# Stifel Financial Corp. Market Risk Rule Disclosures For the Quarterly Period ended December 31, 2022

### **Market Risk Disclosure Overview**

Stifel Financial Corp. ("SF") is required to provide this market risk disclosure in accordance with the "Risk-Based Capital Guidelines: Market Risk" rule ("MRR") jointly released by the Board of Governors of the Federal Reserve System ("FRB"), the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation. In addition to our Value-at-Risk ("VaR") disclosure in the December 31, 2022 10-K Item 7A – Quantitative and Qualitative Disclosures about Market Risk, SF is required to disclose 10-day VaR and 10-day Stressed VaR ("SVaR"). Please refer to our December 31, 2022 10-K for further details.

This disclosure may differ from similar disclosures in SF's Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q since such reports are based on SEC and U.S. GAAP reporting requirements, which may differ from requirements under the MRR. The MRR specifies that an asset or liability categorized as "trading" under U.S. GAAP would not on its own determine whether the assets or liability meets the covered position definition for purposes of the MRR. A covered position is defined under the MRR as:

- 1) Trading assets or trading liabilities (whether on- or off balance sheet) meeting the following criteria:
  - The position is a trading position
  - The position is a hedge for another covered position
  - The position is free of any restrictive covenants on its tradability or SF is able to hedge the material risk elements of the position in a two-way market
- 2) Foreign exchange or commodity positions, regardless of whether the position is a trading asset or trading liability, excluding any structural foreign currency positions that SF chooses to exclude with prior supervisory approval.

## VaR and SVaR

To measure, monitor and manage trading risks arising from equity, volatility and interest rate sensitive instruments, SF calculates VaR and SVaR for all covered positions on a daily basis. SF incorporates VaR and SVaR results in the calculation of Risk Weighted Assets in accordance with Bank Holding Company capital requirements. Both calculations are performed using the VaR model described in the December 31, 2022 10-K and are subject to periodic independent validation of modeling assumptions, conceptual soundness, limitations and uncertainties. SF's portfolio of covered positions is primarily comprised of equity and fixed income instruments.

SF calculates VaR calibrated to a 99% confidence level, over a 10-day period, utilizing historical simulation based on daily market data for the previous 60 months.

The following table set forth the high, low, daily average, and period-end 10 day VaR for all trading portfolios as of the reporting period and dates indicated:

2022-Q4			Daily	As of	As of
99% 10-Day VaR	High	Low	Average (1)	Dec 31, 2022	Sept 30, 2022
Fixed Income	9,584,289	3,698,286	5,131,734	4,733,658	4,801,627
Equity	3,885,958	973,107	1,857,402	1,604,026	3,691,435
Diversification	N/A (2)	N/A (2)	-404,712	-44,249	-359,537
Total	10,995,667	4,448,002	6,584,425	6,293,434	8,133,525

<sup>(1)</sup> The daily average shown is calculated over the entire quarter. Per regulatory requirements, the daily average of the previous 60 business days from the period end date is utilized in the capital calculations.

SVaR is a measure of the potential loss in value of inventory positions during a period of significant market stress. SVaR is calculated at the 99% confidence level over a 10-day period utilizing daily market data from a continuous 12-month period that we've determined would be particularly stressful for our current trading inventories. SVaR is currently calculated using the period from April 15, 2019 to April 15, 2020. The following table sets forth the high, low, daily average, and period-end 10-day SVaR for all of our trading portfolios as of the reporting period and dates indicated:

2022-Q4			Daily	As of	As of
99% 10-Day SVaR	High	Low	Average (1)	Dec 31, 2022	Sept 30, 2022
Fixed Income	23,490,793	11,823,758	17,980,157	18,147,322	11,554,204
Equity	7,114,747	1,032,967	3,441,389	3,105,174	6,540,165
Diversification	N/A (2)	N/A (2)	-235,549	-372,238	-355,476
Total	26,585,391	13,793,899	21,185,996	20,880,258	17,738,893

<sup>(1)</sup> The daily average shown is calculated over the entire quarter. Per regulatory requirements, the daily average of the previous 60 business days from the period end date is utilized in the capital calculations.

### **Modeling Overview**

SF utilizes a historical VaR model. This approach is a standard amongst industry peers and, although computationally intensive, can incorporate more complex exposure as it arises. SF utilizes the results of its VaR model to calculate Risk Weighted Assets in accordance with Bank Holding Company capital requirements. The model is subject to periodic independent validation with regards to modeling assumptions, conceptual soundness, limitations and uncertainties and has been externally validated by a third party consultant. Further, SF has created internal policies and procedural documents that provide a full description of the model and mathematical disciplines utilized.

