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Software TAMP

Synopsis: 55*ip offers you an automated way to do sophisticated tax-loss harvesting and show prospects how to lower their investment costs.*

Takeaways: Clients can set a 'tax budget' when migrating gradually to your target portfolio, and harvesting losses takes place in the context of a complex algorithm that assesses other possible outcomes.

here, exactly, do you draw the line between a turn-key asset management program (TAMP) and asset management software with automated features?

This question arose in my mind as I was looking at a demo of a brand new portfolio management solution called 55ip (https:// www.55-ip.com/). When I say "new," I mean a company that launched earlier this year, which now has 40 advisory firms using the system, with roughly \$800 million in assets.

The service was developed as a quantitative research platform for hedge funds, called Ada Investments, with the algorithms (described below) developed by Dr. Vinay Nair of MIT and Wharton, and Dr. Leonid Kogan, also of MIT. "Our goal was to help hedge funds provide 8% annual returns with low volatility, as an uncorrelated investment," says chief operating officer Sachin Shah. "But then we thought it would be really cool if we could use this quantitative research platform to allow investment advisors—a broader market—to build more sophisticated models for their clients."

How does it work? Suppose you have an appointment with a

55ip is basically a hedge fund quant tool that has been fitted to the planning profession's portfolio management activities.

prospect who has been working with the brokerage office down the street. You invite the prospect to share with you his current portfolio, which you put on a spreadsheet, with the cusip numbers, and upload into the 55ip system. (Alternatively, you can send the statement to 55ip and its staff will input the client's current portfolio.)

Then you log into 55ip (it's web-based) and use a highlyautomated portfolio creation

You start by creating a tool. broad asset allocation (let's say 70% stocks, 30% bonds) and then, if you want, you can break these broad allocations down into subcategories: 35% large cap U.S., 15% small cap, 20% international large cap—or whatever. As an alternative, you can select some volatility parameters and let the 55ip engine optimize the subcategories - an interesting portfolio-building feature I haven't seen anywhere else.

When the allocation is set, 55ip will select an optimal set of ETFs designed to fit the parameters you've created. The system deliberately selects a lot more moving parts than you or I probably would have selectedas in: 11 different sector ETFs to mimic the performance of the S&P 500, in order to provide tax-loss harvesting opportunities throughout the year. (More on that in a minute.) The selections are made based on expense ratio and liquidity. "We don't want to be in an illiquid ETF when we want to trade," says Shah.

In a demo, Shah showed me the prospect's existing portfolio and the proposed portfolio sideby-side, in a colorful chart and also lists of the individual holdings. 55ip has calculated the estimated average annual return and volatility of each portfolio, the annual expense ratio of the existing and proposed portfolio, and it has factored in the advisor's annual fee

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vs. the asset management fee paid to the brokerage firm. (You, of course, supply your own fee.) The client will also see the benefits of a dynamic tax management strategy back-tested on the proposed portfolio, going back 15 years.

"At a minimum, the advisor would show that she can replicate the existing portfolio with limited change the allocations.

Tax-aware migration

Let's say the client agrees to come onboard. The advisor has already created the portfolio that she wants to recommend, but now she has to migrate the existing portfolio to the new allocation. This doesn't

The proposal section of 55ip shows clients the difference in costs between the proposed and existing portfolios, and then back-tests for the tax benefits.

tracking error," says Shah, and in the demo I see that the expense ratio of the proposed portfolio is 16 basis points, vs. 41 for the client's existing mix of funds and ETFs. On the side, we can see that the prospect would be saving more than \$4,000 in annual fees by switching from the brokerage firm to you. The report also shows the possibility of generating a tax alpha of 61 basis points a year, on average, with the new portfolio.

So far, this sounds mostly like a software solution, right? Except that the software is selecting the actual ETFs that will go into the portfolio, which sounds a bit like a TAMP. "We have algorithms that optimize the portfolio for the lowest-cost ETFs and for optimal tax management," Shah explains. "And it minimizes tracking error against the major indices."

