STEPHEN J. HUXLEY, Ph.D.
Curriculum Vita
December, 2010

CURRENT POSTION:
Professor, McLaren School of Business, University of San Francisco
(Executive MBA, MBA, and undergraduate courses include Data Analysis, Decision Modeling, Personal Finance, Quality Management, Operations Mgt).

ACADEMIC TRAINING:
Ph.D., Economics, University of California, San Diego, 1975.
B.Sc., Business Administration and Statistics, Ohio State University, 1966.

HONORS:
The USF Sarlo Prize, 2000 (Highest award given by USF to a single faculty member)
Outstanding Teacher Award, School of Business 2000, 1999, 1993, 1989, 1987
Outstanding Service Award, School of Business 2005, 2000, 1999, 1997
Colleague of the Year Award, School of Business, 1998
Outstanding Faculty Research Award, School of Business and USF, 1988.

Winner of the 17th Annual International Franz Edelman Competition for Management Science Achievement, April, 1988, Washington, D.C. (highest award given by the Institute of Management Science).

BOOK:
"Asset Dedication," McGraw Hill, 2005, (co-authored with Brent Burns, MBA, USF, 2000)
www.assetdedication.com

PUBLICATIONS/ PRESENTATIONS:
"Bond Funds Are Bad for Retirement, " Forbes, June 7, 2010 (electronic version)
http://www.forbes.com/2010/06/07/bond-maturity-treasuries-financial-advisor-network-retirement_print.html

"Silver Lining," Investment Advisor, May, 2010
http://www.investmentadvisor.com/Issues/2010/May-2010/Pages/Silver-Lining.aspx

(See complete list of 2010 publications beginning on Page 3 below.)

"The Match Makers", Financial Planning, Feb., 2008 (co-authored with Brent Burns)
http://www.financial-planning.com/fp_issues/2008_2/match-makers533561-1.html

Invited Speaker: "Asset Dedication: Building a Successful Retirement Portfolio" presented at the 2006 National Financial Planning Association Conference, Nashville, October, 2006

Invited speaker: "Patrol Officer Scheduling for the SFPD" presented at the National Institute of Justice Symposium on Operations Research and the Criminal Justice System, September, 2006

"Asset Dedication vs. Asset Allocation: Dawn of a New Paradigm?" presented at the 61st International Atlantic Economic Society Conference, Berlin, March, 2006

"Transferring the Critical Path Concept to Personal Financial Planning," presented at the Internet, Processing, Systems, and Interdisciplinary Research Conference, Hawaii, January, 2005

"The Greatest Good for the Greatest Number: Data Envelopment Analysis and Non-linear Programming as Tools for Estimating the Efficiency of Foreign Aid Allocations for Developing Countries" presented at the Annual Policy Modeling Conference, Brussels, July, 2002

"Measuring Freedom: A Data Envelopment Analysis," presented at the First International Conference on The Analysis and Measurement of Freedom: Theoretical, Empirical and Institutional Perspectives, Palermo, Italy. September 27-29, 2001

"A Data Mining Approach to Forecasting Inflation," presented at the 20th International Symposium on Forecasting, Lisbon, Portugal, June, 2000.

"Benford's Law of First Digits," presented at the Annual International Conference of the Decision Sciences Institute, Athens, Greece, July, 1999.

"Searching for Economies of Scale in Public Agencies using Data Envelopment Analysis" presented at the Annual International Conference for Institute for Operations Research and Management Science, Tel Aviv, Israel, July, 1998.

"Customer Surveys: The Quality Sample," co-authored with Johnathan Barksy, The Cornell Quarterly (December, 1992).

"A Break from Tradition for the San Francisco Police: Patrol Officer Scheduling Using an Optimization Based Decision System," co-authored with Philip Taylor, Interfaces (Jan., 1989).

"Quick and Dirty Forecasts of the Consumer Price Index: How Dirty?," Studies in Economic Analysis (Spring, 1987).

"Finding the Right Spot for a Church Camp in Spain," Interfaces (October, 1982).

"Predicting Response Speed in Mail Surveys," Journal of Marketing Res. (Feb., 1980).

EXPERIENCE:

Chief Investment Strategist, Asset Dedication LLC, 2009 to date

Chief Executive Officer, Asset Dedication LLC, 2002-09

Speaker on personal financial planning issues for various professional financial planning organizations and general public, 2003 to date.

Acting Associate Dean of Academic Affairs, School of Business, USF, Fall, 1999

Lead Project Director or Co-director on:

Design vs. Darwin: A Scientific Controversy, Panel presentations at:

Moraga Valley Presbyterian Church, Moraga, CA, Oct. 19 & Nov. 2, 2003

Community Presbyterian Church, Danville, CA, May 8 & 15, 2003

IDEA Conference, Univ. of San Francisco, Sept. 27-28, 2002 (www.ideacenter.org)

Productivity and Quality Studies, California Public Utilities Commission, 1991-92.

Design and implementation of personnel scheduling systems, 1985-89.

Installation of statistical quality control systems for small manufacturer, 1984.

Facilities location study in Barcelona, Spain, 1982

Regional economics study, in Queensland, Australia, 1972.

Expert Witness Testimony on Employment discrimination, personal injury, wrongful death, etc., 1969-1996.

Full-time consulting economist with management consulting firm, San Diego, 1968-71.

PERSONAL INFORMATION:

Born January 30, 1943, in Indiana; raised in Ohio; California resident since 1966; two children, born 1971 and 1975; resided in Brisbane, Australia, 1971-73, while teaching at University of Queensland; resided in Barcelona, Spain, while on sabbatical leave in 1981-82; promoted to Full Professor at USF in 1983; active in local church activities.

Publications in 2010

Contents

Co-authorships with Brent Burns (USF MBA 2000)

December 16 2010

RIABiz

Should You Christmas-Shop the Market? It Turns Out There's A Seasonality to Finance, Too

By Stephen Huxley

The last three months of the year historically bring the biggest market gains, but volatility remains high

Seasonality is a familiar concept when it comes to retail sales. December is always the biggest month, with sales about 20 percent higher than the average month. Its seasonal factor is therefore 1.20; to get the seasonally adjusted figure, divide the raw numbers by 1.20.

Retail consumers are driven by different factors than financial investors, of course. Retail sales are deeply influenced by the ebb and flow of calendar and cultural events as the seasons repeat themselves over and over again.

But the same human beings making those decisions are also making decisions to hold, buy or sell assets, whether those assets belong to them, their clients, or the institutions where they work. So are the decisions in the financial realm subject to any sort of repeating, seasonal pattern?

Serious research into the matter becomes very complicated due to the fundamental problem of choosing the time frame. How far back should we look in trying to detect patterns in time series data? Go back 25 years and you might see something that looks like a non-random pattern. Go back 50 years, and it disappears, washed out by counterevidence. Go back 100 years, and it may come back.

Time series

On top of this is the insight that regardless of the length of any time series, it shows only what did happen, not what might have happened. It represents only one set of observations of the zillions that might have occurred. What if the bullet that killed President Kennedy had missed? Would we have had a different steam of historical data thereafter? Probably. What if the bullet that hit Reagan had killed him? Would it have changed things? Probably.

So it is very difficult to draw any sort of firm conclusions from looking at any particular series of values regardless of the time frame. It is best to temper the results of any study on seasonality in financial (or any other) markets with the understanding that what might have happened in the past may or may not presage the future. That warning should sound familiar.

Keeping these thoughts in mind, what about the seasonality in financial markets. If one examines the monthly changes in the S&P 500 from 1950-2010, some degree of seasonality does appear to be present. The average monthly change is .68 percent, but November has the largest gain, averaging 1.65 percent. This would correspond to a seasonal factor of 2.43, much greater than seasonality in retail sales.

It turns out that the last three months of the year are all above average (October averages 1.59 percent, December, 1.05 percent). **This gives the fourth quarter an average monthly gain of 1.42%, the highest of all quarters (Q1 = .81%, Q2 = .40%, Q3 = .07%).** The corresponding quarterly seasonal factors for Q1 through Q4 would be 1.20, .60, .10, and 2.10, respectively. While this “football season phenomenon” appears

significant, it actually represents only 1.28 standard deviations above the mean. Furthermore, it is based only on the 1950-2010 period with no guarantee it will persist.

Whether or not it is possible to profit from this seasonality has been and will likely continue to be a debated question. Active managers who believe in market timing no doubt try to build seasonal factors into their models. Passive managers will point out that even though the other quarters may not perform as well as the fourth quarter, they still earn more than cash or bonds. That debate will no doubt continue regardless of any seasonality effects.

Seasonality in interest rates? Much less

How about seasonality in interest rates? The Federal Reserve reports monthly averages for maturities of 1, 3, 5, 10, and 20 year Treasury bonds for 1953-2010 (through October) – almost the same span as for equities. Combining all maturities over the entire span yields an overall average of 6.01% (high was 6.3% for 20 year, low was 5.4% for 1 year)
The overall average demonstrated far less seasonality compared to equities. The month with the highest average (August) was only 6.07%, meaning a seasonal factor of only 1.01 (only 1 percent higher than the average month). The lowest was January at 5.96%, a seasonal factor of .99. But the big picture is that the highest and lowest are separated by only about 2%, not much of a difference.

So what does this bit of research tell us? First, equities appear more volatile than retail sales from a seasonality standpoint. Second, interest rates have less seasonality than retail sales. In fact, they have hardly any seasonality at all. Finally, it suggests that forecasting future market moves – and profiting from it – is likely to remain as elusive as ever.

Source: http://www.riabiz.com/a/4888035

November 24 2010

RIABiz

A Brief History of Interest Rates, From the First Thanksgiving to the Bond Boom

By Stephen Huxley

The Pilgrims probably paid 12-18% to finance their new lives (lucky for us they took the risk)

Brooke's Note: We were starting to conclude that we couldn't come up with an RIA article with a Thanksgiving angle and then Steve Huxley came through with this one — exceeding our highest hopes. Happy Thanksgiving to everyone.

Thanksgiving always reminds us of our history, and as professionals in the American financial industry, we should know a bit about the history of interest rates in this country. 10-year Treasuries have yielded an average of about 5.1% since 1800, but the historical record is a very meandering pattern.

To start from the very beginning – before 1800 – consider the Pilgrims. To escape governmental oppression of their religious beliefs , several congregations of English farmers relocated themselves in Holland in the early 1600's. Eleven years later, they borrowed money to buy sailing vessels and provisions to resettle permanently in the "new world." What interest rate do you suppose they paid?

According to Homer and Sylla's "A History of Interest Rates," interest rates on commercial loans in Holland during the early 1600s for long term loans by cities were in the 6-8% range. If these were considered the equivalent of AAA rated loans and we use the current definition of junk bond spreads of about 6-10% higher than Treasuries – and judge the Pilgrim voyage to be a very risky venture – then the Pilgrims were likely paying at least 12-18% to finance their new lives.
Historians believe they were able to get the loans because they had established a reputation for trustworthiness and hard work during their years in Holland. Although about half of the pilgrims died during the first year, those that were left celebrated their first harvest with a festival in November, 1621 – America's first Thanksgiving.

Fast forward to 1776 and the Revolutionary War. To buy weapons, provisions, and equipment, the Continental Congress had to borrow money. They tried printing specie with the promise that it would pay 4% to the holder in 5 years, but its principal value fell precipitously to about 2.5% within 3 years and was ultimately redeemed for 1% in 1790 (one wonders if the current Fed leaders are aware of this…). Ultimately, most of the loans came from foreign sources at rates of 5 to 6 percent. Many of these loans (mostly from French and Dutch lenders) could be considered political subsidies to irritate the British Crown rather than actual loans.

Now, fast forward again to the next epochal event in our history, the Civil War. We tend to think of ourselves as a polarized country now, but when viewed from the perspective of the 1860s, we are actually quite chummy, rather like siblings tussling over who gets the bigger piece of (pumpkin?) pie. To finance the war, the Union paid rates in the 6% to 7% range, higher than either corporate or municipal bonds being issued at the time. After the war came the panic of 1873, when several railroads failed due largely to corruption and rates on long term Treasuries began to fall. They stayed in the 3% to 4% range, averaging 3.4% from 1878 to 1958, a period of 81 years with only a few minor exceptions, when they rose to 5%.

Interest rates had begun to rise slowly after World War II, then rapidly after 1965, and culminating in a peak of nearly 14% in 1981 as Fed Chair Paul Volker battled inflation and President Ronald Regan deregulated the financial industry.

At that time, in 1981, there were only about 125 bond funds in existence. But as rates began to fall from their historic highs, financial entrepreneurs who realized that great total returns were in the offing for fixed income began to open bond funds. Today, over 4,000 bond funds exist, meaning 97% of all bond fund managers have been enjoying an environment of terrific total returns buoyed by falling rates over the past 30 years.

And what does the future hold? Rates have little room to drop much lower, in spite of Fed Chairman Ben Bernanke's desire to keep them down. It would not be surprising if more than a few senior bond fund managers – the bright ones anyway – will decide now is a good time to retire with a winning record. Those who do will likely have much to be thankful for over the next few years if rates begin to climb back towards their long term averages.

Source: http://www.riabiz.com/a/4297032

November 15, 2010

Financial Planning

FINANCIAL PLANNING

Hyperbolic Discounting

By Stephen J. Huxley, Chief Investment Strategist, Professor of Business Analytics, Univ. of San Francisco

We hear a lot about the differences between institutions and people when it comes to investing. This is a good thing because there are significant differences between the two in terms of decision-making and investment behavior. In fact, a Nobel Prize in Economics was awarded in 2002 to one of the early pioneers of Behavioral Economics, Daniel Kahneman, a psychologist by training.

One of the terms used in conjunction with behavior economics has an intriguing name: "hyperbolic discounting." What is its meaning and relevance to financial advisors who are on the front lines when it comes to dealing with people and their financial decisions?

The first thing to understand about hyperbolic discounting is that it is a bad thing. It attempts to put a mathematical name to behavior all advisors have observed: unless restrained, people will tend to put too high a value on "now" and too low a value on future events. This makes their investing preferences inconsistent over time.

Psychologists typically note this inconsistency in addiction behavior. A smoker may agree that the best plan is to enjoy smoking today, but to quit tomorrow in order to get health benefits. What he is saying is that for today, smoking has higher value than health benefits but, beginning tomorrow, health benefits will have a higher value. He is discounting the value of the health benefits so much that they have a lower value today than smoking has today, so he smokes today.

The next day, however, when tomorrow becomes today, the same thing happens. He will again enjoy smoking "today" and quit "tomorrow." If this continues, the smoker will never give up, even though he claims he wants to quit. Hence, he suffers from time inconsistency – his tradeoff ratio between current and future actions does not stay constant. It changes with the passage of time. The point is that "now" has especially high value compared to any future time, whenever "now" is. The root problem is self-control; other examples would include dieting, procrastination – and saving for retirement.

