

SMU Community Chat

November 30, 2022

Starting at 11 AM Eastern

Michael Cowden, Steel Market Update

Timna Tanners, Wolfe Research



SteelMarketUpdate.com/Blog/SMU-Community-Chat-Webinars

Steel Market Update Team



SMU Newsletter developed for active buyers & sellers of flat rolled steel.

Prices – Momentum – Trends – Analysis – with a guarantee

For more information visit www.SteelMarketUpdate.com

Upcoming Events

Date	Event	Status	Venue
January 17-18	SMU Steel 101 Workshop	Virtual	SteelMarketUpdate.com/Events
February 5-7	Tampa Steel Conference 2023	Live	Tampa Marriot Water Street

For more information about Tampa Steel, including registration info, visit <https://www.tampasteelconference.com/>
Or contact our events team directly at Events@SteelMarketUpdate.com



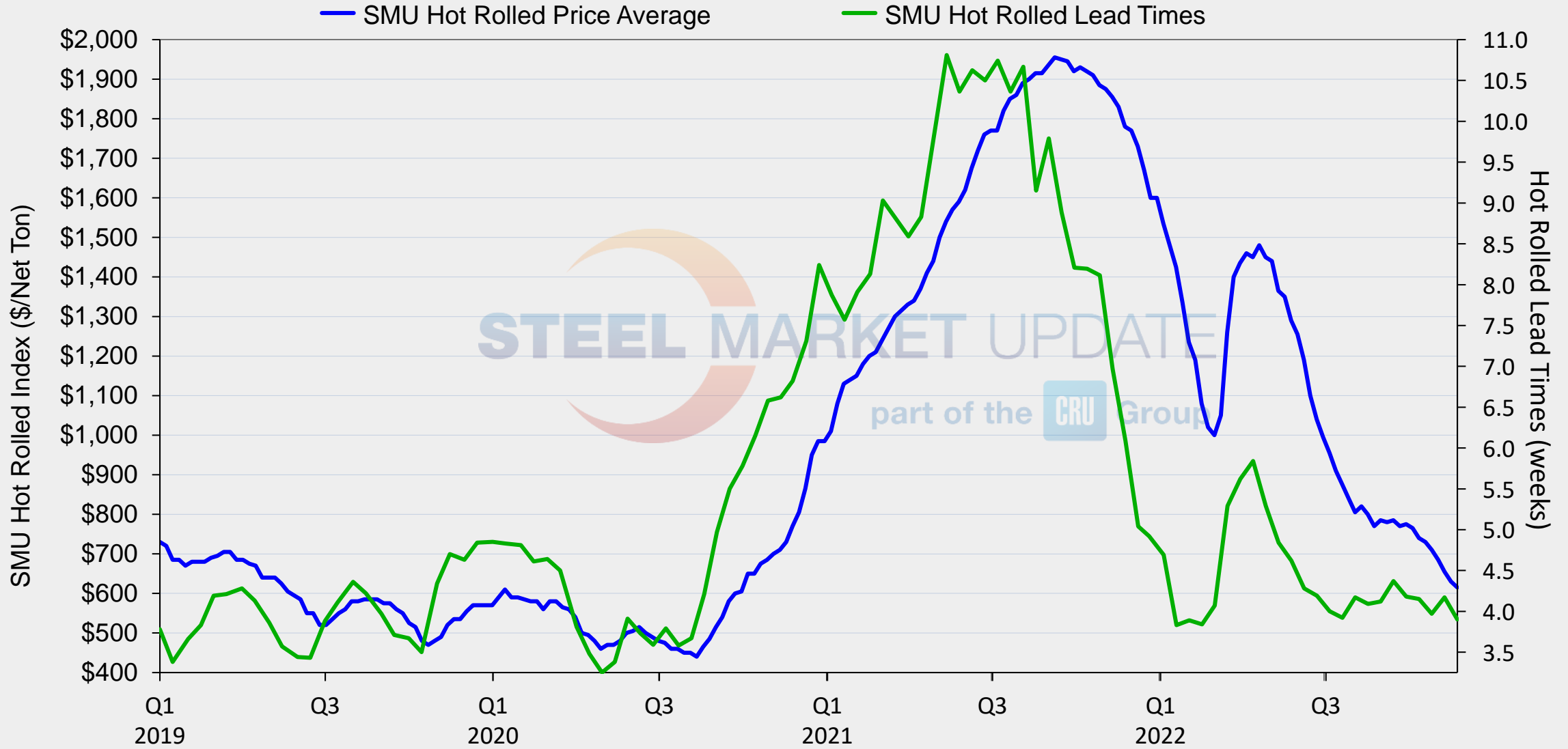
STEEL MARKET UPDATE

part of the  Group

Don't just read our data, see your
company's experience reflected in it.

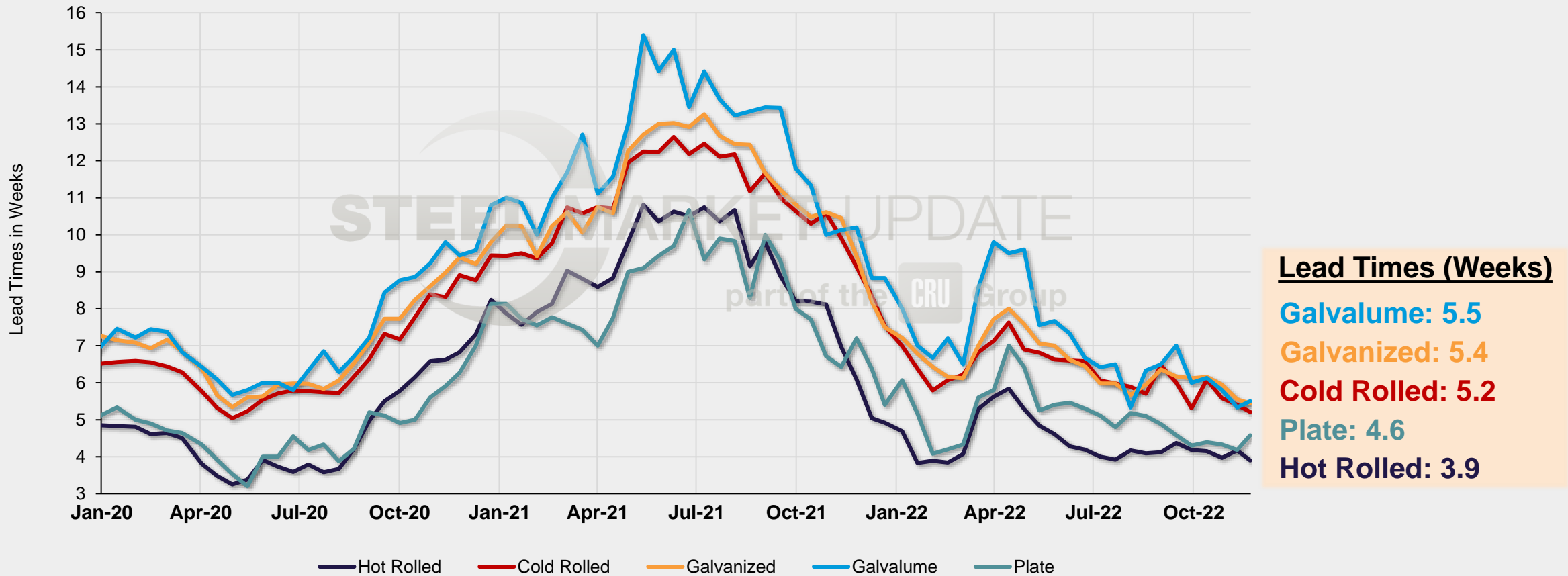
Contact Brett@SteelMarketUpdate.com
for participation information.

