

Factsheet The Goldman Sachs Momentum Builder® Focus ER Index

INDEX INFORMATION¹

Ticker	GSMBFC5
RIC	.GSMBFC5
Index Sponsor	Goldman Sachs & Co. LLC
Currency	USD
Number of Underliers	max. 10
Volatility Control Level (Before Momentum Risk Control)	5.00%
Deduction Rate	0.65% per annum*
Index Calculation Agent	Solactive AG
Index Base Date	January 06, 2020
Launch Date	January 12, 2021

^{*} The index is calculated on an excess return basis, see "Index Overview" for details

INDEX OVERVIEW²

The Goldman Sachs Momentum Builder® Focus ER Index:

- Measures the performance of a dynamically-rebalanced synthetic portfolio comprised of a base index (which reflects a deduction at the federal funds rate) and non-interest bearing cash positions, over a deduction of 0.65% per annum (accruing daily) applied to the entire synthetic
- Provides potential exposure to futures-based indices in the following asset classes: focused US equities, other developed market equities, developed market fixed income, emerging market equities, and commodities
- Seeks to provide exposure to price momentum of the 9 underlying indices and cash using a methodology developed by Goldman Sachs & Co. LLC (Index Sponsor).
- Combines the 9 underlying indices across the above five asset classes and a "return-based money market position⁶ using a return-maximization algorithm that seeks to capture the highest historical return by selecting from the universe of eligible underlying assets, subject to constraints on minimum and maximum weights (including a 20% minimum weight for the focused US equities asset class) and volatility (the resulting interim index, the **base index**).
- Tests the resulting base index (which levels are calculated following deductions at the federal funds rate) for volatility daily and may deleverage from the base index into a non-interest bearing "deleverage cash position" as frequently as daily if the realized volatility of the base index (using the higher of two measures of exponentially-weighted moving volatility with different "decay factors" (reflecting the relative weight of more recent versus older data)) exceeds the volatility cap (the resulting interim index, the **volatility controlled index**).
- Applies a momentum risk control adjustment feature that may further deleverage the portfolio into a non-interest bearing "momentum risk control cash position" as frequently as daily if the volatility controlled index from the above step has demonstrated negative price momentum (the resulting index, the **top-level index**).
- Applies two levels of volatility control across the portfolio before the momentum risk control adjustment feature is triggered (if applicable):
 - Target volatility: 5%. It is measured on a daily basis and acts as a constraint (based on the annualized historical realized volatility) of each return-maximized daily target portfolio, which limit may be relaxed by increments of 0.50%, up to 10%, to the extent that no combination of target weights satisfies the pre-defined weight and volatility constraints.
 - Volatility cap: 5%. It is measured on a daily basis following the application of the volatility-and weight-constrained return-maximization algorithm. The index is rebalanced from the base index into the deleverage cash position to the extent that the annualized historical realized volatility exceeds the volatility cap.
- 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). As a result, on any day, the weighted return of the indices included in the index must outperform the product of the return on the federal funds rate multiplied by the combined weight of indices in the index plus 0.65% per annum (accruing daily) for the index level to increase.

REBALANCING PROCESS

Step 2:

Step 3:

Step 4:

Step 5

Step 1: On each index business day, the algorithm tests the returns of possible portfolio combinations of the underlying assets (comprised of the 9 underlying indices and the return-based money market position) and selects the portfolio combination with the highest historical return over each look-back period (the prior nine months, six months and three months).

Note: For each look-back period (the prior nine months, six months and three months), the algorithm considers only those portfolios that have a realized volatility of 5% or less for such look-back period (the 5% volatility constraint may be successively relaxed by increments of 0.50%, up to 10%, to the extent that no combination of target weights satisfies the pre-defined weight and volatility constraints) and for which the underlying asset and asset class weights meet the constraints on minimum and maximum weights.

Average the weights of each underlying asset across the 3 return-maximized, weight- and volatility-constrained, portfolios chosen in step 1 (one portfolio for each of the 3 look-back periods) to determine the target weight of such underlying asset for that day.

Average the target weights of each resulting underlying asset weight (averaged over the targets corresponding to the three look-back periods) over the weight averaging period which is comprised of such day and each of the prior 9 index business days to determine the daily weight of such underlying asset, effective after the close of business on that day.

On a daily basis, monitor the realized volatility of the resulting base index (which levels are calculated following deductions at the federal funds rate) using the higher of two measures of exponentially-weighted moving volatility based on different "decay factors" (reflecting the relative weight of more recent versus older data). If this volatility exceeds 5%, a pro-rata portion of the underlying assets is allocated to a non-interest bearing deleverage cash position (the resulting interim index, the volatility controlled index).

On a daily basis, monitor the price momentum of the volatility controlled index resulting from step 4. The index will allocate to the volatility On a daily basis, mornior the price momentum of the volatility controlled index business days over a period of 21 index business days during which the volatility controlled index level equals or exceeds its level on the 100th index business day prior, with a value of 1 assigned to days for which the condition is satisfied and a value of 0.25 assigned to days for which the condition is not satisfied. Any portion of the index not allocated to the volatility controlled index will be allocated to a non-interest bearing momentum risk control cash position (the resulting index,

the top-level index)

For information about any investment products tracking the index, please refer to the applicable offering documents.

Prices and additional information are available at http://www.solactive.com

² The strategy and rebalancing process are further described in the full rulebook available at https://www.solactive.com/indices/?se=1&index=DE000SL0BNJ6.

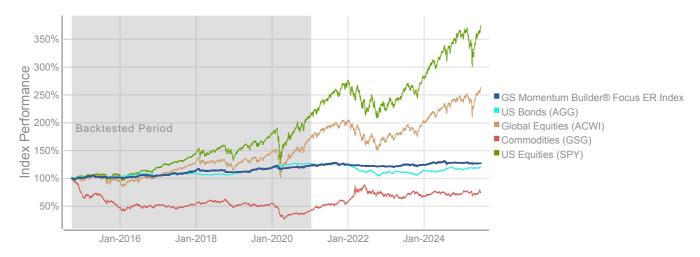


BASE INDEX COMPOSITION

ASSET CLASS	NAME	TICKER	BASE INDEX ASSET CLASS MIN WEIGHT	BASE INDEX ASSET CLASS MAX WEIGHT	BASE INDEX MIN WEIGHT	BASE INDEX MAX WEIGHT
	US Equity Futures Rolling Strategy Index	FRSIUSE			0%**	30%
Focused US Equition	^{ES} US Technology Equity Futures Rolling Strategy Series Q Total Return Index	GSISNQET	20%	50%	0%**	30%
Other Developed	European Equity Futures Rolling Strategy Index	FRSIEUE		500/	0%	30%
Equities	Japanese Equity Futures Rolling Strategy Index	FRSIJPE	0%	50%	0%	30%
	US Government Bond Futures Rolling Strategy Index	FRSIUSB			0%	60%
Fixed Income	European Government Bond Futures Rolling Strategy Index	FRSIEUB	0%	80%	0%	60%
	Japanese Government Bond Futures Rolling Strategy Index	FRSIJPB			0%	60%
Emerging Market Equities	Emerging Markets Equity Futures Rolling Strategy Index	FRSIEME	0%	20%	0%	20%
Commodities	Bloomberg Gold Subindex Total Return	BCOMGCTR	0%	25%	0%	25%
Cash Equivalent	Money Market Position	N/A	0%	80%*	0%	80%*

^{*} The base index asset class maximum weight and base index underlying asset maximum weight applicable to the Cash Equivalent in the table only apply to the return-based money market position in the base index, and not the deleverage cash position or the momentum risk control cash position (which are outside of the base index). As a result of the volatility control and momentum risk control features, the index may allocate nearly its entire exposure to hypothetical cash positions.

INDEX PERFORMANCE VS. INDIVIDUAL ASSET CLASS SPECIFIC ETFs SINCE SEPTEMBER 22, 20143

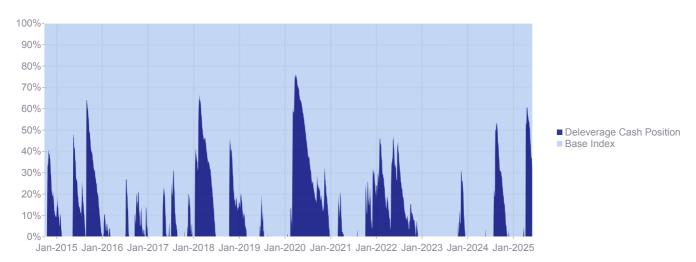


³ The values of the individual asset class specific ETFs are total return (i.e., ETF dividends are reinvested). The total return versions are calculated by Solactive AG. Launch Date: January 12, 2021, values from September 22, 2014 to January 11, 2021 for GS Momentum Builder® Focus ER Index based on 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 performance is normalized such that the graph shows the percentage change in the individual asset class specific ETFs and the index as compared to their respective closing levels on September 22, 2014. 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.