It is normal, of course, to enjoy gratification sooner, rather than defer it. Indeed, that has always been true, because people naturally have a positive time preference – they want good things now and prefer to postpone bad things to later. But investing "rationally" means making this tradeoff consistent over time.

Mathematicians have formulated the discounting of future values in two ways: exponential and hyperbolic.

Exponential discounting leads to the classic present value formula that all institutions and markets use. Time is modeled as an exponent in the denominator: PV = FV/(1+r)^n, where r is the rate of interest and n is the number of years. As n gets bigger, PV gets smaller, i.e. is discounted exponentially. Furthermore, this discount ration would stay the same whether discounting next year to this year, or discounting the Year 21 value to Year 20. It is time consistent.

But with hyperbolic discounting, time is entered as a multiplier, such as PV = FV/(1+n). This does a better job mathematically to generate more rapid discounting of the near future (next year's FV would be 50% of today's) but less rapid discount of the distant future (Year 21 would be worth 95% of Year 20's value). It is this difference that makes hyperbolic discounting behavior inconsistent over time. Any strategy that helps clients overcome this natural tendency – that is, to help them use exponential discounting rather than hyperbolic discounting – is desirable.

Source: http://www.financial-planning.com/news/-2669763-1.html

October 25, 2010

Financial Planning

Commentary from Stephen J. Huxley, Ph.D. Chief Investment Strategist, Asset Dedication, LLC Professor of Business Analytics, University of San Francisco

Are Interest Rates Always Positive?

One of the current topics of debate is the direction interest rates are headed. But curious clients may ask more fundamental questions, such as: "Are interest rates always positive?" It pays for financial planners to be prepared with an answer that demonstrates a depth of understanding the general public does not have.

In this case, the answer is yes. Interest rates have always been positive and probably always will be.

There may be a few circumstances where real interest rates, adjusted for inflation, are negative, but it would be very strange indeed if nominal rates turned negative because an investor can always refuse to invest in anything and get zero return.

Interest rates have been with mankind for a very long time (it is mentioned in Exodus, the second book of the Bible). There are a number of explanations, including inflation, government policies, and perhaps the expectation of rising standards of living. But theoreticians believe there are also deeper "root" causes that stem from our nature as human beings and from the dynamic nature of time.

The first root cause is compensation for deferred gratification. The theory is that we all have "positive time preferences," meaning we want what we want when we want it - now, not later. The default preference is for immediate gratification, but we will wait if there is some reward for doing so. That is why young children prefer to eat dessert first and have to be taught to wait until they get some nutrition. By the same token, we will pay interest on a credit card to buy things to enjoy now to avoid the pain of waiting.

The second explanation for interest rates being positive has to do with risk. Positive time preference isn't just the result of childish impatience. It is a rational response to what physicists call the "dynamic irreversibility of time" and the risk it creates. Once a dollar leaves my direct control, there is always some probability that I won't ever enjoy the gratification it could have provided me with. The investment may go bad, the record of the deposit may be lost, or something may happen to me (I die in an automobile accident before getting repaid). In such cases, my gratification wasn't deferred; it was lost forever. I therefore must be compensated for taking that risk. I want more than my dollar if and when it comes back - I want interest.

Will these underlying reasons for positive interest rates ever change? I doubt it.

Source: http://www.financial-planning.com/news/kelly-saut-research-roundup-2669343-1.html

October 18 2010

Financial Planning

FINANCIAL PLANNING

Waiting on Rates to Rise is a Bad Bet for Retirement Income: Stephen J. Huxley, chief investment strategist, Asset Dedication LLC, and professor of business analytics, University of San Francisco

Rates have been hovering at the lower end of the scale since 2001. Though the media likes to focus on the near zero rate for federal funds, the fact of the matter is that yields on 1 to 3 year maturities in previous periods have actually been lower than they are today for a surprising amount of the time.

For instance, the 1-year Treasury yield on 10/14/10 was a stingy .22%. Although this is indeed low, it has been even lower 20% of the time since 1927. The same holds true for 2- and 3-year Treasuries. At .38% and .60%, they are low, but have been lower 14% and 11% of the time, respectively. Thus, it would not be unprecedented for low rates to hang around for awhile.

What this means is that anyone waiting for rates to rise may be waiting for longer than they realize. That brings up the question: *Is waiting a good idea for someone wanting to buy bonds?* The argument in favor of waiting is that bonds will be cheaper if and when rates rise. The argument against waiting is that short-term rates are so low that the portfolio may never catch up even if rates to begin to rise. The solution to this dilemma will depend on how much and how fast rates rise.

We recently did some research on that issue and concluded that waiting is not a good bet. The case analyzed was an investor who planned to retire in two years and wanted to cover the first eight years of retirement income using individual bonds with staggered maturities whose redemptions and coupon payments would precisely match the income needed over those years. To ensure safety and predictability, the securities would consist of CDs, agencies, and/or Treasuries (whichever had the highest yield for each year) held to maturity. The first year would be covered with cash.

In this case, should the advisor: a) buy a ladder of bonds now, maturing in 3 through 10 years or b) wait two years in cash, then buy bonds maturing in 1 through 8 years? The trade-off is that the 3- to 10-year bonds are further out on the yield curve and thus pay higher rates than 1- to 8 year bonds. The higher rates mean the cost of covering the first 8 years of retirement income will be lower than the cost of 1- to 8-year bonds to match the same income stream, unless rates rise fast enough and far enough to offset the advantage of buying the 3- to 10-year bonds now.

Our “deferment analysis” shows that rates had risen fast enough and far enough to offset that advantage less than 10 percent of the time since 1927. Even when rates were rising to their highest peak in history, from 1947 to 1981, they rose fast enough only 14% of the time. Since 1990, they have never risen fast enough to make waiting pay off.

The conclusion to be drawn from this analysis is that waiting to buy bonds to supply income is not a good idea. This conclusion is reminiscent of the old saying: “A bird in the hand is worth two in the bush.”

Source: http://www.financial-planning.com/news/research-roundup-conrad-2669236-1.html

September 27, 2010

Financial Planning

Commentary from Stephen J. Huxley, Ph.D., chief investment strategist, Asset Dedication, LLC

Performing the retirement calculation – how much to save each month to build a nest egg that will last as long as it needs to – is a common but complex exercise involving many factors. Included are the dates of retirement and termination, income needed (including any legacy), expected returns, current savings, and assumed inflation. Other factors may also play a role, but these are the ones most often incorporated into online calculators.

An obvious question is: which factors have the greatest impact?

Answering this question involves what decision-modelers refer to as "sensitivity analysis." It tests how sensitive the end result - the amount needed to be saved in this case – is to changes in each factor. The factor that produces the largest change in the result is considered to have the greatest impact. The concept is identical to what economists refer to as "elasticity."
A sensitivity analysis of the retirement problem suggests that the two most important factors are the 1) number of years until retirement, and 2) the income level desired. Fortunately, these are also the two factors that people have the most control over – when they retire and how much they will spend.

Let's look at someone who's 57 years old, planning to retire in about 10 years, and wants the portfolio to last until age 100. This client had a target nest egg of $700,000, of which $200,000 had already been saved. The expected return was assumed to be 10 percent per year before retirement, 8% thereafter, and a required withdrawal of $30,000 plus 3% inflation with no legacy. Using this example, let's examine our two factors.

Years until retirement: It is easy to see why postponing retirement has the greatest impact. It affects the savings calculation in two ways: it allows more savings to accumulate and, assuming the terminal date remains constant at age 100, it will not have to last as long.

To reach $700,000 in 10 years, the client would have to save about $900 per month. But delaying retirement by one year (to 11 years from now – a 10% increase) would cut the size of the nest egg needed to about $650,000 and allowed their existing nest egg to grow another year. As a result, their required saving rate drops to about $400 per month, a 60% decrease. None of the other factors could match such dramatic an impact.

Income Level Desired: In second place was the size of the withdrawal. If it declined 10% to $27,000 (assuming all other factors remain constant), the required nest egg drops to about $625,000, and monthly savings to about $540 per month, a 40% decrease. Ten percent improvements in returns and existing savings reduced the required savings rate by 29% to 33%. A 10% reduction in inflation protection (to 2.7%) caused the savings rate to decline by 24%. Note that all the factors create elastic responses, but the retirement delay and income requirement change clearly created the largest impact on the retirement calculation.

Source: http://www.financial-planning.com/news/research-roundup-conrad-2668967-1.html

August 09 2010

Financial Planning

FINANCIAL PLANNING

Interest Rate Headwinds

From Stephen J. Huxley, Ph.D., chief investment strategist, Asset Dedication

Market turbulence following the financial crisis in 2008 has led to unprecedented flows into fixed income investments, especially pooled fixed-income products like bond funds and bond ETFs. The current low rate environment highlights the risk that pooled bond investments face when rates inevitably begin to rise. All fixed income investments have benefited from a tailwind of historical proportions during the past three decades. It's my concern that most investors don't remember, or have never experienced fixed income investing when rates are rising.

Most fixed income investments performed extremely well over the past 29 years because of the inexorable decline in yields after hitting their highs in the early 1980s. Over this span, yields on the 10-year Treasury averaged 6.2%. But total returns (including appreciation) have averaged 9.7%—more than 50% higher than yields alone. In other words, falling yields provided a wonderful tailwind. The industry's trend toward using pooled investments may end up causing unintended but disastrous results the next time we see sustained rises in interest rates.

So how strong will the rising-rate headwinds be? In the 31 years before 1981, yields on the 10-year bond rose nearly every year, starting at 2.1% in 1950 and peaking at 13.9% in 1981. Yields averaged 5.6%. Total return, however, averaged only 4.2% with frequent negative years. Without the ability to lock in yields by immunizing individual holdings, pooled portfolios again will systematically see total returns erode as NAV flattens and falls.

Going forward, portfolios of individual bonds are positioned to deliver better results since individual bonds can both enjoy both appreciation and coupon interest when rates are falling and lock in coupons as a floor when rates are rising. The good news is that many giants in the industry have started to take steps. Among the primary custodians for advisors' assets, both Schwab Advisor Services and Fidelity Institutional Wealth Services have bolstered the depth and breadth of their individual bond capabilities (both directly and through sub-advised products) and ramped up their communications to advisors on this topic. Many of the largest managers of pooled fixed-income assets seem to be waving a warning flag to advisors and investors, leading them to other asset classes or more direct investments where appropriate.
Source: http://www.financial-planning.com/news/saut-huxley-janus-2668236-1.html

August 2, 2010
Financial Planning
FINANCIAL PLANNING

APPROPRIATE BENCHMARKS FOR CLIENT REVIEWS, from Stephen J. Huxley, Chief Investment Strategist, Asset Dedication

Client reviews often include performance comparisons with relevant indexes as benchmarks. Large cap funds are usually pegged to the S&P 500 index, small cap to the Russell 2000, etc. And if each of the client's investments matched its index benchmark, then it would tell the client ….what?

Well, it would tell them nothing more than that performance matched the indexes. What it doesn't tell them is whether their portfolio is meeting their long term goals, which is usually the most important benchmark.

Creating a "critical path" benchmark that projects the client's lifetime financial goals at each point in time will provide a foundation for financial decision. This type of projection should flow out of the financial planning process where the advisor elicits the client's goals and develops a capital needs analysis. Using the client's actual goals as a benchmark is not only more intuitive to the client, but also provides a much better platform for informed decision making.
Source: http://www.financial-planning.com/news/research-roundup-asnes-2668169-1.html

July 19 2010

Financial Planning

A Weakening Recovery

From Stephen J. Huxley. Ph.D., chief investment strategist, Asset Dedication

Recent figures released by the American Institute of Economic Research (AIER) suggest that while the economy's expansion appears to be continuing for now, its pace may be weakening. Most of the leading indicators were up, but a few declines have begun to show up, and still others are mixed.

Consumer spending continues to cause the most problems for the leading indicators. The worst declines were in housing. New housing permits dropped 16 percent since March, and sales of new homes fell 33 percent. The lapse in the federal home buyer tax credit, which expired in April, is the likely explanation. Spending on consumer goods also declined 0.5 percent in April. The change in consumer debt remains negative, meaning consumers are still paying off debt rather than loading up more, suggesting they are still worried about the economy. Expectations play a major role in any economic recovery and worry about the future is clearly prevalent among the general public. One good piece of news this week was the successful plugging of the Gulf oil leak, but much more good news is needed to swing the national mood from pessimism to optimism.

Coincident indicators, those that coincide with economic activity, show a better picture than the "leaders," meaning we are in an expansion right now. All the coincident indicators were up, with the lone exception of the ratio of civilian employment to population. It dropped to 59 percent, its lowest level since the early 1980's. Before the recession began, more than 63 percent of the working age population was employed.

Lagging indicators, those that lag economic activity, are sending mixed messages, similar to the leaders. Theoretically, positive values among the lagging indicators provide confirmation of the strength of the recovery. Based on the AIER report, most continue to show negative values. The worst of the "laggers" is average duration of unemployment, which reached 34 weeks, a record high. This may mean that employers prefer to give more hours to current workers, who are still working a shorter average workweek than before the recession, than hire new ones. If so, it could be awhile before hiring starts.

So what is to be concluded? Are the indicators signaling a faltering recovery or simply a slow one? That is the question everyone would like to have answered. Unfortunately, only spin doctors with other agendas are willing to answer it.

Source: http://www.financial-planning.com/news/research-roundup-asnes-2667933-1.html

June 21 2010

Financial Planning

How "GREAT" Was The Recession?

From Stephen J. Huxley, Ph.D., chief investment strategist, Asset Dedication

Most economists believe that the US economy appears to be in a recovery phase from the recession that officially began in December, 2007, according the National Bureau of Economic Research. Its Business Cycle Dating Committee makes the official call on the turning points for peaks and troughs in the economy. December, 2007, marked the end of an expansion that started in November, 2001 and lasted 73 months. The 1990's expansion lasted 120 months.

While the official end of the recession has not yet been called, statistical indicators suggest that it probably reached the trough in the third quarter of 2009. Its severity and length have inspired Paul Volker to call it the "Great Recession," suggesting it should be considered the little brother of the Great Depression.

Is this warranted? Is this recession all that much different from previous recessions?

The answer is yes, according to the American Institute of Economic Research, which tracks leading, coincident, and lagging business cycle indicators. They defend the title "Great" based on comparisons back to 1948, which includes 10 recessions, and cite four main reasons.

First, assuming it did end in June 2009, the 18-month peak to trough contraction of economic activity would be the longest since the Great Depression, which itself lasted 43 months. Previously, the longest post-war recessions were 16 months (Nov. 1973-March 1975 and also July 1981-Nov. 1982).

Second, the impact on employment has been much deeper. Nonagricultural employment, the ratio of employment to population, personal income less transfer payments, and the average duration of unemployment are all worse than any prior recession since the Great Depression.

