Strategy Update Multi-Asset Solutions

June 2023

SSGA Market Regime Indicator Update

The Market Regime Indicator (MRI) is a proprietary macro indicator developed by the SSGA Investment Solutions Group (ISG). Based on forward-looking market information, it is designed to identify the level of Risk aversion/appetite in the market. The factors utilized to generate the signal include implied equity and currency volatility as well as spreads on fixed income.

The Investment Solutions Group uses the MRI as one of the inputs into its global tactical asset-allocation decisionmaking process.

The MRI is the result of over twelve months of rigorous testing by the Investment Solutions Group. The test results showed that the MRI tracked historical market stress events and trading strategies based on the level of outperformance generated by the indicator. By design, the MRI signal varies between 0% and 100%. On this scale, a high level is often characterised by market tensions, such as a significant increase in volatility and a drop in Risky asset prices.

We Have Identified Five Different Market Regimes:

Crisis (level close to 100%) — Extreme Risk aversion ('Fear/Panic')

High Risk Aversion (level above the average) — Aversion towards Risky assets

Normal (level oscillating around the mean) — Characterised by neutral market sentiment

Low Risk Aversion (level below the average) — Appetite towards Risky assets

Euphoria (level close to 0%) — Extreme Risk appetite ('Greed/Complacency')

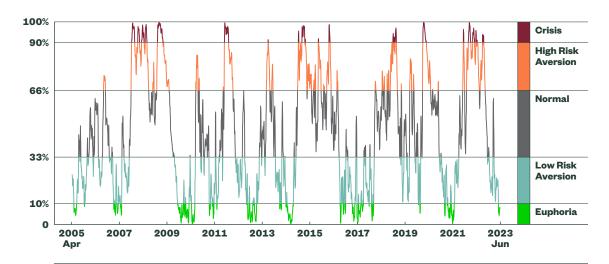
Figure 1 Market Regime Indicator

Market Regime Indicator	31/03/2023	30/06/2023
Average — Equity Implied Volatility	Low	Euphoria
Average — Risky Debt Spreads	Normal	Low
Average — Currency Implied Volatility	Low	Euphoria
MRI Level	Low	Euphoria

Source: State Street Global Advisors Investment Solutions Group, 30 June 2023.



Figure 2 Market
Regime Indicator
(MRI) Evolution



Source: As of June 30, 2023. The data displayed is not indicative of the past or future performance of any State Street Global Advisors product. The portion of results through March 31, 2011 represents a back-test of the MRI model, which means that those results were achieved by means of the retroactive application of the model which was developed with the benefit of hindsight. Data displayed beyond this date is not backtested, but is still generated by the model referenced. All data shown above does not represent the results of actual trading, and in fact, actual results could differ substantially, and there is the potential for loss as well as profit. The Market Regime Indicator (MRI) is a quantitative framework that attempts to identify the current market risk environment based on forward-looking market indicators. We believe the factors used, equity implied volatility, currency pairs implied volatility and bond spreads, are good indicators of the current risk environment as they are responsive to real-time market impacts and in theory should include all current and forward views of those markets. These factors are combined to create a single measure and used to identify one of five risk regimes: Euphoria, Low Risk, Normal, High Risk, and Crisis. A slight calculation change was made as of June 28, 2019.

Market Commentary

The second quarter of 2023 was generally a strong one for risk assets. Global equities gained amid enthusiasm over AI (artificial intelligence) and speculation that central banks could be closing in on the end of the rate hiking cycle. Against this back drop the MRI moved lower over the period. Having moved back into Low Risk regime at the end of March the signal moved into Euphoria regime in early June. This was the first move into Euphoria regime since the summer of 2021 at which point markets were still in the midst of the post COVID rally.

The Implied Volatility on Equities factor began the period in Low Risk regime, which given mid-March had seen the demise of Silicon Valley Bank and Credit Suisse, was somewhat surprising. Equity volatility had however reverted remarkably quickly after this episode and continued to move lower at the start of the quarter with the factor moving into Euphoria regime. Hawkish developments including the surprise move by the Bank of New Zealand to hike by a larger-than-expected 50bps, and U.K. inflation remaining in double-digits, alongside weak data that increased fears regarding a potential

US recession, dented sentiment somewhat in early April, however equities remained resilient and the factor stable.

