

THE BROOKINGS INSTITUTION

ADDRESSING THE WEAK HOUSING MARKET: IS PRINCIPAL REDUCTION THE
ANSWER?

A CONVERSATION WITH THE FEDERAL HOUSING
FINANCE AGENCY'S ED DeMARCO

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Panel Discussion:

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P R O C E E D I N G S

MS. DYNAN: (in progress) things that are interesting. He was a doctoral student in economics at the University of Maryland and his advisor was my colleague, Hank Aaron, a longtime Brookings senior fellow. When we asked Hank for his recollection of DeMarco he said Ed was the kind of guy any father would want his daughter to marry.

Hank went on to say that when you saw Ed DeMarco was the name of the person who was in the crosshairs of various groups, he went and checked whether it was the same person he had known. And he thought it would have been hard to have anticipated that a person as quiet, nice, and mild as Ed DeMarco, would ever become the center of the sort of controversy he is in. I'm sure there are many who share Hank's surprise, including perhaps the director himself.

Getting onto the program, Director DeMarco will speak and then my co-director in Economic Studies, Ted Gayer, will moderate a question-and-answer session. Then we'll have a panel discussion of the principal reduction issue featuring several distinguished experts in the housing finance area.

And with that, I'm going to let Director DeMarco take it away.

MR. DEMARCO: Good morning, everyone. It really is an honor to be here today. And I'd like to thank Karen for that introduction and welcome. It is a particular privilege for me to have Hank Aaron here this morning as part of the audience. I'm very grateful to him for all the support and guidance he gave me. And reflecting on what Karen said, I can't wait to be done here and get home and call my wife and tell her how lucky she is.

All right. Over the past six years, many efforts have been launched by the federal government to stem the losses arising from the housing crisis and to keep people in their homes. Some programs have worked better than others, but almost all of

them require trial and error and were more difficult to actually implement than many people had expected.

As conservator of Fannie Mae and Freddie Mac, the Federal Housing Finance Agency has been deeply involved in many of these efforts, and we have seen our share of successes and missteps. Today we find ourselves in the midst of a national debate regarding mortgage principal forgiveness. Would homeowners, the housing market, and the taxpayer be best served by providing outright forgiveness of mortgage debt for certain homeowners who currently owe more on their mortgage than their house is worth today?

I'm grateful to The Brookings Institution for this opportunity to offer some perspectives on this debate, and to provide some preliminary findings from FHFA's most recent analysis of this issue. I will not be announcing any conclusions today. Our work is not yet complete. But in view of the state of the public policy debate on this subject, I am pleased to have this venue to enhance the public understanding of this difficult question, and to explain how FHFA has approached the matter.

The Brookings Institution's reputation as a home for thoughtful policy analysis and debate of challenging public policy questions makes this a most appropriate setting for this endeavor. Typically, when I begin a speech about Fannie Mae and Freddie Mac, or "the enterprises" as I will refer to them, I set the context by reviewing FHFA's legal responsibilities as conservator. I do so because I believe it is essential for people to understand that Congress considered the objectives it wanted FHFA to pursue as conservator. These objectives may not be easy to meet, but they are clear. FHFA's job is to preserve and conserve the assets of the enterprises, and in their current state, that translates directly into minimizing taxpayer losses.

We are also charged with ensuring stability and liquidity in housing finance and maximizing assistance to homeowners. Today, however, I want to set the context for my remarks in a different way. I'd like to begin with a few words on the human

element of this housing crisis.

Throughout this crisis, each of us know of or have heard about many individual stories of homes lost through foreclosure. One cannot help but have sympathy for those who have suffered such misfortune. And surely, no one can look at the dislocations in the housing market and not feel frustration at how so many people and institutions failed us, whether through incompetence, indifference, or outright greed or fraud.

Yet we are also blessed in this country with people and institutions who care, who are strongly motivated to provide assistance and find solutions. The staff at FHFA has worked tirelessly since the enterprises were placed into conservatorship to seek meaningful, effective responses to the housing crisis.

With the staffs at Fannie Mae and Freddie Mac, at the Treasury Department and HUD, and numerous financial service companies, FHFA has sought to develop and improve on loan modification and loan refinance programs that bring meaningful options to struggling homeowners who want to stay in their homes. In a moment I will describe these efforts and their progress to date. We know we have much more to do in this area, and the strategic plan for conservatorship that we submitted to Congress in February identifies that work as one of our three strategic goals.

There's another human element in this story that does not seem to receive much attention. Clearly, many households got overextended financially. Some accumulated debts they couldn't afford when hours and wages were cut or jobs were lost. Others withdrew equity from their homes as house prices soared. Others bought houses at the peak of the market, often with little money down, perhaps in the belief house prices would continue to climb. Yet there are other Americans who did not do these things. There are families that did not move up to that larger house because they weren't comfortable taking the risk. Perhaps they had to save for college or retirement and did not want to invest that much in housing. And there are people working multiple jobs or

cutting back on the family budget in many ways to continue making their mortgage payments through these tough times. Many of these families are themselves underwater on their mortgage even though they may have made a sizeable down payment.

Whichever of these categories any particular homeowner falls into, the decline in house prices over the last few years has reduced the housing wealth of all homeowners. The Federal Reserve has estimated that from the end of 2005 to the end of last year, the decline in housing wealth amounts to some \$7 trillion. Six years into this housing downturn, the losses persist. The debate continues about how we as a society are going to allocate the losses that remain.

Asking hard questions in this debate does not make one unfeeling about the personal plight this situation has created for so many. Indeed, the majority of those most hurt by this housing crisis did nothing wrong. They were playing by the rules, but they have been the victims of timing or circumstance or poor judgment.

In short, the human element in this unfortunate episode in our country's economic history stands out and commands our attention. Virtually every homeowner in the country has suffered a loss. But that doesn't make the answers any easier and imposes a deep responsibility on policymakers to weigh all these factors in seeking solutions, including the long-term impact on mortgage rates and credit availability of the actions we may take today.

But this is backdrop. My goal today is to answer two questions: what do the enterprises do to assist borrowers through these troubled times in housing, and how has FHFA assessed principal forgiveness as an option for assisting troubled borrowers?

So let's begin with the borrower assistance efforts. Some critics have concluded that FHFA's refusal to allow principal forgiveness raises questions as to the agency's and the enterprises' commitment to helping borrowers stay in their home. To put the principal forgiveness discussion in context, I think it is useful to start by reviewing the enterprises' current borrower assistance programs. Fannie Mae and Freddie Mac

have an array of foreclosure prevention programs for borrowers that are delinquent or in imminent default, most of which allow the troubled borrower to stay in their home. For those who are current on their mortgage, refinance opportunities allow borrowers to lower their monthly payment, or shorten the term of their mortgage. The primary focus of the enterprises' foreclosure prevention programs is on providing borrowers the opportunity to obtain an affordable mortgage payment for borrowers who have the ability and the willingness to make a monthly mortgage payment.

Let's look more closely at foreclosure prevention efforts. I want to start with home retention options of which loan modifications is the principal approach. All right. The enterprises' current loan modification programs are designed to help homeowners who are in default and those who are at imminent risk of default. Now, let me say we're going to be posting on our website a lengthier version of the remarks that I will be making this morning, and they go into greater detail about this and some of the other figures and tables that I will be using in this presentation. So I will try to summarize some of this as we go along.

What this chart shows is that for a troubled borrower seeking a loan modification, the mortgage servicer will first work through with the borrower whether they are eligible for and can benefit from a HAMP, or Home Affordable Modification Program, modification. All right. And this chart shows the order of the steps that are taken to reduce the borrower's monthly mortgage payment down to 31 percent of their current gross monthly income. All right. Some borrowers aren't eligible for or can't benefit from a HAMP mod, and Fannie and Freddie have their own proprietary modifications, or standard mod, that they also offer. And so the second column works through that modification approach as well.

But, again, the idea here is to get the borrower into an affordable monthly mortgage payment. You will note in these two columns that they both talk about forbearing on principal. With a principal forbearance modification, a portion of the loan

principal amount is set aside, usually the underwater portion. The homeowner does not pay interest on that portion of the loan. This means that the lender allows the homeowner to defer payment on a portion of their principal until they sell their home or later refinance the home. And during this period of deferral, they are paying no interest. This approach allows the enterprises to reduce the borrower's monthly payment while avoiding an actual principal write-off. Interestingly, this is the same approach used in many government guaranteed loan programs, including the FHA program.

The enterprises also offer temporary assistance, because a loan modification is not always the best solution. For someone who loses their job, has a medical emergency, or faces some other short-term issue, a loan mod is not necessarily best. In such cases, Fannie and Freddie offer payment forbearance plans that allow a borrower to make no or only partial payments for a period of time.

The enterprises also offer repayment plans for borrowers who fall temporarily behind and just need an opportunity to get caught up and back on track. Since the start of the conservatorships in late 2008, Fannie and Freddie have entered into more than 660,000 such plans.

As this slide shows, there are also non-retention options. Most troubled borrowers should qualify for a home retention option if they have the ability and the desire to stay in their home. But if the borrower does not want to remain in their home or has experienced a permanent and significant loss of income that makes continued homeownership infeasible, the servicer is obligated to consider the borrower for a short sale, a deed in lieu, or a deed for lease.