Through an integration with fi360, the software will display a fiduciary score for each iteration of the portfolios created by the advisor, which changes as we

create any tax problems with IRA assets, but the taxable accounts are a different story. So Shah takes me into the 55ip transition "We capture the client's tool. existing portfolio data [basis, in other words] at the custodian," he explains, "and our trade generation platform automatically builds the trade list that gets the client from the current position to the strategy that the advisor is recommending, and shows the tax cost in real time."

Ah, but what if the client doesn't want to take a big tax hit this year?

"In the case on the screen, the capital gains and ordinary income taxes triggered by the portfolio migration come to roughly \$11,000, which might make the client wince. "Remember that in many cases, the advisor is having to match the gains and losses on a spreadsheet, which can be very time intensive," Shah tells me. "We automate the entire process. Within seconds we can tell you the tax impact, and

then you can go in and create a tax budget, this year, next year, and you can see on the screen the tax impact and the tracking error to the target portfolio."

There's another element, however, this is not immediately evident on the screen. The 55ip system will optimize the trades that are made in that first year, under the tax budget, to reduce the tracking error as much as possible. "We're effectively building a completion portfolio during the transition period," says Shah, "such that the tracking error to the target portfolio is as limited as you want it to be."

Of course, clients can rope off legacy positions that they don't want to sell, and the system will create a completion portfolio around this limitation, getting as close as possible to the recommended portfolio's risk/ return characteristics.

Opportunistic loss harvesting

mentioned tax loss I harvesting and rebalancing earlier, and Shah now turns to the ongoing portfolio management side of 55ip. The advisor can set parameters for rebalancing-say, a 5% deviation from the target allocation-and these parameters can be applied individually to each sub-asset class. But most advisors prefer to let 55ip handle the opportunistic tax-loss harvesting and subsequent rebalancing-and even do the trades for them. (Isn't this is beginning to sound more like a TAMP arrangement?)

"We make the tax-loss harvesting decisions based on machine learning and AI," says Shah, "applying the algorithms to a client's portfolio throughout the course of the year, optimizing opportunities to harvest losses."

In most cases, the advisor would set a maximum tracking error. And then the 55ip algorithms will do two things. First, it applies an options model to every harvesting tax-loss decision. weighing the value of taking the loss today against the potential lost opportunity of taking a larger potential loss tomorrow or next week, based on the volatility of the ETF, the volatility of the portfolio (the average price swings up and down), the client's tax rates and the tracking error constraints. This is a refined version of the rather crude process of simply rebalancing at set percentage deviations.

The other function of the algorithms is to replace the sold position with something that will mimic its performance, to reduce tracking error. In fact, Shah explains, 55ip will take into account not just the security being sold, but the entire portfolio (and, of course, all the positions being sold) to reduce total tracking error down to the lowest possible level, and in all cases below the threshold the advisor has set.

This tax-loss harvesting process is the reason that 55ip uses 11 sector funds instead of the SPDR ETF; it creates more moving parts and more chances that something has a loss to harvest in the normal movements of the markets. The other asset classes are similarly subdivided—which also explains why the system insists on its own ETF selections rather than what advisors select. But that said,

Shah says that advisors can build their own models using their own ETF selections if they prefer—if they're willing to live with less robust tax-loss harvesting benefits. (This makes 55ip sound more like software.) derive from 55ip," he adds. "55ip lets us add value on the tax side with low tracking error, and it's flexible enough that you can cerate whatever portfolio is appropriate for a specific client."

are.) For most clients, Vine "We do not sell off-the-shelf Street is trying to mirror the

55ip uses 11 sector funds to replicate the SPDR ETF-so there will be more opportunities to harvest tax losses in all environments.

model portfolios," says Shah. "But that said, our advisor base has created an inventory of strategies that other advisors could use if they wanted to"—not unlike a model marketplace, which is neither TAMP nor software.

Cost reduction

55ip is an integral part of the asset management process at Vine Street Wealth Management in San Francisco, whose founder, Sasha Kovriga, used to be an equity portfolio manager for Osterweis capital. "I worked there for about 14 years, and then suddenly it seemed like everything was going passive," he says. "I felt like there was an opportunity on the wealth management side."

