

**The Advanced Teachings of Mrs. Langerhorn: 07**  
**By Klarise Yahya, Commercial Loan Broker**

*Note to the Reader ... They are not the notes of our conversations that were earlier published under the title "Mitochondria Learns to Invest". These are the papers Mrs. Langerhorn left me after she passed away. They are her advanced teachings and they, naturally, overlap and reinforce her earlier principles. I hope you gain as much from her advanced teachings as I did.*

**Investment Properties: The Income Tree and Value**

We have established that of the three types of investments (bonds, stocks, income properties), only stocks and income properties have cash flows that trend up over time. Knowing that, you might wish to consider replacing whatever portion of your portfolio you intended to devote to bonds with income properties. Well selected income properties are, I think, nearly as safe as bonds (safer, in some respects) and have the distinct advantage of rising net incomes.

Because their net incomes trend upwards over time, it is not necessary to grovel for low-ball purchases. At the end of 20 or 30 years, the fact that you bought that dreadful commodity building for \$900,000 rather than paying full market \$1,200,000 for a trophy investment will mean very little. With a rising income stream you can buy fine, well located properties at full market prices and still do quite well.

Let's walk through the purchase analysis of a small income property. We'll assume a hypothetical apartment building with 10 two bedroom units and gross scheduled income of \$120,000 annually. Is this an investment? We won't know the answer to this question until we analyze the property from Gross Scheduled Income (GSI) all the way through to Cash Flow (CF).

Here is the income tree, but you must realize that the numbers (rounded) reflect well located Southern California properties at the time of this writing. Things will almost certainly be different if you buy elsewhere or at a later time. The important thing is that you learn the process. You can plug in the numbers appropriate for your situation anytime you wish.

01:	Gross scheduled income (GSI)	\$120,000
02:	Less: Vacancy and Credit Losses @ 5%	(6,000)
03:	Equals: Gross Effective Income	\$114,000
04:	Less: Fixed and Variable expenses @ 35%	(40,000)
05:	Equals: Net Operating Income (NOI)	\$ 74,000
06:	Less: Debt Service @ 1.20 DCR	(62,000)
07:	Equals: Cash Flow (CF)	\$ 12,000
08:	Plus or Minus tax consequences	\$
09:	Equals: After Tax Cash Flow (ATCF)	\$

**Gross Scheduled Income** (GSI) is the maximum income the property would currently generate if all units were occupied and everybody paid their rent on time with good funds. It includes garage income, if any. GSI does not usually include full laundry income, because banks will allow only a portion of the laundry income to apply towards

debt service. They understand that the washers and dryers might bring in \$200 or more per month, but after deducting for water, cost of heating the water, amortization, and repair of the machines the net to the owner is seldom more than \$8 - \$12 per unit per month.

**Vacancy and Credit Losses** vary widely. In desirable areas where there is little or no available land, the pro-forma deduction could be as little as five percent. In other areas, vacancy and credit losses could be much more, sometimes very much more.

**Gross Effective Income** (GSI) is the money you actually expect to have that first year to pay all the expenses of ownership and debt service, with whatever is left over constituting your cash flow.

**Fixed and Variable Expenses** also vary widely. If you buy cheap buildings in marginal areas where the occupants are not familiar with taking care of things (especially things not theirs), you can expect your expenses will be higher than otherwise.

Fixed expenses are non-mortgage costs that are independent of occupancy. Examples might be property taxes, fire insurance premiums, etc. Variable expenses are items that go up or down depending on occupancy. Examples might be utilities, maintenance, management, reserves, etc. The mental clue to remember some of these non-mortgage costs is T.U.M.M.I.R. (Real estate **T**axes, **U**tilities, **M**anagement, **M**aintenance, **I**nsurance, **R**eserves).