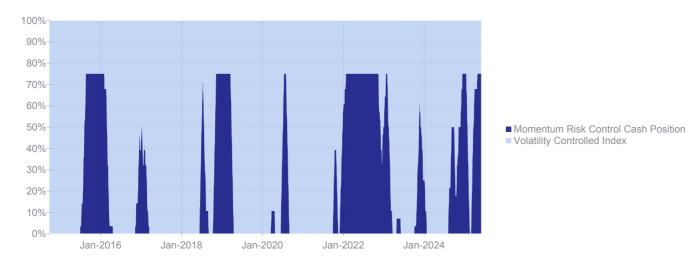
^{**} Although the underlying asset weight of each of the US Large-Cap Equities (US Equity Futures Rolling Strategy Index) and US Technology Equities (US Technology Equity Futures Rolling Strategy Series Q Total Return Index) may be as low as 0%, their minimum combined weight must equal at least 20%



DETAILED HISTORICAL COMPOSITION WEIGHTINGS OF THE VOLATILITY CONTROLLED INDEX RESULTING FROM DAILY VOLATILITY CONTROL⁴



DETAILED HISTORICAL COMPOSITION WEIGHTINGS OF THE TOP-LEVEL INDEX⁴

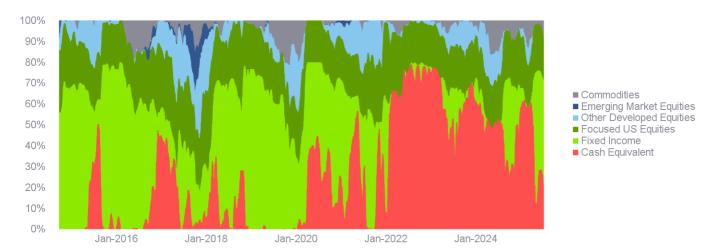


⁴ Launch Date: January 12, 2021, values from September 22, 2014 to January 11, 2021 for GS Momentum Builder® Focus ER Index based on back-testing. Back-testing and other statistical analysis material that is provided in connection with the index use simulated analysis and hypothetical circumstances to 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



HISTORICAL WEIGHTINGS WITHIN THE BASE INDEX⁵

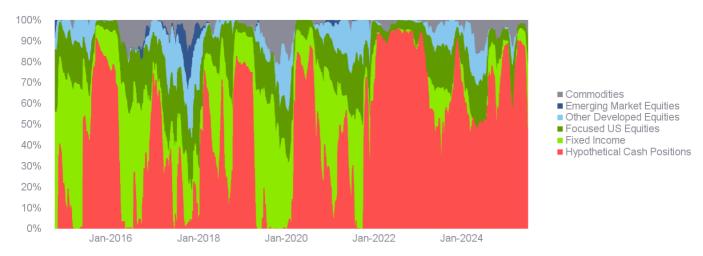
Includes back-tested, hypothetical performance; does not reflect actual index performance



For the avoidance of doubt, the allocation shown above does not take into account the deleverage cash position resulting from the volatility control feature and the momentum risk control adjustment feature. The volatility control feature would rebalance a portion of the base index into the deleverage cash position if the realized volatility of the base index exceeds the volatility control level of 5%. The momentum risk control adjustment feature may further deleverage the volatility controlled index into the momentum risk control cash position if the volatility controlled index has demonstrated negative price momentum.

HISTORICAL WEIGHTINGS WITHIN THE TOP-LEVEL INDEX⁵

Includes back-tested, hypothetical performance; does not reflect actual index performance



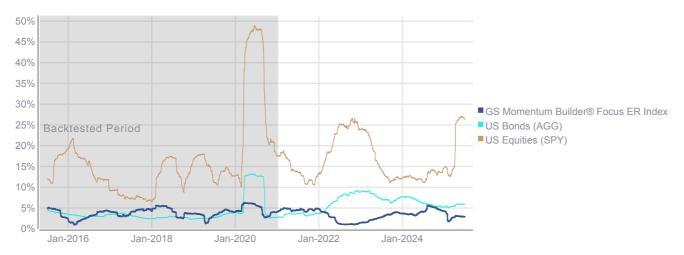
For the avoidance of doubt, the allocation shown above shows the weights of asset classes in the top-level index, and takes into account the deleverage cash position resulting from the volatility control feature and the momentum risk control cash position from the momentum risk control adjustment feature.

⁶ Launch Date: January 12, 2021, values from September 22, 2014 to January 11, 2021 for GS Momentum Builder® Focus ER Index 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



TOP-LEVEL INDEX - ROLLING 6-MONTH REALIZED VOLATILITY (p.a.)6

Includes back-tested, hypothetical performance; does not reflect actual index performance



STATISTICS (TOP-LEVEL INDEX)6

Includes back-tested, hypothetical performance; does not reflect actual index performance

AS OF AS OF JUL-01-2025	GS Momentum Builder® Focus ER Index	US Bonds (AGG) Globa	l Equities (ACWI)	Commodities (GSG)	US Equities (SPY)	
Effective Performance (1M)	0.26%	1.46%	4.80%	4.11%	5.14%	
Effective Performance (6M)	-0.35%	3.92%	9.96%	1.75%	5.66%	
Effective Performance (1Y)	-1.53%	6.16%	16.33%	-0.50%	14.94%	
Effective Performance (3Y)	4.13%	7.81%	61.44%	-4.59%	70.88%	
Effective Performance (5Y)	6.43%	-3.78%	90.12%	112.54%	115.19%	
Annualized Performance (since Sep 2014) ⁷	2.26%	1.77%	9.42%	-2.73%	13.07%	
Annualized Volatility (since Sep 2014) ^{7 8}	3.88%	5.49%	17.90%	23.17%	18.49%	
Return over Risk (since Sep 2014)9	0.58	0.32	0.53	-0.12	0.71	
Maximum Drawdown (since Sep 2014) ¹⁰	6.26%	18.44%	33.55%	73.67%	33.72%	

⁶ The values of the individual asset class specific ETFs are total return (i.e., ETF dividends are reinvested). The total return versions are calculated by Solactive AG. Launch Date: January 12, 2021, values from September 22, 2014 to January 11, 2021 for GS Momentum Builder® Focus ER Index 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 "promation 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.

⁷ Calculated on an annualized basis since September 22, 2014.

⁸ Calculated with daily returns since September 22, 2014

⁹ Calculated by dividing the annualized performance by the annualized realized volatility since September 22, 2014.

¹⁰ The largest percentage decline experienced in the relevant measure from a previously occurring maximum level.



DETAILED HISTORICAL MONTHLY PERFORMANCE¹¹

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2025	0.31%	-0.38%	-0.24%	-0.31%	0.00%	0.26%	_			_			-0.36%
2024	0.40%	1.54%	1.42%	-1.35%	1.18%	0.55%	0.09%	-1.19%	0.29%	-0.20%	0.13%	-0.31%	2.54%
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%

¹¹ Launch Date: January 12, 2021, values from September 22, 2014 to January 11, 2021 for GS Momentum Builder® Focus ER Index 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.

Neither Solactive AG nor Goldman Sachs provide assurance or guarantee that the products linked to the index will operate or would have operated in the past in a manner consistent with these materials. The hypothetical historical levels presented herein have not been verified by an independent third party, and such hypothetical historical levels have inherent limitations. Alternative simulations, techniques, modeling or assumptions might produce significantly different results and prove to be more appropriate. Actual results will vary, perhaps materially, from the simulated returns presented in this document. See "Important Information" on page 9 for more information on back-testing.



DETAILED HISTORICAL WEIGHTINGS WITHIN THE TOP-LEVEL INDEX

Weights as of the last index business day of each month.