SMU Steel Prices vs Lead Times



Steel Mill Lead Times by Product

SMU Lead Times Comparison
Through November 22, 2022



Direction of Steel Mill Lead Times

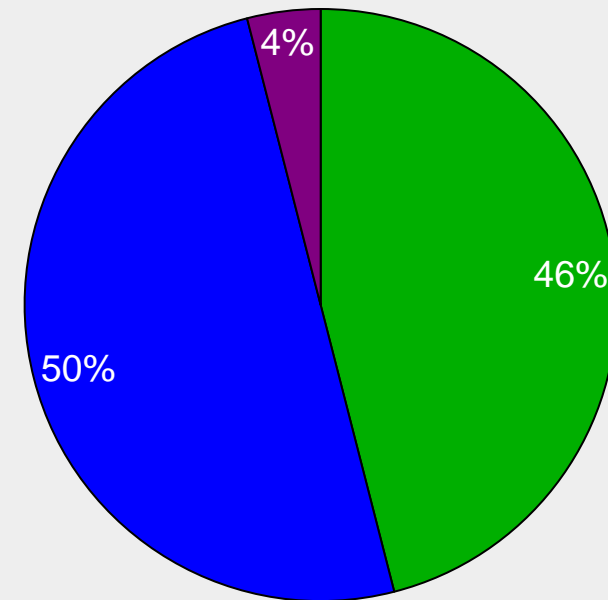
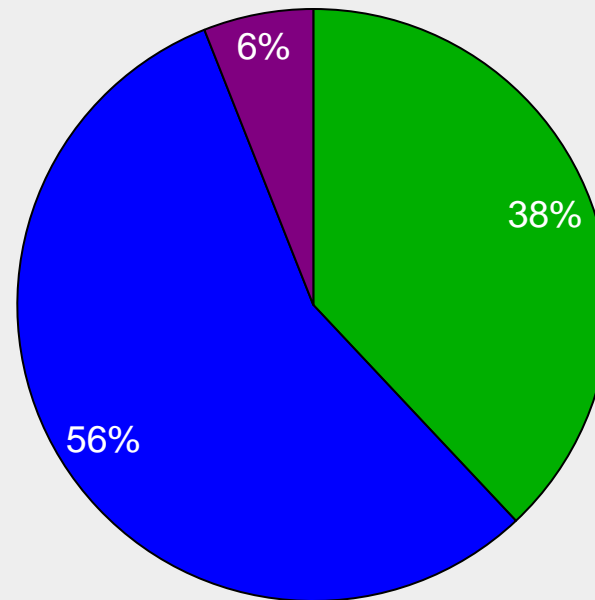
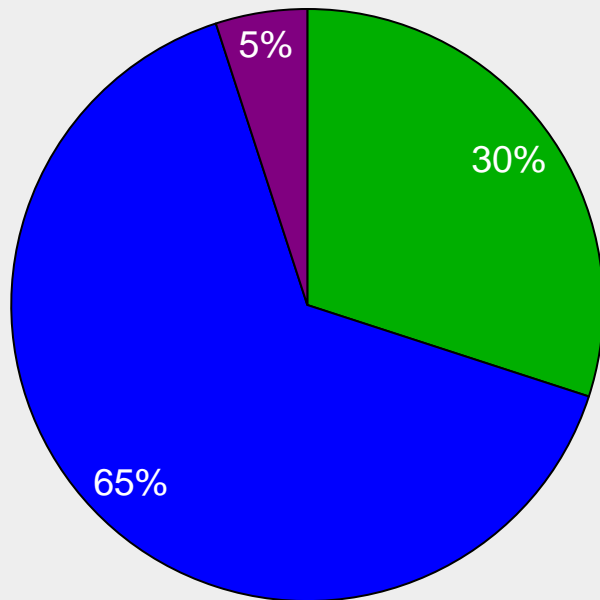
Two months from now, will lead times be extending, flat, or contracting?