Early May saw the Implied Volatility on Equities factor move higher into Low Risk regime as renewed banking turmoil hit markets. First Republic was seized by regulators and then sold to JPMorgan and the KBW bank index fell beneath the lows it had reached during the SVB and Credit Suisse collapses. In addition US debt ceiling concerns moved to the fore as Treasury Secretary Yellen warned that the government could default on debt as soon as June 1. The factor moved between Low Risk and Euphoria regimes for the reminder of the month as debt ceiling concerns continued but markets grew more confident that the Fed would pause their rate hikes following a CPI release that pointed to a lasting slowdown in inflation.

In early June the factor moved lower once again into Euphoria regime as the debt ceiling deal was approved by Congress and the VIX Index (Cboe Volatility index) moved to its lowest level since February of 2020, prior to the COVID pandemic. The factor remained in Euphoria until the end of the quarter with the key market event the Fed pausing as it ended a series of 10 successive rate hikes.

The movements of the Implied Volatility on Currencies factor were rather uninteresting over the second quarter. In mid-April the factor moved from Low Risk into Euphoria regime where it remained until the end of June. This stability was however in itself very unusual and is in fact the longest single period the factor has been in Euphoria regime since 2014, and one which could of course still extend into July.

The Risky Debt Spread factor was the most elevated of the three MRI inputs over the quarter. The factor began April in Normal regime where it remained until the end of May with spreads remaining largely stable throughout the two months.

The improvement in the risk environment in June with the debt ceiling resolution and the Fed pause saw risky debt spreads tighten with both Emerging market and High Yield spreads tightening towards their lows for the year. The High Yield market was also supported by technical factors in the US where close to \$65 billion of have been bonds upgraded to investment grade ratings this year, while new issue volume has remained manageable. The factor moved into Low Risk regime in early June where it closed the quarter.



ssga.com

Marketing communication.
For investment professional use only.

State Street Global Advisors Worldwide Entities

Abu Dhabi: State Street Global Advisors Limited, ADGM branch is regulated by the Financial Services Regulatory Authority (FSRA). This document is intended for Professional Clients or Market Counterparties only as defined by the FSRA and no other person should act upon it. State Street Global Advisors Limited, ADGM Branch, Al Khatem Tower, Suite 42801, Level 28. ADGM Square, Al Maryah Island, P.O Box 76404, Abu Dhabi, United Arab Emirates, Regulated by the ADGM Financial Services Regulatory Authority. T: +97122459000. Australia: State Street Global Advisors, Australia, Limited (ABN 42 003 914 225) is the holder of an Australian Financial Services License (AFSL Number 238276). Registered office: Level 14, 420 George Street, Sydney, NSW 2000, Australia. T: +612 9240-7600. F: +612 9240-7611. Belgium: State Street Global Advisors Belgium, Chaussée de La Hulpe 185, 1170 Brussels, Belgium, T: +32,2,663 2036. State Street Global Advisors Belgium is a branch office of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. Canada: State Street Global Advisors, Ltd., 1981 McGill College Avenue. Suite 500, Montreal, Qc, H3A 3A8, T: +514 282 2400 and 30 Adelaide Street Fast Suite 800 Toronto, Ontario M5C 3G6. T: +647 775 5900. France: State Street Global Advisors Europe Limited. France Branch ("State Street Global Advisors France") is a branch of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. State Street Global Advisors France is registered in France with company number RCS Nanterre 899 183 289, and its office is located at Coeur Défense - Tour A – La Défense 4, 33e étage, 100, Esplanade du Général de Gaulle, 92 931 Paris La Défense Cedex, France, T: +33144454000, F: +331444541 92. Germany: State Street Global Advisors Europe Limited, Branch in Germany, Brienner Strasse 59, D-80333 Munich, Germany ("State Street Global Advisors Germany"), T: +49 (0)89 55878 400. State Street Global Advisors

