Taking Some Chips Off the Table: A Direct to Custom Index Case Study

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Direct Index portfolios have the distinct advantage of matching index performance while generating after-tax alpha, seemingly for “free”. Acute observers know that nothing is actually free. Early adopters of Direct Indexing now face a problem. The longest bull market on record has left their portfolios with significant embedded gains that handcuff them to undesired over/underweights relative to the passive index they seek to replicate.

A client that had been invested with a Direct Index provider recently approached us with a unique ask. After riding the multi-year bull market, they decided that equities were likely fully priced, particularly growth stocks. Typically, one would simply rebalance assets from equities to fixed income or cash, but this would require massive gain realizations as nearly 100% of their underlying Direct Index positions were in a taxable gain position. What might we recommend?

The beauty of *Custom Indexing* as an investing solution is the *flexibility* to shift exposures with full transparency into the trade-offs involved. We ultimately recommended a solution that decreased equity risk at minimal cost and actually *reduced* their tracking error to the original passive index.

Note: While the case below is specific to adding a defensive allocation, other factors – Dividend Growth, Value, Momentum, Shareholder Yield – can be applied with the same transparency into the trade-offs involved.

OBJECTIVE 1: REDUCE EQUITY RISK

Downside protection equity strategies are vast and somewhat nuanced. They typically include some combination of low beta, low volatility, and/or high-quality selection criteria. Investigating the merits of each, we developed our **Defensive Stability** strategy, which seeks companies ranking high on our *Stability* theme while avoiding those that rank poorly on our *Quality* themes.

Stability

In researching the most popular forms of downside protection factor-based strategies, it became clear that the historical results associated with the low volatility “factor” were actually driven by two things: a structural tilt towards cheaper companies; and exposure to companies with low volatility in their fundamentals. Based on this info, we developed a Stability theme that seeks companies with stable operating, management, and price metrics over the trailing five years. Our historical research suggests that greater stability results in positive excess return, lower volatility, downside protection, and a higher Sharpe Ratio. This was an interesting new field of research for us as the goals and objectives of downside protection are different from our Factor Alpha suite—Value, Momentum, and Shareholder Yield. Downside protection strategies generate “alpha” by limiting drawdowns, not through higher upside capture.

Quality

Our Quality themes attempt to ferret out companies with poor operating and financial metrics. We seek to eliminate companies with poor underlying profitability and cash flow trends via Earnings Growth. Our Financial Strength theme eliminates over-levered firms with high reliance on outside sources of capital. Our Earnings Quality theme avoids companies that are using non-cash items to boost earnings. Momentum and Value are also used as screening criteria to eliminate very expensive names, which often carry downside risk, and poor momentum names which tend to continue to perform poorly.

Defensive Stability Strategy

Using a benchmark's constituents as the starting universe, the Defensive Stability investment process begins by eliminating the lowest-scoring companies across each of our quality themes. From there, the strategy concentrates into the highest-scoring companies as measured by the Stability theme. It then applies risk controls at the position, region, sector, and industry level. Below is a high-level view of the backtested results.

Account	US Defensive Stability *(Jan-1986 to Dec-2020)*	Russell 1000 *(Jan-1986 to Dec-2020)*
Annualized Return	12.93%	11.08%
Annualized Standard Deviation	13.07%	15.24%
Sharpe Ratio	0.76	0.53
Tracking Error	7.4%	-
Downside Capture	67.1%	-
Upside Capture	80.9%	-
Turnover	25.4%	-

OBJECTIVE 2: DETERMINE ALLOCATION TO DEFENSIVE STABILITY

Due to the significant embedded gains in the client's current Direct Index, we proposed liquidating a targeted portion of the portfolio and re-allocating to the Defensive Stability exposure. Below, we look at the impact of 5%, 15%, and 25% re-allocations.

Allocation Options to Defensive Stability

	Russell 1000	5% Defensive	15% Defensive	25% Defensive	100% Defensive
Annualized Return	11.08%	11.19%	11.41%	11.61%	12.93%
Annualized Std Dev	15.24%	15.04%	14.69%	14.36%	13.07%
Sharpe Ratio	0.53	0.55	0.57	0.60	0.76
Tracking Error		0.38%	1.13%	1.88%	7.41%
Downside Capture		98.4%	95.2%	92.0%	67.1%
Upside Capture		99.0%	97.0%	95.1%	80.9%
Active Share (12/31/2020)		3.6%	11.7%	19.9%	79.6%

Lower Vol and Downside Capture
With Higher Returns

… but will need to liquidate more of the portfolio
to reach the target model

A 75% Passive/25% Defensive Stability allocation was chosen as it improved the portfolio's upside/downside capture in-line with the client's desire to "take some chips off the table" but limited turnover and the amount of capital gains realized.

