## FAQs on the FDIC Spreadsheet

## Why Use the FDIC Spreadsheet?

- The FDIC spreadsheet allows for rapid and objective determinations as to whether or not any individual homeowner is eligible for a loan modification.
- The FDIC spreadsheet requires very few inputs from the homeowner; most of the information is publicly available or within the knowledge of both the servicer and the homeowner and could easily be brought to a mediation conference.
- The FDIC spreadsheet is verifiable: anyone can check to see whether or not a homeowner is eligible for modification.
- The FDIC spreadsheet is from the FDIC, a corporation created by Congress in 1933 to provide deposit insurance, and uses conservative assumptions.
- The FDIC spreadsheet incorporates an example of the ubiquitous net present value (NPV) calculation to determine whether a loan modification is in the interests of the mortgage holder.


## What Is NPV?

NPV stands for Net Present Value. Leading investor representatives have stated that servicers should perform loan modifications when a proposed loan modification "passes" an NPV test. ${ }^{1}$ The Obama administration's Making Home Affordable program requires that a modification be made when the net present value test is passed. Most servicers should be using net present value calculations to determine whether or not to offer a loan modification to homeowners in default. If a loan mod passes the NPV test, the servicer is insulated from suits by investors under federal law. ${ }^{2}$

Net present value calculations compare the value to investors of a loan modification as compared to a foreclosure. These are "net" calculations because the value of a foreclosure is subtracted from the value of the loan modification and "present value" because the value of the loan modification and the value of the foreclosure are both stated in present dollars. The present value calculation discounts the future cash stream of the loan modification or the future payoff from a foreclosure by a standard interest rate (sometimes called the "discount rate"), applied over the projected length of time of the foreclosure will take or the loan modification will last. The modification is also discounted for the probability that it will not perform, or, in other words, that the borrower will "redefault."

[^0]Embedded in any net present value calculation are assumptions about how much will be recovered after a foreclosure. These assumptions should include a reasonable estimate of foreclosure costs, the actual current value of the home, and some forecast as to what the value of the home will be when sold following foreclosure. The time to foreclose and the time to sell a home post-foreclosure are also critical elements.

Most net present value calculations also make assumptions about whether or not a loan modification will perform. The redefault rate assumptions critically affect the approval or denial a loan modification.

Advocates must remember that the NPV calculation only measures the expected benefit to investors of a loan modification versus a foreclosure. NPV calculations do not take account of claims a consumer may have, or the cost and time of litigation, or any of the larger societal costs of a preventable foreclosure. There will be many cases when a borrower may fail the NPV but should still be offered a loan modification.

## How Does the FDIC Spreadsheet Work?

- Affordability: The FDIC uses a range of affordability ratios, from 31\% to 38\%. The "affordability ratio" is the ratio between the homeowner's gross monthly income and the monthly mortgage payment (PITI). ${ }^{3}$ A homeowner will not be approved for a loan modification with an affordability ratio of less than $31 \%$ or more than $38 \%$. If a homeowner is already paying less than $31 \%$ of her income for PITI, a loan modification will not be approved. What ratio the homeowner ends up with depends on how much the payment is reduced. In general, only if the homeowner is currently paying $38 \%$ or less of her income will her ratio be reduced below $38 \%$. In no circumstances will the final ratio be less than $31 \%$. The target affordability ratio, once determined, drives the rest of the calculations.
- Reduction of payment: Payments under the FDIC program must be reduced by at least $10 \%$. If a reduction of $10 \%$ of the payment puts the homeowner below a $31 \%$ affordability ratio, the modification will be denied. Only if a homeowner is currently paying more than $38 \%$ of her income in PITI will her payments be reduced by more than 10\%.
- Modified payment: The modified payment is calculated after the affordability standard is set. The program follows a standard waterfall: interest is reduced first, to a floor of $3 \%$, holding the length of the loan current; next the amortization and payments are extended out to 40 years; ${ }^{4}$ and finally, if nothing else works to get the payment low

[^1]enough, principal forbearance necessary to reduce the modified payment to its target is calculated. No interest is charged on the forborne principal. Under the FDIC program, the payments stay low for five years and then step up a percentage point every year, until the Freddie Mac rate effective at the time the loan modification was made is reached.