Sep-2014		FRSIUSE	GSISNQET	FRSIEUE	FRSIJPE	FRSIUSB	FRSIEUB	FRSIJPB	FRSIEME	BCOMGCTR	Hypothetical Cash Positions ¹²
Nov.2014 3.73% 16.73% - 6.63% 6.21% 48.44% 10.27%	Sep-2014	2.83%	26.87%	0.43%	9.45%	0.12%	55.48%	-	4.82%	-	0%
Dec-2014 0.41%	Oct-2014	0.84%	16.09%	-	0.87%	6.46%	36.48%	-	0.05%	-	39.21%
Jan 2015 2.68% 17.08% 0.10% 7.34% 6.19% 53.83% - 2.64% 10.12% Feb-2016 0.94% 19.30% 2.17% 7.02% 0.18% 00.00% - - 1.30% - -	Nov-2014	3.73%	16.73%	-	5.63%	6.21%	48.44%	-	-	-	19.27%
Feb 2015	Dec-2014	0.41%	19.75%	_	8.21%	9.00%	52.43%	-	-	-	10.20%
Mar-2015	Jan-2015	2.69%	17.09%	0.10%	7.34%	6.19%	53.83%	-	-	2.64%	10.12%
Apr-2015 10.20% 9.80% 1.97% 11.45% 59.68% 59.68% - - - O.94% May.2015 12.07% 0.66% 0.71% 12.11% 20.99% 2.04% 0.14% - 0.17% 51.14% Juh.2015 1.27% 0.14% 1.758% 2.129% - 0.43% - 2.89% 30.83% Juh.2015 7.34% 8.70% 0.01% 8.46% 5.84% - 0.23% - - 13.34% App-2015 7.78% 1.03% - 1.02% 3.17% 0.76% 1.88% - - 0.136% Dec-2015 0.37% 3.17% - 0.28% 6.20% 0.97% 6.15% - 0.88% 3.01% Nov-2015 0.81% 3.27% - 0.49% 1.47% 7.54% 0.76% - 0.49% 1.47% 7.54% 0.76% - - 3.57% 0.24% 0.60% - 0.02%	Feb-2015	0.94%	19.30%	2.17%	7.02%	9.18%	60.00%	-	-	1.39%	-
May 2015 12.07% 0.66% 0.71% 12.11% 20.96% 2.04% 0.14% - 0.17% 51.14% Jun-2015 12.73% 5.12% 0.14% 17.56% 21.29% - 0.43% - 2.86% 38.83% 38.83% Jul-2015 0.76% 1.03% - 1.02% 3.17% 0.76% 1.86%	Mar-2015	2.67%	17.33%	2.34%	8.42%	10.38%	58.86%	-	-	-	-
Jun-2016	Apr-2015	10.20%	9.80%	1.97%	11.45%	5.96%	59.68%	-	-	-	0.94%
Jul-2015 3.34% 8.70% 0.01% 8.46% 5.64% - 0.23% - 73.42% Aug 2015 0.76% 1.03% - 1.02% 3.17% 0.76% 1.88% - - 91.96% Sep-2015 - 2.92% 0.08% 0.11% 5.62% 2.07% 3.62% - - 85.58% Oct-2015 0.37% 3.17% - 0.28% 6.20% 0.97% 5.15% - 0.06% 83.01% Nov-2015 0.37% 3.17% - 0.28% 6.20% 0.97% 5.15% - 0.06% 83.01% Dec-2015 0.02% 5.40% - 0.40% 1.47% 7.54% 0.76% - - 80.01% Dec-2016 0.02% 5.40% - 0.40% 1.47% 7.54% 0.76% - - 0.02% 75.84% Feb-2016 9.89% 3.95% - - 3.37% 0.24% 6.00% - 0.02% 75.84% Feb-2016 9.89% 0.67% - - 13.83% 18.00% 4.03% - 5.15% 48.75% Mar-2016 2.074% 1.15% 0.29% 0.04% 13.21% 41.95% 7.99% 0.58% 14.07% - May-2016 23.61% 1.39% 1.00% 0.95% 7.57% 40.13% 7.45% - 17.90% - Jul-2016 22.07% - 0.07% - 9.95% 48.69% 1.19% 0.37% 11.69% - Jul-2016 22.07% - 0.07% - 9.95% 48.69% 1.19% 0.37% 17.69% - Jul-2016 23.69% 0.53% 0.89% - 0.11% 47.54% 10.34% 0.13% 4.65% 14.23% 4.28% Aug-2016 16.95% 7.04% - 0.06% 1.88% 49.78% 1.13% 4.65% 14.23% 4.28% Aug-2016 16.95% 7.04% - 0.06% 1.88% - 7.59% 0.25% 3.365% 4.72% 0.13% 0.29% 0.26% 0.09% 3.757% 0.21% 0.29% 0.09% 0.26% 3.365% 4.72% 0.13% 0.13% 0.29% 0.09% 0.26% 3.365% 4.72% 0.13% 0.13% 0.29% 0.26% 0.26% 0.00% 0.26% 0.26% 0.26% 0.00% 0.26% 0.26% 0.26% 0.00% 0.26% 0.26% 0.26% 0.00% 0.26% 0.26% 0.26% 0.26% 0.00% 0.26%	May-2015	12.07%	0.66%	0.71%	12.11%	20.96%	2.04%	0.14%	-	0.17%	51.14%
Aug-2015 0.76% 1.03% - 1.02% 3.17% 0.76% 1.88% - - 91.38% Sep-2015 - 2.92% 0.08% 0.11% 5.62% 2.07% 3.62% - - 85.59% Nov-2015 0.37% 3.17% - 0.28% 6.20% 0.97% 5.15% - 0.86% 83.01% Nov-2015 0.43% 3.27% - 0.03% 0.56% 4.47% 10.58% - - 80.01% Jan-2016 0.89% 3.95% - - 3.57% 9.24% 6.50% - 0.02% 75.84% Jan-2016 9.89% 0.67% - - 13.83% 18.00% - 11.56% 3.57% Apr-2016 2.86% 1.15% 0.29% 0.04% 13.21% 41.95% 7.96% 0.56% 14.07% - Jun-2016 2.26% 0.15% 7.57% 40.13% 7.45% - 17.90%	Jun-2015	12.73%	5.12%	0.14%	17.58%	21.29%	-	0.43%	-	2.89%	39.83%
Sep-2015 - 2.92% 0.08% 0.11% 6.62% 2.07% 3.62% - - 68.58%	Jul-2015	3.34%	8.70%	0.01%	8.46%	5.84%	-	0.23%	-	-	73.42%
Oct-2015 0.37% 3.17% - 0.28% 6.20% 0.97% 5.15% - 0.86% 83.01% Nov-2015 0.31% 3.27% - 0.30% 0.56% 4.47% 10.58% - - 80.01% Dec-2016 0.02% 5.40% - 0.40% 1.47% 7.54% 9.79% - 75.38% Jan-2016 0.89% 3.85% - - 3.57% 9.24% 6.50% - 0.02% 75.84% Peb-2018 9.58% 0.67% - - 14.92% 43.26% 7.40% - 11.56% 48.75% Mar-2016 20.74% 1.15% 0.29% 0.04% 7.57% 40.13% 7.45% - 17.50% - Jun-2016 22.07% - 0.07% - 9.95% 48.89% 1.19% 0.37% 17.66% - Jun-2016 22.07% 0.07% - 9.95% 48.078% 1.19% 0.37%	Aug-2015	0.76%	1.03%	-	1.02%	3.17%	0.76%	1.88%	-	-	91.36%
Nov-2015 0.81% 3.27% - 0.30% 0.56% 4.47% 10.58% 80.01%	Sep-2015	-	2.92%	0.08%	0.11%	5.62%	2.07%	3.62%	-	-	85.58%
Dec-2015 0.02% 5.40% - 0.40% 1.47% 7.54% 9.79% - - 75.38% 3.93% 3.95% - - 3.57% 9.24% 6.50% - 0.02% 75.84% 75.84% 75.86% 0.67% - - 13.83% 18.00% 4.03% - 5.15% 48.75% 48.75% 48.75% 48.726% 48.26% 7.40% - 11.56% 3.57% 48.75% 48.26% 7.40% - 11.56% 3.57% 48.75% 48.26% 7.40% - 11.56% 3.57% 48.75% 49.2016 22.81% 1.39% 1.00% 0.95% 7.57% 40.13% 7.45% - 17.90% - 17.90% - 17.90% - 17.90% - 17.90% - 17.90% - 17.90% - 17.86% - 17.86% - 17.86% - 17.86% - 17.86% - 17.86% - 17.86% - 17.86% - 17.86% - 17.86% - 17.86% - 17.86% - 17.86% - 17.86% - 17.86% - 18.85% 18.20% 18.85% 19.20% 18.85% 19.29% 0.65% 14.23% 4.28% 49.78% 11.3% 4.65% 14.23% 4.28% 4.28% 4.98% 1.949% 2.87% 3.89% 0.28% 0.06% 37.57% 0.21% 2.62% 10.07% 29.02% 0.62216 4.95% 19.49% 2.87% 3.89% 0.28% 0.28% 0.70% - - 1.24% 56.15% 0.28% 0.28% 0.28% 0.70% - - 1.24% 56.15% 0.28% 0	Oct-2015	0.37%	3.17%	-	0.28%	6.20%	0.97%	5.15%	-	0.86%	83.01%
Jan 2016 0.89% 3.95% - - 3.57% 9.24% 6.50% - 0.02% 75.84% Feb 2016 9.59% 0.67% - - 13.83% 18.00% 4.03% - 5.15% 48.75% Mar 2016 17.05% 2.24% 0% - 14.92% 43.26% 7.40% - 11.66% 3.57% Mar 2016 20.74% 11.56% 0.29% 0.04% 13.21% 41.95% 7.49% 0.56% 14.07% - May 2016 23.61% 1.39% 1.00% 0.95% 7.57% 40.13% 7.45% - 17.90% - Jun 2016 23.66% 0.53% 0.89% - 0.11% 47.54% 10.34% 0.13% 17.66% - Jun 2016 23.66% 0.53% 0.89% - 0.11% 47.54% 10.34% 0.13% 14.89% 1.92% Aug 2016 16.95% 7.04% - 0.06% 1.88% 49.78% 11.33% 4.65% 14.29% 4.89% 1.92% Aug 2016 5.83% 13.89% 0.35% 0.29% 0.06% 37.57% 0.21% 2.62% 10.07% 29.02% Oct 2016 4.95% 13.49% 2.87% 3.69% 0.25% 33.65% 4.72% 5.11% 2.97% 22.30% Nov 2016 14.60% 14.21% 0.02% 8.43% - 5.30% - - 1.24% 56.15% Dec 2016 10.27% 5.22% 0.67% 7.68% - 5.30% - - 1.24% 56.16% Dec 2017 10.59% 8.65% 2.08% 7.56% - 6.48% - - 1.18% 63.46% Feb 2017 10.38% 16.70% 24.6% 9.48% - 15.71% - 3.34% 0.74% 41.19% Mar 2017 7.75% 18.77% 21.35% 2.66% 2.73% 2.12% 2.60% 1.08% 10.63% 3.31% Mar 2017 2.18% 5.10% 1.51% 8.55% 17.48% - - 10.62% 2.11% 3.376% Aug 2017 21.18% 5.10% 1.51% 8.55% 17.45% 6.88% 9.49% 10.09% 15.84% 18.1% Dec 2017 21.18% 5.10% 1.51% 8.55% 17.45% 6.88% 9.49% 10.09% 15.44% 18.1% Dec 2017 21.18% 5.19% 1.51% 8.55% 17.45% 6.88% 9.49% 10.09% 15.84% 18.1% Dec 2017 21.18% 5.19% 1.51% 8.55% 17.45% 6.88% 9.49% 10.09% 15.84% 18.1% Dec 2017 21.18% 5.19% 1.51% 5.59% 5.79% 5.19% 5.99% 2.57% 3.34% 4.40% 3.99% Dec 2017 21.18% 5.19% 5.59% 5.59% 5.79% 5.11% 5.20% 5.00%	Nov-2015	0.81%	3.27%	-	0.30%	0.56%	4.47%	10.58%	-	-	80.01%
Feb-2016	Dec-2015	0.02%	5.40%	-	0.40%	1.47%	7.54%	9.79%	-	-	75.38%
Mar-2016 17.05% 2.24% 0% - 14.92% 43.26% 7.40% - 11.56% 3.57% Apr-2016 20.74% 1.15% 0.29% 0.04% 13.21% 41.95% 7.99% 0.56% 14.07% - Jul-2016 23.61% 1.39% 1.00% 0.95% 7.57% 40.13% 7.45% - 17.90% - Jul-2016 23.66% 0.53% 0.89% - 0.11% 47.64% 10.34% 0.13% 14.89% 1.92% Aug-2016 16.95% 7.04% - 0.06% 18.8% 49.78% 1.13% 4.65% 14.23% 4.28% Sep-2016 5.83% 13.98% 0.35% 0.29% 0.06% 37.57% 0.21% 2.62% 10.07% 29.02% Oct-2016 4.95% 19.49% 2.87% 3.69% 0.25% 33.65% 4.72% 5.11% 2.97% 22.30% Dec-2016 10.27% 5.22% 0.67% 7.63% <td>Jan-2016</td> <td>0.89%</td> <td>3.95%</td> <td>-</td> <td>-</td> <td>3.57%</td> <td>9.24%</td> <td>6.50%</td> <td>-</td> <td>0.02%</td> <td>75.84%</td>	Jan-2016	0.89%	3.95%	-	-	3.57%	9.24%	6.50%	-	0.02%	75.84%
