

China Paper Industry Thermometer

Dec data: overall weaker m/m data points to seasonal slowdown

Industry Overview

December data points to seasonal slowdown

December was another weaker month sequentially, indicating the paper and board market in China may have already peaked. On a consolidated basis output was up 0.8% y/y, but down 3.5% m/m, as output dropped m/m for uncoated paper, ivory board and tissue but rose for coated woodfree and duplex. Meanwhile, aggregate inventories rose 2.7% m/m, led by inventory increases in all grades, except tissue. Tissue and coated paper prices dropped in December by 2.5% and 1.8% m/m respectively and uncoated woodfree paper and ivory board saw inventory increases m/m despite the output drop. On the positive side, paper export y/y growth remained at double digit in November and has been a key factor in the Chinese paper & board market pickup. We expect hardwood prices to remain capped in the near term around \$650-660/t. While we do see signs that the pulp market has peaked, we believe any potential price correction ahead should be shallow and short-lived given prices remain reasonably close to cost support at \$550/t.

Tissue: output down m/m and prices still pressured

Tissue operating rates in China dropped 770bp m/m in December to 48.6%, or down 520bp y/y. Total tissue output fell 13.4% m/m and 10.4% y/y to 774Kt in Dec, while enterprise tissue inventories dropped 1.3% m/m but was up 3.2% y/y to 558Kt. Tissue prices dropped 2.5% through December to RMB 6,400/t, down 18.4% throughout 2023.

Coated paper: output up m/m yet inventories climb

Coated paper operating rates rose 150bp m/m in Dec to 66.9%, up 20bp y/y. Coated paper output was up 4% m/m and 0.3% y/y to 408Kt in Dec. Inventories rose 2.1% m/m but was down 28.3% y/y to 392Kt, now at 24 days of supply, up one day m/m. Meantime, coated paper prices were down 1.8% m/m in December to RMB 5,930/t, now up 6.1% through 2023.

UWF paper: output down and inventories up m/m

Uncoated woodfree paper operating rates dropped 4.0ppt m/m in Dec to 66%, down 10bp y/y. Meantime, total uncoated paper production fell 2.2% m/m but was up 9.6% y/y to 848Kt in Dec, while inventories rose 3.5% m/m to 490Kt (down 22.8% y/y).

Ivory board: output down, inventories up m/m

Ivory board operating rates were down 460bp m/m in December to 66.2%, above Dec-22's 65.4%. Total ivory board output dropped 3.3% m/m but was up 12.5% y/y to 977Kt in December, while enterprise inventories rose 7.9% m/m to 497Kt (down 25.3% y/y).

Duplex board: output up 4.5% m/m

Duplex board operating rates were up 160bp m/m but down 830bp y/y in December to 58%. Total duplex board output rose 4.5% m/m but dropped 9.8% y/y to 598Kt in Dec, while enterprise inventory rose 2.1% m/m to 591Kt (down 19.5% 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 16 to 17.

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Timestamp: 03 January 2024 05:52PM EST

Tissue

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

Output dropped 13.4% m/m to 774Kt, while inventories fell 1.3% m/m to 558Kt

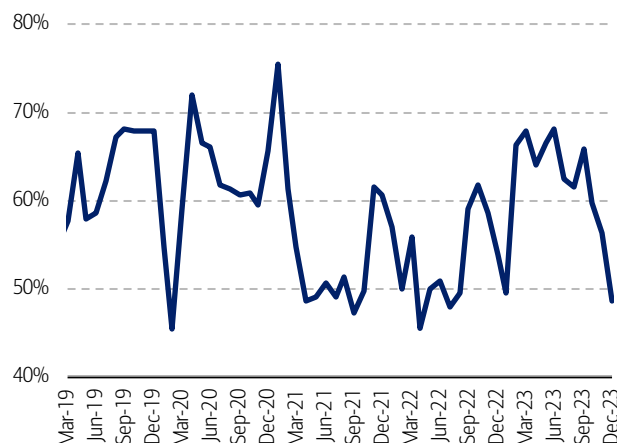
	Dec-23	Nov-23	m/m (%)	m/m	Dec-22	y/y (%)	y/y	ytd
Operating rate (%)	48.6%	56.3%	-13.7%	-7.7	53.8%	-9.7%	-5.2	15.1%
Output (Kt)	774	894	-13.4%	-120	864	-10.4%	-90	17.9%
Import (Kt)	n.a.	4	n.a.	n.a.	2	n.a.	n.a.	n.a.
Export (Kt)	n.a.	30	n.a.	n.a.	16	n.a.	n.a.	n.a.
Consumption (Kt)	n.a.	841	n.a.	n.a.	847	n.a.	n.a.	n.a.
Enterprise inventory (Kt)	558	565	-1.3%	-7	540	3.2%	17	-1.1%

Source: BofA Global Research, SCI, China NBS

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

Tissue operating rates dropped to 48.6% in December

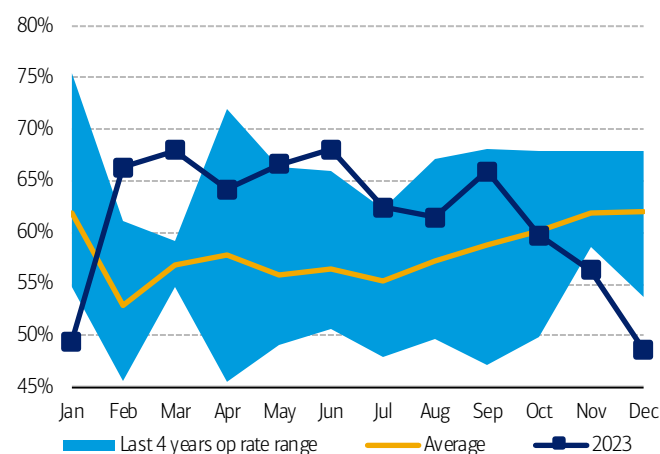


Source: BofA Global Research, SCI

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

Dec 2023 tissue op. rate was below the past four years average

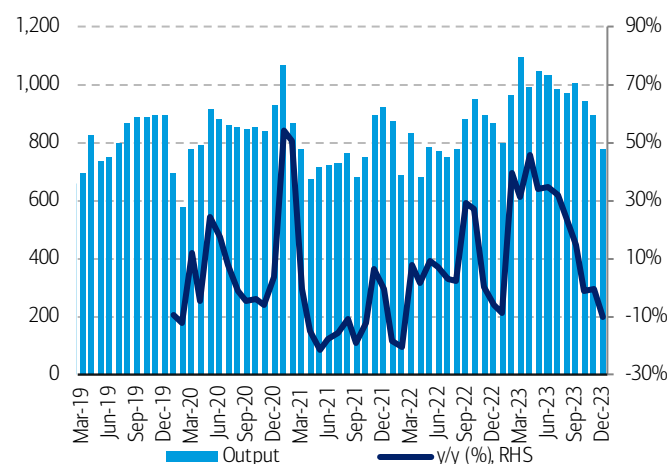


Source: BofA Global Research, SCI

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

Tissue output dropped 13.7% m/m and 9.7% y/y...