- Foreclosure scenario: An REO value is determined by discounting the current value by the price appreciation forecast, the stigma of being sold as REO property rather than owner-occupied, and the estimated months to foreclosure. Assumed foreclosure costs (estimated by state) and interest losses (based on the note rate) are subtracted from the discounted current value to arrive at the REO value. The difference between this REO value and the current unpaid principal balance is then discounted to present value, using the current Freddie Mac rate for the expected rate of return. The FDIC further assumes that some percentage of foreclosures will cure on their own. If a servicer assumes that most loans in foreclosure will cure on their own, either through refinancing, or sale, or the homeowner coming up with the funds on their own to reinstate the loan, then the cost of doing a foreclosure becomes very small, and few loans will be modified. The more costly a foreclosure (the larger the negative number), the more likely a loan modification will be made.
- Value of modification: The value of the modification is based on two numbers: a present value of the payment schedule and the loss suffered after a foreclosure if the loan modification fails. The present value calculation does not currently include the forborne principal, which appears to be a mistake. ${ }^{5}$ The loss suffered after a foreclosure is calculated in a similar manner as in the foreclosure scenario, allowing for the additional delay in prosecuting the foreclosure and the payments received before the loan modification fails. Both the present value of the payments and the loss after a foreclosure, are then multiplied by the chance they will happen: the present value of the payments is multiplied by the chance that the loan modification will be successful; the loss suffered if there is a foreclosure after the loan modification is multiplied by the chance that the loan modification will fail. Those two probabilistic calculations are added together to give the value of the modification.
- Does the modification pass?: The value of the modification (cell E28) is compared to the present value of the anticipated foreclosure loss (cell B41). Both the results of the foreclosure scenario and the value of the loan modification will often be stated as negative numbers, particularly when the potential loss from a foreclosure is high (remember that the value of a modification includes the risk of a delayed foreclosure).

[^2]The value of the modification may be a positive number, when, for example, the loss from a foreclosure is relatively small compared to the potential payment stream from a loan modification. As long as the value of the loan modification is greater-or represents a smaller loss-than the present value of the anticipated foreclosure, the net present value test is passed, and a modification, on the payment terms worked out by the program, is deemed to be in the best interests of the investor.

## What Are the Limitations to FDIC Spreadsheet?

- Conservative assumptions: Most of the assumptions embedded in the spreadsheet are conservative and cut against the homeowner. Key areas for advocacy when using the spreadsheet to get a loan modification include the following:
- Home price appreciation forecast (cells B32, E22)
- REO stigma discount (cell B33)
- Months to foreclosure (cell B34)
- Months to REO sale (cell B35)
- Foreclosure costs (cell B36)
- Months to redefault (cell E20)
- Redefault rate (cell E21)
- Auto-completion: The FDIC spreadsheet auto-completes several fields, including the homeowner's current monthly payment and taxes and insurance escrow amounts, as well as the Freddie Mac weekly mortgage rate. You can and should override these fields with the actual current information. The auto-completed information is often wrong and can lead to homeowners being denied loan modifications improperly. In addition to filling out the gray shaded cells, you must update with current information the following cells:
- Current Freddie rate (cell B5) ${ }^{6}$
- Current monthly mortgage payment (cell B19)
- Current interest payment (cell B20) ${ }^{7}$
- Monthly taxes and insurance (cell B27)
- Principal forgiveness: The FDIC spreadsheet does not permit principal forgiveness, just forbearance. In at least some circumstances, advocates should be able to make a strong case for principal forgiveness. Principal forgiveness can do more to make a home permanently affordable than interest rate reductions and also permits homeowners to sell or refinance their homes if circumstances so warrant.

[^3]
## What Documents Do You Need to Use the FDIC Spreadsheet?

- The note
- The most recent servicing statement available
- Current valuation
- Current tax and insurance information

All the information from these documents can be obtained from other sources, if these documents are not available to the homeowner. For example, the relevant original note terms, including principal, original payment, and rate, may be apparent by looking at other disclosures the homeowner received, an early servicing statement, or the title company file. The current principal balance, rate, and payment can be requested from the servicer via a Qualified Written Request under RESPA or determined from a review of the note and the homeowner's payment records. The local taxing authority's current valuation can be used as an estimate. Tax information is publicly available, and the homeowner, with some prodding, should be able to come up with a hazard insurance bill or policy.

## Shouldn't We Use the Making Home Affordable Program Instead?

To date, there is no publicly available spreadsheet for the Making Home Affordable Program. The administration has prepared an illustrative spreadsheet, but neither that spreadsheet nor the numbers used for the redefault rate, home appreciation forecast, or REO stigma are publicly available. Moreover, servicers are free to adjust many of the numbers in the spreadsheet, and the administration has opined that the spreadsheets used by servicers are proprietary (which may make discovery of those calculations somewhat more difficult in litigation). The public guidance provided by the administration is available at http://www.hmpadmin.com.