October 27, 2022

November 10, 2022

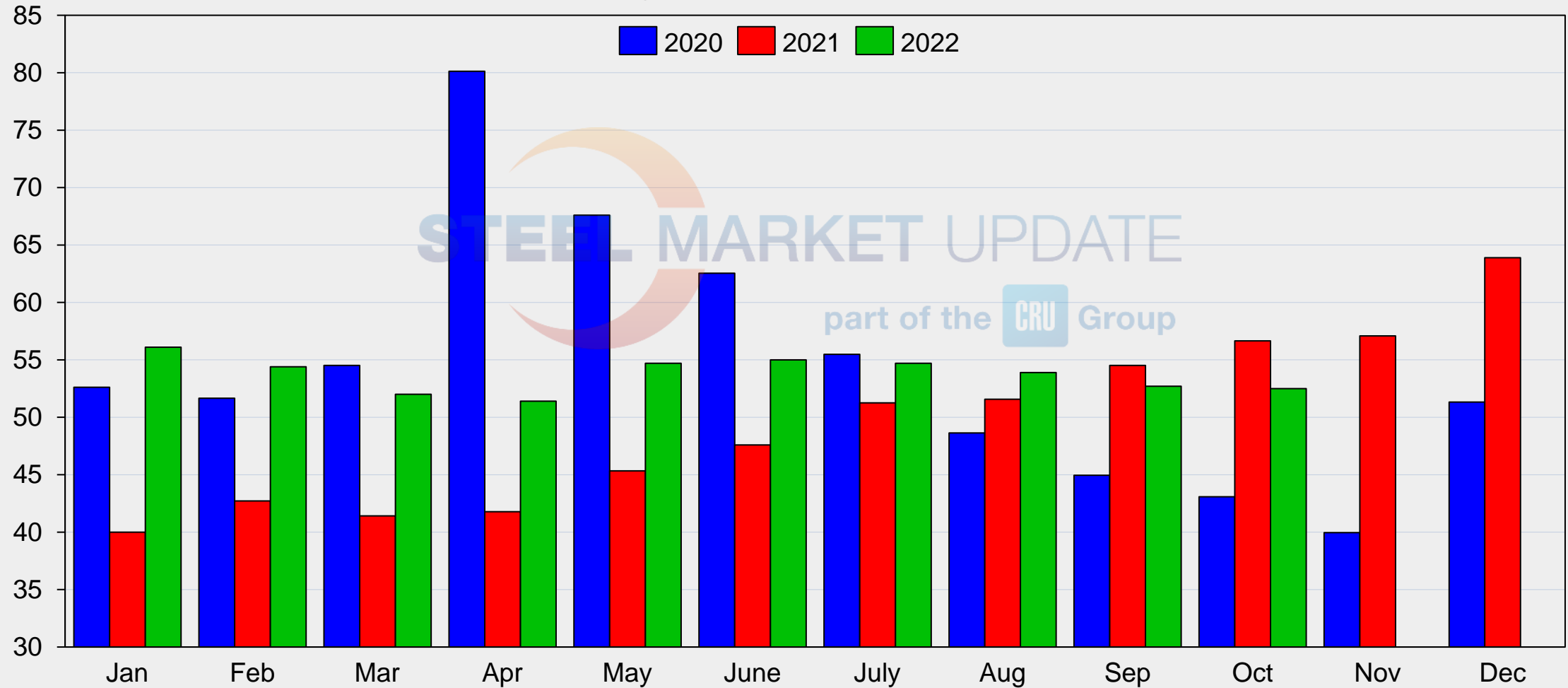
November 22, 2022

■ Extending ■ Flat ■ Contracting



Service Center Inventories

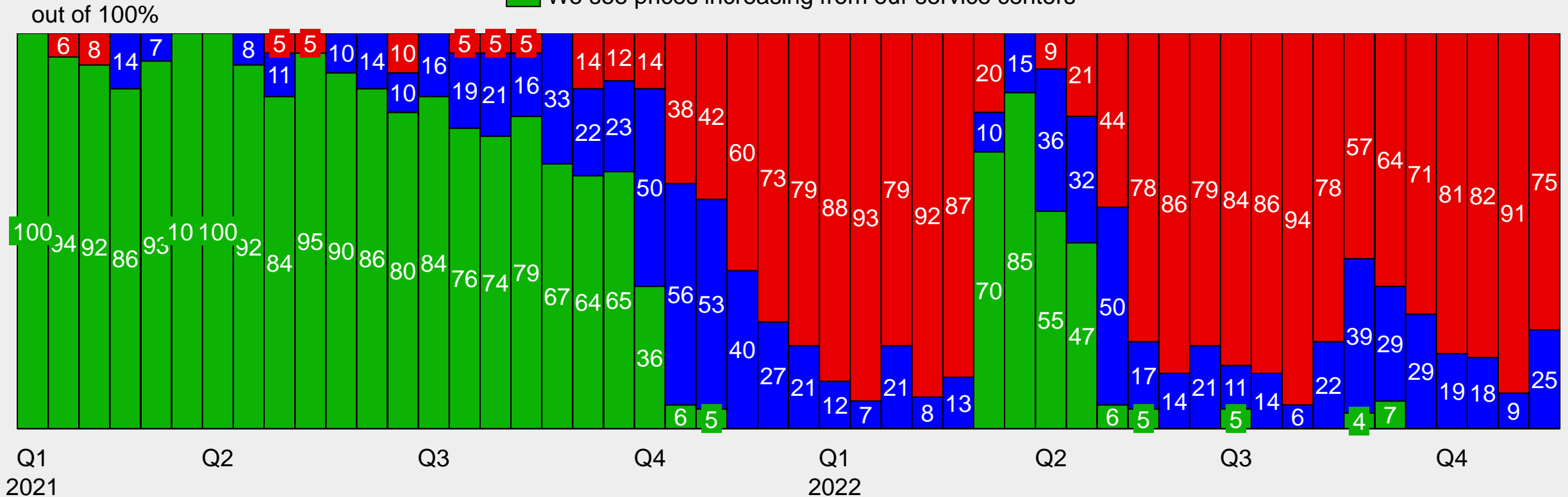
Shipping Days of Supply – Flat Rolled



Manufacturer's View of Service Center Selling Prices History

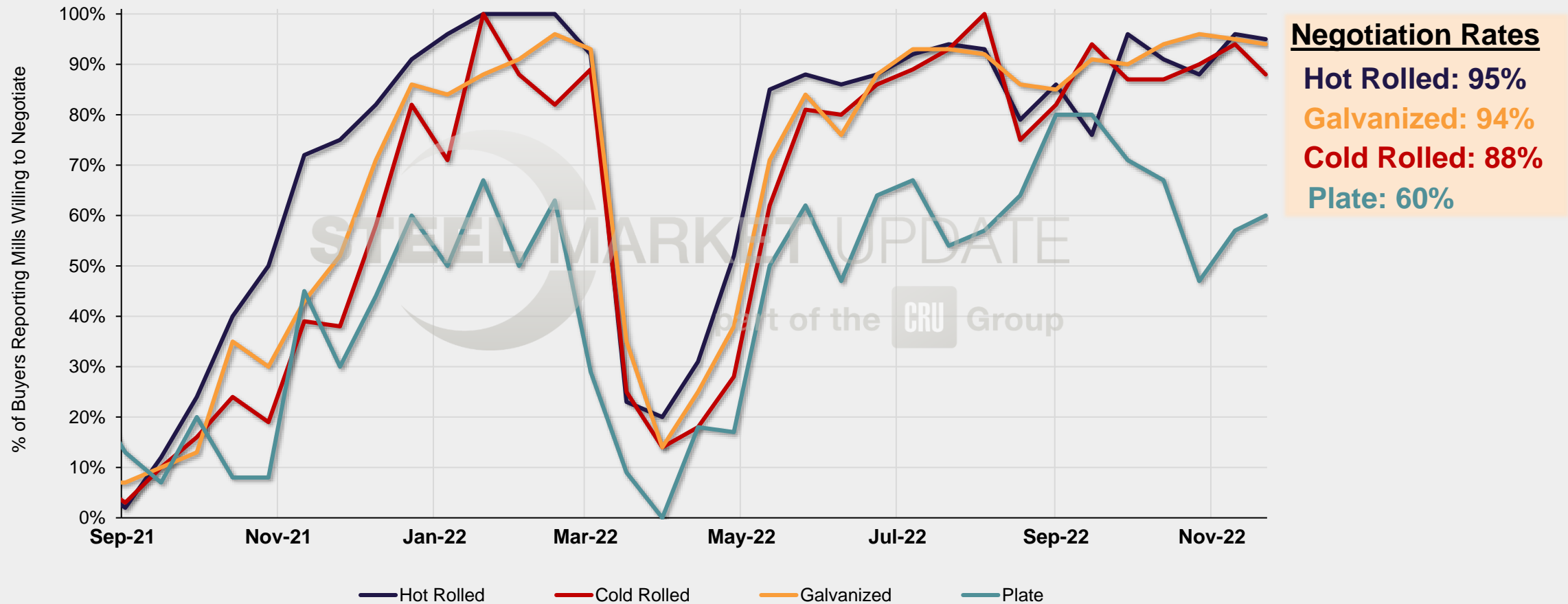
Manufacturers- Which comment do you feel is representative of service center pricing right now compared to two weeks ago?

- We see prices decreasing from our service centers
- We see stable prices from our service centers
- We see prices increasing from our service centers



Steel Mill Negotiations

SMU Price Negotiations on New Steel Orders by Product
Through November 22, 2022

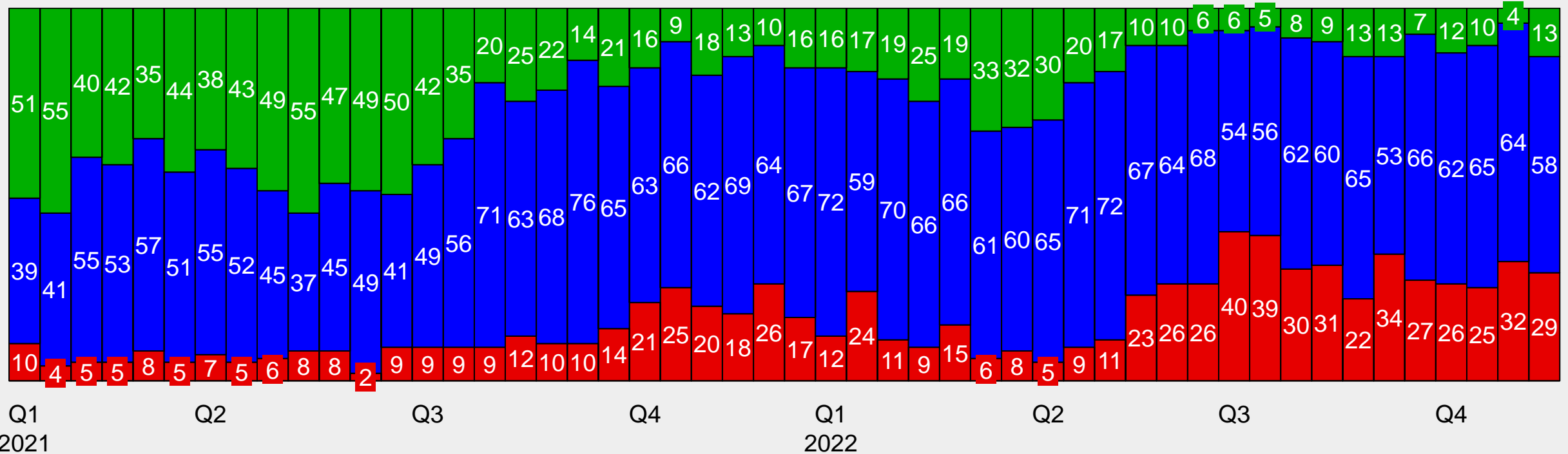


Overall Demand History

How are you seeing demand for your products?