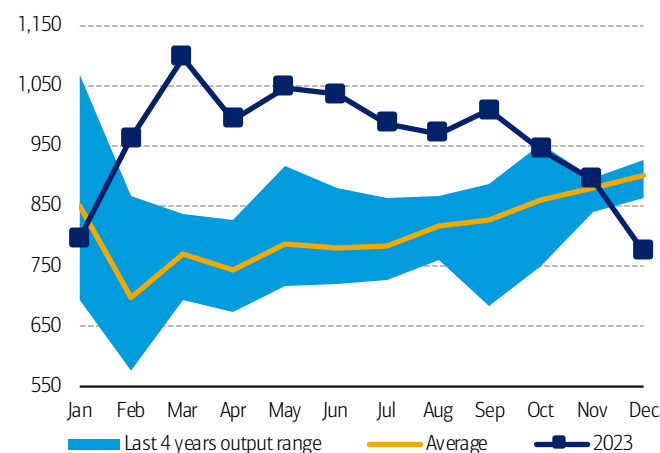


Source: BofA Global Research, SCI

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

... now below the past four years range for the first time this year

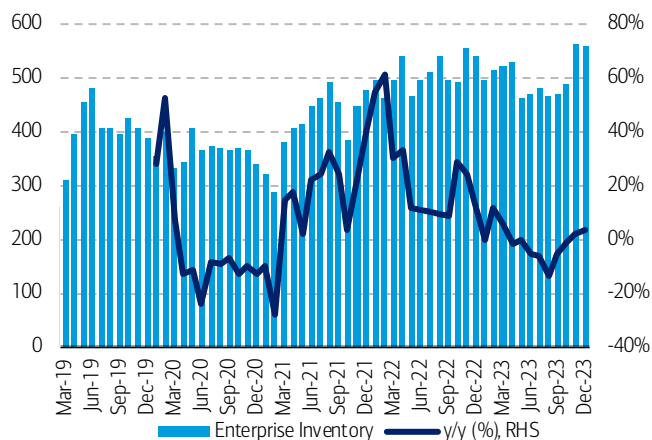


Source: BofA Global Research, SCI

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

Enterprise inventory reached 558Kt in Dec, down 1.3% m/m

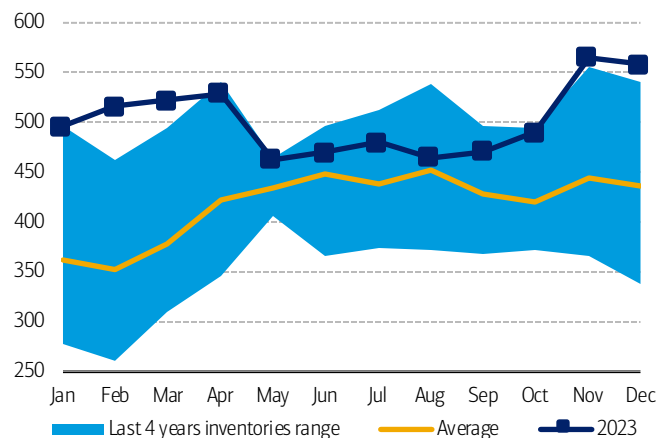


Source: BofA Global Research, SCI

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

Tissue inventories are slightly above the upper end of the past 4-years range

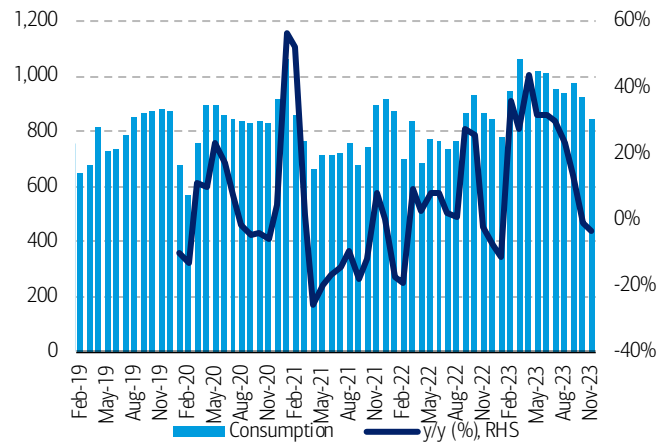


Source: BofA Global Research, SCI

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

Domestic consumption volume was at 841Kt in November...

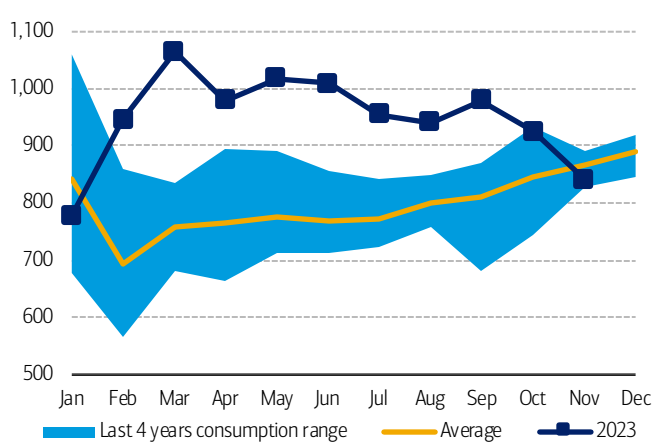


Source: BofA Global Research, SCI, China NBS

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

...slightly below its last four years average

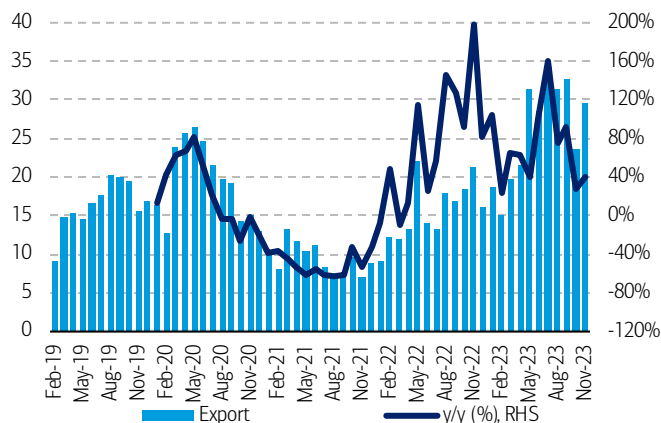


Source: BofA Global Research, SCI, China NBS

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

Export volume was at 30Kt in November

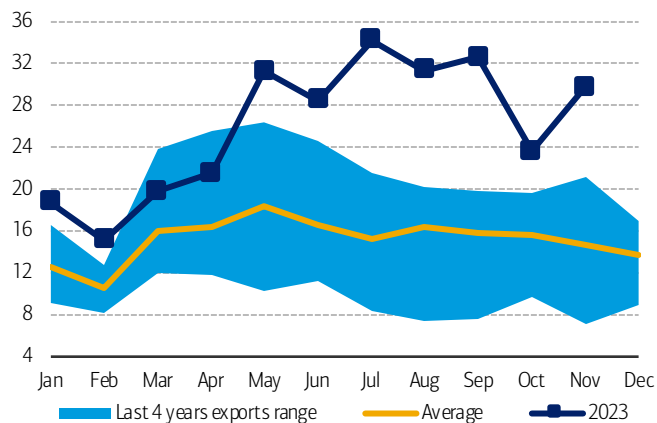


Source: BofA Global Research, SCI, China NBS

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

Tissue exports were above the past four years range in November

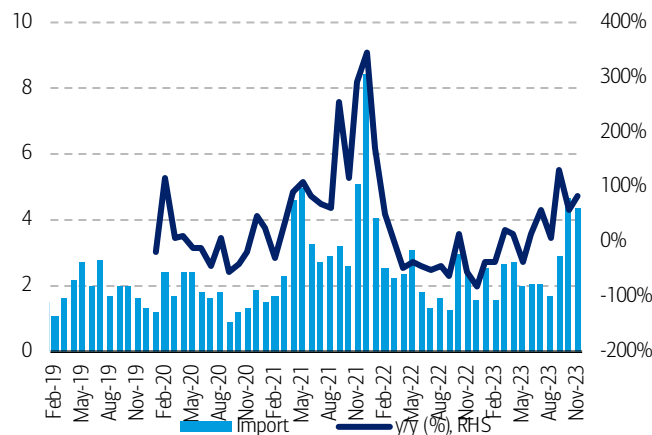


Source: BofA Global Research, SCI, China NBS

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

Tissue import volumes were at 4.4Kt in November...

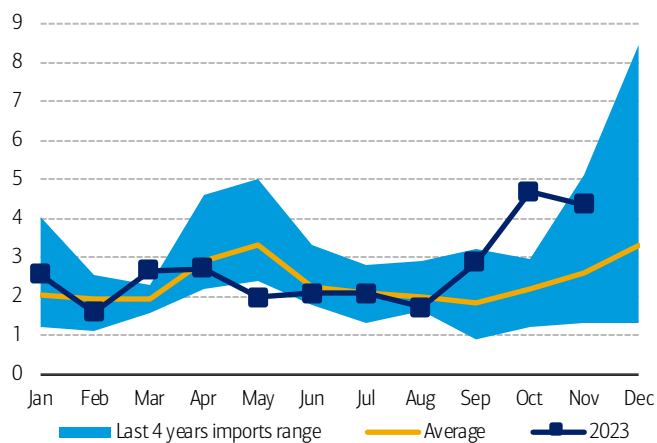


Source: BofA Global Research, SCI, China NBS

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

... at the upper end of its past four years range

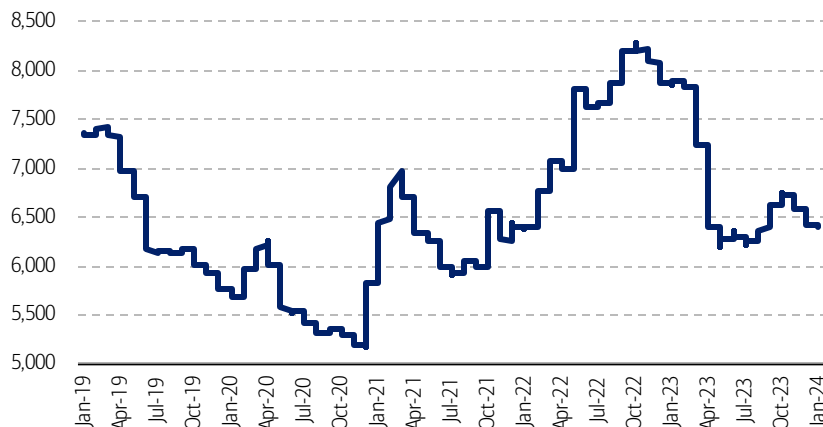


Source: BofA Global Research, SCI, China NBS

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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 rose 4.0% m/m to 408Kt, while inventories rose 2.1% m/m to 392Kt or 24 days of supply

