

## Retailing Industry

## Retail weekly/JMA weather outlook: 16 Feb 2024

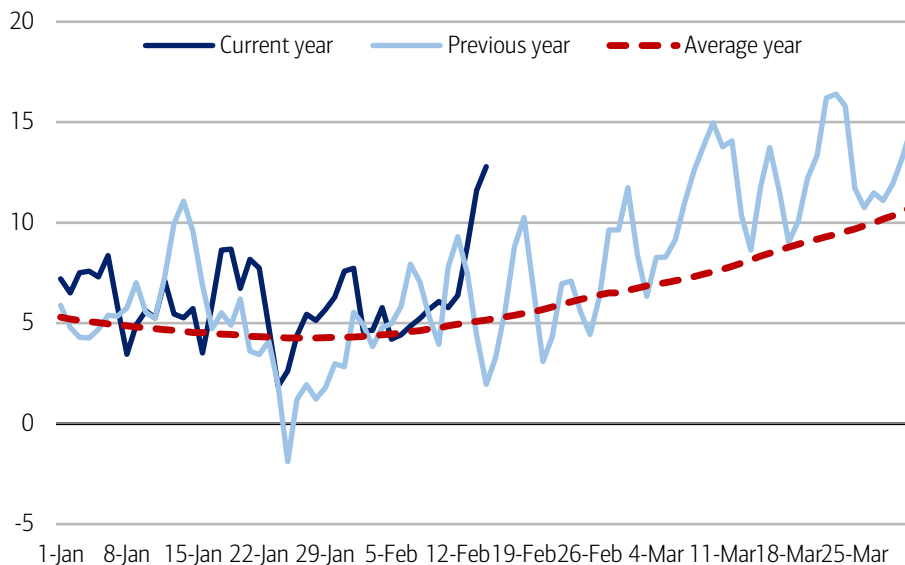
Industry Overview

## Weather outlook: Especially warm in mid-February

The Japan Meteorological Agency (JMA) updated its one-month forecast on 15 February. Over the next month (17 Feb-16 Mar), the JMA expects little impact from cold fronts and temperatures to be high nationwide. It expects warm weather from the middle to the end of February, but temperatures at or below average in some regions from late February to around mid-March. Given current temperatures, we suspect that spring items got off to a solid start but want to keep an eye on temperatures from March.

**Exhibit 2: Current-/previous-year and average temperatures (average for 10 largest cities)**

Temperatures were up YoY and above historical average over the past week



Source: Japan Meteorological Agency, BofA Global Research

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16 February 2024

Equity  
Japan  
Retailing

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**Exhibit 1: Next week's events**

Please confirm official times with companies

21 Feb (Wed)
JNTO Japan tourism statistics
22 Feb (Thu)
Monthly data (Kobe Bussan)
23 Feb (Fri)
Public holiday

Source: BofA Global Research

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Timestamp: 16 February 2024 03:27AM EST

# Retail share-price performance

## Exhibit 3: Retail share price performance (1W, 1M, 3M, 6M, 2023)

Retail Index was -2.5 points vs. TOPIX over the last week, -1.8% over the last month, and -3.0%, over the last three months

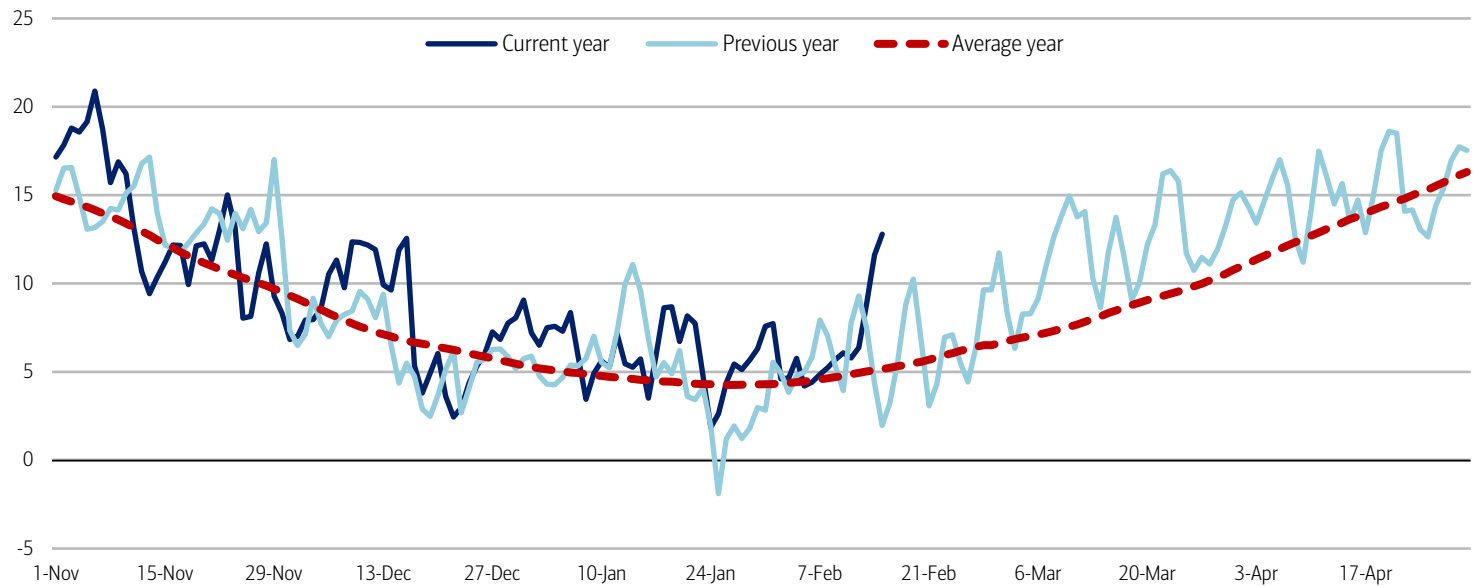
	1 Week	1 Month	3 Month	6 Month	2023	2022
Asics	23.5	33.3	43.1	42.8	96.4	72.2
Fast Retailing	6.0	24.9	41.8	36.9	55.2	69.1
Shimamura	4.8	21.2	38.0	36.0	51.6	59.3
Ryohin Keikaku	4.5	18.8	37.2	29.7	50.7	54.9
PPIH	4.4	15.5	30.5	29.1	48.2	54.6
Isetan Mitsukoshi	3.6	13.2	22.3	25.5	44.8	51.5
ZOZO	3.2	12.5	21.4	25.1	40.2	46.2
Kura Sushi	3.1	9.4	15.5	22.8	39.7	45.1
Nitori	2.8	9.0	15.0	19.8	37.1	43.4
<b>TOPIX</b>	<b>2.6</b>	<b>8.9</b>	<b>14.3</b>	<b>18.2</b>	<b>35.2</b>	<b>35.6</b>
Sugi	2.5	8.7	14.3	17.3	33.6	35.4
Arcs	2.0	8.0	14.2	17.1	32.1	33.1
Izumi	1.6	7.9	14.2	16.7	30.3	30.3
Descente	1.4	7.6	<b>TOPIX</b>	<b>16.1</b>	27.6	25.4
Mizuno	1.0	7.4	13.6	15.7	26.7	23.3
Kobe Bussan	0.8	7.3	13.4	15.2	26.7	19.9
Alpen	0.5	6.5	11.3	15.0	25.3	18.8
Takashimaya	0.2	6.0	11.3	14.7	<b>TOPIX</b>	14.7
<b>TOPIX Retail</b>	<b>0.1</b>	<b>5.9</b>	<b>10.8</b>	14.6	25.0	14.3
JFront	0.0	<b>TOPIX</b>	10.2	13.7	22.2	12.9
7&i	0.0	Nishimatsuya	10.0	13.7	22.1	12.2
Sundrug	-0.2	Aeon	9.2	12.5	21.1	11.9
Aeon	-0.2	DCM	9.1	11.9	20.3	10.9
Seria	-0.4	FOOD & LIFE	8.5	9.6	19.0	9.2
Kusuri no Aoki	-0.4	<b>TOPIX Retail</b>	<b>8.1</b>	<b>TOPIX Retail</b>	18.4	<b>8.8</b>
Komeri	-0.5	ABC-Mart	2.7	8.1	17.1	6.9
Marui	-0.6	Kojima	2.5	6.4	<b>TOPIX Retail</b>	6.4
Lawson	-0.6	Shimamura	2.2	4.7	15.8	5.3
Kojima	-0.8	Cosmos	1.2	4.5	15.2	4.3
World	-0.9	Alpen	0.7	4.4	14.8	3.7
Nishimatsuya	-1.1	Komeri	0.2	4.4	13.7	3.0
DCM	-1.2	Arcs	-0.2	4.3	13.5	2.7
Adastria	-1.4	Izumi	-0.3	4.2	13.2	1.1
U.S.M.H.	-1.4	Kohnan Shoji	-0.3	4.1	13.1	1.1
Welcia	-1.4	Bic Camera	-1.1	2.2	12.4	1.0
Goldwin	-1.5	Marui	-1.3	1.6	11.5	0.9
Kohnan Shoji	-1.5	Sundrug	-1.5	1.5	10.7	0.7
Snow Peak	-1.8	Pal	-1.6	1.0	10.4	-1.0
Tokyo Base	-2.0	U.S.M.H.	-1.9	0.3	9.9	-1.8
United Arrows	-2.1	Life	-2.7	-0.1	8.4	-3.0
Life	-2.3	Yamada	-3.5	-0.3	7.6	<b>-5.1</b>
Edion	-2.4	Ryohin Keikaku	-3.7	-1.6	7.1	-7.3
Tsuruha	-2.5	Yaoko	-4.0	-1.7	6.8	-7.6
Cosmos	-2.6	Onward	-4.2	0.0	6.8	-7.7
ABC-Mart	-2.7	Edion	-5.7	-0.8	6.1	-8.6
Bic Camera	-2.8	K's	-5.7	-4.6	4.8	-9.2
Yonex	-2.9	MatsukiyoCocokara	-5.9	-4.9	4.3	-10.7
JINS	-2.9	Kusuri no Aoki	-5.9	-5.5	2.0	-14.0
Yamada	-3.2	Snow Peak	-6.1	-5.5	1.9	-14.3
H2O	-3.2	United Arrows	-6.4	-6.8	-0.6	-14.9
Workman	-3.4	Kobe Bussan	-7.0	-9.2	-1.0	-15.8
Yaoko	-3.4	Workman	-7.6	-11.2	-1.1	-17.4
Daikokuten Bussan	-3.5	Yonex	-8.4	-11.4	-2.6	-21.2
Onward	-3.9	JINS	-9.0	-12.1	-6.1	-23.3
FOOD & LIFE	-4.4	Goldwin	-9.6	-13.4	-8.4	-23.7
K's	-5.0	Tokyo Base	-10.6	-17.5	-9.6	-26.1
Pal	-5.7	Skyark	-13.2	-17.9	-19.8	-34.2
MatsukiyoCocokara	-6.0	Descente	-15.0	-18.4	-23.0	-40.3
Skyark	-11.5	Tsuruha	-16.3	-27.0	-60.7	-53.3

Note: Includes companies outside of our coverage

Source: Bloomberg, BofA Global Research

**Exhibit 4: Current-/previous-year and average temperatures (average for 10 largest cities)**

Temperatures were up YoY and above historical average over the past week



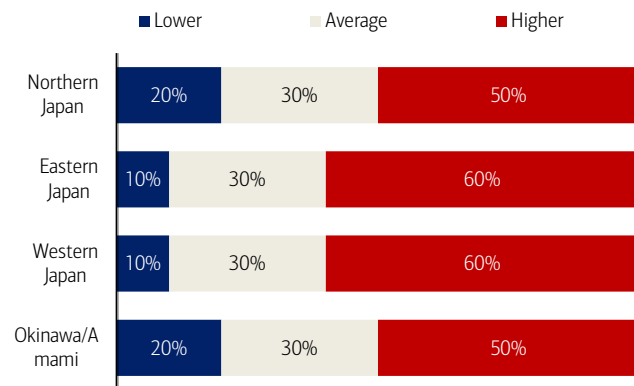
Note: Simple average for 10 cities (Tokyo, Yokohama, Osaka, Nagoya, Sapporo, Fukuoka, Kobe, Hiroshima, Sendai, Matsuyama). Average data based on 1991-2020.

