

# The Two Types of Prepayment Penalties

## Commercial Financing and Prepayment Penalties on Commercial Mortgage Loans. Defeasance and Yield Maintenance

What is the Defeasance Prepayment Penalty and how is it calculated?

Most commercial mortgage lenders making fixed rate commercial mortgage loans charge a prepayment penalty. The reason why is because the investors who buy commercial mortgage backed securities (CMBS) want a certain yield that is locked in. Why? Imagine you are a pension plan making actuarial projections to be sure you have enough money to pay your retirees. You need to know that you will earn a certain amount of interest. This is why you buy commercial mortgage backed securities.

The most common form of prepayment penalty is a *defeasance* formula. The legal definition of *defeasance* is, "A provision in an instrument that nullifies it if certain acts are performed."

When a borrower wants to pay off a fixed rate commercial mortgage loan, he must perform an act; i.e., he must give to the lender a bundle of U.S. Treasuries that provides the lender with the same stream of interest payments and the same balloon payment as the original mortgage.

Buying and assembling these U.S. Treasuries can be expensive. Some investors demand the defeasance provision and are willing to grant a better rate in order to achieve it.

### What is a yield-maintenance prepayment penalty and how is it calculated?

Yield Maintenance is a prepayment penalty that, in the event the borrower pays off a loan before maturity, allows the lender to attain the same yield as if the borrower had made all scheduled mortgage payments until maturity. Yield maintenance premiums are designed to make lenders indifferent to an early prepayment by a borrower. On the flip side, it can mean that if a borrower currently has a 9.5% rate on its mortgage with 5 or 6 years to go until maturity, at this time the penalty could well be huge.

For example, let's assume a 15-year interest-only \$1,000,000 mortgage at 7%. After the 5th year the borrower decides to refinance. The yield maintenance prepayment penalty would equal the difference between the current 7% rate and the yield that the bank would receive reinvesting the loan proceeds in a 10 year Treasury Note. (10 years being the remaining term of the loan).

To keep this example simple, let's say that at the time of prepayment, the 10 year Treasury note is 5%. The borrower would be required to pay the lender the present value of the 2% difference for each year over the loan's ten remaining years, or \$200,000. This penalty will make the lender "whole" and insure that the lender will not experience an economic loss as a result of being paid prior to the loan's maturity. This same formula

applies to amortizing loans, however it is much easier to illustrate with an interest-only loan.

Each lender will have a slight variation to this formula, however the above example conveys the spirit of the yield maintenance penalty.