

# STEEL

## *Cornucopia shattered*

December 18, 2008

### Steel consumption likely to decline in 2008 on weak demand

We expect steel consumption to decline Y-o-Y in CY08 itself against our earlier belief of it declining in CY09. Growth in all key end-user sectors such as auto, construction, and industrial production has declined rapidly in the past two months. Chinese consumption, after growing 11% Y-o-Y in H1CY08, declined 5% in Q3CY08 and is expected to grow just 0.6% in CY08. Likewise, consumption in all major western economies is expected to decline 9-10% in CY08.

### Production cuts world over to maintain demand-supply balance

Steel makers globally have responded in a prompt and coordinated manner by voluntarily trimming production by as much as 50% in some cases. A massive destocking is underway and global production also declined 12% in October. Chinese production was down 17% Y-o-Y in October and by another 12% Y-o-Y in November.

### Iron ore and coking coal contracts set to decline 35% and 40%, respectively

The reduced steel production is also expected to reduce significantly the demand for iron ore and coking coal. We expect steel prices to correct more (in USD/tonne terms) than raw material prices. We believe the ~80% correction in iron ore contract prices as reported in the media is unlikely.

### Prices expected to remain under pressure for next two years

In view of the lackluster demand, we expect world average HR coil price to decline 36% in CY09E to USD 563/tonne and further 4% to USD 540/tonne in CY10E. HR coil prices in Europe, US, and China are expected to decline 34-36%, while in India by 25% Y-o-Y in CY09E. Longs are expected to come under more pressure than flats with expected declines of 35-41% Y-o-Y in CY09E and 10% Y-o-Y in CY10E.

### EBITDA/tonne for non-integrated players may decline 60-80% in CY09E

We continue to believe the decline in raw material prices will not be enough for non-integrated players to cover the effects of reduced steel realisations. Hence, we expect EBITDA/tonne for non-integrated European and US players to decline 65-80% Y-o-Y; for Chinese players, we expect a reduction of 60% Y-o-Y. For most major Indian players, we expect a 25-65% decline in FY10E since they are partially integrated. For European players, CY10E is expected to be the worst year in a decade in EBITDA terms.

### Outlook: Revising FY10 EPS estimates slightly; retaining underweight stance

We have revised FY10 EPS estimates for major companies under coverage. For Steel Authority of India (SAIL) and Jindal Steel and Power (JSPL), we have revised estimates slightly upwards due to reduced coking coal cost and stable merchant power business, respectively. For Tata Steel and JSW Steel, the estimates are revised downwards 6% and 3%, respectively, on less raw material integration. Compared to FY09, the EPS estimates are broadly stable for JSPL, down 12% for JSW, and 65-70% for Tata Steel and SAIL. We maintain our underweight stance on the sector.

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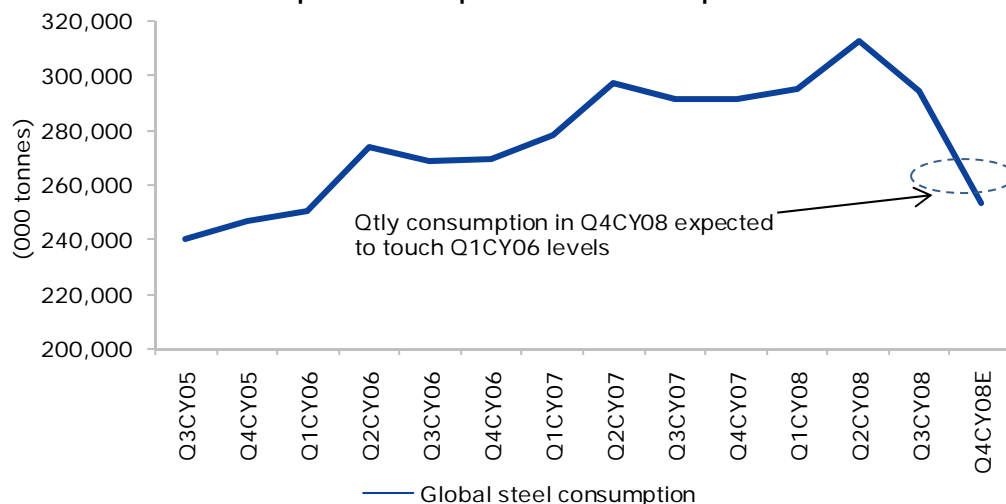
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### Demand woes worsen: Q4CY08 consumption expected at 11 quarters low

We expect steel consumption to decline further in Q4CY08 compared to Q3CY08; a rather tepid end to an extraordinary beginning. We expect steel consumption in Q4CY08 to decline 14% Q-o-Q (13% Y-o-Y) to about 253 mt, taking the full year consumption to 1.12 bn tonnes, a decline of 0.9% Y-o-Y, and marking the end of continuous yearly growth since 1999.

**Chart 1: Q4CY08 consumption level expected to fall to 11 quarters low**



Source: CRU, Edelweiss research

In our latest report, *Melting away*, dated November 12, we had estimated steel consumption to grow 3% Y-o-Y in CY08 to about 1.24 bn tonnes. However, with no signs of revival in demand, we expect steel consumption to decline 0.9% Y-o-Y to 1.12 bn tonnes in CY08. While, Europe and NAFTA are expected to show most precipitous declines, other regions are expected to remain just about stable.