Third, and perhaps the biggest factor, is the drop in overall net worth for the household sector. Hit by the stock market decline in 2008, and falling home prices in the US where 67 percent of the population owns its own home, private individuals suffered a loss of nearly $8 trillion, or 25 percent. This is far greater than any drop since the Great Depression. Even in the 1973-74 recession, considered the worst prior to now, net worth dropped by less than 10 percent. It is unprecedented drop in net worth that appears to have fed the malaise that seems to be hanging on even today in the economy.

The fourth factor cited by the AIER is the magnitude of the federal government's response, which has pursued the most aggressive monetary and fiscal policies since the Great Depression, in both absolute and relative terms. The full consequences of these policies are yet to be known, as are the potential effects of pending legislation for financial industry reforms.

These four factors provide a compelling argument that 2007-2009 has earned its title as the Great Recession. It may be years before the ripple effects of government policies fully manifest themselves and no one can be sure how long the recovery will take to reach it next peak. In the 1973-74 recession, it took 30 months for most of the economic indicators to return to their pre-recession levels. How long it will take this time remains the "Great Question."

Source: http://www.financial-planning.com/news/jpmorganfunds-research-roundup-trimtabs-2667432-1.html

June 14, 2010

Financial Planning

BETTING ON TIPS, from Stephen J. Huxley, chief investment strategist, Asset Dedication

Buying and holding TIPS to maturity to supply a predictable stream of inflation adjusted income appears to be an even better strategy now than it was last year. Advisors who build immunized TIPS portfolios can manage market risk, default risk, reinvestment risk, along with inflation risk.

The breakeven point between TIPS and Treasuries has dropped since last year. Late last year, it would have taken an inflation rate of about 1.5% for TIPS to beat Treasuries over the next five years and 2.2% over the next ten years. Now it will only take an average inflation rate of 1.4% for TIPS to be a better deal over the next five years, 1.8% over the next ten years.

Historically, the chances are about 80% to 85% inflation will be higher than these rates over all 5-year and 10-year spans going back to 1927. This includes the Great Depression, of course. If one goes back only to 1947, the chances are about 90% for both five and ten years.

Source: http://www.financial-planning.com/news/trimtabs-schwab-amundi-2667333-1.html

June 07 2010

Forbes

Bonds are Bad for Retirement

Stephen J. Huxley

Buying individual bonds is the best way to structure retirement income while minimizing exposure to capital losses.

The top concern that advisors hear from retired clients is that they will outlive their money. The challenge for the advisor is to ease those fears with a portfolio strategy that creates stable retirement income without any dramatic change in the client's lifestyle.

This is the fundamental advantage that the unheralded world of individual bonds can bring to the table. Unlike more widely used bond funds, individual bonds offer predictability when managed properly. Bond funds can experience falling net asset values as interest rates rise (they are predicted to rise this year), which can have a substantial negative impact on the portfolio if clients need to make withdrawals. But holding individual bonds to maturity can immunize the portfolio against rising rates. In fact, holding U.S. Treasuries, agencies, CDs and TIPS to maturity provides the closest thing to perfect predictability that exists when it comes to future cash flows. It represents one of the few exceptions to the rule that it is impossible to forecast the future (death and taxes also come to mind).

This predictability means that individual bonds can be used to create peace of mind for retirees worried about what will happen to their long-term chances of success if the market happens to be down just when they have to sell to get cash for living expenses. Individual bonds, if their maturities are managed properly, can supply perfectly timed cash flows year after year, without missing a beat.

The idea is to build what college finance books call a "dedicated bond portfolio." This requires synchronizing the bond maturities and coupon payments to match the cash flow stream the client needs, then holding the bonds until they are redeemed.

For example, consider a couple just entering retirement with a $1 million portfolio. Assume their advisor has recommended a 60/40 stock/bond allocation (probably the most common retirement portfolio) with an initial withdrawal rate of 5% increasing each year with inflation. That means the couple would withdraw $50,000 the first year. If inflation during that first year turned out to be 3%, they could withdraw $51,500 the next year, and so on.

To generate and protect these cash flows regardless of market performance the planner could buy individual bonds with that $400,000 and hold them to maturity. Each bond would supply income in two ways: the coupon interest it produces each year plus its redemption value when it matures. These cash flows would remain constant, regardless of what happens to interest rates--they have been immunized.

The trick is to buy the bonds in just the right amounts and maturities so that the total cash flows match the withdrawals needed for each year. At current yields on U.S. Treasuries or AAA corporate bonds, $400,000 would buy about eight years of income starting at $50,000 and growing at 3% per year. Because safety is paramount, only the safest bonds are used (governments or AAA rated munis or corporates).

Once the dedicated bond portfolio is in place, it provides the cash flow for the withdrawals in just the right amount at just the right times. Furthermore, the eight-year income stream is protected from market fluctuations. The value of the portfolio itself is not protected against rising interest rates, but the cash flow stream is protected because the bonds are held to maturity and not traded. Risk is nullified where it counts. As each year passes, the same eight-year time horizon of protection can be maintained for as long as needed by adding a new bond with an eight-year maturity if desired. Doing it every year over a lifetime would be the equivalent of self-annuitizing.

There is nothing sacred about eight years. Other horizons can be used (5 to 10 years are common for retirees). At today's yields, each year of cash flow takes about a 5% allocation to fixed-income, assuming the initial withdrawal rate itself is at or below 5%. For instance, if the couple had wanted a 30% allocation to fixed income, they could have secured about six years of income; a 50% allocation would buy about 10 years of income. Most retirement portfolios' fixed-income allocations fall into a 30% to 50% range, with 40% being the most popular.

By following this simple dedicated portfolio strategy, advisors can give their retired clients several advantages unique to individual bonds. They can insulate clients from volatile markets. They can provide an intuitive explanation for the client's bond asset allocation. And, especially important in today's competitive times, they can focus on the other non-investment issues that advisors need to manage in providing comprehensive wealth management services to their clients.

Source: http://www.forbes.com/2010/06/07/bond-maturity-treasuries-financial-advisor-network-retirement.html

May 10 2010

Financial Planning

Random Noise

From Stephen J. Huxley, Ph.D., chief investment strategist, Asset Dedication

The Dow's intraday market somersault on 5/6/10 saw it drop nearly 1,000 points before rallying back to a loss of "only" about 347 points (-3.20%) for the day. One rumor is that an online trader had hit the "b" key on his computer for billion instead of the "m" key for million while selling Proctor and Gamble shares. When the order entered the system, it triggered a trading cascade because P&G is one of the companies in the Dow. When the Dow fell, it triggered even more sell orders on automatic trading systems, and down went the Dow.

If the rumor turns out to be true, this would represent the sort of random event that creates what researchers refer to as random noise in the overall trend. It may take a while for the memory to fade that markets can move abruptly and severely. And the fact that the system did not flag such a large trade for scrutiny has already, as expected, led to talk of an investigation.

This incident offers the opportunity for some perspectives on market movements. The worst one-day percentage drop in market history occurred on Oct. 19, 1987 (-23%). How would someone feel who had bought in on the day before?

Pretty bad, obviously. But more important, where would they be 10 years later if they stayed invested in spite of the drop? Turns out they would have earned slightly better than 13% per year because they would have captured much of the Great Bull run of the 1990's. Had they stayed out of the market, they would have suffered a severe case of seller's remorse.

Barber and Odean (2000) showed how individual investors trying to time the market gave up significant long-term returns compared to those who stayed the course and stayed invested through turbulent markets. This week's turbulence is yet another reminder that the ability to predict random events continues to elude even the most seasoned analysts. Thus the key to clients' long-term success is to help them find an asset allocation they understand and can stick to so they don't sell into the noise and trade away long-term returns.
Source: http://www.financial-planning.com/news/jpmorgan-trimtabs-lpl-2666807-1.html

May 03 2010

Financial Planning

Help Clients Stay the Course, from Stephen J. Huxley, Ph.D., chief investment strategist, Asset Dedication

The stock decline of 2008 caused investors to question their asset allocation and dramatically change the way they invest their nest eggs. According to the 2009 Morningstar Fund Flows and Investment Trends annual report, from 2001 through 2008, the flow of cash into bond funds totaled $527 billion, or about $66 billion per year. In 2009, in a flight to less volatile investments, $357 billion poured into bond funds, more than the prior five years combined. Stock funds, on the other hand, saw $68 billion flow out.

Unfortunately, this shortsighted view of capital markets causes investors to be their own worst enemy—by trying to time when to get in and out of the market. The Barclays Capital Aggregate Bond Index returned a

solid 5.9% in 2009. But the S&P 500 Index popped back up 26.5% in 2009, recovering much of the 37% drop in 2008. In other words, investors who stayed with their stock allocations were able to claw back much of their losses. But those who switched to bond funds are still underwater at a much deeper level while they wait for the "right" time to jump back in to the market. If interest rates rise, their meager gains from 2009 could be wiped out entirely and their capital losses decline further.

This looming specter may make things even worse for investors who have chosen to sit out the equity markets in bond funds. Rising rates will keep total returns modest and can even lead to losses, which will catch investors who don't understand the bond market off-guard.

Getting whipsawed, first by stock losses, then by bond losses, adds to the already enormous mountain of evidence against market timing and highlights the real purpose of advisors: keeping clients invested. The key is not only identifying an asset allocation that gives clients a better chance of reaching their financial goals, but also structuring a plan that keeps them invested when markets stumble. The hard part is not the quantitative calculations. It is developing a strategy that bolsters their behavioral fortitude so that clients stay invested through difficult markets and curb their instincts to make the wrong decision at the wrong time.

Source: http://www.financial-planning.com/news/schwab-gluskin-sheff-2666736-1.html

April 26 2010

Financial Planning

FINANCIAL PLANNING

When is a Bond Not a Bond? from Stephen J. Huxley, Ph.D., chief investment strategist, Asset Dedication

International bonds have been touted as a good investment for diversification purposes. Emerging economies appear to be growing more quickly than first world economies, generating cash flows that make it easier to pay off all debts. Furthermore, many economists believe that the dollar will devalue over the long term, making non-dollar denominated assets a good bet.

But there's downside to consider: From an individual client's point of view, international bonds have much more in common with equities than fixed income as investments. Most people put bonds into their portfolios because they want conservative investments. If this is critical to an overall investment goal, international bonds might not make the grade.

The classic risks of bond investing—default risk, market risk, inflation risk and reinvestment risk—can be addressed with the proper strategies when dealing with individual domestic bonds. Any investor can use governments or AAA-rated bonds, hold them to maturity, and buy TIPS to avoid the first three. Investors who are withdrawing funds from their portfolios, like retirees, can avoid reinvestment risk if they use the coupon interest and redemptions to provide predictable, protected cash flows needed for living expenses: in other words, employ a "dedicated" bond portfolio strategy.

The international element adds new risks and reduces the advantages that bond investing brings to the table. Predictability and protection are lost because of exchange rate risk. In addition, there is political risk -- even bonds issued by a sovereign government may default due to fiscal irresponsibility (think Greece) or government takeovers (think Kyrgystan). Furthermore, international bonds are less liquid, typically carry higher transaction costs, and the market for them is less transparent and automated.

Those who want an aggressive stance in international investments can always buy international equities, of course. But conservative bond investors looking for predictability need to realize that international bonds may – or may not – fit the bill.

Source: http://www.financial-planning.com/news/Doll-BlackRock-jobless-2666585-1.html

April 12 2010

Financial Planning

Mixed Signals on the Economy, from Stephen J. Huxley, chief investment strategist, Asset Dedication

The American Institute for Economic Research releases its leading, coincident and lagging indicators of business cycle changes once a month. The organization has been tracking these numbers since the 1960's, so these are respected measures.

Its March release had both good and bad news. The good news is that most of the leading indicators are positive. They are based on moving averages of data points from the past several months for each series. The bad news is that the most recent month added to the moving average—February, 2010—was negative for 7 of the 12 indicators. If they stay negative, they will signal that the nascent recovery that appears to be underway will dissolve.

The most worrisome negatives were the "new orders for consumer goods" and "new orders for core capital goods." These are significant chunks of our economy and any declines are unwelcome sights. They signal that both people and businesses are not ordering equipment like appliances or machines. Also worrisome were the decline in new permits for apartment buildings and continue anemic growth in new single-family homes.

So what does it all mean? While we would all like to think that the recent improvements in the stock market (itself one of the 12 leading indicators) will lead us back to prosperity, the jury is still out. Even the prognosticators of interest rates are scratching their heads. According the Wall Street Journal this weekend, rarely have the quants at major firms been so far apart in their forecasts. Morgan Stanley sees a significant rise to 5.5% by year end for 10 year Treasuries, while Goldman Sachs sees a drop down to 3.25% from Friday's 3.9%.

Nothing is clear at the moment except that predictability has never looked better to investors. Any strategy that can provide it should be welcomed into the investment community.
Source: http://www.financial-planning.com/news/blackrock-doll-raymond-james-lpl-2666465-1.html

April 5, 2010

Financial Planning

CD's vs. US Treasuries and Agencies, from Stephen J. Huxley, chief investment strategist, Asset Dedication

The safest bonds one can buy are those issued by or protected by the federal government. Unfortunately, the ultimate source of the safety is the fact that the US Constitution gives the Treasury Department the right to print money, so it can always run the printing presses to pay off debt.

Nevertheless, bonds, notes, and bills issued by the US Treasury and federal agencies, and CDs insured by the FDIC are considered super-safe securities. They set the floor on rates investors can expect from fixed income securities.

Generally, CDs offer slightly higher yields because they are less liquid than Treasury or agency bonds. They also have some limitations: Maturities are not available for periods longer than 10 years, and the insurance is only good for up to $250,000 per depositor per bank. But most retirees who are withdrawing income for living expenses will not be hampered by these limitations. In fact, for those investors who dedicate their fixed-income allocation to providing predictable cash flows, CDs work well because dedication is based on the principle of holding securities to maturity. So any time CD yields are higher, they are perfect for dedicated portfolios. Last week, for instance, they were higher for maturities of 5 years or less. CDs were offering yields averaging about 2% for bonds with maturities before 2015, whereas agencies were yielding only about 1.7%, treasuries, 1.3%. But for maturities beyond 2015, agencies and treasuries beat out CDs. In fact, agency and treasury yields increased on average about 25 to 30 basis points per year of maturity beginning in 2016.

Source: http://www.financial-planning.com/news/huxley-kleintop-kelly-2666390-1.html

March 29, 2010

Financial Planning

FINANCIAL PLANNING

RISING RATES CAN BE HARMLESS, from Stephen J. Huxley, Ph.D., chief investment strategist, Asset Dedication

The specter of rising interest rates and the damage they will do to portfolio values is weighing heavily on the minds of bond fund managers and probably many advisors as well. The fear is that they have not educated their clients sufficiently about the inverse relationship between interest rates and bond prices. If rates rise as predicted over the next six months, falling portfolio values may generate irate phone calls from clients who thought bonds were much less volatile than stocks and therefore much less risky. To the extent that bond vendors or advisors have oversold bonds as safe investments, they deserve those irate phone calls and corresponding loss of confidence.

