

# Pulp & Paper Price Tracker

## Hardwood producers announced hikes for March orders

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 \$1.11/t w/w to \$653.49/t for hardwood and up \$4.52/t w/w to \$738.10t for softwood

Pulp & Paper Price Reference	Unit	Current Price	w/w Change (USD/t)	w/w Change (%)
<b>Market Pulp - Hardwood</b>				
HW China Net	USD/t	653.49	-1.11	-0.17%
HW China Resale Net (Eucalyptus)	USD/t	628.27	14.08	2.29%
HW Europe List	USD/t	1,143.88	2.56	0.22%
HW Europe Net	USD/t	803.15	1.80	0.22%
HW US List	USD/t	1,235.00	5.00	0.41%
<b>Market Pulp - Softwood</b>				
SW China Net	USD/t	738.10	4.52	0.62%
SW China Resale Net (NBSK)	USD/t	718.87	6.18	0.87%
SW China Futures Net	USD/t	704.66	11.34	1.64%
SW Europe List	USD/t	1,349.86	3.08	0.23%
SW Europe Net	USD/t	966.97	2.21	0.23%
SW US List	USD/t	1,430.00	30.00	2.14%
<b>Printing &amp; Writing - Uncoated</b>				
China Offset Reel	USD/t	933.11	-0.27	-0.03%
Europe Offset Reel	USD/t	1,301.51	-3.71	-0.28%
<b>Printing &amp; Writing - Coated</b>				
China Offset Reel	USD/t	849.76	-0.25	-0.03%
Europe Offset Reel	USD/t	1,175.15	-3.35	-0.28%
<b>Packaging - Containerboard</b>				
Kraftliner China	USD/t	557.89	-0.16	-0.03%
Kraftliner Europe	USD/t	721.91	-0.06	-0.01%
Testliner China	USD/t	471.63	-0.14	-0.03%
Testliner Europe	USD/t	518.97	-0.03	-0.01%
White-top Kraftliner China	USD/t	772.38	-0.23	-0.03%
White-top Kraftliner Europe	USD/t	896.19	0.01	0.00%
<b>Packaging - Boxboard</b>				
Duplex China	USD/t	498.44	-0.15	-0.03%
Duplex Europe	USD/t	1,238.78	-0.23	-0.02%
<b>Old Corrugated Cardboard</b>				
OCC China	USD/t	251.16	-0.07	-0.03%
OCC Europe	USD/t	106.74	0.06	0.05%
OCC US	USD/t	91.00	0.00	0.00%

Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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01 March 2024

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Pulp & Paper

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Refer to important disclosures on page 13 to 14.

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Timestamp: 01 March 2024 04:10PM EST

## Weekly news flow

### Asia: HW producers announce \$30/t hike

FOEX reported pulp prices mixed w/w in China this week, with imported hardwood (HW) down \$1.11/t to \$653.49/t and imported softwood (SW) up \$4.52/t w/w to \$738.10/t. Resale prices were up w/w with hardwood (BEK; Bleached Eucalyptus Kraft) up \$14.08/t w/w to \$628.27/t, while resale softwood (NBSK; Northern Bleached Softwood Kraft) rose \$6.18/t w/w to \$718.87/t. Shanghai SW future (May 2024 contract) rose \$11.34/t w/w to \$704.66/t (net of value added-tax [VAT] and logistic costs). Earlier this week, pulp producers announced HW price hikes in China, Europe and North America, in a movement started by Suzano and joined by other players. Almost all HW producers, except Arauco, announced \$30/t hikes for March orders in Asia, which would lead prices to \$680/t.

According to PPI contacts, in 2023 pulp producers were faced with inventory pressures and had to cut prices. However, this year they are not faced with such pressures and with the current backlogs pushed for an increase. After the announced hikes, buyers are not expecting pulp prices to drop in the coming months and bought the remaining unsold imported volumes from February and resale pulp. PPI contacts also mentioned that paper and board producers would be more willing to accept the HW price hike given their push to increase paper prices. Large papermakers also have inhouse pulp capacity and would benefit from the cost advantage if pulp prices increase so would support this hike. Moving forward some pulp sellers highlighted the capacities coming online and said that if producers continued to seek increases they would slash volumes.

### Global pulp shipments up 7.6% y/y in January

The Pulp and Paper Products Council (PPPC) reported global pulp shipments up 7.6% y/y in January to 4,339Kt. Hardwood (HW) shipments again led the y/y increase, up 14.5% y/y in Jan to 2,365Kt, while softwood (SW) shipments were up 0.2% y/y to 1,819Kt, and unbleached kraft pulp (UKP) rose 0.2% y/y to 152Kt. The increase was led by higher shipments to China, up 22.3% y/y (+41% for HW and +2.5% for SW). Shipments to North America were up 7.5% y/y, Western Europe shipments rose 2.2% y/y, Eastern Europe shipments rose 15.1% y/y, Other Asia and Africa was up 2.8% y/y. Shipments to Latin America dropped 16.1% y/y to 297Kt, Japan dropped 11.1% y/y to 146Kt and Oceania - 5.8% y/y to 28Kt ([link to PPPC review report](#)).

### China continues to lead growth with volumes up 22.3% y/y

PPPC noted that the strong y/y pulp shipments growth in January were partly due to lower comps, as by early 2023 pulp buyers were destocking. Even coming from a strong base in December, the m/m shipment to China dropped in line with previous Januarys, indicating a strong month in terms of pulp shipments. Chinese HW shipments rose an impressive 41% y/y. Meantime, we also saw rebounds in developed world demand, with North America and Western Europe shipments up y/y, although aided by the soft comps.

### Inventories up one day m/m to 44 days

Total producer inventories increased two days m/m to 44 days of supply, up four days m/m to 47 days for HW and up one day m/m for SW to 41 days. On a y/y basis, total inventories dropped seven days, with HW and SW seven days below January 2023 levels. Operating rates at 82% decreased from 93% in Dec 2023 but was up from 79% in Jan 2023.