**Table 1: Steel consumption expected to decline in CY08 itself**

Regions	(mn tonnes)				
	2006	2007	2008E	2009E	2010E
EU (27)	186.3	193.2	149.8	119.8	101.9
Other Europe	29.4	31.3	34.4	32.7	31.4
CIS	48.0	54.9	54.7	56.6	59.2
NAFTA	155.6	141.5	137.3	109.9	93.4
Central and South America	36.5	41.6	65.8	67.1	70.1
Africa	24.1	25.4	25.5	26.4	27.6
Middle East	35.4	47.6	49.2	46.7	48.8
China	361.3	408.3	413.9	417.0	435.7
Asia (inc China)	601.3	664.5	680.6	685.4	709.2
<b>World</b>	<b>1124.6</b>	<b>1208.5</b>	<b>1197.3</b>	<b>1144.6</b>	<b>1141.5</b>
% increase (Y-o-Y)	9.0	7.5	(0.9)	(4.4)	(0.3)

Source: CRU, Edelweiss research

The change in our estimates is an offshoot of credit crunch and retarded activity in key end-user sectors in the current quarter. In Q4CY08, we expect growth in construction, automotive, industrial, and housing sectors across the western world, China, and Japan to decline.

**Table 2: Severe slowdown across all key sectors**

	Q1CY08	Q2CY08	Q3CY08	Q4CY08F
<b>US</b>				
GDP (2)	2.5	2.1	(0.3)	0.0
Industrial production (1)	0.1	(0.8)	(1.5)	(1.6)
Total construction IP (1)	(1.9)	(1.1)	(1.8)	(1.7)
Housing starts (000) (3)	1053	1025	877	820
CV production (mn units)	1.4	1.2	1.2	1.2
Car production (mn units)	1.0	0.9	0.9	0.9
<b>Western Europe</b>				
Eurozone GDP (2)	2.1	1.4	0.6	(0.2)
Germany industrial production (1)	1.6	(1.6)	(1.2)	(1.9)
France industrial production (1)	0.0	(1.5)	(0.7)	(0.8)
Italy industrial production (1)	0.8	(0.8)	(0.4)	(0.7)
UK industrial production (1)	(0.5)	(0.7)	(1.1)	(1.8)
Construction IP - Germany (1)	7.4	(7.2)	(0.9)	(0.2)
Construction IP - France (1)	0.8	(2.7)	(0.6)	(1.3)
Construction IP - Italy (1)	0.9	(0.2)	(0.6)	(0.9)
Construction IP - UK (1)	0.8	0.1	(0.9)	(1.9)
German housing permits (000)	40.3	47.5	45.1	41.6
French housing starts (000)	90.0	79.5	110.6	90.0
English housing starts (000)	32.8	34.4	22.2	27.7
Germany car output (mn units)	1.4	1.4	1.3	1.2
France car output (mn units)	0.7	0.6	0.5	0.5
Italy car output (mn units)	0.2	0.2	0.2	0.2
UK car output (mn units)	0.4	0.4	0.4	0.4
<b>Japan</b>				
GDP (2)	1.2	0.8	0.6	(0.5)
Industrial production (1)	(0.7)	(0.8)	(1.2)	(1.3)
Total construction IP (1)	0.0	(0.9)	0.2	(1.1)
Housing starts (000)	253.9	289.7	291.3	280.0
Car output (mn units)	2.5	2.5	2.5	2.4
CV output (mn units)	0.2	0.4	0.4	0.4
<b>China</b>				
GDP (2)	10.6	10.1	9.0	8.1
Industrial production (2)	16.4	15.9	13.0	8.0

Source: CRU, Edelweiss research

Note: (1) % change on previous period; (2) % change year-on-year; (3) seasonally adjusted annualised

In the US, fixed investment contracted 1.9% in the third quarter, with residential investment plunging 19.1% Q-o-Q (annualised). The housing sector continues to slide with housing starts in Q4CY08 expected to decline 22% compared to the beginning of the year with new single-family home sales in September down 33.1% Y-o-Y despite a slight improvement on the 17-year low reached in August.

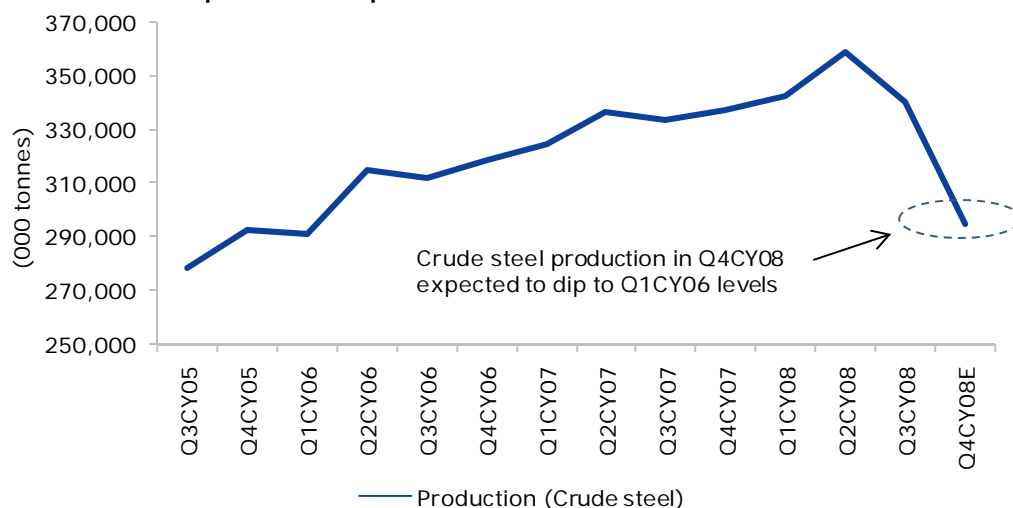
In western Europe, the situation is worsening with negative growth rates expected to continue for the third consecutive quarter in construction and industrial production. The European Commission's key Euro-zone Economic Sentiment Indicator plunged from 87.5 in September to 80.4 in October, a 15-year low. Further, the sharp fall in the German IFO sub-index for business expectations from 86.5 in September to a new record low of 81.4 in October points to a severe downturn in the region's largest economy, as the global economic slowdown accelerates.

