

Pulp & Paper Price Tracker

Buyers looking for lower pulp prices in the next months

Industry Overview

Tracking global pulp and paper price variations

Our P&P Price Tracker aims to track variations in P&P prices across the globe as well as regional simplified cash margins. We also provide snippets of news articles discussing prices and market color, as well as industry data updates.

We hope it's useful. Any suggestions on how to improve it are greatly appreciated.

Exhibit 1: Snapshot of weekly Pulp & Paper price movements

Pulp prices down 0.14/t w/w to 652.93/t for hardwood and down 0.59/t w/w to 732.91/t for softwood

Pulp & Paper Price Reference	Unit	Current Price	w/w Change (USD/t)	w/w Change (%)
Market Pulp - Hardwood				
HW China Net	USD/t	652.93	-0.14	-0.02%
HW China Resale Net (Eucalyptus)	USD/t	606.04	-0.27	-0.04%
HW Europe List	USD/t	1,096.92	28.63	2.68%
HW Europe Net	USD/t	770.18	20.10	2.68%
HW US List	USD/t	1,175.00	0.00	0.00%
Market Pulp - Softwood				
SW China Net	USD/t	732.92	-0.59	-0.08%
SW China Resale Net (NBSK)	USD/t	701.22	-0.31	-0.04%
SW China Futures Net	USD/t	669.68	-7.43	-1.10%
SW Europe List	USD/t	1,301.09	1.20	0.09%
SW Europe Net	USD/t	932.03	0.86	0.09%
SW US List	USD/t	1,380.00	0.00	0.00%
Printing & Writing - Uncoated				
China Offset Reel	USD/t	933.34	-0.42	-0.04%
Europe Offset Reel	USD/t	1,298.21	-2.78	-0.21%
Printing & Writing - Coated				
China Offset Reel	USD/t	849.97	-0.38	-0.04%
Europe Offset Reel	USD/t	1,172.17	-2.51	-0.21%
Packaging - Containerboard				
Kraftliner China	USD/t	559.15	-0.25	-0.04%
Kraftliner Europe	USD/t	719.53	-5.87	-0.81%
Testliner China	USD/t	473.13	-0.21	-0.04%
Testliner Europe	USD/t	524.46	-1.92	-0.37%
White-top Kraftliner China	USD/t	772.58	-0.34	-0.04%
White-top Kraftliner Europe	USD/t	898.70	-2.53	-0.28%
Packaging - Boxboard				
Duplex China	USD/t	505.51	-0.22	-0.04%
Duplex Europe	USD/t	1,233.39	-1.83	-0.15%
Old Corrugated Cardboard				
OCC China	USD/t	251.23	-0.11	-0.04%
OCC Europe	USD/t	106.07	-0.01	-0.01%
OCC US	USD/t	91.00	0.00	0.00%

 $\textbf{Source:} \ \ \mathsf{BofA} \ \mathsf{Global} \ \mathsf{Research}, \mathsf{Fastmarkets} \ \mathsf{FOEX}, \mathsf{Fastmarkets} \ \mathsf{RISI}$

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Refer to important disclosures on page 13 to 14.

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Weekly news flow

Asia: buyers looking for lower prices

FOEX reported pulp prices down w/w in China this week, with imported hardwood (HW) down \$0.14/t to \$652.93/t and imported softwood (SW) down \$0.59/t w/w to \$732.92/t. Resale prices were down w/w with hardwood (BEK; Bleached Eucalyptus Kraft) down \$0.27/t w/w to \$606.04/t, while resale softwood (NBSK; Northern Bleached Softwood Kraft) dropped \$0.31/t w/w to \$701.22/t. Shanghai SW future (May 2024 contract) dropped \$7.43/t w/w to \$669.68/t (net of value added-tax [VAT] and logistic costs). According to PPI, pulp buyers turned to domestic resale during the past weeks, as buyers were anticipating imported pulp prices to drop. SW prices in China were dropping after sellers dialed back on the NBSK \$20/t price increases announced weeks ago, due to buyers push back, and Arauco cut their radiata pine prices by \$15/t. As for HW, PPI reported that buyers cut their purchased volumes, given weaker paper and board market. Some South American producers mentioned they moved volumes to Europe from China and that Chinese mills are keeping moderate inventory levels. They were expected to resume buying after the LNY (Lunar New Year) and some buyers believed prices would drop in March.

