GYROSTAT
RISK MANAGED EQUITY FUNDS

Dynamic Hedging: Why and how?

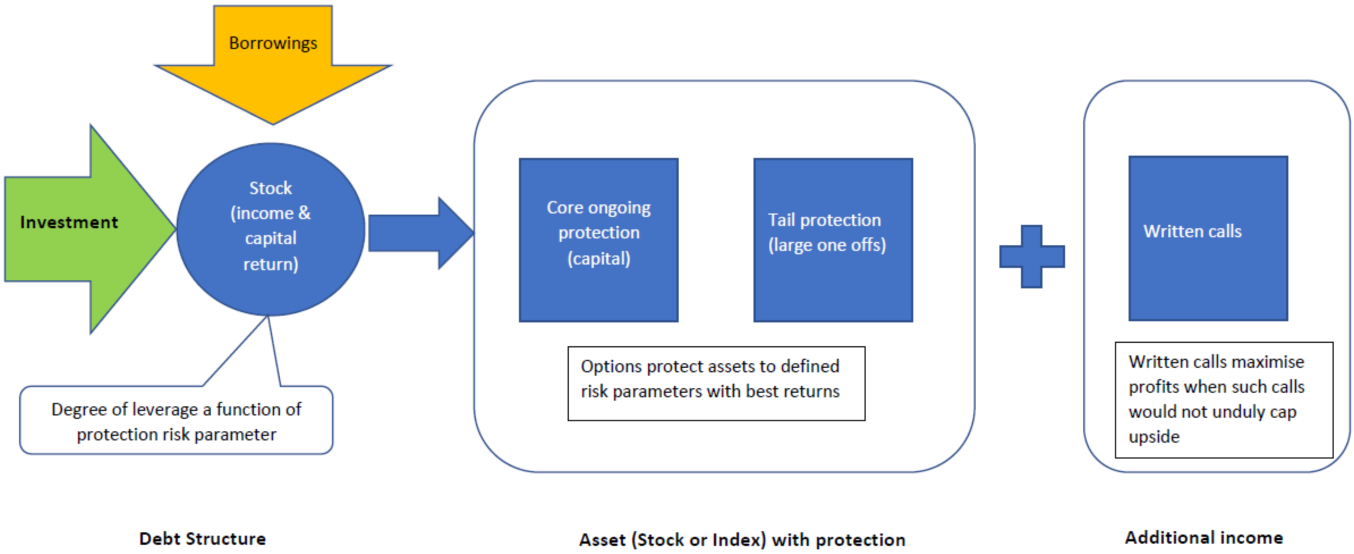
In today's turbulent financial market, managing investment risk is crucial for ensuring long-term success for equity managed funds. One of the most effective ways to manage risk is dynamic hedging, which involves adjusting the protection positions of a portfolio in real-time based on market changes. This strategy is used by sophisticated fund managers with the systems to continuously monitor market conditions and know how to adjust their portfolios accordingly.

Some of the key benefits of using dynamic hedging are:

1. **Real-time risk management**: Dynamic hedging allows fund managers to respond quickly to market changes and adjust their portfolio in real-time to minimise potential losses and maximise returns.
2. **Improved returns**: By continuously monitoring market conditions and adjusting the hedge ratios accordingly, dynamic hedging can help equity managed funds achieve better returns. This is because the hedge ratios are adjusted to minimize the potential impact of market risks on the portfolio.
3. **Increased transparency**: Dynamic hedging provides fund managers with greater insight into the risks and returns of their portfolios. This increased transparency allows fund managers to make informed decisions and adjust their portfolios, leading to better investment outcomes.
4. **Better risk-reward balance**: Dynamic hedging enables fund managers to better balance their risk and reward. By adjusting the hedge ratios, fund managers can minimise potential losses while maximising returns, leading to a better risk-reward balance for their portfolio.

Gyrostat uses dynamic hedging to manage the trade-off between returns, income, and protection levels (risk).

Our approach has focused on a pre-defined quarterly ‘hard’ risk parameter, and then to maximise returns and income within that constraint. A secondary consideration is the source of returns, in particular the level of correlation with the market. From established finance theory adding non correlated assets is of significant value to the overall portfolio, so the Gyrostat approach has been to generate returns in rising and falling markets, which increase with volatility.