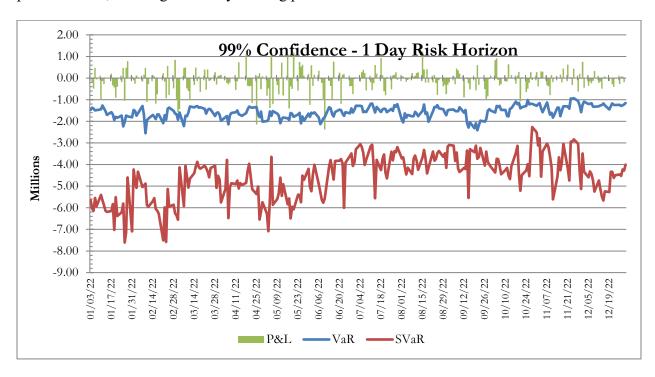
### **Backtesting**

Backtesting compares the previous day's projected VaR results to regulatory-defined daily trading profits or losses, which excludes fees, commissions, reserves, net interest income, and intraday trading, as required by the MRR. SF monitors the number of times that regulatory-defined trading losses exceed VaR ("VaR exception") to ensure consistency with our expectations at a 99% confidence level. During the twelve month period ended December 31,

<sup>(2)</sup> As the high end and low end occur on different days for the different risk types, it is not meaningful to calculate a portfolio diversification effect.

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2022, there were two days our trading portfolios had losses that exceeded our total covered portfolio VaR, utilizing a one-day holding period.



Break Report				
			SVaR	
Date	P&L	VaR	Break?	Break #
4/25/2022	(2,149,885.00)	(1,342,070.59)	No	1
6/10/2022	(2,375,263.79)	(1,812,847.33)	No	2

We utilize stress testing to complement our VaR analysis to measure the trading portfolio's risk under historical and hypothetical adverse scenarios. SF's Enterprise Risk Management department conducts stress tests on a regular basis for changes in volatility expectations, interest rate spreads, and general increases in interest rates.

# **Stress Testing**

Stress testing is accomplished by utilizing either specific historical events with a given portfolio or by assuming large correlated and uncorrelated standard deviation moves on the portfolio's risk factors. Beyond the exercise of replicating and identifying "worst case" losses, the exercise will also help identify any potential modeling concerns. Occasionally, a security can be utilizing a valuation model that will only reveal errors under extreme market movements.

#	Scenario Name	Description	Market Factors
1	Bond Sell Off Equity Sell Off	Representative of a shift from fixed income securities to equity securities and vice versa	300 basis point shift in risk free yield curves with a correlated response in all credit curves.

		<ul> <li>Reflective of a period of strong equity returns with weak fixed income returns and vice versa</li> <li>Bond Sell Off shifts risk free LIBOR 300 bp causing correlated shift across all FI risk factor curves while Equity positions are left unchanged</li> <li>Equity Sell Off shifts S&amp;P by -40% causing correlated shift across all equities while FI positions are left unchanged</li> </ul>	40% shift in the S&P 500 with correlated response for all individual credits.
2	Correlated Sell Off	<ul> <li>Representative of a positively correlated decline in both the equity and fixed income market</li> <li>Shift risk free LIBOR of 300 bp causing correlated shift across all FI risk factor curves while independently shifting all equities - 40%</li> </ul>	300 basis points upward shift in risk free yield curves with a correlated response in all credit curves. 40% decline in all Equities.
3	Corporate Spread Shift	<ul> <li>The spread of corporate securities over their risk free curves is shifted upwards as investors move away from rated securities</li> <li>Shift in spread of corporate securities over their risk free while holding equities and risk free curves constant</li> </ul>	All corporate security spreads over their corresponding risk free curves shifted upwards by 300 basis points.
4	Flight to Quality Test	<ul> <li>Yields of rated securities rise because of a perceived decrease in their credit quality while yields of US government issued securities decline</li> <li>Shift risk free LIBOR of 300 bp causing correlated shift across all FI risk factor curves while independently shifting the risk free curve down by 300 bp and equities by -40%</li> </ul>	300 basis point upward shift in corporate security spreads. 300 basis point downward shift in risk free curves. 40% decline in all equities.
5	Non-Parallel Credit Shift	Credit curve shift for investment and non-investment grade securities, independently	300 basis point upward shift in non-investment grade corporates with 300 basis point downward shift in investment grade corporates
6	September 11, 2001	<ul> <li>Representative of the market movements of September 11, 2001</li> <li>Calibrated shift of Treasuries, corporates, and equities based on historical period</li> </ul>	Run portfolio through the five day periods before and after September 11, inclusive of the date.