In Q4CY08, the Chinese GDP growth rate is expected at just 8.1% Y-o-Y (Q1CY08: 10.6%) while IP growth is expected at 8.0% Y-o-Y (Q1CY08: 16.4%).

### Supply: Production cuts have plunged global capacity utilisation to below 65%

Steel makers globally have embarked on production cuts of 30-50%. ArcelorMittal led the way after announcing cuts of 30-35% in western European and US plants, and about 45-50% in East European plants, followed by other European and US peers. Russian producers have also been cutting production to the same extent. Recently, Tokyo Steel has increased its production cut to 50% compared with the original plan of 20-30% cut. Hence, we expect global crude steel production to dip to 295 mt in Q4CY08, down 12.4% Y-o-Y and 13.4% Q-o-Q.

**Chart 2: Q4CY08 production expected to fall 12.4% Y-o-Y**



Source: CRU, Edelweiss research

In our latest report, *Melting away*, we had expected steel production to grow 3.1% Y-o-Y to about 1.38 bn tonnes in CY08. However, based on the continuing production cuts, we expect global crude steel production to decline 0.6% Y-o-Y to 1.33 bn tonnes in CY08. While Europe and NAFTA are expected to show most precipitous declines, growth in Latin America is expected to be good.

**Table 3: Global steel production expected to decline in CY08**

Region	(mn tonnes)				
	2006	2007	2008E	2009E	2010E
EU (27)	206.8	210.2	190.5	157.4	137.3
Other Europe	36.4	30.5	33.5	34.2	35.4
CIS	119.8	124.0	123.1	127.2	132.9
NAFTA	131.7	132.8	130.1	106.8	92.7
Central and South America	45.3	48.3	53.6	55.5	58.0
Africa	18.8	18.8	18.8	19.5	20.4
Middle East	15.4	16.5	17.1	16.6	16.5
China	422.7	489.2	492.7	492.7	514.8
Asia (inc China)	675.6	754.6	760.1	741.4	756.2
<b>World</b>	<b>1250.0</b>	<b>1344.3</b>	<b>1335.5</b>	<b>1266.8</b>	<b>1257.3</b>
% increase (Y-o-Y)	9.1	7.5	(0.6)	(5.1)	(0.7)

Source: CRU, Edelweiss research

Chinese production is expected to grow just 0.7% Y-o-Y to about 493 mt in CY08 compared to a 15.8% Y-o-Y growth in CY07 and 10% Y-o-Y in H1CY08.

### Iron ore and coking coal contract prices may fall 35% and 40% Y-o-Y, respectively

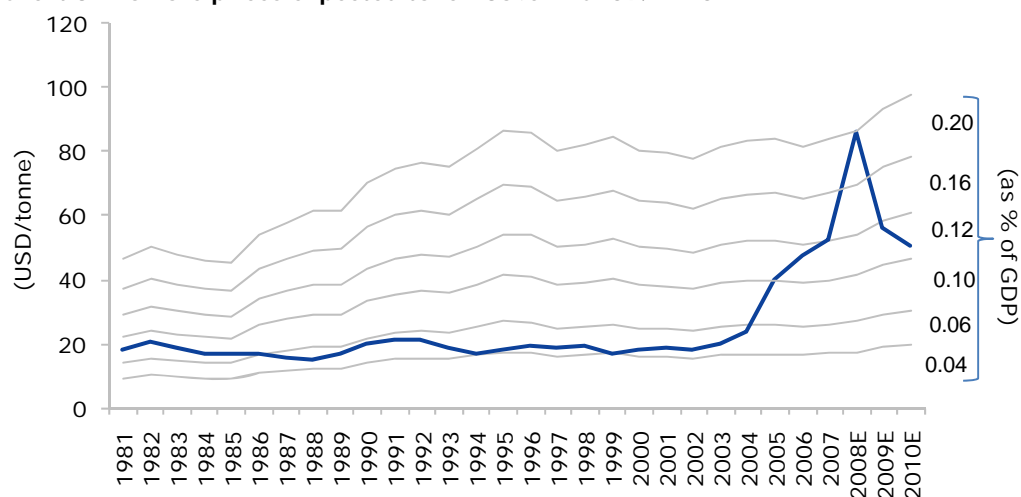
We had expected iron ore and coking coal contract prices to fall 25% and 10%, respectively, in CY09/FY10E. However, with softening demand and production cuts worldwide gaining momentum, we now expect these to weaken further.

#### Iron ore contract prices likely to decline 35% (earlier estimate 25%)

Global iron ore prices have soared year-on-year since 2002 on strong demand from emerging economies. For instance, Chinese iron ore imports surged from 112 mt in 2002 to an expected 430 mt in 2008 (CAGR: 25%).

Iron ore miners gained more than steel companies in the earlier round of market booms. The big three iron ore producers—Vale, Rio Tinto, and BHP Billiton— have seen their gross profit rate averaged at over 130% during 2002-07, with the highest at 173% in 2006 and the lowest of 104% in 2003. However, steel mills have secured much less in the same period. Hence, in the current downturn we expect steel producers to exert sufficient pressure on iron ore miners to reduce prices.

**Chart 3: Iron ore prices expected to fall 35% in CY09/FY10E**



Source: World Steel Dynamics, Edelweiss research

We expect global steel output to drop by 5% in CY09 and hence, global ore demand will drop by 70-80 mt next year. Meanwhile, imported iron ore at Chinese seaports adds up to 70 mt, sufficient for two months' production for home mills.

