

Goldman Sachs Momentum Builder[®] Focus ER Index

PERFORMANCE FIGURES

GSMBFC5 Index	106.50
1 Day	-0.40%
MTD ¹	-0.20%
1 Year	4.77%
2 Years	5.00%
2 Years p.a. ²	2.47%

¹ Values based on the last index publication day of its preceding month

² Annualized rate with yearly compounding

DETAILED HISTORICAL PERFORMANCE³

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2024	0.40%	1.54%	1.42%	-1.35%	1.18%	0.55%	0.09%	-1.19%	0.29%	-0.20%			2.72%
2023	0.42%	-0.49%	0.62%	0.38%	0.39%	1.77%	0.44%	-0.43%	-1.27%	-1.06%	1.46%	0.53%	2.76%
2022	-0.96%	-0.13%	0.17%	-0.54%	-0.33%	-0.43%	0.21%	-0.27%	-0.52%	0.30%	0.35%	-0.86%	-3.01%
2021	-0.40%	-0.46%	1.64%	0.67%	0.62%	0.19%	0.89%	0.83%	-2.69%	0.94%	-1.14%	0.59%	1.60%
2020	1.31%	-2.09%	-0.59%	0.82%	0.48%	0.53%	0.43%	0.88%	-0.94%	-0.85%	2.51%	0.85%	3.30%
2019	0.55%	-0.01%	0.43%	0.66%	-0.99%	3.14%	0.80%	1.72%	-1.25%	0.78%	0.12%	1.18%	7.31%
2018	2.79%	-1.95%	-0.73%	-0.06%	0.55%	0.08%	-0.15%	1.39%	-0.69%	-2.96%	0.11%	-0.35%	-2.05%
2017	0.25%	1.12%	0.45%	1.28%	1.10%	-1.84%	1.27%	0.65%	0.07%	2.07%	0.77%	0.70%	8.14%
2016	-0.21%	0.31%	0.90%	0.01%	-0.18%	2.41%	1.25%	-0.77%	0.55%	-1.57%	-0.08%	0.61%	3.22%
2015	0.69%	1.66%	0.35%	-0.50%	-0.45%	-1.14%	0.78%	-1.06%	-0.07%	0.26%	-0.13%	-0.13%	0.21%
2014									0.07%	-0.65%	1.50%	0.35%	1.26%

³ Launch Date: January 12, 2021, values from September 22, 2014 to January 11, 2021 for the index are based on back-testing. Back-testing and other statistical analysis material that is provided in connection with the index use simulated analysis and hypothetical circumstances to estimate how it may have performed prior to its actual existence. The results obtained from "back-testing" information should not be considered indicative of the actual results that might be obtained from an investment or participation in a financial instrument or transaction referencing the index.

PERFORMANCE OF COMPONENTS AND ATTRIBUTION

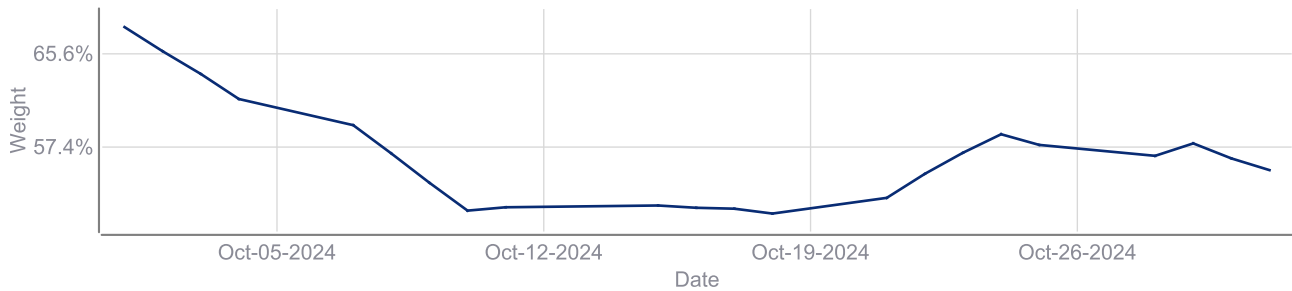
Composition	Name	Close Level	Performance (Daily)	Performance (MTD) ⁴	Performance Attribution (Daily) ⁵
FRSIUSE	US Equity Futures Rolling Strategy Index	2311.58	-1.93%	-0.89%	-0.243%
GSISNQET	US Technology Equity Futures Rolling Strategy Series QTotal Return Index	740.19	-2.48%	-0.77%	0.000%
FRSIEUE	European Equity Futures Rolling Strategy Index	1326.95	-1.36%	-3.61%	0.000%
FRSIJPE	Japanese Equity Futures Rolling Strategy Index	252.13	-0.76%	1.79%	0.000%
FRSIUSB	US Government Bond Futures Rolling Strategy Index	534.19	-0.20%	-2.93%	-0.006%
FRSIEUB	European Government Bond Futures Rolling Strategy Index	591.74	-0.12%	-2.02%	-0.005%
FRSIJPB	Japanese Government Bond Futures Rolling Strategy Index	280.95	0.10%	-0.30%	0.016%
FRSIEME	Emerging Markets Equity Futures Rolling Strategy Index	239.78	-0.45%	-3.54%	0.000%
BCOMGCTR	Bloomberg Gold Subindex Total Return	635.71	-1.83%	3.79%	-0.165%
Cash Equivalent	Money Market Position	221.23	0.01%	0.42%	0.002%

