

China Paper Industry Thermometer

Jan data: higher output and destocking before LNY

Industry Overview

January shows improvement as 2024 starts strong

January was a stronger month, as output was higher m/m and y/y. On a consolidated basis output was up 32.7% y/y and 5.1% m/m, The expressive y/y increase in output is due to last year's LNY (Lunar New Year) being in January. Output was up for all grades m/m, except duplex, while inventories were down for almost all grades. Aggregate inventories dropped 2.9% m/m. This combination of higher output and inventory consumption indicates Jan's paper consumption increased on a m/m basis. Paper prices remained pressured, as tissue prices were stable through January, while coated paper prices dropped. Coated paper gross margins were pressured but remained positive. We expect hardwood prices to be pressured early into 2024 and should see prices dropping during 1H24. We expect the price rebound to be quick after prices bottom above \$550/t and expect 2024 average hardwood price of \$627/t.

Tissue: output up and inventories down m/m

Tissue operating rates in China rose 10.9ppt m/m in January to 59.6%, or up 10.1ppt y/y. Total tissue output rose 23.2% m/m and 19.9% y/y to 954Kt in Jan, while enterprise tissue inventories dropped 10.8% m/m but was up 0.4% y/y to 497Kt. Tissue prices were flattish through January to RMB 6,400/t, down 0.3% ytd.

Coated paper: output stable m/m as inventories decline

Coated paper operating rates were stable m/m in Jan at 66.9%, up 510bp y/y. Coated paper output was stable m/m and up 8.3% y/y to 408Kt in Jan. Inventories dropped 3.3% m/m and was down 33.4% y/y to 379Kt, now at 23 days of supply, up one day m/m. Meantime, coated paper prices were down 3.2% m/m in January to RMB 5,740/t.

UWF paper: output slightly up m/m

Uncoated woodfree paper operating rates increased 90bp m/m in Jan to 66.8%, up 10ppt y/y. Meantime, total uncoated paper production increased 0.3% m/m and 24% y/y to 850Kt in Jan, while inventories dropped 1.3% m/m to 484Kt (down 24.7% y/y).

Ivory board: output and inventories up m/m

lvory board operating rates were up 200bp m/m in January to 66.2%, above Jan-23's 52%. Total ivory board output rose 3.0% m/m and was up 46% y/y to 1,007Kt in January, while enterprise inventories rose 1.4% m/m to 504Kt (down 25.9% y/y).

Duplex board: output down m/m

Duplex board operating rates were down 250bp m/m but up 25ppt y/y in January to 55%. Total duplex board output dropped 4.3% m/m but increased 84.9% y/y to 572Kt in Jan, while enterprise inventory was stable m/m at 591Kt (down 14.2% y/y).

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P&B = paper and board

P&W = Printing and writing

HW = hardwood

UWF= Uncoated woodfree

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Refer to important disclosures on page 18 to 19.

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Tissue

Exhibit 1: Summary of China tissue statistics (Kt) and operating rates (%)

Output rose 23.2% m/m to 954Kt, while inventories fell 10.8% m/m to 497Kt

	Jan-24	Dec-23	m/m (%)	m/m	Jan-23	y/y (%)	y/y	ytd
Operating rate (%)	59.6%	48.6%	22.5%	10.9	49.5%	20.4%	10.1	20.4%
Output (Kt)	954	774	23.2%	179	796	19.9%	158	19.9%
Import (Kt)	n.a.	4	n.a.	n.a.	3	n.a.	n.a.	n.a.
Export (Kt)	n.a.	37	n.a.	n.a.	19	n.a.	n.a.	n.a.
Consumption (Kt)	n.a.	741	n.a.	n.a.	778	n.a.	n.a.	n.a.
Enterprise inventory (Kt)	497	558	-10.8%	-60	496	0.4%	2	0.4%

Source: BofA Global Research, SCI, China NBS

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Exhibit 2: Tissue – operating rates in China (%)

Tissue operating rates rose to 59.6% in January

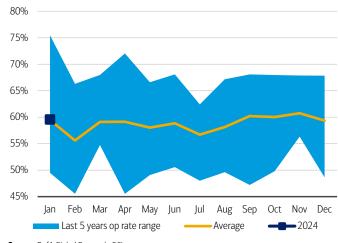


Source: BofA Global Research, SCI

BofA GLOBAL RESEARCH

Exhibit 3: Tissue – operating rates in China (%)

Jan 2024 tissue op. rate was close to the past five years average

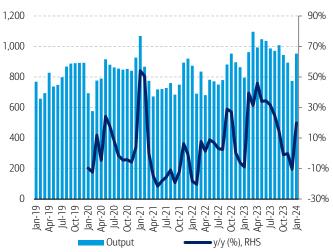


Source: BofA Global Research, SCI

BofA GLOBAL RESEARCH

Exhibit 4: Tissue - production volume in China (Kt)

Tissue output rose 23.2% m/m and 19.9% y/y...