On the supply side, the big three global ore miners plan to trim production to tackle the iron ore market reversal, with Rio Tinto expected to cut production by almost 17 mt, Vale by 30 mt, and BHP by 15 mt.

However, on weak demand conditions we expect iron ore contract prices to decline 35% to USD 56/tonne in CY09E and further 20% to USD 45/tonne in CY10E.

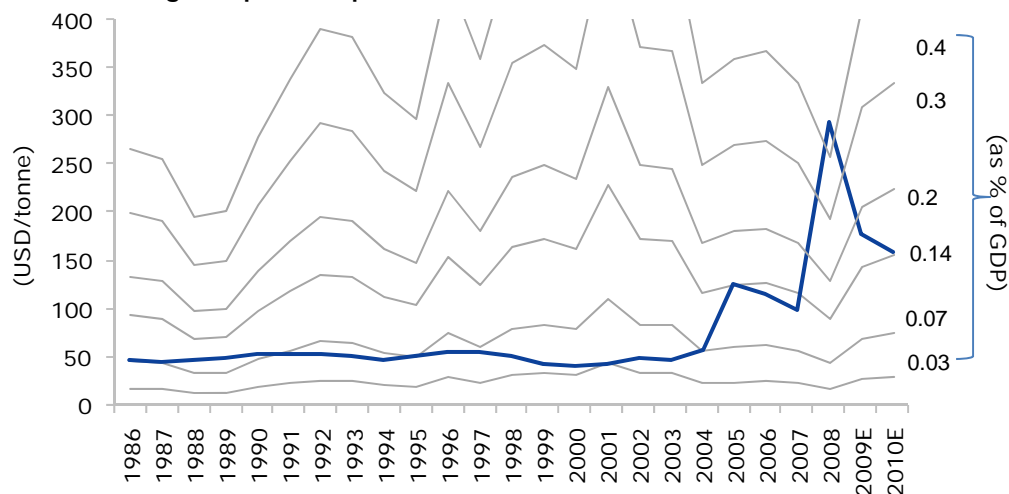
#### Coking coal contract prices likely to decline 40% (earlier estimate 10%)

Coking coal prices had held up better than other products until October. The price in November dropped to about USD 150/tonne FOB Australia from USD 275/tonne in October. However, we believe spot market volumes are much thinner in the coking coal market compared to the one for iron ore and hence, spot prices may not reflect contract prices.

We also believe issues here are similar to those in iron ore as regards fall in steel production. Further weakness in coking coal market stems from the fact that some producers such as

Corus already have sufficient coking coal inventories and are not buying. Additionally, some producers such as JSW Steel may also use scrap temporarily to save on coking coal costs.

**Chart 4: Coking coal prices expected to fall 40% in CY09/FY10E**



Source: World Steel Dynamics, Edelweiss research

Recently, coking coal producers have also taken steps (akin to iron ore miners) to adjust production. For instance, Xstrata has shut down half its coking coal production at Oaky Creek Number One project in Queensland, Macarthur Coal also announced job and production cuts at its Australian mines while lowering its profit guidance for 2008-09.

Hence, we believe coking coal contracts in CY09E will be negotiated at 40% less at USD 177/tonne compared to CY08. In CY10E, we expect prices to dip by another 15% to USD 151/tonne.

#### Historically, raw material prices have declined less than steel prices

While we expect iron ore and coking coal prices to decline substantially from current levels, we also believe the downside risk to our assumptions is fairly limited. Historically, whenever steel prices have declined Y-o-Y, raw material prices have declined less in comparison.

We consider three downturn periods—1982-83, 1990-92, and 1998-2001—to illustrate our view. In 1982-83, steel prices declined 8% and 16% in two years; however, iron ore declined only in 1983 by about 11%. In 1990-92, steel prices declined 13-20% for three years in succession, while decline in coking coal prices was limited to 2%.

**Table 4: Dip in raw material prices has been much less than in steel in slowdown**

Year	change in prices (%)		
	HRC	Iron Ore	Coking Coal
1982	(8.3)	15.7	
1983	(15.9)	(10.8)	
1990	(20.0)	16.1	9.0
1991	(13.7)	8.0	(1.9)
1992	(12.7)	(0.5)	(1.0)
1998	(25.1)	2.9	(4.9)
1999	(1.2)	(11.0)	(17.7)
2000	9.7	4.4	(5.1)
2001	(29.8)	4.3	7.5

Source: World Steel Dynamics, Edelweiss research

Similarly, in 1998-2001, when steel prices declined 25-30% Y-o-Y for a couple of years, decline in raw material prices was at 18% utmost. This has resulted in raw material cost declining much less compared to steel prices, leading to compression in margins of steel makers.

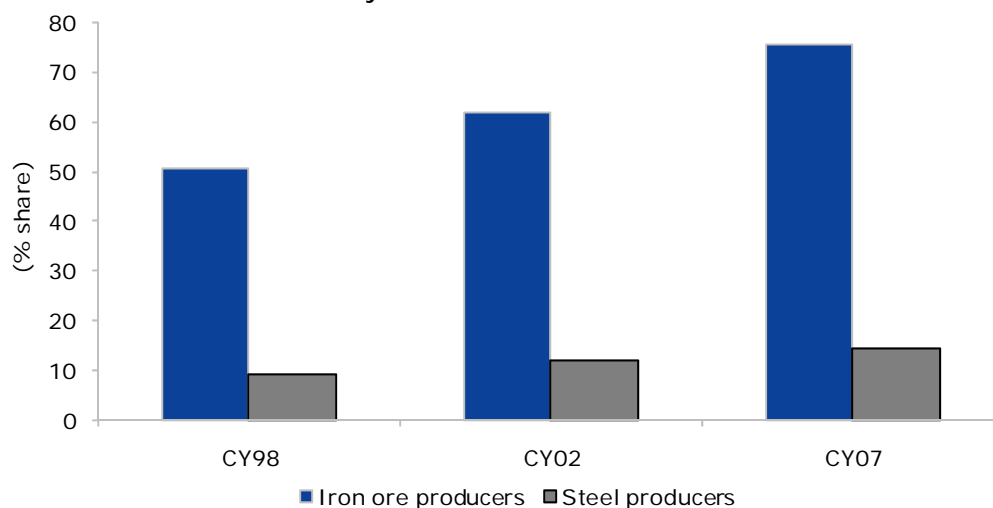
**Table 5: Situation is not any different even in absolute terms (USD/tonne)**