Some of PPI contacts mentioned that pulp prices could increase next month as buyers were resuming purchases. According to these contacts, a lot has been mentioned on the increased HW imports into China last year, but little was talked about the capacities that came online last year. According to these contacts, there will be need to import HW to keep these capacities running. On another note, according to PPI Asia, Asia Symbol announced they increased their February BHKP prices in China by RMB 300/t (~\$42/t). The company also announced RMB 100/t hikes for UFP (Uncoated Fine Paper) and coated ivory board, with additional RMB 200/t hike planned for March. This is at the same time as APRIL, Asia Symbol's parent company, is trying to increase UFP prices by \$30/t. In the meantime, APP Indonesia announced 5-8% fine paper price increases.

Global pulp shipments up 9.2% y/y in December

The Pulp and Paper Products Council (PPPC) reported global pulp shipments up 9.2% y/y in December to 5,002Kt. Hardwood (HW) shipments again led the y/y increase, up 14.9% y/y in Dec to 2,915Kt, while softwood (SW) shipments were up 2.9% y/y to 1,927Kt, and unbleached kraft pulp (UKP) dropped 6.8% y/y to 156Kt. The increase was led by higher shipments to China, up 25.6% y/y (+32.7% for HW and +18.8% for SW). Shipments to Latin America were up 7.8% y/y, Eastern Europe shipments rose 0.2% y/y, Other Asia and Africa was up 24.2% y/y and Oceania was up 5.2%. North America shipments dropped 5.9% y/y to 658Kt, Western Europe dropped 11% y/y to 874Kt and Japan -7% y/y to 162Kt (link to the PPPC review).

China continues to lead growth with volumes up 25.6% y/y

PPPC noted that the pulp shipments growth of 2.2% in 2023 was skewed by the strong shipments growth to China, up 24.8% vs developed markets' shipments dropping, as North America shipments dropped 7.2% and Western Europe shipments dropped 16.3%. The rebound in China was not only fueled by restocking, especially during the Northern Hemisphere summer months, but also by lower output from integrated producers in China (~10Mt of capacity, with ~2Mt operating at \$530-550/ton cash cost), which is also reinforced by wood chip imports to China down 19% ytd in 2023 or ~3.4Mt ytd, although woodchip imports picked up by the end of 2023 as Dec-23 levels were 7.1% above Dec-22. The lower woodchip imports imply a reduction of ~1.5Mt of pulp production from integrated players.



Inventories up one day m/m to 42 days

Total producer inventories increased one day m/m to 42 days of supply, down one day m/m to 43 days for HW and up three days m/m for SW at 40 days. On a y/y basis, total inventories dropped three days, with HW four days and SW three days below December 2022 levels. Operating rates at 94% increased from 90% in Nov 2023 and 89% in Dec 2022.

Exhibit 1: Summary table for World Pulp Statistics – Shipments (Kt)

PPPC reported global pulp shipments up 9.2% y/y to 5,002Kt in December

	Dec-23	m/m %	y/y %	2023 ytd	ytd (%)
Total shipments	5,002	5.9%	9.2%	54,568	2.2%
Softwood pulp	1,927	-2.9%	2.9%	22,585	0.5%
Hardwood pulp	2,915	12.9%	14.9%	30,086	5.2%
Others	160	3.2%	-5.3%	1,897	-17.9%
By region					
North America	658	8.9%	-5.9%	7,369	-7.2%
Europe - Total	1,017	-1.7%	-9.6%	12,499	-14.8%
LatAm	380	16.7%	7.8%	4,101	3.3%
China	1,971	1.4%	25.6%	20,594	24.8%
Japan	162	9.5%	-7.0%	1,904	-15.1%
Other Asia & Africa	782	22.8%	24.2%	7,765	2.0%
Oceania	32	14.3%	5.2%	336	-22.3%

Source: BofA Global Research, PPPC

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Exhibit 2: Summary table for World Pulp Statistics - Inventories

