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Introducing the Daily ISI

The Addepar Investor Sentiment Index (ISI) Research Note is uniquely designed to provide transparency into the investment behavior of the wealthiest tier of investors. Leveraging Addepar's network of RIAs and family offices, we analyze the investment data on our platform to gain insight into how ultra-high-net-worth (U/HNW) investors are making portfolio adjustments and therefore express their views on the economy and markets. Additionally, where relevant, we conduct client interviews to supplement the data analysis presented in our research notes. To ensure privacy, we never disclose identities.

Key November findings:

- In this note, we introduce our new daily investor sentiment index (ISI), which gives an even more high-frequency read of investor sentiment during the large market gyrations over the past two years. The ISI is an important triangulation and navigation tool, particularly during challenging market conditions, and the Daily ISI will provide a more granular understanding of markets.
- On average, investors rebalance their portfolios even during extreme market events like the sell-off in Q4 of 2018 and at the start of the pandemic in Q1 2020. In the context of current frothy market conditions, even a relatively large market correction would not likely trigger investors to reduce exposures.
- More investors are becoming active as market volatility increases. The recent spike in volatility at November month-end has been followed by increasing investor portfolio activity.

Investor Sentiment Index provides a clearer signal of U/HNW investor sentiment

We introduce our new daily investor sentiment index (ISI), which gives a higher-frequency readout of investor behavior on the Addepar platform during the large market gyrations over the past two years.

Investment professionals and academics look at asset flows as a gauge of aggregate demand at the security, asset class, or sector levels. Increasing demand, in theory, should be linked to increased asset prices, and vice versa, decreasing demand should be linked to falling prices. For investors, asset flows are therefore an important point of triangulation to other traditional valuation techniques.

Moreover, our ISI seeks to solve two of the major problems inherent in other flows data sets. Traditional aggregate flows data have two primary limitations that we aim to improve upon with the Addepar Investor Sentiment Index (ISI).

1) Traditional flows data are aggregated across all market participants. Therefore, it is not possible to isolate individual investors or groups of investors. Flows show an aggregate view across asset managers, institutional investors, insurance, HNW, retail investors, and others. It is therefore impossible to disaggregate this data to make a point of accurate comparison.
2) In other flows data, the definition of asset flows is often quite simple. It is the net amount of money moving in or out of an asset. Because flows are effectively dollar-weighted, an individual investor can have an outsized impact on the aggregate flow, simply by virtue of them having the largest flow. It is therefore challenging to discern whether the flows we see are the result of broad-based sentiment or of an individual investor's decisions. For this reason, analysts generally look at long-term trends in flows data and do not rely too much on the shorter-term wiggles.

The Addepar ISI aims to resolve these two challenges. The ISI is computed as the percentage of U/HNW portfolios meaningfully adding exposure to their portfolios minus the percentage of portfolios meaningfully subtracting exposure from their portfolios. Through this simple methodology, the ISI enables wealth managers to isolate the aggregate sentiment across a large slice of portfolios in this U/HNW private wealth segment while portfolio weighting the flows.

How do investors react to a market correction?