Year	Absolute change in prices (USD/tonne)			Raw material cost change
	HR coil	Iron ore	Coking coal	
		A	B	$1.6 * A + 1 * B$
1982	(24)	3		
1983	(42)	(2)		
<b>Total</b>	<b>(66)</b>	<b>1</b>		
1990	(82)	3	4	9
1991	(45)	2	(1)	2
1992	(36)	(0)	(1)	(1)
<b>Total</b>	<b>(163)</b>	<b>4</b>	<b>3</b>	<b>10</b>
1998	(84)	1	(3)	(2)
1999	(3)	(2)	(9)	(12)
2000	24	1	(2)	(1)
2001	(81)	1	3	4
<b>Total</b>	<b>(144)</b>	<b>(0)</b>	<b>(11)</b>	<b>(11)</b>

Source: World Steel Dynamics, Edelweiss research

This divergence in decline can be explained by the relative consolidation in the industry. The iron ore industry (and likewise coking coal producers) is much more consolidated than the steel industry. Top 3 producers control about 75% of iron ore production compared to just 15% in the case of steel.

**Chart 5: Raw materials industry is more concentrated than steel**



Source: World Steel Dynamics, Edelweiss research

Hence, while we expect iron ore and coking coal prices to decline at unprecedented rates, we also believe the decline will not be abysmal owing to better bargaining power of raw material producers.

#### **Global HR coil price may dip 36% Y-o-Y to USD 563/tonne in CY09E**

Steel prices across the globe have decreased rapidly since October. World average HR coil price for Q4CY08 (QTD) is currently at USD 698/tonne, down more than 35% Q-o-Q. Price declines have been massive in the Middle East (44% Q-o-Q), Southern Europe (38% Q-o-Q),

and China (37% Q-o-Q). Currently, HR coil price is the lowest in China and Middle East, at USD 485-500/tonne.

It is noteworthy that the World-China HR coil spread has reduced to just USD 93/tonne in December 2008 compared to USD 283/tonne in Q3CY08. Hence, in the short term we expect the impact of Chinese exports to be less, helping maintain the supply-demand balance.

**Table 6: World HR coil price down 35.2% Q-o-Q in Q4CY08 (YTD)**

	(USD/tonne)								
	Dec-08	Q4CY08 (QTD)	Q4CY07	% chg (Y-o-Y)	Q3CY08	% chg (Q-o-Q)	YTD- CY08	YTD- CY07	% chg (YTD)
World	578	698	635	9.9	1,078	(35.2)	890	605	47.2
Russia	700	745	647	15.3	1,183	(37.0)	933	583	60.0
North Europe	691	821	713	15.1	1,110	(26.0)	941	678	38.8
South Europe	642	710	695	2.1	1,145	(38.0)	940	660	42.5
US	635	820	593	38.5	1,169	(29.8)	959	595	61.3
Japan	743	831	631	31.6	1,055	(21.2)	912	599	52.4
Middle East	500	611	675	(9.4)	1,100	(44.4)	887	624	42.3
China	485	502	583	(13.9)	795	(36.9)	699	538	30.0
India	624	693	731	(5.3)	877	(21.0)	817	690	18.3

Source: Steel Business Briefing, Edelweiss research

Longs prices have also declined rapidly in all regions. After a phenomenal increase in Q2CY08 and Q3CY08 prices have fallen to less than even Q4CY07 levels. Overall, world rebar price is down 40% Q-o-Q to USD 628/tonne; prices declined 50-60% in Europe, Russia, Turkey, and the Middle East. Currently, rebar price in the Middle East is at USD 435/tonne (lowest in the world), down nearly 57% Q-o-Q. World-China rebar spread has reduced to just USD 125/tonne in December 2008 compared to USD 265/tonne in Q3CY08.

