

U.S. Steel Demand Indicator, WSD’s Steel-Consuming Index

For several decades, WSD has been using its Steel-Consuming Index (IDX) — a weighted index of activity for 15 U.S. steel-consuming industries or sectors — to track possible changes in underlying steel demand — that is, apart from mix shifts in the economy, swings in steel intensity (steel consumption per point of GDP) and changes in steel buyer inventory intentions.

As of December 2020, WSD’s IDX was down 0.3% on a year-to-year basis. It was off 8.8% on a full-year 12-month basis, versus 2019, in large part because of the COVID-19-impacted second quarter.

Hence, the rise in the U.S. hot-rolled band price to about US\$1,200/net ton at present versus the low of about US\$440/ton in July 2020 has been in part a function of continued domestic steel supply constraints and steel buyers seeking to add to inventory, both to replenish it and place orders further ahead in order to beat steel price increases. The supply constraints have largely been a function of: (a) the industry operating at only

about 70–75% of derived AISI capacity, as many integrated steel plants have continued to produce well below their capacity; and (b) sharply lower foreign deliveries reflecting both the impact of prior steel trade suits on the imports of foreign steel (subsequently waived in the case of Canada and Mexico as a new three-country trade agreement was finalized) and tight global supply/demand conditions throughout the global steel industry as economies emerge post-COVID-19.

The IDX’s 15 activity level inputs are allocated into four sectors: (a) capital equipment short-lead-time (CES), with an overall weighting of 51.1%; (b) capital equipment long-lead-time (CEL), with a weighting of 27.5%; (c) consumer goods (CDIDX), with a weighting of 19.0%; and (d) miscellaneous (MIDX), with a weighting of 5.0% (Fig. 1).

In December 2020, the CES figure was down 1.1% year to year, with the 12-month figure down 10.5% (Table 1). For CEL, the figures were –6.0% and –5.5%, respectively. For



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.

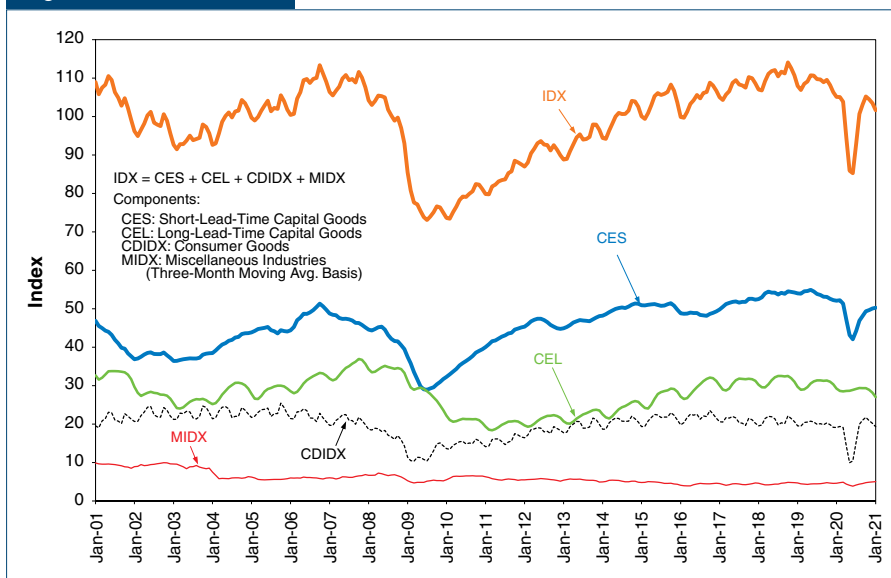


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Figure 1



U.S. components of WSD Index of Steel Activity (index: 2004=100).

Table 1

Components of IDX (2004=100) as of December 2020 and 2019

Indicator	Index figure		Weighted index		Y/Y % chg Dec	Share of index	Share of index Dec 2020	Y/Y first 12 months % chg
	Dec 2020	Dec 2019	Dec 2020	Dec 2019				
CES: Short-Lead-Time Capital Goods								
Oil and gas well drilling	23.5	52.8	0.70	1.58	(55.6)	3.0	0.7	
Railroad rail and miscellaneous	166.8	150.9	5.00	4.53	10.5	3.0	4.9	
Business equipment	161.4	173.8	8.07	8.69	(7.2)	5.0	7.9	
Trucks (not seas. adj.)	83.9	71.9	5.87	5.03	16.7	7.0	5.7	
Fabricated metals	120.2	127.0	14.42	15.24	(5.4)	12.0	14.1	
Non-electrical machinery	141.5	138.0	16.98	16.56	2.5	12.0	16.6	
Total			51.05	51.64	(1.1)	42.0	49.8	(10.5)
CEL: Long-Lead-Time Capital Goods								
Ships and boats construction	101.7	102.9	1.02	1.03	(1.2)	1.0	1.0	
Electrical equipment	130.7	135.2	6.54	6.76	(3.4)	5.0	6.4	
Non-residential construction (not seas. adj.)	86.5	93.1	19.90	21.41	(7.1)	23.0	19.4	
Total			27.45	29.20	(6.0)	29.0	26.8	(5.5)
CDIDX: Consumer Goods								
Residential housing (not seas. adj.)	71.3	52.1	2.14	1.56	37.0	3.0	2.1	
Household appliance	109.6	102.3	4.38	4.09	7.1	4.0	4.3	
Automobiles (not seas. adj.)	78.0	73.4	12.48	11.75	6.2	16.0	12.2	
Total			19.00	17.40	9.2	23.0	18.5	(11.5)
MIDX: Miscellaneous Industries								
Defense and space equipment	146.5	145.4	1.47	1.45	0.8	1.0	1.4	
Farm equipment	96.3	109.9	1.93	2.20	(12.4)	2.0	1.9	
Metal cans	53.3	31.3	1.60	0.94	70.6	3.0	1.6	
Total			4.99	4.59	8.7	6.0	4.9	0.6
Total			102.49	102.84	(0.3)	100	100	(8.8)

CDIDX, they were +9.2% (including +37.0% for residential housing) and -11.5%, respectively. While for MIDX, the figures were +8.7% and +0.6%, respectively.

No doubt, the U.S. economy this past December was clearly in an inventory accumulation mode. Many businesses pared inventory in the second quarter of 2020 because they failed to anticipate the economic rebound that has occurred; and, consumers were catching up in the deferred purchase of consumer durables in the second quarter.

When steel mills' order backlogs are extending, this is always a frightening development for steel buyers — and, in this case, caused a “buyers' panic” with non-contract steel buyers placing orders further ahead.

Have the U.S.'s integrated mills learned to hold back output in order to sustain a higher price? WSD places the odds at one-in-four that this is the case.

For 2021, key steel-demand-related developments will include: (a) the pace at which industrial companies resume their capital spending at a high rate, having cut it back during 2020; (b) the availability of governmental funds for infrastructure projects given the fiscal deficit that will be repeated in 2021; and (c) the extent to which consumer confidence is restored given the likelihood that the country's unemployment rate will remain far above that in 2019. The unemployment rate in December 2020 was 6.7% versus 3.6% in December 2019.

This report includes forward-looking statements that are based on current expectations about future events and are subject to uncertainties and factors relating to operations and the business environment, all of which are difficult to predict. Although WSD believes that the expectations reflected in its forward-looking statements are reasonable, they can be affected by inaccurate assumptions made or by known or unknown risks and uncertainties, including, among other things, changes in prices, shifts in demand, variations in supply, movements in international currency, developments in technology, actions by governments and/or other factors. ◆