Source: Japan Meteorological Agency, BofA Global Research

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**Exhibit 5: Temperature forecasts by region (17 Feb - 16 Mar)**

Forecast for at or above average temperatures in all regions

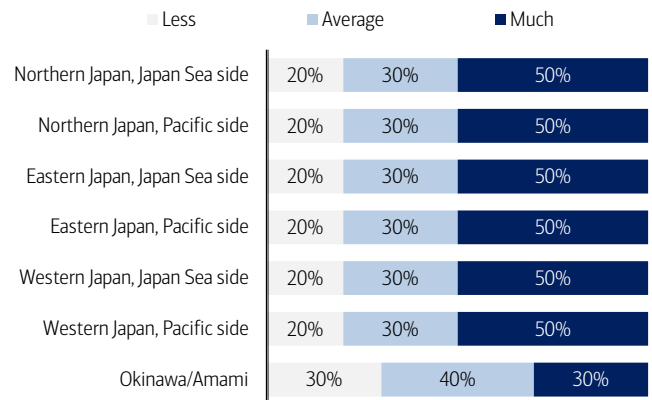


Source: Japan Meteorological Agency, BofA Global Research

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**Exhibit 6: Precipitation forecasts by region (17 Feb - 16 Mar)**

Forecast for at average precipitation in Okinawa/Amami and above average precipitation in other regions



Source: Japan Meteorological Agency, BofA Global Research

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**Exhibit 7: Monthly temperature trends**

Tokyo, Yokohama, Osaka, Nagoya, Sapporo

	Tokyo				Yokohama				Osaka				Nagoya				Sapporo			
	Average	vs. last year	vs. average	vs. 5 yrs	Average	vs. last year	vs. average	vs. 5 yrs	Average	vs. last year	vs. average	vs. 5 yrs	Average	vs. last year	vs. average	vs. 5 yrs	Average	vs. last year	vs. average	vs. 5 yrs
2021/1	5.4	-1.7	0.0	-0.5	6.2	-1.6	0.1	-0.5	6.2	-2.4	0.0	-0.4	5.0	-2.6	0.2	-0.4	-4.4	-2.1	-1.2	-1.3
2021/2	8.5	0.2	2.4	1.5	9.1	0.2	2.4	1.5	8.7	0.7	2.1	1.7	7.5	0.4	2.0	1.4	-2.2	-0.1	0.5	0.4
2021/3	12.8	2.1	3.4	2.5	13.2	2.0	3.5	2.5	12.2	0.8	2.3	1.5	12.0	1.3	2.8	1.8	3.8	0.5	2.7	1.5
2021/4	15.1	2.3	0.8	0.4	15.2	1.8	0.7	0.2	15.5	1.8	0.3	0.0	15.2	1.8	0.6	0.3	7.9	1.1	0.6	0.2
2021/5	19.6	0.1	0.8	-0.3	19.6	-0.1	0.8	-0.3	20.0	-0.8	-0.1	-0.8	19.5	-1.1	0.1	-0.9	13.1	-0.6	0.1	-1.3
2021/6	22.7	-0.5	0.8	0.3	22.7	-0.7	0.9	0.3	23.9	-1.0	0.3	0.3	23.4	-1.2	0.4	0.1	18.9	0.6	1.9	2.0
2021/7	25.9	1.6	0.2	0.0	26.0	1.6	0.4	0.2	27.9	1.9	0.2	0.1	27.4	2.0	0.5	0.3	23.9	2.7	2.8	2.3
2021/8	27.4	-1.7	0.5	-0.4	27.5	-1.6	0.5	-0.4	28.1	-2.6	-0.9	-1.5	27.8	-2.5	-0.4	-1.3	22.9	-0.4	0.6	0.4
2021/9	22.3	-1.9	-1.0	-1.6	22.6	-2.0	-1.1	-1.6	24.8	-1.0	-0.4	-0.5	24.1	-1.3	-0.4	-0.8	18.8	-1.3	0.2	-0.3
2021/10	18.2	0.7	0.2	-0.1	18.7	0.8	0.2	-0.1	20.3	1.6	0.8	0.7	19.9	1.9	1.3	0.9	12.5	-0.6	0.4	0.2
2021/11	13.7	-0.3	1.2	0.8	14.3	-0.4	0.9	0.6	14.1	-0.6	0.3	0.2	13.0	-1.0	0.4	-0.1	7.3	1.0	2.1	2.7
2021/12	7.9	0.2	0.2	-0.1	8.8	0.0	0.1	-0.2	8.8	0.1	0.1	0.0	7.3	-0.1	0.1	-0.3	-0.5	1.1	0.4	0.8
2022/1	4.9	-0.5	-0.5	-0.8	5.5	-0.7	-0.6	-1.1	5.6	-0.6	-0.6	-0.9	4.1	-0.9	-0.7	-1.2	-3.2	1.2	0.0	0.0
2022/2	5.2	-3.3	-0.9	-2.1	5.8	-3.3	-0.9	-2.1	5.5	-3.2	-1.1	-1.7	4.5	-3.0	-1.0	-1.8	-2.2	0.0	0.5	0.4
2022/3	10.9	-1.9	1.5	0.1	11.3	-1.9	1.6	0.1	11.4	-0.8	1.5	0.4	11.0	-1.0	1.8	0.5	2.6	-1.2	1.5	-0.1
2022/4	15.3	0.2	1.0	0.7	15.4	0.2	0.9	0.5	16.8	1.3	1.6	1.5	16.8	1.6	2.2	2.0	9.1	1.2	1.8	1.4
2022/5	18.8	-0.8	0.0	-1.0	19.0	-0.6	0.2	-0.8	20.0	0.0	-0.1	-0.6	19.5	0.0	0.1	-0.7	14.9	1.8	1.9	0.8
2022/6	23.0	0.3	1.1	0.6	22.9	0.2	1.1	0.4	24.4	0.5	0.8	0.7	24.3	0.9	1.3	0.9	16.8	-2.1	-0.2	-0.6
2022/7	27.4	1.5	1.7	1.4	27.1	1.1	1.5	1.1	28.4	0.5	0.7	0.7	27.5	0.1	0.6	0.3	23.1	-0.8	2.0	0.9
2022/8	27.5	0.1	0.6	-0.4	27.6	0.1	0.6	-0.3	29.5	1.4	0.5	0.1	28.5	0.7	0.3	-0.5	22.7	-0.2	0.4	0.4
2022/9	24.4	2.1	1.1	0.9	24.7	2.1	1.0	0.9	26.2	1.4	1.0	1.1	26.1	2.0	1.6	1.4	19.8	1.0	1.2	0.8
2022/10	17.2	-1.0	-0.8	-1.0	17.9	-0.8	-0.6	-0.8	19.0	-1.3	-0.5	-0.6	18.7	-1.2	0.1	-0.3	12.6	0.1	0.5	0.0
2022/11	14.5	0.8	2.0	1.2	15.2	0.9	1.8	1.1	15.2	1.1	1.4	1.2	14.6	1.6	2.0	1.5	7.1	-0.2	1.9	1.5
2022/12	7.5	-0.4	-0.2	-0.3	8.4	-0.4	-0.3	-0.4	7.9	-0.9	-0.8	-0.8	6.6	-0.7	-0.6	-0.9	-1.4	-0.9	-0.5	-0.2
2023/1	5.7	0.8	0.3	0.2	6.4	0.9	0.3	0.1	6.5	0.9	0.3	0.1	5.2	1.1	0.4	0.1	-4.4	-1.2	-1.2	-1.3
2023/2	7.3	2.1	1.2	0.4	7.9	2.1	1.2	0.4	7.0	1.5	0.4	-0.1	6.5	2.0	1.0	0.3	-2.7	-0.5	0.0	0.0
2023/3	12.9	2.0	3.5	1.6	13.2	1.9	3.5	1.5	13.0	1.6	3.1	1.6	12.7	1.7	3.5	1.7	4.9	2.3	3.8	2.0
2023/4	16.3	1.0	2.0	1.5	16.6	1.2	2.1	1.6	15.9	-0.9	0.7	0.4	15.9	-0.9	1.3	0.7	9.2	0.1	1.9	1.2
2023/5	19.0	0.2	0.2	-0.5	19.0	0.0	0.2	-0.6	20.0	0.0	-0.1	-0.4	20.2	0.7	0.8	0.2	13.8	-1.1	0.8	-0.4
2023/6	23.2	0.2	1.3	0.6	23.2	0.3	1.4	0.6	23.8	-0.6	0.2	-0.3	23.8	-0.5	0.8	0.0	19.3	2.5	2.3	1.7
2023/7	28.7	1.3	3.0	2.7	28.2	1.1	2.6	2.2	28.9	0.5	1.2	1.2	28.9	1.4	2.0	1.8	23.8	0.7	2.7	1.5
2023/8	29.2	1.7	2.3	1.1	29.1	1.5	2.1	1.0	29.9	0.4	0.9	0.5	29.4	0.9	1.2	0.4	26.7	4.0	4.4	4.2
2023/9	26.7	2.3	3.4	2.9	26.9	2.2	3.2	2.8	27.9	1.7	2.7	2.4	27.3	1.2	2.8	2.1	21.5	1.7	2.9	2.1
2023/10	18.9	1.7	0.9	0.6	19.5	1.6	1.0	0.7	19.3	0.3	-0.2	-0.4	18.3	-0.4	-0.3	-0.9	13.3	0.7	1.2	0.4
2023/11	14.4	-0.1	1.9	0.5	15.2	0.0	1.8	0.6	14.4	-0.8	0.6	-0.2	13.6	-1.0	1.0	-0.2	6.7	-0.4	1.5	0.5
2023/12	9.4	1.9	1.7	1.4	10.2	1.8	1.5	1.3	9.3	1.4	0.6	0.4	8.4	1.8	1.2	0.8	-0.7	0.7	0.2	0.4
2024/1	7.1	1.4	1.7	1.4	8.0	1.6	1.9	1.5	7.1	0.6	0.9	0.4	6.0	0.8	1.2	0.6	-1.8	2.6	1.4	1.7
2024/2	7.2	-0.1			7.8	-0.1			7.8	0.8			6.9	0.4			-1.7	1.0		

Source: Japan Meteorological Agency, BofA Global Research

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**Exhibit 8: Monthly temperature trends**

Fukuoka, Kobe, Hiroshima, Sendai, Matsuyama

	Fukuoka				Kobe				Hiroshima				Sendai				Matsuyama			
	Average	vs. last year	vs. average	vs. 5 yrs ave	Average	vs. last year	vs. average	vs. 5 yrs ave	Average	vs. last year	vs. average	vs. 5 yrs ave	Average	vs. last year	vs. average	vs. 5 yrs ave	Average	vs. last year	vs. average	vs. 5 yrs ave
2021/1	7.0	-2.5	0.1	-0.5	6.1	-2.7	-0.1	-0.7	5.2	-2.9	-0.2	-0.8	1.2	-2.8	-0.8	-1.3	6.2	-2.5	0.0	-0.6
2021/2	10.2	0.5	2.4	1.9	8.8	0.6	2.3	1.7	8.2	0.4	2.0	1.7	3.7	-0.7	1.3	0.5	8.9	0.5	2.1	1.6
2021/3	13.5	1.1	2.7	1.9	12.3	0.9	2.5	1.6	12.1	1.1	2.6	1.8	8.6	1.1	3.1	1.7	12.7	1.3	2.8	2.0
2021/4	16.7	2.6	1.3	0.7	15.3	1.7	0.3	-0.1	15.4	2.2	0.6	0.2	11.6	1.5	0.9	0.4	15.5	2.2	0.7	0.2
2021/5	20.4	0.0	0.5	-0.4	19.7	-0.9	-0.1	-0.8	19.5	-0.8	-0.1	-0.8	17.0	0.2	1.4	0.0	19.5	-0.6	0.1	-0.6
2021/6	24.2	-0.7	0.9	0.5	23.7	-0.6	0.3	0.4	23.8	-0.4	0.6	0.5	20.6	-0.6	1.4	0.8	23.4	-0.8	0.5	0.2
2021/7	28.9	3.4	1.5	1.2	27.5	1.8	0.4	0.2	27.6	2.4	0.4	0.2	24.1	2.8	1.2	0.6	27.2	1.6	0.1	-0.1
2021/8	27.5	-2.7	-0.9	-1.9	27.8	-2.2	-0.8	-1.5	27.4	-2.5	-1.1	-1.9	24.9	-1.7	0.5	-0.4	27.5	-2.2	-0.6	-1.5
2021/9	25.9	1.4	1.2	1.0	25.1	-0.8	-0.3	-0.4	25.0	0.0	0.3	0.3	20.8	-1.7	-0.4	-1.0	25.0	-0.2	0.4	0.1
2021/10	21.0	1.6	1.4	1.0	20.6	1.5	0.8	0.6	19.9	1.2	1.1	0.7	15.8	0.2	0.1	-0.1	20.1	1.3	1.0	0.4
2021/11	13.9	-1.4	-0.3	-0.6	14.5	-0.6	0.3	0.2	13.1	-1.1	0.2	-0.1	11.1	0.3	1.3	1.3	13.7	-1.0	0.1	-0.1
2021/12	9.1	0.6	0.0	-0.3	8.9	0.1	0.1	-0.2	7.8	0.6	0.3	0.0	4.7	0.8	0.2	0.1	8.8	0.9	0.3	0.1
2022/1	6.9	-0.1	0.0	-0.6	5.7	-0.4	-0.5	-0.9	5.3	0.1	-0.1	-0.6	1.7	0.5	-0.3	-0.6	5.9	-0.3	-0.3	-0.8
2022/2	6.3	-3.9	-1.5	-2.5	5.6	-3.2	-0.9	-1.7	4.8	-3.4	-1.4	-2.1	1.9	-1.8	-0.5	-1.4	5.2	-3.7	-1.6	-2.4
2022/3	12.7	-0.8	1.9	0.7	11.5	-0.8	1.7	0.5	11.5	-0.6	2.0	0.8	6.4	-2.2	0.9	-0.8	11.9	-0.8	2.0	0.8
2022/4	16.4	-0.3	1.0	0.4	16.6	1.3	1.6	1.5	16.4	1.0	1.6	1.4	11.8	0.2	1.1	0.6	15.9	0.4	1.1	0.7
2022/5	20.6	0.2	0.7	-0.1	19.8	0.1	0.0	-0.5	20.0	0.5	0.4	-0.1	16.5	-0.5	0.9	-0.5	19.3	-0.2	-0.1	-0.7
2022/6	24.8	0.6	1.5	0.9	23.9	0.2	0.5	0.5	24.2	0.4	1.0	0.8	20.2	-0.4	1.0	0.3	24.1	0.7	1.2	0.9
2022/7	28.9	0.0	1.5	1.1	28.0	0.5	0.9	0.7	28.1	0.5	0.9	0.8	24.9	0.8	2.0	1.2	27.8	0.6	0.7	0.7
2022/8	29.8	2.3	1.4	0.8	29.2	1.4	0.6	0.2	29.2	1.8	0.7	0.3	25.1	0.2	0.7	0.0	29.1	1.6	1.0	0.5
2022/9	25.7	-0.2	1.0	0.6	26.7	1.6	1.3	1.4	26.0	1.0	1.3	1.3	22.2	1.4	1.0	0.7	26.2	1.2	1.6	1.3
2022/10	19.6	-1.4	0.0	-0.4	19.5	-1.1	-0.3	-0.4	18.9	-1.0	0.1	-0.3	15.5	-0.3	-0.2	-0.4	19.2	-0.9	0.1	-0.3
2022/11	16.2	2.3	2.0	1.8	15.8	1.3	1.6	1.4	14.9	1.8	2.0	1.7	11.9	0.8	2.1	1.6	15.5	1.8	1.9	1.7
2022/12	7.7	-1.4	-1.4	-1.4	7.9	-1.0	-0.9	-1.0	6.4	-1.4	-1.1	-1.2	4.2	-0.5	-0.3	-0.2	7.4	-1.4	-1.1	-1.1
2023/1	7.2	0.3	0.3	-0.2	6.6	0.9	0.4	0.1	5.7	0.4	0.3	-0.2	2.1	0.4	0.1	0.0	6.5	0.6	0.3	-0.1
2023/2	9.0	2.7	1.2	0.6	7.2	1.6	0.7	0.0	6.9	2.1	0.7	0.3	3.0	1.1	0.6	0.0	7.6	2.4	0.8	0.4
2023/3	13.6	0.9	2.8	1.1	13.0	1.5	3.2	1.5	12.6	1.1	3.1	1.4	9.3	2.9	3.8	1.9	12.7	0.8	2.8	1.0
2023/4	16.7	0.3	1.3	0.8	15.9	-0.7	0.9	0.6	15.7	-0.7	0.9	0.5	13.3	1.5	2.6	2.1	15.9	0.0	1.1	0.7
2023/5	20.2	-0.4	0.3	-0.5	19.8	0.0	0.0	-0.3	19.9	-0.1	0.3	-0.1	16.6	0.1	1.0	-0.3	19.8	0.5	0.4	0.0
2023/6	24.4	-0.4	1.1	0.2	23.4	-0.5	0.0	-0.3	23.3	-0.9	0.1	-0.4	21.6	1.4	2.4	1.3	23.1	-1.0	0.2	-0.4
2023/7	28.9	0.0	1.5	1.2	28.0	0.0	0.9	0.7	27.9	-0.2	0.7	0.6	26.6	1.7	3.7	3.0	28.0	0.2	0.9	1.0
2023/8	29.7	-0.1	1.3	0.6	29.7	0.5	1.1	0.7	30.0	0.8	1.5	1.0	28.6	3.5	4.2	3.1	28.9	-0.2	0.8	0.2
2023/9	26.9	1.2	2.2	1.5	27.9	1.2	2.5	2.1	27.2	1.2	2.5	2.0	25.1	2.9	3.9	3.4	27.3	1.1	2.7	1.9
2023/10	19.8	0.2	0.2	-0.1	19.6	0.1	-0.2	-0.5	18.9	0.0	0.1	-0.4	16.7	1.2	1.0	0.6	19.4	0.2	0.3	-0.2
2023/11	15.1	-1.1	0.9	0.2	14.7	-1.1	0.5	-0.3	14.0	-0.9	1.1	0.2	11.4	-0.5	1.6	0.5	14.8	-0.7	1.2	0.5
2023/12	9.9	2.2	0.8	0.7	9.7	1.8	0.9	0.7	8.2	1.8	0.7	0.5	5.7	1.5	1.2	1.2	9.3	1.9	0.8	0.7
2024/1	8.3	1.1	1.4	0.6	7.3	0.7	1.1	0.5	6.5	0.8	1.1	0.4	4.2	2.1	2.2	1.9	7.4	0.9	1.2	0.5
2024/2	9.4	0.4			7.9	0.7			7.6	0.7			4.5	1.5			8.3	0.7		