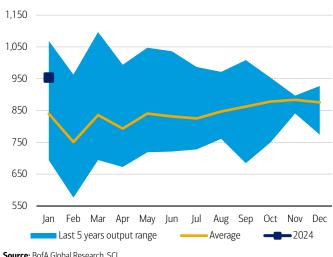


Source: BofA Global Research, SCI

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Exhibit 5: Tissue - production volume in China (Kt)

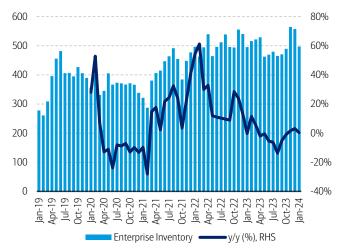
... close to the upper end of the past five years range



Source: BofA Global Research, SCI

Exhibit 6: Tissue - enterprise inventories in China (Kt)

Enterprise inventory reached 497Kt in Jan, down 10.8% m/m

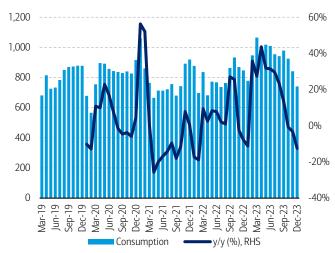


Source: BofA Global Research, SCI

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Exhibit 8: Tissue - total domestic consumption in China (Kt)

Domestic consumption volume was at 741Kt in December...

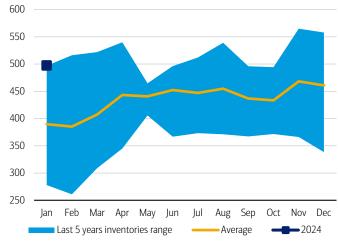


Source: BofA Global Research, SCI, China NBS

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Exhibit 7: Tissue – enterprise inventories in China (Kt)

Tissue inventories are close to the upper end of the past 5-years range

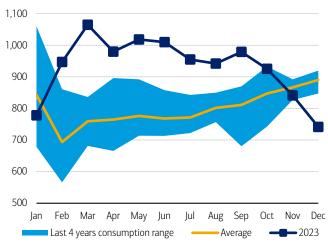


Source: BofA Global Research, SCI

BofA GLOBAL RESEARCH

Exhibit 9: Tissue - total domestic consumption in China (Kt)

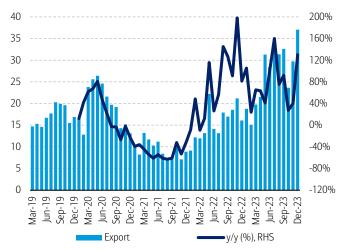
...below the lower end of the last five years average



Source: BofA Global Research, SCI, China NBS

Exhibit 10: Tissue – export volumes in China (Kt)

Export volume was at 37Kt in December

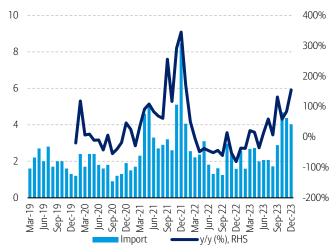


Source: BofA Global Research, SCI, China NBS

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Exhibit 12: Tissue – import volumes in China (Kt)

Tissue import volumes were at 4Kt in December...

