

Is Beta-Risk Becoming More Important to Real Estate?

Real estate investors face

two kinds of risk.

OVER THE LAST two decades real estate has become increasingly integrated with the broader capital markets. For example, since the early 1990s, REITs have become more important in the direct property market, providing a direct connection between equity markets and real estate. The rise and fall of commercial mortgage-backed securities (CMBS) as a source of capital was a central feature of the most recent cycle and serves to illustrate the importance of global capital flows and the broader markets to U.S. real estate markets. Further, many real estate professionals have long wished for real estate to become more widely accepted as an asset class; but as that has increasingly

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happened, real estate values have become more exposed to changes in allocations amongst investors. Sometimes these changes may be driven not by real estate fundamentals but by happenings in other markets; for example, the denominator effect that caused many investors to try to reduce exposure to real estate in 2007 was driven by losses in the equity markets.

Integration with the capital markets means that real estate cycles of the future may be different from those of the past. Past cycles were often characterized by rising prices leading to over-building and a subsequent correction. The most recent cycle, however, did not for the most part see overbuilding; rather the cycle began as a capital markets phenomenon. Prices spiked higher in 2005-2006 based on a “wall of capital” moving into real estate, and the fall in values began with the collapse of that wall.

But if real estate is becoming more integrated with the capital markets, might this change the nature of the risks to

which real estate investors are exposed? Individual property values now depend more on broader capital market trends than they used to, relative to local property conditions; real estate is no longer just a local business. Certainly, maximizing a property’s value requires knowledge of local conditions, but increasingly property values are driven by national trends and global capital markets.

Basic financial theory breaks the risk faced by an investor up into two sources: first, beta-risk, due to risk factors affecting the overall market and therefore all properties in a common manner (sometimes referred to as market risk, or systematic risk); and second, diversifiable risk, due to factors affecting only a particular property or location (sometimes referred to as idiosyncratic risk, or non-systematic risk) (Figure 1).

If properties become more exposed to common factors deriving from capital markets issues, beta-risk will become more important as a component of overall risk.

Figure 1: Beta-risk and diversifiable risk

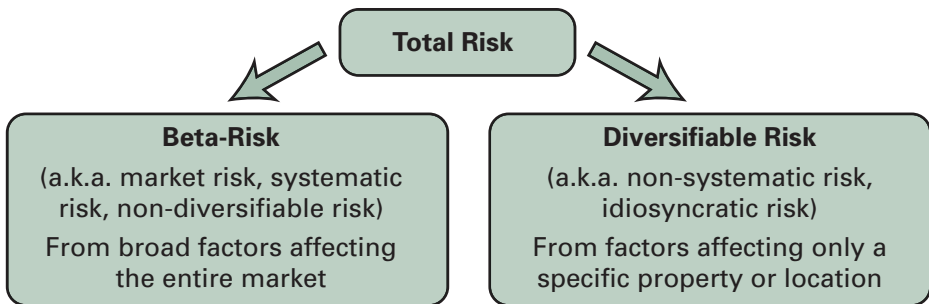
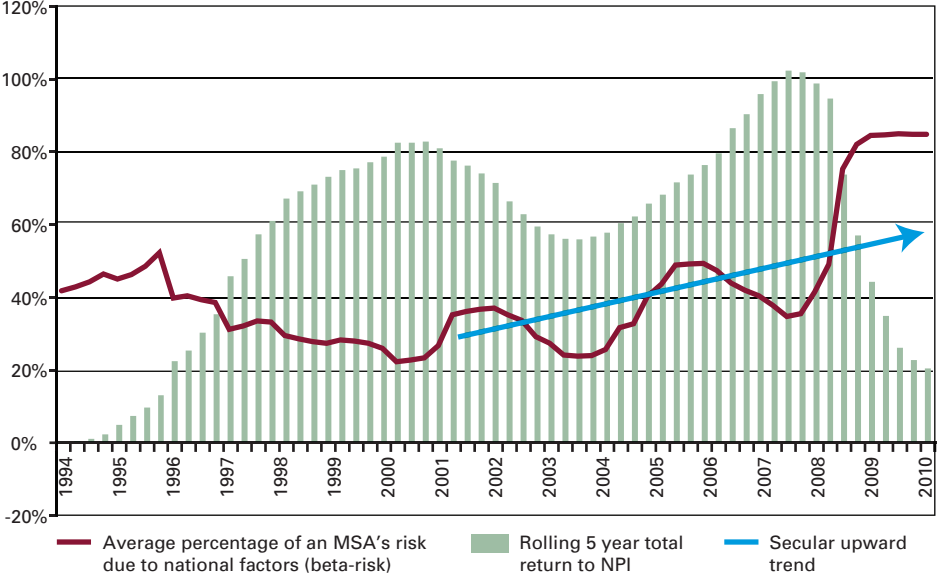


Figure 2: Proportion of an MSA's risk that is beta risk (based on 49 MSAs since 1990)



Sources: NCREIF, author's calculations

In other words, a specific property's returns may now be more dependent than they used to be on capital market factors that also affect returns to most other properties as well. If true, beta-risk is an increasingly important part of the overall risk of property investment. While idiosyncratic risk factors based on local market conditions or issues with a single property certainly still exist (and are important for investors not entirely diversified), they may have become relatively less important.