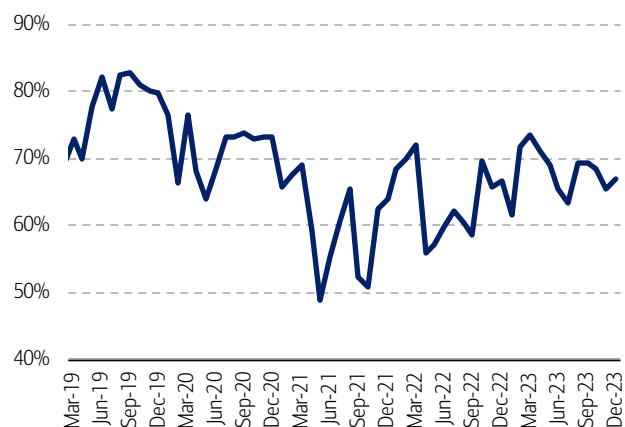
	Dec-23	Nov-23	m/m (%)	m/m	Dec-22	y/y (%)	y/y	ytd
Capacity (Kt)	609	590	3.3%	20	609	0.0%	0	1.0%
Shandong	260	252	3.3%	8	260	0.0%	0	0.2%
Jiangsu	256	248	3.3%	8	256	0.0%	0	-0.2%
Hainan	93	90	3.3%	3	93	0.0%	0	6.7%
Operating rate (%)	66.9%	65.4%	2.4%	1.5	66.7%	0.3%	0.2	6.4%
Output (Kt)	408	392	4.0%	16	406	0.3%	1	6.5%
Import (Kt)	n.a.	22	n.a.	n.a.	16	n.a.	n.a.	-15.1%
Export (Kt)	n.a.	151	n.a.	n.a.	123	n.a.	n.a.	-11.5%
Consumption (Kt)	n.a.	263	n.a.	n.a.	300	n.a.	n.a.	1.6%
Inventory								
Volume (Kt)	392	384	2.1%	8	547	-28.3%	-155	-3.8%
Days	24	23	1.8%	0	33	-28.3%	-9	-3.8%

Source: BofA Global Research, SCI, China NBS

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

Operating rates increased to 66.9% in December...

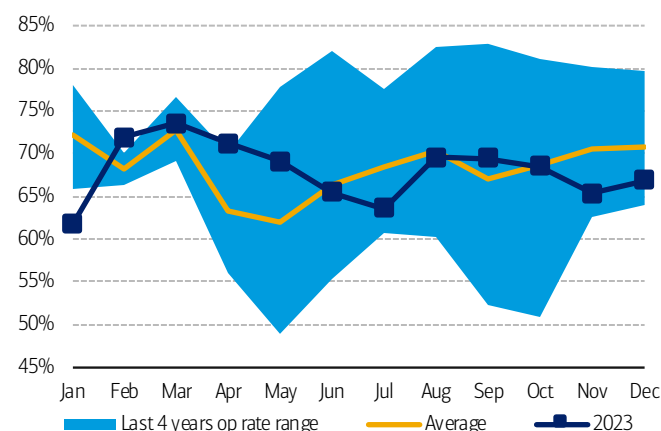


Source: BofA Global Research, SCI

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

... now below its past four years average

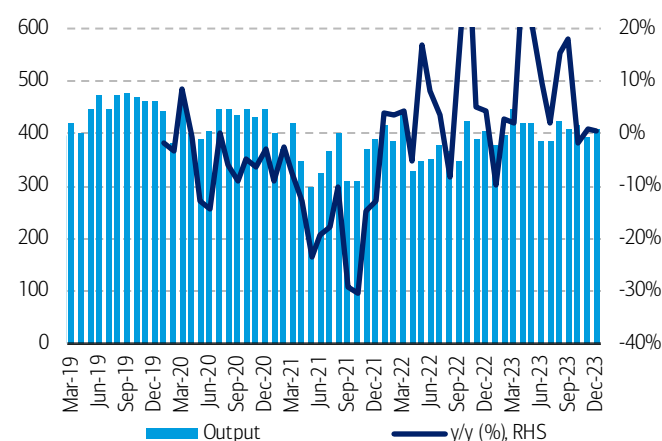


Source: BofA Global Research, SCI

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

Coated paper output rose 4.0% m/m and 0.3% y/y...

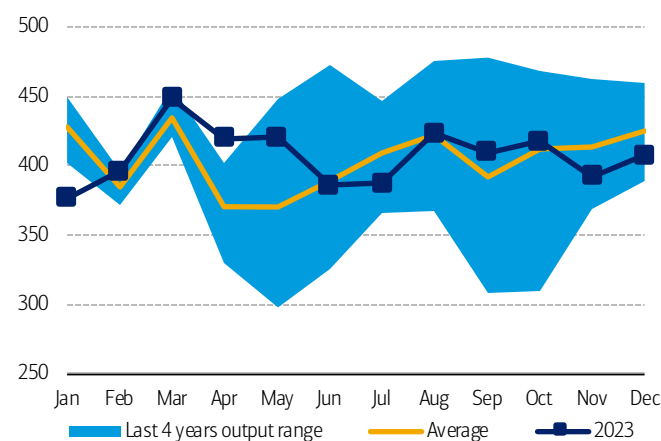


Source: BofA Global Research, SCI

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

... but remained below its past four years average

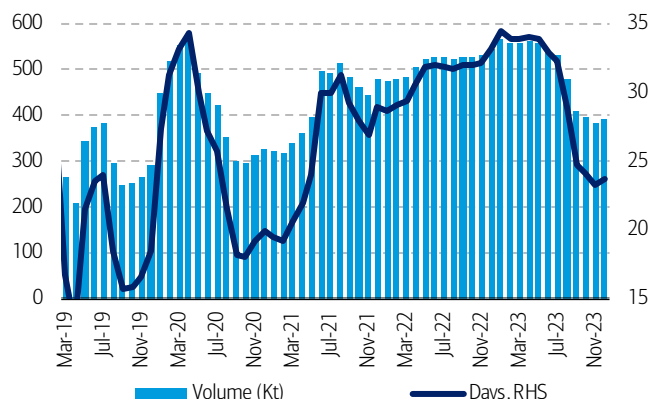


Source: BofA Global Research, SCI

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Exhibit 20: Coated paper - inventory in China

Coated paper inventory reached 392Kt in December...

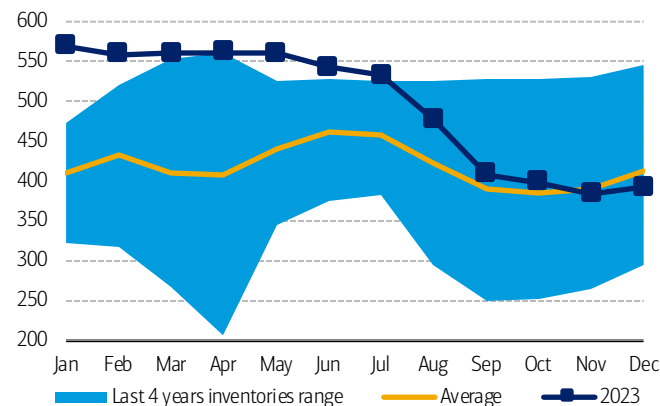


Source: BofA Global Research, SCI

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Exhibit 21: Coated paper - inventory in China

Now slightly below its past four years average

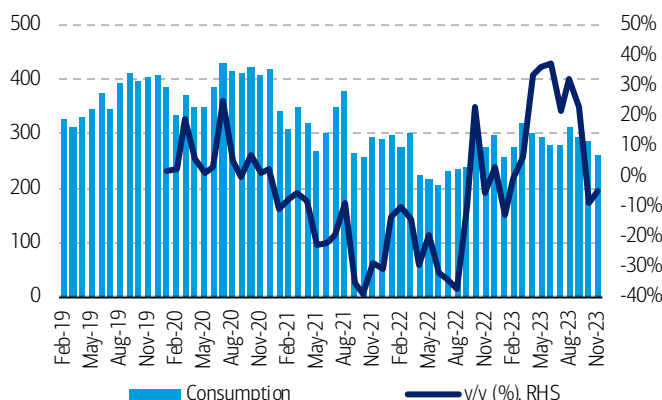


Source: BofA Global Research, SCI

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

Coated paper consumption volume was at 263Kt in November...

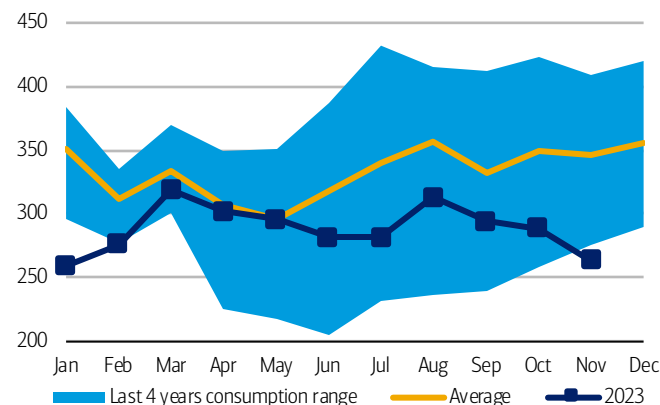


Source: BofA Global Research, SCI, China NBS

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

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

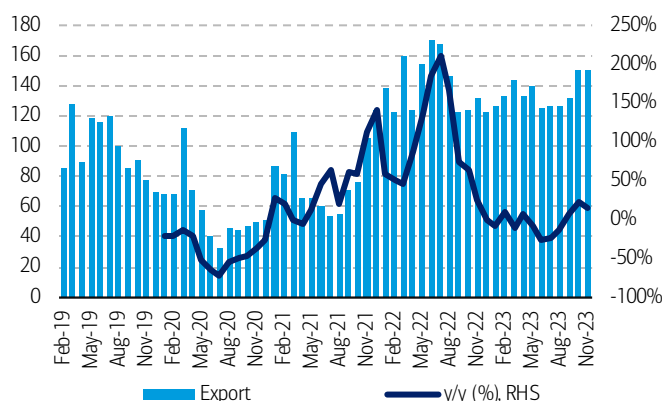


Source: BofA Global Research, SCI, China NBS

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

Coated paper exports were at 151Kt in November, flattish m/m...

