# The Net Present Value Test in Foreclosure Fairness Act Mediation

#### Introduction

The Net Present Value Test, or NPV, will generate different results depending on the inputs. Inputs such as the valuation of the property, the likelihood of curing the loan, and the income of the borrower will all affect the outcome. The purpose of the NPV test is to determine which will generate more money for the beneficiary—a loan modification or a foreclosure sale. The answer to this question is only as good as the inputs used in the test. There are two calculators for NPV, the <u>FDIC Mod in a box</u> excel spreadsheet, and the Making Home Affordable (<u>MHA</u>) NPV calculator available on-line. The MHA calculator must be used in real time, and does not show how calculations change with inputs; so today we will use only the FDIC calculator to demonstrate the importance of verifying inputs.

The NPV test requires certain inputs all of which must be taken from the borrower and beneficiary disclosures. You **must** input the current Freddie rate, set the program interest rate floor to 2% or other appropriate level, and obtain the correct figures for:

- the original loan amount,
- original amortization term,
- the original interest rate,
- the current unpaid principal Balance (UPB),
- the current interest rate,
- the remaining term in months,
- the months past due, the property state,
- the borrower's monthly gross income,
- the monthly taxes and insurance or escrow payment, and
- the current value of the home

#### Borrower Income

Let's start with the income of the borrower. A borrower's monthly income is extremely important in determining whether or not an affordable payment can be calculated in line with a HAMP-style loan modification. But income also plays a pivotal role in the NPV analysis. If the borrower does not make enough income to pay the loan off fast enough and at a high enough interest rate, the profitability of a modification goes down, and the NPV will eventually fail as income is lowered. If the income is too high at some point it will make the calculator fault out, because it requires an increase in a payment, meaning that that the payment is already at an affordable level. This FDIC calculator was established with certain modification rules in mind, which are not applicable to all situations. Some modification programs will NOT grant a modification if the modification terms would increase the payment. Thus,



the calculator stops working. This does not mean that modification is less profitable than foreclosure. It does not mean that the test resulted in a fail. It only means that this calculator will not give you a result at this income level because the payment is already at an affordable level, even if the person has thousands of dollars in arrears.

### Property Value

Next, we will look at the property value. Property value is a highly significant factor. The more equity the borrower has in the property, the more likely the NPV will fail; where significant equity exists it is more profitable to foreclose than to modify because the lender is more likely to be made whole by foreclosing. If the opposite is true and the loan amount owed exceeds the value of the property (what is called being "underwater"), the NPV will likely pass: it is more profitable for a beneficiary to modify a loan and keep it in paying status, because at any sale the house is worth less than what is owed and the lender cannot likely be made whole.

These are the primary inputs that significantly affect NPV outcomes. However, there are other factors, including home price appreciation forecasts, cure rates, re-default rates, and even months to a foreclosure sale that all influence the NPV result, and either on their own, or when combined with small tweaks to value or income, can generate an NPV fail, or an NPV pass, without being easily discerned. This is how the NPV test is manipulated. The beneficiary or borrower can manipulate these inputs in an effort to produce a failing or passing result. It is important to know what these different variables do, whether either party is correct in changing default parameters, and how this affects the homeowner's options and the beneficiary's obligations.

#### Cure Rates

Cure rates – a cure rate, expressed as a percentage, is the likelihood that the borrower can "cure" the default by reinstating the mortgage. A borrower who is a month or two behind has a much higher likelihood of curing than a person four years behind. A beneficiary would likely consider the cure rate higher, which reduces the value of a modification and increases the value of foreclosure, while a borrower would likely consider the cure rate lower, thereby increasing the value of a modification. Borrowers with significant increases of income may have a higher likelihood of curing the default, but if the loan is more than a few months behind and the borrower has limited income, curing the default by reinstating the mortgage will practically be impossible.

## Re-default Rates

Re-default rates – a re-default rate is the likelihood that a person who permanently modifies the loan will miss payments and "re-default" on the loan. When the NPV spreadsheet was created at the height of the crisis, <u>national mortgage metric reports</u> indicated that the re-default rate was around 40%, nationally. Since 2012, the re-default rate has significantly dropped, hovering around 12% for most loan products after 3 months, with FHA loans approaching 40% re-default rates only after a 12 month period. Beneficiaries typically argue that the re-default rates are specific to the borrower in an effort to "fail"



the NPV, while borrower advocates rely on data from OCC reports for the re-default rate for particular loan types.

#### Home Appreciation Forecasts

Similarly to re-default rates, home appreciation forecasts have also changed in the last few years. During the mortgage lending crisis, home values decreased, which meant modifications were more valuable than foreclosure because there was less equity. Now, home prices are on the rise, which potentially creates situations where beneficiary inputs for a home appreciation forecast that "fail" the borrower out of the NPV. While nationally the home appreciation forecast is slowly on the rise, many homes that are in neighborhoods that have experienced the blight of foreclosure will not be seeing a significant appreciation in price. Therefore, it is very important to have a good understanding of how the housing market functions in the particular area where the borrower's home is located. In addition, any change made to the home price appreciate forecast on one side of the spreadsheet must be changed on the other side of the spreadsheet as well. It is a factor that plays a role in the valuation of both a foreclosure and a modification.