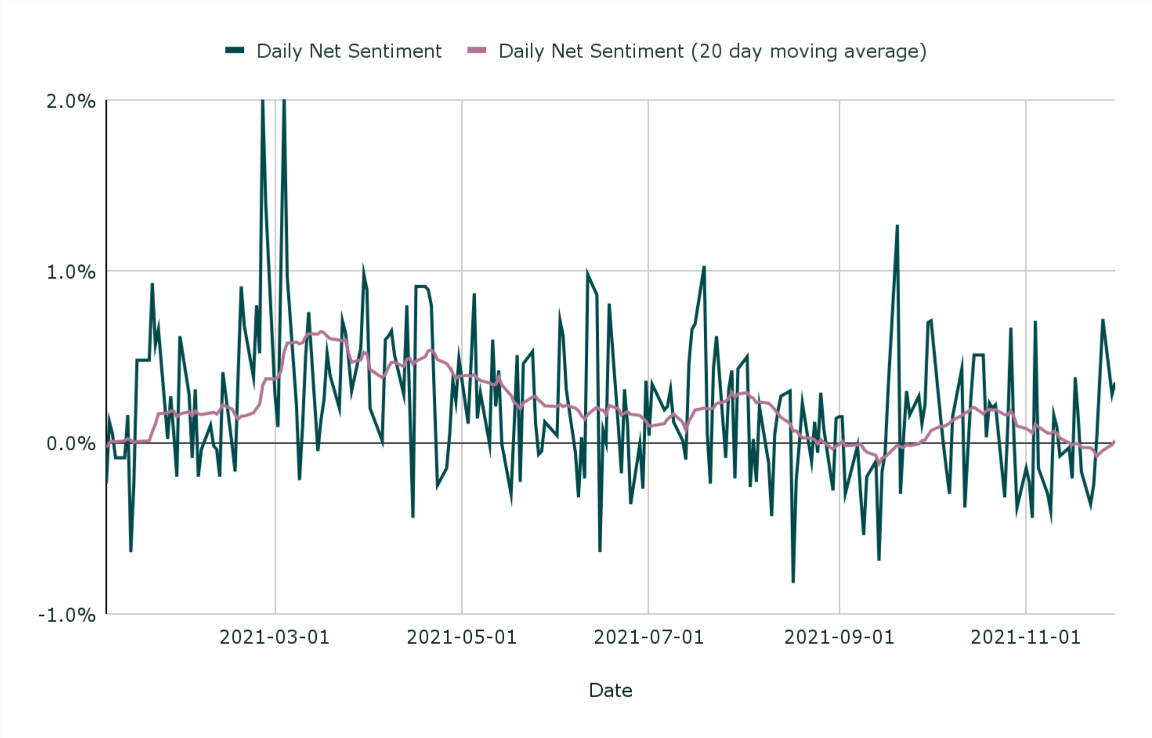
In addition to providing a real-time view into movements of capital, the ISI is a useful tool for understanding how investors might behave in different market/economic circumstances. Take, for example, the current one where the combination of a super long bull market, heightened equity sensitivity to interest rates, and a Fed tightening due to spiking inflation has investors wondering whether a significant market correction might be in the cards soon. In this context, one question we are hearing a lot is how will investors react should a market correction occur? Will investors stick to their allocations? Or are they likely to sell potentially igniting a self-reinforcing bear market?

To answer this question, we can look at daily sentiment data to study how investors generally trade their equity portfolios. We can then also look at the covid crash of 2020 as a case study to learn how investors behave in an extreme market event. Finally, we can look at the sentiment during the most recent volatile weeks.

Figure 1 shows daily investor sentiment in 2021. When measured over the full history of data, on average daily sentiment is very slightly positive at .09% and a standard deviation of .5%. This can be interpreted as investors generally do not have much of a bias to being bullish or bearish. The relatively high level of volatility in the sentiment data is indicative of many different investment behaviors, which can be smoothed for the weekly or monthly level for analysis. It is also indicative that many investors represented in the index are not day trading and their activity is not tightly tied to the daily movements of markets.

