

Implementing Futures to Manage Equity Risk

A Guide for Institutional Investors

Key Ideas

Effectively navigating market dynamics and maximizing risk-adjusted returns are key objectives for institutional investors. This has become a more daunting task, as today's rapidly changing macroeconomic environment often overshadows the alpha generated by equity investments. Thus, it becomes crucial to explore innovative strategies that can navigate today's heightened frequency of regime change while avoiding timing or expensive hedging tactics. The strategic use of futures is among those solutions. In this paper, we will examine the benefits and considerations of integrating futures strategies with an equity portfolio versus using futures overlay strategies:

- **Understand Integration vs. Overlay:** Quickly learn the differences between the integrated and overlay approaches to implementing futures, highlighting the advantages of each approach and the specialized expertise they both require.
- **Learn from Case Studies:** See the effectiveness and challenges of both approaches in managing equity risk, enhancing returns, and improving portfolio stability through two illustrative case studies.
- **Get Actionable Next Steps:** Discover a roadmap for implementing futures to manage equity risks, emphasizing the importance of selecting an approach that aligns with your investment objectives, risk tolerance, and operational capabilities.

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Public equities are the cornerstone of many investment portfolios, but they present a characteristic that investors sometimes find less than desirable: concentrated exposure to macroeconomic factors. While this exposure is often beneficial, the dynamics of today's markets have introduced a new level of complexity. The effects of macroeconomic factors – both positive and negative – are changing more frequently. When the effects are negative, they can significantly overshadow excess returns. When they are positive, they can outpace slow-reacting active strategies.

In response to these more frequent regime changes, some investors might tactically adjust the size of their equity allocations, essentially attempting to time their market participation. However, this approach is not one we would recommend. Instead, we propose that investors consider the potential of futures as a tool to offset these macro risks, provide convexity in downturns, and enhance returns in today's market dynamics.

In this paper, we explore how futures can be deployed in two ways: through integration with an active equity portfolio or as an overlay strategy. We will examine the benefits and considerations of both approaches, providing a comprehensive analysis to guide investors in today's new market order.

Understanding Integrated Futures Strategies

Integrated futures strategies represent a sophisticated approach to managing equity risk within your portfolio. By combining the traditional management of equities with the strategic utilization of futures contracts, these strategies provide the ability to adapt swiftly to market fluctuations, insulate portfolios from downside risks, and potentially amplify returns.

Precision in Risk Management

A significant advantage of integrated futures strategies lies in the precise control they offer over risk exposures. The direct integration of futures contracts into the equity mandate allows for the fine-tuning of risk management strategies. Integrated strategies seek to target equity-specific risks with increased accuracy by employing techniques like beta modulation (see sidebar). This precision facilitates prompt adjustments to market exposure, enabling rapid responses to changing market conditions and the tailoring of portfolios to align with investment objectives.

WHAT IS BETA MODULATION?

Integrating an equity portfolio with futures increases the potential for overexposure to equity risk, as the implicit leverage used in the futures component could alter the strategy's beta profile in certain market environments. Beta modulation attempts to keep the total portfolio's beta range-bound in real-time by constraining it to pre-determined values, offering more precision in targeting such risk.

“Integrated strategies seek to target equity-specific risks with increased accuracy by employing techniques like beta modulation.”

Alpha Source Through Adaptive Rebalancing

Integrated futures strategies offer a unique avenue for alpha generation via adaptive rebalancing. This approach capitalizes on market fluctuations – market “wobbles” – using futures trading to realign the equity portfolio if positions drift or market volatility increases. By exploiting correlations between econometric factors and equity exposures, this strategy targets additional returns, diversifies risk across asset classes, and mitigates the impact of stock-specific risks.

Capital Efficiency and Leverage Optimization

Integrated futures strategies also enhance capital efficiency within your portfolio. Futures positions can be collateralized using a modest cash position from the equity portfolio. This collateralization allows for effective risk mitigation and the optimization of leverage. Consequently, these strategies can potentially amplify returns while committing a smaller capital allocation, optimizing capital efficiency, and enhancing the overall performance of equity holdings.

Streamlined Governance and Enhanced Operational Efficiency

The streamlined governance achieved through integrated futures strategies presents another key advantage. With an integrated approach, a single equity manager is responsible for both equity and futures management. This consolidation of roles reduces governance costs, simplifies oversight, and fosters efficient communication and coordination between teams, leading to improved decision-making processes.

Cost Advantages and Competitive Pricing

Integrated futures strategies may also offer potential cost advantages. The combination of the equity mandate and futures management under one entity allows for the negotiation of more competitive fees for the integrated services. This pricing competitiveness arises from the competitive pressure exerted by conventional equity-only strategies. By achieving cost efficiencies, investors can optimize the utilization of resources, potentially enhancing the net returns available to beneficiaries.

