



**GS Finance Corp.**  
 Medium-Term Notes, Series F | Warrants, Series G  
 guaranteed by  
**The Goldman Sachs Group, Inc.**

**Russell 2000® Value Index**

**Overview**

This section constitutes only a brief overview of the Russell 2000® Value Index. The index is described in more detail under “The Underliers — Russell 2000® Value Index” in the underlier supplement referred to in “About This Index Supplement” below.

The Russell 2000® Value Index (current Bloomberg symbol: “RUJ Index”), which we also refer to in this index supplement as the “index,” is a sub-index of the Russell 2000® Index. The Russell 2000® Value Index is generally considered to be a “small-cap” U.S. equity index and is predominantly comprised of value stocks, meaning stocks issued by companies thought to be undervalued by the market relative to comparable companies. The Russell 2000® Index measures the composite price performance of stocks of 2,000 companies incorporated in the U.S., its territories and certain “benefit-driven incorporation countries” and is designed to track the performance of the small capitalization segment of the U.S. equity market.

The index has a base date of May 31, 1993, with a base value of 1000.00, as adjusted, and is calculated, maintained and published by FTSE Russell.

We have derived all information contained in this index supplement regarding the index from publicly available information. Additional information about the index is available on the following website: [ftserussell.com/products/indices/russell-us](https://ftserussell.com/products/indices/russell-us). We are not incorporating by reference the website or any material it includes in this index supplement.

Quick Facts		Historical Performance		
Sponsor	FTSE Russell			
Calculation Agent	FTSE Russell			
Index Currency	USD			
Reuters Ticker	.RUJ			
Bloomberg Ticker	RUJ			
Rebalancing	Quarterly			
Index Members	Variable			
Geographical Coverage	US			
Type	Price Return			
Launch Date	May 31, 1993			
History Available Since	July 26, 2000	<b>Annualized Return and Annualized Volatility</b>		
		The following table provides the annualized return and annualized volatility of the index for each applicable period ended November 1, 2024. Annualized return represents the average rate of return per annum, calculated as the geometric average of the percentage change of the index during the applicable time period. Annualized volatility is a measure of the historical variability of returns, and is calculated as the square root of 252 multiplied by the sample standard deviation of the daily logarithmic returns of the index during the applicable time period. <b>You should not take any annualized return or annualized volatility information regarding the index as an indication of its future performance.</b>		
			<b>Annualized Return</b>	<b>Annualized Volatility</b>
		<b>1 Year</b>	<b>28.07%</b>	<b>21.40%</b>
	<b>3 Years</b>	<b>-1.15%</b>	<b>22.21%</b>	
	<b>5 Years</b>	<b>5.83%</b>	<b>28.86%</b>	
	<b>Since January 2, 2019</b>	<b>7.45%</b>	<b>27.42%</b>	

Your investment in securities linked to the index involves certain risks. See “Selected Risk Factors” on page S-3 to read about investment risks relating to such securities.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this index supplement, the applicable pricing supplement, the applicable product supplement, if any, the applicable general terms supplement, if any, the accompanying underlier supplement, the accompanying prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

The securities are not bank deposits and are not insured by the Federal Deposit Insurance Corporation or any other governmental agency, nor are they obligations of, or guaranteed by, a bank.

**Goldman Sachs & Co. LLC**

November 2024 Russell 2000® Value Index Supplement dated November 20, 2024.



# November 2024 Russell 2000<sup>®</sup> Value Index Supplement

Dated November 20, 2024

## Comparative Performance Data

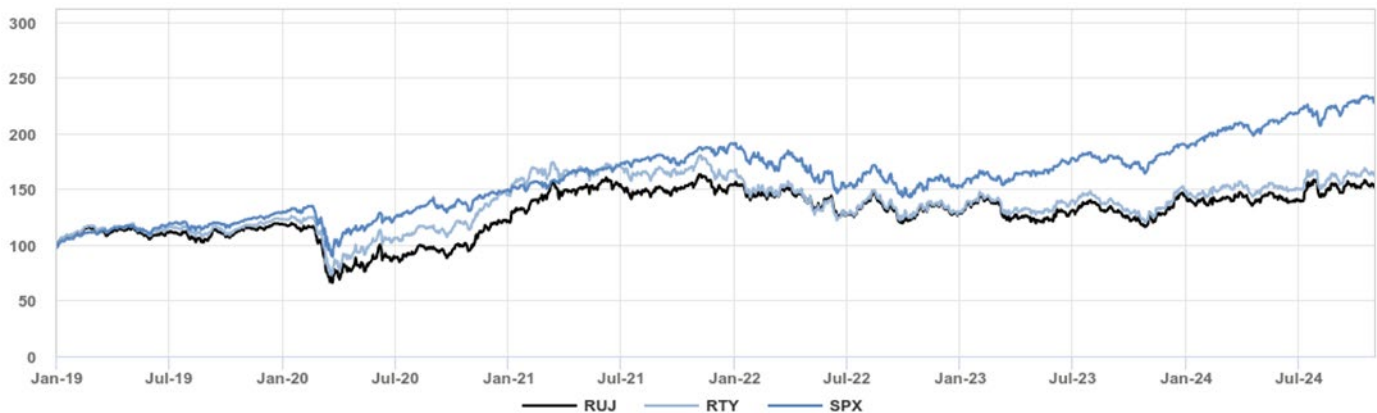
### Index Performance Compared to its Parent Index and a Select Broad-Based Stock Index

For comparative purposes, the graph below shows the performance, from January 2, 2019 through November 1, 2024, of the Russell 2000<sup>®</sup> Value Index (in black), the Russell 2000<sup>®</sup> Index (in gray) and a broad-based equity index, the S&P 500<sup>®</sup> Index (in blue). The S&P 500<sup>®</sup> Index seeks to track a representative sample of 500 companies in leading industries of the U.S. economy.