Dynamic hedging is divided between 'core' and 'tail' protection. The 'core' protection (using a (say) 3% quarterly risk parameter) utilises bought puts close to the current spot stock price and adjusted with market movements. Often overlooked is the divergencies in implied volatility, across strike prices and time periods, which can result in considerably lower costs for the same level of protection, hence offering higher returns for a given level of risk. These pricing anomalies are 'identified' by Gyrostat proprietary systems. The 'tail' protection is for both 'left' and 'right' tail movements with major movements either down or up. This protection has a cost to have in place but generates higher returns on larger market moves.

For Gyrostat Class A Units with a 3% quarterly risk limit parameter the tail protection is a permanent feature – hence having a track record of increasing in value on large market falls.

Gyrostat Class B Units change the blend, and only have tail protection in place when costs are low, typically after a substantial rally in the stock markets. As a result, returns are anticipated to be higher in most market conditions. This Class is a leveraged version of Class A, with 6% 'hard' quarterly risk protection limit.

To pay for the cost of this protection written calls are executed. Although this is an income generating strategy it is used judiciously as it limits upside. The selection of time series and strike price can result in higher income and capping less upside, exploiting the differing levels of implied volatility. Again, these opportunities are identified by Gyrostat proprietary systems.

Dynamic hedging, i.e actively adjusting the protection levels, can also generate returns. For instance, there may be more bought put options than stock owned, and as a result the additional put options, if sold on stock falls, can generate a return.

With uncertainty on whether markets will fall or rally, there is a wider dispersion of volatility spreads across strike prices and time periods. This is a key market condition exploited by the Gyrostat proprietary systems to move to the lowest cost alternative, offering the highest returns, within the 'hard' protection risk constraints as detailed above.

Our absolute return classes, Class A Units (conservative, moderate portfolios) and Class B Units (growth, high growth portfolios) are non-correlated with the market. Gyrostat has a 12 year record of never breaching its pre-defined risk parameter with 12 month returns to 31 January 2023:

- Class A + 16.95%
- Class B + 25.93%.

We are continuing to refine our dynamic hedging approach for Class A & B Units. Our objective is to deliver consistent quarterly returns greater than income distribution, with non-correlated returns increasing with market volatility. We've been able to meet all the protection and income targets for 12 consecutive years. We continue to refine our investment processes, with the wider volatility spreads in the market potentially creating the opportunity for more consistent quarterly returns. This remains a work in progress but if successful, will deliver for investors a consistent income, rising quarterly capital value, all within a 'hard' risk parameter. Removing the fear of major market falls adversely impacting lifestyle.

The same dynamic hedging approach is used for Classes C, D and E, which are benchmarked to their respective index benchmarks. Class C to the Australian index, Class D to the Hong Kong index and Class E to the US index. In effect these are equivalent to risk managed index ETFs. Gyrostat also adjusts the blend for these Classes between the three key factors – returns, income, and protection. As the benchmark is the index, there will be less protection as the objective is to outperform the index over 12 months, by mitigating the losses on major market falls. The income should match the relative index.

In summary, dynamic hedging enables Gyrostat to reduce the risk of large losses during market downturns while still participating in market gains during bull markets.

Further reading:

Recent articles on dynamic hedging in financial markets:

1. "Dynamic Hedging in Financial Markets: Strategies and Applications" - Journal of Trading (2021)
2. "The Benefits and Risks of Dynamic Hedging" - Financial Analyst Journal (2022)
3. "Dynamic Hedging: Balancing Risk and Return in Volatile Markets" - Risk Management Magazine (2022)
4. "Dynamic Hedging in Options Trading: A Guide for Investors" - The Options Insider (2022)
5. "Dynamic Hedging in a Low-Volatility Environment" - The Journal of Portfolio Management (2021)
6. "Dynamic Hedging: An Effective Tool for Managing Risk in Financial Markets" - Financial Management Review (2021)

The following books provide a comprehensive and in-depth examination of dynamic hedging in financial markets and cover various topics such as market dynamics, pricing and risk management, and the use of financial derivatives.

1. "Dynamic Hedging: Managing Vanilla and Exotic Options" by Nassim Nicholas Taleb
2. "The Volatility Surface: A Practitioner's Guide" by Jim Gatheral
3. "Options, Futures, and Other Derivatives" by John C. Hull
4. "Dynamic Hedging in Financial Markets: Strategies and Applications" by Lawrence G. McMillan
5. "Dynamic Hedging: An Options Trader's Guide to Managing Risk" by John L. Teall
6. “The Mathematics of Financial Modelling and Investment Management" by Sergio M. Focardi and Frank J. Fabozzi.

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