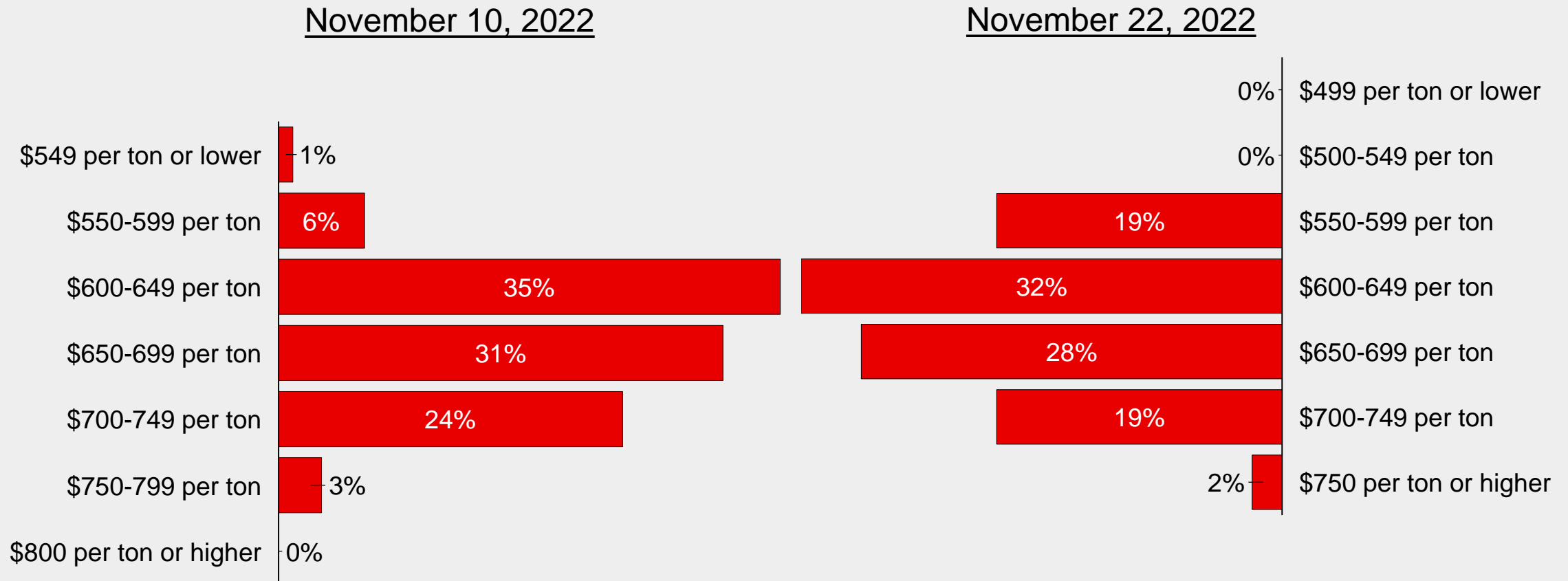
- Demand is improving
- Demand is stable
- Demand is declining

out of 100%



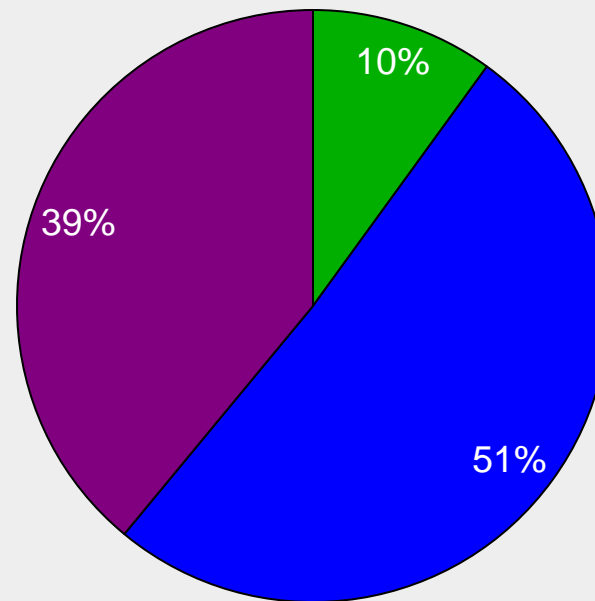
Future Hot Rolled Prices

Where do you think HRC prices will be in two months?



Prime scrap prices in December will:

- Rise
- Remain stable
- Decline



Still the Elephant in the Room?

NEW NORTH AMERICAN FLAT-ROLLED STEEL CAPACITY					LAST REVIEWED: OCTOBER 2022
Company	Location	Capacity (short tons per year)	Type or Project	Completion Date	Investment
Stelco - Lake Erie Works	Nanticoke, Ontario	300,000	Blast furnace upgrade	Oct-20	???
Big River Steel (a U.S. Steel company)	Osceola, Ark.	1.65M	Doubling of capacity at existing EAF steel mill	Nov-20	\$1.2B
Ternium	Pesquería, Mexico	4.4M	New hot rolling mill	May-21	\$1.1B
Steel Dynamics Inc. (SDI)	Sinton, Texas	3M	Greenfield EAF sheet mill	Feb-22	\$1.9B
North Star BlueScope	Delta, Ohio	~1M	Expansion of existing EAF sheet mill: 3rd EAF and 2nd caster. First coil produced in June. Construction "substantially complete" as of August 2022.	1H 2022	\$700M
Nucor (Gallatin)	Ghent, Ky.	1.4M	New EAF and LMF commissioned. Caster and second down coiler pending.	June 2022	\$650M
Nucor	Mason County, W.Va.	3M	New EAF sheet mill	2024	\$2.7B
Nucor	Brandenburg, Ky.	1.2M	Greenfield EAF plate mill	Year-end '22	\$1.35B
AM/NS Calvert	Calvert, Ala.	3.0M	Addition of one 1.5M-tpy EAF in 2H 2023. Second 1.5M-tpy EAF being studied.	1H 2023	\$775M
ArcelorMittal México	Lázaro Cárdenas, Michoacán	2.75M	New hot rolling mill	Completed Dec-21	\$1B
U.S. Steel	Osceola, Ark.	3M	New EAF sheet mill	2024	\$3B
Total		24.7M			\$14.375B



Timna Tanners is a Managing Director at **Wolfe Research**. She has covered the Metals and Mining sector since 2002. She was ranked #1 in Metals and Mining in the Institutional Investor All-America Research Poll from 2013 to 2018. Before joining Wolfe Research, Tanners worked as a Managing Director at Bank of America, where she covered metals and mining not only in North America but in Latin America as well. She began her career in 2002 at UBS. Tanners has a BA in politics from Pomona College, an MS in journalism from Northwestern University, and an MBA from UCLA. She is based in New York.

www.SteelMarketUpdate.com/blog/SMU-Community-Chat-Webinars

The calm before the sheet storm

Steel Market Update Community Chat

Nov 30, 2022

Timna Tanners
(646) 582-9290
ttanners@WolfeResearch.com
tannersteam@WolfeResearch.com