Of these, short sales are the most common. In a short sale an enterprise agrees to allow the borrower to sell the home in an arm's length transaction and accept the proceeds as payment of the debt. Importantly, the unpaid balance becomes forgiven principal to the borrower. Fannie and Freddie have completed more than 300,000 such home forfeiture actions since conservatorship.

So in short, Fannie and Freddie's instructions to mortgage servicers are clear. Only after all these home retention and home forfeiture options have been exhausted should a servicer pursue foreclosure.

So let's turn to the results. While mortgages owned by other financial institutions are held in private label, mortgage-backed securities, have a much higher delinquency rate than those owned or guaranteed by the enterprises, the enterprises have been leading national foreclosure prevention efforts. Fannie Mae and Freddie Mac own or guarantee 60 percent of the mortgages outstanding, but they account for only 29 percent of seriously delinquent loans. Even though these other market participants then are holding 71 percent of seriously delinquent loans, Fannie and Freddie account for more than half of all HAMP permanent modifications. Between HAMP and their own proprietary loan mods, the enterprises have completed 1.1 million loan modifications since entering conservatorship.

Not only are the enterprises leading efforts in completing loan modifications, the performance of these modifications has been better than that for most other market participants. And I would add, probably better than most analysts had expected. This chart here shows at various stages after modification what the re-default rate on the loan modifications have been.

While there are many issues involved in the decision on whether the enterprises should employ principal reduction that I will discuss later, data on loan modifications from the enterprises shows that performance on loan mods is not strongly related to current LTV. All right. So take a look at this slide. While not a definitive analysis, if current LTV -- loan-to-value -- had a strong effect, we would expect that the more underwater the borrower is, the higher the re-default rate would be. However, Fannie Mae data that we present in this slide shows that performance on modified loans does not vary much at all across the loan-to-value ratio. So as you can see in this chart, in looking at the current loan-to-value ratio at the time of modification, even for those

deeply, deeply underwater, the re-performance rates on these loan mods have been about the same. All right.

So what this tells us is that what matters most here is that the performance on loan modification seems to be more a function of the payment change to the borrower rather than the loan-to-value. And this slide is showing that the greater the payment decrease that the borrower gets, the better the re-performance rate on the modification.

Collectively, these efforts have made a meaningful impact on reducing foreclosures. Since conservatorship, the enterprises have completed more loan modifications than foreclosures. And adding all other foreclosure prevention actions to the loan mods totals to some 2.1 million foreclosure prevention actions that the enterprises have taken, which is more than twice the number of foreclosures that they've completed during this same period.

The enterprises also offer borrower assistance for those who are current on their loans. All right. Working with the Treasury Department and the enterprises, FHFA developed the Home Affordable Refinance Program. Exclusive to enterprise-owned mortgages, HARP allows underwater and near underwater borrowers a path to refinance their mortgage without obtaining new mortgage insurance or some other credit enhancement as would normally be required.

Since April of '09, the enterprises have acquired 10 million refinanced mortgages, of which more than a million were HARP loans. Still, these HARP results fell short of what we believed we could achieve. Consequently, FHFA engaged with Fannie and Freddie, the Treasury Department, and a wide array of market participants to identify and resolve impediments to the program. The changes we made to the program took effect last December and already many of the largest lenders in the country are seeing tremendous homeowner interest in this revised HARP program. And we expect the volume of HARP loans to be increasing in the near future.

Let me turn now to principal forgiveness. In the original HAMP program, principal forgiveness was always permitted, but was rarely used. In 2010, to encourage greater use of principal forgiveness for loans with loan-to-value ratios above 115 percent, Treasury supplemented the original HAMP program with the HAMP Principal Reduction Alternative, or HAMP PRA. HAMP PRA is an investor option, not a borrower option, and the HAMP program does not require the lender to offer principal reduction even if the servicer determines it to be superior to the standard HAMP mod on a net present value basis, or NPV basis.

The take-up rate on HAMP PRA has been low. And earlier this year, Treasury announced its intention to triple its current incentive payments to investors who use this approach. While both the original HAMP and HAMP PRA focus on a borrower's ability to pay by reducing the monthly mortgage payment to 31 percent of the borrower's monthly income, PRA also addresses a borrower's willingness to pay by reducing the loan balance.

The rationale for the reduction in loan balance is that a borrower whose mortgage exceeds the home's value may not be willing to continue to make monthly mortgage payments. In other words, even though the borrower may achieve an affordable monthly payment, the ability to pay through a basic HAMP mod, the borrower may not continue to have the willingness to pay because they are deeply underwater.

By forgiving principal as part of the HAMP modification, the lower loan-to-value ratio should improve a borrower's willingness to pay. In fact, historical data has shown that the probability of default correlates with the borrower's current loan-to-value ratio. The higher that ratio, the greater the likelihood of default.

So by forgiving principal and reducing a borrower's current LTV ratio, the probability of default is reduced and, hence, losses are reduced. This type of relationship between default and current LTV, supported by previous analytic work, in fact is embedded in the HAMP net present value model and thus has been explicitly factored

into FHFA's repeated analyses of principal forgiveness.

Now, some proponents of principal forgiveness would limit eligibility in various ways, such as precluding it for cash-out refinance loans or loans that have mortgage insurance. There is no consensus on what such limits should be, nor does the HAMP PRA option impose any beyond the basic HAMP eligibility requirements. However Fannie and Freddie might apply principal forgiveness, it would have to be clear and transparent, having a basis in the conservatorship mandate and a general acceptance of reasonableness if not fairness, and it would have to be clearly and publicly described so that more than a thousand mortgage servicers could apply these rules the same way.

So, let me look first at our previous analysis of principal forgiveness. At the most basic level, the comparison between the lost mitigation strategies of principal forbearance and principal forgiveness is related to who gets the upside. For both principal forbearance and principal forgiveness, if a borrower defaults, enterprises lose the same amount. However, if a borrower performs successfully on the modification, in a principal forbearance mod the enterprise retains an upside to the forborne amount, but in a principal forgiveness modification the borrower retains the upside. And so that's what this figure tells us here. If the borrower redefaults after the mod, the loss is there either way. If the borrower defaults sometime later but there's been some payment down of principal and house price appreciation, then the investor loss through forbearance could be less than it is through forgiveness. But if the borrower is successful as a result of this modification, remains current, stays in the home for a while, house prices recover, there's an opportunity for the taxpayer to be repaid the entire principal amount if forbearance is used. But in the case of principal forgiveness, the amount that it was forgiven upfront remains a loss. Now, this basic relationship between principal forbearance and principal forgiveness largely explains the results in the analyses that FHFA provided to Representative Cummings in January.

Before more fully describing the earlier analysis, one key point is worth

reiterating. Any analysis of employing principal forgiveness involves more than just looking at NPV results. At a minimum, FHFA would have to consider the operational costs of implementing the program and the borrower incentive effects from the program, given that three-quarters of an enterprise deeply underwater borrowers today are still current on their mortgage. In the analysis we published in January, we did not go beyond the NPV analysis, as the results did not indicate that principal forgiveness would produce superior results to principal forbearance.

So, now let's turn to the latest change to the HAMP program, the triple HAMP payment incentives. FHFA is still in the process of analyzing whether the enterprises will offer principal forgiveness as part of HAMP with the triple incentives provided by Treasury. This morning I will provide some preliminary findings from refreshing our earlier analysis, incorporating the triple incentives, and altering our model work based on the critiques that our previous work has received. As I noted earlier, in considering principal forgiveness as a loss mitigation tool, besides the NPV impact we also will need to consider operational costs and borrower incentive effects.

Now, questions were raised about the methodology FHFA employed in its earlier analyses. To address these concerns, we've made the following adjustments.

We've lowered delinquent borrowers' FICO scores or credit scores by a hundred points to better reflect the current credit standing of the borrower rather than where they were at the time the loan was originated.

We've raised delinquent borrowers' housing payment debt-to-income ratios. Those that were below 45 percent have been set at 45 percent, and those above 45 percent have not been adjusted.

This time around, we've applied Zip Code-level rather than state-level house price indexes to estimate what the current loan-to-value ratio of the mortgage is. Rather than doing the analysis as simply forbearance-only versus forgiveness-only, this time around we used the original -- we used the full HAMP PRA and regular HAMP

waterfalls to work through what the actual payment to the borrower would be. And, again, we've incorporated the triple incentive payments that would come from Fannie and Freddie doing principal reduction.

In addition, the original analysis that we produced considered all enterprise loans that had a current loan-to-value above 115 percent, not just the delinquent borrowers. This time, to provide an estimate of the potential HAMP borrower pool, the analysis I'm going to talk about here limits the analysis to those borrowers that are deeply underwater -- all right? -- so, above 115 percent loan-to-value and are delinquent on their mortgage today.

We did allow for some portion of those who are still current today to roll into delinquency, so what we did is we assumed 5 percent of the enterprises borrow deeply underwater borrowers who are current on their mortgage. We assumed 5 percent of them roll into becoming delinquent and then hence being considered for a loan mod. And this wasn't randomly decided -- the 5 percent. Five percent is actually the roll rate we saw from the end of December of 2010 to the middle of 2011.

