;login:

THE MAGAZINE OF USENIX & SAGE
August 2003 • volume 28 • number 4

inside:

THE WORKPLACE

Swartz: Where Can I Find a Good Investment?

USENIX & SAGE
The Advanced Computing Systems Association &
The System Administrators Guild

where can I find a good investment?

by Ray Swartz

Ray Swartz ran his own computer training and consulting company for 20 years, until stepping away from gainful employment in 2000. Watching the stock market and his retirement portfolio move up and down like a yo-yo has given him a new appreciation of his tolerance for risk.

raybo@idiom.com

Let's say you've added up your income and expenses, crafted your ideal retirement, and know what kind of return you need on your retirement assets to make it happen just the way you want. Now, the only issue left is where to invest your money.

Library shelves are loaded with books identifying the best way to invest. Every day, television and radio programs offer financial advice from trained professionals. Emails offer hot stock tips. Even, friends and colleagues have ideas for you. Given the thousands of investment options available, how is someone supposed to pick a good place to put one's money?

For most people, putting their hard-earned dollars into specific investments is one of the scariest things they do. This can be so stressful that people often keep their retirement funds in cash to put off making such choices. It is easy to dismiss this investment-decision avoidance as an irrational fear of what might go wrong. However, I believe that most of us experience this concern when our own money is being put on the line.

As I discussed in my last column ("Isn't That a Little Risky?" April 2003), you are taking some kind of risk no matter what you do with your money. We aren't trying to avoid risk; we simply want to use risk to our advantage. The key is to make investments that offer the return we need at the smallest risk.

You Bet Your Sweet Assets

The kinds of investments you can make may be limited by the kind of retirement accounts you own. Different types of accounts provide varying degrees of choice. Some retirement plans are completely self-directed and allow you to move your money when and where you want. Some programs have a limited set of mutual fund families to choose from. Other accounts are limited to a single family of mutual funds. Many people have more than one kind of account, which often provides more flexibility but increases complexity.

Regardless of the choices you do have, you still need to decide on exactly which investments you are going to make. How might you go about doing this?

The place to start is with the amount of return you need to meet your retirement goals. That number, alone, will begin to winnow down your options. Put another way, each possible investment has an expected return and risk level associated with it. Since we want to minimize our risk while earning a specified return, we can begin eliminating those investments that don't fit these criteria.

Recall that the key to minimizing risk is diversification. Thus, the question we want to answer is, What collection of available investments will minimize the risk for our desired return? In financial parlance, we are trying to set our "asset allocation." That is, we want to determine what percentage (allocation) of our investment dollars (assets) we want to put into each chosen investment to meet our goals.

The first step in asset allocation is deciding how many asset classes to use. The basic allocation is among cash, stocks, and bonds. In fact, investment advisors often identify what percentage of each they recommend for their clients. A typical allocation might be 5% cash, 55% stocks, 40% bonds. Using historical data, we could calculate the expected return and risk of this allocation.

In reality, most asset allocations add detail by further sub-classing stocks and bonds. Thus, you might divvy stocks into domestic and international and then into large-cap, mid-cap, and small-cap. Bonds, too, might be separated by location (domestic and international), length (short-, intermediate-, and long-term), and "quality" (government, corporate, or junk).

Even cash has distinctions. There are CDs, money market accounts, and saving certificates. In addition, short-term bonds, government or corporate, are usually identified as cash investments.

If we used just these categories, we'd have 18. Let's simplify it a bit by representing all international stocks and bonds as separate, single categories; that gets us down to 13.

Stocks
Domestic large-cap
Domestic mid-cap
Domestic small-cap
International stocks

Bonds
Domestic government intermediate-term
Domestic government long-term
Domestic corporate intermediate-term
Domestic corporate long-term
International bonds
Junk bonds

Cash
CDs
Money market account
Short-term bonds

While this is a fairly detailed list, it is only a simplified example. It doesn't include one of the biggest investments most people make, real estate, and lumps stocks by size but not by type, such as growth or value.