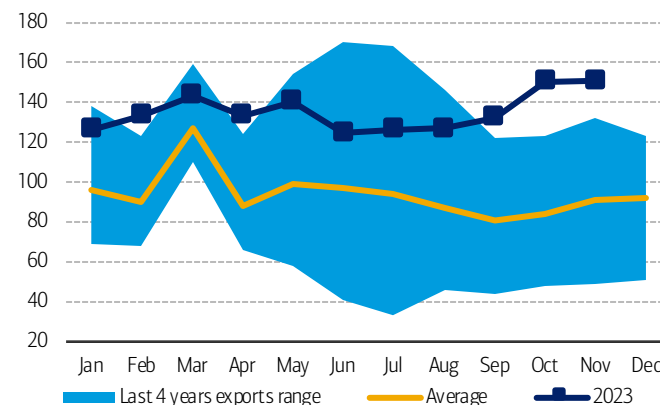


Source: BofA Global Research, SCI, China NBS

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

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

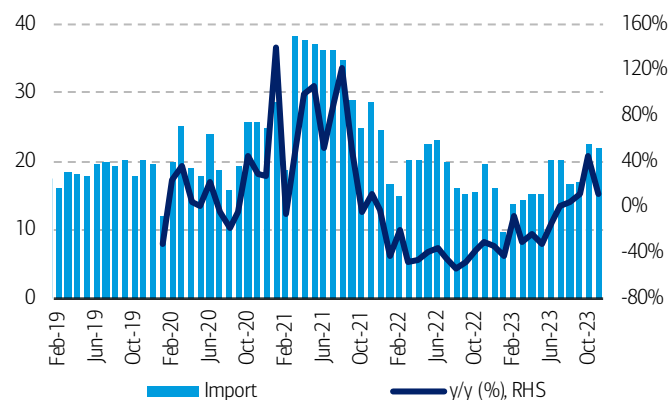


Source: BofA Global Research, SCI, China NBS

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

Coated paper imports were at 22Kt in November, stable m/m...

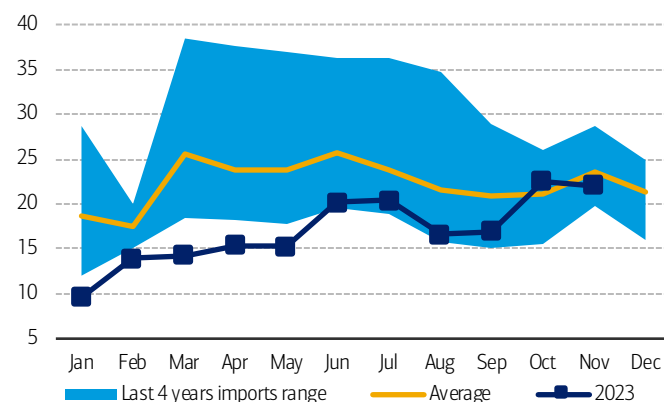


Source: BofA Global Research, SCI, China NBS

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

... and close to its last four years average

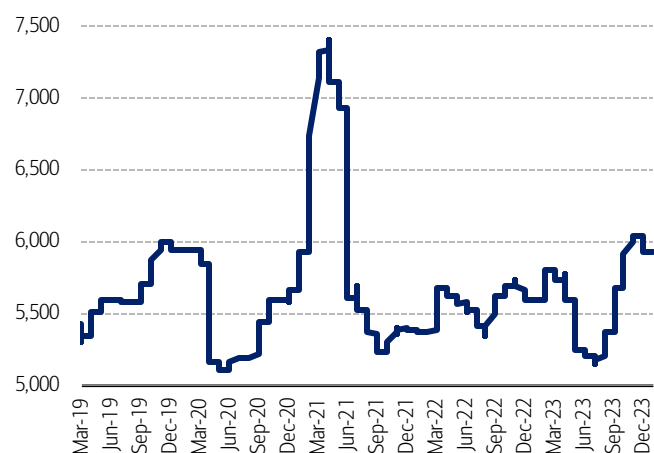


Source: BofA Global Research, SCI, China NBS

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Exhibit 28: Coated paper – average price (RMB/t)

Average coated paper prices fell 1.8% m/m in early Jan to RMB 5,930/t

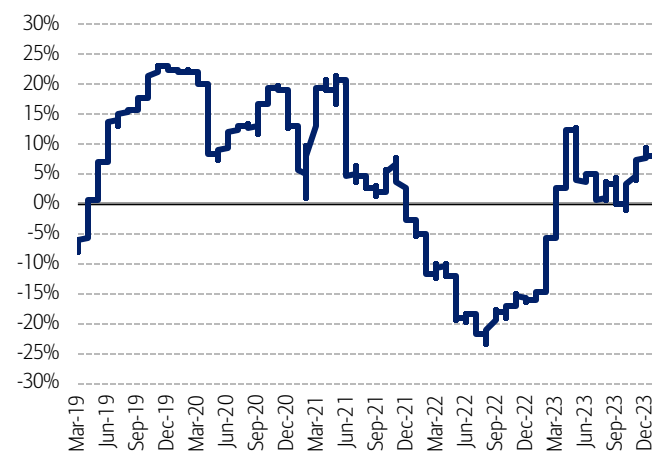


Source: BofA Global Research, SCI

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

Coated paper gross profit rate fell slightly m/m to 7.66% by early January

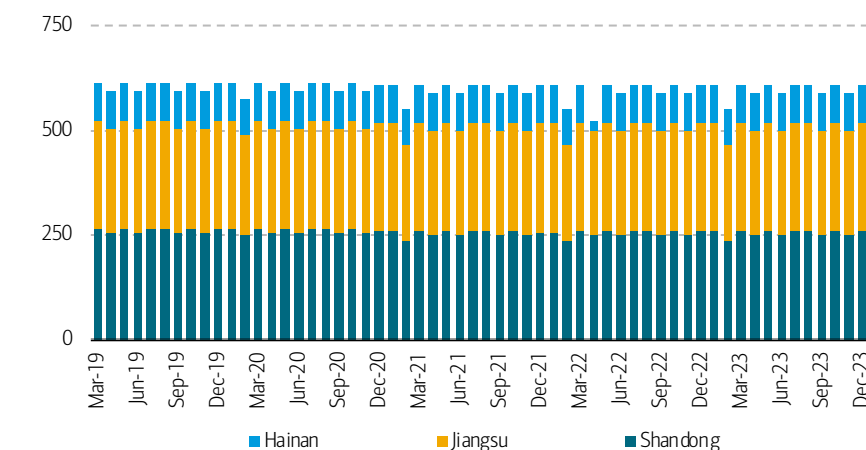


Source: BofA Global Research, SCI

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

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



Source: BofA Global Research, SCI

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Uncoated woodfree paper

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

Output fell 2.2% m/m to 848Kt, while inventories rose 3.5% m/m to 490Kt

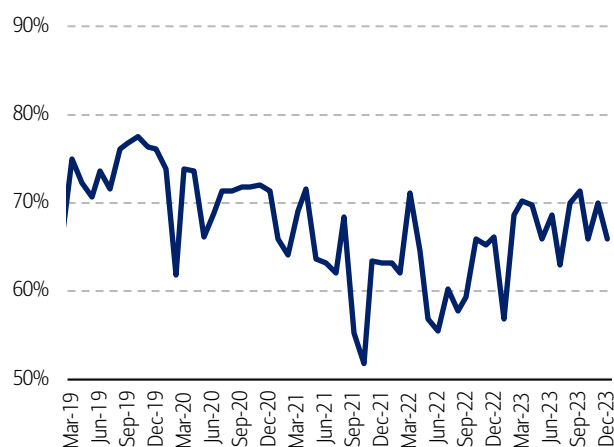
	Dec-23	Nov-23	m/m (%)	m/m	Dec-22	y/y (%)	y/y	ytd
Operating rate (%)	66.0%	70.0%	-5.7%	-4.0	66.1%	-0.2%	-0.1	7.8%
Output (Kt)	848	867	-2.2%	-19	774	9.6%	74	16.5%
Import (Kt)	n.a.	18	n.a.	n.a.	14	n.a.	n.a.	n.a.
Export (Kt)	n.a.	98	n.a.	n.a.	99	n.a.	n.a.	n.a.
Consumption (Kt)	n.a.	787	n.a.	n.a.	689	n.a.	n.a.	n.a.
Enterprise inventory (Kt)	490	474	3.5%	16	635	-22.8%	-145	-16.1%

Source: BofA Global Research, SCI, China NBS

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

Uncoated woodfree paper operating rates reached 76% in December...