**Table 7: World rebar price down 40.2% Q-o-Q in Q4CY08 (YTD)**

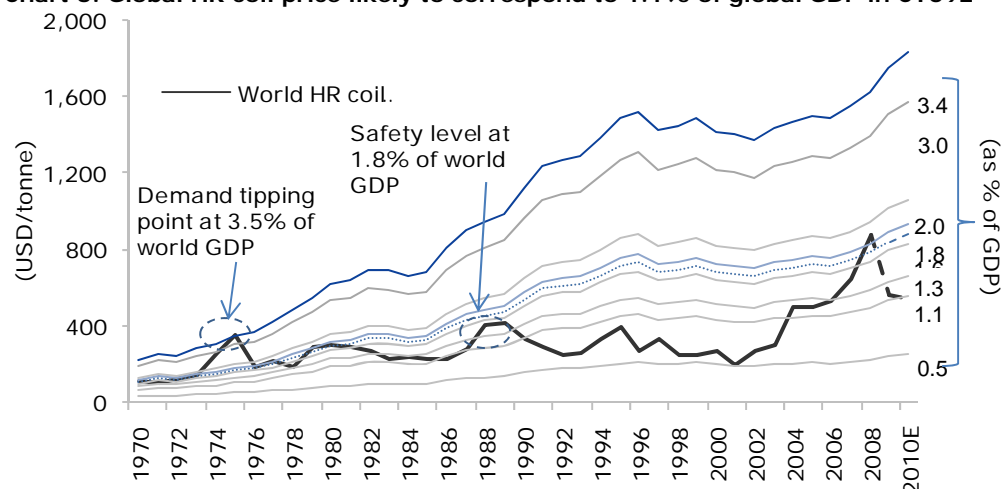
	(USD/tonne)								
	Dec-08	Q4CY08 (QTD)	Q4CY07	% chg (Y-o-Y)	Q3CY08	% chg (Q-o-Q)	YTD- CY08	YTD- CY07	% chg (YTD)
World	560	628	606	3.7	1,050	(40.2)	842	576	46.1
Russia	490	554	571	(3.0)	1,173	(52.8)	864	541	59.6
Europe	556	602	656	(8.3)	1,214	(50.5)	948	665	42.4
US	618	758	608	24.7	1,004	(24.6)	819	590	38.7
Turkey	495	562	567	(0.9)	1,366	(58.9)	971	566	71.7
Middle East	435	576	626	(7.9)	1,336	(56.9)	972	601	61.8
China	601	663	690	(4.0)	784	(15.4)	765	616	24.2
India	507	536	557	(3.8)	751	(28.6)	670	468	43.1

Source: Steel Business Briefing, Edelweiss research

#### **CY09E world HR coil price expected to correspond to 2003 levels in terms of GDP**

In our report, *Melting away*, we had predicted steel price to fall further in CY08 as it was not within the safety zone. We had expected prices in CY09 and CY10 to correspond to 1.4% and 1.2% of GDP spend, respectively.



**Chart 6: Global HR coil price likely to correspond to 1.1% of global GDP in CY09E**

Source: World Steel Dynamics, Edelweiss research

We now expect prices and consumption to fall further in CY09E and CY10E on weak demand and correspond to 1.1% and 1.0% of GDP spend, respectively. However as earlier, we expect prices to remain slightly below the marginal cost for both the years.

**Table 8: Global HR coil price expected to remain below marginal cost in CY09E and CY10E**

	(USD/tonne)	
	World HRC price	World marginal cost
CY07	648	598
CY08E	875	785
CY09E	563	588
CY10E	540	553
<b>Steel spend as % of GDP</b>		
CY07	1.4	
CY08E	1.9	
CY09E	1.1	
CY10E	1.0	

Source: World Steel Dynamics, Edelweiss research

**Cutting price estimates for FY10 and FY11**

We have reduced our price estimates for FY10 by 16-17% for Europe/US HR coil compared to our earlier estimates. We expect European prices to come at USD 606/tonne in FY10E, down 32% Y-o-Y, and US prices to come at USD 608/tonne, down about 34% Y-o-Y, on lackluster demand conditions. Compared to our earlier estimates, these are down 16-17%. Although we expect reduced iron ore and coking coal costs to provide a benefit of almost USD 100/tonne from our earlier estimates, the reduction in revenue is slightly higher at USD 117/tonne. In FY11E, we expect a further moderation of 4-5% in prices.

We expect HR coil prices to come off by 23%Y-o-Y in FY10E for Indian producers; compared to our earlier estimate, this is down 9%. The Europe-India HR spread is expected to decline from USD 148/tonne in FY09E to USD 26/tonne in FY10E.

Table 9: Flats may decline 22-33% and longs 20-40% in FY10E

	(USD/tonne)													
	FY08		FY09E				FY10E				FY11E			
	Actual	New Est.	% chg		% diff	% chg		% diff	% chg		% diff			
		Y-o-Y	Old Est.	New Est.		Y-o-Y	New Est.		Y-o-Y	Old Est.				
<b>HRC</b>														
US	624	914	46.5	976	(6.4)	608	(33.5)	735	(17.3)	578	(4.8)	697	(17.0)	
Europe	713	889	24.7	945	(5.9)	606	(31.8)	723	(16.2)	576	(4.8)	686	(16.0)	
India	734	751	2.3	766	(2.0)	580	(22.8)	637	(9.0)	555	(4.2)	624	(11.1)	
<b>Rebars</b>														
US	673	783	16.3	815	(3.9)	527	(32.7)	600	(12.1)	481	(8.7)	547	(12.1)	
Europe	693	836	20.6	898	(6.9)	505	(39.6)	611	(17.4)	460	(8.7)	557	(17.4)	
India	679	678	(0.1)	667	1.6	541	(20.2)	528	2.4	517	(4.4)	505	2.4	

Source: SBB, Edelweiss research

In rebars, we expect realisations to come off by almost 40% Y-o-Y and 33% Y-o-Y for European and US players, respectively. Compared to our earlier estimates, FY10 prices are down 12-17% for European/US players. Thus far in CY08, rebar prices have moderated by over 60% in Europe and 40% in the US from peak levels. Based on the weak outlook for the construction sector in the West, we have trimmed our estimates further. In FY11E, we expect a further moderation of 8-9% in Europe/US.

For Indian producers, we expect rebars to decline 20% Y-o-Y. The decline is much less compared to European/US players owing to the better demand outlook. Based on Q4CY08 prices, the revised estimates are slightly ahead of the previous ones. In FY11E, we expect a moderation of just 4% Y-o-Y in India, almost half compared to Europe/US due to better demand fundamentals.

#### EBITDA/tonne for non-integrated players expected to decline 60-80% in CY09E

We expect EBITDA/tonne for non-integrated players to decline by almost 70% in Europe and 79% in the US in CY09E. For Chinese players we expect a decline of 60% since prices have begun to bottom out there and in absolute terms we do not expect much further decline.