Figure 1: Daily Investor Sentiment

January 1, 2021 – November 30, 2021



Source: Addepar

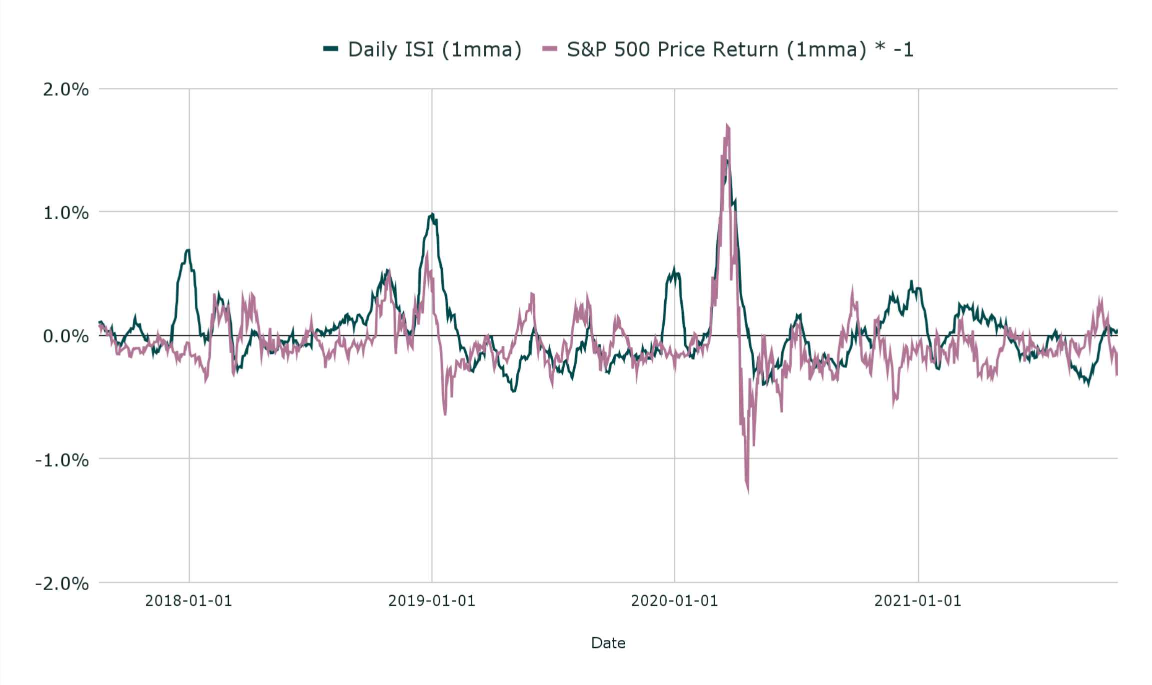
On average, investors are rebalancing their portfolios with market movement

Figure 2 shows the Daily ISI relative to negative price returns of the S&P 500 on a 1-month moving average basis. As the table visually suggests, investor sentiment is negatively correlated with the returns of the S&P 500 on a contemporaneous basis. When equities rally, investors generally sell into a rising market. And when equities sell-off, investors buy equities. This generates a strong negative correlation between the ISI indicator and equity returns of .5 when measured on a 1-month moving average basis.

Due to the construction of the ISI, there is no distinguishing between types of transactions currently. The ISI has seasonality in December due to coupon payments being automatically reinvested (highest at that time). Without the inclusion of coupon payments, correlation increases dramatically.

Figure 2: Investor Sentiment vs Negative S&P 500 Returns

July 31, 2017–November 30, 2021



Source: Addepar

The cause for the negative correlation between the ISI and equity returns is portfolio rebalancing. When equity prices move, portfolio weights shift and move out of sync with their strategic allocation. To shift allocations back to strategic allocations, investors must shift portfolios in the opposite direction of the markets. The correlation is particularly pronounced because equities (particularly U.S. Equities) remain the largest asset class in investors' portfolios.

We smoothed the data (i.e. used 1-month moving average) to draw out correlations. It is interesting to note that correlations degrade when the interval of smoothing shrinks. This occurs because the delay between market action and portfolio rebalancing is delayed and inconsistent across investors. Some investors have rebalancing rules that hold a tight threshold for rebalancing while others have wider bands, while the time required for a portfolio to come back into balance is also inconsistent. As one zooms out to a monthly average, the correlations emerge.