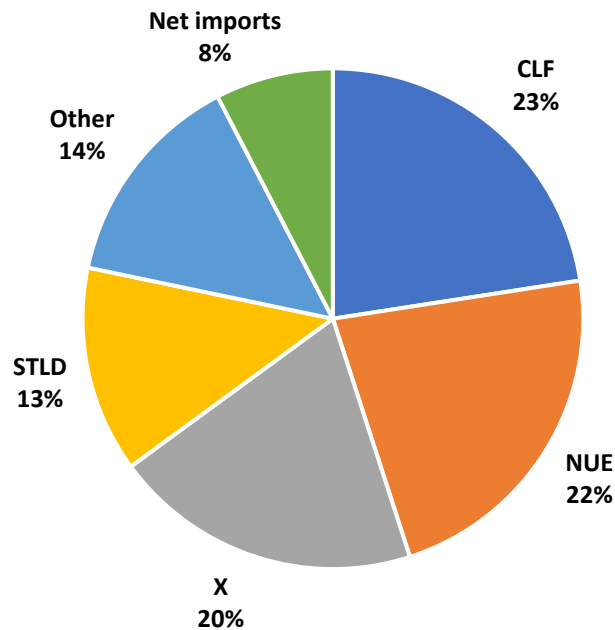


Sheet Storm is brewing

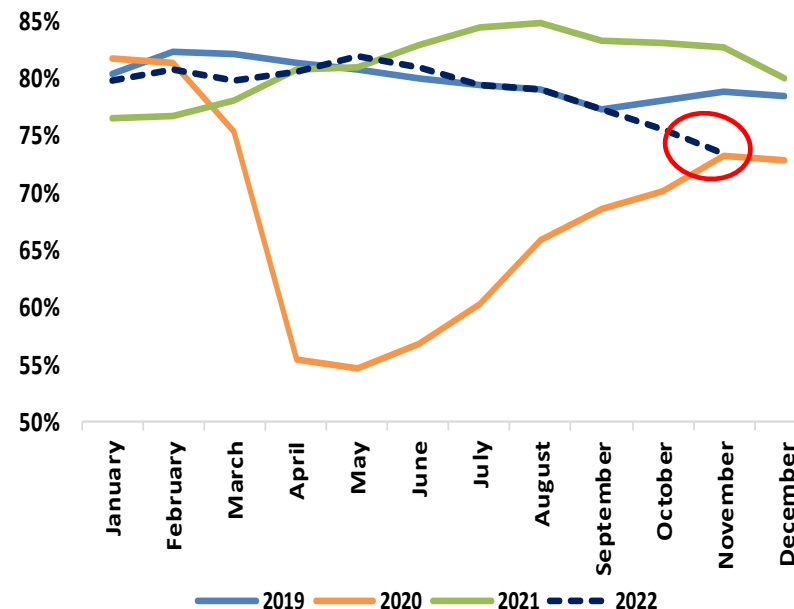
Volume over Value

- Six months since I last addressed this group, and it's a similar story of oversupply and an uncertain demand outlook.
- Mill "discipline" seems to have broken down, and with output down 11% y/y they have ample spare capacity.
- Are they content to let STLD take market share, or will market share battles keep a dark cloud over the NA market?

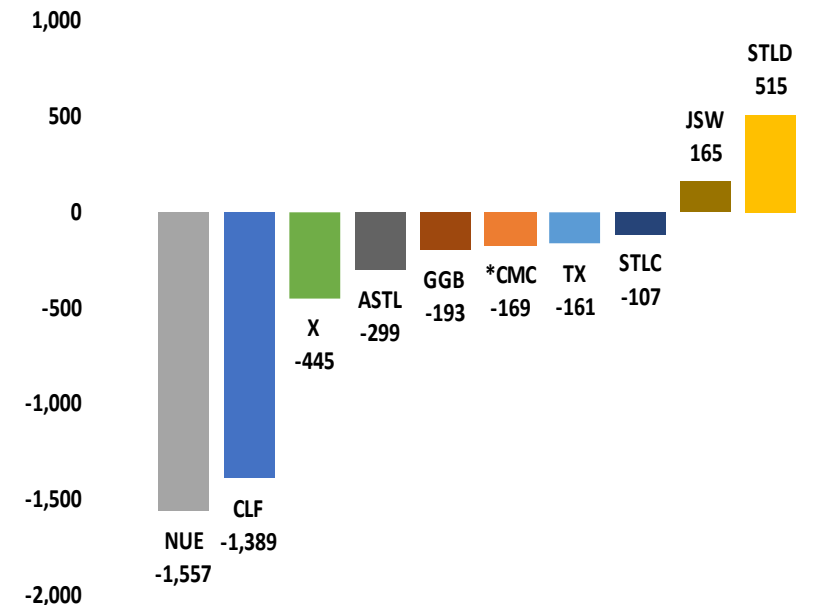
U.S. sheet market share (2021)*



U.S. historical steel capacity utilization



NA mill production ytd vs 2021 (Kst)



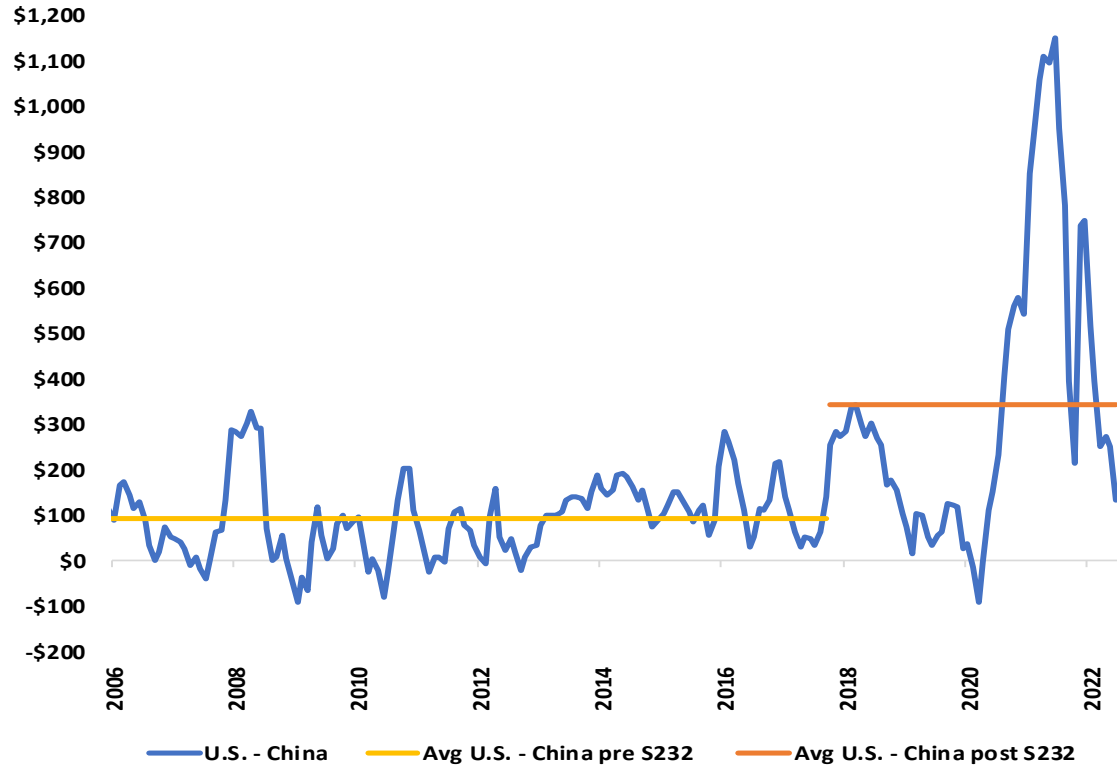
Source: American Iron and Steel Institute (AISI), Wolfe Research, company reports

*Note: Assumes total U.S. sheet shipments were 55% of total 2021 U.S. steel shipments; CMC fiscal year-end is August 31