Producer inventories up one day m/m in Dec to 42 days of supply

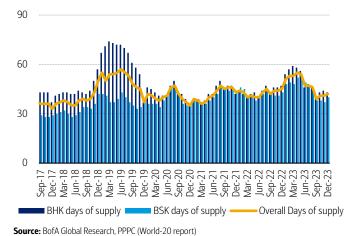
	Dec-23	m/m	y/y
Days of supply	42	1	-3
Softwood pulp	40	3	-3
Hardwood pulp	43	-1	-4
Shipment-to-capacity (operating rates %)	94%	+200bp	+400bp

Source: BofA Global Research, PPPC

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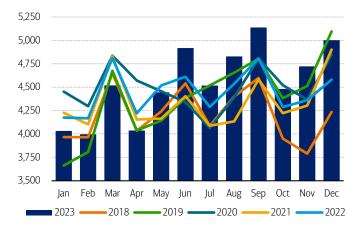
Exhibit 4: Pulp – producer inventory levels (standard days of supply)

Producer inventories increased 1 day m/m in Dec to 42 days of supply



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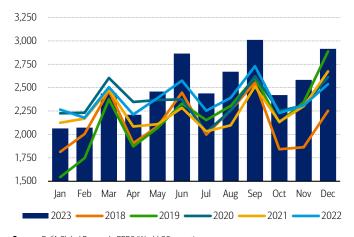
Exhibit 5: Total pulp shipments (Kt)December shipments increased 9.2% y/y



Source: BofA Global Research, PPPC (World-20 report)

Exhibit 6: Bleached hardwood kraft (BHK) pulp shipments (Kt)

December hardwood shipments increased 14.8% y/y

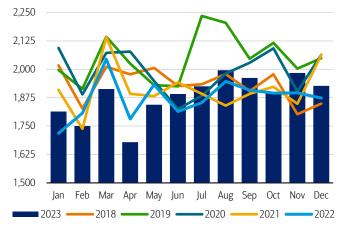


Source: BofA Global Research, PPPC (World-20 report)

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Exhibit 7: Bleached softwood kraft (BSK) pulp shipments (Kt)

December softwood shipments increased 2.8% y/y



Source: BofA Global Research, PPPC (World-20 report)

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Europe: pulp prices move up as more hikes are coming

PPI Europe reported that pulp prices continued to increase in Europe. According to the publication, producers were ascribing the increases to low inventories, paper demand improvement and the geopolitical uncertainties due to the issues in the Red Sea. Producers of both HW and SW grades were looking to continue to increase prices in February. The \$50/t SW increase in January was successful, although it faced more resistance than in December. Some of PPI contacts reported that there was some concerns over pulp availability, due to the situation in the Red Sea, as paper producers have been operating with low inventories. Sellers expect these conditions to support further hikes, as NBSK producers began to announce \$50/t SW hikes for February. As for HW, producers were implementing an additional \$80/t increase for February and were optimistic on its success.

Americas: Brazilian paper industry wants import tariffs

PPI LatAm reported that the Brazilian paper industry is asking the government for 25% import tariffs for paper and board grades, due to the increase in imports from China. According to the industry association, these imports are non-competitive and are harming especially the non-integrated paper producers. On another note, according to PPI LatAm, LatAm pulp buyers were preparing for higher HW costs and pulp suppliers were increasing prices in Europe and the North America. Most contacts were not expecting a sharp increase in costs, but mentioned they would look to increase the share of recycled fiber in their mix.



Exhibit 2: Summary of Pulp & Paper price movementsPulp prices dropped \$0.14/t w/w to \$652.93/t for hardwood and dropped \$0.59/t w/w at \$732.92/t for softwood