7	Fall 08	<ul> <li>Representative of market</li> </ul>	Run portfolio through the
		movements during the financial	fall of 2008 time frame.
		crisis of 2008	
		<ul> <li>Calibrated shift of Treasuries,</li> </ul>	
		corporates, and equities based on	
		historical period	

### Securitizations

Securitizations or re-securitization positions, as defined by the MRR, include a transaction in which all or a portion of the credit risk of one or more underlying exposures is transferred to one or more third parties; the credit risk associated with the underlying exposures has been separated into at least two tranches that reflect different levels of seniority; performance of the securitization exposures depends upon the performance of the underlying exposures; and all or substantially all of the underlying exposures are financial exposures such as loans, commitments, guarantees, receivables, asset-backed securities, mortgage-backed securities, other debt securities, or equity securities. A re-securitization is a securitization in which one or more of the underlying exposures is a securitization position.

Excluding mortgage-backed pass through securities guaranteed by government sponsored entities, SF holds \$8.8 million of securitizations considered covered positions as of December 31, 2022. SF's securitization positions consisted of residential mortgage backed securities and other asset backed securities as presented in Note 6 – Financial Instruments Owned and Financial Instruments Sold But Not Yet Purchased, in our December 31, 2022 10-K.

Further information on securitization positions can also be found in our December 31, 2022 10-K Note 5 - Fair Value Measurements and Item 7A – Quantitative and Qualitative Disclosures About Market Risk.

### Company Information

Stifel Financial Corp. (NYSE: SF) is a financial services holding company headquartered in St. Louis, Missouri, that conducts its banking, securities, and financial services business through several wholly owned subsidiaries. Stifel's broker-dealer clients are served in the United States through Stifel, Nicolaus & Company, Incorporated, including its Eaton Partners business division, Keefe, Bruyette & Woods, Inc., Stifel Independent Advisors, LLC, and Miller Buckfire & Co., LLC each of which is a broker-dealer registered with the SEC and members of FINRA. Stifel Financial Corp. has the following non-U.S. subsidiaries. In the United Kingdom, Stifel Nicolaus Europe Limited is authorised and regulated by the Financial Conduct Authority ("FCA") (FRN 190412) and is a member of the London Stock Exchange and also trades under the name Keefe, Bruyette & Woods Europe. In Germany, Stifel Europe Bank AG is regulated by the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, or BaFin). Stifel Schweiz AG, which is a representative of Stifel Europe Bank AG in Switzerland, is regulated by the Eidgenössische Finanzmarktaufsicht (FINMA). Stifel Europe Bank AG's Milan Branch is authorized and regulated by BaFin and supervised by CONSOB/Bank of Italy, its Paris Branch is authorized and regulated by BaFin and supervised by Autorité des marchés financiers (AMF)/Autorité de Contrôle Prudentiel (ACPR), and its Madrid Branch is authorized and regulated by BaFin and supervised by the National Securities Market Commission (CNMV). In Geneva, Stifel maintains Stifel Europe Geneva S.A., a wholly owned representative office of Stifel Nicolaus Europe Limited. In Canada, Stifel Nicolaus Canada, Incorporated is authorized and regulated by Investment Industry Regulatory Organization of Canada (IIROC) and also trades under the names "Stifel GMP" and "Stifel First Energy". The Company's broker-dealer affiliates provide securities brokerage, investment banking, trading, investment advisory, and related financial services to individual investors, professional money managers, businesses, and municipalities. Stifel Bank and Stifel Bank & Trust offer a full range of consumer and commercial banking solutions. Stifel Trust Company, N.A. and Stifel Trust Company Delaware, N.A. offer trust and related services. To learn more about Stifel, please visit the Company's website at www.stifel.com.

### Forward-Looking Statements

Certain statements made in this disclosure document may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding our VaR-based models. Forward-looking statements are subject to risks and uncertainties that could cause actual results or outcomes to differ materially from those expressed in the forward-looking statements. Those results or outcomes could occur as a result of a number of factors, some of which are beyond our control. Factors that could result in our actual results differing materially from those described in forward-looking can be found in the "risk factors" section of our Form 10-K for the year ended December 31, 2022 and updated in subsequent Form 10-Q's and our other filings with the SEC, which are available on <a href="www.stifel.com">www.stifel.com</a> and <a href="www.stifel.c