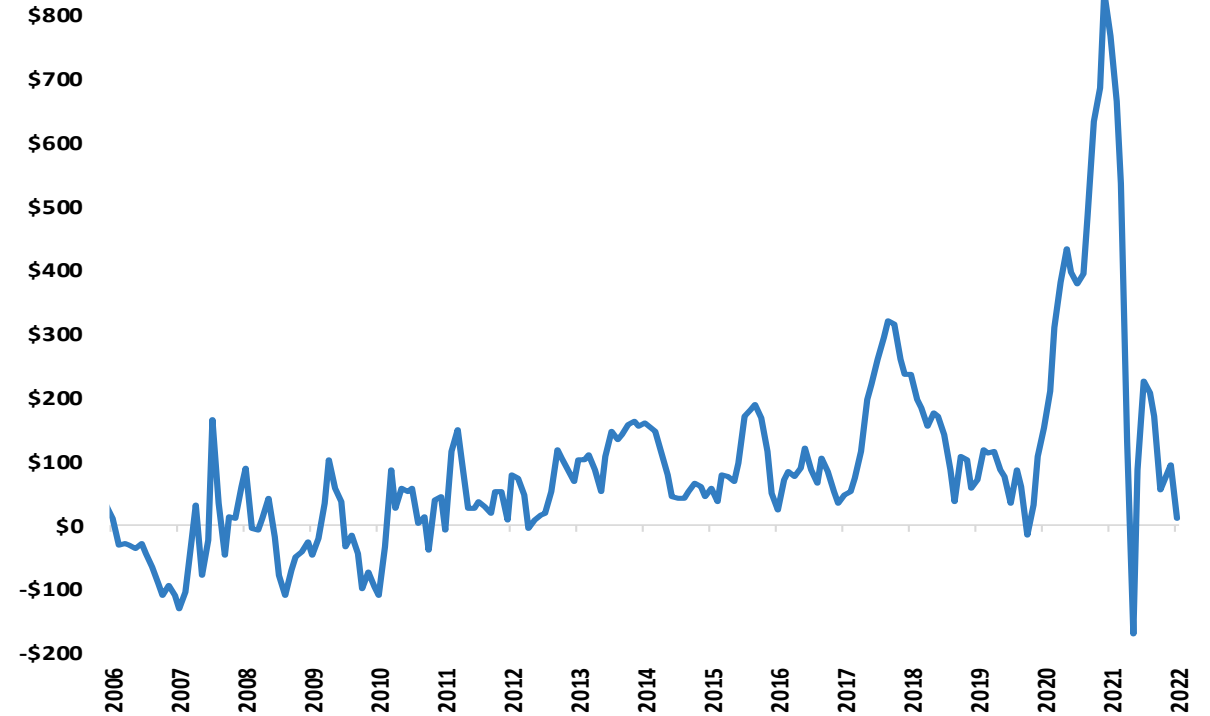
The good news? Imports unappetizing

Import offers aren't much below domestic equivalents, with longer lead times. Non S232 exempt is a non starter...

U.S. vs China HRC spread (\$/st)



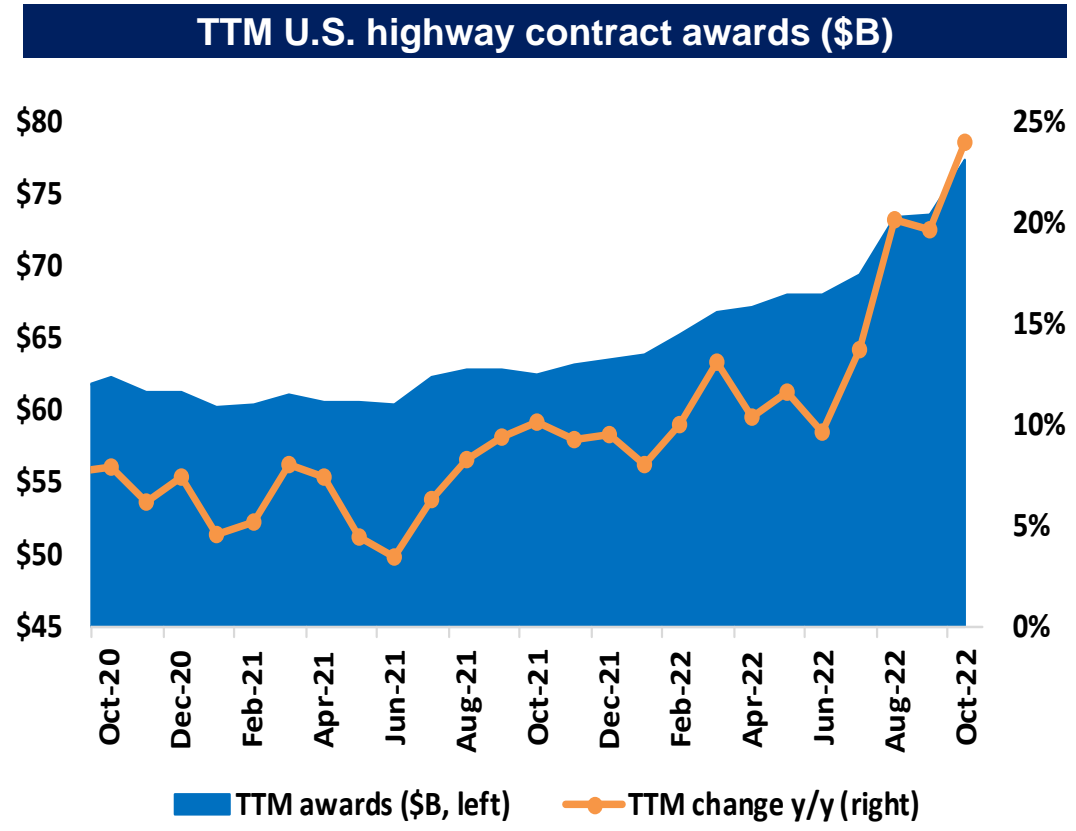
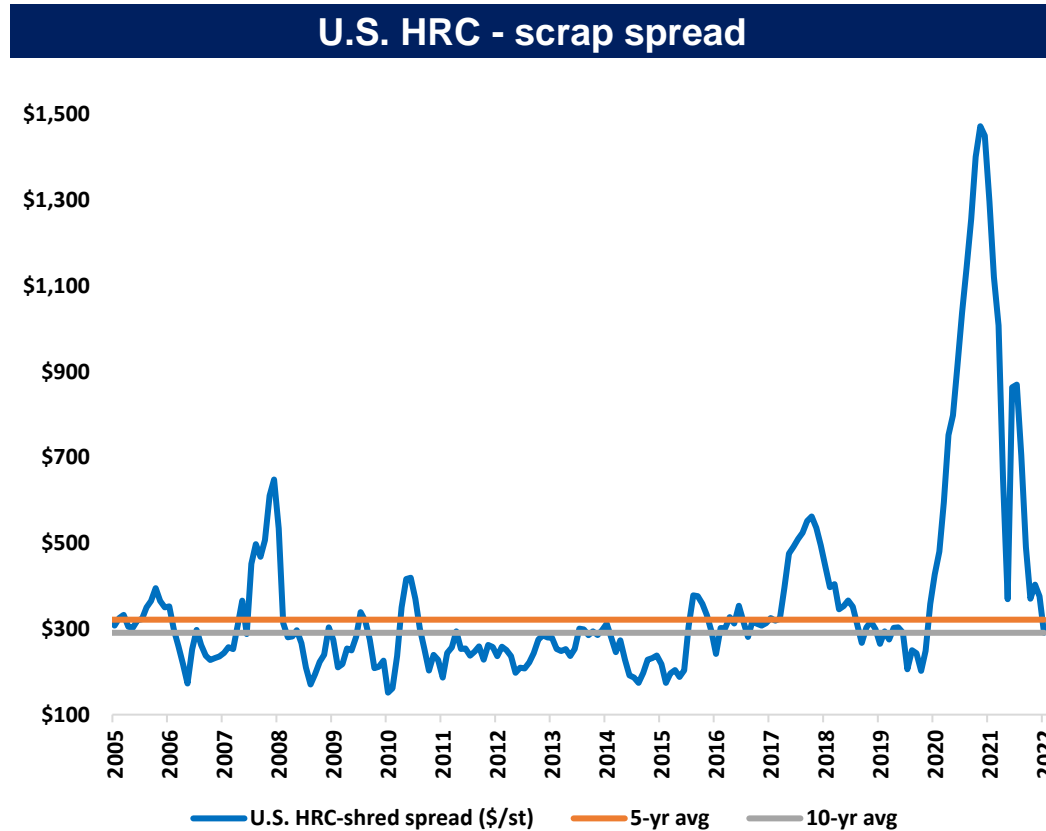
U.S. vs Germany HRC spread (\$/st)



Source: CRU

The not-so-bad news: Prices have hit bottom

- Seasonally better demand is around the corner. Construction season has support from strong backlogs, infrastructure.
- Price hikes can stick as HRC was near marginal costs and scrap is poised to rebound. We see limited upside.