Blind allegiance to modern portfolio theory can lead even well-meaning advisors into the untenable position that bond investments are safe because they are less volatile. Putting a client into 40% bond funds because that is what everyone else is doing is not a good way to do business. Nor is it a good way to help clients get the most from their bonds.

The truth is that there is no way to immunize the value of a bond portfolio from changes in interest rates. When rates rise, values fall. So the question becomes, how best to work around this inherent reality?

The solution lies in moving the focus to the principle advantage that bonds bring to the table as financial instruments: predictability. The cash will flow from the coupon interest and redemptions, fixed for the life of the bond.

When the client is a retiree making withdrawals, the cash flow needs are obvious. Setting up a ladder of individual bonds so that the coupon interest and redemptions match the withdrawals when the bonds are held to maturity renders the intervening values meaningless. The value of the portfolio itself is not immunized, but the cash flow stream is. By simply

changing the focus from portfolio values to cash flows, the fear of rising rates disappears. The risk of holding bonds is nullified where it counts.

In fact, for retirees following a dedicated bond ladder strategy, rising yields are a welcome sight. The cost of bonds to supply the income stream will be cheaper. A recent analysis showed that an 8-year income stream starting in 2011 at $50,000 in today's dollars and growing at 3% per year for inflation would cost about $400,000 (the portfolio consisted of CD's for 2011-13, TIPS for 2014-18). If rates rose 2%, the cost of this portfolio would drop to about $370,000, or 8% less.

By shifting the conversation from portfolio values to dedicated cash flows, worries about the impact of rising rates goes away, or at least is cast in a much better light. Clever advisors can take advantage of the benefits of dedicated portfolios to calm the fears of their squeamish clients.

Source: http://www.financial-planning.com/news/unemplyment-inflation-consumers-Greece-2666344-1.html

March 1, 2010

Financial Planning

FINANCIAL PLANNING

Avoiding the Fixed Income Whipsaw, from Stephen J. Huxley, Ph.D., chief investment strategist, Asset Dedication

In 2008 and 2009, individual investors flocked to the perceived safety of bond funds in hopes of avoiding greater losses. Unfortunately, many jumped out of equities at the bottom, just in time to miss the 2009 recovery. Now those investors may be facing a second round of bad timing, and they probably don't see it coming. Nor do they perceive the impending risk to their portfolios. But bond fund managers do, and they are beginning to issue warnings to people who buy their products. These managers are anticipating that rising interest rates in 2010 will cause the NAV of their fixed income funds to fall at a time when many investors think bond funds are the safest place to be.

Bond funds do not function like bonds in rising-interest-rate environments. Bond funds are continually turning over their portfolios, which in a rising-rate environment will result in falling portfolio values. Individual bonds will suffer the same decline in price, but investors can immunize themselves from this market risk by simply holding the bonds to maturity. This simple distinction between bond funds and individual bonds can have a huge impact on portfolios, particularly for investors who are pulling out cash in retirement. They may need to take withdrawals at the wrong time, magnifying the effect of falling NAV. If they don't reposition their portfolios now, bond fund investors may re-live the pain of losses; this time from a part of their portfolio they thought was safe.
Source: http://www.financial-planning.com/news/Doll-BlackRock-Schwab-2665999-1.html

February 22, 2010

Financial Planning

SHOW US YOUR ASSUMPTIONS, from Stephen J. Huxley, Ph.D., chief investment strategist, Asset Dedication

At the T3 financial-advisory technology conference in San Diego last week, one session focused on the theoretical underpinnings of software that advisors use to support their financial planning efforts (think MoneyGuide Pro, Naviplan, Money Tree, etc.). This was an excellent choice of topics; many advisors have only a hazy understanding of the assumptions that underlie the software they use. A few highlights can provide some interesting insights.

First, most software assumes there is some ideal asset allocation for a client that captures their true risk/return preference (based on highly questionable risk tolerance questionnaires), and that the portfolio should be rebalanced to that ideal on a regular basis. Unfortunately, this blind allegiance to MPT seems unwarranted, given the recent advances in postmodern portfolio theory, behavioral finance theory and dedicated portfolio theory. Footnotes citing where these competing theories might lead to different conclusions would be welcome additions to existing software, or at least links to references for those who are interested.

A second underpinning is that all fixed income is the same: Individual bonds or bond funds are assumed to be equivalent. That is simply wrong. Individual bonds, held to maturity, provide one of the few certainties in the world of finance: a perfectly predictable stream of protected income. In fact, US TIPS offer the closest thing to guaranteed predictability, including inflation, as you will ever get in any financial investment. Bond funds, because they are buying and selling bonds all the time, strip out this vitally important predictability that individual bonds can bring to any portfolio. But most software is blind to this distinction.

Other underpinnings that warrant mention include the fact that software generally assumes that all non-financial issues have been handled elsewhere, that the termination age for the plan is rational, and that people really understand what it means when they say that an 80% probability of success is acceptable to them. Any advisor who had to confront angry clients after their portfolios dropped 20% over the past couple of years can tell you otherwise.

This summary only scratches the surface of this particular session, at what was a very lively conference. Advisors who want to stay on the cutting edge of their profession would do well to attend this conference next year, in Ft. Lauderdale.

Source: http://www.financial-planning.com/news/employment-FDIC-recovery-2665907-1.html

February 16, 2010

Financial Planning

THE NEXT TEN YEARS VS. THE LAST TEN YEARS, from Stephen J. Huxley, chief investment strategist, Asset Dedication

A common theme in financial headlines over the past several months has been the fact that stocks lost money over the prior ten years. This was true for 2008 and 2009. From the end of 1998 to 2008, the S&P 500 returned an average of –3% per year, and from 1999 to 2009, it returned –2.7%. These are sad numbers for long-term investors, and advisors should be ready to provide perspectives to worried clients about the next ten years.

One fact that needs to be remembered is that 1998 and 1999 were the final years of the greatest bull market in history. At the end of 1994, the S&P 500 stood at 459. At the end of 1999, it had more than tripled to 1469. If you start from the highest of highs, is it any wonder that it will take a while before you can reach it again?

If we take a broader view and look at all 10-year periods since 1927, average annualized returns on all stocks have averaged 7.7%. As expected, the Great Depression produced worse records, with average annual returns for 1929-39 at –4.1%, for 1930-40, –3.3%.

In the 10-year periods following these terrible records, however, the picture brightens. From 1939 to 1949 and 1940-50, stocks' returns averaged 7.9% and 9.6% per year respectively, above the long-term average. But, of course, a major cataclysm had occurred: World War II.

Thankfully, there do not appear to be any major cataclysms on the horizon right now, though one can never tell. International and domestic political tensions are a perennial source of factors that can cause major bull or bear markets.

Some speculate that domestic politics played a role in the great bull run of the late 1990's (in addition to the Internet and end of the Cold War). In November 1994, a Democratic president – Clinton – lost his party's control of Congress. As Clinton shifted his policies toward the center, the markets took off. If that explanation is correct, and if the Democrats lose control of Congress this year once again, it could set the stage for good investor news over the next ten years. We shall see what happens in 2011.

Source: http://www.financial-planning.com/news/munis-Moodys-financial-2665821-1.html

January 25, 2010

Financial Planning

FINANCIAL PLANNING

A Silver Lining For Bonds If Interest Rates Rise, from Stephen J. Huxley, chief investment strategist at Asset Dedication

Over the past few years, declining interest rates have caused the market value of fixed income holdings to increase. Rising rates, as many advisors are anticipating this year, will have the opposite effect, causing the market value of money invested in bonds to fall. If interest rates rise in rapid fashion, the drop in value will give financial journalists a field day describing what they will call the bursting of yet another bubble—the bond bubble. (This raises another question: does every decline mean there must have been a "bubble?").

But rising interest rates have a silver lining. For retirees who use a dedicated portfolio that ladders bonds and hold them to maturity in quantities that match their cash withdrawals, higher interest rates are a welcome sight. Rising interest rates mean that someone setting up their cash flow matching ladder for the first time will pay less to get that secure income stream (coupon plus interest).

For example, if a bond ladder to provide a protected 8-year stream of $50,000 a year plus 3% inflation each year costs $400,000 right now, higher interest rates next summer may drive the cost down to $360,000. Unfortunately for those who rely on bond funds for their fixed income allocation, the value of their fixed income investments will likely decline—unless they happen to be lucky enough to buy one of the few bonds funds that wins its gamble on future interest rates.
Source: http://www.financial-planning.com/news/JPM-BNYMellon-Asset-2665552-1.html

January 11, 2010

Financial Planning

GOING FOR THE CONSERVATIVE, from Stephen J. Huxley, Ph.D., chief investment strategist, Asset Dedication

Despite the obvious challenges to foretelling the markets, many clients ask their advisors to gaze into their crystal ball to predict the future, which can be more than a bit hazy.

There is one case, however, where the future value of an investment can be forecast with certainty: a Treasury bond held to maturity. When the federal government promises it will pay $1,000 in 10 years and $50 per year until then, it will happen. The US Treasury has the right to print money, so there is no question that the cash will flow. The beauty of holding a bond to maturity is its predictability. If an investor has a need to spend $50 on living expenses each year for the next 10 years plus $1000 at the end of that period, the Treasury bond will supply the cash flows precisely.

Regardless of changes in the bond market, by devoting bonds to supply cash flows, the most common risks associated with fixed income securities are mitigated. Holding Treasury bonds to maturity controls default risk, reinvestment risk, and market risk. If TIPS are used, inflation risk is controlled too. These unique features, provided only by individual bonds, may protect your client's bond allocation in case your crystal ball is showing a chance of rising interest rates.
Source: http://www.financial-planning.com/news/treasury-bonds-equity-2665361-1.html

January 4, 2010

Financial Planning

TOPICS FOR CLIENT REVIEWS, from Stephen J. Huxley, Ph.D., chief investment strategist, Asset Dedication

Annual review meetings nearly always include risk as a topic for discussion. So what risks will—or should—be discussed for 2010?

Short-term risks will likely continue to focus on volatility. The market is not likely to experience the same degree of gyration it did in 2009, at least by historical standards. The market has not had this much volatility two years in a row since margin requirements were stiffened to current levels after the 1930s. But the ups, and especially the downs, will be fresh in people's minds.

What about inflation? Most forecasters believe that it too will be quiet in 2010 because of idle capacity in the economy, as reflected in unemployment figures. For the longer term, however, beginning in 2011 or 2012 and thereafter, the prospects of inflation loom much larger. No one knows exactly when the enormous deficit run-up will begin to cause price increases, but most economists regard it as a ticking bomb.

Rising interest rates are another risk for portfolios heavily invested in bond funds. Those who use bond funds as volatility dampeners may find that falling NAV does not reflect the stability they were looking for.
Source: http://www.financial-planning.com/news/inflation-interest-manufacturing-2665276-1.html

December 28, 2009

Financial Planning

ADVISOR CHALLENGES IN 2010, from Stephen J. Huxley, chief investment strategist, Asset Dedication

Every December, Cerulli Associates surveys advisors about what they expect will be their main challenges in the New Year. For 2008, advisors rightly expected an economic downturn and volatile markets.

So what about now? This year's survey results suggest advisors have moved on, probably due to the apparent partial recovery in the markets. Their concerns deal more with consequences of the turmoil over the past two years. For 2010, they see client acquisition/retention as their top challenge, followed by insufficient resources.

These priorities are certainly understandable. Many clients were likely disappointed by their advisors' investment performance ("I thought my advisor would protect me from this!"). Grumbling to friends that they had done poorly in spite of putting their portfolio in professional hands would obviously not be very good for

referrals. In fact, some clients likely terminated their current advisors, especially those advisors that insist on managing investments in spite of the fact that they really do not have time to do the proper research. If you live by the sword, you had better keep it pretty sharp, or you will die by that sword—perhaps from self-inflicted wounds.
Source: http://www.financial-planning.com/news/BlackRock-Barclays-Cerulli-2665239-1.html

December 14, 2009

Financial Planning

FOUR WAYS TO SPEND MONEY, from Stephen J. Huxley, Ph.D., chief investment strategist, Asset Dedication

Budgeting is probably the least favorite topic advisors have to deal with. How to spend money can be a very touchy topic. One way to start the conversation is with a simple but insightful analysis first put forward by Milton Friedman, winner of the 1976 Nobel Prize in Economics.

In his book *Free to Choose*, Friedman listed four ways to spend money: 1) spending your own money on yourself; 2) spending your own money on someone else; 3) spending someone else's money on yourself; 4) spending someone else's money on someone else.

In Case 1, spending your own money on yourself, you have the strongest incentive to economize and to get the highest value. When ordering dinner in a restaurant, only you can really decide if the extra cost of a higher priced meal is really worth it. Only a client can make the call as to whether he or she would rather spend $30,000 on a new car or spend $20,000 on a used car and put $10,000 away for the future.

Case 2, spending your own money on somebody else, is what most of us are doing right now during the holiday season. We have the same incentive to economize but not the same knowledge of what recipients would do with the money if they were spending it on themselves.

Buying lunch on an expense account is a classic example of Case 3, spending someone else's money on yourself. You have a strong incentive to get your money's worth but not to economize.

Finally, spending someone else's money on someone else, Case 4, has the weakest incentives to economize or get the best value. This, unfortunately, probably explains why many government programs are not very efficient.

The point this simple analysis should bring home to clients is that they should weigh each dollar they spend. That is what Nobel prizewinners expect them to do.

Source: http://www.financial-planning.com/news/asset-banking-jobless-2665023-1.html

December 7, 2009

Financial Planning

SANTA CLAUS RALLY VS. THE JANUARY EFFECT, from Stephen J. Huxley, Ph.D., Chief Investment Strategist, Asset Dedication

The Santa Claus Rally, the December Effect, the January Effect—most investors have heard such terms and wonder if they are truth or fiction. The rumor is that tax sell-offs in December drive prices below their true value and investors realize that in January, making the first few trading days in January exceptionally good. The Santa Claus rally supposedly takes place in anticipation of the January effect.

The broader issue is whether or not market timing is a fool's game. Nearly all academic research suggests that it is, much to the disgust of actively trading money managers trying to sell their services. Monthly, weekly, and daily prices for the S&P 500 and other indexes are readily available online. This makes it easy to calculate the gains the market has made from one month to the next. Data for the S&P 500 goes back to 1950.