Risks of Integrated Futures Strategies

While integrated futures strategies offer precision and adaptability, they may also introduce general risks like the speculative nature of futures and specific risks such as potential overexposure to equity markets. Both emphasize the need for specialized expertise. Mismanagement or misalignment with investment objectives can lead to unintended risks and even magnify them, making it crucial to engage the right, complementary expertise.

Integrated futures strategies offer a compelling solution for managing equity risk within portfolios. By seamlessly blending the management of equities with the strategic utilization of futures contracts, these strategies provide precise control over risk exposures, enhance capital efficiency, streamline governance, and potentially reduce costs. However, the approach requires your integration manager to engage expertise in both equity management and futures trading in order to tap into these benefits.

Using Futures Overlay Strategies

Overlay strategies represent an alternative approach to managing equity risk, applying futures contracts to the entire equity mandate and providing a broader risk management framework for portfolios. This section will explore the unique features and considerations associated with overlay strategies and compare them to the integrated approach.

Portfolio-Wide Risk Management

One of the primary benefits of overlay strategies is their ability to manage portfolio-wide risks effectively. By utilizing futures contracts to hedge against adverse market movements, overlay strategies serve as a robust risk management tool, akin to an insurance policy providing downside protection and mitigating the impact of market downturns on the entire portfolio.

Alpha Source Through Strategic Positioning

In overlay strategies, alpha can be generated through strategic positioning in futures contracts. This involves the fund manager leveraging market forecasts and pricing inefficiencies to take advantageous long or short positions. By gaining exposure to outperforming asset classes or sectors through futures contracts, overlay strategies can generate additional returns, enhancing the overall performance of the portfolio.

Efficient Portfolio Rebalancing

Overlay strategies also offer a flexible solution for efficient portfolio rebalancing. Rather than engaging in costly and time-consuming transactions involving physical securities, overlay strategies enable swift adjustment of portfolio exposures through futures contracts. This flexibility enhances the efficiency of the portfolio management process by reducing transaction costs and minimizing market impact.

Agile Liquidity Management

In addition to risk management and efficient rebalancing, overlay strategies provide an effective tool for managing liquidity needs within your portfolio. The inherent leverage and ease of trading offered by futures contracts enable prompt management of cash flow requirements, providing valuable flexibility in navigating changing market conditions.

Continuous Monitoring and Adjustments

Overlay strategies demand continuous monitoring and adjustments by investors to remain effective. As market conditions evolve, the risk and return profile of the portfolio changes accordingly. Regular assessment and recalibration of overlay strategies are crucial to ensure their continued relevance and alignment with investment goals.

Risks of Overlay Strategies

Overlay strategies, while offering broader risk management capabilities, share similar risks with integrated futures strategies (as mentioned in the Integration section). Additionally, they may require more complex governance structures and continuous monitoring, introducing further complexity and potential challenges.

Overlay strategies offer a powerful approach to managing equity risk and optimizing portfolio efficiency. They provide comprehensive risk management, efficient rebalancing, and agile liquidity management capabilities. However, they also require specialized expertise in futures trading and portfolio management, as well as ongoing monitoring, to ensure alignment with investment objectives and adaptability to changing market dynamics.

“Regular assessment and recalibration of overlay strategies are crucial to ensure their continued relevance and alignment with investment goals.”

Case Study: Integrated vs. Overlay

Having explored the benefits and considerations of both integrated futures strategies and overlay strategies, we can now use two hypothetical illustrations to help depict practical applications. These case studies intend to provide valuable insights into their effectiveness in managing equity risk and enhancing returns within portfolios.

	Integrated Approach	Overlay Approach
Plan Profile	The Metropolis Teachers' Pension Plan (MTPP) is a large pension fund that uses an integrated futures strategy to manage equity risk within its portfolio. MTPP hired an equity manager who integrated futures contracts directly into its equity strategy.	State University (SU) manages a very large endowment with many asset classes, choosing to employ an overlay futures strategy for its total portfolio. SU has implemented a system to continuously monitor and calibrate the overlay strategy to mitigate risks in the underlying equity portfolio.
Risk Management	Systematic beta modulation offers the capacity for more precise control over equity risk exposures, allowing for fine-tuning of risk and the targeting of equity-specific risks.	Broad risk management capabilities afforded by the overlay provides potential downside protection and mitigates the impact of market downturns on the entire portfolio.
Alpha Generation	Seeking additional alpha through adaptive rebalancing, which attempts to exploit correlations between econometric factors and equity exposures.	Seeking alpha through strategic positioning in futures contracts, which attempts to leverage market forecasts and pricing inefficiencies.
Capital Efficiency	Enhances capital efficiency by collateralizing the equity portfolio using a modest cash position, allowing for effective risk mitigation and optimization of leverage.	The application of futures contracts in overlay strategies may lead to less optimal capital efficiency, as it requires the investor to dedicate a specific portion of the asset allocation to managed futures.
Governance	Streamlined governance with a single equity manager responsible for both equity and futures management, reducing governance costs and simplifying oversight.	May require more complex governance structures, as one or more futures managers may be required to construct the overlay strategy.
Cost	Potential cost advantages since integrated solutions are designed to compete directly with large core equity solutions, requiring managers to set fees competitively.	Overlay strategies may offer more limited cost advantages, as they aim to deliver portfolio-wide value and are typically priced in comparison to other managed futures providers.
Key Challenges	Potential overexposure to equity risk and the need for specialized expertise to manage the futures component in a complementary manner.	Overlay strategies require continuous monitoring and adjustments to remain effective and may introduce additional complexity that necessitates specialized expertise.

