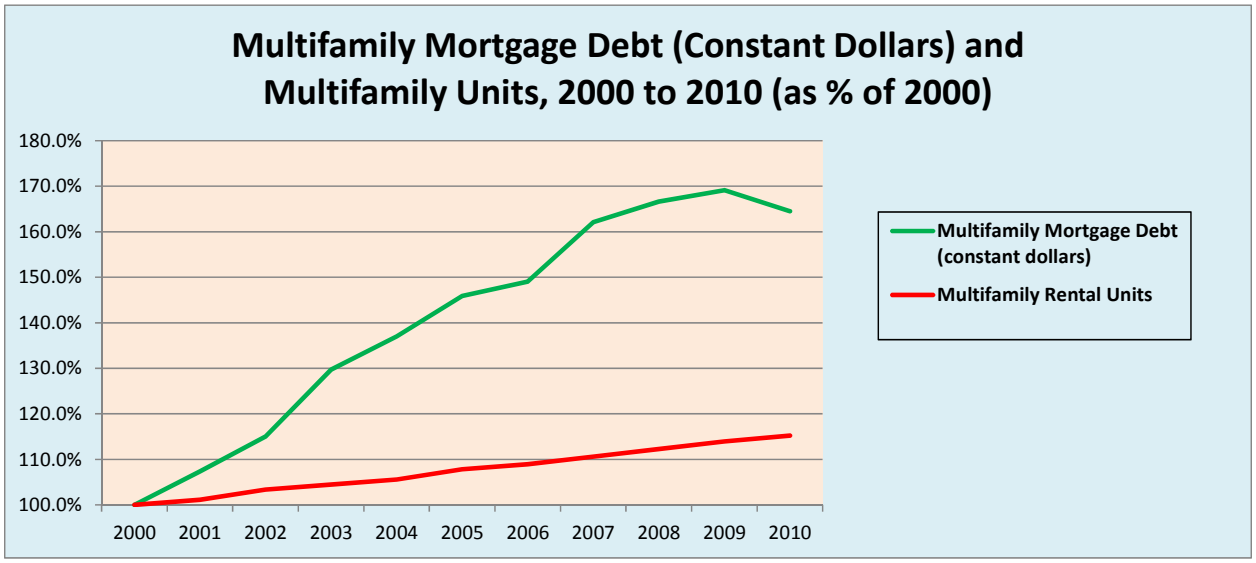
# Moving toward a Viable Multifamily Debt Market with No Ongoing Federal Guarantee

**By Tom White and Charlie Wilkins**

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## About the Authors

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## Executive Summary

One-third of Americans live in rental housing. Over 40 percent of that housing is "multifamily," meaning that the housing unit is located in a building of five or more units. Thus, some 12 to 13 percent of the total housing stock is multifamily rental housing.

Access to capital is crucial to the development and upkeep of this housing, just as it is to all American industries. The multifamily industry has a big advantage. The federal government provides these business owners favorable financing by offering federal guarantees on multifamily loans: in 2011, such a guarantee was provided for 73 percent of all new multifamily loans. The combination of these guarantees and artificially low interest rates—compliments of the Federal Reserve—led to an explosion of mortgage debt on the nation's multifamily stock. The heavy involvement of government-sponsored enterprises (GSEs) in multifamily mortgage finance has distorted the market in ways that may lead to serious future problems if not corrected.

The current federal guarantee of Fannie Mae and Freddie Mac multifamily lending activity poses serious risks to taxpayers and industry participants. The guarantee (1) drives out private competitors by backing loans at uncompetitive low rates relative to private-sector costs; (2) presses guarantors to issue imprudent loans in response to political pressure to increase affordability; (3) increases the use of debt over equity and of debt to finance weaker properties; and as a result (4) exposes taxpayers to risk when the next bottom of cycle hits. The stimulative effects of the guarantee will mask the developing weaknesses until it is too late.

This federal guarantee must be phased out, and the federal footprint in the multifamily lending industry should be restricted to a well-focused role for the Federal Housing Administration (FHA).[1] This paper addresses the concerns associated with phasing out the federal multifamily guarantee and prescribes a detailed roadmap for moving toward a fully private multifamily finance system.