**Exhibit 2: Summary table for World Pulp Statistics – Shipments (Kt)**

PPPC reported global pulp shipments up 7.6% y/y to 4,339Kt in January

	Jan-24	m/m %	y/y %	2024 ytd	ytd (%)
<b>Total shipments</b>	<b>4,339</b>	<b>-13.3%</b>	<b>7.6%</b>	<b>4,339</b>	<b>7.6%</b>
Softwood pulp	1,819	-5.6%	0.2%	1,819	0.2%
Hardwood pulp	2,365	-18.9%	14.5%	2,365	14.5%
Others	155	-2.9%	1.4%	155	0.6%
<b>By region</b>					
North America	633	-3.8%	7.5%	633	7.5%
Europe - Total	1,074	5.6%	3.8%	1,074	3.9%
LatAm	297	-22.0%	-16.1%	297	-16.1%
China	1,542	-21.8%	22.3%	1,542	22.3%
Japan	146	-9.9%	-11.1%	146	-11.1%
Other Asia & Africa	620	-20.7%	2.8%	620	2.8%
Oceania	28	-11.7%	-5.8%	28	-5.8%

Source: BofA Global Research, PPPC

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**Exhibit 3: Summary table for World Pulp Statistics – Inventories**

Producer inventories up two days m/m in Jan to 44 days of supply

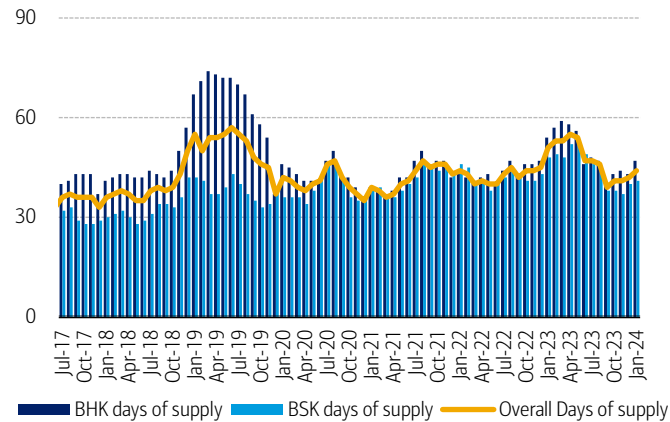
	Jan-24	m/m	y/y
<b>Days of supply</b>	<b>44</b>	<b>2</b>	<b>-7</b>
Softwood pulp	41	1	-7
Hardwood pulp	47	4	-7
<b>Shipment-to-capacity (operating rates %)</b>	<b>82%</b>	<b>-1100bp</b>	<b>+300bp</b>

Source: BofA Global Research, PPPC

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

Producer inventories increased 2 days m/m in Jan to 44 days of supply

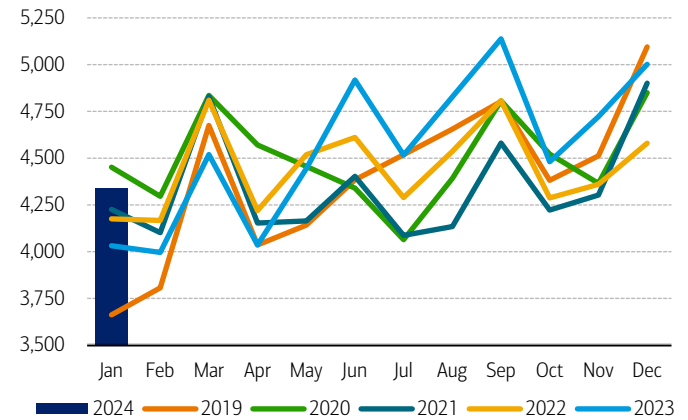


Source: BofA Global Research, PPPC (World-20 report)

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**Exhibit 5: Total pulp shipments (Kt)**

January shipments increased 7.6% y/y

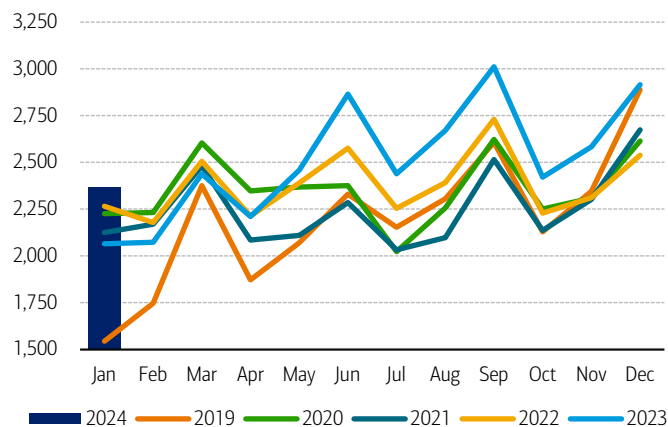


Source: BofA Global Research, PPPC (World-20 report)

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

January hardwood shipments increased 14.5% y/y

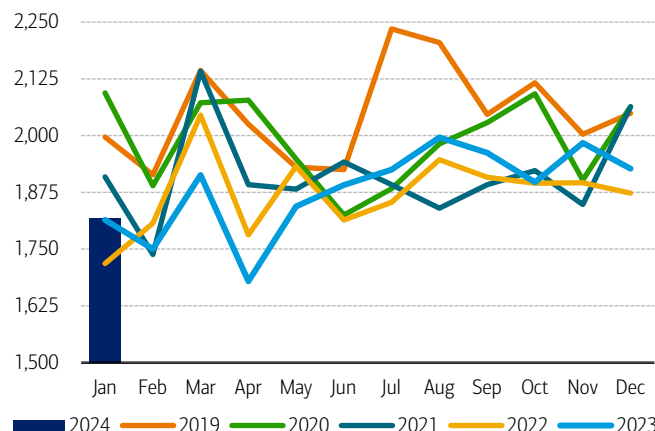


Source: BofA Global Research, PPPC (World-20 report)

