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THEPORTFOLIO

The Match Makers

ADVISORS CAN USE ASSET DEDICATION TO MATCH CLIENTS' CASH FLOWS TO THEIR LIABILITIES.

BY STEPHEN J. HUXLEY AND J. BRENT BURNS

It is surprisingly easy to forget that your clients' investments exist to fund their lifestyles. Clients pull money from their portfolios to pay for living expenses, contribute to college costs, donate to charities and fund estate plans. They may not know exactly when all these outflows will occur, but they have a sense of the time horizons involved. The real benchmark for them, therefore, is whether their money can support their financial goals.

The problem with traditional asset allocation is that it uses formulas that are often removed from how clients think about their money and when they will need it. Model portfolios regularly fail to distinguish between clients whose monetary characteristics appear to be similar, but whose needs differ. This can be true for institutional as well as individual clients.

There is a better way. The asset dedication approach allows advisors to create investment strategies driven by client goals. Like a pension manager, an asset dedicating advisor will match cash flow to projected liabilities.

HOW IT WORKS

The asset dedication process starts by estimating a client's future cash flow stream. It then designs portfolios by matching investments to those cash flows. Short to intermediate fixed-income instruments are calibrated to provide predictable income over a period that makes the client comfortable, usually five to 10 years. Stocks and other growth-oriented investments cover longer-term needs. The advisor and client regularly reevaluate the investment strategy to reflect changes in income needs, risk perception and assumptions about the future.

To link investments effectively to cash flows, asset dedication portfolios are broken into three subportfolios. The Cash Portfolio uses a money market account to fund income needs for the current year. The Income Portfolio uses individual bonds to meet clients' intermediate-term income needs. The Growth Portfolio, comprised of stocks and other high-return investments, generates returns for the long term. Growth Portfolio assets are sold as needed to replenish the Income Portfolio.

Asset dedication differs in several ways from traditional asset allocation. First, you'll find no fixed-formula "model portfolios." Instead, each portfolio is customized. Clients can adjust their time horizons according to their comfort

with market volatility. Conservative clients, for example, usually select longer time horizons and thus a larger allocation to bonds.

Second, the bonds are selected to mature at times when cash is needed (releasing funds, for instance, when the grandkids are ready for college). Because bonds are held to maturity, the price volatility of the securities in the Income Portfolio becomes immaterial. Reinvestment risk is virtually eliminated because coupon interest is consumed by the cash flows.

Third, you don't need to revisit the asset allocation of the entire portfolio. Instead, an increasingly risk-averse client can extend the time horizon of the Income Portfolio at any time—or an advisor can take profits at opportune moments, plow the profits into an extended Income Portfolio and provide a deeper buffer against market volatility.

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CHOOSING A TIME HORIZON

To demonstrate how easily asset dedication can be explained, consider the following retirement example, shown in "Income Portfolio Cash Flows," on the following page. Mr. and Mrs. Smith just retired with $1.8 million of investable assets and plan to withdraw $90,000 per year, increasing at 3% per year for inflation. Assume they want $90,000 in cash for emergencies and to fund the rest of the current year. The allocation to bonds in the Income Portfolio is determined by how long they want their income stream protected. If they choose a five-year horizon, the income stream they wish to protect becomes their "Target Cash Flow," totaling $492,157. Based on U.S. Treasury quotes as of January 2008, a portfolio that would supply the cash flow stream most closely matching the target would cost $447,250, or 25% of their total assets. The balance of their funds, $1,262,750, or 70%, will be invested in stocks. Thus, their allocation becomes 25% bonds, 70% stocks and 5% cash.

If they choose a more conservative, 10-year horizon, the right half of the Income Portfolio chart shows that the required allocation would be 48% bonds, 47% stocks, and 5% cash. In both cases, the correlation between the target income stream and actual cash flows is more than 99%. The match cannot be perfect because bonds must be purchased in $1,000 increments.

For simplicity, the cash flow stream used for the Smiths is smooth, growing at a constant 3% rate. In reality, the mathematics behind asset dedication (called nonlinear programming) can build income portfolios to match any cash flow stream, even an irregular one. The algorithm finds the right bonds in the right quantities with the right maturities to minimize the cost of funding the cash flows.

Dedicated portfolios can also be deferred to start at a future date for clients who are planning to retire or are looking to fund major expenses such as a child's education or wedding. Deferred portfolios can be put in place gradually or all at once and be used before or after retirement. Asset dedication is also ideal for philanthropic vehicles such as foundations or charitable remainder trusts, where the portfolio must support a series of cash flows.

BALANCING NEEDS

When setting the time horizon for the Income Portfolio, clients must choose: Do they crave predictable income, or do they want to sacrifice some security in pursuit of higher expected returns in the Growth Portfolio? Most clients have not saved enough money to dedicate it all to income over their lifetime. If the Smiths invested their entire nest egg in an Income Portfolio, for instance, they would have enough cash for only about 25 years. To make their money last longer, they have to shorten the time horizon on their Income Portfolio and dedicate some assets to long-term growth. Ten years of income is a conservative compromise.

In practice, asset dedication is a dynamic process. Each year, the portfolio is examined to see if it should be reconfigured to extend the initial time horizon and perpetuate the volatility buffer. For example, at the end of the first year, a five-year portfolio will only have four years of cash flows remaining. The simplest decision would be to roll the Income Portfolio back out to a five-year horizon each year. Flexible rolling horizons employ more complex rules that use the projected cash stream as a "critical path" benchmark and compare actual performance to planned performance in deciding what move to make.

