WORLD STEEL DYNAMICS®

is a leading steel information service in Englewood Cliffs, N.J., USA

WSD's steel experience, steel database and availability of steel statistics are the principles for performing steel forecasts, studies and analysis for international clients. WSD seeks to understand how the "pricing power" of steel companies the world over will be impacted by changes in the steel industry's structure. The views and opinions expressed in this article are solely those of World Steel Dynamics and not necessarily those of AIST.

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USA steel demand is down, lessened steel intensity

WSD's weighted index (IDX) of activity in steel-consuming industries, used to track changes in steel demand, is up 2% for the first eight months of 2016 on a year-to-year basis (Table 1). The composite year-to-year components of IDX include: the short-lead-time capital goods index is down 4.4%; the long-lead-time capital goods index is up 9.3%, including a 13.2% gain in non-residential construction; and the consumer goods index is up 7.6%, including a 9.8% increase in automotive production.

Steel consumption per point of IDX has been declining in recent years in

Table 1

Components of IDX (2004=100) as of August 2015 and 2016

Indicator	Index figure		Weighted index		Y/Y % chg	Share of index %		Y/Y first 8 months % chg
	Aug 2016*	Aug 2015*	Aug 2016*	Aug 2015*	Aug*	Aug 2015*	Aug 2016*	
CES: Short-Lead-Time Capital Goods								
Oil and gas well drilling	34.2	62.7	1.03	1.88	(45.5)	3.0	0.9	
Railroad rail and miscellaneous	139.6	142.9	4.19	4.29	(2.3)	3.0	3.8	
Business equipment	166.3	168.1	8.32	8.40	(1.0)	5.0	7.6	
Trucks (not seasonally adjusted)	72.5	87.8	5.08	6.15	(17.4)	7.0	4.6	
Fabricated metals	117.7	119.8	14.12	14.38	(1.8)	12.0	12.9	
Non-electrical machinery	135.0	133.8	16.20	16.05	0.9	12.0	14.8	
Total			48.93	51.16	(4.4)	42.0	44.8	(4.9)
CEL: Long-Lead-Time Capital Goods								
Ships and boats construction	97.1	105.0	0.97	1.05	(7.5)	1.0	0.9	
Electrical equipment	130.8	131.7	6.54	6.58	(0.7)	5.0	6.0	
Non-residential construction (NSA)	104.3	92.1	23.99	21.19	13.2	23.0	22.0	
Total			31.50	28.83	9.3	29.0	28.8	9.2
CDIDX: Consumer Goods								
Residential housing (not seasonally adj.)	61.1	58.2	1.83	1.75	5.0	3.0	1.7	
Household appliance	94.7	95.6	3.79	3.82	(1.0)	4.0	3.5	
Automobiles (not seasonally adj.)	116.5	106.1	18.64	16.98	9.8	16.0	17.1	
Total			24.26	22.55	7.6	23.0	22.2	2.3
MIDX: Miscellaneous Industries								
Defense and space equipment	128.1	130.6	1.28	1.31	(1.9)	1.0	1.2	
Farm equipment	73.3	83.5	1.47	1.67	(12.2)	2.0	1.3	
Metal cans	58.8	52.4	1.76	1.57	12.2	3.0	1.6	
Total			4.51	4.55	(0.8)	6.0	4.1	9.1
Total			**109.20**	**107.08**	**2.0**	**100.0**	**100.0**	**0.0**

*=Preliminary data

part because: some price inflation creeps into the government's unit production indices, as the government adjusts the figures for gains in product quality; and when the economy expands at a slower rate, services account for a large share of the overall growth. Interestingly, since 2006, U.S. automotive production has risen 11% to about 12 million units annually; yet the U.S. Bureau of Labor Statistics' producer price index for automotive increased 14%.