It turns out that the month, which provides the greatest average month-over-month gain, is December (1.64%), followed by November (1.59%). January came in third, registering 1.10%. The average month was 0.67%. The worst was September (-0.62%), with February (-0.29%) next to last, the only two months with negative average gains. There is no apparent pattern in the monthly variances—they appear to follow a random walk.

The widest range of monthly returns occurs in October, with a high of 16.30% (1974) and a low of -21.76% (1987), a difference of 38.07%. The most stable month is July (from -7.90% to 8.84%) but June is very close. Interestingly, December is third (-6.03% to 11.16%). There is no significant correlation between monthly gains and the variation of those games. No month has a record of no losses.

So what does this tell us about market timing? The old caveat still holds, of course—past patterns may not continue in the future. But even if they did—that is, someone does the same analysis 40 years from now using 100 years of data and got the same results—nothing is apparent in the figures to suggest that it is possible to profit from it. It is yet another argument in favor of viewing investing as a long-term endeavor. Better to set goals based on long term horizons and annual averages over those long-term horizons than try to figure out if there is a real Santa Claus out there.
Source: http://www.financial-planning.com/news/looking-ahead-dec-7-2664905-1.html

November 30, 2009

Financial Planning

SEPARATING ASSET MANAGERS' LUCK FROM SKILL, from Stephen J. Huxley, Ph.D., chief investment strategist, Asset Dedication

The mammoth marketing machinery used by managers to gather assets is remarkably effective. One of the most common practices is to post a snappy chart that shows how many years or quarters in a row a fund manager has

made successful market calls. The question is, how long does a track record need to be to establish proof that a manager really is skillful, as opposed to just lucky?

Kenneth French and Eugene Fama, whose research led to the now widely recognized style boxes, are involved in a major research project trying to answer such questions. Their results could be a significant step in demonstrating how difficult it is to time the market's moves and select stocks that will outperform.

A simple way to see why consecutive successes don't prove skill is to see how many managers could boast a string of successes even though their decisions are based on a series of coin flips.

If we assume a 50-50 chance of making the right call in any given year, then half the mutual funds would make the right call just by luck. There were about 10,000 mutual funds at the end of September 2009. By luck, 5,000 would have won in 2009, 2,500 would win again in 2010, and so on. By the beginning of 2014, we would have about 300 firms making the right call since 2008. But they will have gotten there as a matter of luck, not skill. Odds say that one could make it all the way to 2021 before losing—all by luck.

One of the typical quiz questions in college statistics classes is, "Which is more likely, to get six heads in 10 flips or 60 heads in 100 flips?" Most students think the answer is that they are the same. But they aren't: The odds of getting six or more heads in 10 tosses is about 19%, whereas the odds of 60 out of 100 is only about 2.5%. The reason? Getting 60 out of 100 is equivalent to getting six out of 10, ten times in a row.

The bottom line is that short strings of successes aren't always impressive when examined in the context of probability theory. When the Fama-French research is published, it will likely cause lots weeping and gnashing of teeth.

Source: http://www.financial-planning.com/news/economy-recovery-federal-reserve-2664753-1.html

November 23, 2009

Financial Planning

FINANCIAL PLANNING

Helping Clients Give Thanks, from Stephen J. Huxley, Chief Investment Strategist at Asset Dedication

With Thanksgiving just a few days away, there is perhaps no better time to talk to clients about how they want to share their time and money to help out the people and causes they care about. Despite the economic downturn, in 2008 Americans gave away $300 billion. A recent study by the Fidelity Charitable Gift Fund showed that 44% of wealthy clients want to talk to their advisors about charitable giving. Helping clients plan their philanthropy provides an opportunity to expand your conversation about money to encompass the issues and values that they find really important. Often this provides a new way to connect with clients that uncovers different insights about how they feel about money.

For those clients who give away more than a few thousand dollars each year, you may want to offer a more formal framework for their giving. A donor advised fund (DAF) is a simple yet sophisticated structure for your clients' giving, especially if they give gifts of appreciated securities. Rather than making multiple stock transfers, your clients can make a single transfer to their DAF account and then manage grants to their favorite charities. They receive the same tax deduction as an outright gift because a DAF has to be sponsored by a charity. Fidelity and Schwab, two of the largest DAF providers, started non-profits specifically to sponsor their

DAFs. A few operating charities, like Environmental Defense Fund, offer an open platform DAF that can work on any custodial platform with an added benefit of an experienced team of philanthropic planners who can help you and your clients make better decisions.

When clients are able to share some of their good fortune with others, they feel like they are contributing to a better world. When you help them do that, they see your value regardless of what is happening in the market.
Source: http://www.financial-planning.com/news/looking-ahead-investing-ideas-2664672-1.html

November 16 2009

Financial Planning

Volatility Vs. Longevity Risk, *from Stephen J. Huxley, Chief Investment Strategist at Asset Dedication*

Modern portfolio theory [MPT] has actually been under fire for some time. Its poor performance in 2008 struck another blow. A recent study by Cerulli Associates found that the No. 1 worry for retirees is longevity risk—the fear that they will outlive their money. But MPT has a one-dimensional view of risk: risk means volatility. MPT completely ignores longevity risk.

The typical time horizon assumed in retirement research is 30 or 40 years. That is, 95% of men who reach age 65 will die by the age of 94. For women, it is age 97. For withdrawals of 5% or more out of the portfolio, the standard 60/40 equity and fixed income allocation runs a significant chance of running out of money over these long time horizons. On the other hand, [a] 70/30 allocation will make investors increasingly unwilling to stomach the rollercoaster ride of the stock market, particularly in periods of deep market decline like 2008.

The challenge for advisors is that they need to either manage client expectations for lower withdrawal rates, or find a different approach that does a better job managing client's concerns about volatility in the short term so that they can have a better chance of success over the long term. . . Higher returns mean a higher probability of long-term success. This means the new challenge is in understanding and evaluating the impact that asset allocation has on the probability that the money will last as long as it needs to. It is another layer of decision-making, but ignoring it might be harmful to your clients in the long run.

Source: http://www.financial-planning.com/news/looking-ahead-november-16-2664586-1.html

November 09 2009

Financial Planning

Breakeven Points for Tips

From Stephen J. Huxley, Ph.D., Chief Investment Strategist, Asset Dedication

Financial planners trying to protect their conservative retired clients from the potential ravages of inflation must decide whether to buy TIPS or stick with U.S. Treasuries. Yields for both are very low and it becomes a question of determining the tradeoff between inflation protection and yield.

Which are better at today's rates? For five years of income protection, the breakeven point would be about 1.5%. That is, if inflation averages more than 1.5% per year over the next 5 years, the yield on TIPS will be greater than the yield on U.S. Treasuries based on last Friday's quotes. For 10 years, it is about 2.2%. So if a planner suspects inflation will average more than 2.2% over the next 10 years, he or she should recommend TIPS. If not, recommend U.S. Treasuries.

So what are the chances that inflation will be greater than 1.5% or 2.2% over the next five or 10 years? Historically, the chances would be 70% to 80%. But we are in unprecedented times, so those probabilities may be understating the chances. This makes TIPS a good bet for those who want to ice their cash flows over the next few years without worrying about default risk, reinvestment risk, market risk, or inflation. And there may be a lot of retirees who are looking for exactly that.

Source: http://www.financial-planning.com/news/looking-ahead-november-9-2664514-1.html

Publications by Huxley and Burns

May 01 2010

Investment Advisor

Silver Lining

Investors can limit fixed income losses due to rising interest rates by laddering individual bonds and holding them to maturity

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By Stephen J. Huxley, Pd.D. and Brent Burns

Anxiety prevails among fixed income managers over the prospects of rising interest rates and what it will do to their product's reputation as a "safe" investment. Although the Fed recently signaled that it will not be raising rates immediately, the specter remains for investors who thought they were buying safety only to see their bond funds systematically erode as rates start to rise.

Many investors do not understand the counterintuitive nature of the inverse relationship between interest rates and bond values. Those who looked to bonds to protect their portfolios from the volatility of 2008 probably do not realize that the value of their bond portfolios will get hammered as interest rates rise. They assume that the lower volatility of bond funds means that their portfolio cannot lose value, which of course is not true. In fact, some bond fund vendors are beginning to issue warnings to customers that they should consider diversifying out

of bond funds so the hit will not be quite so bad when the rates actually begin to climb from their current historic lows.

How bad can the hit be? A Schwab analyst suggests that, for bond portfolios with an average duration of five years, every percentage point rise in interest rates will cause the portfolio to drop in value by about 5%. There are a lot of technical assumptions behind that estimate, but it gets the point across.

Investors holding bond funds because they think they will be shielded from market fluctuations will be sorely disappointed, but not all bond investors will be hurt by rising rates. For example, retirees (or anyone else) buying fixed income to create predictable cash flows by laddering individual bonds and holding them to maturity will not be harmed by the intervening paper losses on their bond holdings. In fact, these bond investors may welcome cheaper bonds because they will make the cost of continuing the cash flows cheaper. By holding individual bonds instead of bond funds, investors who need to generate income from their portfolio can actually take advantage of rising interest rates and immunize their cash flows. College textbooks, both old and new, refer to the idea of holding bonds to produce cash flows as a "dedicated" portfolio strategy.

The Tale of Two Bond Investments

Investors generally gain exposure to fixed income either through funds or through individual securities. Bond funds and individual bonds serve fundamentally different roles, particularly for retired investors looking to generate income from their portfolios. Bond funds are designed as total return vehicles that seek to deliver lower volatility than stocks. The goal is to grow faster than withdrawals. However, the underlying characteristics of bonds are lost when they are aggregated in a single portfolio that serves thousands of clients. Although bond funds have low volatility, this doesn't mean that they can't lose money, which is exactly what will happen in the short run as rates rise. An investor would still have to sell shares in order to generate income, magnifying the negative effect of reverse dollar cost averaging.

The unique characteristics of individual bonds, on the other hand, can be engineered to deliver predictability along with low volatility. The amount of coupon interest and the timing of maturities for individual bonds are known when the investor buys the bond. So with a little timing, you can match the cash flows using the coupon and redemptions so that the portfolio will be completely immunized from changes in interest rates (since you hold the bonds to maturity) and perfectly match the duration of the income stream regardless of the type of shift in the yield curve.

Liability Driven Investing for Individuals

It used to be that individuals could rely on a pension from their employer to deliver predictable retirement income. Now, most individuals are left to their own devices to generate income from their portfolio. But the pension fund and the individual face the same challenge, building a portfolio to match the projected future income stream. In the institutional investing world, this approach is referred to as "liability driven investing" (LDI), also called goals-based investing

LDI can be implemented with individuals through dedicated (cash-matched) bond portfolios. The idea of a dedicated bond portfolio is to synchronize bond maturities and coupon payments to precisely match future cash flow needs and then hold the bonds until they mature. The cash flows, of course, are the withdrawals retirees must make each year to pay their living expenses. Individual bonds can supply perfectly timed cash flows year after year, without missing a beat. That is why they are called "fixed income" instruments.

Immunization and Predictability

Like its cousin the bond ladder, a dedicated bond portfolio is immunized against rising interest rates because the individual bonds are held to maturity. The value of the portfolio itself is not protected from rising interest rates, but the cash flow stream produced by the bonds is protected. By taking this cash-generating portion of the portfolio off the table risk is nullified where it counts.

Providing predictable cash flow is precisely what a dedicated portfolio is dedicated to do. In fact, holding U.S. Treasuries, agencies, CDs, and TIPS to maturity is probably the closest thing to perfect predictability that exists when it comes to future cash flows. Unlike a bond fund, retirees do not have to worry about what will happen if interest rates are up (and their portfolio value is down) just when they have to sell to get cash for living expenses.

Utilizing dedicated bond portfolios also avoids nearly all the classic risks associated with bonds. As already pointed out, market risk due to rising interest rates is eliminated because the bonds are held to maturity. Reinvestment risk is eliminated because the cash is not reinvested--it is withdrawn and used for living expenses. Default risk can be nearly eliminated by using CDs, Treasuries, and agencies (using AAA rated corporates or munis would carry a low default risk but not eliminate it because defaults do occasionally happen). Inflation risk can be reduced by building inflation adjustments into the target income stream or eliminated entirely by using TIPS.

Consider a couple who retired on January 1, 2010, with a $1 million nest egg. Assume their advisor recommended a 60% stock/40% bond allocation with an initial withdrawal rate of 5% increasing each year with inflation. The couple withdrew $50,000 for living expenses for 2010. If inflation during 2010 turns out to be 3%, they will expect to withdraw $51,500 in 2011, and so on.

To generate and protect the future cash flows regardless of market performance, the couple could buy $400,000 in individual bonds and hold them to maturity. Each bond would supply income in two ways: the coupon interest it produces each year plus its redemption value when it matures. These cash flows are known in advance and would arrive as scheduled, regardless of what happens to interest rates.

The trick is to buy the bonds in just the right amounts and maturities so that the total cash flows match the withdrawals needed for each year. An income stream starting at $51,500 and growing at 3% per year would add up to $457,955 over the next eight years. These are the liabilities that drive the investment, hence the moniker "LDI."

BASE CASE: 8-YEAR DEDICATED INCOME PORTFOLIO OF CD/TIPS

YEAR	BOND	MATURITY	COUPON	YIELD*	PORTFOLIO CASH FLOWS	TARGET CASH FLOWS	DIFFERENCE
2011	GMAC Bk CD	1/10/2011	4.55%	0.78%	$51,834	$51,500	($334)
2012	Bk Of Choice CD	1/3/2012	2.00%	1.53%	$53,219	$53,045	($174)
2013	Mdlnd St Bk CD	1/14/2013	2.65%	1.88%	$54,260	$54,636	$376
2014	US Treas. TIPS	1/15/2014	2.00%	3.19%	$56,909	$56,275	($633)
2015	US Treas. TIPS	1/15/2015	1.63%	3.52%	$57,299	$57,964	$665
2016	US Treas. TIPS	1/15/2016	2.00%	3.76%	$59,673	$59,703	$30
2017	US Treas. TIPS	1/15/2017	2.38%	3.95%	$61,371	$61,494	$123
2018	US Treas. TIPS	1/15/2018	1.63%	4.10%	$63,910	$63,339	($572)
			Totals:	2.89%	$458,474	$457,955	($519)
	BASE CASE TOTAL COST:					$401,068	

*Note: Yield on TIPS assumes 3% annual inflation. Source: BondDesk Alternative Trading System quotes, 3/23/2010

The table above illustrates an example of a set of bonds that would supply this income stream. At current low yields on CD's and TIPS (about 2.9%), this bond portfolio would cost $401,068. But its cash flows sum to

$458,474, matching the annual targets nearly perfectly (bonds must be bought in $1000 increments, so the match cannot be exact).