Source: Japan Meteorological Agency, BofA Global Research

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**Exhibit 9: Monthly precipitation trends**

Tokyo, Yokohama, Osaka, Nagoya, Sapporo

	Tokyo			Yokohama			Osaka			Nagoya			Sapporo		
	vs. last year	vs. average	vs. 5 yrs ave	vs. last year	vs. average	vs. 5 yrs ave	vs. last year	vs. average	vs. 5 yrs ave	vs. last year	vs. average	vs. 5 yrs ave	vs. last year	vs. average	vs. 5 yrs ave
2021/1	-68%	-27%	-30%	-63%	-28%	-27%	6%	37%	37%	2%	11%	48%	76%	-17%	18%
2021/2	490%	57%	196%	200%	51%	125%	-30%	-26%	-14%	-13%	-28%	-3%	-50%	-15%	-2%
2021/3	32%	49%	32%	32%	57%	38%	44%	41%	61%	36%	75%	65%	-26%	2%	0%
2021/4	-47%	17%	6%	-36%	9%	6%	92%	120%	98%	73%	51%	20%	113%	105%	130%
2021/5	-16%	-29%	-16%	16%	-26%	-10%	251%	149%	162%	88%	69%	71%	68%	38%	60%
2021/6	-21%	0%	-4%	-53%	-40%	-44%	-8%	-7%	-13%	-40%	-27%	-28%	-2%	-16%	-54%
2021/7	15%	98%	111%	-3%	102%	79%	-35%	54%	27%	-23%	48%	22%	-87%	-92%	-91%
2021/8	522%	147%	135%	471%	97%	136%	175%	178%	140%	2569%	149%	153%	-13%	-14%	-37%
2021/9	89%	-1%	-5%	85%	-18%	-29%	96%	26%	11%	-3%	-3%	8%	36%	-49%	-28%
2021/10	-3%	-15%	-30%	-5%	-13%	-23%	-67%	-50%	-63%	-76%	-61%	-75%	128%	37%	39%
2021/11	541%	-3%	11%	1317%	18%	63%	110%	36%	138%	96%	-10%	60%	36%	35%	50%
2021/12	792%	100%	149%	669%	103%	104%	341%	47%	46%	305%	57%	64%	309%	-5%	18%
2022/1	-48%	-62%	-58%	-55%	-68%	-64%	-69%	-57%	-57%	-54%	-49%	-32%	88%	57%	113%
2022/2	-20%	26%	96%	-39%	-8%	40%	-63%	-73%	-63%	-27%	-47%	-23%	43%	22%	52%
2022/3	-36%	-5%	-24%	-53%	-26%	-36%	-28%	1%	3%	-58%	-27%	-40%	-31%	-30%	-35%
2022/4	44%	68%	45%	64%	79%	74%	-48%	14%	-12%	-30%	5%	-15%	-87%	-73%	-75%
2022/5	99%	42%	79%	56%	16%	44%	-76%	-41%	-53%	-35%	9%	-4%	-13%	20%	21%
2022/6	-62%	-62%	-63%	-23%	-54%	-54%	-41%	-45%	-39%	-14%	-37%	-32%	41%	18%	-27%
2022/7	-25%	49%	21%	-43%	15%	-5%	-35%	0%	-31%	17%	73%	29%	740%	-31%	-4%
2022/8	-73%	-32%	-33%	-47%	5%	15%	-77%	-35%	-55%	-44%	41%	7%	115%	84%	70%
2022/9	39%	38%	39%	55%	27%	19%	-6%	18%	4%	16%	12%	35%	20%	-38%	-7%
2022/10	-41%	-50%	-61%	-41%	-49%	-59%	35%	-32%	-51%	-14%	-66%	-77%	-47%	-27%	-35%
2022/11	10%	6%	37%	-18%	-3%	41%	-17%	12%	73%	59%	44%	162%	-46%	-28%	-25%
2022/12	-51%	-2%	7%	-52%	-4%	-14%	-78%	-68%	-65%	-72%	-56%	-53%	10%	4%	65%
2023/1	-31%	-74%	-71%	-21%	-74%	-71%	130%	-2%	5%	-4%	-51%	-35%	-58%	-34%	-28%
2023/2	-43%	-28%	-14%	-31%	-37%	-20%	103%	-45%	-15%	29%	-32%	6%	-7%	13%	23%
2023/3	31%	25%	-4%	35%	0%	-15%	-27%	-26%	-33%	12%	-18%	-34%	-35%	-54%	-55%
2023/4	-60%	-33%	-49%	-63%	-34%	-45%	69%	93%	44%	7%	13%	-6%	307%	12%	24%
2023/5	-20%	14%	13%	25%	44%	51%	190%	70%	39%	5%	15%	-9%	-68%	-61%	-62%
2023/6	442%	107%	110%	281%	76%	84%	159%	42%	71%	221%	102%	122%	88%	121%	73%
2023/7	-87%	-81%	-87%	-78%	-74%	-81%	-42%	-42%	-64%	-61%	-32%	-53%	-2%	-32%	-2%
2023/8	26%	-14%	-11%	-25%	-21%	-13%	122%	45%	5%	-20%	12%	-12%	-70%	-45%	-59%
2023/9	-26%	2%	-6%	-51%	-39%	-41%	-76%	-71%	-76%	-62%	-57%	-56%	67%	3%	96%
2023/10	25%	-37%	-34%	9%	-44%	-38%	-16%	-43%	-36%	108%	-29%	-24%	11%	-19%	-24%
2023/11	-60%	-57%	-52%	-45%	-47%	-30%	13%	28%	78%	-38%	-11%	24%	53%	11%	25%
2023/12	-65%	-66%	-68%	-48%	-50%	-60%	8%	-65%	-61%	140%	6%	13%	-61%	-59%	-42%
2024/1	132%	-40%	-23%	97%	-50%	-27%	-49%	-50%	-45%	18%	-42%	-17%	115%	42%	63%
2024/2	4%			-11%			-12%			-33%			-61%		

Source: Japan Meteorological Agency, BofA Global Research

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**Exhibit 10: Monthly precipitation trends**

Fukuoka, Kobe, Hiroshima, Sendai, Matsuyama

	Fukuoka			Kobe			Hiroshima			Sendai			Matsuyama		
	vs. last year	vs. average	vs. 5 yrs ave	vs. last year	vs. average	vs. 5 yrs ave	vs. last year	vs. average	vs. 5 yrs ave	vs. last year	vs. average	vs. 5 yrs ave	vs. last year	vs. average	vs. 5 yrs ave
2021/1	-70%	-39%	-50%	-13%	42%	36%	-42%	9%	-12%	-92%	-78%	-82%	-61%	-28%	-37%
2021/2	23%	14%	28%	-38%	-39%	-39%	-7%	-12%	-14%	282%	120%	312%	25%	5%	7%
2021/3	-26%	12%	10%	-3%	3%	14%	-16%	20%	20%	136%	44%	58%	-8%	-12%	-13%
2021/4	-20%	-44%	-48%	70%	67%	52%	-8%	0%	-17%	-40%	3%	-18%	-36%	-4%	-21%
2021/5	-9%	0%	12%	172%	83%	89%	92%	48%	96%	-29%	-32%	-27%	153%	111%	166%
2021/6	-67%	-51%	-53%	-58%	-42%	-53%	-48%	-18%	-37%	43%	-57%	-44%	-50%	-48%	-49%
2021/7	-94%	-85%	-88%	-69%	-2%	-39%	-51%	36%	0%	-52%	6%	17%	-73%	-34%	-50%
2021/8	1699%	320%	437%	1947%	256%	256%	34700%	430%	527%	152%	16%	4%	3414%	273%	423%
2021/9	-21%	41%	-9%	32%	19%	-8%	52%	36%	-4%	-34%	-35%	-30%	1%	-9%	-44%
2021/10	-32%	-53%	-70%	-72%	-64%	-71%	-87%	-89%	-93%	127%	-5%	-37%	-75%	-74%	-78%
2021/11	510%	67%	206%	120%	71%	197%	316%	59%	204%	829%	11%	309%	150%	98%	232%
2021/12	6%	-33%	-37%	237%	-7%	3%	-26%	-47%	-55%	167%	30%	148%	-22%	-51%	-54%
2022/1	5%	-35%	-42%	-70%	-57%	-60%	-76%	-74%	-78%	68%	-62%	-62%	4%	-25%	-29%
2022/2	-72%	-68%	-61%	-47%	-68%	-56%	-70%	-73%	-70%	-65%	-23%	-12%	-62%	-60%	-57%
2022/3	-6%	5%	-4%	-9%	-7%	1%	-13%	5%	-8%	-33%	-4%	-19%	2%	-11%	-13%
2022/4	114%	20%	40%	-38%	3%	-16%	6%	6%	4%	2%	4%	-1%	42%	37%	23%
2022/5	-66%	-66%	-58%	-62%	-31%	-37%	-88%	-82%	-78%	23%	-17%	-9%	-79%	-55%	-57%
2022/6	13%	-45%	-33%	-14%	-50%	-50%	-46%	-56%	-57%	183%	22%	93%	-15%	-56%	-43%
2022/7	132%	-65%	-69%	33%	30%	-23%	-16%	14%	-23%	88%	100%	90%	74%	14%	-15%
2022/8	-70%	27%	-15%	-56%	58%	0%	-79%	13%	-36%	-21%	-9%	-14%	-86%	-49%	-64%
2022/9	-12%	24%	9%	-30%	-17%	-36%	1%	37%	4%	-9%	-41%	-20%	-15%	-23%	-45%
2022/10	57%	-27%	-42%	108%	-24%	-40%	91%	-80%	-83%	-72%	-73%	-84%	59%	-59%	-63%
2022/11	-78%	-63%	-37%	1%	73%	152%	-60%	-39%	9%	5%	17%	216%	-50%	-1%	19%
2022/12	-20%	-47%	-30%	-62%	-64%	-55%	-9%	-52%	-48%	-54%	-40%	-7%	-5%	-53%	-45%
2023/1	102%	30%	24%	230%	42%	42%	279%	-2%	-2%	-38%	-76%	-76%	64%	23%	23%
2023/2	167%	-14%	13%	53%	-51%	-23%	262%	-4%	30%	21%	-7%	-1%	88%	-25%	-5%
2023/3	-18%	-14%	-29%	-3%	-9%	-13%	-48%	-45%	-56%	-15%	-18%	-30%	-19%	-28%	-34%
2023/4	29%	54%	100%	55%	61%	35%	64%	75%	81%	-49%	-47%	-49%	55%	112%	82%
2023/5	447%	84%	145%	169%	85%	63%	723%	50%	86%	36%	13%	37%	349%	101%	106%
2023/6	22%	-32%	-15%	154%	26%	38%	121%	-3%	12%	-1%	20%	57%	172%	20%	70%
2023/7	409%	79%	62%	-62%	-50%	-74%	-4%	10%	-31%	-56%	-13%	-30%	7%	22%	-17%
2023/8	-38%	-22%	-53%	23%	93%	10%	-67%	-63%	-80%	-79%	-81%	-80%	53%	-23%	-41%
2023/9	-52%	-40%	-52%	-75%	-80%	-83%	-48%	-29%	-45%	138%	41%	96%	-93%	-95%	-96%
2023/10	-67%	-76%	-69%	-45%	-58%	-50%	-61%	-92%	-84%	15%	-69%	-76%	-84%	-93%	-87%
2023/11	53%	-43%	-7%	-22%	35%	51%	-21%	-52%	-23%	-34%	-23%	33%	-33%	-34%	-25%
2023/12	24%	-34%	-18%	9%	-61%	-49%	115%	4%	5%	89%	13%	55%	28%	-40%	-29%
2024/1	-17%	8%	1%	-71%	-58%	-61%	-7%	-8%	-4%	725%	95%	148%	-46%	-33%	-33%
2024/2	12%			-20%			-20%			-92%			-33%		

