



(Source: U.S. Bureau of Labor Statistics, change in PPI as of Nov 30, 2022)

MoM% change for Construction Materials & Services Materials Services 6% 3% Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov 2021

(Source: U.S. Bureau of Labor Statistics, change in PPI as of Nov 30, 2022)

Construction Inflation At a Glance



(Source: U.S. Bureau of Labor Statistics, change in PPI as of Nov 30, 2022)

The producer price index (PPI) for net inputs to construction industries - not seasonally adjusted
(a broad index that measures producer inflation in materials and services to construction excluding capital investments, labor, and imports)



(Source: U.S. Bureau of Labor Statistics, change in PPI as of Nov 30, 2022)

Deeper into the woods | TIMBERRR! The worst performing commodity

year to date in 2022. Lumber futures dropped over 60% since last year and are hovering around the low \$400s in the second week of December. Commodity markets remain mired by sharp contractions in residential construction activity as we embrace the slowest month of the year for homebuying. Demand volume is not picking up in defiance of seasonal buying trends.

However, mortgage rates seem to have peaked and are beginning to ease. The Fed's rhetoric for a soft landing is becoming more pronounced and the bonds market is pricing in a pivot. Maybe not straight into rate slashing but slowing the pace of hikes seems to be the consensus among the wise and foolish. What does that mean for housing, homebuilding, and demand for wood in 2023? Demand for lumber and wood products petered out in the wake of rising rates and a hawkish Fed but could the opposite be true as hawks turn to doves? The trend reversal could turn visceral and render markets volatile once more especially if the money spigot is turned back on.

Lumber & Wood Products

■3 M	o Change	■1 Mo Chan	ge
-10.2%		board and rboard	-0.5%
-9.8%		veneer and wood	-3.8%
-6.0%	Ply	wood	-3.1%
-16.3%	Hardwo	od lumber	-7.4%
-8.9%	Softwoo	od lumber	-0.9%

(Source: U.S. Bureau of Labor Statistics, change in PPI as of Nov 30,

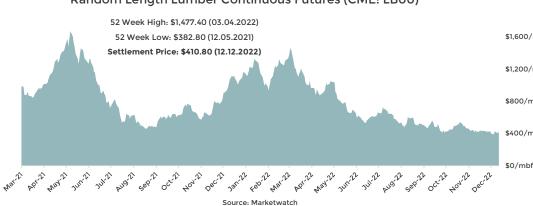
Lumber & Wood Products

■1 Y	r Change	■YTD Cha	nge
-11.6%		board and rboard	-14.4%
5.2%		veneer and wood	0.5%
6.5%	Ply	wood	3.8%
-18.2%	Hardwo	od lumber	-18.7%
-3.9%	Softwoo	od lumber	-22.8%

(Source: U.S. Bureau of Labor Statistics, change in PPI as of Nov 30,



Random Length Lumber Continuous Futures (CME: LB00)



\$1,600/mbf \$1,200/mbf \$800/mbf \$400/mbf \$0/mbf (as of 12.12.2022)

Out of the furnace | Steel futures flirting

with support levels at \$650 per short ton (st) towards end of November and beginning of December. Steel prices re-adjust on revival of demand and China's relaxed COVID measures.

November data captures another month-onmonth drop in PPI for metals & metal products. Steel mill products have fallen nearly 27% yearon-year and 3.0% compared to October. PPI for Copper wire and cable is down 12% compared to

Metals & Metal Products

■1 Y	r Change	■ YTD Chan	ige
-12.1%	Copper wire and cable		-10.1%
6.5%	Hot rolled	steel, carbon	5.8%
-32.1%		nd alloy steel crap	-33.3%
-34.3%	Iron and	steel scrap	-33.1%
-2.5%		ated metal Idings	-3.0%
4.9%	Fabricate	d steel plate	2.3%

Metals & Metal Products

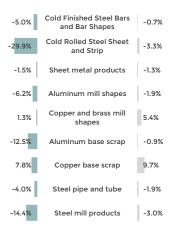
■31	Mo Change	■1 Mo Cha	nge
-1.4%	Copper v		0.5%
-4.0%	Hot rolled st	eel, carbon	-0.49
0.3%	Stainless and scr		8.4%
-9.5%	Iron and st	eel scrap	-2.69
-4.7%	Prefabrica build		-0.1%
-1.0%	Fabricated	steel plate	-1.0%

a year ago while cold rolled steel sheet and strip is down 50%.