Table 10: EBITDA/tonne for European/Chinese players in FY10 to decline to 10 year low

	(USD/tonne)								
	CY06	CY07	Y-o-Y chg (%)	CY08E	Y-o-Y chg (%)	CY09E	Y-o-Y chg (%)	CY10E	Y-o-Y chg (%)
<b>Revenue</b>									
Europe	613	710	15.8	930	31.0	618	(33.6)	578	(6.6)
US	613	592	(3.4)	940	58.7	620	(34.0)	579	(6.6)
China	398	448	12.6	650	45.0	416	(36.0)	391	(6.0)
<b>EBITDA</b>									
Europe	134	171	27.6	141	(17.7)	50	(64.6)	46	(7.1)
US	135	44	(67.4)	155	251.2	33	(78.9)	27	(18.1)
China	80	42	(47.5)	59	41.6	24	(59.8)	20	(16.3)
Iron ore (FOB)	47.4	51.9	9.5	85.7	65.0	55.7	(35.0)	44.6	(20.0)
Coking coal (FOB)	89.5	98.5	10.0	295.5	200.0	177.3	(40.0)	150.7	(15.0)

Source: SBB, Edelweiss research

In our report, *Melting away* we had estimated EBITDA/tonne contraction of 73-75% in CY09. The contraction is higher in the US owing to higher decline in realisation expected there compared to Europe. We expect EBITDA/tonne to decline much less in CY10 owing to the reduced cost compared to our earlier estimates.

We expect CY10E to be the worst year in a decade for European and Chinese players when EBITDA/tonne would be at the lowest.

**Reducing FY10 EPS estimates; retaining 'UNDERWEIGHT' stance**

In India, we expect HR coil prices to decline to USD 543/tonne and rebars to reach USD 511/tonne by Q4FY10E before rising again. Compared with our earlier estimates, yearly average HR coil price is expected to decline 9% (22% Y-o-Y) to USD 580/tonne in FY10E.

On the raw material side, we expect respite in iron ore (our contract estimates are down 35% Y-o-Y) as well as coking coal (contract estimates down 40% Y-o-Y).

Finally, we have also assumed lower sales volumes for FY10—lower 7% for JSW Steel and 12% for SAIL compared to our earlier estimates.

**Table 11: EPS estimates revised slightly—Up for JSPL and SAIL; down for JSW and Tata Steel**

	FY09E			FY10E			% chg FY10 vs FY09
	Current	Previous	% change	Current	Previous	% change	
<b>JSW</b>							
Revenue (INR mn)	175,553	175,557	(0.0)	145,395	171,575	(15.3)	(17.2)
EBITDA (INR mn)	34,809	34,457	1.0	34,010	34,862	(2.4)	(2.3)
PAT (INR mn)	11,853	11,616	2.0	10,387	10,846	(4.2)	(12.4)
EPS (INR)	59.4	58.1	2.2	51.9	53.6	(3.1)	(12.6)
<b>JSPL</b>							
Revenue (INR mn)	100,714	100,714	0.0	96,668	102,851	(6.0)	(4.0)
EBITDA (INR mn)	41,195	41,195	0.0	38,296	36,502	4.9	(7.0)
PAT (INR mn)	18,285	18,285	0.0	17,968	16,678	7.7	(1.7)
EPS (INR)	118.8	118.8	0.0	116.7	108.3	7.7	(1.7)
<b>Tata Steel</b>							
Revenue (INR mn)	1,352,848	1,401,669	(3.5)	918,656	1,096,819	(16.2)	(32.1)
EBITDA (INR mn)	198,365	211,614	(6.3)	139,009	141,204	(1.6)	(29.9)
PAT (INR mn)	80,051	92,729	(13.7)	29,494	31,061	(5.0)	(63.2)
EPS (INR)	89.0	103.9	(14.3)	29.6	31.5	(5.8)	(66.7)
<b>SAIL</b>							
Revenue (INR mn)	433,395	505,842	(14.3)	353,569	408,019	(13.3)	(18.4)
EBITDA (INR mn)	74,872	85,755	(12.7)	27,604	24,466	12.8	(63.1)
PAT (INR mn)	49,760	58,708	(15.2)	15,386	15,040	2.3	(69.1)
EPS (INR)	12.0	14.2	(15.2)	3.7	3.6	2.3	(69.1)

Source: Edelweiss research

For FY09, we have reduced revenue estimates for Tata Steel and SAIL compared to our earlier estimates due to bleak price outlook for Corus in the former and lower-than-expected volumes in the latter.

We expect FY09E realisation at Corus to decline 5% compared to our earlier estimate. For SAIL, we expect sales volume to be lower 21% vis-à-vis our earlier expectation for FY09.

This has resulted in EPS declining 14% and 15% for Tata Steel and SAIL, respectively, for FY09E compared to our earlier estimates.

