Foreclosure Loss and the Foreclosure Process: An Examination of Commercial Mortgage Performance

Executive Summary

Prepared for the Real Estate Research Institute

Brian A. Ciochetti
Department of Finance, University of North Carolina
Chapel Hill, NC 27599-3490
(919)962-3127(ph)/(919)962-0054(fax)/b@_ciochetti@unc.edu(e-mail)

Timothy J. Riddiough
Department of Urban Studies and Planning - Center for Real Estate, MIT
Cambridge, NIA 02139-4307
(617)253-513 1 (ph)/(617)258-6991 (fax)/tjridd@mit.edu(e-mail)

This study examines the foreclosure related effects of a sample of 480 commercial mortgages over the period 1985 through 1995. These loans represent a subset of a portfolio of 2,592 loans originated by a large fife insurance company over the period 1974 through 1990. Using loan-specific contractual and cash flow data, mortgages are analyzed across three dimensions: foreclosure time period, net loss recovery and yield degradation. These factors are further examined by type of mortgage termination outcome; i.e., whether the loan was a straight foreclosure, whether it was modified prior to being foreclosed upon, or whether the property was purchased on the "courthouse steps" by an outside party who made the lender whole. The impact of foreclosure is also examined by region of loan origin, property type securing the loan, year of loan foreclosure, as well as state law governing the method by which foreclosure occurs.

We find the average delinquency/foreclosure time period for all loans in the sample to be slightly greater than one year, with significant differences noted by region in which the loan was originated and by mortgage termination outcome. Loans previously modified are found to average much shorter foreclosure periods, suggesting that lenders may attempt to minimize losses once a modification strategy is determined to be unsuccessful. Loans subject to judicial foreclosure procedures are found to take approximately 2.5 months longer to foreclose than those foreclosed through non-judicial means. For all loans in the sample, net loss recovery is found to average slightly greater than 73 percent of the outstanding loan balance at onset of foreclosure, and slightly greater than 69 percent when courthouse loans are excluded.

On average all loans subject to foreclosure are found to suffer 5.4 percent in yield degradation; which we define as the difference between promised and realized return. The impact of these observed losses on required yield premia appear to be generally consistent with observed spreads in the marketplace. We also find differences in foreclosure performance across mortgage outcome. Courthouse loans suffer no economic loss, a phenomenon which has not been previously reported in the literature. Straight foreclosed loans are found to experience slightly greater levels of yield degradation than the entire group at 5.9 percent, while loans which have been previously modified are shown to have significantly higher-losses at 7.6 percent. Loans foreclosed judicially are found to suffer 1.5 percent higher yield degradation than those foreclosed by power-of-sale, suggesting that the type of contract used to secure a

loan **at** origination may **be** significant in determining eventual performance of these assets. Yield degradation is also found to differ across both region and property type securing the loan. Finally we note that within the context of regression analysis, many of the variables posited to have an impact on the performance of foreclosed debt are indeed found to be significant in explaining not only foreclosure time period, but net loss recovery and yield degradation as well.

One avenue for further research is to take results from studies such as ours and combine them with results from default frequency studies to create models of mortgage pricing. This is relevant because sophisticated application of pooled security pricing technology is becoming more important in the secondary commercial mortgage market. Because the commercial mortgage securitization process generally shifts default risk to lower priority payment classes, a greater understanding and robust estimation of default risk is especially critical to the accurate rating and pricing of these new instruments. Another avenue for future research relates to the overall investment performance of the asset class. To date, commercial mortgage performance studies have generally focused on an analysis of the mortgage asset while classified as debt. Yet upon transfer of title the debt asset converts to equity and is typically held for some time prior to ultimate disposition. Therefore cash flows associated with the operation of the property as well as the ultimate sales proceeds must be included in order to accurately gauge the "cradle to grave" investment performance of these holdings. Such an analysis would shed light on the contribution to performance of debt versus equity management, an issue of interest to not only originators of commercial mortgage debt, but those involved in the securitization of these assets as well.