## What Are the Differences Between the Making Home Affordable Program NPV Calculation and the FDIC Spreadsheet?

Treasury has not publicly released its model spreadsheet and is allowing servicers to make their own, proprietary spreadsheets, thus a complete comparison is impossible. The servicer guidelines require servicers to combine the present value of the unmodified payment stream with the value realized after a foreclosure before netting the result with the value to be obtained from a modification. An additional theoretical difference is that servicers are expected to include the risk of prepayment in determining the value of a loan modification (but not, apparently, in setting the value of the payment stream pre-modification). How different the results will be in practice from the FDIC spreadsheet is difficult to determine without seeing the formulae.

## Known NPV Parameter Comparison

|  | Making Home Affordable | FDIC Program |
| :--- | :--- | :--- |
| Redefault Rate | Will be based on actual <br> performance of modified | $40 \%$ |


|  | loans; however, servicers are free to use their own numbers, even if higher than the average Current redefault model looks at four inputs: <br> - Mark-to-market LTV <br> - Credit score <br> - Default status <br> - DTI |  |
| :---: | :---: | :---: |
| Past due escrow and interest | Capitalized | Capitalized |
| Interest rate floor | 2\% | 3\% |
| Interest rate cap | Freddie Mac Weekly Primary Market Mortgage Rate | Freddie Mac Weekly Primary Market Mortgage Rate |
| Waterfall | 1) Interest rate reduction <br> 2) Extend term to 480 months <br> 3) Principal forbearance | 1) Interest rate reduction <br> 2) Extend term to 480 months <br> 3) Principal forbearance |
| Principal forgiveness permitted | Yes | No |
| Required reduction in payment | 6\% | 10\% |
| Discount rate (rate used for present value calculations) | Freddie Mac Weekly Primary Market Mortgage Rate plus as much as 250 basis points | Freddie Mac Weekly Primary Market Mortgage Rate |
| Home price appreciation forecast | Special, nonpublic, dataset prepared by FHFA | Kay Shiller proprietary dataset |
| REO Stigma | Fannie Mae and Freddie Mac REO sales | Servicer's history, if adjusted, or National Association of Realtors Existing Home Sales Data |
| Private mortgage insurance | Not included in affordability trigger | Included in affordability trigger |


[^0]:    ${ }^{1}$ See American Securitization Forum, Statement of Principles, Recommendations and Guidelines for the Modification of Securitized Subprime Residential Mortgage Loans (June 2007), available at http://www.americansecuritization.com/uploadedFiles/ASF\%20Subprime\%20Loan\%20Modification\%20Principles 060107.pdf.
    ${ }^{5}$ Pub. L. No. 111-22, §201(b) (to be codified at 15 U.S.C. § 1639a).
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[^1]:    ${ }^{3}$ PITI means a payment that covers principal, interest, taxes, and insurance, the latter two portions of the payment being escrowed to pay property taxes, condominium fees, hazard insurance, and the like.
    ${ }^{4}$ If the loan has an existing amortization of longer than 40 years, that existing amortization will be maintained. Earlier versions of the spreadsheet did not extend the payments, only the amortization term, due to concerns that pooling and securitization agreements-and REMIC and FASB rules-prohibited the extension of the repayment term of the loan.

[^2]:    ${ }^{5}$ The calculation also understates the present value of loans that have amortization schedules of more than 40 years. This is so because the net present value calculation only looks at payments through 40 years. As an aside, the program's failure to calculate balloon payments in the payment schedule is irrelevant for the present value calculation, so long as the amortization schedule is less than 40 years and more than 8 years. This is because the discount rate used in the present value calculation is the Freddie Mac weekly rate, the same rate that is the rate cap. At current Freddie Mac rates, ranging from roughly $4.8 \%$ to $5.3 \%$, even if the rate for the first five years of the modification is set at the floor of $3 \%$, within 8 years, the Freddie Mac weekly rate will be reached. Thus, payments over the life of the loan are set at the same rate as the discount rate, and the present value calculation is therefore indifferent as to how far out in the future payments are made .

[^3]:    ${ }^{6}$ The current Freddie Mac Weekly Primary Mortgage Market Survey rate is available at http://www.freddiemac.com/dlink/html/PMMS/display/PMMSOutputYr.jsp. The relevant rate is the 30 year mortgage rate.
    ${ }^{7}$ An easy way to get the correct amount for the current interest rate is to change the reference in the formula in cell B20 from B11, the original interest rate, to B14, the current interest rate, and from B9, the original loan amount, to B 13 , the current unpaid principal balance.