**Table 12: Revised operational assumptions: Advantage for non-integrated players**

	FY09E			FY10E			% chg FY10 vs FY09
	Current	Previous	% change	Current	Previous	% change	
<b>Volume (mn tonnes)</b>							
JSPL- Steel business	1.6	1.6	-	1.8	1.8	-	13.8
JSW	4.1	4.1	(0.0)	4.4	4.7	(5.8)	6.7
Standalone	3.5	3.5	(0.0)	3.8	4.1	(6.7)	7.9
SISCOL	0.6	0.6	-	0.6	0.6	-	-
Tata Steel	30.3	30.3	-	29.2	29.2	-	(3.4)
India	5.6	5.6	-	6.2	6.2	-	10.7
Corus	19.9	19.9	-	18.4	18.4	-	(7.4)
SEA	4.9	4.9	-	4.7	4.7	-	(3.7)
SAIL	10.8	13.6	(21.2)	11.5	13.1	(12.1)	7.0
<b>Revenue/tonne (USD)</b>							
JSPL- Steel business	1,138	1,138	-	877	954	(8.0)	(22.9)
JSW	811	811	0.0	618	682	(9.3)	(23.7)
Standalone	851	851	0.0	643	711	(9.6)	(24.4)
SISCOL	571	571	-	458	481	(4.8)	(19.8)
Tata Steel	991	1,026	(3.5)	715	853	(16.2)	(27.9)
India	1,107	1,107	-	942	1,000	(5.8)	(14.9)
Corus	1,030	1,085	(5.0)	675	861	(21.6)	(34.5)
SEA	694	694	-	570	626	(9.1)	(17.9)
SAIL	894	869	2.9	699	742	(5.7)	(21.8)
<b>EBITDA/tonne (USD)</b>							
JSPL- Steel business	379	379	-	224	201	11.0	(40.9)
JSW	167	165	1.2	173	156	11.0	3.1
Standalone	196	193	1.2	187	177	5.6	(4.2)
SISCOL	1	1	-	79	6	N/M	N/M
Tata Steel	145	155	(6.3)	108	110	(1.6)	(25.6)
India	500	500	-	407	406	0.2	(18.6)
Corus	64	78	(18.9)	32	31	4.2	(49.5)
SEA	71	71	-	12	29	(58.7)	(83.2)
SAIL	154	147	5.1	55	45	21.3	(64.7)
<b>EBITDA margin</b>							
JSPL- Steel business	33.3	33.3		25.5	21.1		
JSW	20.7	20.4		27.9	22.8		
Standalone	23.0	22.7		29.1	24.9		
SISCOL	0.2	0.2		17.2	1.3		
Tata Steel	14.7	15.1		15.1	12.9		
India	45.2	45.2		43.2	40.6		
Corus	6.2	7.2		4.8	3.6		
SEA	10.2	10.2		2.1	4.6		
SAIL	17.3	16.9		7.8	6.1		

Source: Edelweiss research

For FY10E, we expect JSPL's and SAIL's EPS to increase 7% and 2%, respectively. The increase in JSPL is due to merchant power business, where full 1,000 MW capacity will be operational for the complete year. Compared to our earlier estimates, revenue from steel business is expected to decline 8% Y-o-Y. However, due to lower coking coal/coke prices we expect EBITDA/tonne to expand 11% Y-o-Y to USD 224.

JSW is expected to gain from reduced coking coal contracts. While revenue/tonne is expected to dip almost 24%, we expect EBITDA/tonne to increase 3% to USD 173 in FY10E.

In FY10E, for Tata Steel, we expect benefit to Corus from lower raw material contract prices to be negated by lower steel prices. We expect blended realisation for Tata Steel's Indian operations to decline only 15% owing to relatively stable Ferro alloys and minerals divisions, though steel realisation is expected to decline 22% Y-o-Y. EBITDA/tonne for Tata Steel (India) is expected at USD 407/tonne, broadly unchanged from our earlier estimate and the highest among Indian peers. For South East Asia operations, we expect both revenue and cost to decrease. However, the fall in longs' price is expected to be much more than in flats and we expect EBITDA/tonne to shrink to USD 12/tonne.

We expect SAIL to benefit the most from lower coking coal prices since its entire 13 mt capacity is dependent on the same. However, due to prior year inventory sufficient for at least a quarter, we expect EBITDA/tonne to be 21% higher at USD 55/tonne on revenue/tonne decline of 6% in FY10E compared to our earlier estimates.

#### **Retaining sector and stock specific outlook**

We retain our "underweight" stance on the sector and **'REDUCE'** on all stocks under coverage. We believe there are significant downside risks to demand/volume in particular and to a lesser extent to prices. We had also highlighted the low valuations that steel stocks dip to in a down cycle in our *Melting away* report.

This update will be followed by company-specific notes at a later date.

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### Coverage group(s) of stocks by primary analyst(s): Metals & Mining:

Adhunik Metaliks, Bhushan Steel & Strips, Hindalco Industries, Hindustan Zinc, Jindal Stainless, Jindal Steel & Power, JSW Steel, Monnet Ispat and Energy, National Aluminium Company, Sesa Goa, Steel Authority of India, Sterlite Industries (India), Tata Steel, Usha Martin

#### Recent Research

Date	Company	Title	Price (INR)	Recos
03-Dec-08	<b>Tata Steel</b>	Excellent numbers, but tough times ahead; <i>Result Update</i>	165	Reduce
01-Dec-08	<b>China Steel</b>	All hopes pinned on stimulus package; <i>Sector Update</i>		
24-Nov-08	<b>Metals &amp; Mining</b>	No respite in sight; <i>Sector Update</i>		
17-Nov-08	<b>Steel</b>	Melting away; <i>Sector Update</i>		

#### Distribution of Ratings / Market Cap

##### Edelweiss Research Coverage Universe

	Buy	Accumulate	Reduce	Sell	Total
Rating Distribution*	94	59	14	8	187

\* 10 stocks under review / 1 rating withheld

	> 50bn	Between 10bn and 50 bn	< 10bn
Market Cap (INR)	75	65	47

#### Rating Interpretation

Rating	Expected to
<b>Buy</b>	appreciate more than 20% over a 12-month period
<b>Accumulate</b>	appreciate up to 20% over a 12-month period
<b>Reduce</b>	depreciate up to 10% over a 12-month period
<b>Sell</b>	depreciate more than 10% over a 12-month period

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