So, let's look at some of the results here.

This slide shows that the enterprise losses on these loans are expected to be almost \$64 billion if they are not modified but went through foreclosure. So, you can see in the two columns, you know, the 63.7 there.

Now, if we do principal forbearance, the model results tell us that the losses on these loans would be \$55.5 billion. If we use the HAMP principal reduction alternative, the losses would be \$53.7 billion to Fannie and Freddie. Hence, in this analysis principal reduction is better for the enterprises. That is, it reduces the enterprises' losses by \$1.7 billion.

All right, now, the total potential incentive payments from the Treasury to the enterprises in this analysis would be \$9.5 billion. But the expected incentive payments that would actually be paid is much less. It would be \$3.8 billion. That's the

bottom of the last column here. And the reason for this difference is that the HAMP model allows for and predicts that a good number of the borrowers that get this loan modification are still going to default anyway. And if they default anyway, not all of these incentive payments would actually get paid, because the incentive payments from Treasury are paid out over several years.

So, in summary, on just a net present value basis, this updated analysis shows a positive benefit to the enterprises of \$1.7 billion and treasury incentive payments to the enterprises of \$3.8 billion, which would imply a net cost to the taxpayer of 2.1 billion.

Now, this does not account for any offsetting benefits in terms of greater housing market stability if principal reduction reduces total foreclosures relative to doing a standard HAMP mod. But that benefit is difficult to quantify.

As I've noted, the NPV results alone are not the sole basis for the decision on whether the enterprises should pursue principal forgiveness. One factor that needs to be considered is the borrower incentive effects. That means will some percentage of borrowers who today are deeply underwater but current on their mortgage be encouraged to either claim a hardship or actually go delinquent in an attempt to capture the benefits of capital forgiveness?

This is a particular concern for the enterprises, because unlike other mortgage market participants that can pick and choose where principal forgiveness makes sense, the enterprises must develop the program to be implemented the same way by more than a thousand seller servicers. In addition, the enterprises will have to publicly announce this program, and borrower awareness of the possibility of receiving a principal reduction modification will be heightened among enterprise borrowers. So, as opposed to more targeted efforts of individual lenders or the current opacity of the HAMP process, there is a greater possibility that borrower incentive effects would take place on an enterprise-wide principal forgiveness program.

Now, it's difficult to model these borrower incentive effects with any precision. What we can do is give a sense of how many current borrowers would have to successfully become strategic modifiers for this NPV economic benefit provided by the Treasury incentives to be eliminated. In this context, a strategic modifier would be a borrower that either claims a financial hardship or misses two consecutive mortgage payments in an attempt to qualify for HAMP and obtain principal forgiveness.

This table provides some sense of the results. If principal reduction was successfully done on all 691,000 borrowers that I talked about a few slides ago, the enterprises would need to have 90,000 additional borrowers strategically modify for that to wipe out the benefit to them of receiving the Treasury incentive payments. But that's unlikely, right? We're not going to get a hundred percent pull-through on loan mods offering principal forgiveness.

Suppose we were successful on half of the 691,000. Then we would need roughly 50,000 strategic modifiers. And if we only had a quarter pull-through with principal forgiveness, then we would need only 20,000 current borrowers to strategically modify in order to wipe out the benefit to the enterprises of the incentive payment. And keep in mind in this that the enterprises have about 2 million deeply underwater borrowers today who are current on their loan.

Finally, in considering whether the enterprises should adopt principal forgiveness under HAMP, FHFA must also consider operational costs. The direct operational costs would focus primarily on technology modifications and improvements. We're still evaluating those costs, but they're not trivial. There would be other more indirect costs. These include the cost for launching a new program, including the development of guidance 2 and training 4 mortgage servicers. The indirect costs also include the opportunity cost of diverting existing resources at Fannie and Freddie from other loss mitigation activities or from some of the activities announced in the strategic plan. All these cost factors would have to be carefully considered in coming to a decision

to employ forgiveness or not.

In closing, let me try to summarize all of this into a handful of conclusions and observations.

The issue before us is not about whether Fannie Mae and Freddie Mac provide support to families having trouble making their mortgage payment. Clearly, they already do, and it remains FHFA's and the enterprises' collective objective to do so. As FHFA makes its decision on whether the enterprises should offer principal forgiveness with the HAMP triple incentives, we will look to the issues I have described: the net present value impact, the borrower incentive effects, and the operational costs. Those are the issues within our responsibility as conservator of the enterprises.

Whether Fannie Mae or Freddie Mac forgive principal or not, the universe of enterprise borrowers potentially eligible for a HAMP principal reduction is well less than a million households or a fraction of the estimated 11 million underwater borrowers in the country today. This is not about some huge difference-making program that will rescue the housing market. It is a debate about which tools at the margin better balance two goals: maximizing assistance to several hundred thousand homeowners while minimizing further cost to all other homeowners and taxpayers. The anticipated benefits of principal forgiveness is that by reducing foreclosures relative to other modification types, enterprise losses would be lowered and house prices would stabilize faster, thereby producing broader benefits to all market participants.

The far larger group of underwater borrowers who today have remained faithful to paying their mortgage obligations are the much greater contingent risk to housing markets and to taxpayers. Encouraging their continued success could have a greater impact on the ultimate recovery of housing markets and cost to the taxpayers than the debate over which modification approach offered to troubled borrowers is preferable. A key risk in principal forgiveness targeted to delinquent borrowers is the incentive created for some portion of the current borrower population to cease paying in

search of a principal forgiveness modification.

In closing, the population of underwater borrowers, current and delinquent, remains a key risk for Fannie and Freddie, for taxpayers, and for the housing market. There may still be improvements to current efforts that can mitigate this risk in a cost-effective way.

And I want to conclude by saying FHFA remains committed to working with the administration and with Congress on these difficult questions, because we recognize we all have a shared objective of preventing avoidable foreclosures, minimizing taxpayer losses, and bringing a greater measure of stability to housing markets across the country.

Thanks very much for having me today.

MR. GAYER: Well, first let me thank you for coming and giving such a thoughtful speech, and we share with you the ambition to just try to inform the debate, and I think we have a good panel set up to kind of probe into this further.

I wanted to start -- you mentioned today, as you did I think -- as you suggested you do every time you give this speech, you talk about your legal responsibilities, and one of those is to preserve and conserve the assets and properties of agencies -- in effect, protect the taxpayers. So, the key question I think for your new analysis, and you alluded to it in your sample NPV analysis there, is how much do these new Treasury incentive payments change the equation? And in the role of your legal responsibility, do you view the cost -- so, these Treasury incentive payments are also payments from the taxpayer. Is this in any sense viewed as a cost to you in your analysis? Or is this money that's coming from another source and therefore if it's enough to fill the hole and make principal reduction worth it? In some sense that's not your role; that's not your problem that's a different pile of taxpayer money, and so there it's not part of the analysis.

MR. DeMARCO: We're approaching it as our responsibility is to

conserve assets of the taxpayer, and so we're looking at what the cost would be to Fannie and Freddie. It can't help us but to be aware that we are conserving assets on behalf of the American taxpayer, and so if we engage in principal forgiveness because there's money being taken from another taxpayer pocket, we're trying to provide transparency, you know, that that is the case. So, while it may make Fannie and Freddie's losses lower, if it makes the overall cost to the taxpayer higher, we're trying to, you know, provide clarity to that point. But we recognize that Congress gave us a responsibility and a mandate. It gave the Treasury Department a different responsibility and mandate and a different funding source with TARP funds.

Now, TARP funds up to now have never been used for any Fannie and Freddie loan modifications, but the Treasury Department has determined, for the first time this January, that if we were to do principal forgiveness modifications that it would use TARP money to Fannie and Freddie as investors to receive the investor incentive payment. So, we're trying to provide clarity about how this all works, but our responsibility is to that of conservator. So, it will be how this affects the net present value to Fannie and Freddie, but it will also include these other considerations I touched on in my remarks: What's the operational cost of doing this, and what are the borrower incentive effects, which are very hard to measure.

MR. GAYER: And understanding that this was preliminary, do you have a sense of when your final analysis will be, including these Treasury incentive payments?

MR. DeMARCO: I believe that this issue really needs to be brought to conclusion. There's an awful lot of new information, and obviously the Treasury offer is fairly new, so we really had to take time to go back through this analysis. But we're looking to wrap it up in the next few weeks.

MR. GAYER: Okay, sounds great.

Also, again on your responsibilities and how you see your role, you mentioned affordability. And I think in previous speeches you've talked about the

fundamental point of a loan modification is to make it affordable so the borrower can make the monthly payment. And I noticed -- I tried to scribble quickly as you were writing -- here you distinguished between ability to pay and willingness to pay. So, it's quite likely that there are underwater borrowers out there who might be able to afford their mortgage or maybe if you give them a principal forbearance or lower their rate, they can afford their mortgage, but they are so far underwater that they make the decision you know what, I'm so far underwater I'll never make this equity up, I'm not willing to pay, I'd rather walk away from this. And I think I got the quote. You said that any principal reduction policy would have to consider, I think, "general acceptance of reasonableness if not fairness." So, I can see if there -- if a principal reduction is helping those people who can completely afford their mortgage but they opt not to because they're underwater, many people may view that unfair, and maybe that's why this is a tough thing to pass through legislation. But does that go into your calculus in how to do that NPV analysis and how to go forward, because clearly from a bottom line point of view for Fannie or Freddie, if you have a borrowers who is going to walk unless they get a principal reduction, it's better to give that borrower a principal reduction.