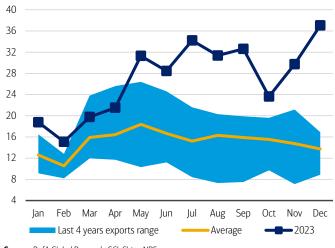


Source: BofA Global Research, SCI, China NBS

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Exhibit 11: Tissue - export volumes in China (Kt)

Tissue exports were above the past four years range in December

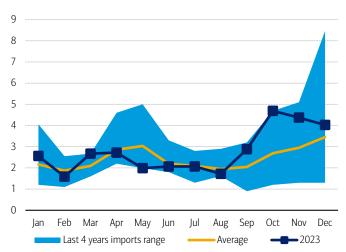


Source: BofA Global Research, SCI, China NBS

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Exhibit 13: Tissue – import volumes in China (Kt)

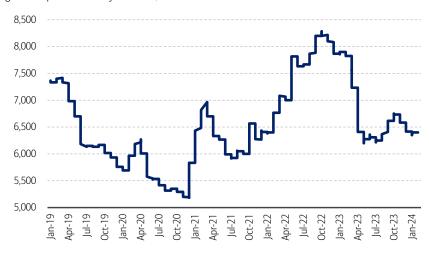
... above the past four years average



Source: BofA Global Research, SCI, China NBS

Exhibit 14: Tissue – average prices in China (RMB/t)

Average tissue prices currently at RMB 6,400/t



Source: BofA Global Research, SCI

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Coated paper

Exhibit 15: Summary of China coated paper statistics (Kt) and operating rates (%)

Output was stable m/m at 408Kt, while inventories dropped 3.3% m/m to 379Kt or 23 days of supply

	Jan-24	Dec-23	m/m (%)	m/m	Jan-23	y/y (%)	y/y	ytd
Capacity (Kt)	609	609	0.0%	0	609	0.0%	0	0.0%
Shandong	260	260	0.0%	0	260	0.0%	0	
Jiangsu	256	256	0.0%	0	256	0.0%	0	
Hainan	93	93	0.0%	0	93	0.0%	0	0.0%
Operating rate (%)	66.9%	66.9%	0.0%	0.0	61.8%	8.3%	5.1	8.3%
Output (Kt)	408	408	0.0%	0	376	8.3%	31	8.3%
Import (Kt)	n.a.	17	n.a.	n.a.	10	n.a.	n.a.	-100.0%
Export (Kt)	n.a.	141	n.a.	n.a.	127	n.a.	n.a.	-100.0%
Consumption (Kt)	n.a.	284	n.a.	n.a.	259	n.a.	n.a.	-100.0%
Inventory								
Volume (Kt)	379	392	-3.3%	-13	569	-33.4%	-190	-33.4%
Days	23	24	-3.5%	-1	34	-33.5%	-12	-33.5%

Source: BofA Global Research, SCI, China NBS

Exhibit 16: Coated paper - operating rate in China (%)

Operating were stable at 66.9% in January...

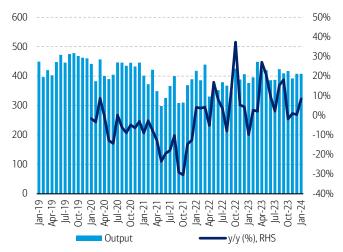


Source: BofA Global Research, SCI

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Exhibit 18: Coated paper - output volume in China (Kt)

Coated paper output was stable m/m and up 8.3% y/y...

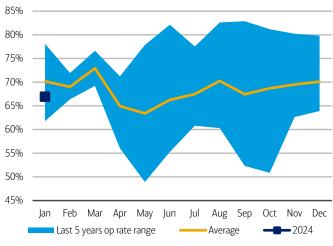


Source: BofA Global Research, SCI

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Exhibit 17: Coated paper - operating rate in China (%)

... now below its past five years average

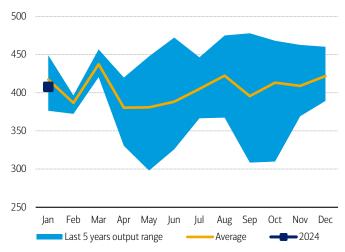


Source: BofA Global Research, SCI

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Exhibit 19: Coated paper - output volume in China (Kt)

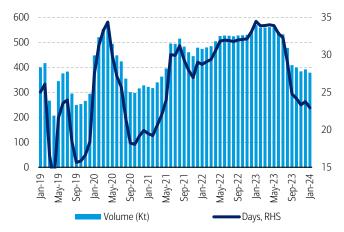
... were close to the its past five years average



Source: BofA Global Research, SCI

Exhibit 20: Coated paper - inventory in China

Coated paper inventory reached 379Kt in January...