Source: Japan Meteorological Agency, BofA Global Research

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**Exhibit 11: Monthly sunshine hours**

Tokyo, Yokohama, Osaka, Nagoya, Sapporo

	Tokyo			Yokohama			Osaka			Nagoya			Sapporo		
	vs. last year	vs. average	vs. 5 yrs ave	vs. last year	vs. average	vs. 5 yrs ave	vs. last year	vs. average	vs. 5 yrs ave	vs. last year	vs. average	vs. 5 yrs ave	vs. last year	vs. average	vs. 5 yrs ave
2021/1	23%	-10%	-13%	17%	-4%	-8%	40%	20%	14%	10%	-7%	-11%	17%	21%	22%
2021/2	10%	26%	26%	12%	36%	32%	37%	35%	24%	-11%	-6%	-9%	15%	10%	11%
2021/3	6%	10%	6%	11%	13%	7%	2%	13%	0%	-4%	-3%	-11%	-7%	12%	-4%
2021/4	2%	22%	14%	0%	21%	14%	-3%	15%	8%	-14%	10%	3%	11%	18%	8%
2021/5	-14%	-16%	-27%	-12%	-13%	-24%	-23%	-17%	-27%	-29%	-26%	-33%	-28%	-26%	-34%
2021/6	-3%	6%	-9%	7%	9%	-5%	-1%	13%	-4%	-6%	1%	-16%	83%	45%	59%
2021/7	236%	6%	16%	210%	11%	17%	101%	4%	10%	124%	6%	13%	43%	70%	46%
2021/8	-31%	1%	-2%	-36%	-7%	-10%	-44%	-26%	-34%	-37%	-17%	-26%	-1%	11%	6%
2021/9	-5%	-21%	-7%	-7%	-18%	-9%	-7%	-23%	-9%	-15%	-21%	-11%	44%	26%	15%
2021/10	43%	26%	41%	41%	25%	40%	11%	22%	32%	11%	17%	30%	3%	8%	3%
2021/11	32%	38%	34%	34%	38%	34%	10%	25%	10%	-1%	20%	7%	25%	6%	6%
2021/12	21%	16%	20%	22%	16%	21%	-4%	19%	14%	-6%	-1%	0%	16%	33%	30%
2022/1	20%	7%	7%	4%	0%	-4%	-8%	11%	3%	22%	13%	12%	-22%	-6%	-10%
2022/2	-11%	12%	5%	-13%	18%	7%	-10%	22%	10%	4%	-3%	-3%	6%	17%	14%
2022/3	1%	12%	4%	2%	15%	5%	-1%	12%	0%	6%	3%	-1%	-18%	-9%	-21%
2022/4	-22%	-5%	-17%	-21%	-4%	-16%	-2%	13%	1%	-9%	0%	-10%	17%	38%	22%
2022/5	20%	1%	-7%	11%	-4%	-11%	26%	5%	-3%	39%	2%	-2%	51%	12%	7%
2022/6	27%	35%	16%	16%	27%	10%	23%	38%	15%	33%	34%	12%	-34%	-4%	-6%
2022/7	10%	17%	25%	-1%	10%	13%	-1%	3%	12%	10%	16%	25%	-37%	7%	-14%
2022/8	-14%	-14%	-18%	-10%	-16%	-19%	30%	-3%	-6%	-7%	-23%	-27%	-19%	-9%	-10%
2022/9	34%	6%	19%	37%	12%	24%	43%	10%	26%	30%	3%	12%	-3%	23%	7%
2022/10	-27%	-8%	-4%	-22%	-3%	0%	-1%	21%	22%	-4%	12%	17%	4%	12%	5%
2022/11	-22%	7%	-5%	-21%	9%	-4%	-3%	21%	3%	-4%	15%	-1%	-8%	-2%	-5%
2022/12	-13%	1%	3%	-11%	3%	6%	0%	18%	10%	4%	3%	7%	-26%	-2%	-11%
2023/1	-6%	1%	3%	0%	-1%	0%	0%	10%	3%	-5%	7%	5%	46%	37%	29%
2023/2	-6%	5%	-2%	-13%	3%	-7%	-22%	-4%	-17%	12%	9%	11%	-15%	-1%	-9%
2023/3	-16%	-6%	-13%	-13%	0%	-10%	17%	31%	17%	4%	7%	4%	36%	24%	15%
2023/4	16%	10%	-1%	18%	13%	1%	-11%	0%	-12%	1%	1%	-9%	-33%	-8%	-23%
2023/5	8%	9%	5%	15%	11%	8%	6%	11%	5%	7%	10%	7%	0%	12%	6%
2023/6	-18%	11%	-6%	-14%	10%	-6%	-39%	-15%	-29%	-37%	-15%	-28%	24%	20%	16%
2023/7	42%	65%	81%	48%	63%	75%	28%	32%	44%	25%	45%	53%	-4%	2%	-16%
2023/8	48%	28%	13%	52%	27%	17%	2%	-1%	-5%	39%	7%	3%	15%	4%	7%
2023/9	7%	13%	25%	17%	31%	40%	5%	16%	29%	11%	14%	26%	-27%	-10%	-23%
2023/10	68%	55%	55%	58%	53%	52%	6%	29%	16%	15%	29%	22%	8%	22%	12%
2023/11	9%	17%	3%	6%	15%	2%	4%	25%	6%	-5%	9%	-7%	9%	7%	3%
2023/12	13%	14%	21%	11%	15%	23%	10%	30%	21%	9%	12%	18%	33%	31%	20%
2024/1	2%	3%	6%	11%	10%	13%	-6%	4%	-2%	-6%	1%	0%	-35%	-10%	-21%
2024/2	-51%			-51%			-41%			-46%			-34%		

Source: Japan Meteorological Agency, BofA Global Research

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**Exhibit 12: Monthly sunshine hours**

Fukuoka, Kobe, Hiroshima, Sendai, Matsuyama

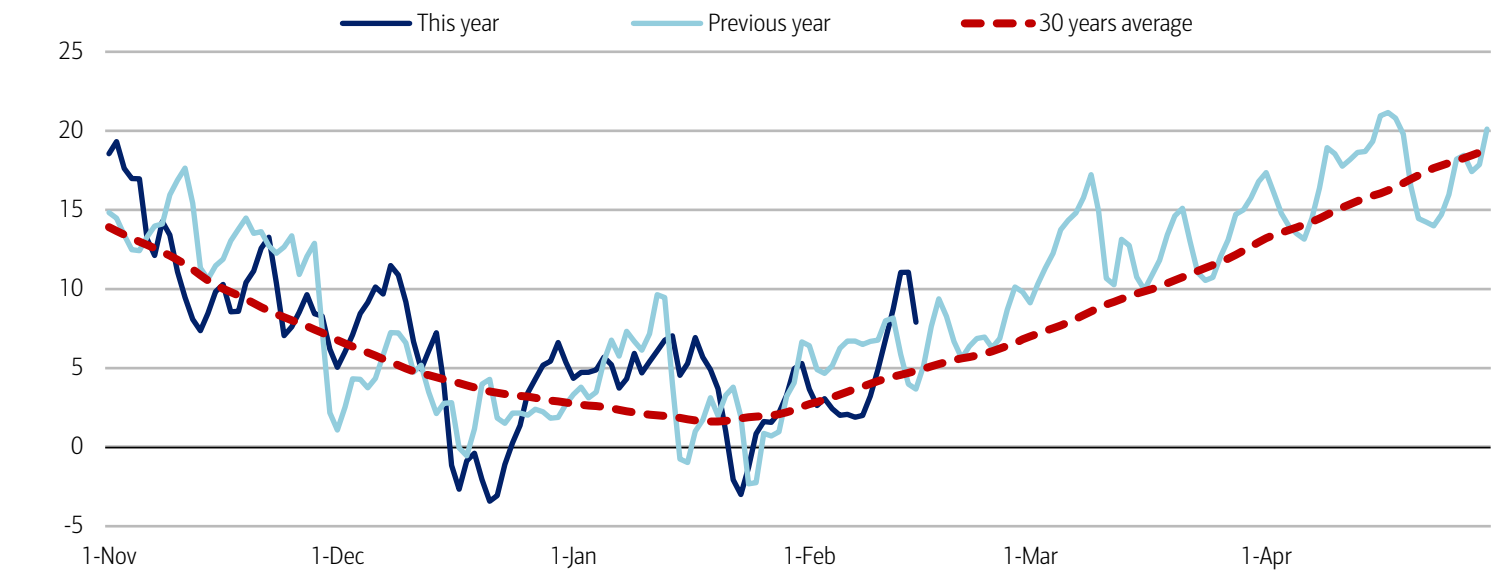
	Fukuoka			Kobe			Hiroshima			Sendai			Matsuyama		
	vs.	vs.	vs.	vs.	vs.	vs.	vs.	vs.	vs.	vs.	vs.	vs.	vs.	vs.	vs.
	last year	average	5 yrs ave	last year	average	5 yrs ave	last year	average	5 yrs ave	last year	average	5 yrs ave	last year	average	5 yrs ave
2021/1	27%	14%	12%	31%	15%	11%	21%	21%	15%	7%	-4%	-4%	25%	21%	23%
2021/2	28%	41%	34%	30%	36%	28%	26%	41%	33%	25%	14%	8%	14%	26%	25%
2021/3	5%	16%	4%	-3%	12%	2%	6%	13%	3%	6%	9%	0%	14%	11%	4%
2021/4	-7%	14%	7%	-2%	16%	10%	-7%	13%	4%	10%	18%	15%	-7%	16%	7%
2021/5	-17%	-12%	-22%	-23%	-17%	-27%	-25%	-25%	-31%	2%	1%	-10%	-30%	-23%	-31%
2021/6	1%	29%	5%	6%	10%	-1%	-8%	6%	-5%	-8%	14%	-2%	-7%	9%	-2%
2021/7	132%	17%	11%	112%	4%	10%	105%	-100%	-100%	177%	9%	9%	85%	6%	9%
2021/8	-43%	-28%	-41%	-46%	-28%	-36%	-44%	-29%	-38%	-33%	-4%	-8%	-46%	-29%	-37%
2021/9	-11%	-9%	9%	-6%	-22%	-9%	-27%	-31%	-17%	52%	9%	12%	-22%	-29%	-13%
2021/10	4%	25%	40%	14%	22%	37%	9%	29%	44%	9%	-6%	-1%	17%	28%	43%
2021/11	-1%	8%	-2%	6%	22%	7%	-8%	14%	2%	11%	29%	19%	-8%	17%	3%
2021/12	-9%	6%	12%	-16%	6%	3%	-7%	4%	14%	11%	-1%	-7%	0%	16%	19%
2022/1	28%	46%	30%	-4%	10%	4%	-3%	17%	5%	25%	21%	17%	-2%	18%	7%
2022/2	-18%	16%	0%	-9%	25%	13%	-12%	24%	8%	-13%	-2%	-8%	-11%	12%	5%
2022/3	-8%	6%	-7%	-5%	6%	-3%	-15%	-4%	-13%	3%	11%	3%	-10%	1%	-6%
2022/4	5%	20%	7%	-5%	10%	-1%	2%	15%	3%	-3%	15%	8%	-6%	9%	-5%
2022/5	25%	10%	2%	31%	8%	-1%	55%	16%	12%	13%	14%	2%	35%	4%	-1%
2022/6	1%	30%	0%	11%	23%	6%	14%	20%	3%	-1%	13%	-5%	23%	34%	15%
2022/7	-6%	9%	7%	5%	9%	19%	-11%	-11%	-2%	4%	12%	12%	-11%	-6%	2%
2022/8	40%	1%	-7%	27%	-9%	-12%	30%	-8%	-11%	-18%	-22%	-20%	35%	-3%	-6%
2022/9	5%	-4%	7%	39%	9%	24%	15%	-21%	-8%	-11%	-3%	-8%	3%	-27%	-14%
2022/10	-3%	21%	20%	-9%	11%	13%	-8%	18%	15%	10%	3%	16%	-7%	19%	18%
2022/11	26%	36%	20%	1%	23%	5%	8%	23%	7%	-12%	14%	-1%	13%	32%	11%
2022/12	-11%	-6%	1%	9%	16%	12%	3%	7%	13%	-8%	-9%	-14%	-11%	3%	3%
2023/1	-20%	16%	1%	-1%	9%	5%	1%	18%	7%	-28%	-13%	-18%	-4%	13%	3%
2023/2	-9%	6%	-8%	-25%	-7%	-19%	-20%	0%	-15%	5%	3%	-3%	-8%	3%	-5%
2023/3	16%	23%	7%	21%	28%	17%	26%	21%	11%	0%	11%	0%	20%	20%	12%
2023/4	-9%	9%	-5%	-8%	1%	-10%	-9%	5%	-8%	-2%	13%	4%	-4%	5%	-10%
2023/5	-11%	-2%	-7%	2%	11%	4%	-14%	0%	-3%	-4%	10%	-2%	-2%	2%	0%
2023/6	-23%	0%	-23%	-35%	-20%	-29%	-29%	-15%	-26%	0%	13%	-3%	-42%	-22%	-34%
2023/7	-9%	-1%	-1%	13%	23%	32%	28%	14%	26%	45%	63%	73%	15%	8%	21%
2023/8	10%	12%	8%	15%	5%	3%	11%	2%	1%	114%	67%	58%	-7%	-10%	-11%
2023/9	10%	5%	14%	7%	17%	30%	19%	-6%	11%	7%	4%	9%	45%	6%	27%
2023/10	-1%	20%	7%	15%	28%	18%	5%	24%	10%	34%	38%	44%	4%	24%	11%
2023/11	-21%	8%	-10%	-4%	19%	0%	-3%	19%	0%	4%	19%	2%	-8%	21%	-2%
2023/12	0%	-6%	-2%	4%	21%	15%	-1%	6%	10%	19%	8%	7%	7%	10%	9%
2024/1	-5%	10%	-8%	-5%	3%	-1%	-14%	2%	-12%	35%	17%	15%	-1%	12%	-1%
2024/2	-57%			-42%			-53%			-47%			-54%		