MR. DeMARCO: Well, be careful about the kind of incentives --

MR. GAYER: Yes, sure, understanding that.

MR. DeMARCO: -- that we sort of create by doing that is really the point.

But the point I was trying to make about, you know, this being sort of reasonable if not fair, was in the context of the situation for Fannie and Freddie in determining to offer principal forgiveness and then, you know, who would be offered to is different than an individual mortgage servicer who may make this decision for their own book of business. Because that individual mortgage servicer can go through their loan book and decide on whatever factors it wants to use whether to offer that borrower principal forgiveness. There's no regularity to it, and that particular servicer can do its thing in the way it sees best.

For Fannie and Freddie to do this, they're working through over 1,000 mortgage servicers and they're doing it -- and everything they do has to be much more transparent. So we have to write guidance that gets published and posted publicly that goes out to these 1,000-plus mortgage servicers that says, okay, if a borrower comes in and a troubled borrower needs a loan modification in order to stay in the house and not go through foreclosure, here's how you go about evaluating that borrower. And if we're offering principal forgiveness, we have to be very clear and transparent about the decision rules these 1,000-plus servicers are supposed to apply. And because there's that amount of transparency in exactly how the rules are applied it raises a concern for us that that makes it easier to be strategically modified against relative to an individual servicer who doesn't have to provide any of that sort of transparency to the borrowers in their book.

MR. GAYER: So if I could follow up, I think there's two points there. One is it may make complete sense to give Borrower A a principal forbearance and Borrower B a principal reduction, but it's really awfully hard to distinguish which one is which, and I think what you're saying is putting aside the change of behavior, trying to set up rules such that you can identify one versus the other is very difficult and so you may, in effect, be faced with a clunkier system which is they either both get it, which may not be worth it, versus they both get principal forbearance. I think that's step one.

MR. DEMARCO: That's certainly part of it. And if I may, Ted, just to clarify a little bit more on principal forbearance. What principal forbearance is doing is, it is in fact taking, you know, most or all of the underwater portion of the borrower's loan principal, it's setting it aside, it's charging 0 interest on it, there's no repayment against it, and it just sits there silently until the borrower either ultimately goes into foreclosure if they fail in their mod, or if the borrower is successful and stays in their home and somewhere way down the road sells the house, it takes that forborne principal that no payments are being made on, lets it sit there, but down the road if the loan modification is

successful then the borrower retains that obligation to pay off that forbore principal amount at the time they sell their house. That gives the taxpayer the opportunity to share in the borrower's upside. If this loan modification has been successful and has allowed the borrower to stay in their home and, you know, kind of go along, that's great. I mean, the borrower got that opportunity because the taxpayer provided the loan modification, but the taxpayer then gets to share in that upside down the road if you do principal forbearance.

So that's why our point is, the borrower is getting the same monthly payment either way. The question really comes on the upside if over the long-term these loan modifications are successful. You know, how do we get the taxpayer to share in that upside success of the borrower?

MR. GAYER: I know that we may hear about this later, too. That brings up another question. Is there a way to do some sort of shared appreciation model where you give them a reduction in principal but Fannie or Freddie in some sense keeps the upside for future price appreciation?

MR. DEMARCO: Right. So, fair question. It's being talked about. In fact, principal forbearance is a form of shared appreciation. It's a less-complicated form of it because we don't have to do a new loan instrument and the operational tracking of this is much simpler. But in fact, it is a form of shared appreciation. It's saying that we're setting aside this forbore amount and down the road home prices recover, borrower pays down their mortgage, that the investor -- in this case, Fannie or Freddie -- gets all the upside up to the forbore amount and then every dollar after that the homeowner gets all of it. So it's one form of doing shared appreciation.

MR. GAYER: And if I may, you talked about this and I think this is a useful exercise to kind of size the impact that even if you did go full hog on a principal reduction, how much could this affect the broader -- there's 11 million underwater borrowers, and how much that would even affect the broader housing market.

One thing I don't think you touched on but I'm curious to know. The incentive payments, there's a range and I think the range is -- the incentive payments are lower for people who have been without payment or in the foreclosure process for the longer period of time --

MR. DEMARCO: Right.

MR. GAYER: Over six months, I think, since last payment. Those incentive payments are pretty small, and I think that's acknowledging that if somebody hasn't paid their mortgage in over six months even with a principal reduction they might not be recovering and staying in their house. And I looked it up after I saw that, and I think the latest numbers of people in the foreclosure process is something like 11 percent, only 11 percent have been less than 6 months since their last payment.

So I guess that's my question on the sizing. Is this something -- obviously it's going to have to figure into your analysis, but this would -- you gave a number of less than a million. That is also addressing this issue that a lot of people actually might be too far into this that even a principal reduction might not be helpful to them or might not keep them in the home?

MR. DEMARCO: Yeah. So, a couple things to that point. First of all, in the preliminary findings we reported, the assumed Treasury incentive payments to Fannie and Freddie were scaled according to the rules of the HAMP program. So, the amount of incentive payment did vary on the loan, that was factored into our modeling result.

But to your question about sort of what's the universe we're talking about. There's a common estimate that there's 11 million underwater homeowners in this country. Estimating this is pretty difficult because it involves using house price indexes and you know, there's all sorts of measurement issues with that. But taking all that as it is, right? For Fannie and Freddie, if we use ZIP code level house price data, Fannie and Freddie today have about 2.5, 2.6 million loans that are what we call deeply underwater.

That is, the current loan-to-value ratio on these mortgages is above 115 percent. So, 2.5, 2.6 million. Of that, approximately 2 million of them are still paying their mortgage every month. So the group that is delinquent, whether it's 60-days delinquent or they haven't made a mortgage payment in 4 years is on the order of 500- to 600,000 borrowers. So, that's the universe of folks that we're trying to reach right now with the various loss mitigation tools I talked about in my speech, but it's the 2 million who are deeply underwater and current that, you know, we're particularly concerned about and that's why the HARP program and the changes we made to HARP last year are so important to try and give these folks both an encouragement and a better opportunity to continue to pay their mortgage, because that's a huge credit risk to us.

MR. GAYER: We're going to take questions from the crowd, if that's all right. So we have time for a few questions. I see Nick back there. And I think there's a microphone. If you can just introduce yourself, and we're limited on time so keep it to a question.

SPEAKER: Sure, thanks. I'm not going to stand up because of the camera behind me. Two-thirds of all of Fannie May's loans in Nevada are underwater and half of them have loan-to-values above 125 percent. HAMP mods are temporary in the sense that after five years, the reduced payments will begin to rise again. So I wonder if in places like Las Vegas where amortization and appreciation may not bring these borrowers back to positive equity in five years, do you think the current modifications in these parts of the country are sustainable?

MR. DEMARCO: It's a fair question, but I think actually they are. One thing about what happens in five years is it's the interest rate. If the interest rate got lowered to 2 percent it starts increasing at that point. If there's principal forbearance, that principal forbearance goes for the life of the loan. It does not -- that does not change at the five-year mark. What changes at the five-year mark is a re-setting of the mortgage interest rate, and so in the HAMP program the mortgage interest rate can be lowered as

far down as 2 percent, right? And after five years it will go up a percentage point a year until it hits whatever the current market rate was at the time of the loan mod. For most borrowers, that's going to be on the order of 4 to 4-1/2 percent, so there will be a gradual increase in interest rate from 2 percent to 4 or 4-1/2 percent that will start at the 5 year mark, but the other aspects of the loan mod will stay in place, including the principal forbearance.

And the other thing I would just observe about Nick's question is that clearly when we talk about these underwater borrowers, these are not sort of randomly or uniformly distributed around the country. They're clearly concentrated in certain markets that particularly experienced a big housing bubble and then a big burst in the bubble. So, most of this is concentrated in a handful of states.

MR. GAYER: Question? It's going to be a little unfair. He's going to be married to his daughter. Hank.

MR. AARON: I have an analytical question. To what extent did you subject your calculations to the real estate equivalent of the bank's stress test? That is to say, to what extent would your calculations -- did you build into your analysis the possibility that real estate markets might perform significantly better or worse than the best guess? And if so, what was the sensitivity of the calculations to such variations?

And a related question to that is, you stressed the fact that the interventions you are discussing are relatively marginal in the larger sweep of delinquencies, but the impact of even marginal shifts in behavior of homeowners on the course of the housing market could have feedback effects on the very calculations you're trying to make. So my question is, really I'm asking you for the error properties of your model.

MR. DEMARCO: Right. So, fair enough. The model itself assumes home prices stay flat. There's no appreciation or depreciation in home prices that are part of this, so we don't bank on there being an upside, but at the same time we're not

stressing it on the downside. We do other analyses that do that, but in terms of assessing an individual borrower for loan modifications, that's not part of what we do.