Kovriga's portfolio management goal is to reduce fees and costs for clients, and add alpha on the tax-loss harvesting side. "We use Orion for portfolio management and performance statements," he says, "but the tax-loss harvesting and portfolio design are the primary benefits we

All-Country World Index for its equity allocations. "We have 55ip create a synthetic ACWI, rather than just buying the ACWI ETF," says Kovriga. "It creates tax-loss harvesting opportunities on a monthly basis, and 55ip also rebalances to keep the appropriate exposures." A typical portfolio will include 6-10 equity ETFs.

With new clients, says Kovriga, it is not uncommon for clients to balk at the tax hit of a full migration over to the portfolios he's recommending, so he will work with the client to set an annual tax budget—which could be zero, meaning that low-basis positions will be slowly migrated as tax losses are harvested to cover them.

"We explain that there is a tension between risk of tracking error and cost of taxes," Kovriga says. "Sometimes it helps that clients are at a low tax rate, which allows us to move over more quickly. And it helps that 55ip can quickly quantify these numbers for us in that first meeting."

Kovriga says that such

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efficient tax management with low tracking error probably wouldn't have been possible five or ten years ago. "Today, you have a phenomenal number of ETFs of every flavor," he says. "The ability to substitute, and the liquidity of this market, is very high today."

What, exactly, is the alpha value of tax-loss harvesting?

"That's the 64 million dollar question," Kovriga admits. "It "For us, it is super-simple."

Flexible migration

Brian Beasley runs a smaller advisory shop, with \$55 million under management, plus some legacy trail commissions from variable annuities he sold to clients before filing as an RIA in 2013. His firm, Athena Private Wealth in Des Plaines, IL, starts

Migrating from existing to recommended portfolios in the taxable space is easy and flexible. 55ip lets clients choose a yearly tax budget.

depends on tax rates, and what point in the market you come in, and what the market has been doing." He is confident that there IS value, but whether it's 50 or 100 basis points, more or less, he can't say. "It's a pretty straightforward concept, and conceptually it makes sense," he says. "But I couldn't tell you a figure, and the tracking error and trading costs make it more complicated."

He adds that sophisticated investors will see the value on their tax returns, but as yet there is no clear way to create a quarterly statement showing a pretax and after-tax return, and the difference is the benefit of all the work that goes into tax-loss harvesting.

Is 55ip a TAMP or software? Kovriga calls it an outsource solution. "You give them the accounts, they invest it, you see what is in those accounts, and depending on the tax budget, they will rebalance or not," he says. with the Riskalyze platform, and then assigns clients to one of eight model portfolios created through 55ip, which conform to Riskalyze scores ranging from 25 to 77.

"The platform shows us the difference in cost between our portfolios and what those prospects have now," Beasley explains. "We can show the back-test of that strategy, and say this is compared to a benchmark that takes the same amount of risk. Here is the outcome over different time frames."

Beasley says that migrating from existing to recommended portfolios in the taxable space is easy and flexible in 55ip. "They give us the ability to restrict a specific position, and that's been really nice," he says. "The other feature we use more often is the tax-aware transition, where we can input the tax budget."

Some clients, Beasley explains, will come in with loss carryforwards, and the client will

want to limit the tax bite to that amount. The tax budget can be a certain amount the first year and a (usually smaller) amount in subsequent years.

Most of Athena's clients use the automated tax-loss harvesting and rebalancing feature. "We don't place the trades; they do it," says Beasley. "We could choose to receive instructions from 55ip, and we'd be the ones to pull the trigger on trades. But that's not something we've done on our end."

Is 55ip software or a TAMP? "At the start of the relationship, we sent our paperwork into Schwab, which basically said: please give our permission to 55ip to manage our accounts and make trades," Beasley replies. "But we give 55ip specific instructions; these are the features that this client wants on this account."

So it's automated an "Tactically, I would solution? say it's automated," says Beasley. "Strategically, we still have control. That's one of the things we liked about it, is that you're not completely delegating, if you don't want to, the entirety of your client assets into someone else's program. From our perspective, we have been able to keep a tremendous amount of control over specific features."

Most importantly, Beasley adds, there have been no unpleasant surprises for clients. "We have been able to go back to them and show them, our experience has been exactly what we would have expected, given how the markets have performed," he says. "That," he says, "is what we want to be able to tell them."