

Quantifying the benefits of overlay management



Diversification has long been one of the primary tenets of investment theory – and for good reason. From a practical standpoint, however, diversification introduces a number of logistical and operational issues that, if not addressed effectively, can adversely affect investment returns and make the implementation process cumbersome for clients and the investment professionals they engage.

Specifically, diversification requires investing in different asset classes, often with different managers and in different vehicles. Monitoring and coordinating that activity can be challenging, especially with more complex portfolios.

Fortunately, there are a variety of multi-manager/multi-asset-class solutions that can help address most of these implementation issues. These include manager of managers products, Unified Managed Accounts (UMA), implemented consulting solutions and some versions of outsourced Chief Investment Officer (OCIO) offerings. Many of these incorporate the role of an overlay manager, who coordinates the activity across the client's entire pool of assets.

A holistic approach

The good news about overlay solutions is that they can do more than just reduce or eliminate many of the logistical and operational hurdles associated with managing diversified portfolios. In a number of areas, overlay management actually has the potential to improve returns for investors, illustrating the adage that the whole is greater than the sum of the parts.

Overlay solutions can do more than reduce the operational challenges of managing diversified portfolios. They also have the potential to improve returns for investors.



Quantifying the benefits overlay management can bring to these areas can be challenging, as it depends a great deal on the overlay approach, the portfolio structure and the time periods. Some have incorrectly assumed that these benefits are mostly applicable to taxable investors. In fact, most are equally relevant to tax-exempt and taxable investors. In this paper we'll attempt to summarize existing academic research on the potential to add value in these areas and present some new ideas as well.

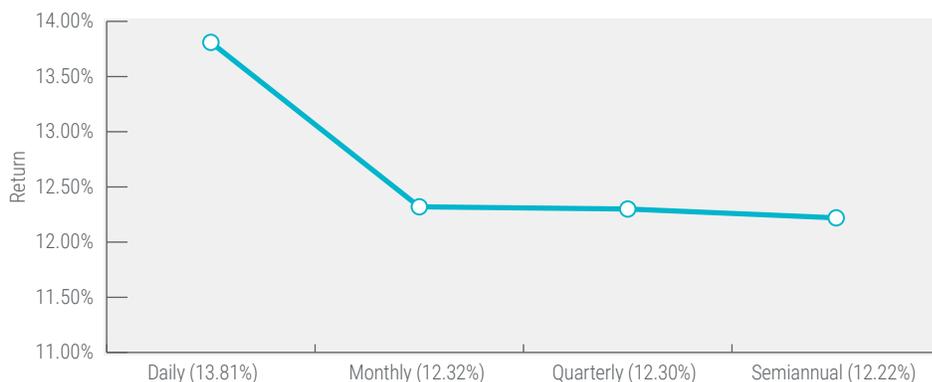
Monitoring asset allocation and rebalancing*

Few would dispute the wisdom of setting appropriate asset allocation targets in place to help clients achieve their investment objectives. It's equally important to monitor the portfolio's actual allocations over time and rebalance the portfolio back toward its target allocations when excessive drift occurs. Drift can be difficult to monitor if a client's assets are distributed across multiple managers and investments. In practice, it might get checked periodically – perhaps annually, or maybe more frequently. With an effective overlay management approach in place, drift can be monitored as often as daily.

There is substantial benefit to monitoring allocation drift more frequently. Reviewing clients' actual allocations on a daily basis provides more opportunities for identifying overvalued asset classes that can be sold and undervalued ones purchased. In a paper published in 2002 in the *Journal of Portfolio Management*,¹ researchers found that considerable

value was added by more frequent monitoring of portfolio allocations and the benefit was significant. It is important to note that the frequency we are discussing here is for monitoring allocations, not necessarily actually rebalancing portfolios. Rebalancing is conducted only when the monitoring identifies drift beyond the allowable interval (set at 5% in much of the analysis in this paper). The analysis examined simulated, bootstrapped and actual asset class returns and yielded generally consistent results with each approach. Figure 1 illustrates the actual results from the study for a 60/40 blend of US equity (S&P 500® Index) and fixed-income (JP Morgan All Government Index) over the period between 1987 and 2000. Other periods and asset class combinations demonstrated similar trends, with the incremental benefit accruing from daily monitoring ranging from around 13 bps to more than 1.5% per year.

FIGURE 1: Actual returns for 5% rebalancing interval



The 60/40 allocation consists of 60% US Equity (S&P 500® Index) and 40% Fixed Income (JP Morgan All Government Index).

Performance data shown represents past performance and is no guarantee of, and not necessarily indicative of, future results.

Actual returns shown do not take into account management fees or trading fees; if reflected, performance would have been lower.