Unfortunately, a lack of data means this hypothesis cannot be tested by looking at individual properties. However, by looking at returns by metropolitan statistical area (MSA) one can get a feel for whether or not this has actually been hap-

pening. Using returns on the forty-nine MSAs that have consistently been represented in the NCREIF Property Index (NPI) since 1990 and therefore have been of consistent interest to institutional investors, I calculated the proportion of overall risk for each MSA that can be attributed to market-wide, national factors. This, in other words, is the proportion of total risk for each MSA that can be designated as beta-risk. This was done on a rolling five-year basis; for each five-year period the results were averaged across MSAs. Figure 2 presents the results along with the rolling total five-year returns to the NPI.

Two things about beta-risk in the average MSA's returns are apparent from the chart. First, there is a distinct cycli-

cal component. For instance, during the recent crash in values the proportion of beta-risk spiked upwards. This indicates that MSA-level returns were being driven by common, national factors during this period; in effect, MSAs became more highly correlated with one another during the downturn. This is also evident during the two other downturns over this period; on the left of the chart the proportion of risk that is beta-risk begins at a high level reflecting the early 1990s downturn (remember that the line is based on the trailing five-year period), and beta-risk rose again in the 2000-2001 downturn. The cyclical component of this indicates the MSAs become more “like” one another during downturns; MSA returns are more highly correlated in bad market conditions. Diversification across MSAs therefore tends to become less effective during downswings, presumably when investors would most value it. This phenomenon, however, is not unique to real estate; research on a number of markets has shown that assets typically become more highly correlated during bear markets.

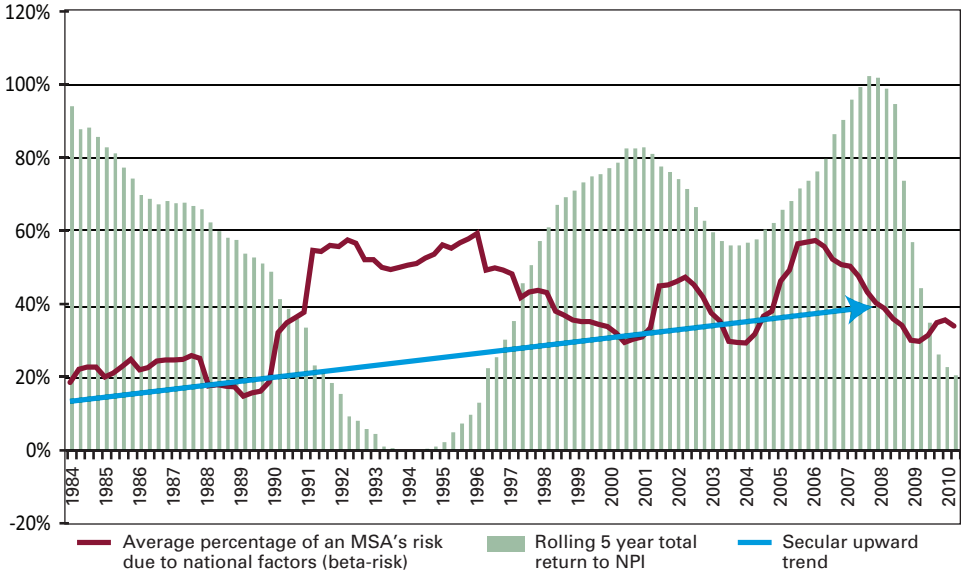
The other aspect of beta-risk apparent from Figure 2 (and the one most germane to this article) is that there is a longer-term, secular trend in the proportion of beta-risk. Beginning around 2000, a trend developed with each peak and trough higher than the last. The last fifteen years have seen the fastest growth in integration between real

estate and capital markets, and it would appear that during this time the importance of beta-risk in the real estate market has grown along with it.

The same result can be seen over a somewhat longer horizon from 1980, based on a smaller sample of the twenty-one MSAs that have been represented in the NPI consistently since 1980. Figure 3 shows the distinct cyclical pattern to the importance of beta-risk, as well as the longer-term increasing trend.

But, other than as a curiosity, is this of any importance to institutional investors? Certainly, yes. First, this trend would indicate that investors’ portfolios are increasingly affected by broad economic and capital market factors, and relatively less so by local conditions affecting only one property or area. In monitoring portfolio risk it is no longer sufficient to concentrate only on issues in the locales within which you are invested; broader capital market issues on a national level are increasingly important. Second, as returns across MSAs are increasingly linked to one another due to a common dependence on capital markets, diversification within the real estate market becomes less effective (at least geographic diversification by MSA according to the findings here). Even if a portfolio is diversified across MSAs, if all MSAs are reacting similarly to capital markets or other national issues, then being diversified does not entirely insulate

Figure 3: A longer-term view of beta-risk (based on 21 MSAs since 1980)



Sources: NCREIF, author's calculations

the portfolio from those issues. This is not to say that diversification across properties or MSAs is no longer valuable, only that it may be less valuable as a risk reducer than it once was.

Of course the increasing trend in the relative importance of beta-risk cannot go on forever; there is a limit. Local issues will always be relevant to the performance of an individual property, but it appears that local conditions in a specific MSA may be less important than they once were. An open question is whether the trend in beta-risk will continue upward going forward or whether the full effects of real estate's increasing integration with capital markets have already been felt.