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

January softwood shipments increased 0.2% y/y



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

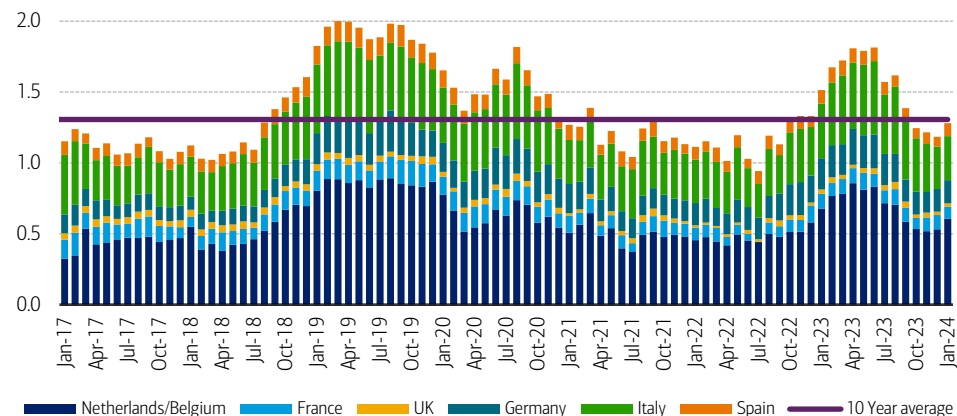
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**Europe: pulp port inventories down 15.5% y/y**

Earlier this week, HW producers announced \$80/t hikes for orders in March in a movement led by Suzano. On another note, more European containerboard producers announced recycled containerboard price hikes and also announced virgin fiber grade hikes for April. Most of the companies backed their hikes by higher costs. Meanwhile, Europulp reported inventories of woodpulp at European ports dropped 15.5% y/y but rose 8.1% m/m in January to 1,280Kt.

**Exhibit 8: Wood pulp inventories at European ports (Mt)**

Inventories of woodpulp at European ports down 15.5% y/y in December to 1,280Kt



Source: BofA Global Research, Europulp

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**Americas: outlook mixed on containerboard market**

PPI LatAm reported the outlook for the Brazilian containerboard market was mixed, as some said that sales in the first two months of 2024 were good, while others mentioned that high paper supply continued to pressure prices. According to sources there was a contrast between integrated and non-integrated players, as non-integrated players' margins remained pressured. With the increased kraftliner supply in Brazil and lower demand from international markets, producers were integrating as much as possible to lower the price pressure. Market participants were expecting Brazilian kraftliner exports to rebound, as US buyers have been attempting to increase their Latin American imports, which led Klabin to announce a \$60/t hike for kraftliner March exports.

**Exhibit 9: Summary of Pulp & Paper price movements**

Pulp prices down \$1.11/t w/w to \$653.49/t for hardwood and up \$4.52/t w/w to \$738.10t 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
<b>Market Pulp - Hardwood</b>							
HW China Net	USD/t	653.49	-1.11	-0.17%	-87.55	-11.81%	1-Mar-24
HW China Resale Net (Eucalyptus)	USD/t	628.27	14.08	2.29%	-101.33	-13.89%	1-Mar-24
HW Europe List	USD/t	1,143.88	2.56	0.22%	-185.85	-13.98%	27-Feb-24
HW Europe Net	USD/t	803.15	1.80	0.22%	-130.49	-13.98%	27-Feb-24
HW US List	USD/t	1,235.00	5.00	0.41%	-255.00	-17.11%	28-Feb-24
<b>Market Pulp - Softwood</b>							
SW China Net	USD/t	738.10	4.52	0.62%	-170.25	-18.74%	1-Mar-24
SW China Resale Net (NBSK)	USD/t	718.87	6.18	0.87%	-186.14	-20.57%	1-Mar-24
SW China Futures Net	USD/t	704.66	11.34	1.64%	n.a.	n.a.	1-Mar-24
SW Europe List	USD/t	1,349.86	3.08	0.23%	-42.33	-3.04%	27-Feb-24
SW Europe Net	USD/t	966.97	2.21	0.23%	-30.32	-3.04%	27-Feb-24
SW US List	USD/t	1,430.00	30.00	2.14%	-222.50	-13.46%	28-Feb-24
<b>Printing &amp; Writing - Uncoated</b>							
China Offset Reel	USD/t	933.11	-0.27	-0.03%	-110.29	-10.57%	1-Mar-24
Europe Offset Reel	USD/t	1,301.51	-3.71	-0.28%	-48.39	-3.58%	1-Mar-24
<b>Printing &amp; Writing - Coated</b>							
China Offset Reel	USD/t	849.76	-0.25	-0.03%	-29.69	-3.38%	1-Mar-24
Europe Offset Reel	USD/t	1,175.15	-3.35	-0.28%	-79.18	-6.31%	1-Mar-24
<b>Packaging - Containerboard</b>							
Kraftliner China	USD/t	557.89	-0.16	-0.03%	-64.36	-10.34%	1-Mar-24
Kraftliner Europe	USD/t	721.91	-0.06	-0.01%	-128.43	-15.10%	1-Mar-24
Testliner China	USD/t	471.63	-0.14	-0.03%	-13.86	-2.85%	1-Mar-24
Testliner Europe	USD/t	518.97	-0.03	-0.01%	-130.99	-20.15%	1-Mar-24
White-top Kraftliner China	USD/t	772.38	-0.23	-0.03%	-73.38	-8.68%	1-Mar-24
White-top Kraftliner Europe	USD/t	896.19	0.01	0.00%	-66.37	-6.89%	1-Mar-24
<b>Packaging - Boxboard</b>							
Duplex China	USD/t	498.44	-0.15	-0.03%	-58.61	-10.52%	1-Mar-24
Duplex Europe	USD/t	1,238.78	-0.23	-0.02%	-207.72	-14.36%	1-Mar-24
<b>Old Corrugated Cardboard</b>							
OCC China	USD/t	251.16	-0.07	-0.03%	-16.74	-6.25%	1-Mar-24
OCC Europe	USD/t	106.74	0.06	0.05%	30.69	40.35%	1-Mar-24
OCC US	USD/t	91.00	0.00	0.00%	58.00	175.76%	1-Feb-24
<b>Margins - China</b>							
Uncoated Paper	USD/t	279.62	0.84	0.30%	-22.74	-7.52%	1-Mar-24
Coated Paper	USD/t	196.27	0.86	0.44%	57.86	41.80%	1-Mar-24
Kraftliner	USD/t	63.26	-2.39	-3.63%	29.13	85.36%	1-Mar-24
Testliner	USD/t	220.46	-0.06	-0.03%	2.88	1.32%	1-Mar-24
Coated Duplex	USD/t	3.81	-2.37	-38.37%	34.88	-112.25%	1-Mar-24
White-top Kraftliner	USD/t	76.59	-1.93	-2.46%	55.52	263.46%	1-Mar-24
<b>Margins - Europe</b>							
Uncoated Paper	USD/t	498.36	-5.51	-1.09%	82.10	19.72%	1-Mar-24
Coated Paper	USD/t	372.00	-5.15	-1.36%	51.31	16.00%	1-Mar-24
Kraftliner	USD/t	185.05	-1.19	-0.64%	-128.61	-41.00%	1-Mar-24
Testliner	USD/t	412.23	-0.09	-0.02%	-161.68	-28.17%	1-Mar-24
Coated Duplex	USD/t	271.81	-2.44	-0.89%	-177.39	-39.49%	1-Mar-24
White-top Kraftliner	USD/t	-70.78	-2.20	3.21%	-36.04	103.77%	1-Mar-24
<b>Pulp Spreads</b>							
HW Europe - China (Net)	USD/t	149.66	2.91	58.65%	-42.94	-22.30%	1-Mar-24
SW Europe - China (Net)	USD/t	228.87	-2.31	-1.00%	139.93	157.33%	1-Mar-24
SW - HW China	USD/t	84.61	5.63	7.13%	-82.70	-49.43%	1-Mar-24
SW - HW Europe	USD/t	163.82	0.41	0.25%	100.17	157.37%	27-Feb-24

Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 10: Pulp & Paper prices period comparison**

Evolution of pulp and paper prices

<b>Pulp &amp; Paper Price Reference</b>	<b>Current Price (USD/t)</b>	<b>Last Week Price</b>	<b>Last Month Price</b>	<b>Last Year Price</b>	<b>12M Average</b>	<b>5Y Average</b>	<b>Source</b>
<b>Market Pulp - Hardwood</b>							
HW China Net	653.49	654.60	655.74	741.04	589.51	615.90	FOEX
HW China Resale Net (Eucalyptus)	628.27	614.18	602.47	729.59	583.89	611.10	RISI
HW Europe List	1,143.88	1,141.32	1,068.29	1,329.73	1,001.95	978.03	FOEX
HW Europe Net	803.15	801.35	750.08	933.64	703.50	687.84	BofA/FOEX
HW US List	1,235.00	1,230.00	1,175.00	1,490.00	1,179.56	1,184.44	RISI
<b>Market Pulp - Softwood</b>							
SW China Net	738.10	733.58	747.39	908.35	734.99	751.79	FOEX
SW China Resale Net (NBSK)	718.87	712.68	708.38	905.00	727.04	749.72	RISI
SW China Futures Net	704.66	693.31	681.80	n.a.	679.88	n.a.	RISI
SW Europe List	1,349.86	1,346.78	1,299.89	1,392.19	1,251.23	1,143.15	FOEX
SW Europe Net	966.97	964.76	931.17	997.29	896.32	819.97	BofA/FOEX
SW US List	1,430.00	1,400.00	1,380.00	1,652.50	1,401.78	1,399.17	RISI
<b>Printing &amp; Writing - Uncoated</b>							
China Offset Reel	933.11	933.38	936.96	1,043.40	939.12	976.00	RISI
Europe Offset Reel	1,301.51	1,305.22	1,306.86	1,349.90	1,320.59	1,146.51	RISI
<b>Printing &amp; Writing - Coated</b>							
China Offset Reel	849.76	850.01	853.27	879.45	838.33	875.43	RISI
Europe Offset Reel	1,175.15	1,178.50	1,179.98	1,254.33	1,204.63	988.30	RISI
<b>Packaging - Containerboard</b>							
Kraftliner China	557.89	558.06	561.31	622.25	579.56	679.29	RISI
Kraftliner Europe	721.91	721.97	727.41	850.34	766.84	797.24	FOEX
Testliner China	471.63	471.76	474.97	485.48	472.95	591.88	RISI
Testliner Europe	518.97	519.00	527.84	649.96	564.95	606.07	FOEX
White-top Kraftliner China	772.38	772.61	775.57	845.77	790.88	870.03	RISI
White-top Kraftliner Europe	896.19	896.18	903.74	962.56	935.17	922.52	FOEX
<b>Packaging - Boxboard</b>							
Duplex China	498.44	498.58	507.47	557.05	516.03	650.64	RISI
Duplex Europe	1,238.78	1,239.00	1,238.66	1,446.49	1,363.32	n.a.	RISI
<b>Old Corrugated Cardboard</b>							
OCC China	251.16	251.24	253.73	267.90	241.85	331.71	RISI
OCC Europe	106.74	106.68	106.37	76.05	101.20	126.60	FOEX
OCC US	91.00	91.00	87.00	33.00	59.92	72.72	RISI
<b>Margins - China</b>							
Uncoated Paper	279.62	278.78	281.22	302.36	349.62	360.10	FOEX/RISI
Coated Paper	196.27	195.41	197.53	138.41	248.82	259.53	FOEX/RISI
Kraftliner	63.26	65.65	60.75	34.13	91.14	137.54	FOEX/RISI
Testliner	220.46	220.53	221.23	217.59	231.10	260.17	FOEX/RISI
Coated Duplex	3.81	6.17	6.91	-31.07	27.60	108.89	FOEX/RISI
White-top Kraftliner	76.59	78.52	74.01	21.07	128.63	186.18	FOEX/RISI
<b>Margins - Europe</b>							
Uncoated Paper	498.36	503.86	556.79	416.26	617.09	458.67	FOEX/RISI
Coated Paper	372.00	377.14	429.91	320.69	501.13	300.46	FOEX/RISI
Kraftliner	185.05	186.24	208.64	313.66	268.08	323.95	FOEX
Testliner	412.23	412.31	421.47	573.90	463.76	479.46	FOEX
Coated Duplex	271.81	274.24	307.49	449.20	467.00	444.55	FOEX/RISI
White-top Kraftliner	-70.78	-68.58	-27.44	-34.73	38.85	102.55	FOEX
<b>Pulp Spreads</b>							
HW Europe - China (Net)	149.66	146.75	94.34	192.60	113.99	71.94	FOEX
SW Europe - China (Net)	228.87	231.18	183.78	88.94	161.32	68.18	FOEX
SW - HW China	84.61	78.98	91.65	167.31	145.49	135.89	FOEX
SW - HW Europe	163.82	163.41	181.10	63.65	192.82	132.13	FOEX

Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

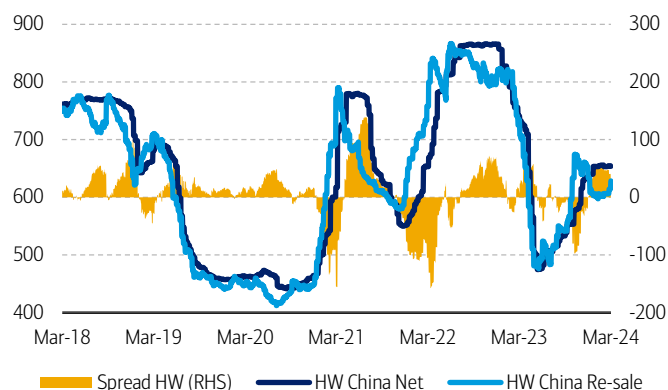
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# Key charts

## Main global pulp price references

### Exhibit 11: China HW net price (US\$/t)

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

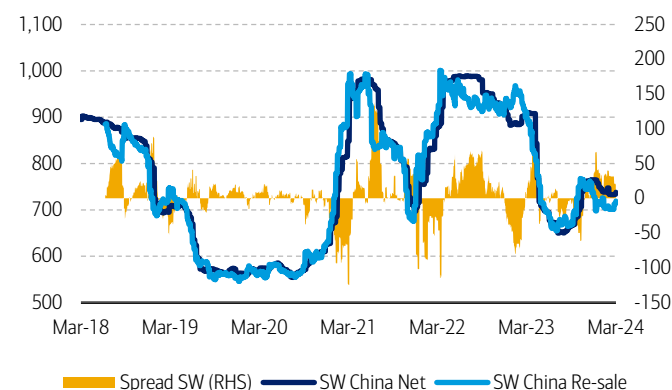


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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### Exhibit 12: China SW net price (US\$/t)

Softwood prices began to drop

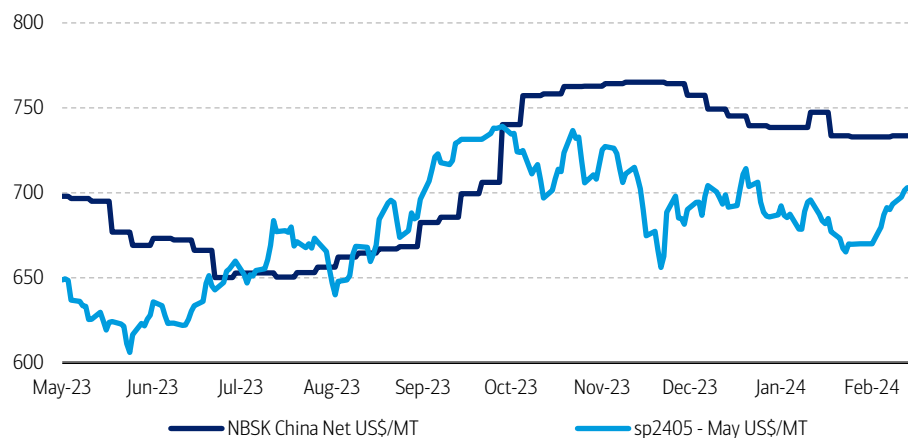


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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### Exhibit 13: 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) has rebounded recently



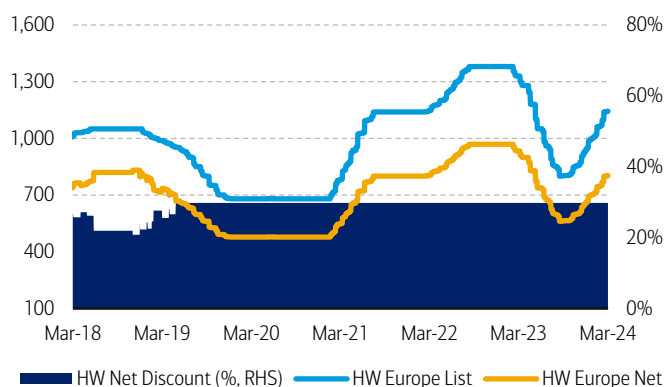
Source: BofA Global Research, Shanghai Futures Exchange, Fastmarkets FOEX

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

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**Exhibit 14: Europe HW list vs. net price (US\$/t)**

Europe Hardwood list prices are still rebounding

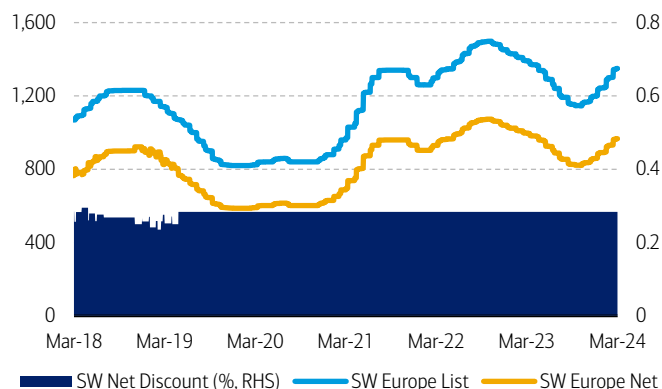


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 15: Europe SW list vs. net price (US\$/t)**

As for Softwood, list prices are rebounding slightly

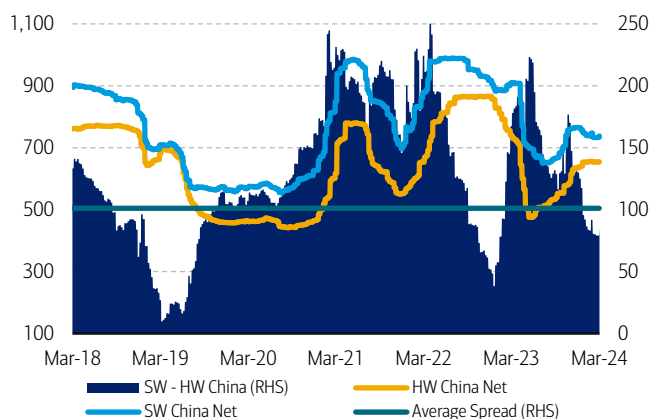


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 16: China SW – HW spread (US\$/t)**