Once the dedicated bond portfolio is in place, it will provide cash flows for the withdrawals in just the right amounts at just the right times. As each year passes, the same 8-year time horizon of protection can be maintained for as long as needed by adding a new bond with an 8-year maturity if desired. In practice, the entire portfolio would need to be re-configured to adjust for the cash flows from the new bond but this is the idea. Doing it every year over a lifetime would be the equivalent of self-annuitizing.

There is nothing sacred about eight years. Other horizons can be used (5 to 10 year are common for retirees). At today's yields, each year of cash flow takes about a 5% allocation to fixed income, assuming the initial withdrawal rate itself is at or below 5%. For instance, if the couple had wanted a 30% allocation to fixed income, they could have secured about six years of income; a 50% allocation would buy about 10 years of income. Most retirement portfolios' fixed income allocations fall into a 30% to 50% range, with 40% being the most popular.

The Impact of Rising Rates

At higher interest rates, the cost of funding the cash flow stream in our example would drop. This is why personal investors following this strategy might welcome a rise in rates.

To project the impact of higher rates, assumptions must be made. Starting with the base case of current rates, the same analysis was done assuming a parallel shift in the yield curve and using yields higher by 0.5%, 1%, 1.5% and 2%. The table above tabulates the results.

In the Base Case of current rates, the cost of the portfolio ($401,068) was about 87% of the 8-year cash flow it produced ($458,474). But if rates rose by 2%, the cost would be $370,426 or about 81% of the same cash flow. That represents a drop of about 8% for the cost of the overall bond portfolio.

Imagine that interest rates dropped by 2% immediately after the investor purchased the portfolio. Although the paper losses would be significant at more than $30,000, notice the income delivered by the portfolio remains unchanged. This same rate change would impact a bond fund values in a similar way. But there is a difference: the investor using a total return approach would have to sell shares in order to generate enough cash thereby selling a depressed asset. This sequence risk magnifies the impact of the withdrawal on the portfolio.

COST OF 8-YEAR DEDICATED INCOME PORTFOLIO AT HIGHER RATES

ROW	DESCRIPTION SUM OF 5-YEAR INCOME	BASE CASE	+0.5%	+1.0%	+1.5%	+2.0%
1	Stream Produced	$458,474	$458,474	$458,474	$458,474	$458,474
2	Cost of Portfolio	$401,068	$392,830	$385,004	$377,556	$370,456
3	Sum as %	100%	100%	100%	100%	100%
4	Cost as %	87%	86%	84%	82%	81%

Source: Bond Desk 2010

In fact, rising interest rates will be seen as a blessing for investors who use a dedicated bond portfolio. As shown in Table 2 (above), rising interest rates make it cheaper to buy future income. As income is consumed out of the portfolio each year, investors will likely look to extend the portfolio time horizon back out to the original (8-years in the case above).

Conclusion

Rising interest rates do indeed cause bond values to fall. For investors who utilize bond funds in a total return approach to generating income, rising rates may well continue the whipsaw effect that started in their equity portfolio in 2008. Portfolios of individual bonds dedicated to generating cash flows with redemptions and coupon interest will fare much better. The simple idea of precision laddering bond maturities to match income needs solves many of the problems that rising rates and fluctuating markets can cause. Rising rates mean lower costs to provide the same cash flows, and will be viewed as a silver lining for smart bond investors.

Source: http://www.advisorone.com/article/silver-lining-1

November 30 2010

Asset Dedication White Paper Series

ASSET DEDICATION
Engineered Income Portfolios

The Cost of Waiting for Interest Rates to Rise

By Stephen Huxley and Brent Burns

Executive Summary

Today's interest rate environment presents financial advisors with a conundrum - do I stay on the sidelines and wait for rates to rise before re-allocating my clients' portfolios, or do I jump in now....what are the costs of waiting for rates to rise? We evaluate this question in the context of income-matching portfolios constructed with individual bonds. Income-matching portfolios consist of a series of individual bonds held to maturity whose redemptions and coupon payments provide cash flows that precisely match a client's target income stream. We will compare the income-matching strategy to investing in short duration bond funds, holding cash or buying a CD to show it is better for investors to buy now than wait for rates to rise.

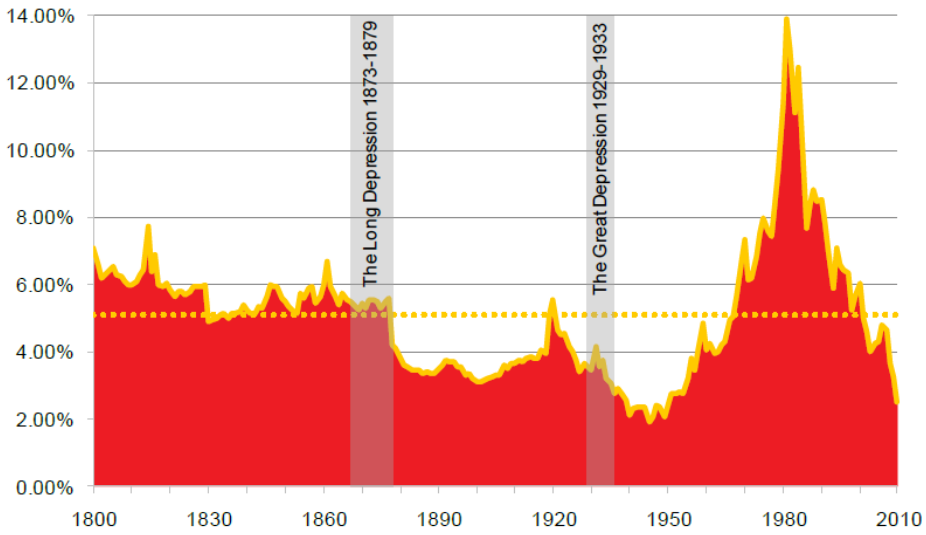
Introduction

Given the current interest environment, the challenge for investors is finding a bond strategy that will work in either a period of rising rates or a prolonged period of low rates, similar to Japan over the last 20 years. This paper first exposes the weaknesses of bond funds relative to individual bonds in periods of rising interest rates. Then we present the concept of income-matching using individual bonds as a superior alternative to the total return approach of bond funds whether rates rise or stay flat. Finally, for an investor two years from retirement, we demonstrate the advantage of buying an income-matching portfolio now rather than waiting for rates to rise in short duration bond funds, cash or a 2-year CD.

Economists in the Wall Street Journal's Economic Forecast Survey are among the many who predict rising interest rates in 2011. These predictions are based on the observation that rates have been low recently, both in absolute terms and in relative terms. For example, the federal funds rate is close to zero and the yield on the 10-year Treasury has been below or near 3% compared to its long term average of 5.1%.

There is some question, however, about how quickly rates may rise if we examine the very long run. Figure 1 provides a historical perspective of 10-year Treasury bond yields back to 1800.[2] Two important periods of sustained low interest rates follow periods of severe economic turmoil. The Long Depression (1873-1879) and the Great Depression (1929-1933) both preceded periods of below average yields that lasted two decades or more as the economy struggled to recover. Therefore, we see that low rates by themselves do not necessarily prove that rates will rise immediately.

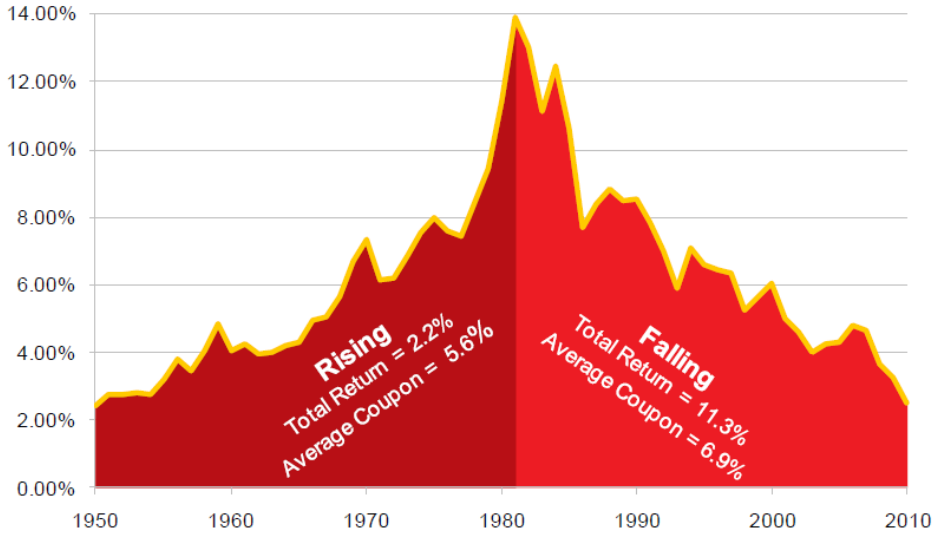
Figure 1
10-year Treasury Bond Yields, 1800-2009



Bond Funds in Rising and Falling Rates

There is an obvious interest rate spike in the post-war era that rose to a peak in the early 1980's. A closer view of rates since 1950 is shown in Figure 2. During 1980 to 1984 rates averaged over 12 percent, corresponding to Fed Chairman Paul Volcker's attempts to rein in inflation and President Ronald Reagan's deregulation of the financial services industry. This peak created two distinct periods of interest rates that were profoundly different; a sustained period of rising rates prior to 1981 and a sustained period of falling rates from 1981 until today. These two periods provide interesting insight into the structural differences between individual bonds and bond funds

Figure 2
10-year Treasury Bond Yields, 1950-2010[3]



In the 31-year period of rising rates from 1950 to the peak in 1981, total return for the 10-year Treasury index (used as a proxy for bond funds throughout this paper) averaged 2.2% even though the average coupon over the period was 5.6%.[4] If rates begin to rise again over the next few years, bond fund investors may experience the same disappointing total return. In a recent Wall Street Journal article, Jeremy Siegel and Jeremy Schwartz, noted:

"The last time interest rates on Treasury bonds were as low as they are today was in 1955. The subsequent 10-year annual return was 1.9 percent…"[5]

On the other hand, when rates began to fall following the peak in 1981, the total return for the 10-year index averaged a spectacular 11.3% while the average coupon was 6.9%. In a period of falling rates, total return exceeds the average income for the portfolio. With a sustained tailwind, it is not surprising that 97 percent of taxable bond funds existing at the end of 2009 started after 1981.6

Bonds versus Bond Funds When Rates are Low

Investing in bonds in the current environment is challenging and highlights the unique advantage that individual bonds have over bond funds. First, it is important to understand the distinction between an individual bond and a bond fund. Individual bonds represent legal obligations to pay coupon interest and return principal at maturity. Coupon and principal payments are predictable when a bond is held to maturity. A bond fund, on the other hand, has no such legal obligation. Instead, a bond fund is a pooled portfolio of bonds but without the predictable characteristics offered by individual bonds.

Total return for a bond fund can be decomposed into two parts; *price return* and *income return* (see sidebar on this page). Price return is the appreciation or depreciation of the bonds, usually represented by net asset value (NAV) for a bond fund. Because bond prices are inversely related to yields, when interest rates rise bond prices fall. The fund's total return becomes the blend of negative price return and positive income return. If negative price return outweighs income return then total return is negative. This means that when interest rates are rising, total return for a bond fund will by definition be lower than the yield to maturity of the underlying bonds if they were simply held to maturity. A portfolio of individual bonds held to maturity, on the other hand, is unaffected by the intervening price loss and simply collects the coupon payments and principal when the bonds redeem.

Decomposing Bond Fund Total Return

Total return for a bond fund can be broken down into two components: ***price return*** *and* ***income return****.*

Price return *is the underlying value of the bonds in the portfolio if they were sold. Bond prices are inversely related to interest rates, so bond prices fall as rates rise and rise when rates fall.*

Income return *is the income received from the underlying bonds in the portfolio and is never negative. For portfolios with coupon paying bonds, income return is best measured by the 30-day annualized yield.*

The contrast in total return between the periods of rising rates and falling rates highlight the difference between bond funds and individual bonds. Individual bonds hold the advantage during periods of rising interest rates, but nearly 30 years of falling interest rates have masked the structural differences between individual bonds and bond funds. Since 1981, both investing bond holders and bond fund managers have been the price of for total return, selling bonds before maturity. Because selling it in a bond goes up as rates fall, the bond is worth more by the intervening period than by holding it to maturity.

Bond funds generally do not hold bonds to maturity. The average turnover rate for Intermediate and Short-Intermediate Government bond funds is 173%, meaning that the entire portfolio is traded almost two times per year.[7] The challenge is when rates are rising, because total return for a bond fund will always be lower than the yield to maturity on the underlying bonds and, as seen in Figure 3, can even be negative. Individual bonds, on the other hand, can be held to maturity, avoiding recognition of losses and achieving the yield to maturity as a minimum return.

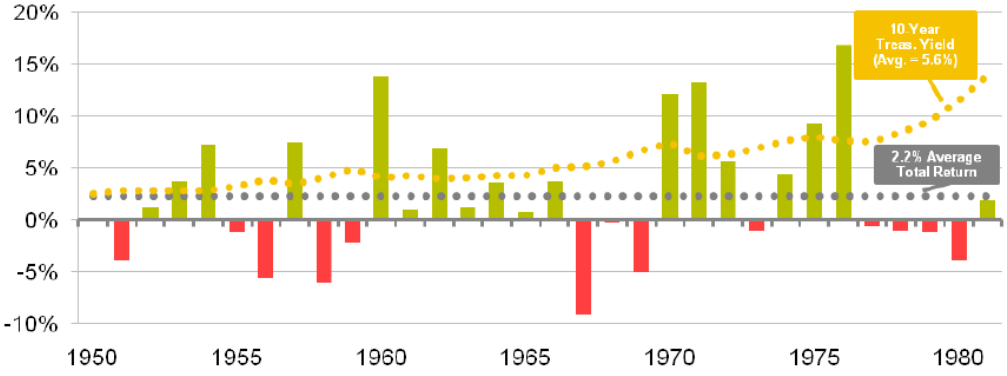
Table 1 shows the impact of rising, flat and falling interest rates environments on the total return of bond funds and individual bonds.

Table 1
Impact of Various Interest Rate Scenarios on Total Return

	Bond Funds	Individual Bonds
Falling Rates	Price Return ↑ Income Return ↓ Total Return > Income Return	Price Return ↑ Income Return ↓ Total Return > Income Return
Flat Rates	Price Return → Income Return → Total Return = Income Return	Price Return → Income Return → Total Return = Income Return
Rising Rates	Price Return ↓ Income Return ↑ Total Return < Income Return	Price Return → Income Return ↑ Total Return = Income Return

When rates rose from 1950 through the peak in 1981, they generated a dramatic negative impact on total return for bond funds. Figure 3 shows that average total return of 2.2% lags the average coupon yield of 5.6%, meaning the drop in price return averaged 3.4% per year. Also note the volatility of the annual returns.