But the other part, the incentive effects, that is part of what we are in fact wrestling with today, and so that work is not complete. But the idea that -- I mean, and this is -- I can be an economist, right, on the one hand? On the one hand, if principal forgiveness achieves its stated objective of accelerating the stabilization of house prices and the feeling that borrowers are going to continue to stay and we're not going to see more foreclosures, that has a positive feedback effect.

On the other hand, if principal forgiveness offered to borrowers who were deeply underwater and stopped paying their mortgage, creates a sense across the country among all these borrowers who are paying their mortgage that, what am I doing this for? You know, I'm at 140 or 180 LTV, you know, I'm doing this because I believe I've got an obligation to but I see the government is encouraging, you know, activity the other way or providing certain people -- let me put it that way. The government is providing an opportunity for certain people who aren't paying the ability to let this principal right down. You know, it's got a feedback effect there that is very negative to the housing market, and in fact the more we see that kind of behavior the more that could build upon itself.

So I mean, interestingly the various participants in this debate, you know, tend to take one side or the other but in fact, you know, both are plausible. But to your point, these feedback effects in terms of how they may affect borrower behavior are really quite important to this whole discussion.

MR. AARON: But on the first point, do you have any sense as to the sensitivity of your calculations to the possible increase in real estate prices? Or on the other hand, to a decrease?

MR. DEMARCO: I didn't get to do this in my dissertation defense, but I don't believe I've got anything I can report on that.

MR. GAYER: In the back there?

MR. ARNOLD: Chris Arnold with National Public Radio. Excuse me. Could you talk a little bit more about the shared appreciation approach, the one I guess you described as more complicated where let's say there's \$50,000 that gets pushed back and no interest is paid on it, house prices recover, where the homeowner would get, you know, \$25,000 of the upside, Fannie or Freddie would get \$25,000 of the upside. So, there's a disincentive for strategic default because the homeowner would be losing some of the potential upside, but enough of an incentive to stay with making the payments because, well, I'm not giving up all my upside. You know, the kind of thing I think Menendez has talked about at hearings and stuff.

Is that actively being considered, I guess is my question?

MR. DEMARCO: What I was trying to say there is that a shared appreciation mortgage -- if we did a principal forgiveness modification and then wrote a separate shared appreciation agreement, that's a new instrument that doesn't exist today. We'd have to figure out what the basis for that shared appreciation would be. Operationally, this would be harder to track over time, and then the ability to take this loan and if we would probably end up having to be on the balance sheet of Fannie and Freddie, which we're trying to shrink. So, it operationally has some different complexities and some judgments about the shared appreciation feature that would all have to be worked out.

The systems, the operational systems, the financial accounting systems, and so forth that are in place today already allow for principal forbearance, and so there's no additional investment. We can do that easily and we know how to track it. It is one way of doing shared appreciation. So the point is that the way with principal forbearance we are, in effect, doing shared appreciation mortgages using the technology and tools that are already in place. We don't have to take time to build that and to make these other decisions.

MR. ARNOLD: Just to follow up so I understand. Does that mean you're

not considering the more complicated one? Or you are, you're running all the numbers on it, you're just saying it is more complicated, it would cost more money to implement?

MR. DEMARCO: I think I'll leave it where I have it.

MR. GAYER: Let's take one more last one, right here.

SPEAKER: With all these programs to help delinquent borrowers, and you went through many of them, to what extent do you think -- and all the political pressure to help delinquent borrowers -- to what extent do you think a mortgage is no longer backed by collateral? And what does that imply about the future of the return of the private sector?

MR. DEMARCO: So let me say something about the underwater borrowers. I talked about how many are Fannie or Freddie, but there's a whole lot that are in private label securities. What doesn't get reported nearly widely enough is that most Americans that are underwater on their mortgage, they realize that they signed a contract, they've got an obligation to make that payment, and in fact they are. So, whether we consider this to be a collateralized loan or not, or how an investor looks at it, I think the real important point here is that folks that are underwater on their mortgage realize that they've got an obligation to make that mortgage payment, they are continuing to do so, and they should be encouraged to continue to do so.

In terms of bringing private capital back into the market, I mean private capital is going to want to look for a number of things to be fixed relative to the way the market operated over the past decade. And so, the strategic plan for conservatorship that we sent up to Congress in February is one measure of the steps that we at FHFA are seeking to take to fix those problems with the mortgage market, and we think they are a part of what needs to be done in order to attract private capital back into the mortgage market. But clearly, private investors are going to look for -- you know, are going to take a whole lot harder look at mortgaged credit risk as they reenter into this market space.

MR. GAYER: Well with that, I want to thank you again and also welcome

you to stay if you'd like to listen. We have a panel following. But thank you so much for being here, and you're always welcome to come.

MR. DEMARCO: I'd be glad to. Thanks, Ted. I appreciate it.

(Applause)

MR. GAYER: I am very happy to introduce a panel of experts to dig a little bit deeper on this. There are longer bios outside for all of them, but I will just give a short bio going from my left to my right.

On the far left there we have Mark Fleming, who is the chief economist for CoreLogic. He leads the mortgage risk analytics and economics team. Next to Mark is Paul Nikodem, who is the executive director and head of mortgage credit research at Nomura Securities International, and previously he was a senior mortgage credit strategist at Goldman Sachs.

On my right is Andrew Jakabovics. Close?

MR. JAKABOVICS: Close enough.

MR. GAYER: Close enough. Senior director for policy development and research at Enterprise Community Partners. Previously, he was senior policy advisor to the assistant secretary for policy development and research at HUD, and prior to that he was associate director for housing and economics at the Center for American Progress and on my far right is Tony Sanders, who's professor of finance in the School of Management in George Mason University and previously taught at the University of Chicago.

So, I asked each of them to give at least a brief intro, about five minute intro. I'll start with Mark, who's going to talk, basically, on the state of the housing market and the different options available to address the high level of distressed assets that we see out there.

So, Mark, you can take it away from there.

MR. FLEMING: Thank you. I think, first, I probably need to apologize. I

and my colleagues at CoreLogic are the source of the 11 million, 23 percent, \$700 billion problem that is encircling us here, and I think the real issue of, you know, this whole concept of principle forgiveness and principle forbearance really focuses on, you know, that \$700 billion number and what do we need to do about it.

And I think Ed very eloquently described a lot of these issues. It's not really a problem of \$700 billion. I mean, the folks who are delinquent, somewhere between, when we looked at notices of default, 750,000 of the 11 million. When you look at delinquencies we're talking about a few million, maybe, of the 11 million, so it's significantly less. So, we're talking not \$700 billion but maybe a couple hundred billion dollars of those who are delinquent, and the truth is that the vast majority of these individuals do, in fact, continue to pay their mortgages.

And also, you know, this concept of ability and willingness to pay, we've built models and looked at this analysis very carefully to try and understand the willingness component and that's really the key is, how do we incent individuals to continue to pay on their mortgages.

Negative equity is a problem that's not going away any time soon. Somebody mentioned, you know, in Nevada, you know, is this a problem five years out? Well, negative equity is not going away in Las Vegas in five years, maybe not even in ten years. In fact, we studied the concept a couple of years ago, we looked at it and said, if you assumed house price forecasts -- and let me be the first to say, to say what house prices are going to do over the next five to ten years, you know, we're really sort of punting a question on that and I mean -- and getting into sort of 2 or 3 percent growth a few years from now. In many of these markets that are so deeply under water, even ten years from now the average under water borrower is still going to be under water.

And so, this is a problem that's not just about dealing with those who are struggling and delinquent, but more broadly negative equity is a problem for, you know, a quarter of all home owners out there. What happens five, six, seven, eight years from

now when the borrower who has been paying their mortgage for that length of time, you know, needs to move for a job or something like that? That's something that will be facing the industry.

It has implications that are very hard to measure. I don't think any of us really have a good handle on the impact on mobility and the influence of creating stickiness of high unemployment rates in labor markets.

It certainly is having an impact on the mortgage markets themselves today. One of the reasons, among others, that we see such a low volume of purchases is there's a lot of people out there who are underwater on their home and therefore can't sell their house to buy another one, right, so the turnover in the markets is much lower.

So, again, it does get back to this concept of willingness, and we find that willingness is an important factor. You know, much of the research does show that LTVs make a difference, I think, but that research was done on a paradigm that is very different from today. We're, sort of, in very uncharted territory at the moment in terms of how people behave.

But we do, you know, conceptually get the idea that someone who is so deeply underwater has less willingness, and that's where concept of shared appreciation and all of that stuff comes into play.

So, you know, the point is, yes, it's a big problem, there's the delinquency problem that we're all trying to address and we're making great strides at that. You know, we publish statistics now on completed foreclosures and we're saying, look, foreclosures are down. We ran about 65,000 foreclosures, completed foreclosures, in February of this month, and that's a run rate, it's similar to last February, but it's a run rate of annually we're looking at, you know, 800- to 900,000 foreclosures in the course of the year. That's down from 1.1 two years ago.

Well, why are we not foreclosing on more people? For crimony's sake, there's a lot of people out there who are in the shadow inventory and so why aren't these

people being processed through foreclosure? Well, when we actually look at, we'll coin the term, foreclosure liquidations, which could be anything, could be a foreclosure, could be a deed in lieu, could be a short sale, could be a modification -- many of these things, for those who have been put in the process of foreclosure by a servicer, the relative share of foreclosure liquidations are rising. They've been trending upward very slowly for a number of months now.