Source: Japan Meteorological Agency, BofA Global Research

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# China temperature trends

**Exhibit 13: China temperature trends (current-year, previous-year, and 30-year averages)**  
Temperatures up YoY and above historical average over the past few days



Source: Bloomberg, BofA Global Research

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**Exhibit 14: China monthly temperatures (simple average)**  
Above historical average but down YoY for Feb

	2022												2023												2024											
	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2
vs. last year	0.3	0.9	-1.2	0.5	0.7	1.5	-0.9	-0.2	2.0	-2.6	-0.3	2.9	0.2	-0.3	1.0	0.2	-0.1	-0.6	0.6	1.5	-1.6	1.1	0.3	-1.1												
vs. average year	2.8	1.5	0.1	1.5	1.7	2.1	1.6	0.2	2.5	-1.2	1.4	1.9	3.0	1.2	1.0	1.6	1.6	1.5	2.2	1.8	0.9	-0.1	1.7	1.1												

Note: Feb 2024 temperature is the average as of 15 Feb

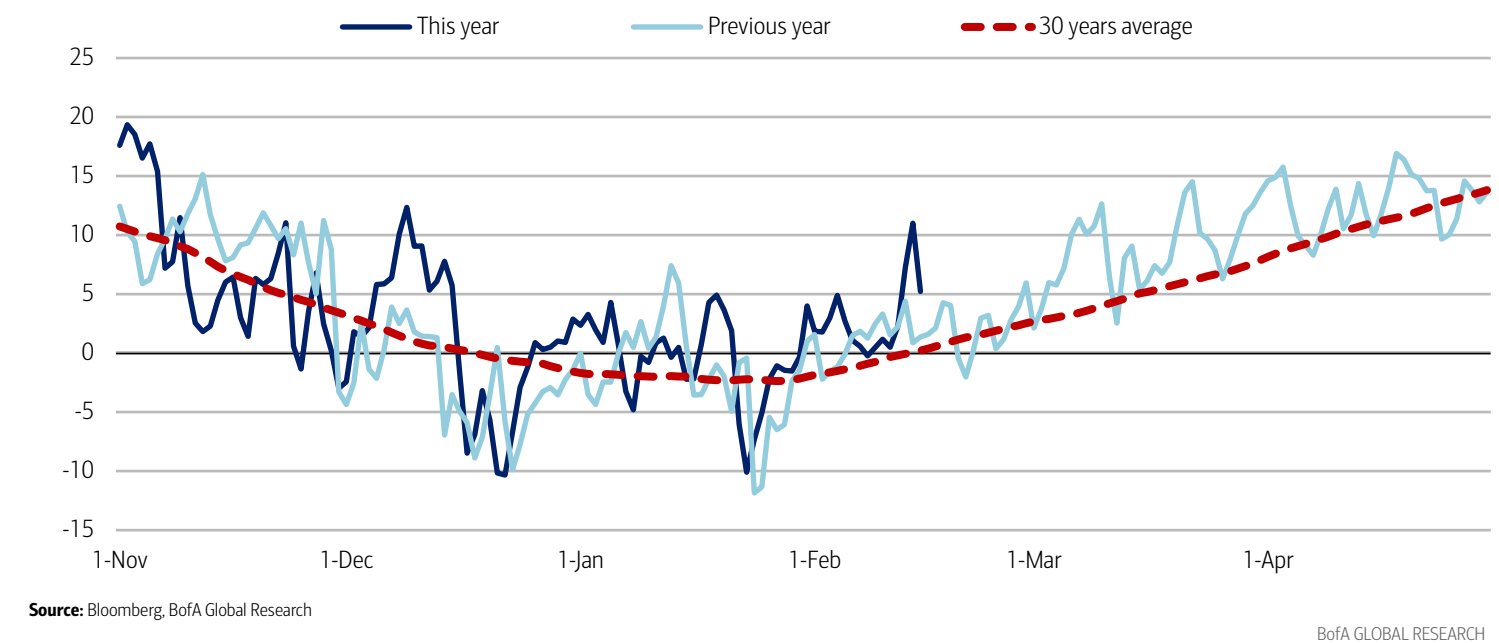
Source: Bloomberg, BofA Global Research

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# Korea temperature trends

**Exhibit 15: Korea temperature trends (current-year, previous-year, and 30-year averages)**  
Temperatures up YoY and above historical average over the past few days



**Exhibit 16: Korea monthly temperatures (simple average)**  
Monthly average remains above historical average and up YoY for Feb

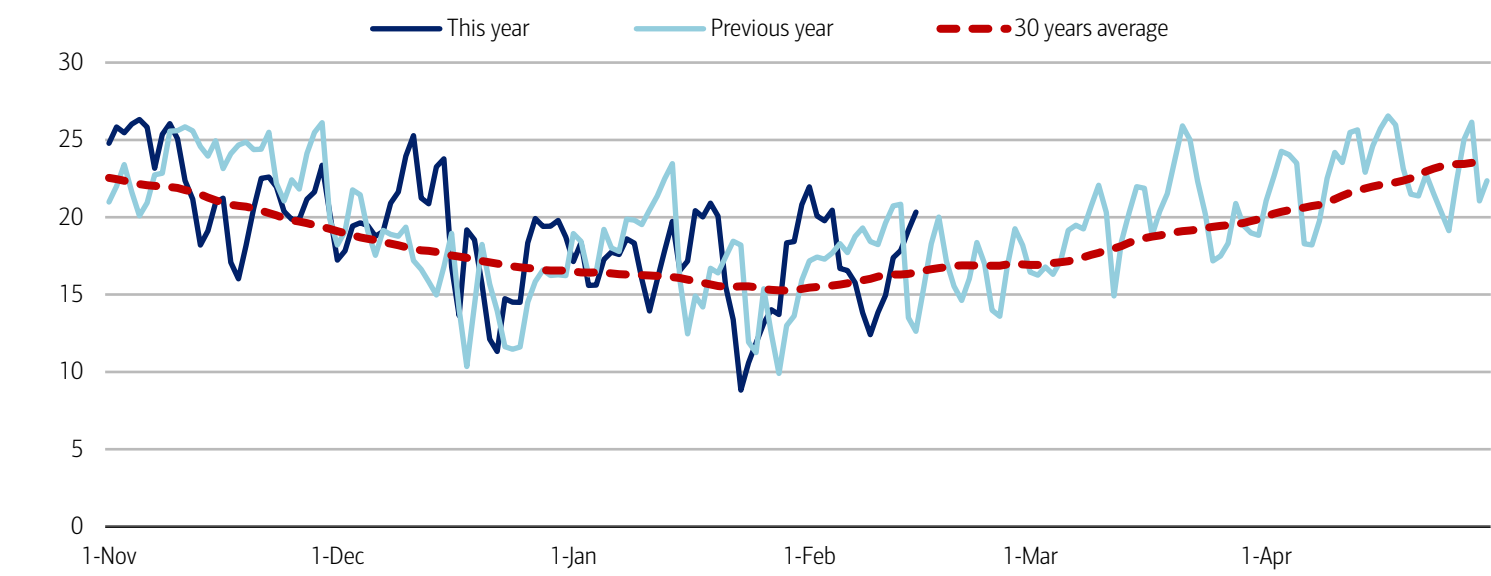
	2022												2023												2024	
	3	4	5	6	7	8	9	10	11	12		1	2	3	4	5	6	7	8	9	10	11	12		1	2
vs. last year	-0.9	0.5	1.4	0.6	-0.3	0.2	-0.6	-1.3	1.6	-3.3		0.4	2.8	1.5	-0.6	0.1	0.1	-0.2	1.3	1.6	1.2	-2.3	3.7		1.2	1.8
vs. average year	1.9	2.5	1.9	2.0	2.6	1.0	1.2	-0.3	2.4	-3.0		0.4	1.3	3.5	1.9	2.0	2.0	2.4	2.2	2.8	0.9	0.0	0.7		1.6	3.8

Note: Feb 2024 temperature is the average as of 15 Feb

Source: Bloomberg, BofA Global Research

# Taiwan temperature trends

**Exhibit 17: Taiwan temperature trends (current-year, previous-year, and 30-year averages)**  
Temperatures up YoY and above historical average



Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

**Exhibit 18: Taiwan monthly temperatures (simple average)**  
Above historical average but up YoY for Feb

	2022												2023												2024											
	3	4	5	6	7	8	9	10	11	12		1	2	3	4	5	6	7	8	9	10	11	12		1	2										
vs. last year	0.4	-0.2	-4.8	-1.3	0.1	1.3	-2.1	-1.2	2.3	-1.7		-0.4	1.1	-1.2	0.4	2.4	0.7	-0.3	-1.0	1.6	1.0	-1.4	2.2		-0.2	-0.4										
vs. average year	2.5	0.4	-1.6	0.4	1.2	1.6	0.2	0.3	2.5	-1.1		0.9	0.9	1.4	0.9	0.8	1.1	0.9	0.7	1.8	1.3	1.1	1.1		0.7	1.5										

Note: Feb 2024 temperature is the average as of 15 Feb

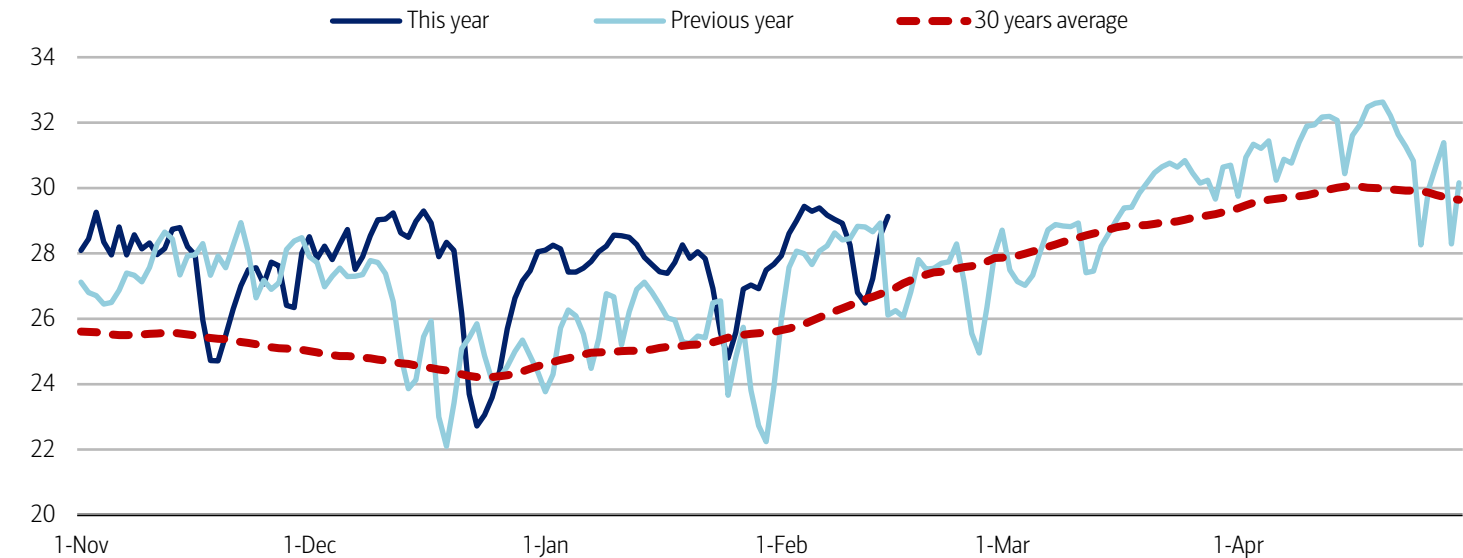
Source: Bloomberg, BofA Global Research

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# Thailand temperature trends

**Exhibit 19: Thailand temperature trends (current-year, previous-year, and 30-year averages)**  
Temperatures recently rising to on par with year-earlier levels



Source: Bloomberg, BofA Global Research

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**Exhibit 20: Thailand monthly temperatures (simple average)**  
Monthly average remains up YoY and above historical average in Feb

	2022												2023												2024											
	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2
vs. last year	-0.3	0.5	-1.2	-0.6	-0.1	-0.5	0.0	-0.3	0.1	0.0	-1.5	0.5	-0.2	1.9	2.5	0.8	0.7	1.1	0.9	1.0	-0.1	1.7	2.2	0.5												
vs. average year	0.7	-0.5	-0.4	1.2	1.3	1.2	0.9	1.2	2.2	1.1	0.3	0.7	0.5	1.4	2.2	2.0	2.0	2.2	1.8	2.2	2.1	2.8	2.4	2.3												