SW-HW spreads in China are below the historical average

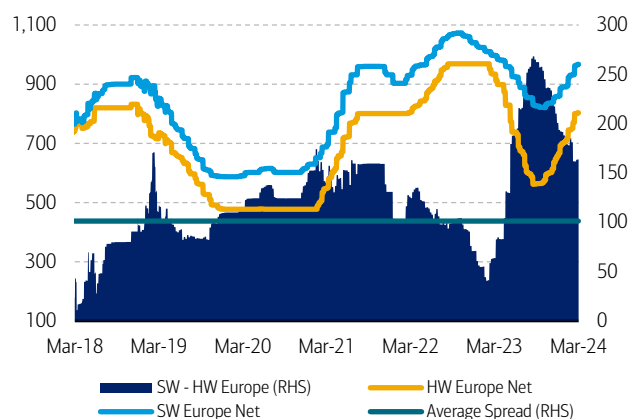


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 17: Europe SW – HW spread (US\$/t)**

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

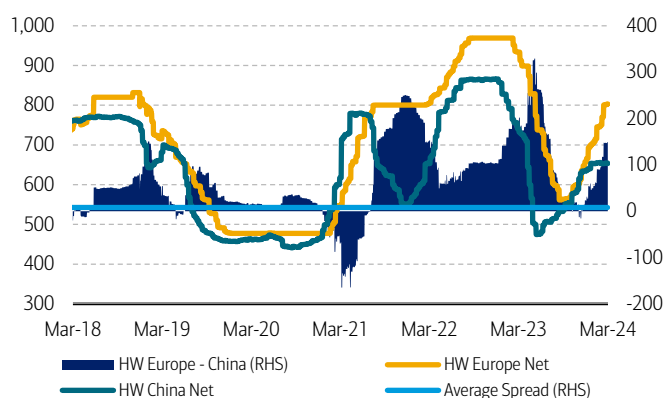


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 18: Europe HW vs. China HW price (US\$/t)**

Europe prices are at a premium to prices in China

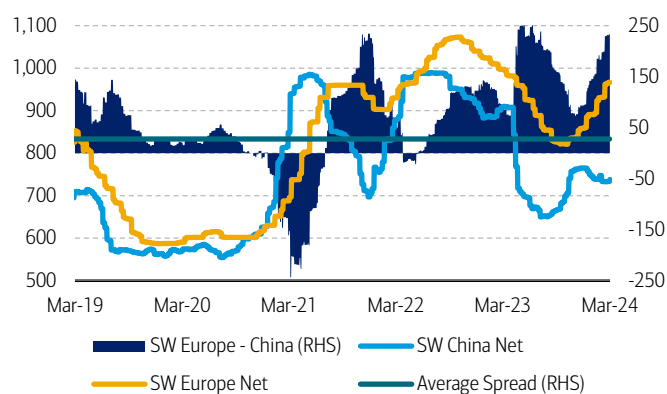


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 19: Europe SW vs. China SW price (US\$/t)**

As for Softwood, EU-CH spread has been increasing



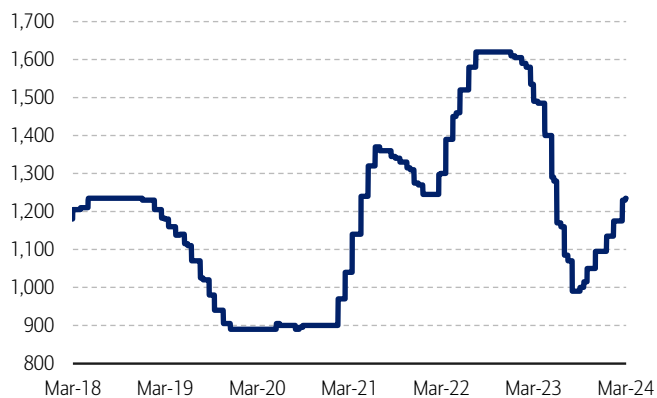
Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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

US hardwood prices increased from the bottom

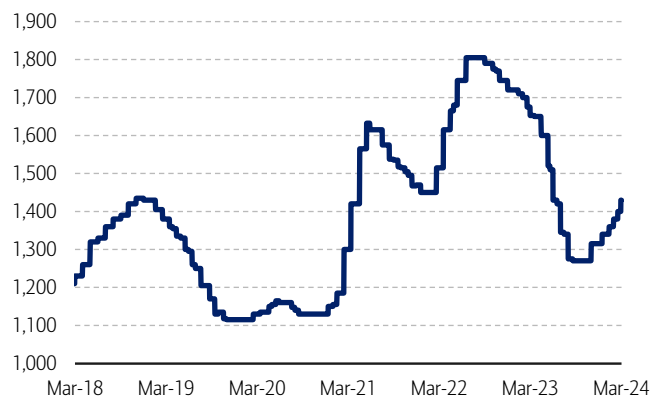


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 21: US SW list price (US\$/t)**

US softwood prices have remained close to the bottom

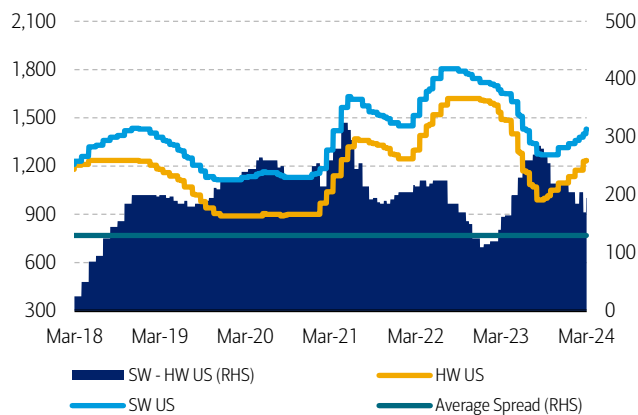


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 22: US 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 ~US\$124/t



Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 23: US OCC (US\$/t)**

OCC prices have recovered from the recent bottom



Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

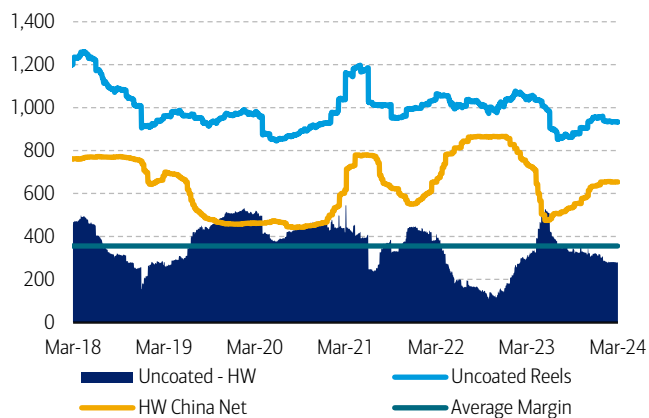
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# Key charts

## Main global paper price references

### Exhibit 24: China uncoated reels price and margin (US\$/t)

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

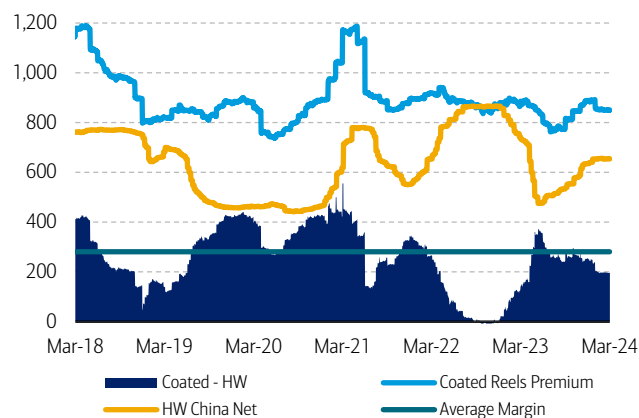


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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### Exhibit 25: China coated reels price and margin (US\$/t)

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

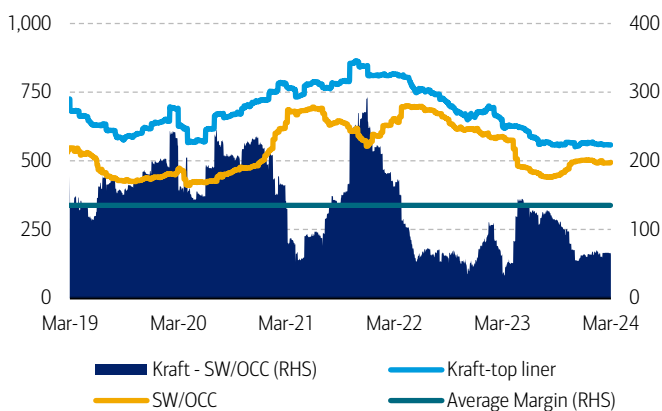


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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### Exhibit 26: China kraftliner (US\$/t)

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

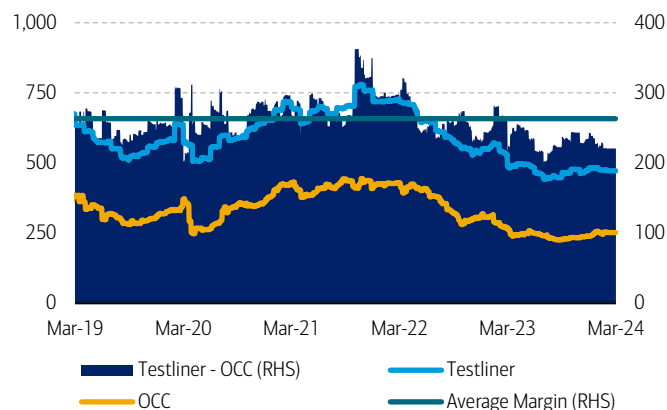


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### Exhibit 27: China testliner (US\$/t)

Testliner margins are below the historical margin

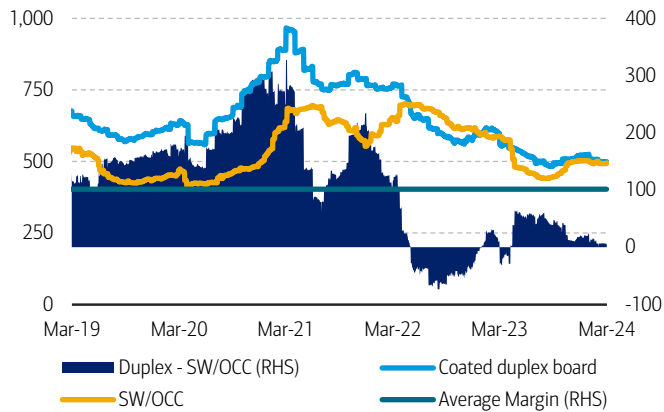


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 28: China duplex (US\$/t)**

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

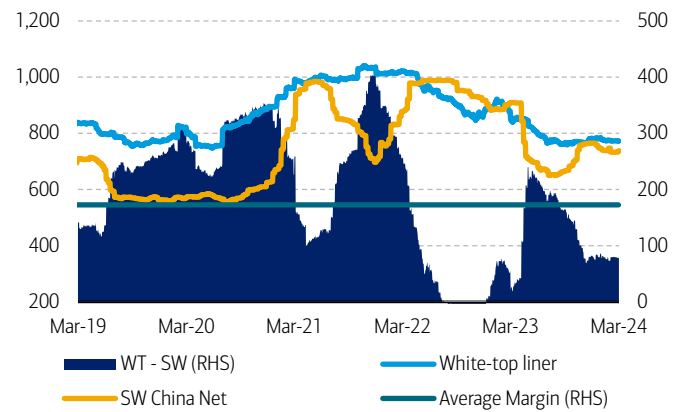


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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

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

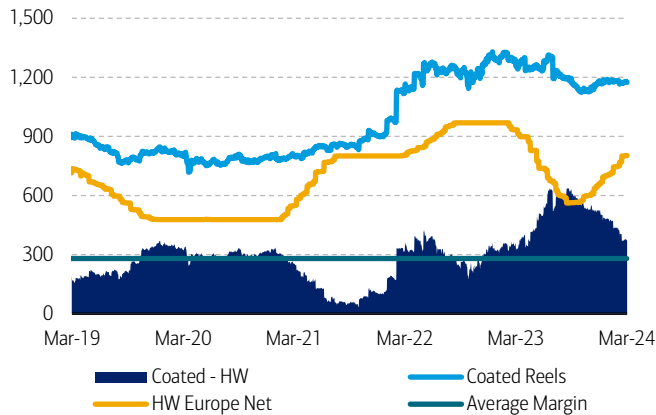


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 30: China ivory board (US\$/t)**