For comparative purposes, each of the Russell 2000<sup>®</sup> Value Index, the Russell 2000<sup>®</sup> Index and the S&P 500<sup>®</sup> Index have been adjusted to have a closing level of 100.00 on January 2, 2019 by dividing the applicable closing level on each day by that index's closing level on January 2, 2019 and multiplying the quotient by 100.00.

The daily historical closing levels of the indices used to create this graph were obtained from Bloomberg Financial Services, without independent verification. **You should not take this graph or the historical closing levels of the indices used to create this graph as an indication of the future performance of any index, including the Russell 2000<sup>®</sup> Value Index, or the correlation (if any) between the level of the Russell 2000<sup>®</sup> Value Index and the levels of the Russell 2000<sup>®</sup> Index or the S&P 500<sup>®</sup> Index.**

**Comparative Performance of the Russell 2000<sup>®</sup> Value Index (RUJ), the Russell 2000<sup>®</sup> Index (RTY) and a Broad-Based Stock Index (SPX)**



### Index Annualized Return Compared to its Parent Index and a Select Broad-Based Stock Index

The following table provides a comparison of the annualized returns of the Russell 2000<sup>®</sup> Value Index, the Russell 2000<sup>®</sup> Index and the S&P 500<sup>®</sup> Index for the applicable period ended November 1, 2024. Annualized return represents the average rate of return per annum, calculated as the geometric average of the percentage change of the applicable index during the applicable time period. **You should not take the annualized returns of the indices as an indication of the future performance of any index, including the Russell 2000<sup>®</sup> Value Index.**

**Comparison of Annualized Returns of the Russell 2000<sup>®</sup> Value Index, the Russell 2000<sup>®</sup> Index and a Broad-Based Stock Index**

	1 Year	3 Years	5 Years	Since January 2, 2019
S&P 500 <sup>®</sup> Index	35.18%	7.48%	13.31%	15.20%
Russell 2000 <sup>®</sup> Index	32.37%	-2.14%	6.82%	8.74%
Russell 2000 <sup>®</sup> Value Index	28.07%	-1.15%	5.83%	7.45%



# November 2024 Russell 2000<sup>®</sup> Value Index Supplement

Dated November 20, 2024

## ***Selected Risk Factors***

An investment in securities linked to the index is subject to the risks described below as well as the risks and considerations described in the accompanying underlier supplement no. 41, the applicable pricing supplement, the applicable product supplement, if any, the applicable general terms supplement, if any, the accompanying prospectus supplement and the accompanying prospectus. The following risk factors are discussed in greater detail in the accompanying underlier supplement no. 41.

- The Estimated Value of Your Securities At the Time the Terms of Your Securities Are Set On the Trade Date (as Determined By Reference to Pricing Models Used By GS&Co.) Is Less Than the Original Issue Price Of Your Securities
- Your Securities Are Subject to the Credit Risk of GS Finance Corp., as Issuer, and the Credit Risk of The Goldman Sachs Group, Inc., as Guarantor
- The Market Value of Your Securities May Be Influenced by Many Unpredictable Factors
- If the Value of an Underlier Changes, the Market Value of Your Securities May Not Change in the Same Manner
- The Return on Your Securities Will Not Reflect Any Dividends Paid on Any Underlier Stock
- You Have No Shareholder Rights or Rights to Receive Any Underlier Stock
- Past Performance is No Guide to Future Performance
- The Policies of the Applicable Underlier Sponsor and Changes that Affect Such Underlier, or the Underlier Stocks Comprising Such Underlier, Could Affect the Amount Payable on Your Securities and Their Market Value
- Except to the Extent That We or Our Affiliates May Currently or in the Future Own Securities of, or Engage in Business With, the Applicable Underlier Sponsor or the Issuers of the Underlier Stocks, There Is No Affiliation Between the Issuers of the Underlier Stocks or Such Underlier Sponsor and Us
- There Is No Guarantee That the Methodology of the Russell 2000<sup>®</sup> Value Index Will Be Successful



# November 2024 Russell 2000<sup>®</sup> Value Index Supplement

Dated November 20, 2024

## ***About This Index Supplement***

GS Finance Corp. may use this index supplement in the initial sale of the securities. In addition, Goldman Sachs & Co. LLC (GS&Co.), or any other affiliate of GS Finance Corp., may use this index supplement in a market-making transaction in a security after its initial sale. ***Unless GS Finance Corp. or its agent informs the purchaser otherwise in the confirmation of sale, this index supplement is being used in a market-making transaction.***

This index supplement constitutes a supplement to the documents listed below and therefore should be read in conjunction with such documents:

- Underlier supplement no. 41 dated September 20, 2024
- Applicable prospectus supplement:
  - For notes: prospectus supplement dated February 13, 2023
  - For warrants: prospectus supplement dated February 13, 2023
- Prospectus dated February 13, 2023

We have not authorized anyone to provide any information or to make any representations other than those contained in or incorporated by reference in this index supplement, the accompanying underlier supplement no. 41, the accompanying prospectus supplement or the accompanying prospectus. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide. This index supplement addendum is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this index supplement addendum, the accompanying index supplement no. 41, the accompanying prospectus supplement and the accompanying prospectus is current only as of the respective dates of such documents.

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