Figure 3
10-year Treasury Bond Yield vs. Total Return 1950-1981[7]



Catch-22 for Bond Funds
Bonds with longer maturities will experience a greater price loss when rates rise. A bond's "duration" is the average maturity of all of the payments – coupon interest plus redemption value (see sidebar page 6). Mathematically, it is the weighted average of the lengths of time until the bond's remaining payments are completed and quantifies the relationship between interest rates and bond prices. Duration is equivalent to the concept of "elasticity" used by economists to represent a measure of the sensitivity of bond prices to changes in interest rates. Funds holding bonds of short duration will fall less if rates rise than funds holding bonds with longer durations.

Therefore, conventional wisdom for bond fund investors is to purchase funds with shorter duration when rates are expected to rise in order to lessen the loss in the bonds' market value. But short durations mean giving up significantly higher returns that longer durations offer if rates stay flat over the next few years. In other words, investing in the short end of the yield curve means losing the higher returns offered on the longer end of the yield curve.

For example, if the US experiences a Japan-like prolonged flat interest rate environment, keeping fund duration short will create a significant opportunity cost for investors. Table 2 below shows the difference in yield among iShares Treasury Bond ETFs with different maturity ranges. If rates stay flat, investors buying short,

represented by the 1-3 Year fund, are giving up nearly 200 basis points per year to the longer 7-10 Year fund. Over 10 years, the opportunity cost of staying short will be approximately $220 for every $1,000 invested.

Table 2
Comparing Bond Fund Duration and Yield[8]

Fund	Duration	30-Day Yield[9]
Barclays 1-3 Year Treasury Bond Fund	1.84	0.21%
Barclays 3-7 Year Treasury Bond Fund	4.50	1.04%
Barclays 7-10 Year Treasury Bond Fund	7.29	2.20%

Alternatively, if rates rise, the 7-10 Year fund will be subject to greater price loss because of the longer duration. For instance, a 1% rise in rates could cause an annual price loss of approximately 7.3% for the 7-10 Year fund as opposed to 1.8% for the 1-3 year. For a $1,000 investment, the estimated annual net loss for the 7-10 Year fund would be $50.90 compared to $16.30 for the 1-3 Year fund.

Since no one knows which way rates will move, investors need a strategy where they can shift out on the yield curve to take advantage of higher yields if rates stay flat while protecting the value of the cash flows if rates rise. Unfortunately for bond fund investors, they have to pick their poison. Either stay short so they don't get hurt as badly should rates rise and give up yield if rates stay flat, or extend the duration of the portfolio to achieve higher yield and risk greater losses if rates rise. In either case, bond funds expose investors to significant risks when compared to individual bonds.

Income-Matching Bond Strategy

Income-matching is an individual bond strategy that can provide protection against both rising interest rates and the opportunity to achieve higher yields by moving out the yield curve. Investors approaching or in retirement can use individual bonds to create an income-matching portfolio that protects the portfolio cash flows that will replace their paychecks.

Expanding on the simple concept of a bond ladder, income-matching portfolios synchronize coupon and redemption payments to precisely match an investor's target income stream and immunize cash flows from falling bond prices caused by rising interest rates (see sidebar this page). Although the value of the portfolio is subject to intervening price fluctuation, the actual cash flows are predictable and protected.

Bond funds cannot immunize cash flows because they turnover their portfolio instead of holding their bonds to maturity and thus realize losses when rates are rising. Bond fund investors seeking income from their portfolio must take systematic withdrawals from their portfolios in order to generate income. When rates rise and bond fund values fall, investors essentially reverse dollar-cost-average out of their portfolio, exacerbating low or negative total return. Only a portfolio of individual bonds, held to maturity, can protect cash flows from rising rates. Most income-matching portfolios are established for only a portion of retirement. Investors typically maintain a standard stock/bond asset allocation (60/40 for example). However, the fixed income allocation serves a dual purpose. In addition to providing general stability/diversification, the portfolio also provides a predictable, protected cash flow stream over a specified period. The average portfolio time horizon is 10 years of income, although portfolios can be as short as 3 years and can extend beyond 30 years. The portfolio spends down principal each year and must be replenished from stocks and other growth oriented investments to extend the income horizon back out to the original. In what becomes a dynamic rebalancing process, when equity markets are up, stocks are sold to by bonds and extend the horizon. If equities are down, the income-matching portfolio is allowed to spend down a year to ride out bad markets rather than selling stocks at the wrong time to buy more bonds.

Bond Terminology Defined

Duration *measures the approximate percent change in a bond's value for a one percent change in yield, reflecting a bond's sensitivity to changing interest rates. A bond's price will change roughly by its duration for every 1% change in yield. For example, if interest rates rise 1%, a bond with 4-year duration will lose about 4% in value.*

Immunization *is an investment strategy used to protect bond investments from changes in interest rates by matching the timing of cash flows (coupon payments and redemptions) to an investor's income needs over a specified time horizon.* An *investor can immunize a bond portfolio by holding bonds to maturity, avoiding realized losses during the intervening periods and receiving a known specific rate of return (yield to maturity) regardless of what happens to interest rates.*

Investors approaching but not yet in retirement can defer cash flows to start in the future at their expected retirement date. For example, someone who plans to retire in 2 years and wants an 8-year income horizon could buy bonds maturing in 3 to 10 years. The first would mature at retirement and the others would mature in each of the successive years thereafter for the next 7 years. The time horizon can be extended through dynamic rebalancing as described above.

Buy Now or Wait?

With interest rates near historical lows, many investors question whether now is a good time to implement an income-matching strategy or if it would be to their advantage to wait until rates are more attractive. If interest rates rise, prices of bonds will fall and the cost of building an income-matching portfolio would be cheaper. We examine three waiting strategies and will show that there is a low probability that any of the waiting strategies will be better than buying now.

We examine the cost of waiting for rates to rise from the perspective on an investor who is transitioning from work to retirement. Once retired, the investor's portfolio will need to generate predictable cash flows that replace his/her paycheck. The following scenario is the base of our analysis:

- Target retirement in 2 years (Jan. 2013)
- Target income stream starting at $100,000 in 2013 plus 3% inflation thereafter
- Cash flow horizon starting at retirement and continuing over the next 8 years (2013-2020)[10]

Listed below are four implementation strategies investors might consider when evaluating the timing decision if they believe rates will rise in between 2011 and 2013.

1. **Buy Now**. Invest in an income-matching portfolio today consisting of bonds with 3-year through 10-year maturities (maturities of 2013 through 2020 timed to deliver cash flows when the investor retires).
2. **Wait in Bond Funds**. Invest for total return in a bond fund for 2 years and purchase an income-matching portfolio in 2013 using 1- to 7-year bonds (maturing in 2014 through 2020). .
3. **Wait in Cash**. Invest in cash for 2 years, then purchase an income-matching portfolio in 2013 using 1- to 7-year bonds. These bonds will mature in 2014 through 2020. Sufficient cash will be set aside to fund 2013 income. **Wait in a CD**. Invest in a 2-year CD maturing in January, 2013, This CD will be held to maturity with the proceeds at redemption used to fund 2013 and buy the 1- to 7-year portfolio for 2014 to 2020.

We will examine each of these options in detail. Note that Strategies 2, 3, and 4 actually require successful market timing in order to pay off. The Wait in Bond Funds strategy proves to be mathematically impossible to pay off because the price loss of the portfolio caused by rising rates outstrips the increase in income return at current rates. The Wait in Cash and Wait in a CD strategies have very low probabilities of paying off for investors.

Strategy 1 - Buy Now:

For the base scenario described above where the investor is 2 years away from retirement, it costs $770,896 now to buy income-matching portfolio of 3- to 10-year bonds that calibrated to generate income starting in 2013 (Table 3).

The investor is buying income in advance of retirement, shifting out the yield curve as shown by the dark blue arrow in Figure 4. Because the portfolio is immunized, extending the duration of the portfolio allows the investor to take advantage of higher yields further out on the curve while protecting the value of the cash flows. Also notice that the portfolio avoids the very low yields of the short part of the curve. This scenario will serve as the base for evaluating the other strategies.

Table 3

Buy Now Income-Matching Portfolio (Purchased in 2011, Deferred to Start in 2013)

Year	Issue	Maturity	YTM	Cost	Portfolio Cash Flows	Target Cash Flows
2013	CD DISCOVER BK	1/2/2013	1.2%	$64,439	$100,701	$100,000
2014	CD GOLDMAN SACHS BK	3/11/2014	2.0%	$98,801	$103,061	$103,000
2015	CD CAPITAL ONE BK	1/12/2015	2.1%	$113,382	$106,055	$106,090
2016	TENN VALLEY AUTH	1/15/2016	2.1%	$95,132	$109,630	$109,273
2017	FINANCING CORP	2/3/2017	2.5%	$93,471	$112,630	$112,551
2018	FINANCING CORP	2/3/2018	2.7%	$92,063	$115,630	$115,927
2019	RESOLUTION FDG	1/15/2019	2.8%	$92,140	$119,630	$119,405
2020	FED HOME LOAN BK	3/18/2020	3.1%	$121,470	$122,815	$122,987
		Total	**2.2%**	**$770,896**	**$890,152**	**$889,234**

To evaluate the waiting strategies, we need to establish a benchmark. The required income stream can be purchased now for $770,896. What will it cost in 2013? No one can know, but the cost of an identical 8-year income stream right now would be $820,088 (Table 4). The cost is higher because the investment has shifted back down the yield curve to buy bonds with 1- to 7-year maturities (Figure 4).

If we assume no change in the yield curve, then in 2013, the cost will be the same, $820,088. This means that, to make waiting worthwhile, either: 1) rates will have to rise enough to lower the cost of buying this income stream to $770, 896, a drop of $49,192 (6.0%); or 2) the $770,896 will have to earn $49,192 over the two years, which would require a return of 3.1 percent per year.

For the rising rates scenario, we must estimate how changes in interest rates change portfolio values. Economists call this elasticity, financial analysts call it duration. The duration of the $820,088 portfolio is 3.6 years. This means that a 1 percent rise in rates will cause the value of the portfolio to fall by 3.6 percent. Therefore, a decline of 6.0 percent will require a rise in rates of 1.68 percent to make waiting worthwhile.

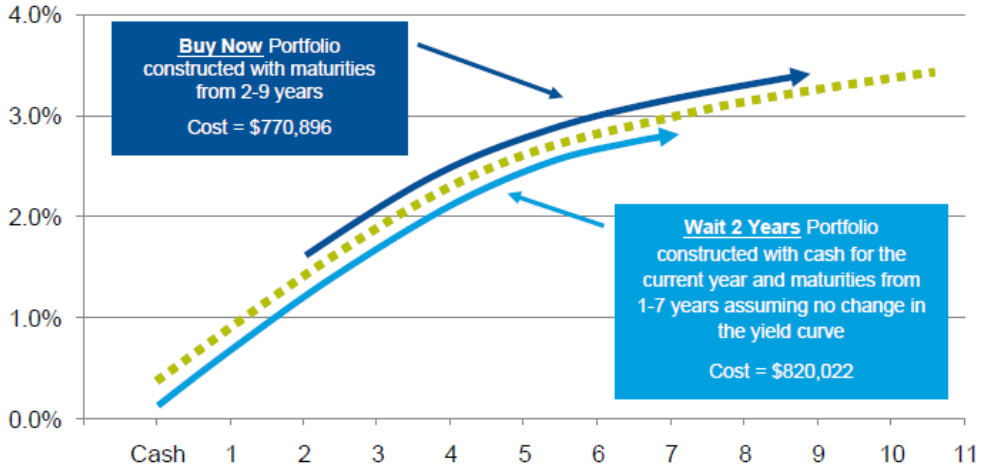
Table 4

Wait 2 Years Income-Matching Portfolio (Purchased in 2013 to Start Immediately)

Year	Issue	Maturity	YTM	Cost	Portfolio Cash Flows	Target Cash Flows
2013	Cash	-	0.075%	$84,517	$100,000	$100,000
2014	CD GOLDMAN SACHS BK	3/11/2014	0.7%	$93,204	$102,974	$103,000
2015	CD CAPITAL ONE BK	1/12/2015	1.2%	$102,028	$105,632	$106,090
2016	TENN VALLEY AUTH	1/15/2016	2.0%	$108,362	$109,069	$109,273
2017	FINANCING CORP	2/3/2017	2.1%	$124,720	$112,668	$112,551
2018	FINANCING CORP	2/3/2018	2.1%	$104,107	$116,000	$115,927
2019	RESOLUTION FDG	1/15/2019	2.5%	$102,046	$119,000	$119,405
2020	FED HOME LOAN BK	3/18/2020	2.7%	$101,105	$123,000	$122,987
		Total	**1.7%**	**$820,088**	**$888,342**	**$889,234**

*Note – assumes no shift in yield curve and identical bonds with identical yields purchased two years later, so maturities would all be two years later than those shown. Cash assumed to be in a money market fund paying .15% per year. Half the funds would be in the account over the year on average, so .075% was used as the first year cash return.

Figure 4
Income-Matching Portfolios at Various Points on the Yield Curve



The reason why the *Buy Now* portfolio now is cheaper should be clear. The 3-year bond (maturing in 2014) in 2011 becomes the 1-year bond in 2013, the 4-year bond becomes the 2- year bond, etc. Assuming no change in the yield curve, the 3 year bond yields more than the 1- year bond and so on, making the overall cost to generate the income now lower than it will be in 2 years. Essentially, buying the portfolio now replaces cash and the 1-year bonds with 8- and 9- year bonds, therefore shifting the portfolio further out on the yield curve and buying the same cash flows at a greater discount (as shown in Figure 4). Note that the *Wait 2 Years* portfolio has cash in the first year because the portfolio needs to support income needs starting in 2013 and therefore needs to be liquid.

Strategy 2: Wait in Bond Funds

Whether rates rise or stay flat, the *Buy Now* strategy is superior to any bond fund strategy. In periods of rising interest rates, the relationship between yield and bond fund prices make it mathematically impossible for an investor to be better off waiting in a bond fund so long as the duration greater than the yield. When the duration is greater than the yield, the price loss caused by rising rates will by definition be greater than the increased yield. Thus, as a bond funds yield begins, its price will fall by a greater amount. One step forward, two steps back.

Additionally, if rates stay flat, bond funds would need to yield 3.1% annually to overcome the $49,000 advantage of the *Buy Now* strategy. As can be seen in Table 2, if rates do not change, then none of the bond funds will earn the requisite 3.1 percent needed to make waiting worthwhile. In the current rate environment, investors would either need to extend the duration of their funds and/or take on credit risk in order to achieve the required yield. If they take on extended duration in a bond fund, investors face even bigger losses if rates end up rising. Credit risk exposes investors to losses regardless of changes in interest rates. In either case, investors increase their uncertainty.

The following analysis reveals the challenges faced by short to intermediate duration bond funds. Short duration funds are less hurt by rising rates, but fall even further short if rates stay flat.