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

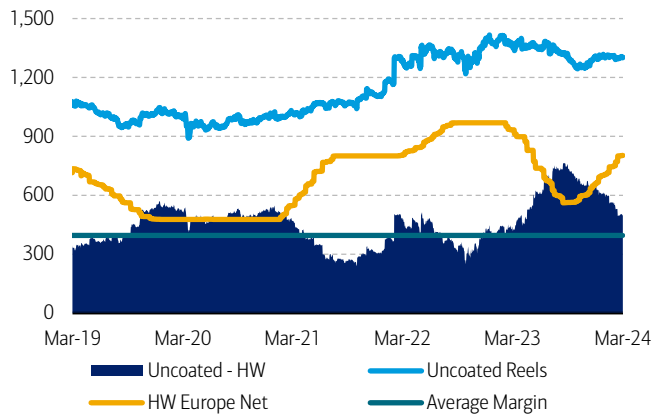


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 31: Europe uncoated reels (US\$/t)**

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

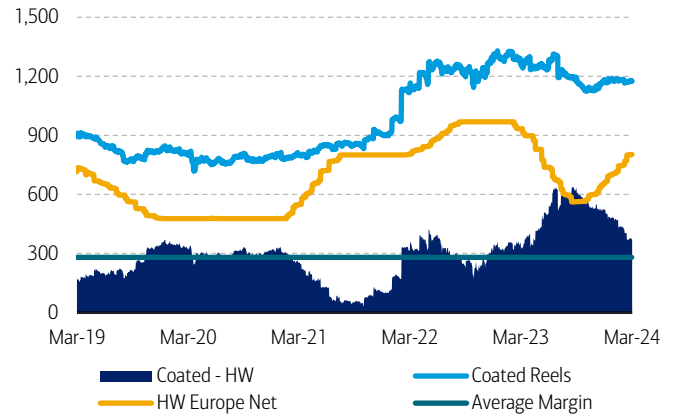


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 32: Europe coated reels (US\$/t)**

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

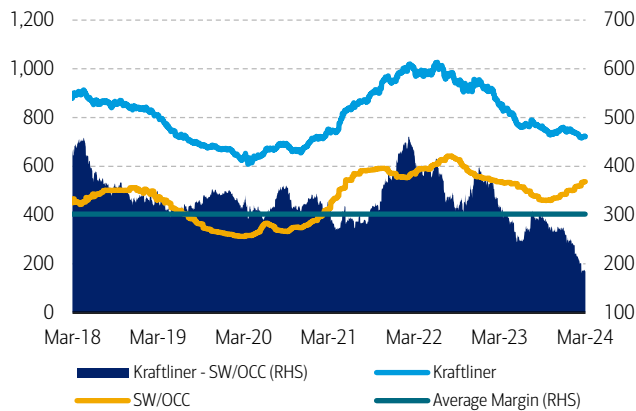


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 33: Europe kraftliner (US\$/t)**

Kraftliner margins are currently below the historical average

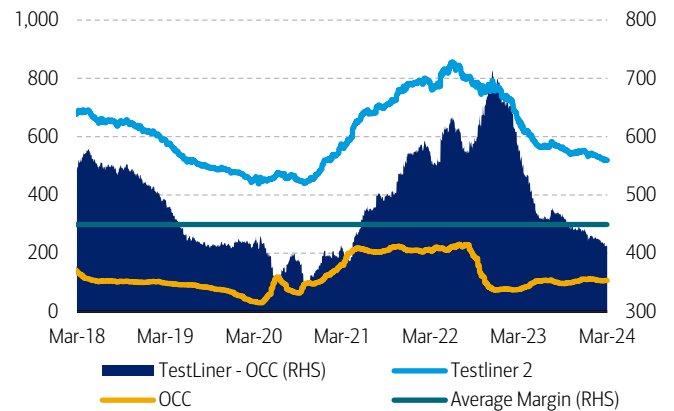


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 34: Europe testliner (US\$/t)**

Testliner margins are currently below the historical average

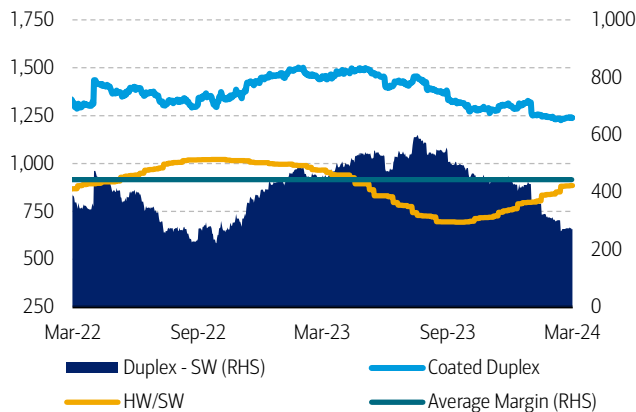


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 35: Europe duplex (US\$/t)**

Margins for duplex in Europe are close to the historical average

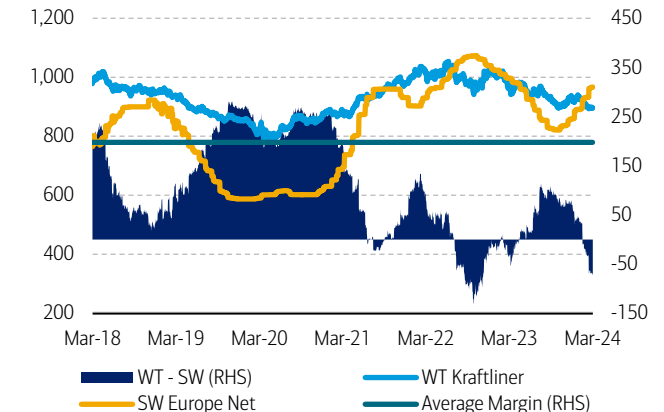


Source: BofA Global Research, Fastmarkets FOEX, Fastmarkets RISI

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**Exhibit 36: Europe white-top liner (US\$/t)**

WT kraftliner margins are currently low



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