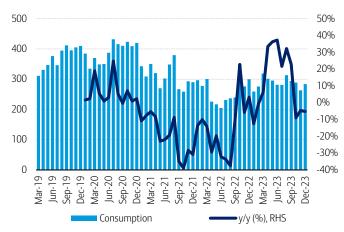


Source: BofA Global Research, SCI

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Exhibit 22: Coated paper - consumption in China (Kt)

Coated paper consumption volume was at 284Kt in December...

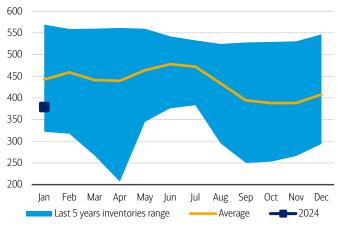


Source: BofA Global Research, SCI, China NBS

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Exhibit 21: Coated paper - inventory in China

... below its past five years average

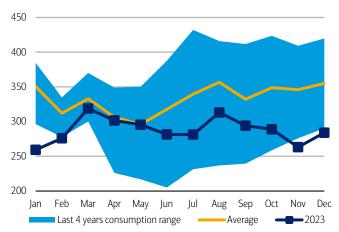


Source: BofA Global Research, SCI

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Exhibit 23: Coated paper - consumption in China (Kt)

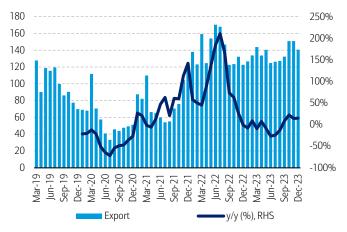
... below the bottom end of its last four years range



Source: BofA Global Research, SCI, China NBS

Exhibit 24: Coated paper - export volume in China (Kt)

Coated paper exports were at 141Kt in December, down 6.8% m/m...

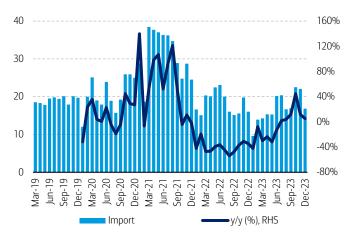


Source: BofA Global Research, SCI, China NBS

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Exhibit 26: Coated paper – import volume in China (Kt)

Coated paper imports were at 17Kt in December...

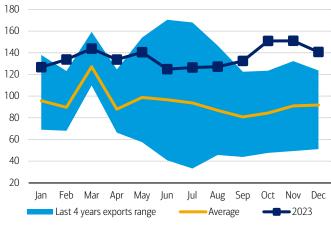


Source: BofA Global Research, SCI, China NBS

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Exhibit 25: Coated paper - export volume in China (Kt)

... and at the upper end of its last four years range

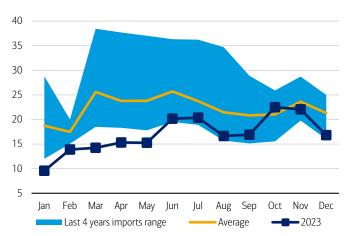


Source: BofA Global Research, SCI, China NBS

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Exhibit 27: Coated paper - import volume in China (Kt)

... and below the bottom of the past four years range

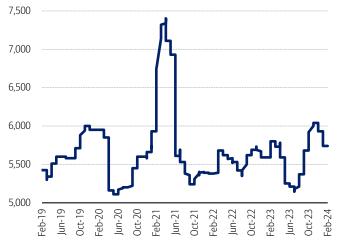


Source: BofA Global Research, SCI, China NBS



Exhibit 28: Coated paper - average price (RBM/t)

Average coated paper prices fell 3.2% m/m in early Feb to RMB 5,740/t



Source: BofA Global Research, SCI

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Exhibit 29: Coated paper - gross profit rate (%)

Coated paper gross profit rate fell m/m to 5.16% by early February

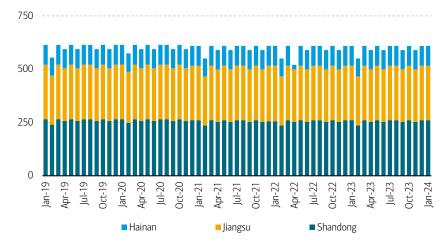


Source: BofA Global Research, SCI

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Exhibit 30: Coated paper - capacity in China (Kt)

Capacity was stable m/m at 609Kt/month, with most of it coming from Shandong and Jiangsu