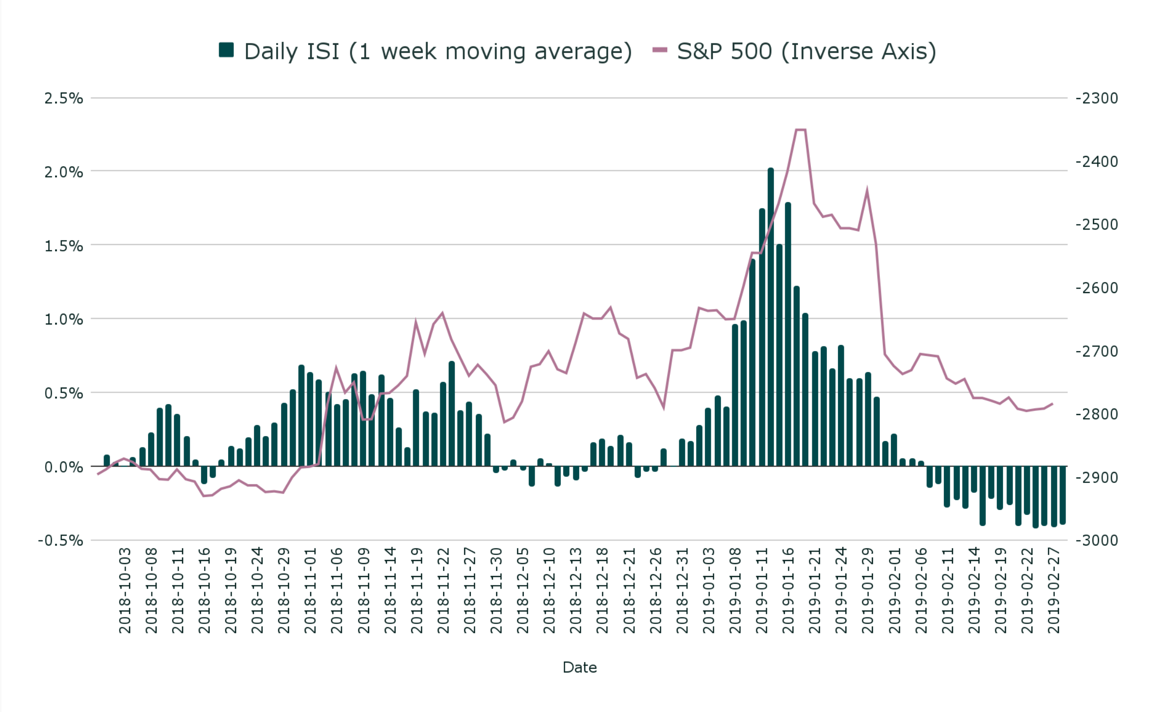
In figures 3 and 4, we take a closer look at investor sentiment during more extreme market events. Both during the approximately 15% sell-off at the end of 2018 and the

30% sell-off in the covid crash of 2020, aggregate investor behavior continued to show the diligent practice of rebalancing.

This demonstrates that investors and their managers (on average) remain diligent in their practices of rebalancing, even during relatively extreme market events. That discipline has served these investors well in that buying low and selling high continues to be a universal and timeless winning strategy.