Pulp & Paper Price Reference	Unit	Current Price	w/w Change (USD/t)	w/w Change (%)	y/y Change	y/y Change (%)	Last Change
Market Pulp - Hardwood							Ĭ
HW China Net	USD/t	652.93	-0.14	-0.02%	-110.99	-14.53%	9-Feb-24
HW China Resale Net (Eucalyptus)	USD/t	606.04	-0.27	-0.04%	-184.52	-23.34%	8-Feb-24
HW Europe List	USD/t	1,096.92	28.63	2.68%	-257.34	-19.00%	6-Feb-24
HW Europe Net	USD/t	770.18	20.10	2.68%	-180.69	-19.00%	6-Feb-24
HW US List	USD/t	1,175.00	0.00	0.00%	-405.00	-25.63%	12-Jan-24
Market Pulp - Softwood	035/1	1,175.00	0.00	0.00 /0	103.00	25.05 %	12 Juli 2 1
SW China Net	USD/t	732.92	-0.59	-0.08%	-153.58	-17.32%	9-Feb-24
SW China Resale Net (NBSK)	USD/t	701.22	-0.31	-0.04%	-245.82	-25.96%	8-Feb-24
SW China Futures Net	USD/t	669.68	-7.43	-1.10%	n.a.	n.a.	9-Feb-24
SW Europe List	USD/t	1,301.09	1.20	0.09%	-108.09	-7.67%	6-Feb-24
SW Europe Net	USD/t	932.03	0.86	0.09%	-77.43	-7.67%	6-Feb-24
SW US List	USD/t	1,380.00	0.00	0.00%	-320.00	-18.82%	30-Jan-24
Printing & Writing - Uncoated	030/1	1,500.00	0.00	0.0070	-320.00	-10.02 70	30-jan-24
China Offset Reel	USD/t	933.34	-0.42	-0.04%	-130.11	-12.23%	8-Feb-24
Europe Offset Reel	USD/t	1,298.21	-2.78	-0.21%	-83.58	-6.05%	9-Feb-24
Printing & Writing - Coated	υου/τ	1,230.21	-2./0	-∪.∠ 1 %0	-03.30	-0.05%	J-1 EU-Z4
China Offset Reel	USD/t	849.97	-0.38	-0.04%	-36.65	-4.13%	8-Feb-24
Europe Offset Reel	USD/t	1,172.17	-0.56 -2.51	-0.21%	-124.78	-9.62%	9-Feb-24
•	USD/L	1,172.17	-2.31	-U.Z 190	-124.70	-9.02%	9-160-24
Packaging - Containerboard Kraftliner China	LICD/#	FFO 1F	0.25	0.040/	100.00	16.010/	0 Fab 24
	USD/t	559.15	-0.25	-0.04%	-106.60	-16.01%	8-Feb-24
Kraftliner Europe	USD/t	719.53	-5.87	-0.81%	-159.96	-18.19% -12.70%	9-Feb-24
Testliner China	USD/t	473.13	-0.21	-0.04%	-68.83		8-Feb-24
Testliner Europe	USD/t	524.46	-1.92	-0.37%	-166.65	-24.11%	9-Feb-24
White-top Kraftliner China	USD/t	772.58	-0.34	-0.04%	-126.28	-14.05%	8-Feb-24
White-top Kraftliner Europe	USD/t	898.70	-2.53	-0.28%	-95.59	-9.61%	9-Feb-24
Packaging - Boxboard	LICD/t	FOF F1	0.22	0.040/	100.45	17.200/	0.5-5-24
Duplex China	USD/t	505.51	-0.22	-0.04%	-106.45	-17.39%	8-Feb-24
Duplex Europe	USD/t	1,233.39	-1.83	-0.15%	-232.62	-15.87%	9-Feb-24
Old Corrugated Cardboard	LICD (251.22	0.11	0.040/	25.21	0.120/	0.5.1.04
OCC China	USD/t	251.23	-0.11	-0.04%	-25.21	-9.12%	8-Feb-24
OCC Europe	USD/t	106.07	-0.01	-0.01%	31.70	42.62%	9-Feb-24
OCC US	USD/t	91.00	0.00	0.00%	58.00	175.76%	1-Feb-24
Margins - China	LICE /	200.41	0.20	0.100/	10.10	6.200/	0.5.1.04
Uncoated Paper	USD/t	280.41	-0.28	-0.10%	-19.12	-6.38%	9-Feb-24
Coated Paper	USD/t	197.04	-0.24	-0.12%	74.34	60.58%	9-Feb-24
Kraftliner	USD/t	67.07	0.10	0.15%	-17.20	-20.41%	9-Feb-24
Testliner	USD/t	221.91	-0.10	-0.04%	-43.62	-16.43%	8-Feb-24
Coated Duplex	USD/t	13.44	0.13	0.95%	-17.06	-55.93%	9-Feb-24
White-top Kraftliner	USD/t	79.65	0.02	0.03%	6.00	8.15%	9-Feb-24
Margins - Europe							
Uncoated Paper	USD/t	528.03	-22.88	-4.15%	97.10	22.53%	9-Feb-24
Coated Paper	USD/t	401.99	-22.61	-5.33%	55.91	16.16%	9-Feb-24
Kraftliner	USD/t	200.48	-6.30	-3.04%	-137.10	-40.61%	9-Feb-24
Testliner	USD/t	418.38	-1.92	-0.46%	-198.35	-32.16%	9-Feb-24
Coated Duplex	USD/t	301.36	-2.69	-0.89%	-155.19	-33.99%	9-Feb-24
White-top Kraftliner	USD/t	-33.33	-3.39	11.33%	-18.16	119.69%	9-Feb-24
Pulp Spreads							
HW Europe - China (Net)	USD/t	117.25	20.24	88.64%	-69.70	-37.28%	9-Feb-24
SW Europe - China (Net)	USD/t	199.11	1.45	0.73%	76.15	61.93%	9-Feb-24
SW - HW China	USD/t	79.99	-0.45	-0.56%	-42.59	-34.74%	9-Feb-24
SW - HW Europe	USD/t	161.85	-19.24	-10.63%	103.26	176.21%	6-Feb-24

Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI



Exhibit 3: Pulp & Paper prices period comparison Evolution of pulp and paper prices

Pulp & Paper Price Reference	Current Price (USD/t)	Last Week Price	Last Month Price	Last Year Price	12M Average	5Y Average	Source
Market Pulp - Hardwood							
HW China Net	652.93	653.07	653.06	763.92	595.01	615.96	FOEX
HW China Resale Net (Eucalyptus)	606.04	606.31	597.21	790.56	592.30	611.99	RISI
HW Europe List	1,096.92	1,068.29	1,018.64	1,354.26	1,013.76	976.53	FOEX
HW Europe Net	770.18	750.08	715.22	950.86	711.79	687.03	BofA/FOEX
HW US List	1,175.00	1,175.00	1,135.00	1,580.00	1,199.27	1,184.35	RISI
Market Pulp - Softwood	,	,	,		,	,	
SW China Net	732.92	733.51	739.46	886.50	744.04	751.39	FOEX
SW China Resale Net (NBSK)	701.22	701.53	723.43	947.04	739.38	749.95	RISI
SW China Futures Net	669.68	677.10	688.59	n.a.	680.16	n.a.	RISI
SW Europe List	1,301.09	1,299.89	1,248.25	1,409.18	1,254.99	1,141.12	FOEX
SW Europe Net	932.03	931.17	894.18	1,009.46	899.01	818.95	BofA/FOEX
SW US List	1,380.00	1,380.00	1,340.00	1,700.00	1,418.28	1,399.21	RISI
Printing & Writing - Uncoated	1,500.00	1,500.00	1,5 10.00	1,7 00.00	1,110.20	1,000.21	11.51
China Offset Reel	933.34	933.76	936.47	1,063.45	945.77	976.10	RISI
Europe Offset Reel	1,298.21	1,300.99	1,312.43	1,381.79	1,324.73	1,143.68	RISI
Printing & Writing - Coated	1,20.21	1,500.55	1,512.15	1,501.75	1,52 1.75	1,1 15.00	Mai
China Offset Reel	849.97	850.35	852.82	886.63	839.89	875.06	RISI
Europe Offset Reel	1,172.17	1,174.68	1,185.01	1,296.95	1,211.09	985.06	RISI
Packaging - Containerboard	1,172.17	1,17 4.00	1,105.01	1,230.33	1,211.03	303.00	ICIJI
Kraftliner China	559.15	559.39	561.02	665.74	585.22	681.11	RISI
Kraftliner Europe	719.53	725.40	741.76	879.49	775.31	798.30	FOEX
Testliner China	473.13	473.34	474.72	541.97	476.57	594.10	RISI
Testliner Europe	524.46	526.38	537.68	691.11	573.92	606.89	FOEX
White-top Kraftliner China	772.58	772.92	775.16	898.86	797.43	870.72	RISI
White-top Kraftliner Europe	898.70	901.23	928.70	994.29	940.12	922.96	FOEX
Packaging - Boxboard	090.70	901.23	920.70	994.29	940.12	922.90	FUEX
Duplex China	505.51	505.73	507.20	611.96	522.08	652.62	RISI
· ·	1,233.39	1,235.23					