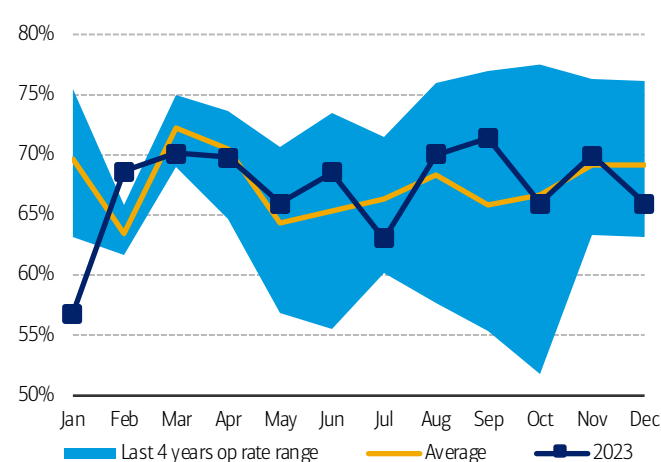


Source: BofA Global Research, SCI

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

... now below its past four years average

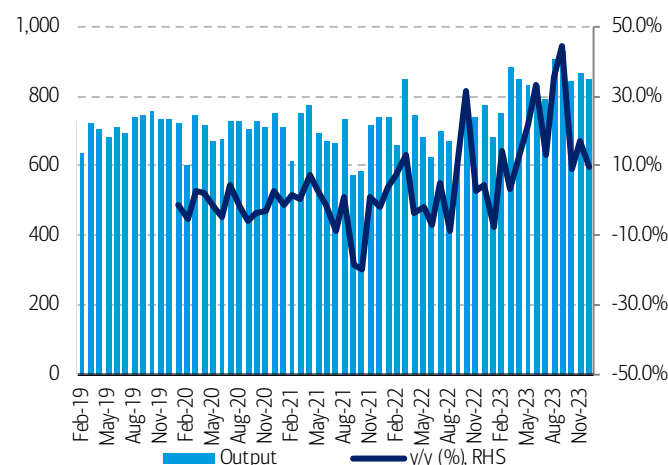


Source: BofA Global Research, SCI

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

Uncoated woodfree paper output dropped 2.2% m/m...

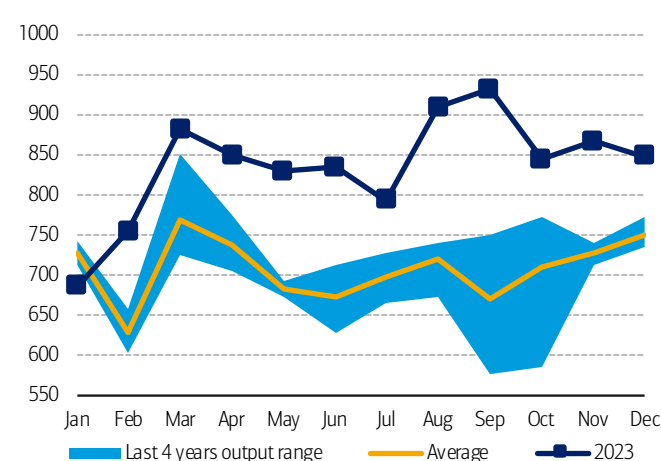


Source BofA Global Research, SCI

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

... but remained well above its past four years range in December

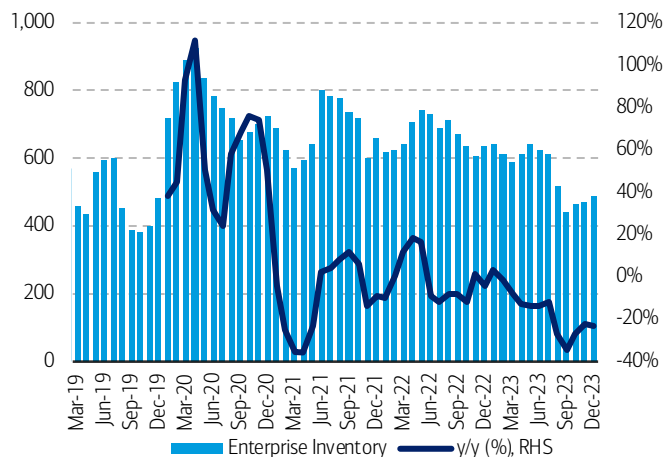


Source: BofA Global Research, SCI

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Exhibit 36: UWF - inventory in China (Kt)

Uncoated woodfree paper inventory reached 490Kt in Dec...

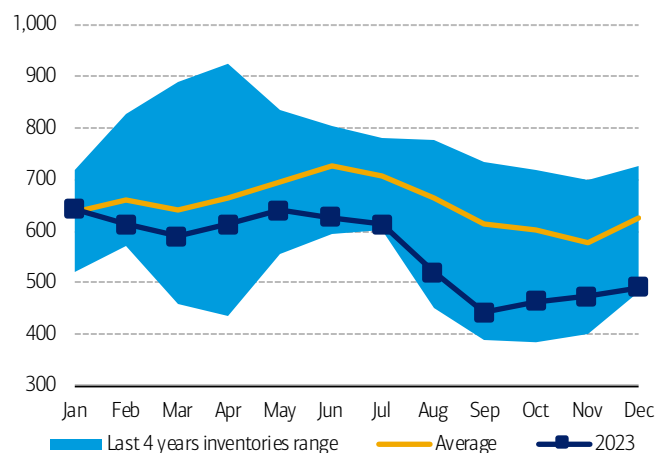


Source: BofA Global Research, SCI

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Exhibit 37: UWF - inventory in China (Kt)

... and remained at the bottom end of its past four years range

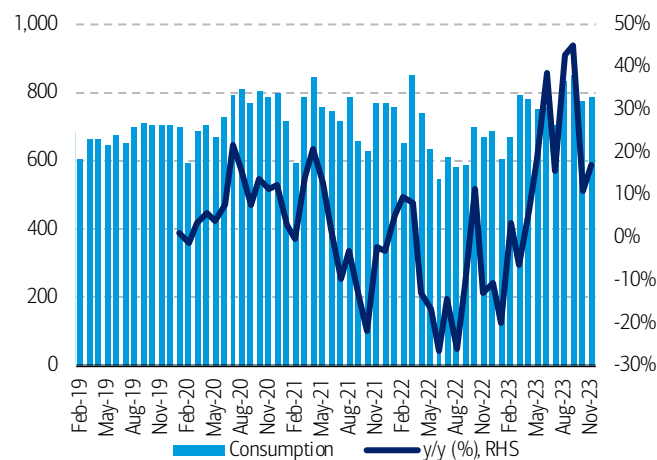


Source: BofA Global Research, SCI

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Exhibit 38: UWF - consumption in China (Kt)

Uncoated woodfree paper consumption was at 787Kt in November...

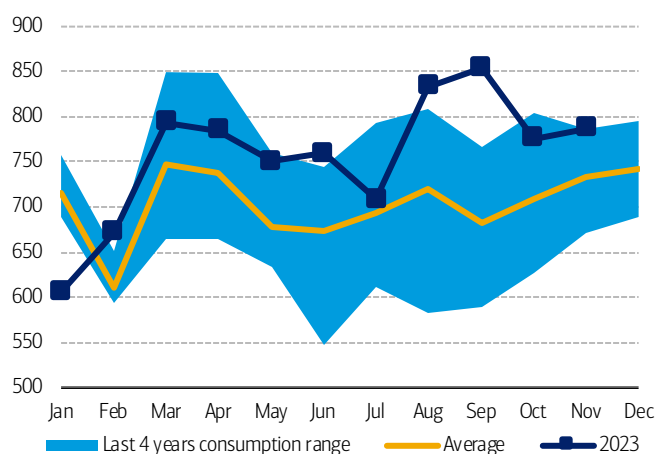


Source: BofA Global Research, SCI, China NBS

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Exhibit 39: UWF - consumption in China (Kt)

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

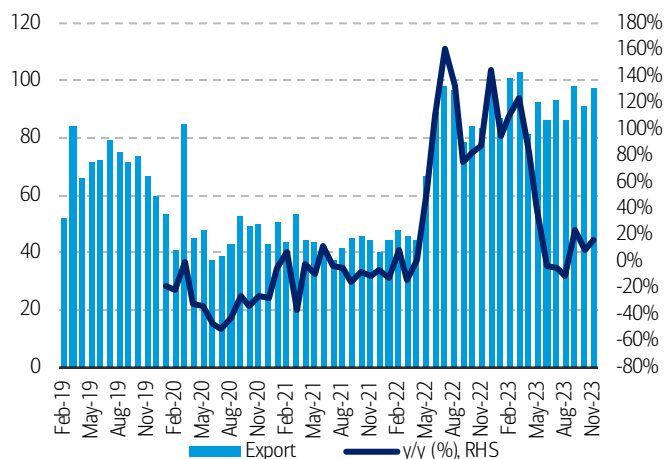


Source: BofA Global Research, SCI, China NBS

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

Uncoated woodfree paper exports were at 98Kt in November...