Figure 3: Investor Sentiment in 2018 Sell-Off

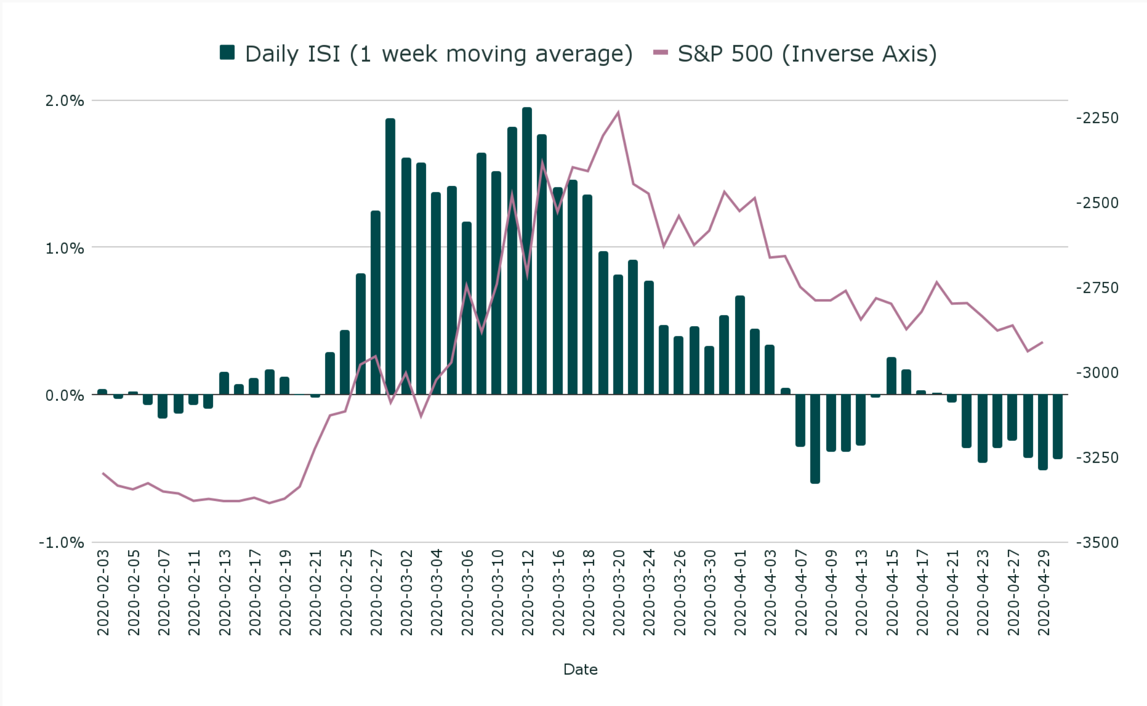
October 1, 2018 – February 28, 2019



Source: Addepar

Figure 4: Investor Sentiment in the Covid crash of 2020

February 1, 2020 – April 30, 2020



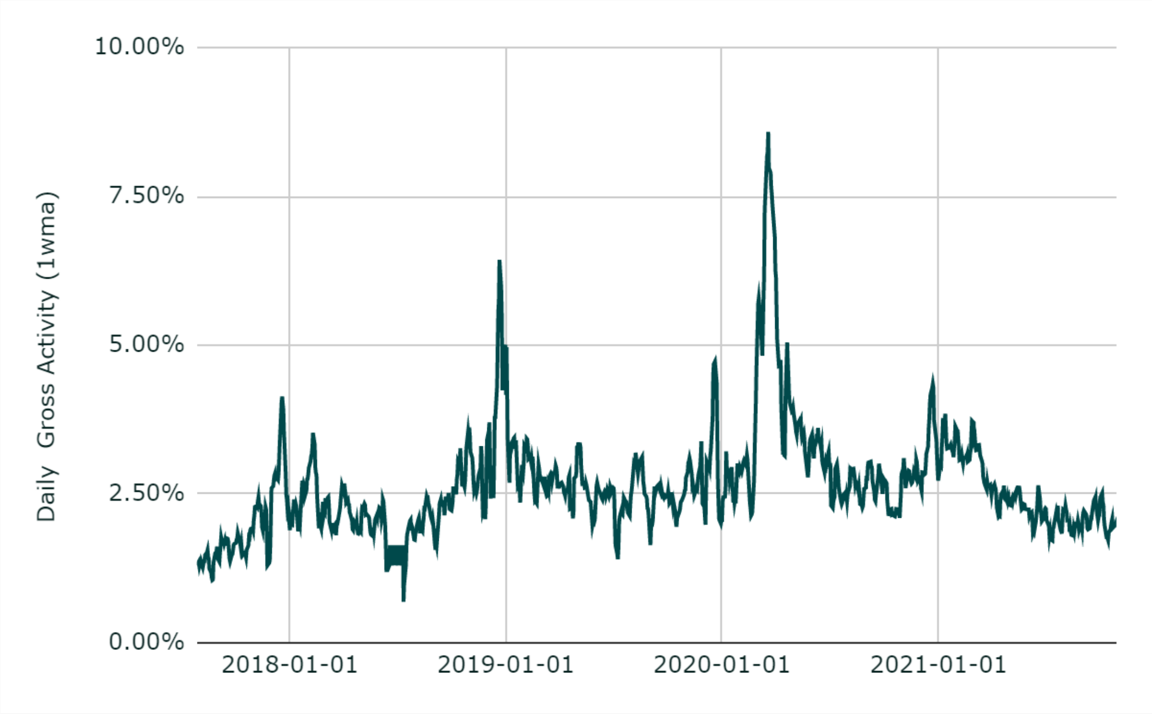
Source: Addepar

Many opposing views are represented in the sentiment index

Because correlations are so high, one may be lulled into a false expectation that the entire group of investors represented within the ISI are highly disciplined at rebalancing. This may only be partially true or true only for some investors. Because the ISI is a net score, one is basically seeing the average across many investors.