Steel scrap price undervalued? Declining demand trumps value

In Fig. 2, the price of 80/20 steel scrap delivered to Turkey is compared to the weighted iron ore/coking coal price — with the iron ore price being the delivered price to China and the coking coal price being the Australian export price.
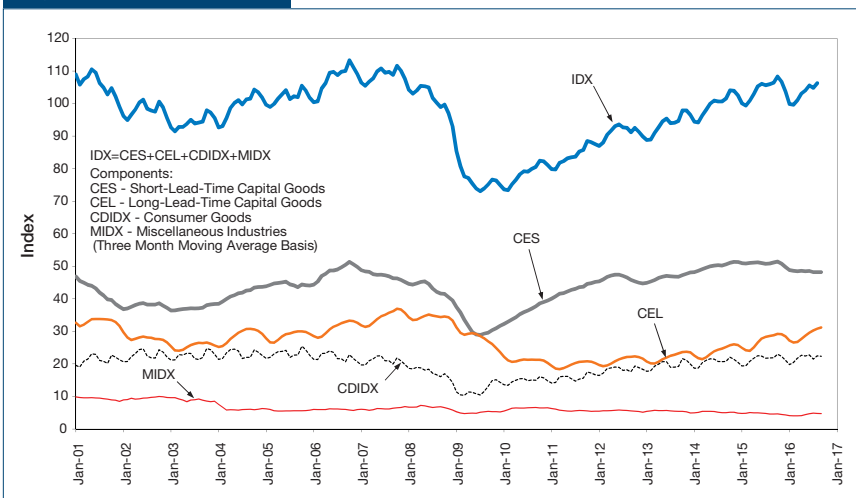
Since spring 2016, the combination of the roughly US$75/metric ton decline in steel scrap price delivered to Turkey and the US$100/metric ton spike in the coking coal price has resulted in about a US$90/metric ton discount in the steel scrap price relative to the weighted iron ore and coking coal prices.

A discount this substantial last persisted in 2014 when U.S. steel demand rose about 9% and steel production in China was up about 100 million metric tons from 2012. And the U.S. dollar on a trade-weighted basis at that time was about 10% cheaper.

Figure 1

IDX=CES+CEL+CDIDX+MIDX
Components:
CES - Short-Lead-Time Capital Goods
CEL - Long-Lead-Time Capital Goods
CDIDX - Consumer Goods
MIDX - Miscellaneous Industries
 (Three Month Moving Average Basis)

Components of WSD Index of Steel Activity, USA (Index: 2004=100).

Figure 2

80/20 HSM scrap delivered to Turkey vs. weighted iron ore/coking coal price index. Sources: WSD estimates, Platts, SteelBenchmarker™.

Given the current scrap price discount, Turkish EAF-based steelmakers will again turn to making rebar in their furnaces, rather than converting it from billet purchased from China or Russia. That is, if the Chinese billet price rises due to the increase in the coking coal price.
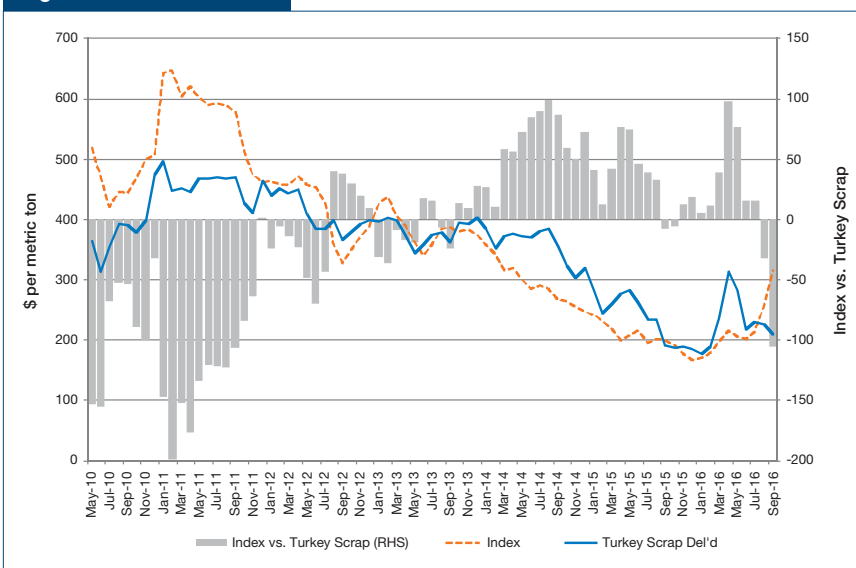
What drives the scrap price — the supply/demand balance or its relative value? What may cause the spread to diminish? If Chinese steel production falls back, as WSD is forecasting, the major driver will be the drop in the coking coal price.