Let's suppose we decided to use these 13 categories. By assembling historical data into expected returns and risk for each category and calculating the covariances for each pair of asset classes, we can determine which combination of these possible investments would yield the least risk for the return we are seeking. That result would be our asset allocation.

As I said in my last column, this data manipulation is done by a financial advisor using one of several available software packages. One drawback to these asset allocation packages is that they often use different asset classes, making it hard to compare results. But, for the sake of demonstration, let's say our (or our advisor's) software uses just the categories listed above.

The process would work something like this: We would specify the return we want to achieve and the program would spit out a set of recommended percentages for each asset class. Then we would compare these percentages to our current investment mix to determine what changes we need to make in order to conform to our recommended asset allocation. In virtually all cases, this will involve selling some investments and buying others.

Choosing Specific Investments

Above, I described a sample allocation as 5% cash, 55% stocks, 40% bonds. Let's suppose that our more detailed allocation broke it down to:

Cash (5%)
3% Money market account
2% CDs

Stocks (55%)
22% Domestic large-cap stocks
17% Domestic small-cap stocks
16% International stocks

Bonds (40%)
15% Domestic corporate long-term bonds
8% Junk bonds
7% Domestic corporate intermediate-term bonds
5% International bonds
5% Domestic government long-term bonds

The next step is to find specific investments that fit the categories listed. We could buy individual stocks and bonds. However, my preference is for mutual funds, even though they have much higher costs. I prefer to let the fund managers do the work of buying, selling, and researching actual stocks. Here is where your choices might be limited due to the type of retirement account you hold.

If you are in a company 401(k) plan or have your accounts with specific investment companies, your selection of funds may be limited. Since mutual funds are required to disclose how they invest money, it should be a straightforward task to assemble a list of mutual funds that you can invest in and the asset class they belong to.

If you make your own investment decisions, getting a list of available mutual funds that meet your asset-class definitions can be done online at a site like *http://www.morningstar.com* (though they break things down even finer than we did here). You also can take advantage of other specialized financial planning software that allows you to search though all the available mutual funds by many different criteria.

Once we have determined, using our allocation, that we want to invest 22% of our retirement money in domestic large-cap stocks, we can narrow our options in that class by ratings, costs, fees, returns, risks, or whatever other performance categories we come up with. In my experience, once the asset class is identified, it is relatively easy to find several acceptable funds that cover that class.

By way of example, I went to Morningstar's Web site and, using their free mutual fund selector, I did a search for domestic large-cap growth stock mutual funds. Here are the criteria I used (all pull-down selections on the search page):

Minimum purchase $10,000 or less
3-year return greater than category average
5-year return greater than category average
10-year return greater than category average
5-star rating only (Morningstar rating)

In less than a minute, I had a list of 13 mutual funds meeting these qualifications. While it will take much longer to pick the fund(s) we actually want to sink money into, it isn't an unbounded search.

Discipline, Not Emotion

If picking a list of possible investments off the Internet in under a minute makes your knees wobble, then that is all the more reason to follow an asset allocation plan. There is a great deal of mystique surrounding the entire investment field, and it is easy to feel overwhelmed by the available choices and the consequences of making a serious mistake.

In truth, such feelings are based on emotion: the desire to make money, the fear of losing money, the worry of mismanaging retirement funds, the dread of making monetary decisions. Emotional investing causes people to buy at the top of the market, hold losing investments, sell at the wrong time, and make other bad choices.

It is much easier to follow a plan, based on our specific needs, that tells us what to do and when to do it. If investing is a hard thing for you to do, then removing the emotion from the decision process should make your investing life much easier.