Source: BofA Global Research, SCI

Uncoated woodfree paper

Exhibit 31: Summary of China uncoated woodfree paper statistics (Kt) and op. rates (%)

Output rose 0.3% m/m to 850Kt, while inventories dropped 1.3% m/m to 484Kt

	Jan-24	Dec-23	m/m (%)	m/m	Jan-23	y/y (%)	y/y	ytd
Operating rate (%)	66.8%	66.0%	1.3%	0.9	56.8%	17.6%	10.0	17.6%
Output (Kt)	850	848	0.3%	2	686	24.0%	164	24.0%
Import (Kt)	n.a.	17	n.a.	n.a.	7	n.a.	n.a.	n.a.
Export (Kt)	n.a.	82	n.a.	n.a.	87	n.a.	n.a.	n.a.
Consumption (Kt)	n.a.	782	n.a.	n.a.	606	n.a.	n.a.	n.a.
Enterprise inventory (Kt)	484	490	-1.3%	-6	643	-24.7%	-159	-24.7%

Source: BofA Global Research, SCI, China NBS

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Exhibit 32: UWF - operating rate in China (%)

Uncoated woodfree paper operating rates reached 67% in January...

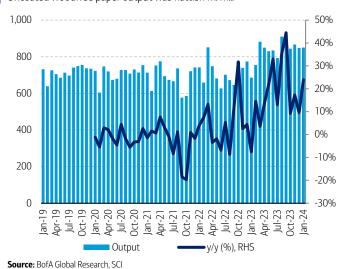


Source: BofA Global Research, SCI

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Exhibit 34: UWF - output volume in China (Kt)

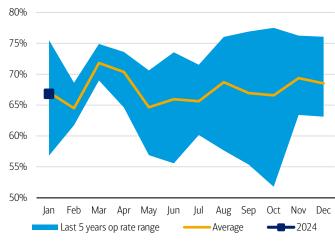
Uncoated woodfree paper output was flattish m/m...



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Exhibit 33: UWF - operating rate in China (%)

... close to its past five years average

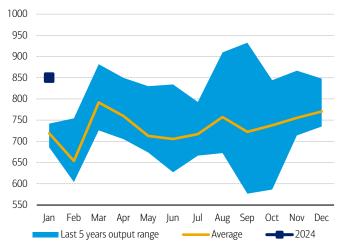


Source: BofA Global Research, SCI

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Exhibit 35: UWF - output volume in China (Kt)

... but remained well above its past five years range in January

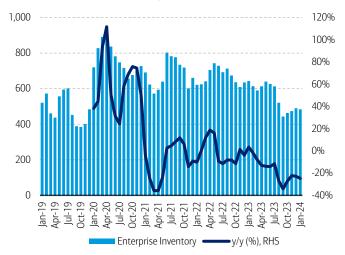


Source: BofA Global Research, SCI



Exhibit 36: UWF - inventory in China (Kt)

Uncoated woodfree paper inventory reached 484Kt in Jan...

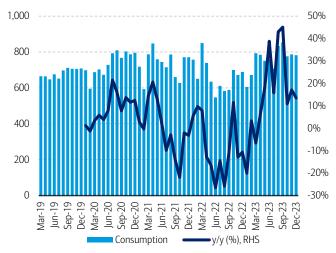


Source: BofA Global Research, SCI

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Exhibit 38: UWF - consumption in China (Kt)

Uncoated woodfree paper consumption was at 782Kt in December...

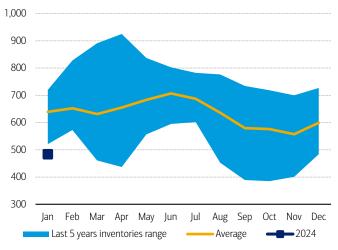


Source: BofA Global Research, SCI, China NBS

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Exhibit 37: UWF - inventory in China (Kt)

... and were below the bottom end of its past five years range

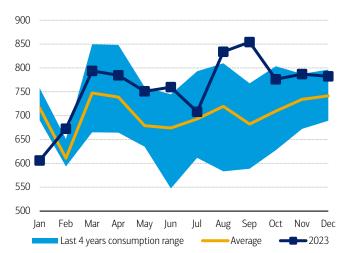


Source: BofA Global Research, SCI

BofA GLOBAL RESEARCH

Exhibit 39: UWF - consumption in China (Kt)

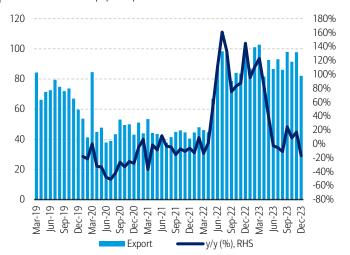
... stable m/m and at the upper end of its past four years range



Source: BofA Global Research, SCI, China NBS

Exhibit 40: UWF - export volume in China (Kt)

Uncoated woodfree paper exports were at 82Kt in December...

