.4%	4.8%	4.8%
EPS (After-EI)	6,562	5,866	6,136	5,443	6,167	6,437
EPS (After EI) Growth (%) (YoY)	-19%	-11%	5%	-11%	4%	0%
P/E (X)	7.9	8.8	8.4	9.5	8.4	8.0
Price/ BVPS (X)	0.4	0.5	0.4	0.4	0.4	0.4
Seah Besteel Corp (KRW bn)	FY2014	FY2015	FY2016	FY2017	FY2018F	FY2019F
Total Revenue	2,202	2,527	2,531	3,055	3,121	3,136
Operating Profit	175	222	143	189	196	204
EBITDA	272	379	313	364	379	388
EBIT	181	245	162	200	208	215
Profit Before Tax (After-EI)	163	215	133	173	190	214
Net Profit (After-EI)	124	151	89	127	136	153
EV/ EBITDA (X)	4.0	5.5	5.8	4.8	4.2	3.6
Return on Average Equity (ROAE) %	8.5%	10.2%	5.5%	7.1%	7.1%	7.5%
EPS (After-EI)	3,444	4,208	2,473	3,546	3,796	4,277
EPS (After EI) Growth (%) (YoY)	18.8%	22.2%	-41.2%	43.4%	12.7%	0.0%
P/E (X)	7.3	6.0	10.2	7.1	6.6	5.9
Price/ BVPS (X)	0.6	0.6	0.5	0.5	0.5	0.4
Angang (RMB m)	FY2014	FY2015	FY2016	FY2017	FY2018F	FY2019F
Total Revenue	74,046	52,759	57,882	81,754	82,327	82,940
Operating Profit	4,275	-1,053	3,871	6,086	6,811	7,215
EBITDA	6,835	1,508	6,357	9,699	10,406	10,811
EBIT	2,851	-2,417	2,906	6,103	6,811	7,215
Profit Before Tax (After-EI)	1,579	-3,763	1,620	5,092	5,931	6,555
Net Profit (After-EI)	928	-4,593	1,616	5,006	5,833	5,027
EV/ EBITDA (X)	9.5	40.0	10.2	6.4	5.5	4.9
Return on Average Equity (ROAE) %	2.0%	-10.1%	3.7%	10.7%	11.5%	9.3%
EPS (After-EI)	0.13	-0.63	0.22	0.69	0.81	0.69
EPS (After EI) Growth (%) (YoY)	20.5%	-594.9%	-135.2%	209.8%	-13.8%	0.0%
P/E (X)	49.8	-10.1	28.6	9.2	7.9	9.2
Price/ BVPS (X)	1.0	1.1	1.0	0.9	0.9	0.8
Maanshan (RMB m)	FY2014	FY2015	FY2016	FY2017	FY2018F	FY2019F
Total Revenue	36,086	44,110	61,396	87,932	94,140	98,904
Operating Profit	8,591	8,061	11,952	14,514	17,503	19,894
EBITDA	12,238	12,197	18,760	20,048	25,613	28,291
EBIT	9,126	7,553	13,110	13,382	18,917	21,395
Profit Before Tax (After-EI)	7,328	5,336	9,764	9,435	15,032	17,850
Net Profit (After-EI)	5,314	3,707	6,850	6,536	10,413	12,365
EV/ EBITDA (X)	5.6	7.1	5.8	5.8	4.5	4.0
Return on Average Equity (ROAE) %	18.1%	11.0%	17.0%	13.7%	18.9%	19.3%
EPS (After-EI)	0.89	0.59	0.96	0.86	1.20	1.42
EPS (After EI) Growth (%) (YoY)	-6.4%	-33.6%	62.4%	-9.9%	18.4%	0.0%
P/E (X)	8.0	12.0	7.4	8.2	5.9	5.0
Price/ BVPS (X)	1.3	1.3	1.1	1.1	1.0	0.9

Source: DBS Bank

China's supply-side reform continues in 2018

China to complete its steel capacity cut earlier than expected. China announced at the National People's Congress on 5 Mar that it targets to reduce steel production capacity by 30m tons in 2018. Following the successful capacity elimination of 65m tons in 2016 and over 50m tons in 2017, the elimination of 30m tons this year means that China will not only meet its 5-year steel capacity cut target (2016-2020) of 100-150m tons, but also be ahead of schedule. China will also step up its efforts in eliminating "zombie enterprises", through bankruptcy liquidation and reorganisations. Besides, the country will remove 150m tons of coal capacity in 2018, and shut down substandard coal-fired power generating units with capacity of below 300,000kW. In addition, China continues to monitor the substandard steel facilities (intermediate frequency furnaces; IFF) to prevent their return to the market. Tianjin province has recently raised the monetary incentives given to people for reporting illegal operations of IFFs. Despite the earlier doubts over China's successful capacity reduction, the plan has so far been well followed through, thus having a positive impact on global markets.