Duplex Europe	1,233.39	1,233.23	1,256.41	1,466.01	1,375.96	n.a.	RISI
Old Corrugated Cardboard	251.23	251.24	250.52	276.44	242.00	222.00	DICI
OCC China		251.34	250.53	276.44	243.00	333.00	RISI
OCC Europe	106.07	106.08	110.23	74.37	99.46	126.55	FOEX
OCC US	91.00	91.00	87.00	33.00	56.65	72.32	RISI
Margins - China	200.41	200.50	202.41	200.52	250.76	26014	EOEW/DIGI
Uncoated Paper	280.41	280.69	283.41	299.53	350.76	360.14	FOEX/RISI
Coated Paper	197.04	197.28	199.76	122.71	244.88	259.10	FOEX/RISI
Kraftliner	67.07	66.97	66.02	84.28	91.70	138.92	FOEX/RISI
Testliner	221.91	222.01	224.18	265.53	233.56	261.10	FOEX/RISI
Coated Duplex	13.44	13.31	12.20	30.49	28.56	110.42	FOEX/RISI
White-top Kraftliner	79.65	79.63	78.90	73.65	127.91	187.04	FOEX/RISI
Margins - Europe							
Uncoated Paper	528.03	550.92	597.21	430.93	612.94	456.65	FOEX/RISI
Coated Paper	401.99	424.61	469.79	346.08	499.30	298.03	FOEX/RISI
Kraftliner	200.48	206.77	239.56	337.57	276.08	325.55	FOEX
Testliner	418.38	420.30	427.44	616.73	474.47	480.34	FOEX
Coated Duplex	301.36	304.05	362.23	456.55	476.95	447.41	FOEX/RISI
White-top Kraftliner	-33.33	-29.94	34.52	-15.17	41.11	104.01	FOEX
Pulp Spreads							
HW Europe - China (Net)	117.25	97.01	62.16	186.94	116.78	71.07	FOEX
SW Europe - China (Net)	199.11	197.66	154.72	122.96	154.97	67.56	FOEX
	=0.00	00.44	06.40	122.50	1 40 02	125.42	FOEV
SW - HW China	79.99	80.44	86.40	122.58	149.03 187.22	135.43	FOEX

Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

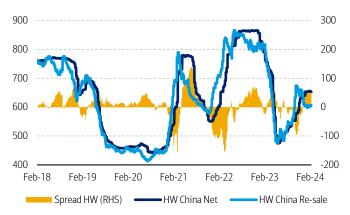


Key charts

Main global pulp price references

Exhibit 4: China HW net price (US\$/t)

Hardwood prices rebounded from the bottom of ~\$480/t

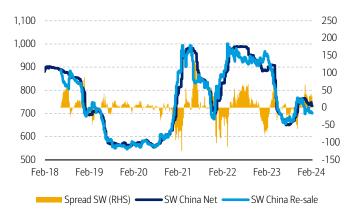


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 5: China SW net price (US\$/t)

Softwood prices began to drop



Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 12: Shanghai softwood pulp futures (May 2024 contract [sp2405], US\$/t, net*) vs. PIX NBSK China net (US\$/t)

The most traded pulp future contract (May 2024; sp2405) is rangebound in the past weeks

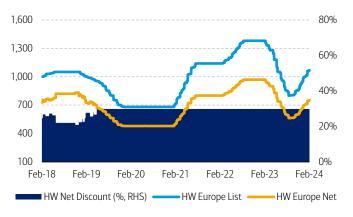


Source: BofA Global Research, Shanghai Futures Exchange, Fastmarkets FOEX

*Net of VAT (13%) and logistic costs (estimated at RMB 150/MT)