Source: CRU, Platts, ARTBA; Note: Historical HRC-scrap through December 2019

The ugly: So much excess supply, interest rates pinch

- The NA market faces an unprecedented excess of sheet capacity, soon to be followed by a galvanized glut.
- Non-res construction looks poised to roll over in H2, no way they escape the wrath of the Fed.
- Outsized downstream to shrink past Q1, warehouses, even garage doors (!) to slow.

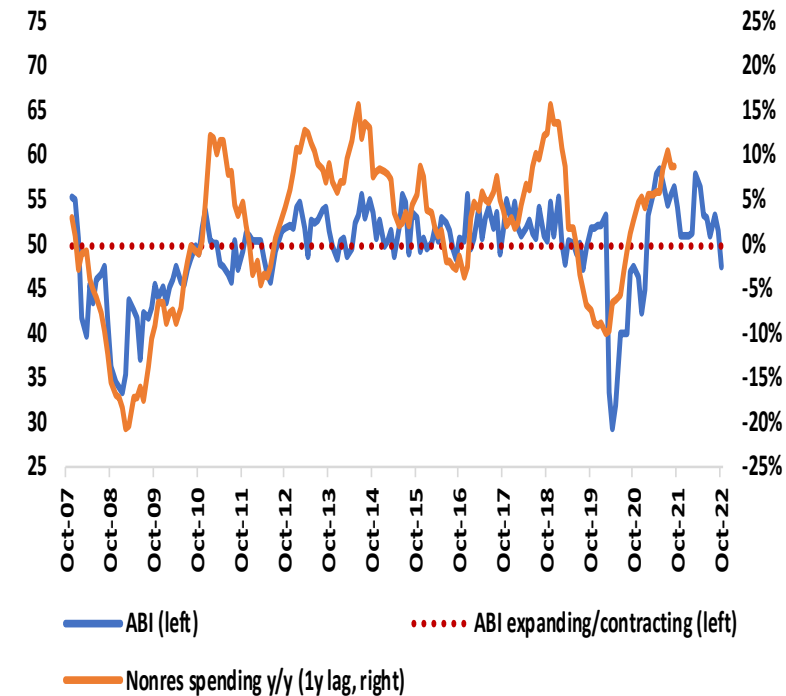
New NA sheet steel capacity (2020-2025E)

Target ramp-up completion	Company	Capacity (Mst/yr)
Q4 2020	Stelco - Lake Erie Works	0.30
Q4 2020	U.S. Steel - Big River Steel (BRS) expansion	1.65
Q4 2022	North Star BlueScope	0.85
Q1 2023E	Steel Dynamics Inc. (Sinton)	3.00
2023E	ArcelorMittal Mexico	2.75
2023E	Ternium	4.40
H1 2023E	AM/NS (Calvert)	1.50
2023E	Nucor (Brandenburg)	1.20
2023E	Nucor (Gallatin)	1.40
2024E	Algoma	3.70
2024E	U.S. Steel (BRS)	3.00
2024E/2025E	Nucor (Apple Grove)	3.00
Total new capacity:		26.75
2024E	U.S. Steel	1.60
2024E	U.S. Steel	1.40
H1 2023E	AM/NS Calvert	1.50
2022E/2023E	Ternium	0.90
2024E	Algoma	2.80
Net new capacity:		18.55

New NA galvanized capacity (2020-2025E)

Target ramp-up completion	Company	Capacity (Kst/yr)
H121	Nucor (Hickman)	500
H123E	Steel Dynamics Inc (Sinton)	550
H223E	Steel Dynamics Inc (Sinton)	300
H223E	Steel Dynamics Inc (Terre Haute)	300
2023E/2024E	U.S. Steel - Big River Steel (BRS)	325
H124E	Nucor (Crawfordsville)	300
2024E	U.S. Steel (BRS)	1,000
2024E	Ternium (Pesquería)	300
2024E/2025E	Nucor (Apple Grove)	1,000
H225E	Nucor (Berkeley)	500
TBD	Nucor (western U.S. - TBD)	TBD
TBD	CSN (U.S. greenfield - TBD)	TBD
Total new capacity:		5,075
2023E	U.S. Steel-POSCO (UPI)	400
Net new capacity:		4,675

ABI vs nonres spending (1-yr lag)



Source: Wolfe Research, USGS, AIA, Dodge, company reports

The good times have rolled, inflation may support higher lows

Wolfe price forecast

	2017	2018	2019	2020	2021	Q122	Q222	Q322	Q422E	2022E	Q123E	Q223E	Q323E	Q423E	2023E	2024E	2025E
Carbon steel																	
HRC (\$/st)	\$623	\$835	\$601	\$587	\$1,605	\$1,200	\$1,306	\$837	\$700	\$1,011	\$775	\$750	\$700	\$700	\$731	\$750	\$775
CRC (\$/st)	\$815	\$952	\$755	\$755	\$1,839	\$1,745	\$1,740	\$1,223	\$950	\$1,415	\$1,000	\$950	\$900	\$875	\$931	\$910	\$925
HDG(\$/st)	\$889	\$1,033	\$839	\$830	\$1,923	\$1,748	\$1,821	\$1,273	\$1,000	\$1,460	\$1,050	\$1,000	\$950	\$925	\$981	\$960	\$975
Plate (\$/st)	\$684	\$941	\$811	\$638	\$1,478	\$1,844	\$1,933	\$1,808	\$1,650	\$1,809	\$1,525	\$1,350	\$1,200	\$1,100	\$1,294	\$1,050	\$975
Rebar (\$/st)	\$549	\$687	\$669	\$615	\$911	\$1,066	\$1,144	\$1,014	\$980	\$1,051	\$990	\$925	\$860	\$835	\$903	\$825	\$765
Scrap																	
Scrap (HMS 1/2) (\$/lt)	\$278	\$329	\$258	\$250	\$426	\$454	\$441	\$308	\$270	\$368	\$340	\$325	\$310	\$310	\$321	\$325	\$340
Scrap (Shredded) (\$/lt)	\$302	\$355	\$285	\$276	\$473	\$519	\$543	\$432	\$375	\$467	\$450	\$445	\$430	\$430	\$439	\$445	\$450
Scrap (Busheling) (\$/lt)	\$365	\$398	\$320	\$312	\$582	\$583	\$712	\$452	\$365	\$528	\$475	\$495	\$480	\$480	\$483	\$495	\$490

Source: Wolfe Research, Platts, CRU

Key themes for 2023...

The revenge of the scrap

- More domestic demand, as EAFs ramp up.
- Turkey could also re-fire capacity for double whammy after crushing H222.
- Less construction means less demolition supply.
- Yet price cap as foreign mills now have practice making pig iron if prices surge enough.