⁴ Performance (MTD) = Price (last close) / Price (last day of previous month) - 1. The calculation of Performance (MTD) reflects only the performance of the components and does not take into account their weights within the index and does not reflect their performance within the index or any adjustments for fees and deductions. The index is calculated on an excess return basis over the return on the federal funds rate, and the index performance is further reduced by a deduction rate of 0.65% per annum (accruing daily).

⁵ The daily performance attribution shown above does not take into account any deleverage cash position resulting from the volatility control feature and any momentum risk control cash position from the momentum risk control adjustment feature.

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As of Oct-31-2024

ROLLING 30D MONEY MARKET WEIGHT (Post-Volatility Control and Momentum Risk Control)⁶



⁶ The chart above displays the percentage of exposure of the Money Market Position, which is included in the cash equivalent asset class. This exposure includes any allocation to the deleverage cash position resulting from the volatility control feature and the momentum risk control cash position from the momentum risk control adjustment feature.

COMPOSITION WEIGHTINGS

Base Index Composition⁷

Index Money Market Composition

	FRSIUSE	GSISNQET	FRSIEUE	FRSIJPE	FRSIUSB	FRSIEUB	FRSIJPB	FRSIEME	BCOMGCTR	Cash Equivalent	Volatility Control Feature Cash Position ⁸	Momentum Risk Control Cash Position ⁹	Cumulative Cash Position ¹⁰
Oct-31-2024	21.0%	0.0%	0.0%	0.0%	5.0%	7.0%	26.4%	0.0%	15.0%	25.6%	6.7%	35.7%	55.4%
Oct-30-2024	21.0%	0.0%	0.0%	0.0%	5.9%	7.1%	25.0%	0.0%	14.8%	26.2%	8.1%	35.7%	56.4%
Oct-29-2024	21.0%	0.0%	0.0%	0.0%	6.8%	7.8%	22.4%	0.0%	14.6%	27.3%	9.5%	35.7%	57.7%
Oct-28-2024	21.0%	0.0%	0.0%	0.0%	7.3%	8.8%	20.1%	0.0%	14.4%	28.4%	10.7%	32.1%	56.6%
Oct-25-2024	21.1%	0.0%	0.0%	0.0%	8.0%	9.4%	18.5%	0.0%	14.2%	28.9%	12.1%	32.1%	57.6%
Oct-24-2024	21.1%	0.0%	0.0%	0.0%	8.2%	10.4%	16.8%	0.0%	14.1%	29.5%	13.3%	32.1%	58.5%
Oct-23-2024	20.7%	0.0%	0.0%	0.0%	7.6%	11.3%	16.3%	0.0%	14.6%	29.5%	14.4%	28.6%	56.9%
Oct-22-2024	20.5%	0.0%	0.0%	0.0%	7.3%	12.1%	16.2%	0.0%	14.8%	29.2%	15.3%	25.0%	55.0%
Oct-21-2024	20.3%	0.0%	0.0%	0.0%	7.7%	13.2%	14.8%	0.0%	14.8%	29.3%	15.3%	21.4%	52.9%
Oct-18-2024	20.1%	0.0%	0.0%	0.0%	7.5%	13.6%	13.9%	0.0%	15.0%	29.8%	15.9%	17.9%	51.5%
Oct-17-2024	20.0%	0.0%	0.0%	0.0%	7.5%	13.1%	14.2%	0.0%	15.1%	30.0%	16.5%	17.9%	52.0%
Oct-16-2024	20.0%	0.0%	0.0%	0.0%	8.0%	12.8%	14.8%	0.0%	15.0%	29.3%	17.4%	17.9%	52.0%
Oct-15-2024	20.0%	0.0%	0.0%	0.0%	8.4%	11.8%	16.3%	0.0%	15.0%	28.6%	18.6%	17.9%	52.2%
Oct-11-2024	20.0%	0.0%	0.0%	0.0%	9.2%	10.3%	18.1%	0.0%	15.0%	27.5%	19.6%	17.9%	52.1%
Oct-10-2024	20.0%	0.0%	0.0%	0.0%	9.6%	9.7%	19.5%	0.0%	15.0%	26.2%	20.5%	17.9%	51.8%
Oct-09-2024	20.0%	0.0%	0.0%	0.0%	11.8%	8.3%	19.0%	0.0%	14.7%	26.1%	21.2%	21.4%	54.2%
Oct-08-2024	20.0%	0.0%	0.0%	0.0%	14.1%	7.1%	18.0%	0.0%	14.4%	26.3%	21.9%	25.0%	56.8%
Oct-07-2024	20.0%	0.0%	0.0%	0.0%	16.2%	5.3%	18.2%	0.0%	14.2%	26.1%	22.9%	28.6%	59.3%
