

## **The Advanced Teachings of Mrs. Langerhorn: 03 Income and Yield: The Two Components of Value by Klarise Yahya, Commercial Loan Broker**

Do you remember when your mother told you “*All men are the same -- they just have different faces so we can tell them apart*”?

An investor would say it a little differently. An investor would say, “All streams of net income are the same. They just have different sources so we can tell them apart”.

When you make an investment, you are, as we’ve discussed, buying an annualized stream of net income. It isn’t how much gross income the investment throws off that’s important, it’s how much net income sticks.

The question is, if you have a choice between competing investments, how do you choose? How, for example, can you determine which is better, a net income of \$8,000 a year or a net income of \$10,000 a year? That’s not a foolish question. They probably cost different amounts of money.

You must determine the yield. Yield, as we’re using the term, is the cash-on-cash “interest rate” on the money you invest. To get yield, you divide annual cash flow by your investment. (Ex: \$5,000 annual net income (after debt service) divided by \$160,000 of your money you invested = 3.125% yield.)

Yield is not quite the same as capitalization rate because *the cap rate always presumes an all-cash purchase*, even when it isn’t. If you bought a stream of net income of \$10,000 annually for an all-cash purchase price of \$100,000 you would have a 10% cap rate and your yield (because you had no loan payments) would both be 10%. Obviously.

If, however, you borrowed \$80,000 to fund the purchase, you would still be buying at a 10% cap rate (remember, cap rate presumes an all-cash purchase!), but your yield (cash flow divided by the dollars you invested) would change. Since you financed the purchase, you will have loan payments. If your loan payments were \$6,000 annually your cash flow would be reduced to \$4,000. And since you invested \$20,000, your yield would be 20% (\$4,000 divided by \$20,000).

Everything else being the same (i.e., similar risk profile and similar term), the greatest yield wins. That’s because the first step in learning how to invest is to understand that investors purchase streams of income. We’ve discussed that ad nauseum. Ad nauseum is Latin for “until you throw up”. I’ve always found it a useful expression.

*The second step is to select, among investments of similar duration and risk, those with the greatest yield.* For example, if you put \$40,000 down to acquire a stream of net income of \$10,000 annually, your yield would be 25%. If you put \$12,000 down to acquire a stream of cash flows, after debt service, of \$8,000 annually, your yield would be 67%. The latter is a better investment, even though the actual dollars received is less because you would have the remaining \$28,000 (\$40,000 minus \$12,000) to invest elsewhere and earn additional streams of income while you diversify your portfolio.

I know I’m repeating myself, but this is vital: net income is important because what counts is not how much money you make, *it’s how much sticks*. When you buy stocks, you have to adjust for trading costs and taxes before you know how much sticks. If you buy income properties, you have to adjust for the additional costs of ownership.

*Remember, net income is after all costs.* It’s what you can take at the end of the year to Nordstrom’s shoe department.

By the way, I remember that you once asked, while we were having tea, what I did with my stock money when it wasn't actively invested in individual stocks. You know that I like to put half of my investable assets in income properties and the other half in individual stocks. Sometimes a stock reaches maturity and it's time to sell it, but there is no immediate replacement. You wanted to know what I did with the money. I didn't tell you then because I wanted you to continue with your index fund. I thought at the time that you didn't have the seasoning to buy individual stocks, but now I want to answer your question. The fact is, as you know, that I put half my money into stocks. And half my "stock" money goes into DVY. The other half is divided among up to 20 individual stocks, so my *original* investment in any one stock is never more than 2.50% of my combined (DVY plus individual stocks) portfolio and never more than 1.25% of my investable assets (property plus stocks). Naturally, I hope the individual stocks I pick increase in value over time. When they do, I just let them grow. I don't sell a stock until it reaches maturity. Then, if there is no immediate replacement, I just put the proceeds back into DVY.