So, we're doing less foreclosures and more foreclosure liquidations in the form of all these things we're talking about.

So, I suppose I could say things are getting better, they're getting better slowly, but it's such a large mountain to climb that this will take a long time, and we should be looking at, you know, addressing the concept of willingness for those who are, you know, in delinquency, the concept of willingness for those who are current and not incenting them to go delinquent, we certainly don't want that to happen, and then also looking at, in the longer term, what are we going to do about those who have behaved exactly as we wanted, paid those mortgages but yet five, six, seven, ten, twelve years from now are still underwater.

Thank you.

MR. GAYER: Great. Next up is Paul and Paul's going to talk on the historical performance of loans with principle modification and give some investor feedback on various principle modification programs and proposals, and I think we have a few slides to draw your attention to as well. Take it away.

MR. NIKODEM: Great. Thanks, Ted. So, I'm just going to quickly address some of the data that we've seen, more so in the non-agency RMBS market where I focus where we look at the performance of various types of mod programs and the drivers of modification performance.

So, first of all, in terms of the historical performance, if you take a look at the top part of the slide on the screen, we take a look at, first of all, the performance of

principle mods versus rate mods. This is the first cut. Do principle mods actually perform better than rate mods? The issue with this approach is that we only have about 12 to 24 months of decent data since modification programs only picked up recently.

So, the statistic we show is a 12-month re-default rate both in subprime on the left, and prime and Alt-A on the right for rate mods in red and principle modifications in gray, and in both cases you can see that the principle modifications tend to perform better. The difference is much bigger in prime and Alt-A because there tends to be a greater share of strategic defaulters, but even in the subprime sector where borrowers tend to default more for affordability reasons, there is still a pick up in performance for the performance of borrowers with a principle modification.

Now, keep in mind, these principle modifications are -- the majority of these principle modifications involve forbearance rather than forgiveness and it is impossible for us on a broad scale to differentiate the performance of forgiveness versus forbearance mods other than to be able to tell that they are better.

Anecdotally, in conversations with various mortgage servicers and in taking a look at specific deals that report this information, we do see a modest pickup in performance for loans with forgiveness versus forbearance. It's not massive, it's not minimal, and it varies by deal, but there definitely is a noticeable difference in performance over the first 12 months.

Second of all, I would say that there are other factors that also drive the recidivism rates for modified borrowers in addition to the principle modification decision. So, as Ed was saying before, certainly the timing of when the modification takes place also makes a huge difference, so if a borrower did not make payments for two years or more they're used to making a zero payment, so even if you cut 90 percent of their balance, they still have to pay more than zero, so it is much harder to get a lot of these borrowers who are deeply delinquent to start paying on their mortgage whereas if a borrower misses only six to twelve months of payments when they receive a modification,

the success rates are much greater regardless of what type of modification is offered to the borrower.

Also the payment cut is also a big driver of performance. If you cut a greater percentage of the payment, borrowers tend to perform much better.

So, we have a heat map at the bottom of this slide that show two of these dimensions. We have the balance reduction, which is in the different rows, and we have the depth of the payment cut, the percentage of payment reduction in the different columns. And the point to make here is, clearly, both of these factors matter quite a bit, but if you take a look at the right half of that chart, so, borrowers that have a 30 percent or greater payment reduction, you can see that any additional reductions in principle balance, either through forbearance or forgiveness, do not have a meaningful difference in helping the performance of the borrowers.

So, this is in subprime where affordability is a much bigger deal for borrowers but, you know, once you cut enough of a payment, these borrowers seem to perform similarly regardless of the amount of principle reduction.

The key question, though, is how do these borrowers perform over the long run? That's the key to the NPV question for bond holders, for tax payers, for the GSEs and we just don't have sufficient data to be able to tell whether this affordability issue will continue to drive performance three to five years down the road and whether these borrowers are going to be able to refinance or move, as Mark was saying.

So, you know, for example, if a borrower receives a principle mod and they're marked down to 100 CLTV and they pay down a little bit of principle, it's much easier for them to move or refinance in five years and that will greatly decrease lifetime losses for these loans, whereas if a borrower still has a 120 or 130 LTV in five years, who knows what their incentives are going to be at that time.

The other thing to point out is that over the last year the market has started to pay a lot more attention to rental growth, so in a lot of cases we are hearing

from servicers that the borrowers modified payment is less than what the borrower would pay if they were forced to rent an equivalent property.

We did a study on this for subprime borrowers looking at the average payment that subprime borrowers make in different cities and comparing against average proxies for rent in those different cities and on average we find that modified subprime borrowers are paying about 10 to 20 percent less than the equivalent rent in those cities if they were to get kicked out of their homes and forced to rent.

And if rents are growing, call it 3 to 5 percent a year, this only provides a greater disincentive for borrowers to default in some ways if they think about what they would have to pay in rent after they get kicked out of their homes.

So, this is another factor that we are hearing from servicers are providing a greater disincentive for borrowers to default. Even if they have a rate modification, for example, it is possible that the rate modification allows them to lock in a lower payment than they would pay in rent.

And I'd say that, you know, in conclusion, just to sum this all up, we definitely see some cases where, you know, principle forgiveness would make more sense for borrowers compared to a forbearance mod or for a rate mod, but it is definitely a small subset of borrowers. For example, you'd have to target the borrowers early in the delinquency cycle and you'd have to look at the borrower's underlying credit and make sure that you're not cutting too much principle.

In the non-agency sector, we have not seen a huge pickup in moral hazard risk when different modification programs were rolled out, the HAMP program, the HAMP principle reduction program, their service or specific principle modification programs, but at the same time these modification programs are very specific and it was impossible for borrowers to tell which borrowers would receive a principle modification and it was very subject to subject to service or specific policies.

So, as Ed was saying before, this cannot necessarily be extrapolated to

the GSEs principle modification programs where the policies would have to be more institutionalized.

At the same time, we do see a number of principle modifications being NPV negative compared to rate modifications or compared to foreclosing on a borrower just depending on the style of modification.

MR. GAYER: Thank you very much. I'll turn now to Andrew to, I think, make the case for principle reduction and put it in a historical context and maybe also touch on the moral hazard if it comes up as well.

MR. SANDERS: Sure, be glad to. So, I didn't bring any slides but I brought one of these. And so, Director DeMarco talked a lot about the fairness question, and unfortunately, the way the current servicing structure in the mortgage industry is developed, borrowers have absolutely no control over what happens to their servicing rights. I mean, who controls their mortgage?

So, the way we've rolled out HAMP and the other modification efforts is really, heads you win, tails you lose, but you have no way of knowing when you go into a mortgage, with the exception of FHA, where you know up front who's going to ultimately service your note or that the rules of the road are being consistent across the board.

And so talking about fairness, we've sort of narrowed the box a little bit, and I think the broader conversation from a policy perspective really needs to get to the point of, if I look exactly like Tony here, so, I have to lose a little more hair and gain several inches of height, but we're similarly situated borrowers, if, you know, he got lucky enough to end up in a note that was held on a bank's portfolio, the bank basically has unlimited access to whatever decisions they want to make to modify that note.

If, however, I end up in a note that is -- got sold into a private label security and the investor is willing to do principle reduction, maybe I'll get it. If they're participating in HAMP, maybe I'll get it. If I've got a servicer who is not a HAMP participant, then I guess I put my coin back in my pocket but there are, you know,

effectively 31 flavors of HAMP out there and the idea that, from a pure policy perspective, that we're going to incentivize or dis-incentivize borrowers to be able to access or to suddenly start strategically defaulting, you know, six years after house prices have peaked nationally, you know, I think overstates the likelihood that we're going to see significant changes in borrower behavior.

So, I think rather than taking a categorical approach to the question of principle reduction versus forbearance, I think the individual approach that they're now applying through the analysis, I think, makes a lot of sense. The NPV test, though, I think is far more complicated than the average borrower can really unwind given transparency in the process. So, I think that the risk of increased strategic default, once we know -- I think, again, if we're clear that there are sort of, at best, half a million borrowers out there who may, relative to the other waterfall tests, get access to some degree of reduction rather than forbearance as opposed to just a simple interest rate reduction, et cetera, if we build the principle reduction into the waterfall the way it does exist for our other servicers that are already servicing on behalf of lots of -- thousands of investors out there, I think the operational complexity, again, is a little bit overstated given that there is transparency around HAMP in general.

The model itself is not public, although the factors that go into the decisions are made known, but there's enough that's proprietary in there to expect the borrowers who, to this point, have not been strategic are suddenly going to start becoming strategic because there's an additional incentive component in a waterfall that is non-optimizing anyway, I think is really kind of -- misses the point that there is a tool that is available.

Even the current analysis that Director DeMarco provided us today does show that there is benefit to the enterprises should they do principle reduction in certain instances, and so not to have that tool on the table, we know that, in fact, private lenders and servicers are doing it for an increasing share of their books of business when it

makes sense to do.