Source: 'The Benefits of Rebalancing', Buetow et al [2002]

*Rebalancing may involve additional cost and tax consequences.

More timely implementation of portfolio changes

Even portfolios based on long-term strategic asset allocations need occasional adjustments. Actual allocations may drift away from targets, which requires rebalancing; issues may arise with managers or funds, requiring their replacement; and a client's risk profile or investment objectives might change, necessitating adjustments to their portfolio structure.

Implementing these changes with a traditional multi-manager approach can present some challenges, however. Consider a scenario where a client works with multiple managers managing separate accounts and needs to adjust allocations, due either to drift or to a change in the investment objectives. To accomplish this, those managers whose allocations are above target must be directed to raise cash. This cash must then be transferred into the accounts managed by managers whose weightings are below their target allocations. While cumbersome administratively and logistically, this also means that the client's portfolio is holding excess cash during the transition period, exposing them to the potential for greater cash drag if the market appreciates.

Of course these time lags can sometimes work in the investor's favor, but what we are trying to quantify here is the risk of an adverse outcome.

Accounting for manager changes

Implementing a manager change is even more cumbersome and can entail a longer transition period. Contracts must be entered into between the client and the new manager, the old manager must be terminated and assets must be transferred to the new manager. At best this process probably takes several weeks, and there are numerous examples of institutions that have taken over a year to implement decisions.

A multi-manager approach, especially one that involves an overlay manager acting in a discretionary capacity, can reduce or eliminate the administrative burden associated with these kinds of scenarios. It can also minimize the opportunity costs of being uninvested or delaying the implementation of a manager change or allocation decision.

Quantifying this benefit is difficult, but one useful framework is the concept of implementation shortfall. This is a concept used frequently in investing,

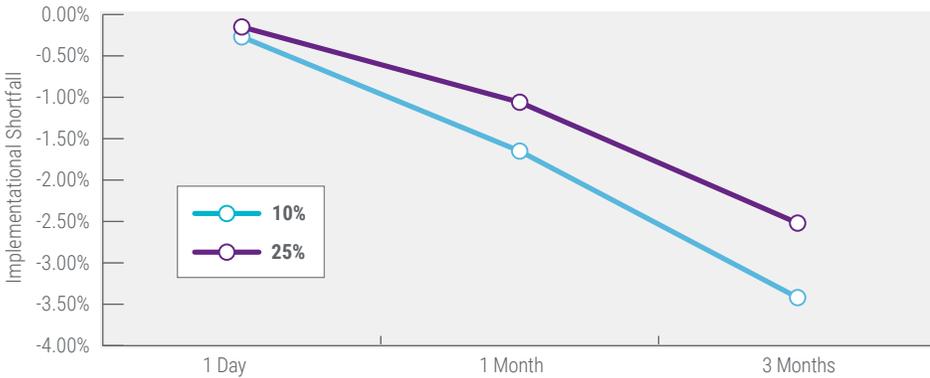
though primarily relating to the execution of trades within portfolios. The general idea is to compare the performance of a "paper" portfolio, using theoretical money, which has an investment decision implemented immediately at the then-current price, with the actual portfolio, which will inevitably see some time lag in the implementation of the decision. When looking at equity trades in a portfolio, the shortfall will also include any transaction costs and the bid/ask spread.



The incremental benefit attributable to daily monitoring can top 1.5% a year.

When looking at manager or allocation changes, this same concept can be helpful. The time lag associated with implementing changes is likely to be the key driver of any implementation shortfall. Scenarios that involve longer implementation time lags and/or higher levels of volatility of relative returns between the two asset classes/managers involved create the potential for larger implementation shortfalls.

FIGURE 2: 10% and 25% provability level implementation shortfalls for a change from AGTHX to FCNTX (Data from 1/1/10 to 12/31/11)

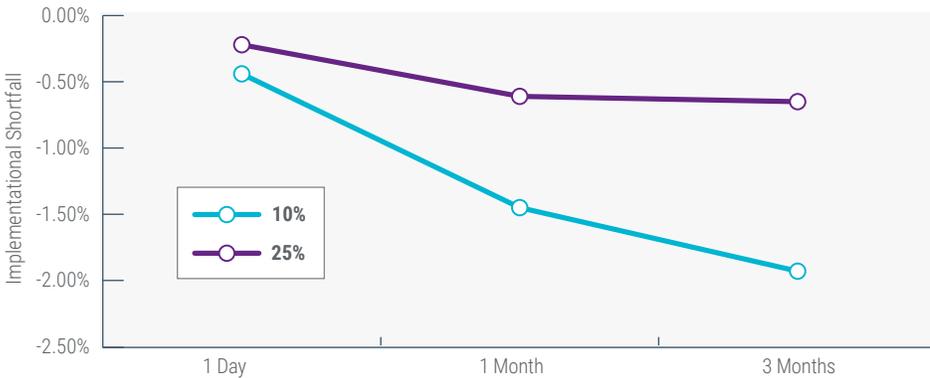


For Illustrative Purposes Only. This material should not be considered a recommendation for investment action.