DVY (iShares Select Dividend) is an exchange traded fund (ETF) composed of 100 of the highest dividend-yielding stocks (excluding REITs) in the Dow Jones U.S. Total Market Index. In my mind, what this means is that a purchase of DVY provides (a) dividend income, (b) the potential for growth, and (c) diversification. While I use it as a default position when no promising individual stocks are found, I suppose you could just buy DVY as a substitute for the S&P 500 Index Fund that you started with, if you wished. Like I said, I try to keep half of my stock portfolio in DVY.

Ok. Let's go back to what we were talking about. When you hire yourself out to someone else, whether to an employer or to a client, you are offering not only your intelligence and your work ethic, you are also offering your skill set. An investor's skill set is the ability to determine the value of a stream of income regardless of the package it comes in. It doesn't matter if it is a single share of General Electric stock or a 12 acre office park. Like mother should have said: "*All streams of net income are the same ...*" The responsibility of an investor is to always try to operate within her skill set.

If we accept that the investment value of a stream of net income is a function of its yield, what's the least yield you should accept? Baseline yield for investors is the applicable *U.S. Treasury issue of similar (remaining) duration*. If, for example, you wish to make an investment of 2 years duration your baseline yield would be a Treasury security with 2 years remaining life. If you expected to hold for 10 years, it would be a Treasury security with 10 years remaining life.

You must understand that the yield offered by a specific security can change during its term. While a security may have sold at a 5% yield at time of issue, once purchased its market value fluctuates depending on current market rates. If you hold the security for its entire term, you can expect to have a 5% yield (in this example) during the holding period. But if you must sell it before maturity the yield is subject to market pressures. As we'll see below, market rates vary widely over time. Assume you bought your \$10,000 stream of income at a 5% yield, indicating a purchase price of \$200,000. If interest rates go down and similar securities sell a year or two later for a 3% yield, the value of your investment appreciates to \$333,000 (\$10,000 divided by .03). It is really, *really* important to recognize that the value of a stream of income – any stream of income, whether a Treasury issue or an apartment building – cannot reasonably exceed the capitalized value

of the yield on alternative investments of similar duration and risk. That's a basic money management concept well worth remembering: *the value of an investment is no more than the cost of an equally desirable alternative*. So if you bought a 5 year Treasury note at a 5% yield, and interest rates decline so that three years later (when your note has two years remaining) new 2 year notes sell at a 4% yield, then the value of your note is greater than face amount. For example, a \$1,000 note bearing 5% interest yields \$50 annually. If interest rates go down and that \$50 is capitalized at 4%, the value of your note will be \$1,250. Alternatively, if rates go up and you have to sell, your note will lose value.

The reason the similar-duration U.S. Treasury issue establishes the baseline yield is simple: If you were going to buy an apartment building whose four streams of income (*appreciation / depreciation / equity build-up / cash flow*) are variable and subject to numerous risks (including, but not limited to, the possibility of rent controls, rate increases in variable rate mortgages, vandalism, slip-and-fall injuries from the attorney-clients of the drug dealer in unit A, etc.), why would you complete the purchase if your total anticipated return wasn't even as much as you could on a "risk-less" investment? Clearly, the yield on the applicable Treasury issue impacts the value of any stream of income.

The reason Treasury issues are deemed "risk-less" investments is they are supported by the full faith and credit of the U.S. Government. That means the government will just print more money to pay off your government-backed security when it becomes due. You know by now, however, even U.S. Government securities are not really "risk-less" because *if you sell them before maturity* the sales price is subject to market interest rates, as any other financial instrument. We've covered how you might sell your government security for less - or more - than you paid for it, depending on how market rates have changed since your purchase. But, once again, they are deemed "risk-less" because it is assumed you will keep them until maturity, at which time the government will pay you off.