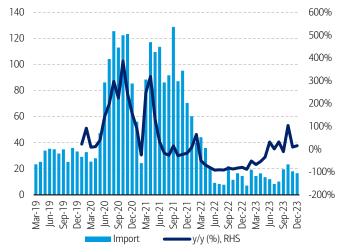


Source: BofA Global Research, SCI, China NBS

BofA GLOBAL RESEARCH

Exhibit 42: UWF - import volume in China (Kt)

Uncoated woodfree paper imports were at 17Kt in December...

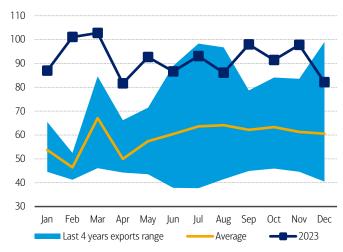


 $\textbf{Source:} \ \mathsf{BofA} \ \mathsf{Global} \ \mathsf{Research}, \mathsf{SCI}, \mathsf{China} \ \mathsf{NBS}$

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Exhibit 41: UWF - export volume in China (Kt)

... close to the upper end of its past four years range

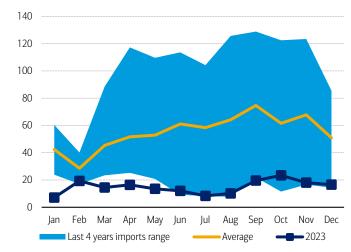


Source: BofA Global Research, SCI, China NBS

BofA GLOBAL RESEARCH

Exhibit 43: UWF - import volume in China (Kt)

... close to the bottom of its past four years range



Source: BofA Global Research, SCI, China NBS

Ivory board

Exhibit 44: Summary of China ivory board statistics (Kt) and operating rates (%)

Output increased 3.0% m/m to 1,007Kt, while inventories rose 1.4% m/m to 504Kt

	Jan-24	Dec-23	m/m (%)	m/m	Jan-23	y/y (%)	y/y	ytd
Operating rate (%)	68.2%	66.2%	3.0%	2.0	52.0%	31.3%	16.3	31.3%
Output (Kt)	1,007	977	3.0%	30	689	46.0%	317	46.0%
Import (Kt)	n.a.	44	n.a.	n.a.	48	n.a.	n.a.	-100.0%
Export (Kt)	n.a.	316	n.a.	n.a.	246	n.a.	n.a.	-100.0%
Consumption (Kt)	n.a.	895	n.a.	n.a.	540	n.a.	n.a.	-100.0%
Enterprise inventory (Kt)	504	497	1.4%	7	680	-25.9%	-176	-25.9%

Source: BofA Global Research, SCI

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Exhibit 45: Ivory board - operating rate in China (%)

Ivory board operating rates were up to 68.2% in January...

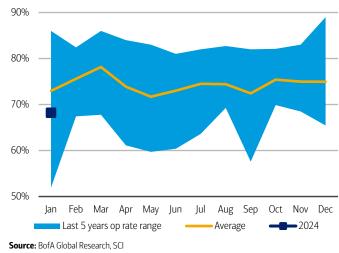


Source: BofA Global Research, SCI

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... now at the bottom end of its past four years range

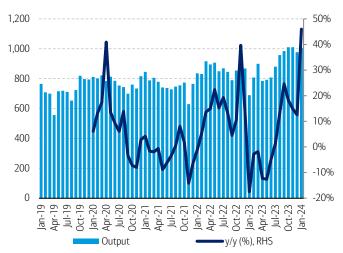
Exhibit 46: Ivory board - operating rate in China (%)



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Exhibit 47: Ivory board - output volume in China (Kt)

Ivory board output rose 3.0% m/m and 46% y/y to 1,007Kt...