These case studies illustrate the different approaches taken by prominent institutional investors in managing equity risk within their portfolios. While MTPP sought success with an integrated futures strategy, leveraging the benefits of seamless risk management and enhanced governance, SU's endowment fund is comfortable with dedicating a separate allocation to futures and contending with the complexities and costs associated with overlay strategies to realize broader risk management capabilities.

Key Takeaway

These case studies highlight the importance of aligning the chosen strategy with the unique characteristics and objectives of your portfolio and organization. Integrated futures strategies offer a streamlined approach, providing more precise control over equity risk while optimizing capital efficiency and reducing costs. On the other hand, overlay strategies offer broader risk management capabilities but are less capital efficient and require careful oversight and ongoing monitoring to maintain their effectiveness.

Roadmap for Implementing Futures for Risk Management

When it comes to managing equity risk within your portfolio, the decision between integrated futures strategies and overlay strategies requires careful evaluation of several key considerations. These factors will help guide your decision-making process and ensure that you choose the approach that best aligns with your investment objectives, risk tolerance, and operational capabilities.

Below are some practical recommendations and guidelines for implementing an effective equity risk management strategy using futures.

- ☐ **Define Clear Objectives:** Begin by clearly defining your investment objectives and risk tolerance. Determine the level of equity risk you are willing to accept and the desired balance between risk and return. This will serve as the foundation for designing your equity risk management strategy.
- ☐ **Conduct a Comprehensive Risk Assessment:** Perform a thorough risk assessment of your portfolio, considering not only equity risk but also other relevant risks such as interest rate risk, credit risk, and geopolitical risk. Understand the interdependencies and correlations between various risks to ensure a holistic risk management approach.
- ☐ **Evaluate Integrated Futures Strategies:** Assess the potential benefits and challenges of integrated futures strategies. Consider their ability to potentially provide direct control over equity risks, increase alpha, enhance governance efficiency, optimize capital efficiency, and potentially offer competitive fees. Engage in in-depth discussions with investment managers experienced in integrated strategies to fully understand their approach and track record.
- ☐ **Explore Overlay Strategies:** Explore the merits of overlay strategies as a comprehensive risk management tool. Assess their ability to potentially manage portfolio-wide risk, add alpha, facilitate efficient rebalancing, and provide liquidity management solutions. Collaborate with experienced overlay managers who can customize the strategy to your portfolio's unique risk profile and investment objectives.

- ☐ **Align Governance and Oversight:** Ensure that your governance structure and oversight capabilities align with your chosen strategy. Allocate resources to support effective monitoring, evaluation, and adjustment of the strategy. Consider engaging a consultant or other experts to manage the specialized aspects of your chosen futures strategy.
- ☐ **Continuously Monitor and Reevaluate:** Implement a robust monitoring and evaluation framework to assess the effectiveness of your equity risk management strategy over time. Regularly review the strategy's performance, risk-adjusted returns, and costs. Stay abreast of market developments and adjust the strategy as necessary to align with evolving market conditions and your portfolio's risk profile.
- ☐ **Communicate with Stakeholders:** Maintain open and transparent communication with stakeholders, including plan beneficiaries, board members, and investment committee members. Clearly articulate the rationale behind the chosen strategy and provide regular updates on its performance and risk management outcomes.

By following these recommendations, you can establish a modern equity risk management strategy that aligns with your portfolio objectives, risk tolerance, and operational capabilities. Effective risk management is an ongoing process that requires continuous monitoring, evaluation, and adjustment to adapt to changing market dynamics. Embrace the principles of flexibility, agility, and disciplined decision-making to successfully navigate the complex landscape of equity investments.

“Consider engaging a consultant or other experts to manage the specialized aspects of your chosen futures strategy.”

Conclusion

In this paper, we have explored the two prominent approaches to managing equity risk with futures: integrated futures strategies and overlay strategies. We have examined the benefits and considerations of each approach and provided recommendations for implementing an effective equity risk management strategy.

The choice between these strategies ultimately depends on the unique characteristics of your portfolio and organization. These include the nature of equity risk, risk tolerance, governance capabilities, operational efficiency, and cost considerations. It is essential to thoroughly evaluate these factors and select the approach that best aligns with your investment objectives and risk management goals.

Today more than ever, effective management of equity risk is crucial for investors to achieve their investment objectives. And the use of futures is an innovative way to manage those risks. By carefully considering the benefits and key considerations of integrated futures strategies and overlay strategies, you can make informed decisions and implement a robust equity risk management strategy tailored to your unique needs.

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