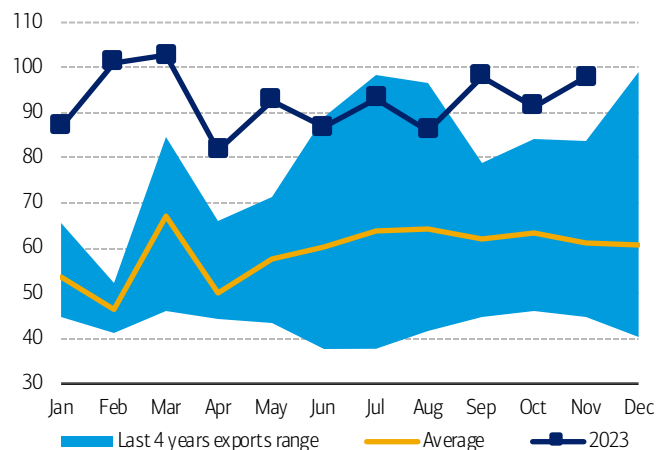


Source: BofA Global Research, SCI, China NBS

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

... above the upper end of its past four years range

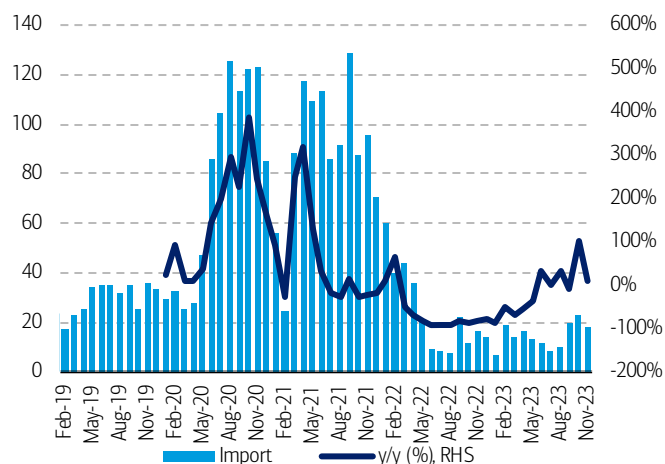


Source: BofA Global Research, SCI, China NBS

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

Uncoated woodfree paper imports were at 18Kt in November...

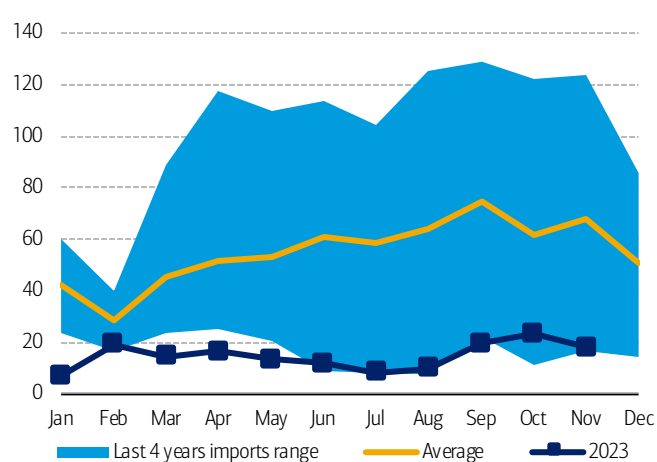


Source: BofA Global Research, SCI, China NBS

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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

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Ivory board

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

Output fell 3.3% m/m to 977Kt, while inventories rose 7.9% m/m to 497Kt

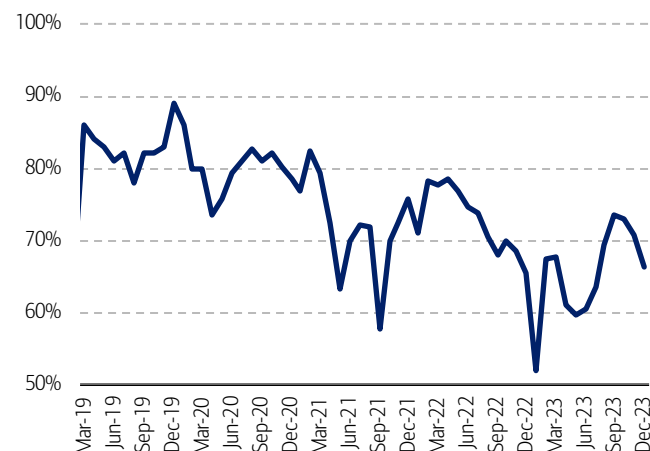
	Dec-23	Nov-23	m/m (%)	m/m	Dec-22	y/y (%)	y/y	ytd
Operating rate (%)	66.2%	70.8%	-6.5%	-4.6	65.4%	1.2%	0.8	-10.1%
Output (Kt)	977	1,011	-3.3%	-34	868	12.5%	109	2.5%
Import (Kt)	n.a.	43	n.a.	n.a.	51	n.a.	n.a.	-4.8%
Export (Kt)	n.a.	341	n.a.	n.a.	239	n.a.	n.a.	-8.8%
Consumption (Kt)	n.a.	867	n.a.	n.a.	747	n.a.	n.a.	1.1%
Enterprise inventory (Kt)	497	460	7.9%	37	665	-25.3%	-168	-2.6%

Source: BofA Global Research, SCI

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

Ivory board operating rates were down to 66.2% in December...

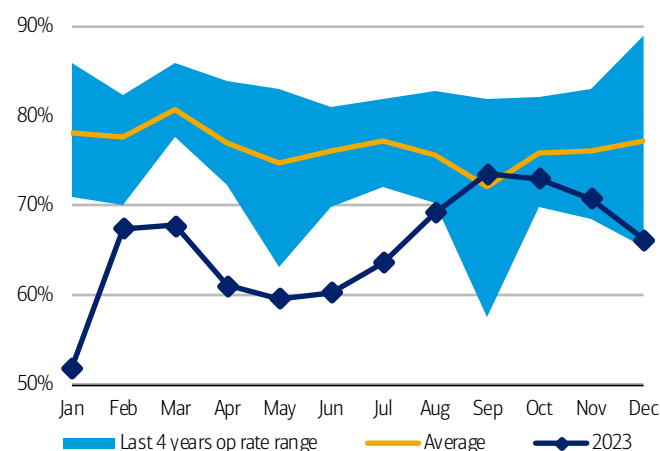


Source: BofA Global Research, SCI

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

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

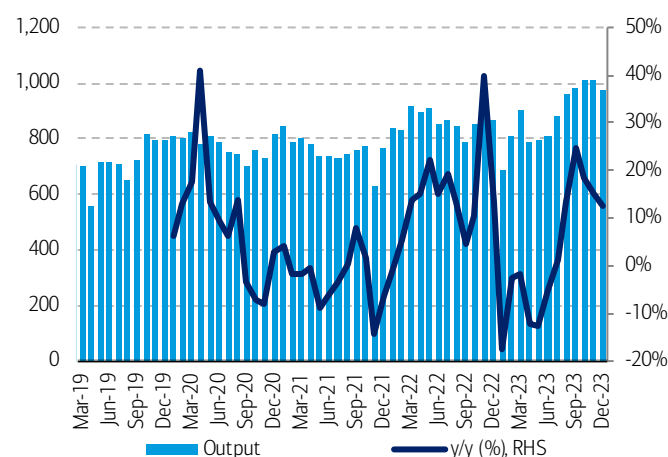


Source: BofA Global Research, SCI

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

Ivory board output dropped 3.3% m/m but rose 12.5% y/y to 977Kt...

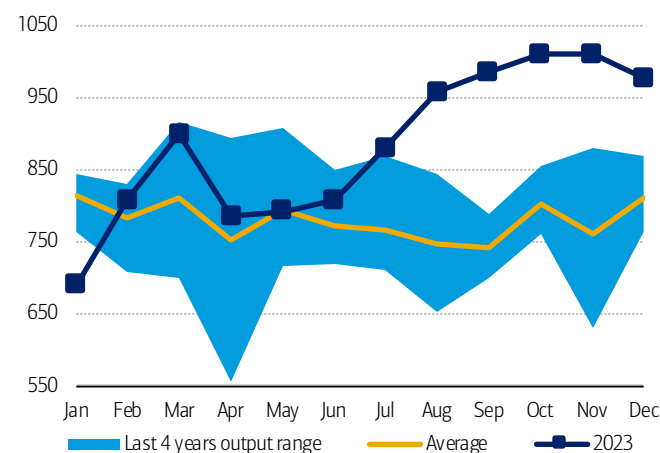


Source: BofA Global Research, SCI

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

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

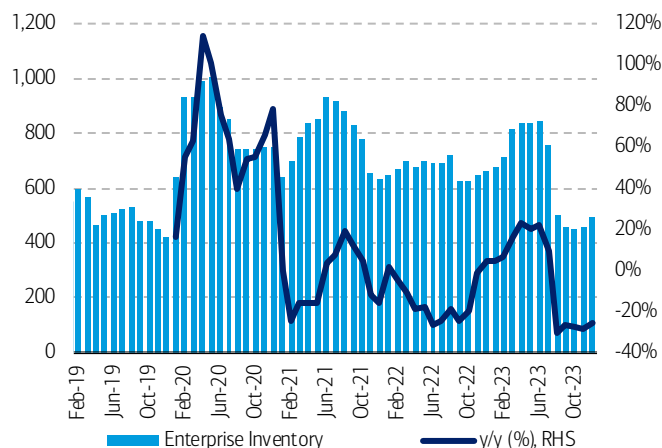


Source: BofA Global Research, SCI

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

Ivory board inventory rose m/m to 497Kt in December...