Shortening implementation times can significantly improve outcomes.

The results shown apply only to the funds selected for this hypothetical illustration. Applying the same scenario to other mutual funds may provide significantly different results.

FIGURE 3: 10% and 25% provability level implementation shortfalls for a change from Russell 1000 Growth to the Russell 1000 Value Index (Data from 1/1/10 to 12/31/11)



For Illustrative Purposes Only. This material should not be considered a recommendation for investment action.

For illustrative purposes we've constructed a couple of scenarios and applied some quantitative analysis. The first scenario involves a hypothetical decision to replace one US equity manager with another. For this hypothetical situation we've used two of the largest US mutual funds.† We examined a scenario in which an investor decided to move assets from one fund to the other, using data for the previous two years. As illustrated in Figure 2, a one-day delay in the implementation of such a decision is unlikely to have a significant impact on investor returns. With longer periods, however, such as one or three months, the levels can become quite significant. Despite the fact that the returns of the two funds exhibited a 97.5% correlation over this period, there was a 25% chance of giving up 2.5% or more in relative return if such a decision took three months to implement.

We constructed another hypothetical scenario involving a shift in asset allocation from US large-cap growth stocks to US large-cap value stocks, using the Russell 1000® Growth and Russell 1000® Value indexes as proxies. The results, shown in Figure 3, show similar trends.

Terminating manager relationships, engaging new ones and transferring assets can be a cumbersome and time-consuming process. Even shifting allocations between managers can take time, as one manager has to raise cash in their portfolio, the assets must then be

† Largest US mutual funds is based on AUM.

transferred from one account to the other and then the new manager must invest those assets. Multi-manager platforms that streamline the process involved in these changes have the potential to add considerable value by shortening the time frame needed to implement investment decisions. This is likely to reduce the probability of significant adverse outcomes during these transitions.

Tax management

Tax management will not be applicable to all clients, but for those with taxable assets, the benefits of an integrated approach that takes taxes into account can be significant. Overlay management processes that look to enhance after-tax returns can employ a number of techniques. These include proactive harvesting of losses, selecting the optimal tax lot from within a client's portfolio when selling, deferring short-term gains until they qualify as long-term, and avoiding wash sale rule violations.

A number of research articles have been published on the benefits these types of techniques can deliver to clients in terms of increased after-tax returns. Using a simulation, Arnott, Berkin and Ye [2001]² found that loss harvesting added a cumulative gain of 27% over a 25-year period before liquidation.[‡]

Even after liquidation this benefit was still 14% (slightly more than 50 bps annualized). Subsequent research by Berkin and Ye [2003]³ built on this approach by varying a number of factors, including turnover, tax rates and market environment. Their analysis confirmed that tax harvesting and FIFO accounting (which is close to but not quite as beneficial as optimum tax lot selection) could generate substantially improved after-tax returns. The benefits in the simulation varied across the different scenarios they examined but ranged from 31 to 74 bps annualized after liquidation. Further research by Horvitz and Wilcox [2003]⁴ yielded results that quantified the potential benefit in this same range.

Behavioral issues

Many aspects of the decision-making processes hardwired into our brains are counterproductive to successful investing. Extensive research has been published on these behavioral aspects of financial theory. One common failing is the tendency to extrapolate past results. This frequently manifests itself in investors' unwillingness to reduce their exposure to asset classes that have performed well and re-allocate to those that underperformed and are therefore underweight relative to their allocation targets.



Research has demonstrated that systematic rebalancing can actually add value.

[‡] Fees were not taken into account in the scenario. Had fees been taken into account, they would not have impacted the tax loss harvesting effect.

Morningstar publishes data that can help illustrate the impact of this tendency by comparing the asset-weighted returns of mutual funds with the actual fund returns. When investors move into a mutual fund after it has already experienced strong performance, the asset-weighted return would be expected to trail the fund's actual return for that period. Research published by Morningstar⁶ found that on average, for diversified equity mutual funds over the 10-year period ending 12/31/2015, investors' actual returns trailed those of the funds by 0.74%. Investors in fixed income funds experienced wider shortfalls. Taxable bond funds demonstrated a -0.82% gap, which equates to 20% of fund return, while municipal bond fund investors realized a -1.32% gap, about 1/3 of the fund return. With an overlay management approach, systematic rebalancing is

typically employed in an effort to reduce or eliminate the potential for human behavioral biases to cause this erosion of returns. In fact, systematic rebalancing, which is a disciplined approach that adheres to the investing basic of buying low and selling high, can potentially add value, as shown in several published research articles.^{1, 6, 7, 8}

