Risk-adjusted returns

Like Potter Stewart said, you know it when you see it

by Roy Schneiderman

I promise there will be no Greek symbols in this article. In fact, there is virtually no mathematics at all. Rather, this column is going to try to deconstruct just what real estate professionals mean when they talk about risk-adjusted returns and provide some commentary on the various uses.

In my experience, there are a few general uses of the phrase "risk-adjusted returns" by real estate professionals and they are not consistent with each other. One use comes in the context of asset allocations. In this context, risk-adjusted returns for private real estate are compared to the risk-adjusted returns for other asset classes. And, strangely enough, real estate tends to look good

Generally, real estate practitioners who say a deal has an attractive risk-adjusted return are saying the deal is mispriced. Or, not as risky as most people think it is.

Roy Schneiderman
Bard Consulting, LLC

"on a risk-adjusted basis" in most of the studies I have seen, although that may have as much to do with the fact that I am seeing the studies produced by and for real estate people as it has to do with relative risk-adjusted returns.

But there is one thing I can say about these studies: I know what is meant by "risk." Risk in such studies is defined as the volatility of returns over time. The analysis may simply plot standard deviation against returns and let the picture tell the story. Or the analysis may become more sophisticated using Sharpe ratios, dull mathematics and Greek symbols that make me glad I have a CFA colleague I can lean on for translation. (Don't get him started on systematic versus unsystematic risk adjustments.)

But what has always bothered me (and others before me) about equating risk with volatility is that this never seemed to be what real estate practitioners mean when they talk about "risk" in general and "risk-adjusted returns" in particular. Read any investment memorandum, and the section on "mitigating risk" has nothing directly to do with reducing the volatility of returns. The discussion will be entirely about minimizing the investment downside, while maximizing the upside. Real estate practitioners generally have no problem with highly volatile returns as long as the volatility is above the target return. In some respects, volatility above that level is a desired outcome!

There is no particularly new insight in the above paragraph. But it is useful to acknowledge that when a real estate professional says that they really like a specific deal's risk-adjusted return, the one thing that is pretty certain is the person is not saying that they have forecast the quarterly returns for their investments and believe that the expected return for that investment looks really attractive given the standard deviation of that return. It is even less likely that they know the Sharpe ratio for the investment.

From time to time, I have asked real estate practitioners who use the phrase "risk-adjusted return" with respect to a specific investment to tell me what the risk-adjusted return for that investment actually is. I tend to just get a quizzical stare. And in this I am not alone. Doing research for this article, I came across the following line in a 2008 *Forbes* magazine article. The interviewer was speaking to a Morgan Stanley investment banker: "But when asked what the risk-adjusted returns are for funds with high returns, [he] leans back in his chair and ponders his answer like a man who's rarely asked the question."

The author of the *Forbes* article seemed to be reacting with a degree of indignation that

the manager was stymied by the question. But I think the manager was simply flummoxed by the reporter who was looking for a technical or quantitative answer to the risk-adjusted return question in an area where the phrase is typically used only qualitatively.

So if risk-adjusted returns do not reflect "returns adjusted for volatility," what do real estate practitioners mean when they say they find the risk-adjusted return for a deal to be attractive? I am afraid the answer is a variant of Potter Stewart's famous line about pornography and obscenity: "I know it when I see it."

Generally, real estate practitioners who say that a deal has an attractive risk-adjusted return are simply saying that they think the deal is mispriced. Or, put another way, the deal is not as risky as most people think it is. To use a very simple example, say there is an office building being offered for sale with a major tenant whose lease expires in 18 months. Say the market believes the renewal probability for that tenant is 50 percent. But one investor knows that a key decision maker at the company has just bought a large house near the office building, and the investor's spouse works for an architectural firm that just got a contract to redesign the tenant's current premises. This investor believes the renewal probability is 90 percent. They can plug 60 percent renewal probability into their Argus model (still higher than the market's 50 percent expectation), probably win the bidding, and still crow that on a "risk-adjusted basis" they really like this deal.

This same type of thinking can be applied to discrete real estate investment strategies. Someone could look at, say, buying multifamily properties in the Southeast and build a case that this strategy has attractive risk-adjusted returns out of factors such as a) demographic trends, b) regional economic growth, c) public policy and d) anticipated capital flows. Notice how this rationale makes no reference to the volatility of returns, standard deviation or Sharpe ratio.

In both the individual deal example and the discrete investment strategy example above, risk takes the form of specific characteristics of the real estate or the market. That is how most real estate practitioners think about risk. And all that "risk-adjusted return" tends to mean is that in some qualitative manner, someone thinks something is mispriced. While a "risk-adjusted return" might be calculable in some way ("That office building would trade at a 5.5 percent cap rate if people knew the major tenant would renew, and I got it at a 6.25 percent cap"), usually people just leave it as a qualitative statement.

Now, just when you think the conclusion is going to be that quantitative "risk-adjusted returns" in real estate are as rare as unicorns, below is a very familiar table:

	Levered return	Unlevered return
Asset A	12.1%	8.2%
Asset B	8.5%	6.7%

Although rarely referenced as a "risk-adjusted return," leverage is widely and correctly considered an element of risk in real estate investments, and de-levering returns to evaluate investments on an unleveraged basis is a common and prudent exercise. Presumably because such an analysis already has a name, "unlevered returns" are rarely referred to as "risk-adjusted returns." But they certainly could be.

There is an interesting, but ultimately meaningless, anomaly that arises when one tries to apply the concept of "volatility of return" to the analysis of individual real estate investments. As pointed out by professor Joseph Pagliari in PREA's 2013 *An Overview of Fee Structures in Real Estate Funds and Their Implications for Investors,* investors can reduce return volatility by simply providing a manager an incentive fee if there previously was no incentive fee. Using some simple assumptions and comparing a "no promote" structure to "20 percent over a 12," professor Pagliari gets a 15.0 percent standard deviation with no promote and a 13.5 percent standard deviation for the same investment with a promote. He calls this reduction in volatility an illusion, and I would agree.

Similar results can be achieved by simply increasing the manager's promote rate if there is already a promote in place. But no investor would look at increasing a manager's promote as a risk mitigation measure, which simply drives home the point that when real estate practitioners are talking about "risk" and "risk-adjusted returns" at the individual investment level, they are not talking "volatility of return."

Finally, somewhere between "asset mispricing" and "real estate compared with other asset classes" is an area where substantial research on real estate using "volatility of return" as the measure of risk would be very appropriate. For example, there is more than enough NCREIF data available to do a study comparing the four core property types, as done by University of Colorado professor Liang Peng in his 2010 piece *Risk and Returns of Commercial Real Estate: A Property Level Analysis.*

But I will leave the interpretation of that data to professor Peng and others who understand the Greek letters more than "I." ❖

Roy Scheiderman is principal of **Bard Consulting, LLC.**