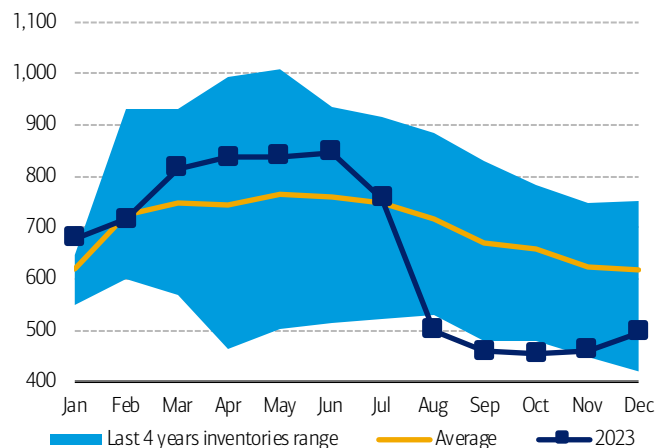


Source: BofA Global Research, SCI

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

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

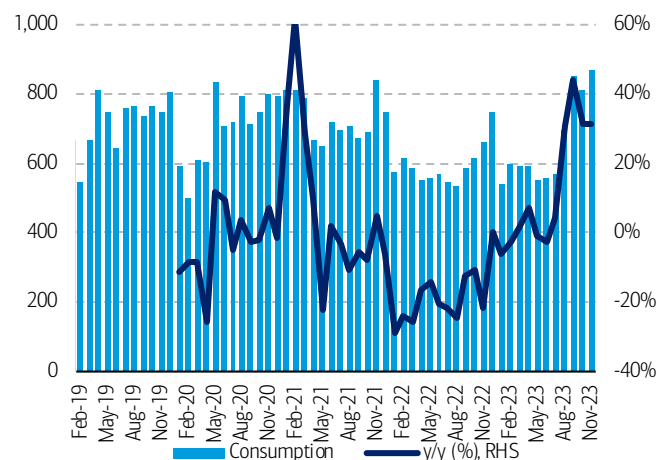


Source: BofA Global Research, SCI

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

Ivory board consumption was at 86Kt in November...

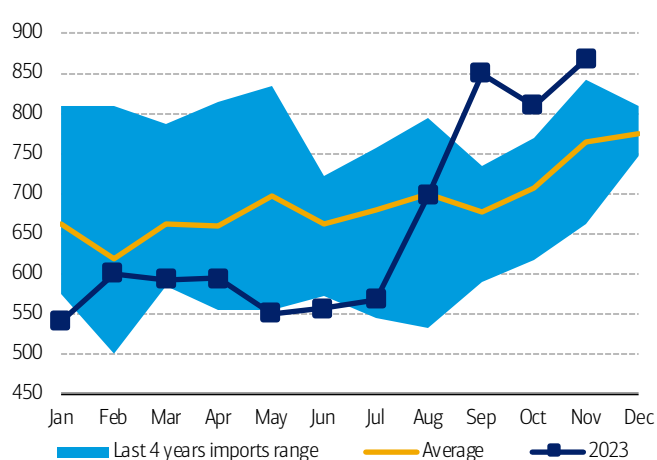


Source: BofA Global Research, SCI, China NBS

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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

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Duplex board

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

Output rose 4.5% m/m to 598Kt, while inventories rose 2.1% m/m to 591Kt

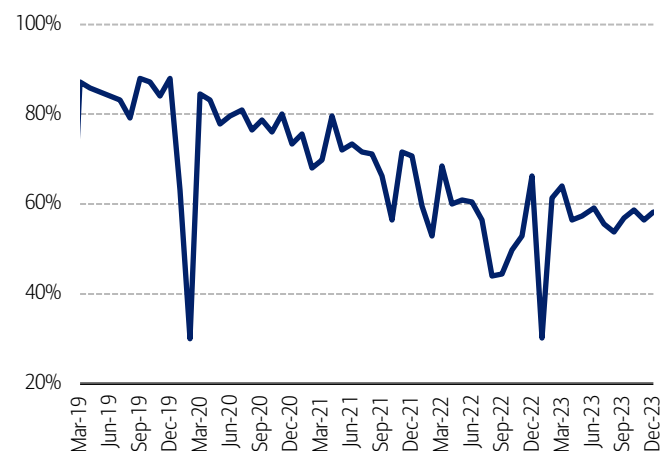
	Dec-23	Nov-23	m/m (%)	m/m	Dec-22	y/y (%)	y/y	ytd
Operating rate (%)	58.0%	56.4%	2.9%	1.6	66.3%	-12.5%	-8.3	-1.3%
Output (Kt)	598	573	4.5%	26	664	-9.8%	-65	-4.2%
Import (Kt)	n.a.	43	n.a.	n.a.	51	n.a.	n.a.	-4.8%
Export (Kt)	n.a.	341	n.a.	n.a.	239	n.a.	n.a.	-8.8%
Consumption (Kt)	n.a.	546	n.a.	n.a.	657	n.a.	n.a.	-7.5%
Enterprise inventory (Kt)	591	579	2.1%	12	734	-19.5%	-143	-6.5%

Source: BofA Global Research, SCI, China NBS

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

Duplex board operating rate reached 58% in December...

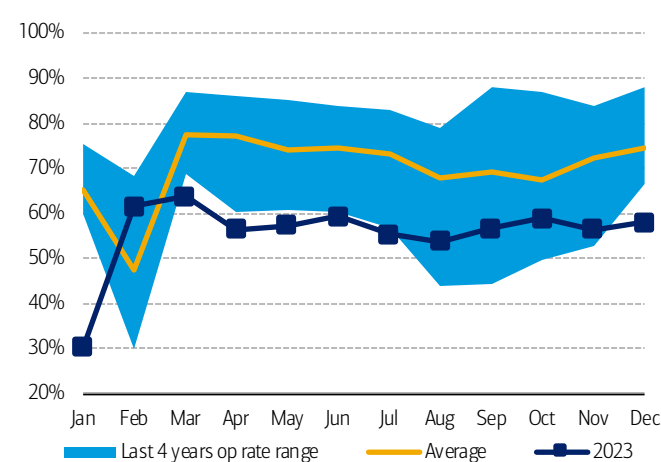


Source: BofA Global Research, SCI

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

... below the low-end of its past four years range

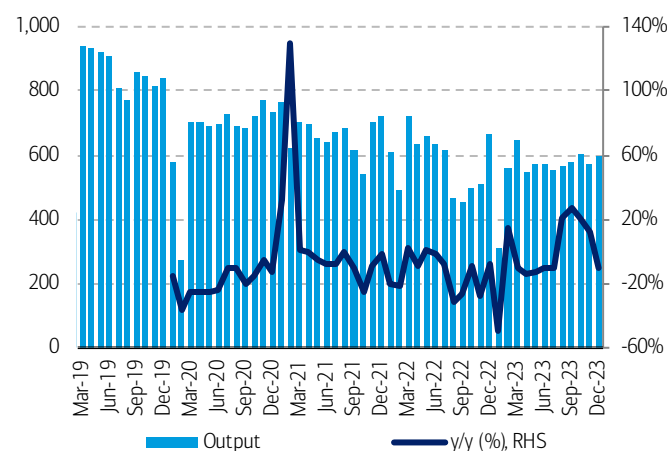


Source: BofA Global Research, SCI

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Exhibit 56: Duplex - output in China (Kt)

Duplex board output rose 4.5% m/m but dropped 9.8% y/y to 598Kt ...