And so, to say we're going to do an analysis, it's going to be NPV positive, and yet we're not going to take that option, we're going to do this slightly less NPV positive assessment and give you a slightly less valuable to us alternative, doesn't make a lot of sense from a conservative's perspective either.

And I think that there are implications, as Mark was talking about, for the long-term stability of the housing markets, the idea that you're still dealing with severely underwater borrowers, even post-modification, as opposed to a principle reduction where the borrower doesn't need to go back to the lender to get an approval for a sale. The idea that you're going to basically stagnate the housing market in places like Phoenix or Las Vegas over the long term, as opposed to allowing that liquidity to come back in, to allow people to move and that mobility, to allow the next generation of homeowners to be able to buy, I think, has broad implications over the long-term.

And so, while forbearance may have short-term benefits that may outweigh forgiveness outright, I think when you're taking a longer-term view of the stability of the housing markets as a whole, I think willingness to pay certainly creeps in and thinking about what the markets might look like in five years is certainly part of what any long-term strategy for the enterprises should be.

And I think, just sort of -- I mean, I've been sort of a supporter of principle reduction for, you know, the last four plus years, so it shouldn't come as a surprise that I'm still advocating for it. But I think it also just -- if the GSEs aren't willing to do it, you know, there are plenty of investors who are buying these notes, and in full disclosure, we're, as a nonprofit, part of a consortium of other nonprofits working in Illinois with hardest hit funds that is beginning to acquire notes on the open market, doing the deep reductions, because economically it makes a lot of sense. There's a lot of upside where these notes are trading, and so, you know, if the GSEs don't want to recapture some of that value, you know, I think our folks would be happy to take some of those off of your

hands.

But overall, I think investors are also starting to see the opportunity to buy these things at a discount and are doing the reductions simply because the long-term performance of these notes with the principle forgiveness makes a lot of sense, marketing these properties to market, and just putting it, again, in historical context, this is something that we did during the Depression. The Homeowners Loan Corporation, as a matter of course, marked loans down to -- refinanced borrowers into loans at 80 percent of LTV -- current LTV, and so really had a re-default rate of about 20 percent and when those notes defaulted, actually, they rented those properties out before selling, so that's another kind of historical nod to some of the work that's being done by the GSEs today in terms of the rental program.

But overall, historically, we've done this. It hasn't led to additional strategic defaults and there are ways in which you can contain it, again, by sort of capping the start date so no new borrowers get in so, you're only dealing with a pool of already delinquent borrowers, it would be interesting to see what your analysis shows if you do, not the 5 percent role rate, but simply anyone who is 60 days delinquent as of, let's call it January 1st of this year, so you're really dealing with a finite pool rather than, effectively, an infinite pool.

And I think those are the kinds of questions that I'd love to see as you make your full analysis available to the public.

MR. GAYER: Great. Thank you so much, Andrew. And then we'll wrap up with Tony on his opening comments making the -- stating some of the problems with principle reduction and maybe sharing on shared appreciation.

MR. SANDERS: Thank you. The problem with being the last person on a panel is that everyone's already hit all the high points. My talking points are exhausted. But having said that, let me continue on anyway.

I am the one person probably in the room who was very relieved to hear

Mr. DeMarco say we need more analysis of this.

What I want to guard against, and what I hope most of you want to guard against, is what we'll just call anecdotal economic policy, the fact that we do hear tales, and I've heard them all, that this will help salvage the housing market, principle reductions will end up helping out households, which of course it would, but the problem is we don't have enough observations yet.

In fact, Mr. DeMarco touched on it. When we're talking about looking at the HAMP programs and the fact that you need to get out a certain number of years to see if these things actually work and see if there's re-default rates, we have no idea what this looks like, we're just guessing -- econometrically forecasting, but we're guessing.

And so, what I'm saying is, is this is a major shift in economic policy, fortunately keeping it fairly small, do we really want to go out on the hairy edge based on a few anecdotal assumptions that this might work. And I would argue, no, we need more studying.

But let me also posit something else. I agree with what Mr. DeMarco said on forbearance, forbearance and (inaudible) marginally dominated, but I'll still take the marginal over zero, but the point is, is that it's not really just that comparison. There are other ways to get around this problem.

I mentioned shared appreciation mortgages, which Mr. DeMarco deflated rapidly, but I'm a big advocate of that. But in his defense, I did a study of Bank of Scotland shared appreciation mortgage programs over there and the problem with those programs is the forecasts are so -- if you forecast 2 percent rise in housing prices and housing prices go up 20 percent or down 20 percent, the game's over. I mean, everything just turns on its head. So, there are problems with that and that's, I think, one reason why they're very hesitant to do that.

But there's also other programs. Like Bank of America just announced a pilot program on what they call mortgage-to-rent, where they're trying to let households

that are in trouble on foreclosure actually transition to the rental market. Then Bank of America, I believe, keeps the asset on its books maybe for up to two years and then sells in the market, but, again, there are lots of approaches that are different than simply doing principal reductions. Principal reductions I would rank as last. You should do loan modifications forbearance; programs such as Bank of America and Freddie and Fannie can do those, as well. Principal reduction should be the absolute reduction of last resort.

And here's the other problem: Pandora's box. We open this up, and Mr. DeMarco thankfully will keep the lid on it. Supposing every time the stock market crashes and pension funds and retirees are in deep trouble and the administration comes along and says instead of HAMP, we'll have a stock market HAMP. We're going to bail out everyone that has lost money in the stock market. What kind of behavior would that breed in the stock market, do you think? Oh, my gosh, I'll take wild risks because I'm going to get bailed out. And even if this is constrained to Fannie and Freddie, I can picture if you start doing it here and suddenly, we're going to make all private lenders do the same thing or they're going to try. Reduce principal, even though we have no evidence in the long run that it works, but we're going to force companies, private entities to go through and do this, too.

Again, it's dangerous policy, even if it works, by the way. So, I would agree with even if he thinks it works -- we've been on fed panels before. So, we know each other's talking points quite well. (Laughter) Even if it works, it's a dangerous precedent -- ask you just to carefully consider oh, by the way, Mr. DeMarco misstated a number. It wasn't \$7 trillion in household equity loss, it's \$7.4 trillion. (Laughter)

And my other last point is whatever we did to lose \$7.4 trillion in equity and get into this disastrous mess we're in, can we change whatever economic policies we had to kind of push this down this cliff? Thank you very much. (Laughter)

MR. GAYER: All right, thank you. I'm going to start off with a few questions and then open it up to you guys to ask some questions.

I want to start with something I talked about with Mr. DeMarco, and I do sense there's -- I guess this gets into the size of the question. On the moral hazard issue, the change in behavior, Andrew I think rightly pointed out that the way to deal with that is to base it on historical delinquency. So, if you were delinquent previous to the date of the announcement, if there were to be an announcement, then you can qualify. But on the flip side, I noticed the tension because the incentive payments are much smaller for people who haven't made their mortgage payment in more than six months. And, again, an implementation there is oh, they may be beyond help, and, so, we don't want to incentivize it too much because they might be incentive payments gone for nothing.

And, so, I'm wondering, and this is, I guess, for all the panelists, but, Andrew, maybe start with you. Does that leave us with that many people? If you restricted the people -- first of all, they have to be Fannie or Freddie mortgages. Secondly, they have to be delinquent as of today or yesterday, which gets sort of 75 percent of those, and thirdly, they're really not going to help people that haven't paid in more than six months or in some of these cases, about 40 percent of them haven't paid in 2 years. How many then are there left and how much of an effect will this have?

MR. JAKABOVICS: So, I mean, they're the ones with the numbers, so, we'd have to toss it back to them, but I think just structurally, it still makes a lot of sense. We need a lot of tools to solve this problem.

As Director DeMarco mentioned, borrowers run into problems for a whole host of reasons, and, so, for as many reasons as there are people run into problems, we need as many solutions potentially, and, so, to simply categorically say principal reduction will not be considered under any circumstance seems unnecessary, that we're sufficiently sophisticated to be able to craft these solutions that take MPV tests

into account and the value of principal reduction relative to forbearance and the other. So, put at the end of the waterfall. And, so, it may be if there are half a million GSE borrowers who might be helped sort of in the aggregate on this and at the end of the day, only 50,000 qualify for principal reduction, then those are 50,000 people who are better off because principal reduction is offered than an alternative. And, so, to the extent that you get a re-performing asset on the GSE's books, again, relative to default rates and all the other things that are already baked into the MBD model that everybody is using, Fannie developed. So, to say everybody else has to use our numbers, but we ourselves are not going to I think also is somewhat problematic. But I think, again, it gets back to this basic notion of fairness that if every other service area at least has access to offer principal reduction where it makes sense, and, again, I'd love to see as much transparency on investor decisions and when services who are participating within HAMP are allowing their borrowers to use the principal reduction alternative as opposed to the standard HAMP waterfall, I think you can require the same of the GSEs without radically shifting behaviors in the marketplace.