Volume over value? May the lowest cost mill win...

- Minimills' cost advantage could erode given the above.
- Low prices could again force the hand of higher cost players/older mills, especially in H223 as demand rolls over.

U.S. exports?

- A strong dollar makes this tough. In order to be competitive prices have to be below global OR mills are dumping...
- U.S. mills have shareholders that like to see profits. That is somewhat unique.

China weary of making steel at a loss? Russia to stop dumping?

- China has an indirect impact on the U.S. market, with any closures able to pressure raw materials costs.
- We can't predict geopolitics, but Russia ended up being a negative for the industry broadly.
- Less excess supply from China and Russia would be positive.

DISCLOSURE SECTION

Analyst Certification:

The various Wolfe Research, LLC analysts who are primarily responsible for this research report certify that (i) the recommendations and opinions expressed in this research report accurately reflect the research analysts' personal views about the subject securities or issuers and (ii) no part of the research analysts' compensation was, is or will be directly or indirectly related to the specific recommendations or views contained in this report.

Other Disclosures:

Wolfe Research, LLC Fundamental Stock Ratings Key:

Outperform (OP): The security is projected to outperform analyst's industry coverage universe over the next 12 months.
Peer Perform (PP): The security is projected to perform approximately in line with analyst's industry coverage universe over the next 12 months.
Underperform (UP): The security is projected to underperform analyst's industry coverage universe over the next 12 months.

Wolfe Research, LLC uses a relative rating system using terms such as Outperform, Peer Perform and Underperform (see definitions above). Please carefully read the definitions of all ratings used in Wolfe Research, LLC research. In addition, since Wolfe Research, LLC research contains more complete information concerning the analyst's views, please carefully read Wolfe Research, LLC research in its entirety and not infer the contents from the ratings alone. In all cases, ratings (or research) should not be used or relied upon as investment advice and any investment decisions should be based upon individual circumstances and other considerations.

Wolfe Research, LLC Sector Weighting System:

Market Overweight (MO): Expect the industry to outperform the primary market index for the region (S&P 500 in the U.S.) by at least 10% over the next 12 months.
Market Weight (MW): Expect the industry to perform approximately in line with the primary market index for the region (S&P 500 in the U.S.) over the next 12 months.
Market Underweight (MU): Expect the industry to underperform the primary market index for the region (S&P 500 in the U.S.) by at least 10% over the next 12 months.

Wolfe Research, LLC Distribution of Fundamental Stock Ratings (As of May 31, 2022):

Outperform:	53%	6% Investment Banking Clients
Peer Perform:	38%	3% Investment Banking Clients
Underperform:	9%	0% Investment Banking Clients

Wolfe Research, LLC does not assign ratings of Buy, Hold or Sell to the stocks it covers. Outperform, Peer Perform and Underperform are not the respective equivalents of Buy, Hold and Sell but represent relative weightings as defined above. To satisfy regulatory requirements, Outperform has been designated to correspond with Buy, Peer Perform has been designated to correspond with Hold and Underperform has been designated to correspond with Sell.

Wolfe Research Securities, Wolfe Research Advisors, LLC and Wolfe Research, LLC have adopted the use of Wolfe Research and The Wolfe Daily Howl as brand names. Wolfe Research Securities, a member of FINRA (www.finra.org) and the National Futures Association, is the broker-dealer affiliate of Wolfe Research, LLC. Wolfe Research Advisors, LLC is the SEC-registered investment adviser affiliate of Wolfe Research, LLC. Wolfe Research Securities and Wolfe Research Advisors, LLC are responsible for the contents of this material. Any analysts publishing these reports are associated with each of Wolfe Research, LLC, Wolfe Research Securities and Wolfe Research Advisors, LLC.

The Wolfe Daily Howl is a subscription-based service for Institutional investor subscribers only and is a product of Wolfe Research, LLC. The products received may contain previously published research which has been repackaged for Wolfe Daily Howl subscribers. The types of services provided to you by Wolfe Research, LLC, vary as compared to that provided to other external clients of Wolfe Research. Wolfe Research, LLC, its directors, employees and agents will not be liable for any investment decisions made or actions taken by you or others based on any news, information, opinion, or any other material published through this service.

The content of this report is to be used solely for informational purposes and should not be regarded as an offer, or a solicitation of an offer, to buy or sell a security, financial instrument or service discussed herein. Opinions in this communication constitute the current judgment of the authors as of the date and time of this report and are subject to change without notice. Information herein is believed to be reliable but Wolfe Research and its affiliates, including but not limited to Wolfe Research Securities, makes no representation that it is complete or accurate. The information provided in this communication is not designed to replace a recipient's own decision-making processes for assessing a proposed transaction or investment involving a financial instrument discussed herein. Recipients are encouraged to seek financial advice from their financial advisor regarding the appropriateness of investing in a security or financial instrument referred to in this report and should understand that statements regarding the future performance of the financial instruments or the securities referenced herein may not be realized. Past performance is not indicative of future results. This report is not intended for distribution to, or use by, any person or entity in any location where such distribution or use would be contrary to applicable law, or which would subject Wolfe Research, LLC or any affiliate to any registration requirement within such location. For additional important disclosures, please see <https://www.WolfeResearch.com/Disclosures>.

The views expressed in Wolfe Research, LLC research reports with regards to sectors and/or specific companies may from time to time be inconsistent with the views implied by inclusion of those sectors and companies in other Wolfe Research, LLC analysts' research reports and modeling screens. Wolfe Research communicates with clients across a variety of mediums of the clients' choosing including emails, voice blasts and electronic publication to our proprietary website.

Copyright © Wolfe Research, LLC 2022. All rights reserved. All material presented in this document, unless specifically indicated otherwise, is under copyright to Wolfe Research, LLC. None of the material, nor its content, nor any copy of it, may be altered in any way, or transmitted to or distributed to any other party, without the prior express written permission of Wolfe Research, LLC.

This report is limited for the sole use of clients of Wolfe Research. Authorized users have received an encryption decoder which legislates and monitors the access to Wolfe Research, LLC content. Any distribution of the content produced by Wolfe Research, LLC will violate the understanding of the terms of our relationship.

Thank You

Thank you for attending our SMU Community Chat. A special thank you to Ms. Tanners for her participation today.

For information on subscribing to SMU, contact Lindsey Fox: Lindsey@SteelMarketUpdate.com

To participate in our surveys, contact Brett Linton: Brett@SteelMarketUpdate.com

To become a data provider for our service center inventory report, contact Estelle Tran: Estelle.Tran@CRUGroup.com

To contact Michael Cowden: Michael@SteelMarketUpdate.com

Stay safe and stay tuned to Steel Market Update!



Tom Derry is Chief Executive Officer of the **Institute for Supply Management® (ISM®)**, with more than 30 years of experience in leadership and general management roles for public and private companies, and in the not-for-profit sector. He has executed turn-arounds at the corporate and business-unit level through a variety of means, including acquisitions, divestitures, restructuring, and business process re-engineering.

www.SteelMarketUpdate.com/blog/SMU-Community-Chat-Webinars

TSC 34th Annual
**TAMPA STEEL
CONFERENCE 2023**
Tampa Marriott Water Street, Tampa, FL, USA
FEBRUARY 5-7, 2023



Timna Tanners
Managing Director
Wolfe Research

Continue the debate in Tampa

Timna and other industry leaders will be speaking at the Tampa Steel Conference 2023 this February.

Register today and join senior representation from steel mills, steel distribution, manufacturing, trading, and shipping communities.

Give your business a boost at the start of 2023.

www.tampasteelconference.com



STEEL MARKET UPDATE

part of the  Group

When you need answers... www.SteelMarketUpdate.com