Oct-04-2024	20.0%	0.0%	0.0%	0.0%	17.9%	3.3%	19.0%	0.0%	14.1%	25.7%	23.9%	32.1%	61.6%
Oct-03-2024	20.0%	0.0%	0.0%	0.0%	18.4%	1.3%	21.0%	0.0%	14.3%	24.9%	25.0%	35.7%	63.8%
Oct-02-2024	20.0%	0.0%	0.0%	0.0%	19.5%	0.3%	22.2%	0.0%	14.2%	23.8%	26.1%	39.3%	65.8%
Oct-01-2024	20.0%	0.0%	0.0%	0.0%	20.1%	0.8%	22.1%	0.0%	14.1%	22.9%	27.2%	42.9%	67.9%

The above rebalancing may continue subsequent to the date of this document. Rebalancing may affect the performance of the index.

⁷ The table above sets forth the daily allocation on each index business day between each underlying asset, including a cash equivalent through the Money Market Position within the index prior to the application of the volatility control feature and the momentum risk control adjustment feature.

⁸ The column labeled "Volatility Control Feature Cash Position" represents the percentage of index exposure to the deleverage cash position resulting from the volatility control feature only.

⁹ The column labeled "Momentum Risk Control Cash Position" represents the percentage of index exposure to the momentum risk control cash position from the momentum risk control adjustment feature only.

¹⁰ The "Cumulative Cash Position" represents the aggregate of the Money Market Position resulting from the base index position, the additional Money Market Position resulting from the volatility control feature, and the additional Money Market Position from the momentum risk control adjustment feature.

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Goldman Sachs Momentum Builder® Focus ER Index As of Oct-31-2024

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Different strategies with a different set of underlying assets may significantly outperform the selected strategy. For parts of the back-testing period, the underlying assets showed in this presentation have had strong performances. Back-tested and past performance figures are not a reliable indicator or guarantee of future results.

The strategy is not actively managed. For further information and disclosure about the strategy, including in particular relevant risk factors, please refer to the related transaction documentation.

The index was launched on January 12, 2021. Hypothetical performance from September 22, 2014 to January 11, 2021 is based on the historical levels of the underlying assets using the same methodology that is used to calculate the index.

Hypothetical performance prior to the launch of the index on January 12, 2021 refers to simulated performance data created by applying the index's calculation methodology and strategy to historical levels of the underlying assets that comprise the index. Such simulated performance data has been produced by the retroactive application of a back-tested methodology, and may reflect a bias towards strategies that have performed well in the past. No future performance of the index can be predicted based on the simulated performance or the historical returns described herein.

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