MR. GAYER: So, this is a follow-up. I guess I'm looking for agreement, so, tell me if I'm wrong here. It seems like neither of you, let's say, would say that there are circumstances where a principal reduction on an individual basis might be the right thing to do. The question is: Can policy, given the share the market GSE has and given the way policy is made, can it be nimble enough to distinguish such that you pick the right ones? And maybe it's 50,000, but you're not doing principal reductions for an enormous amount that, A, either change their behavior to incentivize them or, B, if it doesn't change their behavior, it would have been a lot less expensive for some of them not to have done a principal reduction. Can we equip policy nimbly enough? Would that be your critique on it that sure, there might be someone out there that we should have that option for if we can target it well?

MR. JAKABOVICS: Yes, I already came out previously and said that there's a whole host of households with this will not work and the people that are currently making payments on their mortgages and there's no reason to write theirs down, people that are unemployed, it's very difficult and there's already competing programs to allow them deter or forebear their payments. There's a little wedge where it might work, I agree, but, again, the problem is it's so small. Bear in mind we have 14 different programs from the federal government for modifications, and those are just administration programs that doesn't include bank programs and Fannie and Freddie programs internally for these things. None of these really have worked all that well, and, so, when we're saying but at this time, it will work. No, I mean, let's say again I asked you to do more studies, which Mr. DeMarco said he's going to do. There's a wedge, but how big is the wedge and how effective will it be? And is government nimble? (Laughter) Come on, let's be honest. Federal government is about as nimble as a slug. I mean, they're well-intended, but they move very slowly and I'm worried about -- sorry, I didn't mean to put --

MR. FLEMING: I would just add that --

MR. GAYER: Go ahead, Mark.

MR. FLEMING: I would just add to this. I mean, I think there is uniquely some growing consensus for all of this here in the room. There is a time and a place for all of these choices. Principal reduction is one of the many choices. There's also the ability to develop objective net present value-based tests that look at lots of data and do sorts of things in very objective fashions to begin to try and make those decisions. Are they perfect? No. Is there any such thing as a perfect model? I'd like to find one if I could, but no, that doesn't exist. And, so, it shouldn't be excluded a priority. It should be used as one of the many things.

And we're looking at this and saying there are some great benefits that have come out of much of this stress. In the old days, was there such a thing as a net

present value test that a servicer was running when the guy went 90 days delinquent? There was one choice and one choice only, and what was it? We're going to take you to foreclosure. We didn't do deeds, we didn't do short sales, we didn't consider rent back programs or any significant amount of modifications. It was a very, very simple world, and, so, yes, the world is more complicated in response to what's happened and that's actually a good thing going forward for the industry that we're going to be much better about addressing the best way to handle these things. And the problem, we keep talking about "the problem," I don't know if there is any single or even multiple sets of policies that can solve such a big problem that we have other than time. Right now, one of the best policies we have is time, right? The economy will get back on track, incomes will grow, and what do house prices do when incomes grow? They grow, too.

And these things will all age themselves out, and time has two unique benefits to it as a policy. The first benefit, it's free. And the second benefit is you can't really go wrong, right? And these are two things that really hinder us in developing policies today is how much does it cost and what if we go wrong?

MR. GAYER: I want to open it up for questions. Again, keeping it nice and succinct. Right there in the blue vest, and there's a microphone coming around. Right there.

MR. O'NEIL: My name is Bill O'Neil and I'm an independent journalist. I'm the author of *"Ten Million Foreclosures: No Saving Private Ryan This Time."*

Well, I've listened very carefully. There's a gentleman from the Chinese Embassy here. I'm sure he's listening very carefully, as well. (Laughter) I hear microanalysis after microanalysis to try to solve a problem that is on several scales as difficult and deep as the Great Depression in terms of property value, the loss and the gap and the number of potential foreclosures. What I don't hear is any thinking, and I'm asking for macro numbers since we have backed off addressing unemployment and you look at the approach that was taken at the size and scale of the interventions during the

Great Depression to meet this problem both directly, intervening in the mortgage market, as well as putting unemployed people back to work and I tend to think that's where the answer is. And our state of political economy doesn't allow us to get to anything through the micro approach that can satisfactorily deal with this problem except "self-healing and time" and I don't think it's going to work.

MR. GAYER: Does anybody have a comment on that?

MR. O'NEIL: Thank you.

MR. SANDERS: Well, I wouldn't say we've done nothing on a macro level. Absolutely, you take the employment to population ratio in this country has stalled at 58.5 percent and it's been that way since September of 2009. Something needs to be done. Again, you have the Keynesian versus Austrian. There's different strategies of how do this, but the one thing I will say is that the fed, our federal reserve, and Chairman Bernanke has been very active in trying to help this problem out by pushing interest rates to almost Japanese levels, getting down to near zero. We're in a liquidity trap. So, nothing seems to be working, but, again, I caution you that if the fed is throwing everything and the kitchen sink at this problem and nothing is firing up, I'm not sure what other macro policies will do the same thing. It's a tough problem, absolutely.

MR. GAYER: Any other questions? Yes, somebody in the back over there.

MS. RICHARDSON: Hi, thanks for your comments. I'm Neila Richardson. There seems to be some consensus that principal forgiveness should be at least one tool in the toolbox. The question I have is: Should this tool be subsidized so it's chosen more frequently than the other tools?

MR. JAKABOVICS: I think to the extent that we now have some of the analytics, and we're going to disagree as to how good our modeling capacity in the current time point is, I think the numbers themselves would bear out when it would make sense and when it wouldn't make sense. Unfortunately, I mean, HAMP is not an

optimization model; it's basically a waterfall approach and you could then therefore decide to make principal reduction.

First and foremost, we just reduce principal and let it go. I don't think anybody's advocating for that. Either the question is: After you've reduced the interest rate, after you've extended term, what other options might you do with the residual amount of the value of the note, the unpaid principal balance to the value of the property do you simply forebear or do you forgive, and I think that's where the policy decision comes in, but to simply say we will only forebear, I think, is shortsighted. And, so, from my perspective, I think that given the existing waterfall, the existing operational comfort that exists with the HAMP process, it should be sort of fifth in line if you are sort of for A and for B in that regard. So, I think putting it after some of these other things that are less costly, but potentially as effective for sort of slightly underwater borrowers or slightly delinquent borrowers I think makes sense, but, again, you figure out where it fits in the process from a purely operational and MPV analysis at the pool level.

MR. FLEMING: Yes, I think I would echo since we've already talked about era models and Keynesian versus Austrian economic approaches, I'm going to throw out some welfare economics here. We talked a lot about what these things costs, and we've paid homage to the fact that well, there's probably some benefit out there, right? I mean, conceptually, we get the idea that fewer people get foreclosed upon, those homes aren't left vacant, and that's good for the existing homeowners around that foreclosed property, you don't have blighted neighborhoods and all these things. And, so, in theory, we should say well, the subsidy should be equal to encouraging the benefit to society, right? But the same could be said for any kind of modification or any kind of disposition tool that prevents the foreclosure from happening. There should be that welfare benefit to society that would offset the costs. Since stimulating the economy is all about trying to say well, we believe that there's a benefit to doing this, it costs us money, but there's a benefit to doing it. I think the problem that we land on is we often don't talk

about or measure these benefits and sort of include them in the calculations because it's extremely difficult to know what they are, but if we want to talk about subsidization, we want to talk about trying to get a better handle on measuring what the benefits of these programs are to society in a welfare economics framework.

MR. GAYER: Let's take one final question. Right up front.

MR. ICHES: Eddie Iches from HUD.

I wanted to ask you how this may play out in this political season. I mean, for example, there appear to be at least republicans against any kind of loan forgiveness, let the market work, and probably against a lot of other programs, and at least some democrats in favor of loan forgiveness.

MR. GAYER: I don't have any political analysts up here. Does anybody want to give a conjecture? Tony?

MR. SANDERS: The only thing I'll say is that, again, related back to my problem that I discussed before is that the banner headline, administration forces DeMarco to do principal reductions, even if they're like 5 out of 11 million households, I don't think anyone will read the second line in the story. I mean, there is kind of a headline impact there which they wouldn't do.

MR. GAYER: Andrew, alternative headline? (Laughter)

MR. JAKABOVICS: I mean, I --

MR. GAYER: There are reporters in the back, I think.

MR. JAKABOVICS: Yes, well, I'll leave it to them or their editors to write their headlines.

MR. GAYER: Yes, that's right.

MR. JAKABOVICS: The stories are right, and, unfortunately, you have to actually read a little bit into the details, and that's the challenge of all of this. I mean, as we see from the variety of opinions up here, housing is complicated, as are the

solutions, and, so, I think that the differences and you can tell even though he's all the way on the far right and I got situated not quite as far right --

MR. SANDERS: I voted for Carter. (Laughter)

MR. JAKABOVICS: I wasn't old enough to vote. So, I mean, I think the real issue is that, as you can see, the sides are not that far apart and, again, the number of folks that we're talking about is not staggeringly large, but to the extent that there's an opportunity to provide meaningful relief that was previously unavailable, I think it's worth getting it right most of the time, even if we're going to make some mistakes, and I think really the debate is are the mistakes too great or too frequent for us to go down that path, and I think the answer is no.

MR. GAYER: Well, before wrapping up, I just want to ask everyone to remain in their seats. Director DeMarco, we just want to have him be able to exit first, but I do want to thank Director DeMarco for speaking here and also for staying for all the comments and also thank my panelists for the conversation that ensued. Thank you very much. (Applause)

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