Apr-2016 20.74% 1.15% 0.29% 0.04% 13.21% 41.95% 7.99% 0.56% 14.07% - May-2016 23.61% 1.39% 1.00% 0.95% 7.57% 40.13% 7.45% - 17.90% - Jul-2016 22.07% - 0.07% - 9.95% 48.69% 1.19% 0.37% 17.66% - Jul-2016 23.66% 0.53% 0.89% - 0.11% 47.54% 10.34% 0.13% 14.89% 1.92% Aug-2016 16.95% 7.04% - 0.06% 1.88% 49.78% 1.13% 4.65% 14.23% 4.22% Sep-2016 5.83% 13.98% 0.35% 0.29% 0.06% 37.57% 0.21% 2.62% 10.07% 29.02% Oct-2016 4.95% 19.49% 2.87% 3.69% 0.25% 33.65% 4.72% 5.11% 2.97% 22.30% Dec-2016 10.27% 5.22% 0.67% 7.63%	Feb-2016	9.58%	0.67%	-	-	13.83%	18.00%	4.03%	-	5.15%	48.75%
May-2016 23.61% 1.39% 1.00% 0.95% 7.57% 40.13% 7.45% - 17.90% - Jun-2016 22.07% - 0.07% - 9.95% 48.69% 1.19% 0.37% 17.66% - Jul-2016 22.60% 0.53% 0.89% - 0.11% 47.54% 10.34% 0.13% 14.89% 1.92% Aug-2016 16.95% 7.04% - 0.06% 1.88% 49.78% 1.13% 4.65% 14.23% 4.28% Sep-2016 5.83% 13.89% 0.35% 0.29% 0.06% 37.57% 0.21% 2.62% 10.07% 29.02% Oct-2016 4.95% 19.49% 2.87% 3.69% 0.25% 33.66% 4.72% 5.11% 2.97% 22.30% Nov-2016 14.60% 14.21% 0.02% 8.43% - 5.36% - - 1.14% 56.15% Dec-2017 10.59% 8.65% 2.08% 7.63%	Mar-2016	17.05%	2.24%	0%	-	14.92%	43.26%	7.40%	-	11.56%	3.57%
Jun-2016 22.07% - 0.07% - 9.95% 48.69% 1.19% 0.37% 17.66% - Jul-2016 23.66% 0.53% 0.89% - 0.11% 47.54% 10.34% 0.13% 14.89% 1.92%	Apr-2016	20.74%	1.15%	0.29%	0.04%	13.21%	41.95%	7.99%	0.56%	14.07%	_
Jul-2016 23.66% 0.53% 0.89% - 0.11% 47.54% 10.34% 0.13% 14.89% 1.92% Aug-2016 16.95% 7.04% - 0.06% 1.88% 49.78% 1.13% 4.65% 14.23% 4.28% Sep-2016 5.83% 13.98% 0.35% 0.29% 0.06% 37.57% 0.21% 2.62% 10.07% 29.02% Oct-2016 4.95% 19.49% 2.87% 3.69% 0.25% 33.65% 4.72% 5.11% 2.97% 22.30% Nov-2016 14.60% 14.21% 0.02% 8.43% - 5.36% - - 1.24% 56.15% Dec-2016 10.27% 5.22% 0.67% 7.63% - 7.89% 0.70% - - 67.61% Jan-2017 10.59% 8.65% 2.08% 7.56% - 6.48% - - 1.18% 63.46% Feb-2017 10.38% 16.70% 2.46% 9.48% -	May-2016	23.61%	1.39%	1.00%	0.95%	7.57%	40.13%	7.45%	-	17.90%	_
Aug-2016 16.95% 7.04% - 0.06% 1.88% 49.78% 1.13% 4.65% 14.23% 4.28% Sep-2016 5.83% 13.98% 0.35% 0.29% 0.06% 37.57% 0.21% 2.62% 10.07% 29.02% Oct-2016 4.95% 19.49% 2.67% 3.69% 0.25% 33.65% 4.72% 5.11% 2.97% 22.30% Nov-2016 14.60% 14.21% 0.02% 8.43% - 5.36% - - 1.24% 56.15% Dec-2016 10.27% 5.22% 0.67% 7.63% - 7.89% 0.70% - - 67.61% Jan-2017 10.59% 8.65% 2.08% 7.56% - 6.48% - 11.18% 63.46% Feb-2017 10.33% 16.70% 2.46% 9.48% - 15.71% - 3.34% 0.74% 41.19% Mar-2017 7.75% 18.77% 21.35% 2.66% 2.73%	Jun-2016	22.07%	_	0.07%	_	9.95%	48.69%	1.19%	0.37%	17.66%	_
Sep-2016 5.83% 13.98% 0.35% 0.29% 0.06% 37.57% 0.21% 2.62% 10.07% 29.02% Oct-2016 4.95% 19.49% 2.87% 3.69% 0.25% 33.65% 4.72% 5.11% 2.97% 22.30% Nov-2016 14.60% 14.21% 0.02% 8.43% - 5.36% - - 1.24% 56.15% Dec-2016 10.27% 5.22% 0.67% 7.63% - 7.89% 0.70% - - 67.61% Jan-2017 10.59% 8.65% 2.08% 7.56% - 6.48% - - 1.18% 63.46% Feb-2017 10.38% 16.70% 2.46% 9.48% - 15.71% - 3.34% 0.74% 41.19% Mar-2017 5.35% 22.66% 13.80% 7.38% 0.64% 13.33% 12.98% 3.89% 28.99% Apr-2017 7.75% 18.77% 21.35% 2.66% 2.73% <td< td=""><td>Jul-2016</td><td>23.66%</td><td>0.53%</td><td>0.89%</td><td>-</td><td>0.11%</td><td>47.54%</td><td>10.34%</td><td>0.13%</td><td>14.89%</td><td>1.92%</td></td<>	Jul-2016	23.66%	0.53%	0.89%	-	0.11%	47.54%	10.34%	0.13%	14.89%	1.92%
Oct-2016 4.95% 19.49% 2.87% 3.69% 0.25% 33.65% 4.72% 5.11% 2.97% 22.30% Nov-2016 14.60% 14.21% 0.02% 8.43% - 5.36% - - 1.24% 56.15% Dec-2016 10.27% 5.22% 0.67% 7.63% - 7.89% 0.70% - - 67.61% Jan-2017 10.59% 8.65% 2.08% 7.56% - 6.48% - - 1.18% 63.46% Feb-2017 10.38% 16.70% 2.46% 9.48% - 15.71% - 3.34% 0.74% 41.19% Mar-2017 5.35% 22.66% 13.80% 7.38% 0.64% 1.33% 12.98% 2.98% 3.89% 28.99% Apr-2017 7.75% 18.77% 21.35% 2.66% 2.73% 2.12% 2.60% 1.08% 10.63% 3.03% 19.95% 5.79% 17.42% 1.49% 3.90% 1.99%	Aug-2016	16.95%	7.04%	_	0.06%	1.88%	49.78%	1.13%	4.65%	14.23%	4.28%
Oct-2016 4.95% 19.49% 2.87% 3.69% 0.25% 33.65% 4.72% 5.11% 2.97% 22.30% Nov-2016 14.60% 14.21% 0.02% 8.43% - 5.36% - - 1.24% 56.15% Dec-2016 10.27% 5.22% 0.67% 7.63% - 7.89% 0.70% - - 67.61% Jan-2017 10.59% 8.65% 2.08% 7.56% - 6.48% - - 1.18% 63.46% Feb-2017 10.38% 16.70% 2.46% 9.48% - 15.71% - 3.34% 0.74% 41.19% Mar-2017 5.35% 22.66% 13.80% 7.38% 0.64% 1.33% 12.98% 2.98% 3.89% 28.99% Apr-2017 7.75% 18.77% 21.35% 2.66% 2.73% 2.12% 2.60% 1.08% 10.63% 3.03% 19.95% 5.79% 17.42% 1.49% 3.90% 1.99%	Sep-2016	5.83%	13.98%	0.35%	0.29%	0.06%	37.57%	0.21%	2.62%	10.07%	29.02%
Dec-2016 10.27% 5.22% 0.67% 7.63% - 7.89% 0.70% - - 67.61% Jan-2017 10.59% 8.65% 2.08% 7.56% - 6.48% - - 1.18% 63.46% Feb-2017 10.38% 16.70% 2.46% 9.48% - 15.71% - 3.34% 0.74% 41.19% Mar-2017 5.35% 22.66% 13.80% 7.38% 0.64% 1.33% 12.98% 2.98% 3.89% 28.99% Apr-2017 7.75% 18.77% 21.35% 2.66% 2.73% 2.12% 2.60% 1.08% 10.63% 30.31% May-2017 - 23.81% 22.75% 3.33% 19.52% 5.79% 17.42% 1.49% 3.90% 1.99% Jul-2017 6.81% 17.75% 21.20% 4.80% 29.49% 5.90% 2.57% 3.34% 4.40% 3.74% Jul-2017 21.18% 5.10% 1.51% 8.55%	Oct-2016	4.95%	19.49%	2.87%	3.69%	0.25%	33.65%	4.72%	5.11%	2.97%	22.30%
Jan-2017 10.59% 8.65% 2.08% 7.56% - 6.48% - - 1.18% 63.46%	Nov-2016	14.60%	14.21%	0.02%	8.43%	-	5.36%	-	-	1.24%	56.15%
Feb-2017 10.38% 16.70% 2.46% 9.48% - 15.71% - 3.34% 0.74% 41.19% Mar-2017 5.35% 22.66% 13.80% 7.38% 0.64% 1.33% 12.98% 2.98% 3.89% 28.99% Apr-2017 7.75% 18.77% 21.35% 2.66% 2.73% 2.12% 2.60% 1.08% 10.63% 30.31% May-2017 - 23.81% 22.75% 3.33% 19.52% 5.79% 17.42% 1.49% 3.90% 1.99% Jun-2017 6.81% 17.75% 21.20% 4.80% 29.49% 5.90% 2.57% 3.34% 4.40% 3.74% Jul-2017 21.18% 5.10% 1.51% 8.55% 17.18% - - 10.62% 2.11% 33.75% Aug-2017 16.81% 6.15% 7.92% 9.52% 17.45% 6.86% 9.49% 19.05% 4.94% 1.81% Sep-2017 21.12% 2.33% 3.71%	Dec-2016	10.27%	5.22%	0.67%	7.63%	-	7.89%	0.70%	-	_	67.61%
Mar-2017 5.35% 22.66% 13.80% 7.38% 0.64% 1.33% 12.98% 2.98% 3.89% 28.99% Apr-2017 7.75% 18.77% 21.35% 2.66% 2.73% 2.12% 2.60% 1.08% 10.63% 30.31% May-2017 - 23.81% 22.75% 3.33% 19.52% 5.79% 17.42% 1.49% 3.90% 1.99% Jun-2017 6.81% 17.75% 21.20% 4.80% 29.49% 5.90% 2.57% 3.34% 4.40% 3.74% Jul-2017 21.18% 5.10% 1.51% 8.55% 17.18% - - 10.62% 2.11% 33.75% Aug-2017 16.81% 6.15% 7.92% 9.52% 17.45% 6.86% 9.49% 19.05% 4.94% 1.81% Sep-2017 21.12% 2.33% 3.71% 15.19% 9.20% 0.75% 10.93% 19.06% 15.84% 1.87% Dec-2017 20.00% 5.48% -	Jan-2017	10.59%	8.65%	2.08%	7.56%	-	6.48%	_	-	1.18%	63.46%
Apr-2017 7.75% 18.77% 21.35% 2.66% 2.73% 2.12% 2.60% 1.08% 10.63% 30.31% May-2017 - 23.81% 22.75% 3.33% 19.52% 5.79% 17.42% 1.49% 3.90% 1.99% Jun-2017 6.81% 17.75% 21.20% 4.80% 29.49% 5.90% 2.57% 3.34% 4.40% 3.74% Jul-2017 21.18% 5.10% 1.51% 8.55% 17.18% - - 10.62% 2.11% 33.75% Aug-2017 16.81% 6.15% 7.92% 9.52% 17.45% 6.86% 9.49% 19.05% 4.94% 1.81% Sep-2017 21.12% 2.33% 3.71% 15.19% 9.20% 0.75% 10.93% 19.06% 15.84% 1.87% Oct-2017 24.87% - 5.68% 25.81% 8.15% 6.18% 0.15% 12.74% 12.44% 3.98% Nov-2017 22.90% 5.48% -	Feb-2017	10.38%	16.70%	2.46%	9.48%	-	15.71%	-	3.34%	0.74%	41.19%