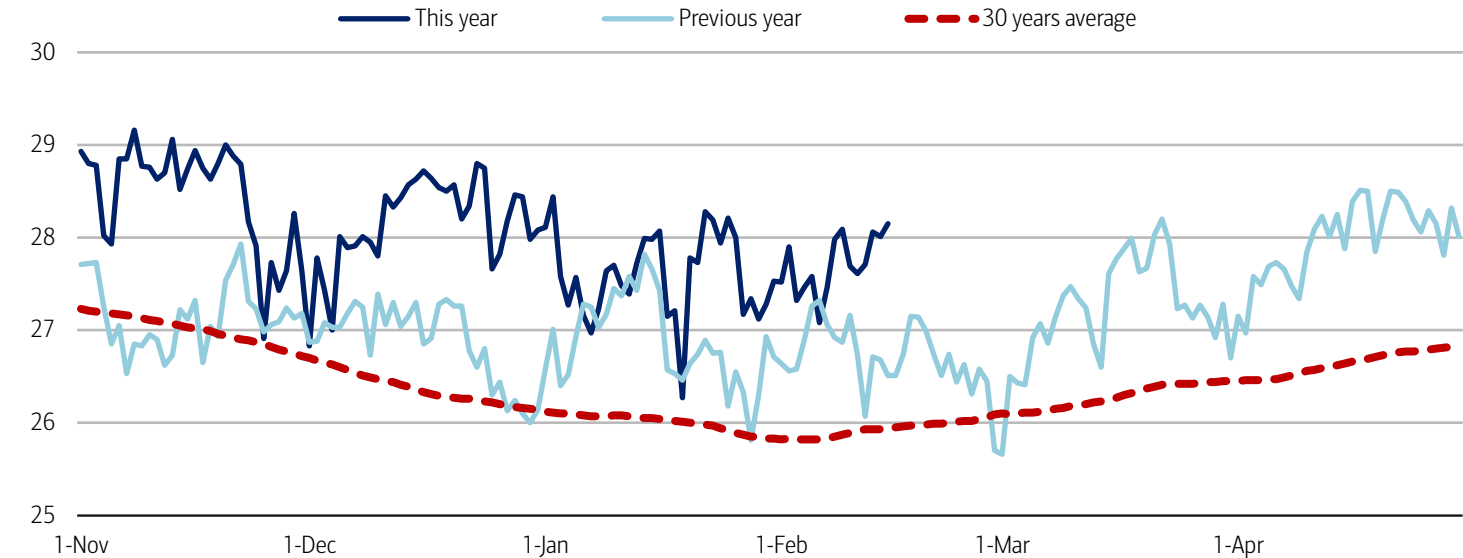
Note: Feb 2024 temperature is the average as of 15 Feb

Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

# Indonesia temperature trends

**Exhibit 21: Indonesia temperature trends (current-year, previous-year, and 30-year averages)**  
Temperatures up YoY and above historical average over the past few weeks



Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

**Exhibit 22: Indonesia monthly temperatures (simple average)**  
Monthly average remains up YoY and above historical average in Feb

	2022												2023												2024											
	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2
vs. last year	0.2	0.1	-0.2	-0.5	-0.1	0.0	-0.3	-0.9	-0.2	-0.4	-0.3	-0.2	-0.4	0.2	0.5	0.9	0.2	0.3	0.8	1.8	1.3	1.3	0.7	0.9												
vs. average year	1.3	1.1	1.0	0.5	1.2	1.0	0.5	-0.1	0.1	0.5	0.9	0.8	0.9	1.3	1.5	1.4	1.3	1.3	1.3	1.7	1.5	1.8	1.6	1.8												

Note: Feb 2024 temperature is the average as of 15 Feb

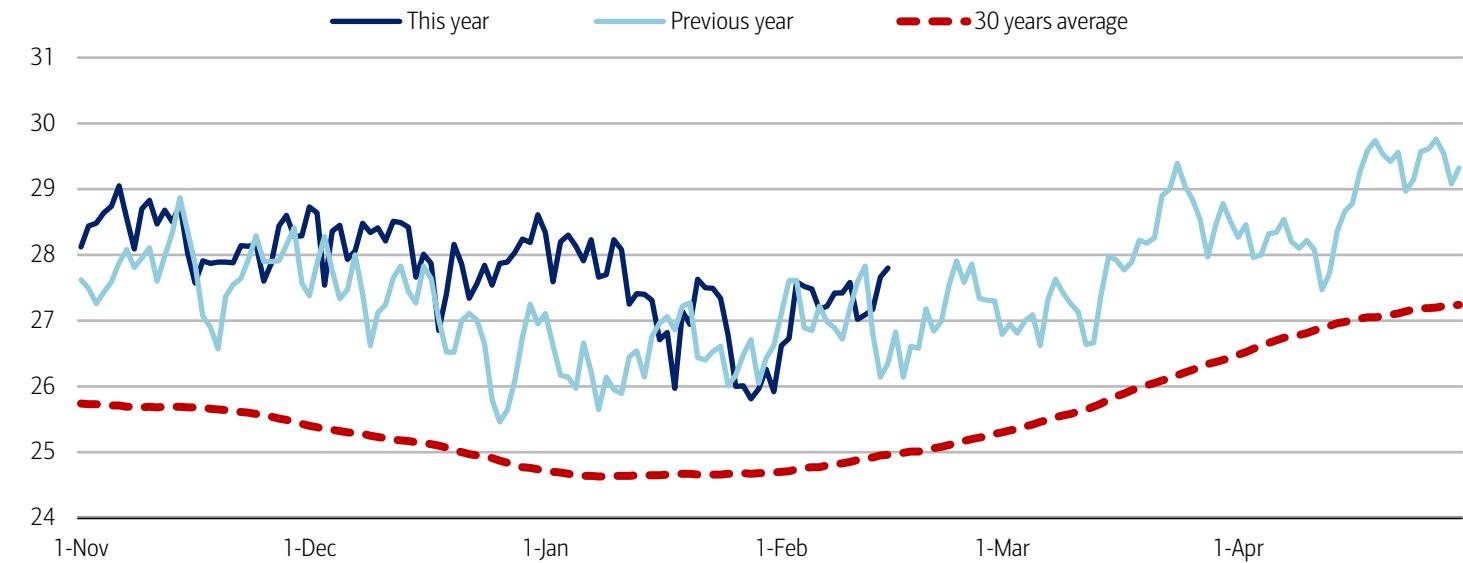
Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH



# Philippines temperature trends

**Exhibit 23: Philippines temperature trends (current-year, previous-year, and 30-year averages)**  
Temperatures recently up YoY and above historical average over the past few days



Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

**Exhibit 24: Philippines monthly temperatures (simple average)**  
Monthly average remains up YoY and above historical average in Feb

	2022												2023												2024			
	3	4	5	6	7	8	9	10	11	12		1	2	3	4	5	6	7	8	9	10	11	12		1	2		
vs. last year	0.0	-0.4	-0.6	0.2	0.0	-0.4	0.2	0.1	-0.1	0.1		-0.4	0.0	-0.3	0.7	0.6	-0.1	0.1	0.7	0.1	0.1	0.5	1.0		0.8	0.2		
vs. average year	2.2	1.1	1.5	1.9	2.0	1.6	1.9	2.0	2.1	2.0		1.8	2.1	2.0	1.8	2.0	1.8	2.1	2.3	2.0	2.1	2.6	3.0		2.6	2.5		

Note: Feb 2024 temperature is the average as of 15 Feb

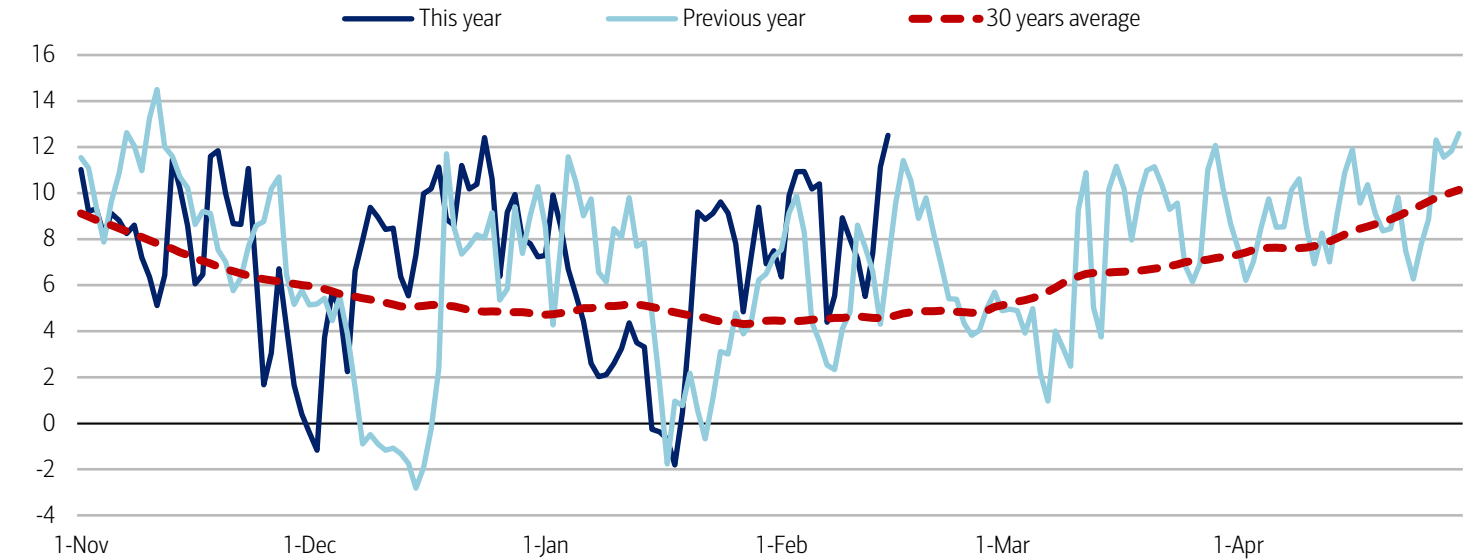
Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH



# UK temperature trends

**Exhibit 25: UK temperature trends (current-year, previous-year, and 30-year averages)**  
Temperatures recently up YoY and above historical average over the past few days



Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

**Exhibit 26: UK monthly temperatures (simple average)**  
Above historical average and up YoY for Feb

	2022												2023												2024	
	3	4	5	6	7	8	9	10	11	12		1	2	3	4	5	6	7	8	9	10	11	12		1	2
vs. last year	0.6	2.5	2.8	-0.6	1.0	3.1	-1.5	0.7	1.7	-2.9		0.1	-0.8	-0.9	-0.7	-0.5	1.7	-2.6	-2.6	2.6	-0.6	-2.0	3.5		-0.2	2.6
vs. average year	1.8	1.4	1.9	1.5	2.7	2.9	0.9	2.2	2.2	-1.0		0.5	1.9	0.9	0.6	1.3	3.3	0.1	0.3	3.5	1.6	0.2	2.4		0.3	4.1

Note: Feb 2024 temperature is the average as of 15 Feb

Source: Bloomberg, BofA Global Research

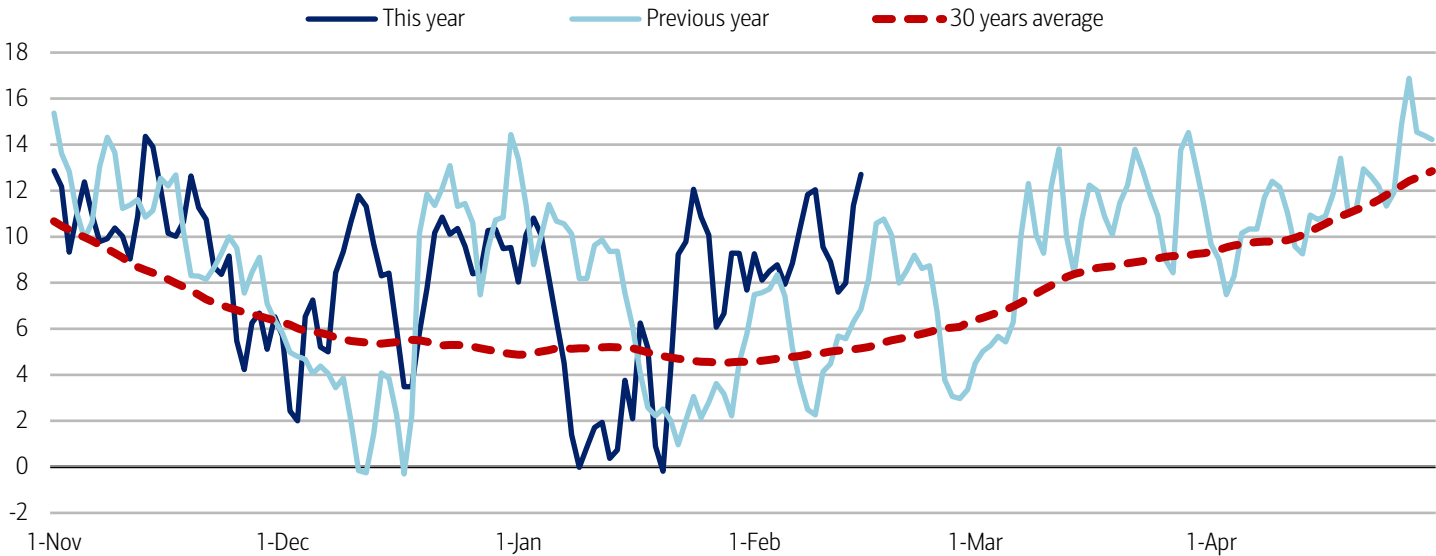
BofA GLOBAL RESEARCH





# France temperature trends

**Exhibit 27: France temperature trends (current-year, previous-year, and 30-year averages)**  
Temperatures up YoY and above historical average over the past a few weeks



Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

**Exhibit 28: France monthly temperatures (simple average)**  
Above historical average and up YoY for Feb

	2022												2023												2024											
	3	4	5	6	7	8	9	10	11	12		1	2	3	4	5	6	7	8	9	10	11	12		1	2										
vs. last year	1.1	1.6	3.9	0.7	2.8	3.7	-1.1	3.5	2.9	-0.5		1.5	-1.6	0.0	-0.4	-1.8	0.5	-1.6	-2.1	2.8	-0.7	-0.8	1.5		-0.6	3.9										
vs. average year	1.8	1.3	3.0	2.9	2.9	3.1	1.5	3.8	2.3	1.0		1.5	1.3	1.9	0.9	1.2	3.5	1.3	1.1	4.3	3.1	1.5	2.5		0.8	4.7										

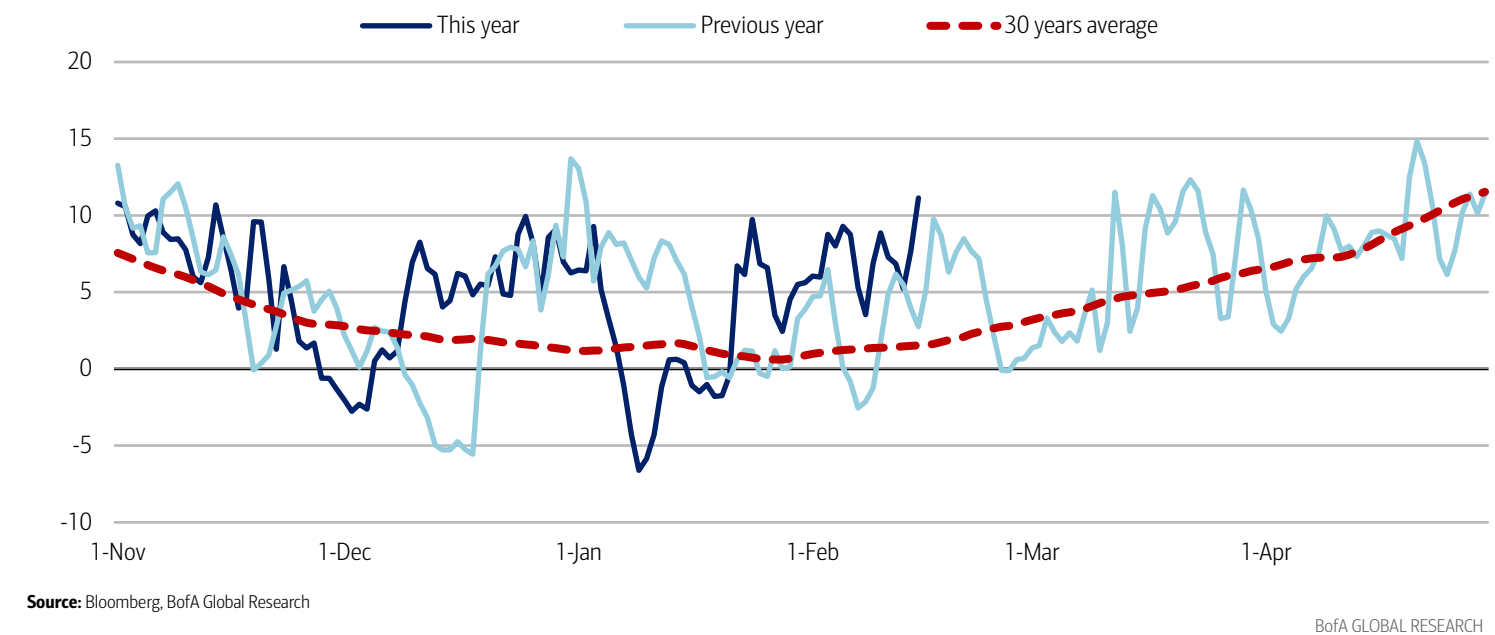
Note: Feb 2024 temperature is the average as of 15 Feb

Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

# Germany temperature trends

**Exhibit 29: Germany temperature trends (current-year, previous-year, and 30-year averages)**  
Temperatures up YoY and above historical average over the past few weeks



**Exhibit 30: Germany monthly temperatures (simple average)**  
Above historical average and up YoY for Feb

	2022												2023												2024											
	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2												
vs. last year	0.2	1.7	3.6	-0.9	0.4	3.8	-1.8	2.5	1.1	-0.8	0.8	-1.4	0.6	-0.2	-1.4	0.4	-0.4	-2.1	4.0	-0.5	-0.4	2.4	-2.3	4.8												
vs. average year	0.9	-0.1	1.8	2.7	1.2	2.8	0.0	3.2	1.7	0.2	3.1	2.0	1.4	-0.3	0.4	3.0	0.8	0.7	4.0	2.7	1.2	2.6	0.8	6.0												

Note: Feb 2024 temperature is the average as of 15 Feb

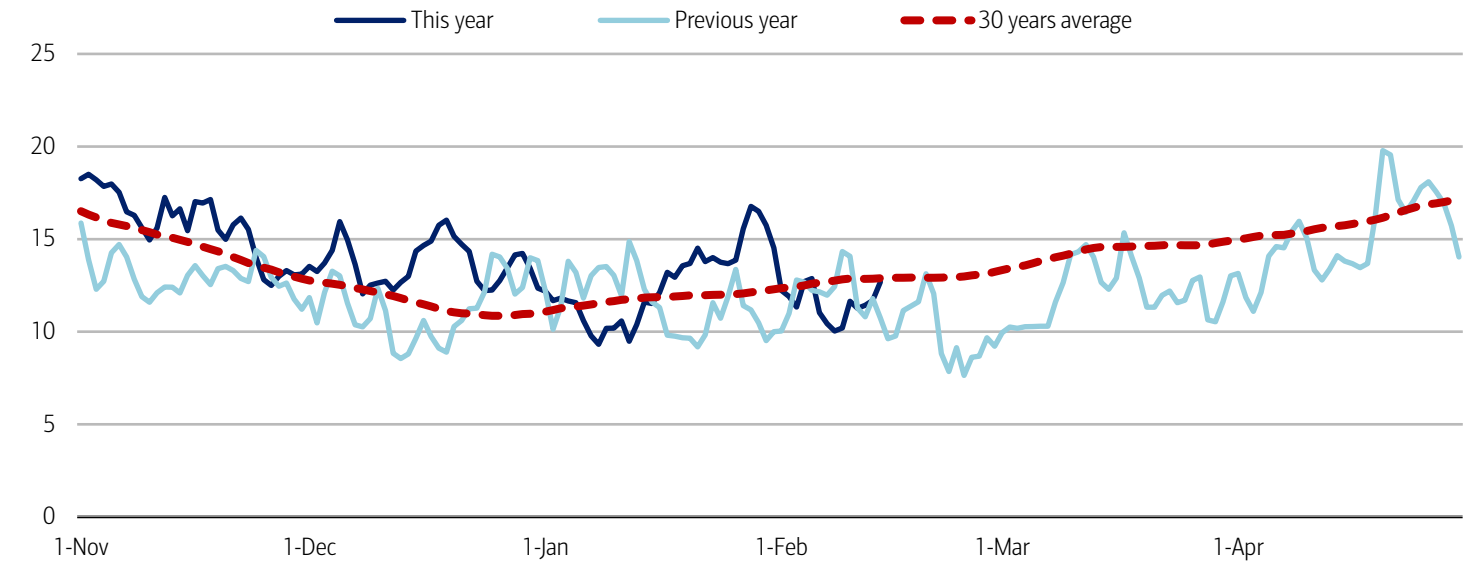
Source: Bloomberg, BofA Global Research



# US temperature trends

Average temperature trends for the US’s five states (California, Texas, Florida, New York, Washington) are shown below.

**Exhibit 31: California temperature trends (current-year, previous-year, and 30-year averages)**  
Temperatures recently rising to on par with historical average



Source: Bloomberg, BofA Global Research. BofA GLOBAL RESEARCH

**Exhibit 32: California monthly temperatures (simple average)**  
Below historical average and down YoY for Feb

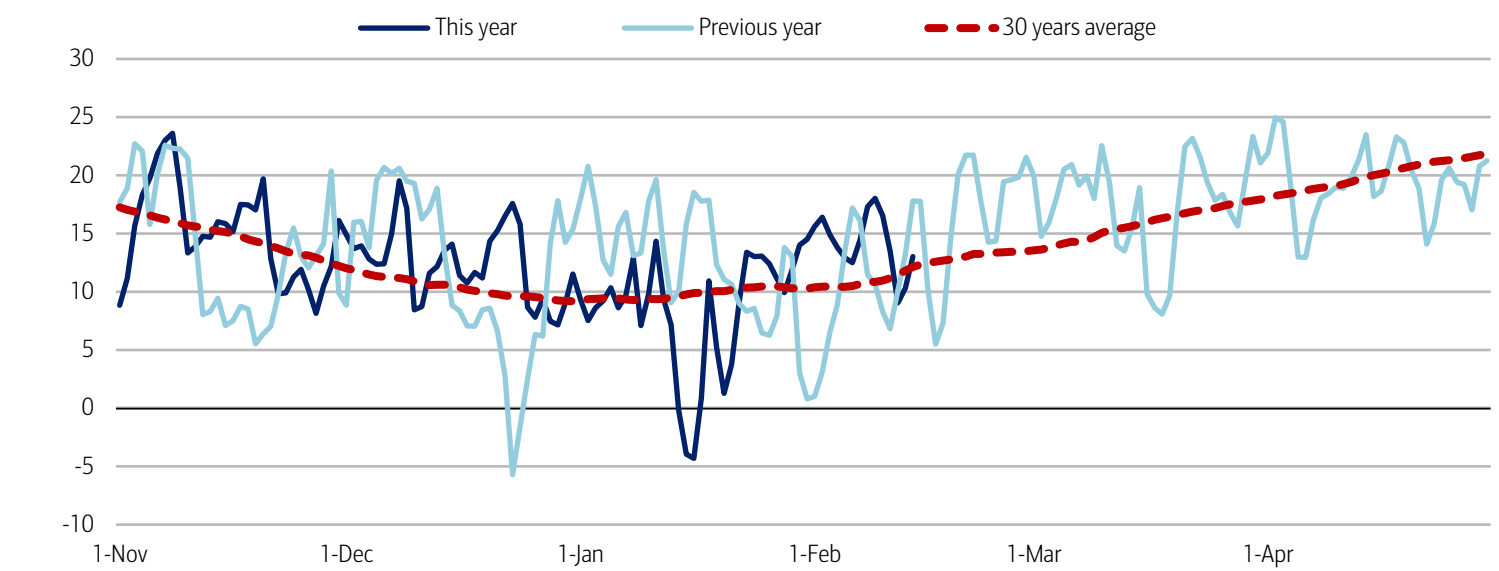
	2022												2023												2024											
	3	4	5	6	7	8	9	10	11	12		1	2	3	4	5	6	7	8	9	10	11	12		1	2										
vs. last year	1.7	0.3	-0.1	0.4	-0.7	1.0	2.5	1.2	-2.4	0.4		-0.7	-2.3	-2.9	-1.3	-1.1	-2.7	0.7	-0.4	-2.8	0.4	2.8	2.4		1.0	-0.5										
vs. average year	0.6	0.5	0.0	1.3	-0.1	1.2	2.4	0.2	-1.7	-0.3		-0.2	-1.8	-2.3	-0.8	-1.1	-1.3	0.6	0.9	-0.4	0.6	1.1	2.1		0.8	-1.1										

Note: Feb 2024 temperature is the average as of 14 Feb  
Source: Bloomberg, BofA Global Research

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**Exhibit 33: Texas temperature trends (current-year, previous-year, and 30-year averages)**  
On par with historical average but down YoY



Source: Bloomberg, BofA Global Research

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**Exhibit 34: Texas monthly temperatures (simple average)**  
Above historical average and up YoY for Feb

	2022												2023												2024	
	3	4	5	6	7	8	9	10	11	12		1	2	3	4	5	6	7	8	9	10	11	12		1	2
vs. last year	-1.3	2.4	3.3	2.1	3.4	0.3	0.2	-1.5	-1.2	-5.1		3.3	4.0	2.0	-2.4	-2.2	-0.9	-0.2	3.2	2.2	0.6	1.0	0.6		-4.2	3.8
vs. average year	-0.1	1.9	2.4	2.1	2.4	0.1	0.9	0.2	-0.9	1.5		2.8	1.2	1.8	-0.5	0.1	1.2	2.1	3.3	3.1	0.8	0.1	2.1		-1.5	3.3

Note: Feb 2024 temperature is the average as of 14 Feb

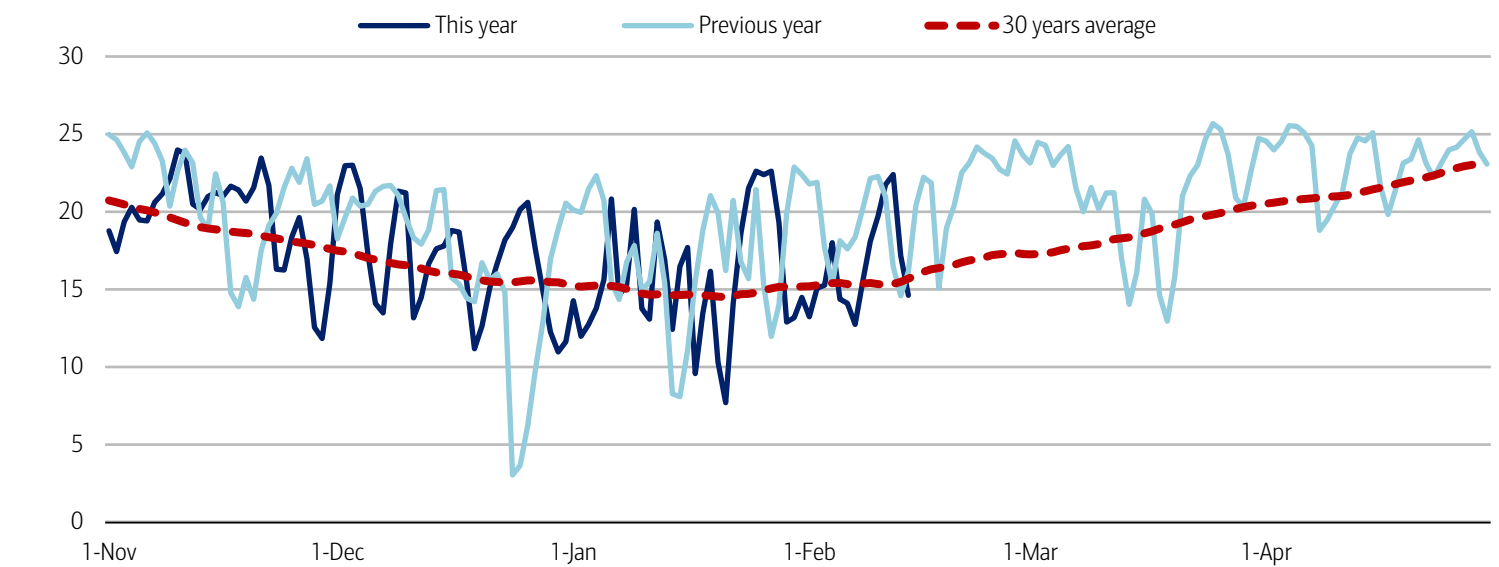
Source: Bloomberg, BofA Global Research

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Exhibit 35: Florida temperature trends (current-year, previous-year, and 30-year averages)