Figure 5 shows the percentage of investors who are active on any day smoothed to a 1-week moving average. On average 2.6% of investors are making changes to their portfolio on any given day, a very high number. During the height of the pandemic this activity spiked to 8.5% in March, 2020. When compared against the small numbers we see in the ISI, this indicates that investors do not all follow the same investment strategy and investors that buy in the market are roughly offset by sellers. The ISI really represents the cumulative net effect across investors which broadly shows a propensity to rebalance although there are many opposing views.

Figure 5: Daily Gross Activity
July31, 2017–October 28, 2021



Source: Addepar

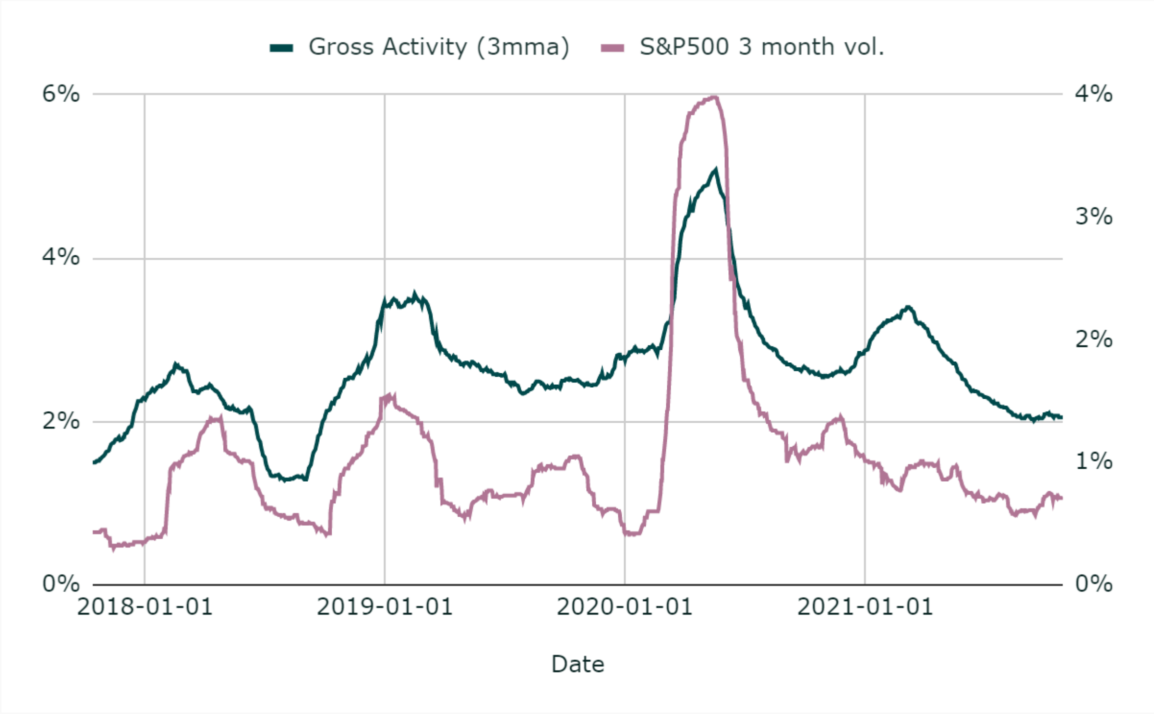
When volatility increases, investors become more active