Germany is a branch of State Street Global Advisors Furone Limited registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. Hong Kong: State Street Global Advisors Asia Limited 68/F Two International Finance Centre, 8 Finance Street, Central, Hong Kong. T: +852 2103-0288. F: +852 2103-0200. Ireland: State Street Global Advisors Europe Limited is regulated by the Central Bank of Ireland, Registered office address 78 Sir John Rogerson's Quay, Dublin 2. Registered Number: 49934. T: +353 (0)1776 3000. F: +353 (0)1776 3300. Italy: State Street Global Advisors Europe Limited, Italy Branch ("State Street Global Advisors Italy") is a branch of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. State Street Global Advisors Italy is registered in Italy with company number 11871450968 - REA: 2628603 and VAT number 11871450968, and its office is located at Via Ferrante Aporti, 10 - 20125 Milan, Italy. T: +39 02 32066 100 F: +39 02 32066 155 Japan: State Street Global Advisors (Japan) Co., Ltd., Toranomon Hills Mori Tower 25F 1-23-1 Toranomon, Minato-ku, Tokyo 105-6325 Japan. T: +81-3-4530-7380. Financial Instruments Business Operator, Kanto Local Financial Bureau (Kinsho #345), Membership: Japan Investment Advisers Association The Investment Trust Association, Japan, Japan Securities Dealers' Association. Netherlands: State Street Global Advisors Netherlands, Apollo Building 7th floor, Herikerbergweg 29, 1101 CN Amsterdam, Netherlands, T: +31 20 7181 000, State Street Global Advisors Netherlands is a branch office of State Street Global Advisors Europe Limited. registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. Singapore: State Street Global Advisors Singapore Limited, 168, Robinson Road, #33-01 Capital Tower, Singapore 068912 (Company Reg. No: 200002719D, regulated by the Monetary Authority of Singapore). T: +65 6826-7555. F: +65 6826-7501 Switzerland: State Street Global Advisors AG, Beethovenstr. 19, CH-8027 Zurich. Registered with the Register of Commerce Zurich CHE-105.078.458. T: +41 (0)44 245 70 00. F: +41 (0)44 245 70 16. United Kingdom: State Street Global Advisors Limited, Authorised and regulated by the Financial Conduct Authority. Registered in England. Registered No. 2509928. VAT No. 577659181. Registered office: 20

Churchill Place, Canary Wharf, London, E14 5HJ. T: 020 3395 6000. F: 020 3395 6350. United States: State Street Global Advisors, 1 Iron Street, Boston, MA 02210-1641. T: 41 617 786 3000

This document is confidential. It is intended only for the person to whom it is addressed. These materials are only meant for qualified/institutional clients and are not meant for retail distribution. Clients should conduct their own due diligence on the SSSAFS and the financial services marketed. If you do not understand the contents of this document you should consult an authorised financial adviser.

Investing involves risk including the risk of loss of principal. The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without SSGA's express written consent. Equity securities may fluctuate in value in response to the activities of individual companies and general market and economic conditions.

Bonds generally present less short-term risk and volatility than stocks, but contain interest rate risk (as interest rates rise bond prices usually fall); issuer default risk; issuer credit risk; liquidity risk; and inflation risk. These effects are usually pronounced for longer-term securities. Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

SSGA uses quantitative models in an effort to enhance returns and manage risk. While SSGA expects these models to perform as expected, deviation between the forecasts and the actual events can result in either no advantage or in results opposite to those desired by SSGA. In particular, these models may draw from unique historical data that may not predict future trades or market performance adequately. There can be no assurance that the models will behave as expected in all market conditions. In addition, computer programming used to create quantitative models, or the data on which such models operate, might contain one or more errors. Such errors might never be detected, or might be detected only after the Portfolio has sustained a loss (or reduced performance) related to such errors. Availability of third-party models could be reduced or eliminated in the future.

The views expressed in this material are the views of Investment Solutions Group through the period ended 16 July 2021 and are subject

to change based on market and other conditions. All information is from SSGA unless otherwise noted and has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.

The information contained in this communication is not a research recommendation or 'investment research' and is classified as a 'Marketing Communication' in accordance with the Markets in Financial Instruments Directive (2014/65/EU) or applicable Swiss regulation. This means that this marketing communication (a) has not been prepared in accordance with legal requirements designed to promote the independence of investment research (b) is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This communication is directed at professional clients (this includes eligible counterparties as defined by the [appropriate EU regulator or applicable Swiss Regulator]) who are deemed both knowledgeable and experienced in matters relating to investments. The products and services to which this communication relates are only available to such persons and persons of any other description (including retail clients) should not rely on this communication.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor.

Past performance is not a guarantee of future results.

© 2023 State Street Corporation. All Rights Reserved. ID1701250-4708815.8.1.GBL.RTL 0723 Exp. Date: 07/31/2024