Temperatures recently down to on par with year-earlier levels and historical average



Source: Bloomberg, BofA Global Research

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Exhibit 36: Florida monthly temperatures (simple average)

Above historical average but down YoY for Feb

	2022												2023												2024			
	3	4	5	6	7	8	9	10	11	12		1	2	3	4	5	6	7	8	9	10	11	12		1	2		
vs. last year	0.8	1.1	0.9	1.4	1.0	0.3	0.3	-1.5	3.5	-2.6		2.6	2.7	0.6	1.0	-0.9	-0.8	0.5	1.2	0.5	0.9	-1.5	0.3		-1.5	-2.3		
vs. average year	1.9	0.8	0.8	0.9	0.6	0.4	0.1	-0.4	2.1	0.6		2.3	4.3	2.4	1.8	0.0	0.1	1.1	1.7	0.6	0.5	0.6	0.9		0.9	1.2		

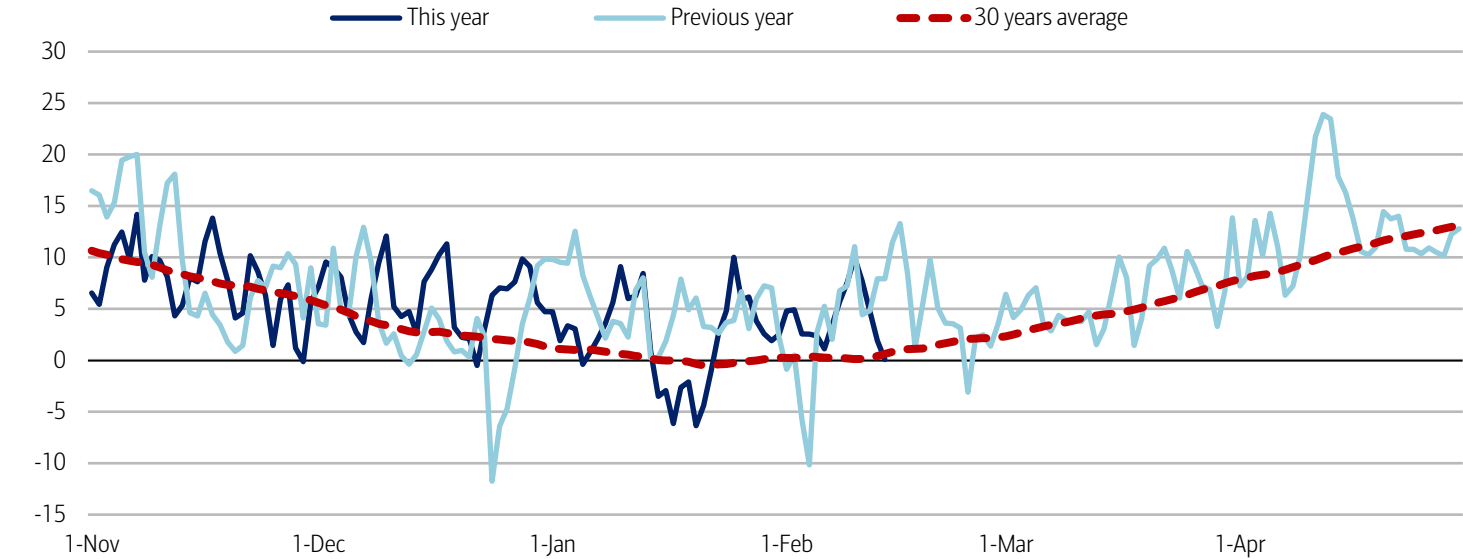
Note: Feb 2024 temperature is the average as of 14 Feb

Source: Bloomberg, BofA Global Research

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**Exhibit 37: New York temperature trends (current-year, previous-year, and 30-year averages)**  
Temperatures down YoY to historical average



Source: Bloomberg, BofA Global Research

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**Exhibit 38: New York monthly temperatures (simple average)**  
Above historical average and up YoY for Feb

	2022												2023												2024	
	3	4	5	6	7	8	9	10	11	12			1	2	3	4	5	6	7	8	9	10	11	12	1	2
vs. last year	-0.3	-1.0	0.6	-1.5	1.8	0.5	-0.9	-3.0	2.0	-3.1			6.5	1.9	-0.6	2.3	-0.7	-1.1	-0.5	-2.1	0.0	1.7	-2.3	3.1	-3.0	1.1
vs. average year	1.8	0.1	1.2	0.1	1.6	2.0	0.6	0.0	1.8	0.1			4.9	3.1	1.2	2.4	0.5	-1.0	1.1	-0.1	0.6	1.7	-0.5	3.2	1.9	4.0

Note: Feb 2024 temperature is the average as of 14 Feb

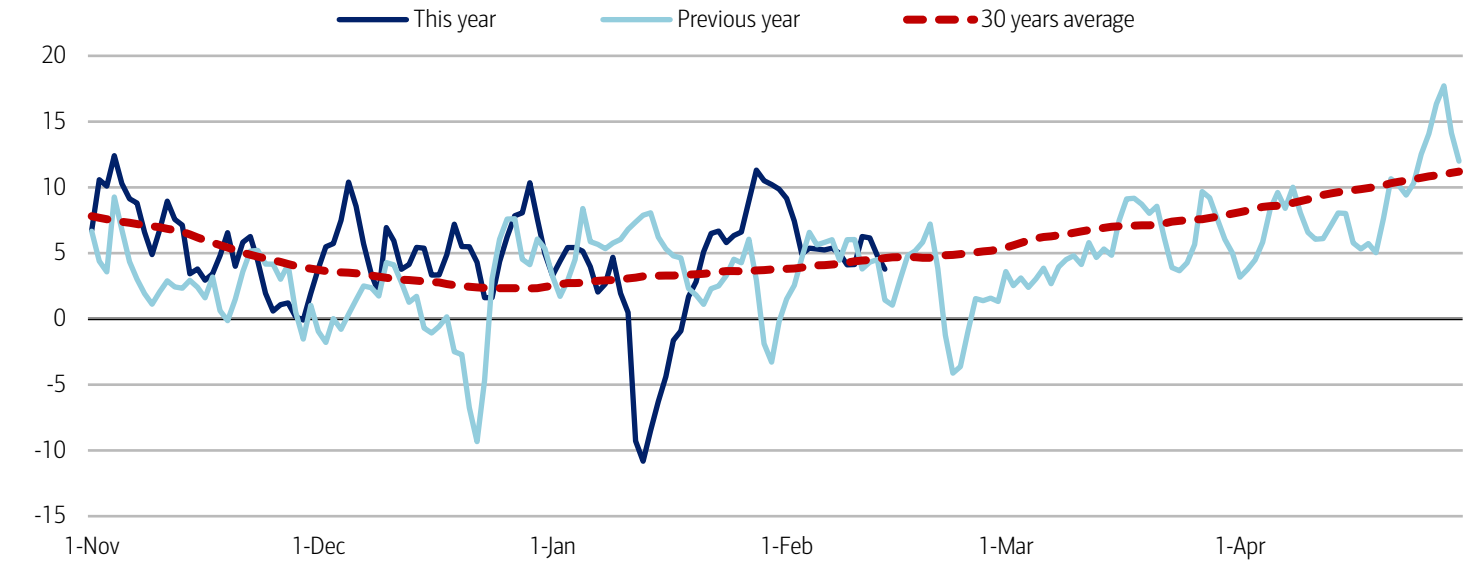
Source: Bloomberg, BofA Global Research

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Exhibit 39: Washington temperature trends (current-year, previous-year, and 30-year averages)

Down to on par with year-earlier levels and historical average



Source: Bloomberg, BofA Global Research

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Exhibit 40: Washington monthly temperatures (simple average)

Above historical average and up YoY for Feb

	2022												2023												2024	
	3	4	5	6	7	8	9	10	11	12		1	2	3	4	5	6	7	8	9	10	11	12		1	2
vs. last year	1.1	-3.4	-2.3	-3.5	-0.2	1.7	1.5	2.9	-4.2	-0.5		1.4	-0.5	-1.9	1.2	5.0	1.0	0.0	-0.5	-1.5	-1.8	2.3	4.4		-1.2	1.0
vs. average year	0.5	-2.4	-2.1	0.1	1.5	2.2	1.5	2.3	-2.9	-1.7		0.8	-1.4	-1.4	-1.1	2.9	1.1	1.4	1.7	0.0	0.5	-0.5	2.7		-0.3	1.3

Note: Feb 2024 temperature is the average as of 14 Feb

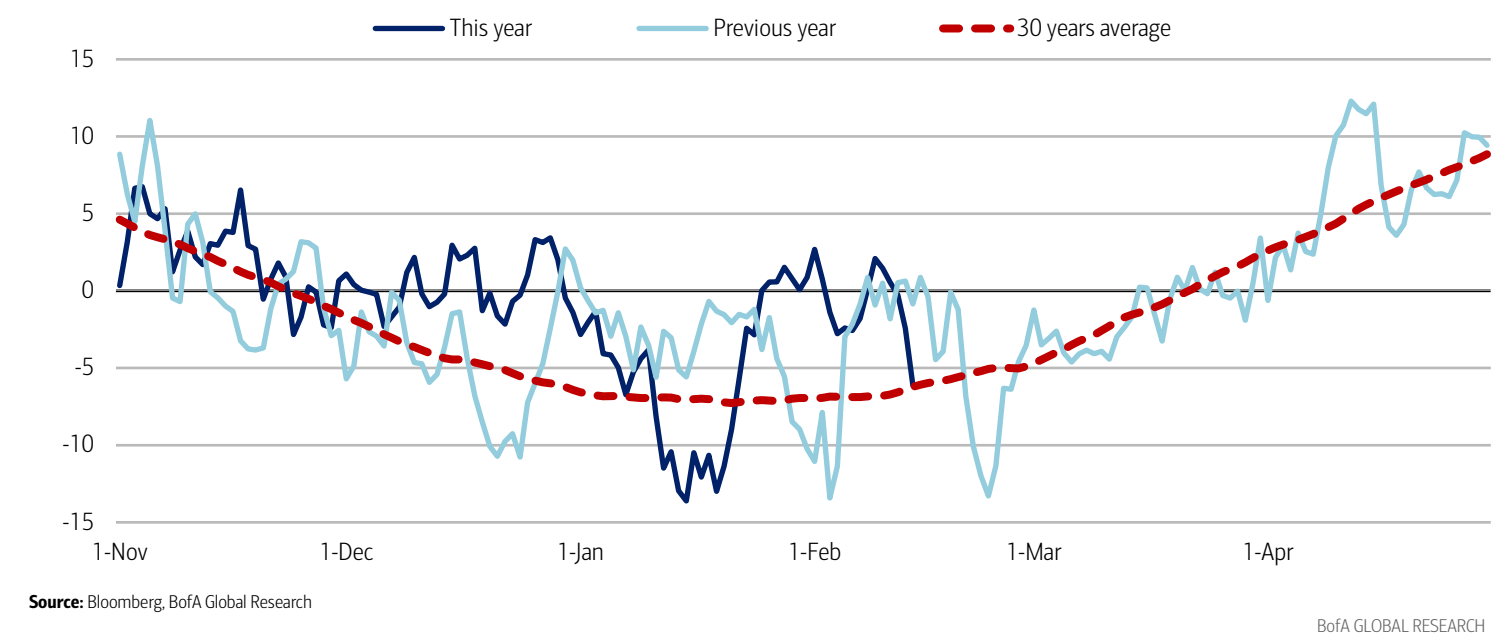
Source: Bloomberg, BofA Global Research

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# Canada temperature trends

**Exhibit 41: Canada temperature trends (current-year, previous-year, and 30-year averages)**  
Recently down YoY to on par with historical average



**Exhibit 42: Canada monthly temperatures (simple average)**  
Above historical average and up YoY for Feb

	2022												2023												2024											
	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2
vs. last year	-1.9	-2.0	1.0	-2.3	0.5	-0.2	-0.1	-1.0	-0.8	-0.2	5.7	1.4	-1.4	1.6	0.4	0.6	-0.3	-1.8	0.6	0.5	0.5	4.9	-2.2	2.8												
vs. average year	1.1	-0.6	1.7	0.7	1.2	1.8	1.1	1.4	0.0	-0.1	3.7	1.4	-0.3	1.0	2.1	1.3	0.9	0.0	1.7	1.9	0.5	4.7	1.5	5.9												

Note: Feb 2024 temperature is the average as of 14 Feb

Source: Bloomberg, BofA Global Research

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Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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