Zooming further out, one can see that gross activity is highly correlated with market volatility. Figure 6 shows the 3-month moving average of gross sentiment against the 3-month volatility of the S&P 500. Correlations are highest at .8 on a slightly lagging or contemporaneous basis, which indicates that investors are responding to volatility and become increasingly active as market volatility increases.

Since volatile markets also quite often coincide with sell-offs this indicates that approximately half of the active investors are covering their exposure when markets are extreme and sell-off. So even though on average investors rebalance, many do not and are sub-optimizing the return potential of their portfolios. It is precisely in these extreme circumstances that investors and their managers should review flows data as another point of triangulation before taking action on their portfolios.

Figure 6: Gross Activity vs Market Volatility

July 31, 2017–October 28, 2021



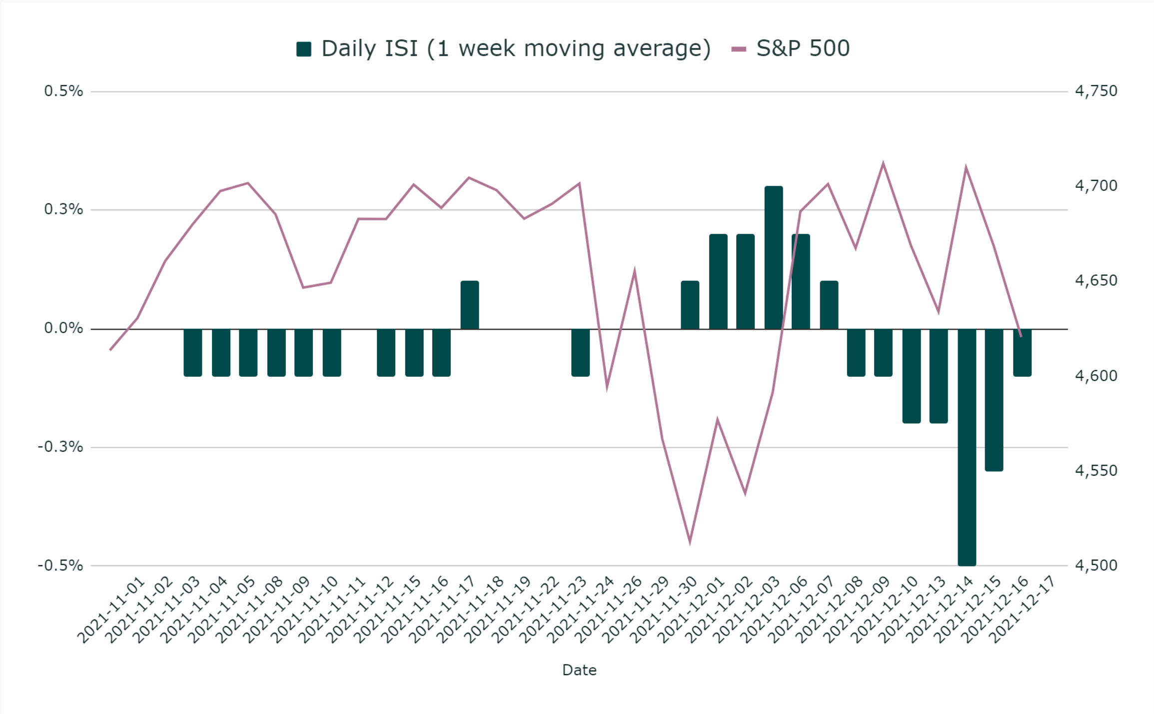
Source: Addepar

As described in the opening of this piece, investors are closely monitoring the market which has been recently trading sideways and experienced a short surge in volatility at the end of November. For now, on average investors continue to buy the dips (figure 7). Based on history, it would take a much more significant sell-off to change this behavior.