BREAKING DOWN THE RISKS

Research has shown that traditional asset allocation strategies do not work psychologically for many individual investors. The quantitative language of standard deviations fails to express risk in a way that clients understand. Research on current risk tolerance questionnaires, moreover, suggests that they do a poor job of matching investor personalities and preferences to investment strategies. Asset dedication, on the other hand, gives advisors an opportunity to help clients evaluate risks in ways that reflect how they think about and spend their money.

The asset dedication strategy allows clients to address different risks in different portfolios: short-term concerns (such as volatility) in the Income Portfolio and long-term worries (such as inflation and replenishing assets) in the Growth Portfolio. Advisors can use an iterative Monte Carlo approach to help clients evaluate the probability of achieving their long-term financial goals alongside the tradeoffs for various Income Portfolio time horizons.

Short-term loss is a natural part of market cycles. The traditional approach to asset allocation uses bonds to dampen volatility but may fail to quiet clients' fears. With the asset dedication strategy, the Income Portfolio insulates the client from the panic that short-term losses can engender. With the knowledge that they have set aside several years' worth of predictable income, clients can more comfortably dedicate assets to long-term growth and contend with periodic downturns. Although the Growth Portfolio is still subject to short-term loss, they can now view it in perspective.

Longer term, the Growth Portfolio can address another legitimate client fear—that they will outlive their money. This is called shortfall risk. Generally, stocks are the best hedge for shortfall risk because the worst-case returns for stocks beat the best-case returns for bonds over time. In our book *Asset Dedication,* we present data back to 1926 showing that asset-dedication returns beat those of traditional asset allocation portfolios that held 70% or less in stocks.

Asset dedication is a customized investment strategy driven directly by clients' personal financial goals. Unlike traditional asset allocation approaches and model portfolios, investments are expressly linked to the cash flows that need to be funded. Short-term concerns about losses and long-term worries about achieving goals can be compartmentalized and managed. Although cash flow needs and concerns about risk change over time, asset dedication provides advisors with an intuitive framework to guide clients through their financial decisions. FP

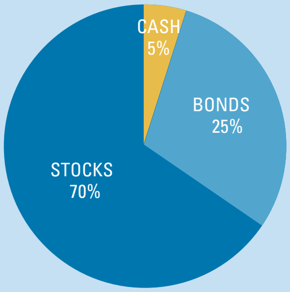
INCOME PORTFOLIO CASH FLOWS

In asset dedication, algorithms find the right bonds to minimize the cost of funding cash flows.

5-YEAR HORIZON

Year	Target Cash Flow Needed for Retirement	Actual Cash Flow from Income Porfolio (Bonds)	Difference
0		$90,000 from Cash	
1	$92,700	$92,291	($409)
2	$95,481	$95,861	$380
3	$98,345	$98,729	$383.57
4	$101,296	$101,729	$433.21
5	$104,335	$104,000	($334.67)
Total	**$492,157**	**$492,610**	**$453.11**

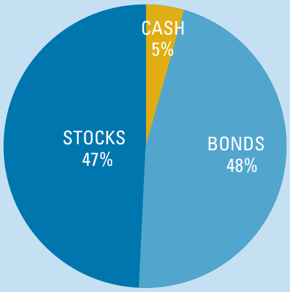
Correlation of Target vs. Actual Cash Flows:	99.58%
Actual Cost of Income Portfolio:	$447,250 (25%)
Invested in Growth Portfolio:	$1,262,750 (70%)
Cash:	$90,000 (5%)
Total:	$1,800,000 (100%)
Assumed Total Return on Growth Portfolio:	10%
Ending Portfolio Value in Future Dollars:	$2,232,952
Ending Portfolio Value in Today's Dollars:	$1,871,123



10-YEAR HORIZON

Year	Target Cash Flow Needed for Retirement	Actual Cash Flow from Income Porfolio (Bonds)	Difference
0		$90,000 from Cash	
1	$92,700	$92,170	($530)
2	$95,481	$94,980	($501)
3	$98,345	$98,275	($70.43)
4	$101,296	$101,275	($20.79)
5	$104,335	$103,985	($349.67)
6	$107,465	$106,985	($479.71)
7	$110,689	$110,985	$296.35
8	$114,009	$113,905	($104.31)
9	$117,430	$117,000	($429.59)
10	$120,952	$121,000	$47.53
Total	**$1,062,702**	**$1,060,560**	**($2,141.61)**

Correlation of Target vs. Actual Cash Flows:	99.96%
Actual Cost of Income Portfolio:	$859,343 (48%)
Invested in Growth Portfolio:	$850,657 (47%)
Cash:	$90,000 (5%)
Total:	$1,800,000 (100%)
Assumed Total Return on Growth Portfolio:	10%
Ending Portfolio Value in Future Dollars:	$2,422,593
Ending Portfolio Value in Today's Dollars:	$1,751,125



Source: Author calculations.

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Asset Dedication provides a complete, behind-the-scenes, turn-key investment management platform that complements your wealth management approach by integrating quantitative and behavioral finance. Partnering with us takes you out of the performance loop and positions you as the strategist, the chief architect of your client's financial plan. You create the plans that map out your clients' financial goals. We build the portfolios, matched to those plans, dedicated to getting them there. By managing portfolio construction, implementation and oversight, along with back office functions like billing, we free up your time to build stronger client relationships, grow your business, and increase your profitability.

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