55ip Risk Management Capabilities

55ip provides portfolio construction and rebalancing algorithms aimed at protecting investors from extreme losses through increased diversification and monitoring the effectiveness of diversification in protecting capital in various market conditions.

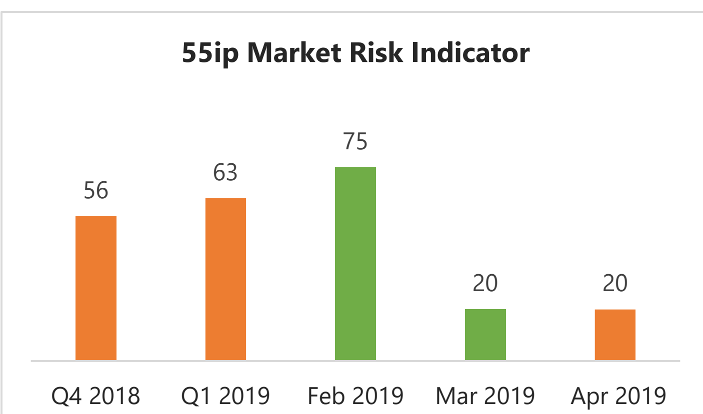
55ip believes asset class diversification is helpful, but its effectiveness is limited in certain market conditions when there is a high degree of correlation. We help advisors leverage sophisticated quantitative capabilities to address these limitations by dynamically shifting asset allocation from higher volatility assets such as equities to lower volatility assets such as short duration fixed income.

55ip Risk Indicators

Market Risk Indicator (MRI)

55ip MRI guides allocation among global equities and a shelter basket (cash equivalents and other stable asset classes) to protect investors from extreme losses due to correlated and down markets. Based on the 55ip MRI score, exposure is dynamically adjusted to minimize the drag due to such allocation while aiming to provide protection when most needed. This becomes significantly important for investors who are averse to losses because of income or other needs.

The MRI score can range from 0 (lowest possible downside risk assessment) to 100 (highest possible downside risk assessment). (See White Paper). The MRI score is based on several indicators for **Valuations** (e.g. price to book ratio), **Macroeconomic Conditions** (e.g. manufacturing sentiment index), **Financing Indicators** (e.g. trend indicators) and **Return Stability** (e.g. multi-asset VIX).



55ip Market Risk Indicator (MRI) score remained unchanged at 20 in April 2019.

Based on this score in April, the shelter basket allocation remains at 10% in the Equities sleeve of the standard application of MRI. Below are more details on each of the metrics contributing to the MRI.

• **VALUATION METRICS:** Valuation concerns continue to contribute to our overall April MRI score. Our metrics indicate that investors are demonstrating uncertainty regarding valuations.

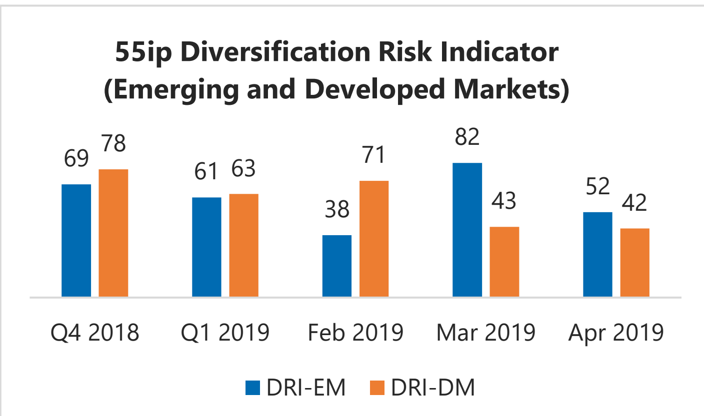
- **MACROECONOMIC METRICS:** Macroeconomic metrics are stable. Consumer Confidence declined in March driven in part by concerns about business and labor markets. However, consumers remain confident that the economy will continue expanding in the near-term. Indicators for the manufacturing and service sector were positive in March, albeit at a slower pace.
- **FINANCING METRICS:** Financing risks continue to be low. Credit spreads, the difference in yield between corporate bonds and treasuries, tend to widen when investors perceive more economic risk.

In general, since Q4 2018, credit spreads have narrowed. In addition, the Fed's change in stance is more supportive to credit market conditions.

- **RETURNS STABILITY METRICS:** Return stability metrics did not signal any significant risks, and for the most part did not contribute to our April MRI score.

Diversification Risk Indicator (DRI)
55ip DRI guides allocation among US and non-US equities to protect from times when international exposure could lead to increased risk instead of diversification and risk reduction. This score is comprised of two regional components: DRI for Emerging Markets (DRI-EM) guides allocation between emerging market equities and US domestic markets. DRI for Developed Markets (ex-US) (DRI-DM) guides allocation between developed market equities and US domestic markets.

DRI score can range from 0 (lowest possible downside risk assessment) to 100 (highest possible downside risk assessment).



The regional risk scores, DRI for Emerging Markets (DRI-EM) went from 82 to 52 and for Developed Markets (DRI-DM) went from 43 to 42.

The DRI-EM score decreased from last month, indicating less overall risk in Emerging Markets, although the DRI-EM will retain a 26% reduction from the maximum EM equity allocation. The DRI-DM measure remained nearly unchanged with a reduction in the DM equity allocation of 21% in a standard 55ip-powered portfolio.

Compared to March, DRI EM decreased significantly. Relative to U.S. markets, improvement in long-term momentum, suggesting less equity risk in EM markets, contributed to lowering the DRI-EM score

DRI-DM was in line with last month. Measures of higher relative momentum in U.S. Equity markets compared to Developed Markets has contributed to the overall DRI-DM score.

Please contact us with any questions at 617.960.9559.