**Net Operating Income** (NOI) is the (annualized) money you could put in your purse if you'd paid cash for the property. The only thing that comes out of NOI is your debt service. The lender is probably not going to permit all the NOI to go towards monthly payments. For their own security, lenders want you to have a positive cash flow. They seem to feel better if you have, as my husband once said, "skin in the game". Commonly, the way lenders determine how much of the NOI is permitted for debt service is to divide it by some ratio. The most common ratio is currently 1.20, but can go up or down, depending on market conditions and the lender's confidence in the loan. That means that if your building generates \$74,000 a year in NOI, the lender will divide that number by the DCR, for example 1.20, to determine the maximum annual payments. In our example, maximum monthly payments would be \$62,000 divided by 12, or a touch over \$5,000. Parenthetically, that 1.20 DCR breaks down to the "1" referring to the loan payment and the ".20" representing the portion of the NOI that becomes your cash flow. To figure it out, and you can estimate it pretty well in your head, ask yourself how many times 20 goes into 120. Obviously, the answer is 6. That tells us that, at a 1.20 DCR, one-sixth of the NOI will be your cash flow. If the DCR was 1.25, then  $1/5^{\text{th}}$  of the NOI would be cash flow. At a 1.00 DCR, you would have no cash flow at all because all your NOI would be going towards debt service.

**Debt Service** is, as we've discussed, the annual loan payment. Obviously, the size of the loan this payment will cover depends on the interest rate. If interest rates are 5%, we can borrow \$960,000 (rounded). If rates are 7%, we can borrow \$775,000 (rounded).

At 9%, that payment will only cover a loan of about \$640,000. As we saw at the end of the first chapter, as rates go up any given NOI will service increasingly smaller loan amounts. That means that the value of the property you are buying typically goes down.

**Cash Flow** is the money you can put in your purse after paying all expenses and loan payments associated with the investment. Cash flow has a significant impact on the value

of the property, because the value of a large cash flow is obviously greater than for a small one.

When I analyze a building for purchase, I stop after Cash Flow. The next two levels are *Plus or Minus Tax Consequences* and *After Tax Cash Flow*. There are normally tax write-offs associated with income properties which result in an *After Tax Cash Flow* greater than the before-tax Cash Flow. But I don't compute these lines because I never make investment decisions based on tax considerations. Tax benefits come and go, it seems, every time Congress sits, and as we've discussed, it doesn't do to make permanent decisions based on what may be temporary benefits.

Do we still agree that the only value to income property is the income? If so, then it follows that the income – actually, the net income (NOI) – determines the property's value. We've noted that NOI has to pay for two bands of return. The first goes to the bank, and, as we've observed, the higher the interest rate the lower the mortgage. Let's assume, for the moment, an interest rate of 7% and a mortgage of \$775,000. Clearly, that means the building (the “stream of income”) is worth \$775,000 plus an appropriate down payment.

What might a reasonable down payment be? In the last couple of years it seems that the value the market places on Cash Flow in well located areas of Southern California reflects the one year Treasury rate. If the 12 month Treasury Bill offers 2% return, then we would capitalize the expected Cash Flow at 0.02 and come up with an appropriate down payment of \$600,000 and a total purchase price of \$1,375,000 (44% down).

At a 4% Treasury Bill capitalization rate, the cash flow would reasonably generate a down payment of \$300,000 and a total purchase price of \$1,075,000 (28% down).

At a 6% capitalization rate, the stream of cash flow income would be worth \$200,000, and the building \$975,000 (21% down). *This last bit is for demonstration purposes only. Don't pay any attention to it because it's difficult (not, of course, impossible) to buy an apartment building of 5 units or more with only 21% down.* At the time I'm writing this, banks normally require a minimum of 25% down. The quick way to determine 25% down is to determine the loan the NOI will support, then divide it by “3” and that's your down payment. For example, \$775,000 divided by 3 is \$258,333.33. That would be your minimum down payment. Multiple by “4” to get purchase price of \$1,033,000 (rounded). It's really easy, isn't it? Bullet points ...

- **The only value to income property is its net income.**
- **5/6<sup>th</sup> of the NOI is allowed for debt service @ 1.20 DCR.**
- **1/6<sup>th</sup> of the NOI normally is your cash flow @ 1.20 DCR.**
- **Capitalize your cash flow at the 1 year Treasury Bill rate to determine a reasonable down payment, but remember that the minimum down is almost always 25%.**
- **And purchase price, of course, equals bank loan plus down payment**

*Klarise Yahya is a Commercial Loan Broker. If you are thinking of refinancing or purchasing five units or more – it's probably happened, but not to me or anybody I know – 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.*