As figure 8 shows, an increasing number of investors are also becoming active subsequent to the short increase in volatility. Although somewhat impacted by seasonal dividend reinvestments, this may indicate more portfolios are being actively managed. We will keep you posted on this trend as we enter the new year.

Figure 7: ISI vs S&P 500

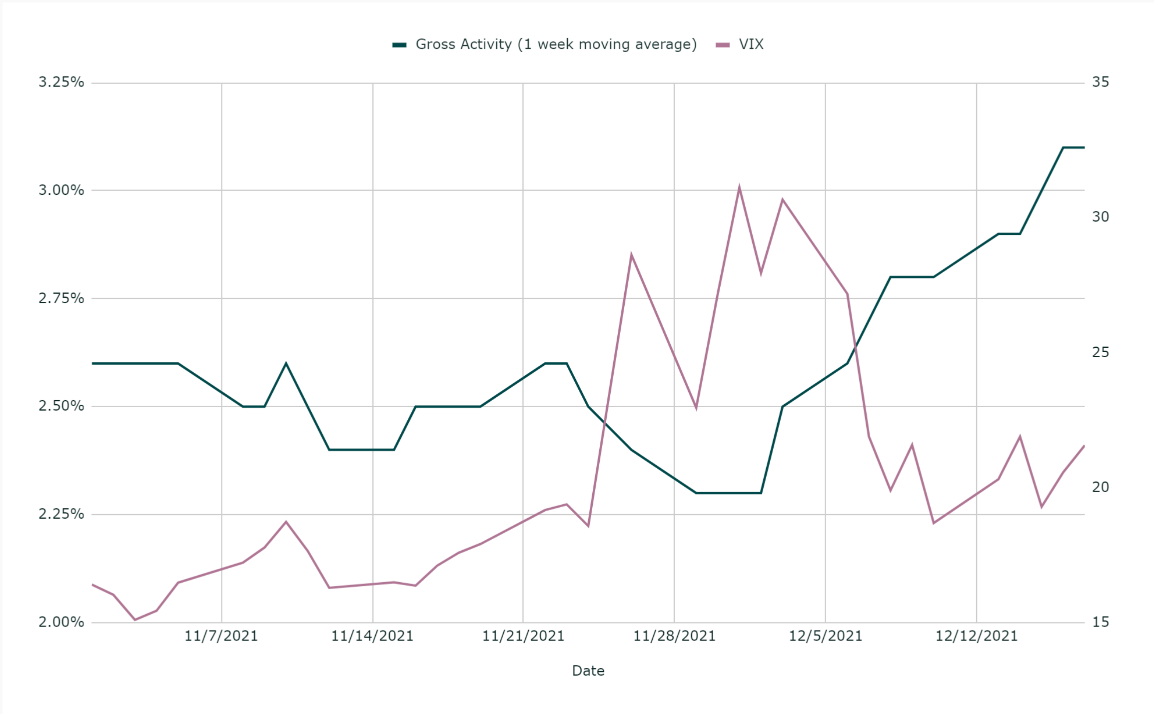
November 1, 2021–December 17, 2021



Source: Addepar

Figure 8: Gross Activity vs VIX

November 1, 2021–December 17, 2021



Source: Addepar

The ISI and related data points represent the cumulative investment behavior across many investors makes the ISI an important triangulation and navigation tool, particularly during challenging market conditions. Understanding how one compares to one's peer group is an additional piece of information that is not available from other public sources.

Stay tuned

We'll continue to develop analytics that provide additional value to our clients through the aggregated and anonymized investment data on our platform. We'll also keep posting the monthly ISI index, our key observations and periodic research notes on our website.

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