Apr-2017 7.75% 18.77% 21.35% 2.66% 2.73% 2.12% 2.60% 1.08% 10.63% 30.31% May-2017 - 23.81% 22.75% 3.33% 19.52% 5.79% 17.42% 1.49% 3.90% 1.99% Jun-2017 6.81% 17.75% 21.20% 4.80% 29.49% 5.90% 2.57% 3.34% 4.40% 3.74% Jul-2017 21.18% 5.10% 1.51% 8.55% 17.18% - - 10.62% 2.11% 33.75% Aug-2017 16.81% 6.15% 7.92% 9.52% 17.45% 6.86% 9.49% 19.05% 4.94% 1.81% Sep-2017 21.12% 2.33% 3.71% 15.19% 9.20% 0.75% 10.93% 19.06% 15.84% 1.87% Oct-2017 24.87% - 5.68% 25.81% 8.15% 6.18% 0.15% 12.74% 12.44% 3.98% Nov-2017 22.90% 5.48% -	Mar-2017	5.35%	22.66%	13.80%	7.38%	0.64%	1.33%	12.98%	2.98%	3.89%	28.99%
Jun-2017 6.81% 17.75% 21.20% 4.80% 29.49% 5.90% 2.57% 3.34% 4.40% 3.74% Jul-2017 21.18% 5.10% 1.51% 8.55% 17.18% - - 10.62% 2.11% 33.75% Aug-2017 16.81% 6.15% 7.92% 9.52% 17.45% 6.86% 9.49% 19.05% 4.94% 1.81% Sep-2017 21.12% 2.33% 3.71% 15.19% 9.20% 0.75% 10.93% 19.06% 15.84% 1.87% Oct-2017 24.87% - 5.68% 25.81% 8.15% 6.18% 0.15% 12.74% 12.44% 3.98% Nov-2017 22.90% 5.48% - 18.59% 1.55% 6.31% 11.47% 8.89% 3.22% 21.59% Dec-2017 30.00% 7.49% - 24.66% - 14.73% 8.51% 6.32% 2.60% 5.69% Jan-2018 20.22% 4.46% - 11.7	Apr-2017										
Jul-2017 21.18% 5.10% 1.51% 8.55% 17.18% - - 10.62% 2.11% 33.75% Aug-2017 16.81% 6.15% 7.92% 9.52% 17.45% 6.86% 9.49% 19.05% 4.94% 1.81% Sep-2017 21.12% 2.33% 3.71% 15.19% 9.20% 0.75% 10.93% 19.06% 15.84% 1.87% Oct-2017 24.87% - 5.68% 25.81% 8.15% 6.18% 0.15% 12.74% 12.44% 3.98% Nov-2017 22.90% 5.48% - 18.59% 1.55% 6.31% 11.47% 8.89% 3.22% 21.59% Dec-2017 30.00% 7.49% - 24.66% - 14.73% 8.51% 6.32% 2.60% 5.69% Jan-2018 20.22% 4.46% - 11.75% - 9.34% 5.49% 2.04% 4.16% 42.53% Feb-2018 3.75% 5.58% - 2.99%	May-2017	_	23.81%	22.75%	3.33%	19.52%	5.79%	17.42%	1.49%	3.90%	1.99%
Aug-2017 16.81% 6.15% 7.92% 9.52% 17.45% 6.86% 9.49% 19.05% 4.94% 1.81% Sep-2017 21.12% 2.33% 3.71% 15.19% 9.20% 0.75% 10.93% 19.06% 15.84% 1.87% Oct-2017 24.87% - 5.68% 25.81% 8.15% 6.18% 0.15% 12.74% 12.44% 3.98% Nov-2017 22.90% 5.48% - 18.59% 1.55% 6.31% 11.47% 8.89% 3.22% 21.59% Dec-2017 30.00% 7.49% - 24.66% - 14.73% 8.51% 6.32% 2.60% 5.69% Jan-2018 20.22% 4.46% - 11.75% - 9.34% 5.49% 2.04% 4.16% 42.53% Feb-2018 3.75% 5.58% - 2.99% - - 15.52% 0.50% 3.34% 68.33% Mar-2018 0.01% 13.29% - 0.66%	Jun-2017	6.81%	17.75%	21.20%	4.80%	29.49%	5.90%	2.57%	3.34%	4.40%	3.74%
Sep-2017 21.12% 2.33% 3.71% 15.19% 9.20% 0.75% 10.93% 19.06% 15.84% 1.87% Oct-2017 24.87% - 5.68% 25.81% 8.15% 6.18% 0.15% 12.74% 12.44% 3.98% Nov-2017 22.90% 5.48% - 18.59% 1.55% 6.31% 11.47% 8.89% 3.22% 21.59% Dec-2017 30.00% 7.49% - 24.66% - 14.73% 8.51% 6.32% 2.60% 5.69% Jan-2018 20.22% 4.46% - 11.75% - 9.34% 5.49% 2.04% 4.16% 42.53% Feb-2018 3.75% 5.58% - 2.99% - - 15.52% 0.50% 3.34% 68.33% Mar-2018 0.01% 13.29% - 0.66% - 0.14% 28.83% 0.32% 2.04% 54.71% Apr-2018 0.86% 12.30% - 1.77% - </td <td>Jul-2017</td> <td>21.18%</td> <td>5.10%</td> <td>1.51%</td> <td>8.55%</td> <td>17.18%</td> <td>-</td> <td>-</td> <td>10.62%</td> <td>2.11%</td> <td>33.75%</td>	Jul-2017	21.18%	5.10%	1.51%	8.55%	17.18%	-	-	10.62%	2.11%	33.75%
Oct-2017 24.87% - 5.68% 25.81% 8.15% 6.18% 0.15% 12.74% 12.44% 3.98% Nov-2017 22.90% 5.48% - 18.59% 1.55% 6.31% 11.47% 8.89% 3.22% 21.59% Dec-2017 30.00% 7.49% - 24.66% - 14.73% 8.51% 6.32% 2.60% 5.69% Jan-2018 20.22% 4.46% - 11.75% - 9.34% 5.49% 2.04% 4.16% 42.53% Feb-2018 3.75% 5.58% - 2.99% - - 15.52% 0.50% 3.34% 68.33% Mar-2018 0.01% 13.29% - 0.66% - 0.14% 28.83% 0.32% 2.04% 54.71% Apr-2018 0.86% 12.30% - 1.77% - 11.25% 29.97% - 7.13% 36.72% May-2018 5.51% 10.94% 3.29% 5.78% -	Aug-2017	16.81%	6.15%	7.92%	9.52%	17.45%	6.86%	9.49%	19.05%	4.94%	1.81%
Nov-2017 22.90% 5.48% - 18.59% 1.55% 6.31% 11.47% 8.89% 3.22% 21.59% Dec-2017 30.00% 7.49% - 24.66% - 14.73% 8.51% 6.32% 2.60% 5.69% Jan-2018 20.22% 4.46% - 11.75% - 9.34% 5.49% 2.04% 4.16% 42.53% Feb-2018 3.75% 5.58% - 2.99% - - 15.52% 0.50% 3.34% 68.33% Mar-2018 0.01% 13.29% - 0.66% - 0.14% 28.83% 0.32% 2.04% 54.71% Apr-2018 0.86% 12.30% - 1.77% - 11.25% 29.97% - 7.13% 36.72% May-2018 5.51% 10.94% 3.29% 5.78% - 18.18% 29.49% - 0.08% 26.73% Jun-2018 1.41% 10.06% 1.81% 3.51% - <	Sep-2017	21.12%	2.33%	3.71%	15.19%	9.20%	0.75%	10.93%	19.06%	15.84%	1.87%
Dec-2017 30.00% 7.49% - 24.66% - 14.73% 8.51% 6.32% 2.60% 5.69% Jan-2018 20.22% 4.46% - 11.75% - 9.34% 5.49% 2.04% 4.16% 42.53% Feb-2018 3.75% 5.58% - 2.99% - - 15.52% 0.50% 3.34% 68.33% Mar-2018 0.01% 13.29% - 0.66% - 0.14% 28.83% 0.32% 2.04% 54.71% Apr-2018 0.86% 12.30% - 1.77% - 11.25% 29.97% - 7.13% 36.72% May-2018 5.51% 10.94% 3.29% 5.78% - 18.18% 29.49% - 0.08% 26.73% Jun-2018 1.41% 10.06% 1.81% 3.51% - 21.18% 14.51% - 0.40% 47.10% Jul-2018 2.91% 14.53% 0.35% 2.03% - 3	Oct-2017	24.87%	_	5.68%	25.81%	8.15%	6.18%	0.15%	12.74%	12.44%	3.98%
Jan-2018 20.22% 4.46% - 11.75% - 9.34% 5.49% 2.04% 4.16% 42.53% Feb-2018 3.75% 5.58% - 2.99% - - 15.52% 0.50% 3.34% 68.33% Mar-2018 0.01% 13.29% - 0.66% - 0.14% 28.83% 0.32% 2.04% 54.71% Apr-2018 0.86% 12.30% - 1.77% - 11.25% 29.97% - 7.13% 36.72% May-2018 5.51% 10.94% 3.29% 5.78% - 18.18% 29.49% - 0.08% 26.73% Jun-2018 1.41% 10.06% 1.81% 3.51% - 21.18% 14.51% - 0.40% 47.10% Jul-2018 2.91% 14.53% 0.35% 2.03% - 35.53% 15.94% - - 28.71%	Nov-2017	22.90%	5.48%	-	18.59%	1.55%	6.31%	11.47%	8.89%	3.22%	21.59%
Feb-2018 3.75% 5.58% - 2.99% - - 15.52% 0.50% 3.34% 68.33% Mar-2018 0.01% 13.29% - 0.66% - 0.14% 28.83% 0.32% 2.04% 54.71% Apr-2018 0.86% 12.30% - 1.77% - 11.25% 29.97% - 7.13% 36.72% May-2018 5.51% 10.94% 3.29% 5.78% - 18.18% 29.49% - 0.08% 26.73% Jun-2018 1.41% 10.06% 1.81% 3.51% - 21.18% 14.51% - 0.40% 47.10% Jul-2018 2.91% 14.53% 0.35% 2.03% - 35.53% 15.94% - - 28.71%	Dec-2017	30.00%	7.49%	_	24.66%	-	14.73%	8.51%	6.32%	2.60%	5.69%
Mar-2018 0.01% 13.29% - 0.66% - 0.14% 28.83% 0.32% 2.04% 54.71% Apr-2018 0.86% 12.30% - 1.77% - 11.25% 29.97% - 7.13% 36.72% May-2018 5.51% 10.94% 3.29% 5.78% - 18.18% 29.49% - 0.08% 26.73% Jun-2018 1.41% 10.06% 1.81% 3.51% - 21.18% 14.51% - 0.40% 47.10% Jul-2018 2.91% 14.53% 0.35% 2.03% - 35.53% 15.94% - - 28.71%	Jan-2018	20.22%	4.46%	_	11.75%	-	9.34%	5.49%	2.04%	4.16%	42.53%
Apr-2018 0.86% 12.30% - 1.77% - 11.25% 29.97% - 7.13% 36.72% May-2018 5.51% 10.94% 3.29% 5.78% - 18.18% 29.49% - 0.08% 26.73% Jun-2018 1.41% 10.06% 1.81% 3.51% - 21.18% 14.51% - 0.40% 47.10% Jul-2018 2.91% 14.53% 0.35% 2.03% - 35.53% 15.94% - - 28.71%	Feb-2018	3.75%	5.58%	-	2.99%	_	-	15.52%	0.50%	3.34%	68.33%
Apr-2018 0.86% 12.30% - 1.77% - 11.25% 29.97% - 7.13% 36.72% May-2018 5.51% 10.94% 3.29% 5.78% - 18.18% 29.49% - 0.08% 26.73% Jun-2018 1.41% 10.06% 1.81% 3.51% - 21.18% 14.51% - 0.40% 47.10% Jul-2018 2.91% 14.53% 0.35% 2.03% - 35.53% 15.94% - - 28.71%	Mar-2018	0.01%	13.29%	-	0.66%	-	0.14%	28.83%	0.32%	2.04%	54.71%
May-2018 5.51% 10.94% 3.29% 5.78% - 18.18% 29.49% - 0.08% 26.73% Jun-2018 1.41% 10.06% 1.81% 3.51% - 21.18% 14.51% - 0.40% 47.10% Jul-2018 2.91% 14.53% 0.35% 2.03% - 35.53% 15.94% 28.71%				-		-					
Jun-2018 1.41% 10.06% 1.81% 3.51% - 21.18% 14.51% - 0.40% 47.10% Jul-2018 2.91% 14.53% 0.35% 2.03% - 35.53% 15.94% - - 28.71%	· · · · · · · · · · · · · · · · · · ·			3.29%		-			-		
Jul-2018 2.91% 14.53% 0.35% 2.03% - 35.53% 15.94% 28.71%	-					-			-		
						-			-	_	
						2.62%		-	-	-	