Let's say you intend to purchase a stream of income and expect to hold it for five years. How might the yield on the applicable Treasury issue affect the value of your investment during the expected holding period? Well, remember that interest rates vary widely over time. For example, the 5 Year U.S. Treasury note yielded 3.56% in January, 1970. In September, 1981, it rose to 16.27% before trending downward to reach a nadir of 2.27% in May of 2003.

Using the formula we've already covered, let's see how the value of a hypothetical investment might be impacted by changing interest rates. While this data is specific to the 5 Year Treasury note, remember that all other income producing investments are affected by rate changes to one degree or another. We'll assume a net annual income of \$100,000 and employ the actual market interest rates achieved by the 5 year Treasury note.

January, 1970 @ 3.56%	\$2,809,000
September, 1981 @ 16.27%	\$ 615,000
May, 2003 @ 2.27%	\$4,405,000

Please note that over a 33 year period, the value of a \$100,000 stream of “risk-less” income ranged from \$615,000 to \$4,405,000 *due to changes in Yield (interest rate)*. If you sold between January, 1970 and September, 1981 you are pretty sure to have lost money. If the fellow who bought it from you subsequently sells the investment anytime between September, 1981 and May, 2003 he is almost assured to have made money. What have we determined here? For most investors it makes a huge difference where on the interest rate cycle we purchase a given stream of income. If we buy when interest rates are depressed and prices high (a) we will pay a lot of money, (b) our yield will be low, and (c) we will lose principal as interest rates revert to their mean (trend upwards). Oddly enough, it somehow seems easier to sell in periods when interest rates are low and prices are high. That appears true whether people are buying real estate or stocks. I really cannot imagine why.

If, however, we buy when interest rates are high and prices low, (a) our yield will also be high and, (b) as interest rates trend downwards (revert to their mean), the value of our investment will increase. Remember the teeter-totter? As rates go down, value goes up? For us, it is the best of all possible worlds. It is, however, somehow difficult to sell a stream of income when interest rates are high (and prices are low). People are fearful that things might get worse. Nobody wants to make the commitment. Opportunities are foregone.

Ok, let’s stop discussing the effects of Yield on investments and move on to Income. The Rule is – surprise! – *more income is better than less income*. A change in net income, whether up or down, is reflected as a change in the investment’s value. A 25% increase in net income – again, given that the cap rate remains unchanged – results in a 25% increase in value. A 50% *decrease* in net income results in a 50% *decrease* in the investment’s value. There is a neat bit of symmetry here, showing us that, again, *given a stable capitalization rate*, value is determined by the net income. The question is, if you hypothetically put 25% down on an income property, how much would you have to raise the net income to double your investment (disregarding, for the moment, costs of purchase and sale)? Cap rate remains the same. With 25% down, you would have to raise the net income by 25% for your investment to double, everything else remaining the same.

Recognizing that Time is vitally important for investment success, we can’t always wait until high interest rates prevail before we take the plunge. But we can offset, at least partially, possible injury to our principal by buying investments whose net incomes tend to increase over time. We’ll discuss this later.

So what do we want to take away from this lesson? Here are the bullet points:

- If you buy a stream of income when interest rates are historically high, you will get a nice cash flow and your principal will increase as interest rates revert to their long-term mean. You will let everybody think you are really, *really* smart.
- If you buy a stream of income when interest rates are historically low, your cash flow will be miserly and the value of your investment will erode (again, as interest rates revert to their long-term mean). You will blame someone or something else.
- If you buy a variable stream of net income, the value of your investment will increase or decrease proportionally with the income, everything else remaining constant.

- Since market interest rates move in long cycles, it will be necessary to invest even when rates are below norm. You can offset some of the deleterious effects of rising yields by purchasing streams of income that tend to rise over time.

*Klarise Yahya is a Commercial Loan Broker. If you are thinking of refinancing or purchasing five units or more anywhere in the U.S.A., Klarise Yahya can help. Find out how much you can borrow! For a complimentary mortgage analysis, please call her at (818) 500-9966.*