OBJECTIVE 3: TRANSITION WHILE MINIMIZING TAX COST

The third component of the client's objective was working in Defensive Stability exposure with the lowest possible tax impact. Allocation changes often come with a tax cost but applying tax management *during the transition* and on an *ongoing* basis helps mitigate the impact. For Canvas accounts, we apply a simple 4-step process:

1. **Invest** the portfolio while being mindful of tax impact during the transition from an existing portfolio. This means providing cost/benefit analysis for the portfolio transition and creating a plan to transition over time if appropriate.

2. **Regularly evaluate** the portfolio for tax loss harvesting opportunities. Parameters can be set to manage to an annual tax budget or tolerance threshold that allows us to deviate from the portfolio's strategy model to capture as many losses as possible.

3. **Reinvest proceeds** from tax loss harvesting with an awareness of wash sale rules and to maintain target allocations, factor tilts, and risk exposures.

4. Use accumulated losses to **offset realized gains**, lowering, or eliminating the client's tax bill.

We evaluated the incumbent portfolio to determine which tax lots gave us the "biggest bang for our buck"— meaning which tax lots can be liquidated and reinvested to reduce tracking error the most to our target 75% Passive/25% Defensive Stability target.

The table below shows projected results of a Half Transition and Full Transition. A Full Transition would realize all gains required to re-allocate to the chosen 25% Defensive Stability exposure. A Half Transition effectively provides a 12.5% exposure to Defensive Stability on day 1, with progress made in the future as loss harvesting opportunities arise from market movement within the client's annual tax budget and tracking error parameters.

In Canvas, we typically present statistics on the incumbent portfolio and options for an initial transition as it aids the decision-making process. Note in the table below that the incumbent portfolio's tracking error to the Russell 1000—the passive benchmark it is tracking—has ballooned to 1.82% due the embedded gains in the portfolio.

In this case, a Half Transition would actually *reduce* the incumbent portfolio's tracking error to the Russell 1000 from 1.82% to 1.57%, while also aligning it much more closely with the 75%/25% target allocation.

Tax Budget	Tracking Error 75/25 Model	Tracking Error Russell 1000	Turnover	Short Term Gains Created	Long Term Gains Created	P/E	P/S	Dividend Yield	Active Share
Incumbent	2.60%	1.82%	-	-	-	30.72	3.33	1.14%	38.50%
Half Transition	0.50%	1.57%	15.59%	$4,22	$274,423	29.02	3.02	1.47%	24.74%
Full Transition	0.27%	1.59%	32.96%	$27,385	$507,028	28.42	2.98	1.56%	10.87%
Total Embedded Gains: ST: $102,327 LT: $1,435,326									

Below are the top sells and buys associated with the Half Transition. Comparing the Russell 1000 and Incumbent weights, it is easy to see how the significant embedded gains in their portfolio were driving a high tracking error to the index (1.82%). Apple and Microsoft were held at nearly 3% overweights—more akin to an active manager than a passive index.

This highlights another key reason the client was looking to shift exposures. Growth stocks have done exceptionally well over the last few years and have been the drivers of total returns and embedded gains. To the extent that they are no longer the drivers of market returns, a Direct Index portfolio stuck in "Tax Lock" carries substantive active risk.

Top 5 Sells				
Company	**Russell 1000 Weight**	**Incumbent Weight**	***Transition Target Weight***	***Post-Trade Weight***
Apple	5.63%	8.83%	*4.22%*	*4.47%*
Microsoft	4.85%	8.13%	*3.91%*	*4.72%*
Amazon	3.70%	4.36%	*2.78%*	*3.05%*
NVIDIA	0.95%	1.54%	*0.71%*	*0.72%*
Walt Disney	0.89%	1.49%	*0.67%*	*0.87%*

Top 5 Buys				
Company	**Russell 1000 Weight**	**Incumbent Weight**	***Transition Target Weight***	***Post-Trade Weight***
Johnson & Johnson	1.15%	0.00%	*1.89%*	*1.75%*
Oracle	0.31%	0.00%	*1.17%*	*0.99%*
Pfizer	0.51%	0.00%	*1.05%*	*0.93%*
Procter & Gamble	0.83%	0.71%	*1.55%*	*1.45%*
Verizon	0.63%	0.00%	*0.47%*	*0.54%*

CONCLUSION

The value of a Custom Indexing platform like Canvas lies in its ability to solve for intricate scenarios like the one described. This example also highlights the advantages of *Custom* Indexing over *Direct* Indexing.

Using a Custom Indexing solution, the client could easily blend and/or re-allocate their passive exposure to incorporate a more defensive posture. The tax optimizer in Canvas would then execute this re-allocation in a manner that stayed within the client's set Tax and Tracking Error Budgets. The ability to manage passive *and* factor-based allocations from one account enables a more holistic and tactical approach to tax management not available in a standalone Direct Index.

CANVAS®

An investment service of O'Shaughnessy Asset Management, LLC

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For the full composite performance summary of this strategy, please follow this link: http://www.osam.com

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