	FRSIUSE	GSISNQET	FRSIEUE	FRSIJPE	FRSIUSB	FRSIEUB	FRSIJPB	FRSIEME	BCOMGCTR	Hypothetical Cash Positions ¹²
Sep-2018	20.00%	15.98%	0.03%	3.94%	-	36.80%	-	-	-	23.25%
Oct-2018	3.17%	3.60%	-	-	-	14.02%	2.55%	-	0.25%	76.42%
Nov-2018	3.82%	0.65%	-	-	0.65%	9.04%	5.83%	-	1.39%	78.62%
Dec-2018	4.17%	-	-	-	1.95%	12.17%	0.84%	-	1.73%	79.14%
Jan-2019	3.20%	1.38%	-	-	4.56%	9.89%	0.20%	0.09%	3.60%	77.08%
Feb-2019	5.08%	-	-	-	5.01%	11.28%	0.34%	-	3.30%	75.00%
Mar-2019	9.35%	1.37%	1.29%	0.09%	8.99%	27.97%	-	-	4.52%	46.43%
Apr-2019	13.95%	9.25%	7.71%	-	11.08%	55.13%	-	0.96%	1.92%	0%
May-2019	4.46%	15.53%	8.44%	-	20.35%	43.88%	-	_	7.34%	-
Jun-2019	14.28%	2.81%	7.94%	-	25.03%	24.98%	-	-	9.03%	15.94%
Jul-2019	16.25%	3.75%	6.74%	-	6.80%	52.37%	-	-	14.09%	-
Aug-2019	8.95%	11.03%	0.02%	-	8.98%	55.61%	-	-	15.41%	-
Sep-2019	19.97%	0.03%	6.29%	5.88%	0.72%	45.92%	-	-	21.02%	0.17%
Oct-2019	13.90%	6.10%	9.62%	10.34%	36.78%	1.87%	-	-	21.39%	0%
Nov-2019	6.42%	13.65%	8.29%	16.91%	43.45%	-	-	-	11.28%	-
Dec-2019	5.35%	17.85%	4.25%	22.46%	33.80%	-	-	_	16.29%	-
Jan-2020	10.41%	16.58%	1.04%	18.20%	30.91%	1.26%	-	-	18.04%	3.56%
Feb-2020	0.69%	19.43%	0.26%	9.07%	32.56%	1.38%	-	-	9.89%	26.72%
Mar-2020	0.04%	4.34%	-	-	11.33%	0.64%	0.11%	-	0.09%	83.45%
Apr-2020	-	7.16%	-	-	14.50%	-	_	_	-	78.34%
May-2020	_	8.83%	-	-	18.77%	-	_	_	_	72.39%
Jun-2020	_	7.27%	-	0.01%	13.44%	0.13%	0.52%	_	_	78.63%
Jul-2020	0.45%	3.23%	0.09%	0.26%	8.08%	0.51%	0.75%	0%	0.81%	85.82%
Aug-2020	1.41%	14.65%	0.61%	2.74%	22.97%	13.20%	-	0.14%	1.94%	42.33%
Sep-2020	6.12%	9.54%	0.42%	4.39%	15.27%	13.76%	1.56%	0.25%	3.00%	45.69%
Oct-2020	9.40%	8.11%	-	9.54%	15.00%	32.56%	0.75%	0.68%	2.11%	21.86%
Nov-2020	10.65%	5.60%	-	5.72%	12.22%	32.50%	3.39%	0.83%	0.22%	28.86%
Dec-2020	12.15%	7.86%	-	7.17%	4.24%	41.58%	4.86%	1.66%	0.04%	20.44%
Jan-2021	14.52%	5.48%	-	10.76%	-	56.94%	3.77%	3.26%	0.10%	5.17%
Feb-2021	10.86%	9.14%	-	14.34%	1.18%	43.17%	2.69%	2.08%	0.29%	16.25%
Mar-2021	19.32%	-	3.79%	12.28%	_	20.72%	-	0.07%	-	43.83%
Apr-2021	20.10%	-	6.11%	9.96%	_	9.84%	0.53%	_	-	53.46%
May-2021	20.00%	_	17.07%	5.39%	-	-	25.32%	_	1.13%	31.09%
Jun-2021	21.93%	0.15%	19.01%	4.14%	4.41%	_	23.03%	0.09%	1.56%	25.68%
Jul-2021	24.41%	4.06%	14.79%	2.88%	13.75%	1.35%	37.21%	-	0.82%	0.73%
Aug-2021	16.32%	9.82%	18.35%	-	1.35%	30.18%	23.88%	0.03%	-	0.07%
Sep-2021	14.79%	11.94%	13.17%	10.08%	17.91%	11.83%	15.78%	-	-	4.51%
Oct-2021	13.89%	1.55%	8.18%	2.44%	1.44%	_	1.26%	_	0.16%	71.08%
Nov-2021	12.42%	9.83%	8.96%	3.44%	_	2.67%	12.74%	-	5.32%	44.62%
Dec-2021	9.05%	2.98%	0.13%	-	1.81%	6.66%	9.15%	_	0.52%	69.70%
Jan-2022	3.32%	0.05%	1.16%	0.04%	_	0.70%	0.09%	_	1.43%	93.20%
Feb-2022	4.34%	0.18%	0.16%	0.25%	-	_	-	-	2.65%	92.42%
Mar-2022	4.78%	_	-	0.08%	-	_	-	-	5.12%	90.02%
Apr-2022	4.17%	-	-	0.39%	-	-	-	-	4.73%	90.71%
May-2022	3.34%	-	-	0.04%	-	-	0.33%	-	1.66%	94.62%
Jun-2022	3.13%	-	-	0.05%	-	-	-	-	1.47%	95.35%
Jul-2022	4.01%	-	-	0.10%	-	_	0.60%	-		95.28%
Aug-2022	4.36%	0.25%	_	0.20%	_	_	0.83%	_	_	94.35%
Sep-2022	4.22%	0.02%	_	0.24%	_	_	1.43%	_	_	94.09%
Oct-2022	4.62%	-	0.01%	0.22%	_		0.22%	_	_	94.93%
Nov-2022	9.28%	_	0.01%	0.66%	_		2.30%	_	_	87.49%
1407-2022	3.2070		0.2070	0.0070	-		2.5070			07.4370