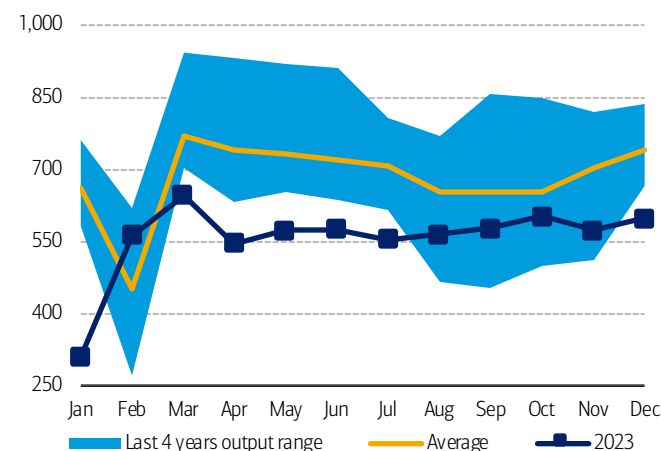


Source: BofA Global Research, SCI

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Exhibit 57: Duplex - output in China (Kt)

... in December, below its past four years range

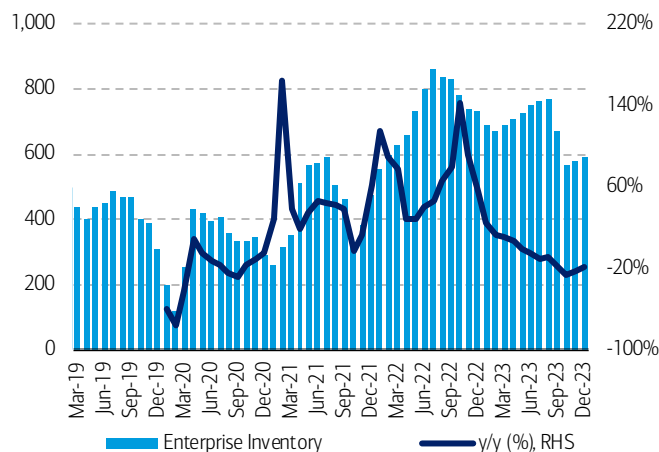


Source: BofA Global Research, SCI

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

Duplex board inventory reached 591Kt in December...

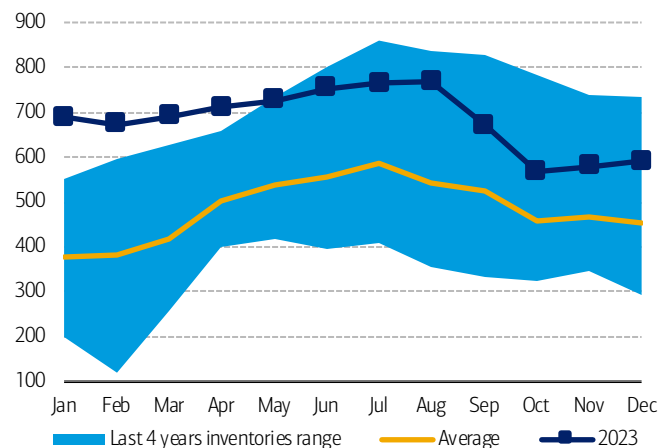


Source: BofA Global Research, SCI

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

... above its past four years average

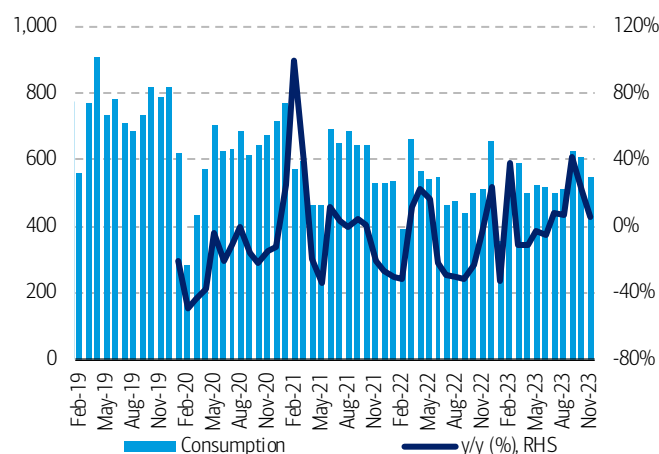


Source: BofA Global Research, SCI

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Exhibit 60: Duplex – consumption in China (Kt)

Duplex board consumption was at 546Kt in November, up 6.1% y/y...

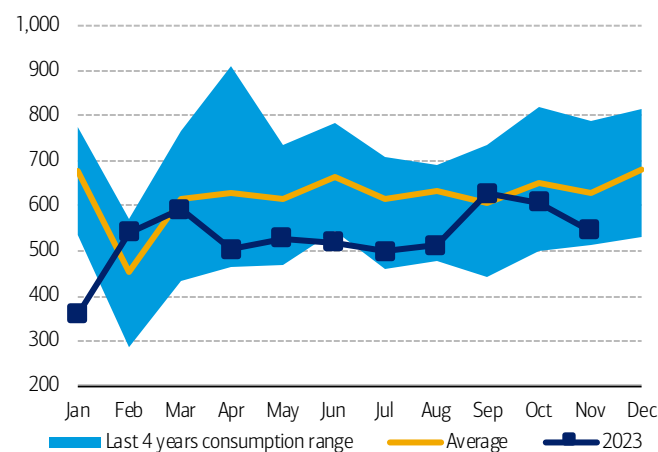


Source: BofA Global Research, SCI, China NBS

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Exhibit 61: Duplex – consumption in China (Kt)

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

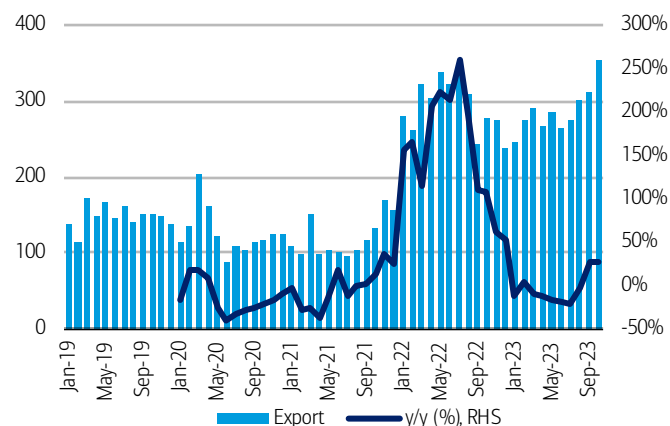


Source: BofA Global Research, SCI, China NBS

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

Duplex & ivory board combined exports were at 341Kt, up 24.5% y/y...

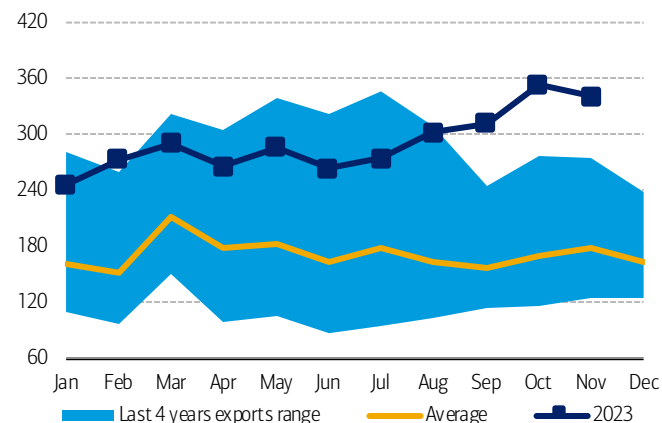


Source: BofA Global Research, SCI, China NBS

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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 November

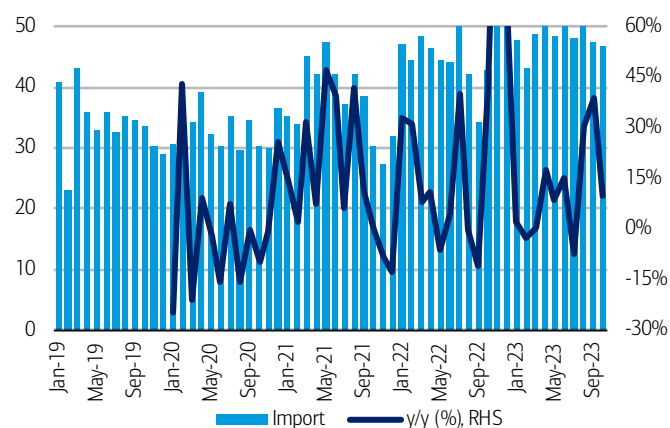


Source: BofA Global Research, SCI, China NBS

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

Duplex & ivory board combined imports were at 43Kt, down 33% y/y...

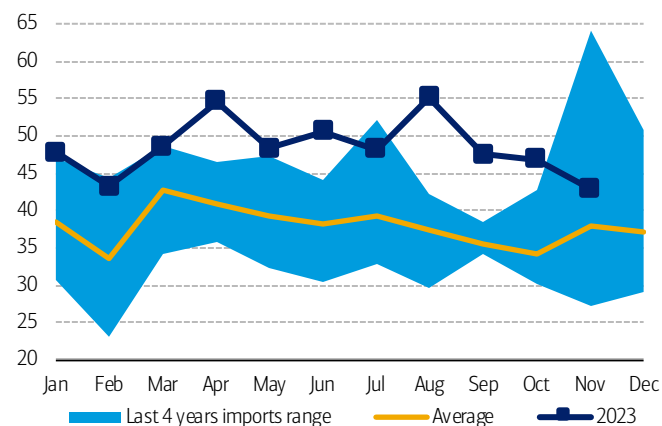


Source: BofA Global Research, SCI, China NBS

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

... and close to its past four years range in November



Source: BofA Global Research, SCI, China NBS

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