Tangshan to extend winter production cut measures; the impact on China's total output could be limited. Notably, Hebei's production volume declined 12.6% y-o-y and 11.4% y-o-y in Nov and Dec 2017, respectively, thus attesting to the materialisation of the winter production cut measures in China's biggest steel producing province. In line with China's continued commitment to environmental protection, Tangshan city (in Hebei) will extend its winter production cut measures beyond 15 Mar. From 16 Mar to 14 Nov, the city will require 10-15% cuts in blast furnace utilisation rate. Other cities and provinces could also follow suit and further contribute to lowering steel production volume throughout the year. However, considering that China's steel production still posted y-o-y growth during the winter despite the measures, the risk of production growth in non-restricted regions should persist.

Implementation of environment tax. With effect from 1 Jan 2018, China introduced environmental tax on four categories – water pollution, air pollution, noise pollution and solid wastes. Compared to the previous system of pollutant discharge fee, the tax system more actively encourages emission cuts, by applying different tax rates according to the level of pollution. Also, penalties are now heavier for evaders, with as much as five times the tax in fine (3x previously), and the possibility of applying criminal charges. Given that 100% of tax revenue now goes to local authorities (vs. 90% previously), they should be more incentivised to enforce the tax. According to the State Administration of Taxation, over 260k companies have been identified for the first payment period which started on 1 Apr.

China environment tax details

Pollution Type	Tax Rates
Atmospheric	RMB1.2-12/unit*
Water	RMB1.4-14/unit*
Solid waste	Coal: RMB5/ton Tailings: RMB15/ton Hazardous waste: RMB1,000/ton Smelting slag, coal ash, cinder, and other solid wastes: RMB25/ton
Industrial noise	For exceeding the standard level by: 1-3 dB: RMB350/month 4-6 dB: RMB700/month 7-9 dB: RMB1,400/month 10-12 dB: RMB2,800/month 13-15 dB: RMB5,600/month 16 dB and above: RMB11,200/month

* The pollution equivalent quantity of atmospheric/water pollutants are calculated by dividing the emission amount of each pollutant by the specific pollution equivalent value of said pollutant, as mentioned in the full-text of the law

Source: The National People's Congress of the People's Republic of China, DBS Bank

US steel import reduction vs. China's supply decline

US measure triggers surge in US steel prices. Based on the US Department of Commerce's estimate of steel capacity utilisation of 72.3% for 2017, annual steel production volume would increase by 8.7m tons to 90.6m tons when the utilisation rate reaches its target of 80%. Assuming that the US will reduce its steel imports by the same amount, equivalent to a quarter of its 2017 import level, there will be an additional 8.7m tons of steel (c.0.5% of total global steel consumption in 2017) flowing out to the global market (outside the US). Accordingly, the US's HR price (steelbenchmarker) jumped 12.3% from US838/ton at end-Feb (prior to the Section 232 tariff announcement on 9 Mar) to US$941/ton on 9 Apr.

China to be the key determinant of the resulting impact on global steel market balance. We think that this contraction in US steel import volume may not be detrimental to the global steel market balance. It would be critical to watch whether China's reduction in exports is enough to offset the import reduction in the US. This should be impacted by China's ongoing supply reform – newly adopted environmental tax, capacity cut and China's demand growth domestically. Looking back in 2002, global steel prices have actually risen despite the safeguard measures imposed by the US, on the back of demand expansion from China following its inclusion into WTO.

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STRONG BUY (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)
BUY (>15% total return over the next 12 months for small caps, >10% for large caps)
HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)
FULLY VALUED (negative total return i.e. > -10% over the next 12 months)
SELL (negative total return of > -20% over the next 3 months, with identifiable catalysts within this time frame)

Share price appreciation + dividends

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Dissemination Date: 20 Apr 2018 08:20:37 (SGT)

Sources for all charts and tables are DBS Bank unless otherwise specified.

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