	FRSIUSE	GSISNQET	FRSIEUE	FRSIJPE	FRSIUSB	FRSIEUB	FRSIJPB	FRSIEME	BCOMGCTR	Hypothetical Cash Positions ¹²
Dec-2022	9.99%	-	0.37%	0.50%	-	-	1.16%	-	0.52%	87.46%
Jan-2023	5.00%	-	0.11%	0%	-	-	-	0.04%	1.03%	93.83%
Feb-2023	14.28%	-	3.19%	0.30%	-	-	-	-	1.05%	81.19%
Mar-2023	15.34%	4.66%	1.30%	0.92%	-	-	14.01%	-	4.98%	58.79%
Apr-2023	15.04%	3.53%	1.38%	4.85%	0.04%	-	11.99%	-	5.79%	57.38%
May-2023	10.52%	8.04%	0.46%	9.24%	2.84%	-	16.32%	-	4.91%	47.66%
Jun-2023	9.67%	10.35%	0.33%	10.46%	0.69%	0.42%	19.11%	-	1.58%	47.39%
Jul-2023	6.72%	14.93%	0.27%	8.03%	-	-	21.09%	-	3.01%	45.95%
Aug-2023	3.16%	17.78%	-	12.44%	-	-	10.12%	-	0.70%	55.80%
Sep-2023	10.56%	9.44%	-	18.24%	-	-	0.98%	-	-	60.78%
Oct-2023	2.34%	11.65%	-	8.64%	-	-	1.46%	-	-	75.90%
Nov-2023	0.25%	8.44%	-	3.45%	-	-	0.33%	-	1.74%	85.78%
Dec-2023	1.12%	14.02%	0%	3.61%	-	8.71%	-	-	2.21%	70.34%
Jan-2024	9.63%	10.39%	0.43%	12.07%	0.16%	3.66%	1.19%	-	2.23%	60.24%
Feb-2024	12.23%	7.99%	4.46%	16.06%	-	2.71%	4.76%	-	1.47%	50.32%
Mar-2024	20.00%	0.03%	7.28%	12.93%	-	-	1.15%	0.13%	6.59%	51.89%
Apr-2024	20.00%	-	6.59%	8.07%	-	-	-	-	16.29%	49.05%
May-2024	19.76%	0.20%	5.83%	7.04%	-	-	-	-	15.83%	51.35%
Jun-2024	9.23%	12.03%	2.84%	8.40%	-	-	-	-	15.17%	52.33%
Jul-2024	18.98%	0.44%	2.28%	7.51%	3.88%	-	-	0.02%	8.15%	58.74%
Aug-2024	7.85%	-	0.03%	-	5.83%	-	7.70%	-	4.29%	74.30%
Sep-2024	7.71%	-	-	-	8.22%	0.31%	8.05%	-	5.36%	70.34%
Oct-2024	12.62%	-	-	-	2.98%	4.19%	15.84%	-	9.01%	55.36%
Nov-2024	10.76%	0.01%	-	0.20%	-	1.71%	4.69%	-	5.86%	76.77%
Dec-2024	3.77%	1.61%	-	0.94%	-	1.47%	0.48%	-	3.62%	88.12%
Jan-2025	10.88%	3.83%	3.32%	1.05%	-	-	0.62%	-	7.17%	73.12%
Feb-2025	18.84%	1.16%	8.09%	0.14%	-	-	-	-	14.17%	57.60%
Mar-2025	7.14%	-	0.61%	0.75%	2.77%	-	-	-	7.05%	81.68%
Apr-2025	2.23%	-	-	-	1.04%	-	5.06%	-	1.66%	90.01%
May-2025	3.31%	-	-	-	1.25%	-	5.89%	-	1.87%	87.68%
Jun-2025	10.40%	2.57%	-	-	3.86%	4.36%	22.80%	-	7.28%	48.73%