Conclusion

The benefits that integrated overlay management can contribute to a portfolio's returns can vary and will depend on a wide variety of factors including the time period considered, the composition of the portfolio and the overlay approach employed. The potential benefits that can be gained from the more coordinated and integrated approach that overlay management can offer is significant, however. Each of the

areas outlined above offers opportunities for material benefits. When added together the impact can be quite dramatic. Unlike most investment opportunities, this comes with relatively little to no cost – and in a couple of ways. It isn't necessary to take on extra risk to get these returns, as they are the result of more effective implementation, not a more aggressive investment stance. With substantial opportunity to enhance returns and little to no incremental risk or cost, there is a very compelling case for investors to consider multi-manager solutions that integrate overlay management.

REFERENCES

- 1 Buetow, Gerald W., Ronald Sellers, Donald Trotter, Elaine Hunt and Willie Whipple, "The Benefits of Rebalancing." *The Journal of Portfolio Management*, Winter 2002, pp. 23–32.
- 2 Arnott, Robert D., Andrew L. Berkin and Jia Ye, "Loss Harvesting: What's It Worth to the Taxable Investor?" *Journal of Wealth Management*, Spring 2001.
- 3 Berkin, Andrew L. and Jia Ye, "Tax Management, Loss Harvesting, and FIFO Accounting." *Financial Analysts Journal*, July/August 2003.
- 4 Horvitz, Jeffrey E. and Jarrod W. Wilcox, "Know When to Hold 'Em and When to Fold 'Em: The Value of Effective Taxable Investment Management." *Journal of Wealth Management*, Fall 2003.
- 5 Kinnell, Russel, "Mind The Gap 2015, <http://www.morningstar.com/advisor/t/115631283/mindthegap2016.htm?single=true>
- 6 Arnott, R.D., and R.M. Lovell, "Monitoring and Rebalancing the Portfolio." In J. Maginn and D. Tuttle, eds., *Managing Investment Portfolios: A Dynamic Process*. Charlottesville, VA: Association for Investment Management and Research, 1990.
- 7 Stine, Bert and John Lewis, "Guidelines for Rebalancing Passive Investment Portfolios." *Journal of Financial Planning*, April 1992.
- 8 Overway, Curt and Dan Price, "Introduction to Overlay Portfolio Management." Natixis Global Asset Management Whitepaper.

NATIXIS INVESTMENT MANAGERS

Natixis Investment Managers serves financial professionals with more insightful ways to construct portfolios. Powered by the expertise of more than 20 specialized investment managers globally, we apply Active ThinkingSM to deliver proactive solutions that help clients pursue better outcomes in all markets. Natixis ranks among the world's largest asset management firms¹ (\$997.8 billion AUM²).

Natixis Investment Managers includes all of the investment management and distribution entities affiliated with Natixis Distribution, L.P. and Natixis Investment Managers S.A.

1 Cerulli Quantitative Update: Global Markets 2017 ranked Natixis Investment Managers (formerly Natixis Global Asset Management) as the 15th largest asset manager in the world based on assets under management as of December 31, 2016.

2 Net asset value as of December 31, 2017. Assets under management ("AUM"), as reported, may include notional assets, assets serviced, gross assets and other types of non-regulatory AUM.

Performance data shown represents past performance and is no guarantee of, and not necessarily indicative of, future results. Use of overlay management and tax management strategies does not guarantee a profit or protect against a loss in an investor's portfolio.

This document may contain references to third party copyrights, indexes, and trademarks, each of which is the property of its respective owner. Such owner is not affiliated with Natixis Investment Managers or any of its related or affiliated companies (collectively "Natixis") and does not sponsor, endorse or participate in the provision of any Natixis services, funds or other financial products.

The index information contained herein is derived from third parties and is provided on an "as is" basis. The user of this information assumes the entire risk of use of this information. Each of the third party entities involved in compiling, computing or creating index information disclaims all warranties (including, without limitation, any warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to such information.

Natixis Advisors, L.P. does not provide tax or legal advice. Please consult with a tax professional prior to making any investment decision.

Natixis Advisors, L.P. provides advisory services through its divisions Active Index Advisors[®] and Managed Portfolio Advisors[®]. Advisory services are generally provided with the assistance of model portfolio providers, some of which are affiliates of Natixis Investment Managers, L.P.

Natixis Distribution, L.P. is a limited purpose broker-dealer and the distributor of various registered investment companies for which advisory services are provided by affiliates of Natixis Investment Managers. • Natixis Advisors, L.P. and Natixis Distribution, L.P. are located at 888 Boylston Street, Boston, MA 02199. • 800-862-4863