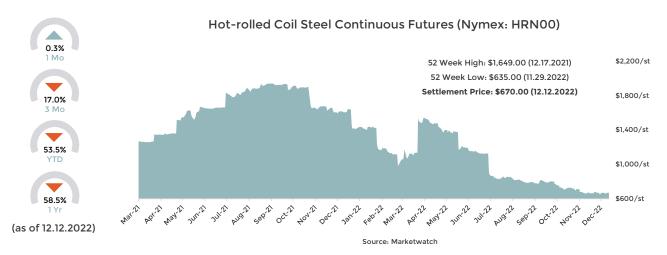
Steel prices reached record highs last year off the back of robust demand (COVID lockdown sugar rush) and low global inventories (supply crunch). But the bullrun was short lived and the retracement that ensued was dramatic. Steep corrections this year as energy prices skyrocketed and central banks hiked interest rates. Another key proponent that tapered demand for ferrous commodities was China's zero COVID policy and lockdowns. But those restrictions are now easing.



(Source: U.S. Bureau of Labor Statistics, change in PPI as of Nov 30, 2022)



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Equipment & Others 14.7% Heating 11.3% 7.4% Lighting 6.6% 9.7% Construction machinery and equipment Air conditioning and refrigeration equip 18.3% Air conditioning and refrigeration equip Elevators, escalators, and other lifts 5.9%

(Source: U.S. Bureau of Labor Statistics, change in PPI as of Nov 30, 2022)

Equipment & Others

■ 3 Mo Change ■ 1 Mo Change		
2.7%	Heating equipment	2.2%
0.9%	Lighting fixtures	0.0%
0.3%	Construction machinery and equipment	0.2%
-0.1%	Air conditioning and refrigeration equip	-0.9%
1.4%	Elevators, escalators, and other lifts	-0.1%

(Source: U.S. Bureau of Labor Statistics, change in PPI as of Nov 30, 2022)

Nonmetallic Mineral Products

■3 M	o Change ■1 Mo C	hange
0.2%	Construction sand/gravel/crushed stone	-0.0%
0.2%	Insulation materials	-0.2%
0.4%	Gypsum products	0.4%
2.9%	Flat glass	1.5%
6.2%	Brick and structural clay tile	0.0%
1.3%	Prestressed concrete products	2.1%
0.9%	Precast concrete products	0.3%
2.3%	Ready-mix concrete	1.0%
3.3%	Concrete pipe	0.0%
1.9%	Concrete block and brick	-0.0%
2.3%	Cement	0.1%

(Source: U.S. Bureau of Labor Statistics, change in PPI as of Nov 30, 2022)

Fuels & Related Products

■1 Yr C	hange	■ YTD	Change
3.9%	Aspha refin		9.9%
59.6%	No.2 o		69.0%

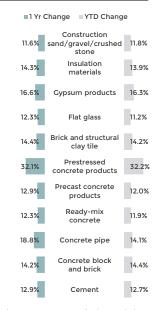
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Fuels & Related Products

■3 Mo Change ■1 Mo Ch	nange
-31.8% Asphalt (at refinery) -7	.3%
17.6% No.2 diesel fuel -3	.4%

(Source: U.S. Bureau of Labor Statistics, change in PPI as of Nov 30, 2022)

Nonmetallic Mineral Products



(Source: U.S. Bureau of Labor Statistics, change in PPI as of Nov 30, 2022)

Rubber & Plastic Products

■1 Y	r Change	■ YTD C	Change
4.2%	Plastics p fixtu		3.8%
18.7%	Plastics fittings an		15.7%
20.6%	Plastics pip		11.6%
10.8%	Plastics	drain	4.7%
12.3%	Plastics	s pipe	7.9%

(Source: U.S. Bureau of Labor Statistics, change in PPI as of Nov 30, 2022)

Rubber & Plastic Products

■3 Mo Change ■1 Mo Change			
0.6%	Plastics plumbing fixtures	0.4%	
-1.6%	Plastics pipe fittings and unions	-1.4%	
-0.3%	Plastics water pipe	-0.1%	
-5.9%	Plastics drain	-1.7%	
-2.9%	Plastics pipe	-0.1%	

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