¹² For the avoidance of doubt, the allocation shown in this column takes into account the return-based money market position in the base index, as well as the deleverage cash position resulting from the volatility control feature and the momentum risk control cash position from the momentum risk control adjustment feature.



IMPORTANT INFORMATION

The index is calculated and published by the Index Calculation Agent. The Index Calculation Agent uses its best efforts to ensure that the index is calculated correctly. The Index Calculation Agent does not warrant the accuracy or completeness of any information contained herein. Irrespective of its obligations towards any issuer of a financial instrument linked to the index, the Index Calculation Agent has no obligation to point out errors in the index to third parties including but not limited to investors and/or financial intermediaries of the financial instrument. The calculation and publication of the Index by the Calculation Agent for the purpose of use in connection with the financial instrument does not constitute a recommendation by the Index Calculation Agent to invest capital in said financial instrument nor does it in any way represent an assurance or opinion of the Index Calculation Agent with regard to any investment in said financial instrument.

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The GS Momentum Builder Focus ER Index is an index that measures a strategy that is a momentum driven strategy, aiming to capture trends in the market by using historical data over predefined time periods. There is no guarantee that the index will be able to capture trends effectively, or that the chosen time-period will still be relevant in the future. There is no guarantee that the index will not underperform some or all of the underlying assets. In particular, GS Momentum Builder Focus ER Index may have a significant weight in one of those assets at the time of a sudden drop, or no exposure to one of those underlying assets at a time it has a strong performance.

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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