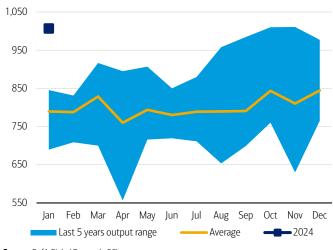


Source: BofA Global Research, SCI

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Exhibit 48: Ivory board - output volume in China (Kt)

... well above the upper end of its past five years range

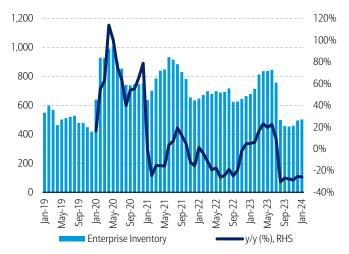


Source: BofA Global Research, SCI



Exhibit 49: Ivory board - enterprise inventory in China (Kt)

Ivory board inventory rose m/m to 504Kt in January...

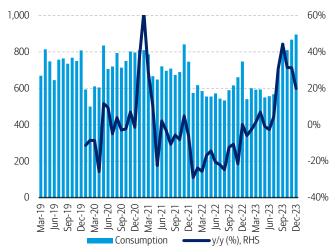


Source: BofA Global Research, SCI

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Exhibit 51: Ivory board - consumption in China (Kt)

lvory board consumption was at 895Kt in December...

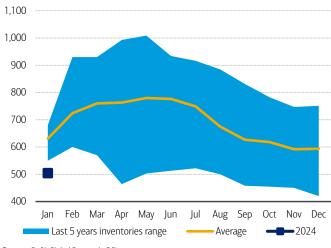


Source: BofA Global Research, SCI, China NBS

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Exhibit 50: Ivory board - enterprise inventory in China (Kt)

... but remained well below its past five years average

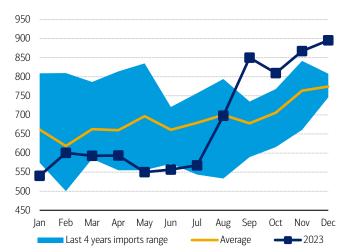


Source: BofA Global Research, SCI

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Exhibit 52: Ivory board - consumption in China (Kt)

... above its past four years range



Source: BofA Global Research, SCI, China NBS

Duplex board

Exhibit 53: Summary of China Duplex board statistics (Kt) and operating rates (%)

Output dropped 4.3% m/m to 572Kt, while inventories were stable m/m to 591Kt

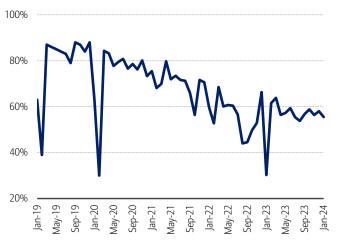
	Jan-24	Dec-23	m/m (%)	m/m	Jan-23	y/y (%)	y/y	ytd
Operating rate (%)	55.5%	58.0%	-4.3%	-2.5	30.3%	83.4%	25.2	83.4%
Output (Kt)	572	598	-4.3%	-26	309	84.9%	263	84.9%
Import (Kt)	n.a.	44	n.a.	n.a.	48	n.a.	n.a.	-100.0%
Export (Kt)	n.a.	316	n.a.	n.a.	246	n.a.	n.a.	-100.0%
Consumption (Kt)	n.a.	546	n.a.	n.a.	359	n.a.	n.a.	-100.0%
Enterprise inventory (Kt)	591	591	0.0%	0	689	-14.2%	-98	-14.2%

Source: BofA Global Research, SCI, China NBS

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Exhibit 54: Duplex - operating rate in China (%)

Duplex board operating rate reached 55% in January...

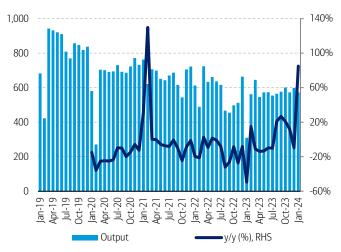


Source: BofA Global Research, SCI

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Exhibit 56: Duplex - output in China (Kt)

Duplex board output dropped 4.3% m/m but rose 85% y/y to 572Kt ...