Exhibit 7: Europe HW list vs. net price (US\$/t)

Europe Hardwood list prices are still rebounding

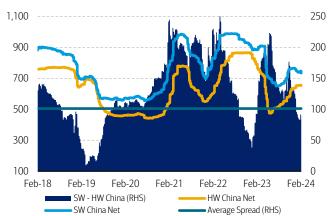


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 9: China SW - HW spread (US\$/t)

SW-HW spreads in China are below the historical average

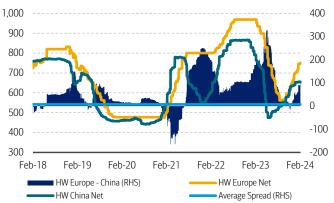


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 11: Europe HW vs. China HW price (US\$/t)

Europe prices are at a premium to prices in China

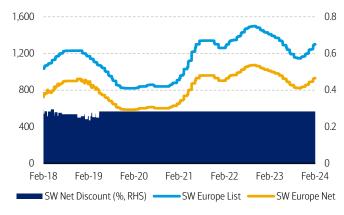


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 8: Europe SW list vs. net price (US\$/t)

As for Softwood, list prices are rebounding slightly

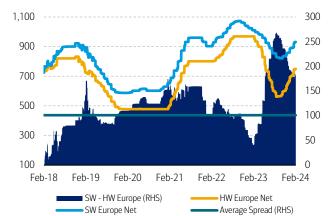


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 10: Europe SW - HW spread (US\$/t)

SW-HW spreads in Europe have been trading above its historical avg

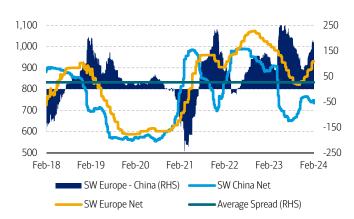


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 12: Europe SW vs. China SW price (US\$/t)

As for Softwood, EU-CH spread has been increasing



Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI



Exhibit 19: US HW list price (US\$/t)

US hardwood prices increased from the bottom

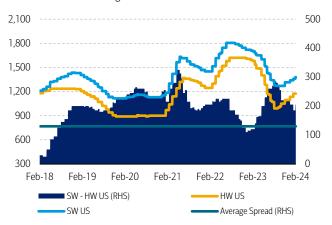


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 21: US SW-HW spread (US\$/t)

Even after the increase in spreads from 2020 and early 2021, current value is still well above historical avg of \sim US\$124/t



 $\textbf{Source:} \ \mathsf{BofA} \ \mathsf{Global} \ \mathsf{Research}, \mathsf{Fastmarkets} \ \mathsf{FOEX}, \mathsf{Fastmarkets} \ \mathsf{RISI}$

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Exhibit 20: US SW list price (US\$/t)

US softwood prices have remained close to the bottom



Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 22: US OCC (US\$/t)

OCC prices have recovered from the recent bottom



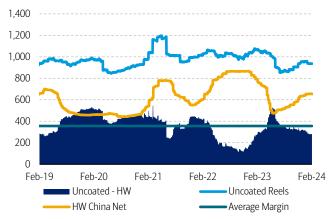
Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

Key charts

Main global paper price references

Exhibit 17: China uncoated reels price and margin (US\$/t)

China uncoated margins trading close to the historical avg of ~US\$360/t

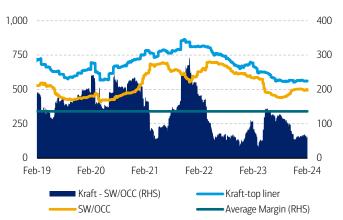


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 19: China kraftliner (US\$/t)

After peak in October 2021, kraftliner margins in China dropped and are now below to avg. of \sim US\$150/t

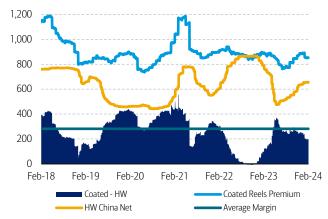


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 18: China coated reels price and margin (US\$/t)