Trying to find a good mutual fund from the thousands in the investment haystack is hard. An asset allocation plan simplifies this by dividing the entire market into clear asset classes. By listing a dollar amount for each class, you are given an easy-to-follow financial guide. From there, it quickly gets down to picking one out of a selected list of mutual funds. I find this task much more manageable, especially if all I have to do is to make my choice from a set of highly rated funds.

Selling Your Winners and Buying Your Losers

Not counting the CDs and money market account, our sample asset allocation calls for investment in eight different asset classes. After we make our investment decisions, we might actually put money into 10 or more different mutual funds. We don't know which of these will make us money and which ones won't. If our assumptions are correct (namely, that historical trends will continue on into the future), it won't matter because, over time, this mix of investments will earn us the return we are seeking.

To better demonstrate how this works, let's suppose we need 9% to meet our retirement goals. Using the asset allocation described above, our return might break down like this:

Cash (5%)
3% Money market account (4% return)
2% CDs (5% return)

Stocks (55%)
22% Domestic large-cap stocks (10% return)
17% Domestic small-cap stocks (12% return)
16% International stocks (14% return)

Bonds (40%)
15% Domestic corporate long-term bonds (7% return)
8% Junk bonds (12% return)
7% Domestic corporate intermediate-term bonds (5% return)
5% International bonds (11% return)
5% Domestic government long-term bonds (6% return)

One of the hardest things about investing is handling the emotional issues of committing money to an uncertain future.

Any deviation from the returns assumed here will alter the percentages called for by our asset allocation. Since our asset allocation's percentages are designed to minimize risk for our selected return, we will either begin to take more risk than necessary or get a lower expected return. In order to keep on using our allocation, we need to rebalance our investments back to the allocation's percentages every so often. This means selling some shares that did well and buying those that did poorly.

A numerical example may help here. Our asset allocation calls for 22% of our retirement assets in domestic large-cap stocks. One year after putting our money into the market, it turns out that large-cap stocks had a better than 10% return and this class now accounts for 27% of our retirement assets. Further, let's say that it was a bad year for long-term bonds and we now have only 10% of our assets in domestic corporate long-term bonds. To get back into balance, we would sell our large-cap stock funds and buy our domestic corporate long-term bond funds, so that our portfolio again holds the percentages listed in our allocation.

Here is where emotion can get in the way. Most people would advise you to hold those funds that are doing well and get rid of those that are doing poorly. The goal of such a strategy is to maximize return regardless of risk. This is not what we are trying to do.

In order to maintain our asset allocation and minimize risk, we need to do exactly the opposite. We sell those asset classes that have done well and, therefore, now constitute a larger percentage than they should. At the same time, we buy more of our losing investments. This not only requires discipline but the fortitude to withstand the jibes of others who, no doubt, have made a killing in the stock market following their own advice!

How often should you rebalance? There is no generally accepted amount of time. Some people suggest every three months; others say once a year is plenty. I prefer balancing once a year, on my birthday. I do this simply to limit the time and effort I spend worrying about and fussing with my investments. A different time frame might work better for you.

One of the hardest things about investing is handling the emotional issues of committing money to an uncertain future and the roller-coaster of watching your retirement funds rise and fall in value. Asset allocation investing aims to replace emotion with a disciplined strategy based on the assumption that, in the long run, things will move along historical trends.

Sometimes it is hard to focus on the long-term when your balance is reduced by thousands of dollars in a single day. In the short-term, things might be great (dot-com boom) or horrible (dot-com crash). However, by following an investment discipline, you should be able to avoid making bad investments in the heat of the moment.

Following an asset allocation is no guarantee that you will meet your retirement goals or that everything will go according to plan. After all, risk is involved and things might not work out. The good news is that you can always choose to alter your allocation to earn more return or take less risk if the future begins to turn out differently than you hoped. The best reason to follow an asset allocation is that you have a specific plan to implement and a disciplined way to handle the risk of investing. In my experience, this not only reduces the stress of investing but also provides specific directions and dollar amounts to guide one's decisions.