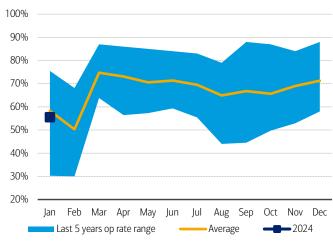


Source: BofA Global Research, SCI

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Exhibit 55: Duplex - operating rate in China (%)

... close to the past five years average

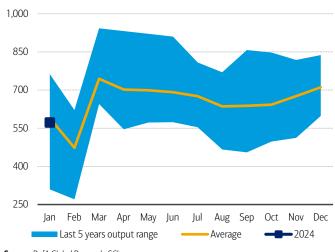


Source: BofA Global Research, SCI

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Exhibit 57: Duplex - output in China (Kt)

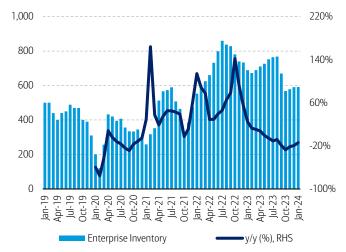
... in January, close to its past five years average



Source: BofA Global Research, SCI

Exhibit 58: Duplex - enterprise inventory in China (Kt)

Duplex board inventory reached 591Kt in January...

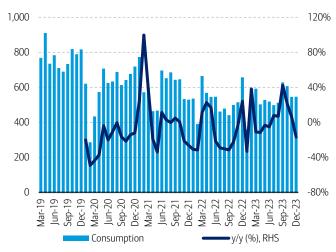


Source: BofA Global Research, SCI

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Exhibit 60: Duplex - consumption in China (Kt)

Duplex board consumption was at 546Kt in December, down 16.8% y/y...

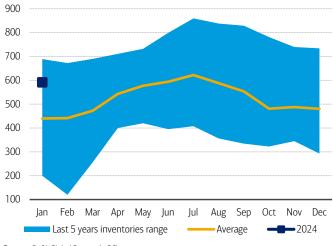


Source: BofA Global Research, SCI, China NBS

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Exhibit 59: Duplex - enterprise inventory in China (Kt)

... above its past five years average

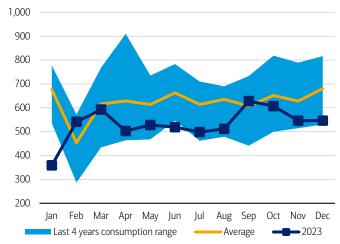


Source: BofA Global Research, SCI

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Exhibit 61: Duplex - consumption in China (Kt)

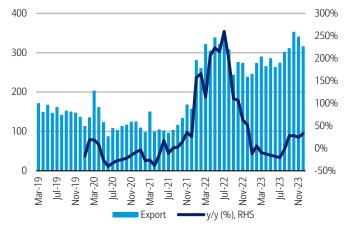
... and close to the bottom end of its past four years range



Source: BofA Global Research, SCI, China NBS

Exhibit 62: Duplex & Ivory Board - export volume in China (Kt)

Duplex & ivory board combined exports were at 316Kt, up 32.5% y/y...

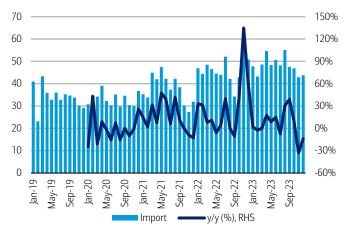


Source: BofA Global Research, SCI, China NBS

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Exhibit 64: Duplex & Ivory Board - import volume in China (Kt)

Duplex & ivory board combined imports were at 44Kt, down 14% y/y...

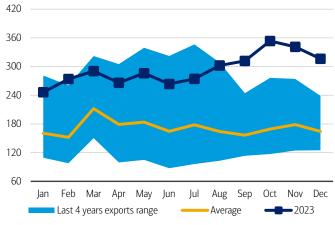


Source: BofA Global Research, SCI, China NBS

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Exhibit 63: Duplex & Ivory Board - export volume in China (Kt)

... and above the upper end of the past four years range in December

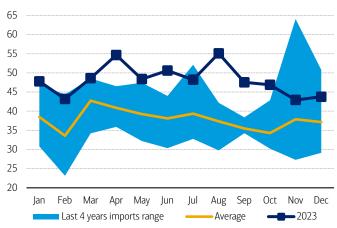


Source: BofA Global Research, SCI, China NBS

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Exhibit 65: Duplex & Ivory Board - import volume in China (Kt)

... and above its past four years average in December



Source: BofA Global Research, SCI, China NBS



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