China coated margins are close to the historical avg of ~US\$280/t

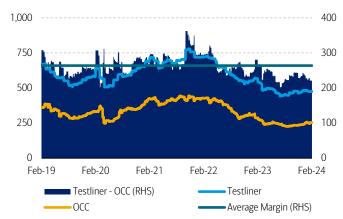


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 20: China testliner (US\$/t)

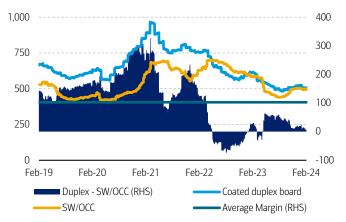
Testliner margins are below the historical margin



Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

Exhibit 21: China duplex (US\$/t)

After recent peak in November, duplex margins in China started to drop and are now below the avg of \sim US\$130/t

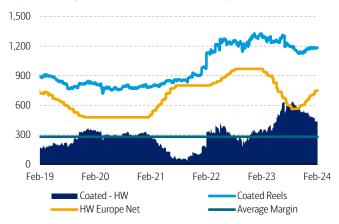


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 23: China ivory board (US\$/t)

Ivory board margin in China is now above the average of ~US\$260/t

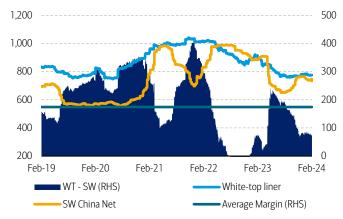


 $\textbf{Source:} \ \mathsf{BofA} \ \mathsf{Global} \ \mathsf{Research}, \ \mathsf{Fastmarkets} \ \mathsf{FOEX}, \ \mathsf{Fastmarkets} \ \mathsf{RISI}$

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Exhibit 22: China white-top liner (US\$/t)

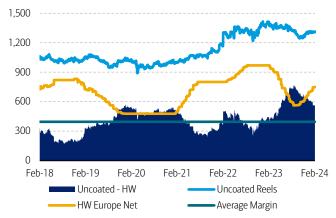
White-top liner also suffered pressure in margins by April 2021, and now returned to levels below avg



Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

Exhibit 24: Europe uncoated reels (US\$/t)

For uncoated in Europe, margins are recently high, and trading above its historical avg of ~US\$380/t

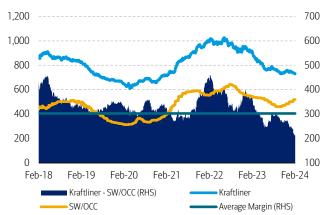


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 26: Europe kraftliner (US\$/t)

Kraftliner margins are currently below the historical average

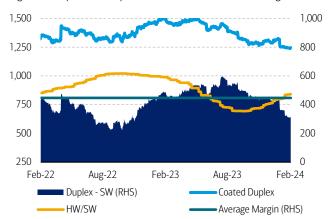


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 28: Europe duplex (US\$/t)

Margins for duplex in Europe are close to the historical average

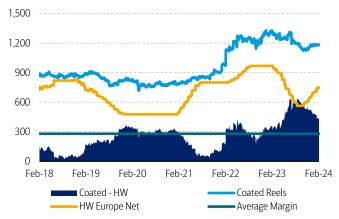


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 25: Europe coated reels (US\$/t)

Margins for uncoated in Europe recovered from low level reached after peak in 2020 and early 2021

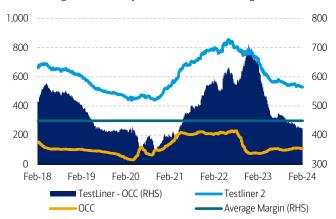


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 27: Europe testliner (US\$/t)

Testliner margins are currently below the historical average

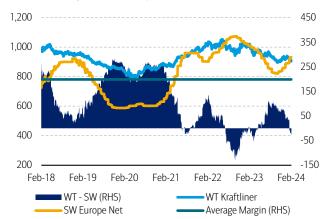


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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Exhibit 29: Europe white-top liner (US\$/t)

WT kraftliner margins are currently low



Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI



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