Short Duration Bond Fund

As the earlier analysis showed, a 1-3 year bond fund such as the Barclay's fund with duration of 1.84 years would actually lose 1.84% of its value if rates rise by 1%. If rates rose steadily by 1.68% over two years, it value would drop 3.1%, or 1.55% each year (see Table 5). Its income would be higher but even if it sold all of its current bonds (which are paying .21 percent) at the start of each year and replaced them with new bonds paying 1.05% (.21% + .84%) in Year 1, it would still lose .50% the first year. It would gain .34% the second year (assuming the yield curve remained stable the second year). That means that if the $770,896 were invested in a 1-3 year bond fund, it would end up at $769,710, slightly below where it started at $770,873 by the end of two years.

Therefore, no matter how fast rates rise, the short duration fund comes up short because the fund will lose slightly more than the price of the *Wait 2 Years* portfolio falls. Of the bond fund strategies, the short duration fund comes closest to the other 2 waiting strategies that have small probabilities of paying off. If rates did not rise, of course, then the fund would earn its .21% yield, well below the 3.1% needed for $770.896 to grow to $820.088. Thus, in either a rising rate case or in flat rate case, the *Buy Now* strategy is better than the *Wait in Short Duration Bond Funds* strategy.

Table 5
Effect of a 1.24 percent Rise in Rates Over Two Years
1-3 Year Bond Fund - Duration = 1.84, 30-Day SEC Yield = .21%

	Change in Value	Income Return	Total Return	End of Year Value
Year 1	-1.55%	1.05%	-0.50%	$767,067
Year 2	-1.55%	1.89%	0.34%	$769,710

Short/Intermediate Duration Bond Fund

What if a longer duration bond fund were used to wait? The analysis suggests that the results are even worse. As Table 6 shows, if a 3-7 year bond fund had a duration of 4.5 years, its value would drop by 4.5% for each 1% rise in rates. For a 1.68 percent rise in rates, the fund would drop 7.6% in value. The Barclay's 3-7 year fund was earning only 1.04%, so even a rise of 1.68% is not enough to overcome the decline in value. The portfolio would actually be worth only $748,168 at the end of two years. Buying now would be a better strategy.

Table 6
Effect of a 1.24 percent Rise in Rates Over Two Years
3-7 Year Bond Fund - Duration = 4.5, 30-Day SEC Yield = 1.04%

	Change in Value	Income Return	Total Return	End of Year Value
Year 1	-3.79%	1.88%	-1.91%	$756,211
Year 2	-3.79%	2.72%	-1.06%	$748,168

Intermediate Duration Bond Fund

As the duration of the bond fund extends out further, the picture gets even worse. Drawing again from the Barclay fund example, their 7-10 year Treasury fund has a duration of 7.9 years and an income of 2.20%. The required 1.68% rise in rates over two years would result in a 12.3% drop in value, which would overwhelm the increase in income due to higher rates. Table 7 shows that the value after two years would be only $710,527, a significant loss.

Table 7
Effect of a 1.68 percent Rise in Rates Over Two Years
7-10 Year Bond Fund - Duration = 7.29, 30-Day SEC Yield = 2.20%

	Change in Value	Income Return	Total Return	End of Year Value
Year 1	-6.13%	3.04%	-3.09%	$726,891
Year 2	-6.13%	3.88%	-2.25%	$710,527

Thus, the strategy of waiting in bond funds is likely to be a losing strategy because, if rates stay flat, the funds cannot grow fast enough to overcome the effect of sliding back to a lower portion of the yield curve. On the other hand, if rates rise, they will cause the value of the fund to fall by more than any boost from the increased income might earn. This is truly a Catch-22 of the "new normal" where an environment of low rates undermines the chances of success for traditional responses to rising rates.

Strategy 3 – Wait in Cash:

In order to make it worthwhile to wait in cash, the future cost of the portfolio will need to drop by enough to overcome the initial $49,192 difference. That is, rates will have to rise by enough to cause the future cost to be less than the current cost of the deferred portfolio, $770,896. This slightly overstates the decrease needed

because the cash will earn a small return. We will assume money market yields of 15 basis points (.15% per year) over the next two years. This means that the $770,896 will grow to $773,211. That is, the cost the 1- to 7-year bonds in the portfolio in 2013 will have to fall to $773,211(a drop of 5.7 percent) to make the *Wait in Cash* strategy work.

Thus, for a portfolio with duration of 3.6 years to fall this much will require a rise in rates of at least 1.24 percent over the next two years. This much of a rise represents a 71.0 percent in relative terms over the current rate of 1.7 percent. How often have rates risen this fast?
Table 8 shows the results for several spans. If we assume that the probability is equivalent to the historical frequency of occurrence, then even from 1947 to 1981 (the fastest and most prolonged rise since 1800), the rise was rapid enough only about 27.8 percent of the time in absolute terms, 5.2 percent of the time in relative terms.[13] The probability is less for the relative rise because an absolute gain of 1.24% is more likely when rates are high than when they are low.
The primary conclusion to be drawn from Table 8 is that investors are better off to *Buy Now* than to *Wait in Cash*. The odds of successfully timing interest rates are too low to be a good bet. And if rates do not rise, waiting in cash will come up significantly short.

Table 8
Frequency Required Rate Rises
Over Different Historical Periods for Waiting in Cash

Period	Years	Absolute Increase	Relative Increase
Entire span	1927-2009	16.9%	4.7%
Post-War	1947-2009	21.8%	2.9%
Rising Rates	1947-1981	27.8%	5.2%
Recent	1990-2009	11.5%	0.0%

Strategy 4: Wait in a 2-year CD
Strategy 3 is identical to Strategy 2 except a 2-year CD is purchased and held to maturity. As of this writing, a 2-year CD is yielding about 1.2%, low by historical standards but nearly eight times more than the money market return used in Strategy 2. Once the CD matures, the proceeds ($789,977) would be used to provide cash for the first year and purchase an income-matching portfolio for the following 7 years.

Following the same analysis as Strategy 2, the required absolute rise in rates over two years becomes .81 percent, a relative rise to 46.1 percent. Table 9 shows that the probabilities increase correspondingly for all time periods analyzed. The probabilities still lie below the 40 percent level, meaning that even with a 1.2 percent return investors as better off to *Buy Now* than to *Wait in a 2-Year CD*. Again, if rates do not rise, the *Wait in a 2-Year* CD strategy will not grow sufficiently to pay off.

Table 9
Frequency of Required Rate Rises
Over Different Historical Periods for Waiting in CD

Period	Years	Absolute Increase	Relative Increase
Entire span	1927-2009	26.6%	14.8%
Post-War	1947-2009	31.0%	13.3%
Rising Rates	1947-1981	38.9%	18.3%
Recent	1990-2009	18.9%	0.0%

Source: http://assetdedication.com/public/uploads/pdf/Asset_Dedication_White_Paper-Cost_of_Waiting_for_Rates_to_Rise.pdf

September 10 2010

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The Cost of Waiting for Interest Rates to Rise

By Stephen J. Huxley & Brent Burns

The unforeseen pitfalls of "staying short" with your client's fixed income allocation

Brooke's Note: A bond trader friend of mine is fond of saying: Buy bonds, wear diamonds. This may be true but it presumes that you buy them intelligently [so you'll still be wearing a shirt]. Surprisingly little is written on bond investments relative to the position that this asset class holds in people's portfolios. The author's of this article, Stephen Huxley and Brent Burns, offer insight on the topic and will also elaborate on the topic in an upcoming webinar. To register, you can click here.

In these interesting times in the markets, low interest rates have led to a paralysis of sorts for many investors and their investment advisors, especially when it comes to investing in fixed income. There have recently been unprecedented flows into bond funds in the past 18 months.

This includes $185 billion flowing into bond funds through the first 7 months of 2010 on the heels of $357 billion being poured into bond funds in 2009, according to Morningstar. Compare this to the last time period — 2001 to 2003 as the tech bubble burst — when investors were fleeing equities in favor of fixed income. Bonds funds received inflows of $65 billion, $129 billion and $45 billion in 2001, 2002 and 2003. See this viewpoint from a bond fund manager: Advisor: Muni's no longer seem the deal they once did, but some deserve a look

Yet these record inflows are occurring at a time when prominent bond fund managers are actively warning investors that this might not be the right time to do so, as those investments might lead to unforeseen outcomes.

Rates have generally been falling for the last 30 years since they peaked in 1981, and are now at what many consider to be historic lows. See: As a result, the general feeling among market experts, industry analysts and the financial advisory community is a looming switch to a rising interest rate environment, posing the challenge for investment advisors of identifying when rates will rise and by how much. Absent a reliable market timing strategy, advisors must weigh the costs of waiting for rates to rise rather than acting now.

Resolving the dilemma

To solve this dilemma, we have evaluated a number of scenarios and decisions to determine the best probabilities for success in constructing fixed income portfolios, beginning first with which investment products are the most optimal and then whether to act now or wait for rates to rise.

Individual bonds or bond funds?

In a falling interest rate environment, individual bonds and bond funds behave similarly, both providing the ability to deliver total return above the average coupon of the portfolio. When rates rise, however, individual bonds and bond funds do not behave the same. Bond funds often have flat or even negative returns because rising rates cause prices to fall, generating total return below the average coupon of the portfolio.

Individual bonds, on the other hand, have a return floor when they are held to maturity, protecting the downside by "immunizing" from interest rate risk. Immunization definition – when a bond portfolio is immunized, the investor receives a specific rate of return over a given time period regardless of what happens to interest rates during that time.

Thus, for a rising interest rate environment, using an immunized portfolio of individual bonds is the preferred solution over a traditional bond fund, especially when an investor is likely to utilize that bond investment to provide income in retirement.

Invest now or wait?

For this decision, there are four scenarios to consider:

- Buy a fully immunized portfolio of individual bonds that match the client's expected cash flow needs now
- Invest your clients in cash and wait for rates to rise
- Invest your clients in shorter duration bond funds and wait for rates to rise (what seems to be the most popular choice today)
- Invest your clients in longer duration bond funds (like advisors have much of the past 30 years) and use total return to generate cash flows

To best illustrate which of these choices makes the most sense, it is helpful to use an example. In this case, assume your client is retiring in 2 years and is looking to replace their paycheck with income from their portfolio of $100,000 per year plus 3% inflation. The cost to buy 8 years of immunized income in the form of individual bonds for this client today is roughly $733,000.

If we stay in this current low rate environment for the next two years, the cost to buy that same 8 years of immunized income if rates don't change would be about $787,000. The portfolio would cost more because the client would be buying on the shorter end of the yield curve, trading the 9 and 10 year bonds for the 1 and 2 year bonds.

The majority of the time, the cost of market timing interest rates does not benefit the client because an immunized portfolio locks in the base rate even in the rising rate environment. In the example above, the cost of waiting is about $54,000 or 7% of the client's entire fixed income portfolio.

For "Wait in Cash" to pay off, interest rates would need to rise such that the cost in 2 years plus the marginally higher rates on cash will put the client in the same place as if he/she had purchased now. Since 1927, the probability of rates rising sufficiently fast enough for the decision to be break-even is 11.1%.

Rule-of-thumb

The "Wait in Shorter Duration" decision is a bit of a moving target. Duration Definition: A measure of the sensitivity of the price (the value of principal) of a fixed-income investment to a change in interest rates. Duration Rule-of-Thumb: A 1% rise in the yield curve will lead to a corresponding percentage price drop

roughly equal to a portfolio's duration. For example, a 1% rate rise leads to an approximate 5% price drop for a portfolio with a 5 year duration. The Wait in Shorter Duration strategy is even less likely to be successful than Wait in Cash.

Extending duration in a bond fund beyond cash will lead to low or negative returns as rates rise. The duration mismatch between the client's cash flows and the portfolio create a very unlikely opportunity. Rising rates would have to exceed the cash model because of the decline in the bond portfolio value. The further the duration extends, the worse the problem will get. In most scenarios, it is mathematically impossible to catch up using bond funds of any duration greater than cash.

In the case of choosing a total return strategy with bond funds, the total return net asset value (NAV) is directly related to interest rates, which falls as rates rise. The income return is the weighted average of the portfolio's coupons and is always positive. When interest rates rise, Total Return is always below the weighted average of the coupon if the portfolio is not immunized. An analysis of the most recent sustained period of rising interest rates from 1950 to the peak in 1981, showed that the Total Return approach ran out of money 59% of the time when compared to immunized approaches that by definition generated the exact cash flows needed every time. This analysis points to the benefits of building income matching or immunized bond portfolios in this current low interest rate environment to remove the guesswork of what to do now, regardless of which way interest rates go.

Buying and holding bonds to maturity removes the NAV risk in bond funds and lowers the risk of going further out the yield curve since the return of principal from each bond is meant to be spent in the year it comes due. Combined with sophisticated mathematical programming, immunizing portfolios allows for a reduction in the amount of the clients' capital that is required to "purchase" the cash flow, saving the client thousands of dollars over the life of the portfolio.

Conclusions

- Individual bond strategies in this interest rate environment are best positioned to benefit investors over bond funds
- Waiting to implement an individual bond strategy will cost your clients money because the mathematics are stacked against the chance that the portfolio will be able to catch up to the 250-300 bps that are given up each year of waiting
- Shortening the duration of clients' fixed income exposure is even less likely to work (than staying in cash), even if rates start to rise immediately.
- When rates eventually rise, Total Return using bond funds will not be a successful strategy.
- An income matching immunized bond portfolio can bring an even greater benefit to fixed income investors in this interest rate environment.

Source: http://www.riabiz.com/a/2249036

February 1, 2008

Financial Planning

FINANCIAL PLANNING

The Match Makers

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.

Choosing a Time Horizon

To demonstrate how easily asset dedication can be explained, consider the following retirement example, shown in "Income Portfolio Cash Flows," page 101. 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.

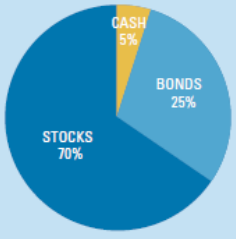
INCOME PORTFOLIO CASH FLOWS

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**

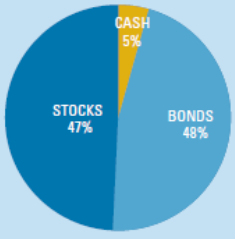
Correlation of Target vs. Actual Cash Flows:	99.58%
Actual Cost of Income Portfolio:	$447,250 (25%)
Invested in Growth Portfolio:	$1,262,750 (70%)
Cash:	$90,000 (5%)
Total:	$1,800,000 (100%)
Assumed Total Return on Growth Portfolio:	10%
Ending Portfolio Value in Future Dollars:	$2,232,952
Ending Portfolio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

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.

Source: http://www.financial-planning.com/fp_issues/2008_2/match-makers533561-1.html?zkPrintable=1&nopagination=1