**Continue the Status Quo?** Arguments defending the mortgage guarantee fail to justify maintaining the risky status quo. First, removing the guarantee will not raise rents: tenant rents are determined by supply and demand factors in individual neighborhoods—not by interest rates or apartment owners' costs. Second, removing the guarantee would not significantly affect lending to small properties most at risk to be lost to the housing stock as these need additional resources to be viable, resources not provided by a guarantee. Nor would it significantly impact smaller-property lending, as local lenders are competitive. Third, the federal guarantee is not needed to facilitate lending to Low-Income Housing Tax Credit (LIHTC) properties. Prudent private loan terms, described in the paper, would ameliorate any effects of removing the guarantee.

Multifamily lobbying groups argue that their industry must receive government financing. In our view, the industry proposals have little public policy merit and instead are basically attempts to obtain subsidies that benefit multifamily owners and lenders but impose costs and risks on everyone else.

We understand that the recent crisis has left a reasonable fear of future market liquidity, but such short-term fear should not drive the fundamental government policy as other liquidity options are available.

Currently we have a synchronized (rather than locally differentiated) multifamily mortgage market producing excessive leverage for many apartment owners who then are ill-equipped to absorb the potential shock of rising interest rates or declining property prices. This is a formula for future taxpayer losses unless we change course quickly. If we keep on the same path, once again the government will be privatizing gains and socializing losses.

**Moving Forward: Recommendations for Reform.** Policymakers should follow five key steps to help promote change and reduce guarantee risk to taxpayers and the industry:

1. Phase out the current GSE guarantees for multifamily housing over a period of five years. This fixed, predictable phaseout would provide the best inducement for private capital to reenter the multifamily mortgage market.

2. Reduce the multifamily footprint of the other federal actors (for example, the FHA and the Department of Agriculture) to an appropriately targeted role in below-prime lending..

3. Build on the strength of prime multifamily mortgage loans. Financial institutions should be subject to lower capital requirements for prime multifamily loans.

4. Privatize multifamily business units of the GSEs but do not include their accompanying portfolios in privatization transactions. Bundling units and portfolios would sacrifice taxpayer value.

5. Sell portions of existing multifamily portfolios in separate transactions to maximize taxpayer value. This could be done through a competitive bidding process.

**Summary of Our Views on the Multifamily Finance Industry**

**The Last 20 Years Are An Anomaly.** Since 1992, multifamily finance has been undergirded by guarantees issued by the GSEs. Investors (rightly, as it turned out) viewed these GSE guarantees as being federal guarantees, thereby converting the multifamily finance market from a market dominated by private capital and private risk-taking into a market dominated by the government with risk borne by taxpayers rather than by investors. This is a degree of federal government support that is unprecedented in multifamily and that is shared by no other commercial real estate class.

**The Last 10 Years Are Particularly Anomalous.** The GSEs began increasing their multifamily market share aggressively in the early 2000s. By contrast, in the 1992–2002 period, GSE participation in multifamily lending was much less significant.

**The Industry Likes This Anomaly and Wants It to Continue. We Disagree.** The industry views the GSE guarantees in a positive light because the GSE guarantees have allowed developers and owners of apartments to make more profits than they would have made had multifamily competed for capital on a level playing field. We have an opposite view. We believe that the GSE guarantees have had these undesirable effects:

- Over-allocation of capital to the multifamily sector, at the expense of other businesses.
- Overuse of debt in the multifamily sector, as opposed to equity.
- In particular, overuse of debt in weaker multifamily properties.
- Exposing taxpayers to losses when the next bottom-of-cycle hits.
- Exposing the multifamily industry to the risk of political meddling in which properties receive financing and on what terms.

**Prime Lending in Multifamily Is Safe.** In our November 2011 paper, we demonstrated that prime multifamily loans, such as those guaranteed by the GSEs from 1992 to 2004, are low-risk loans suitable for securitization to retail investors.[2] Appendix C is our definition of prime multifamily mortgage loans from our November 2011 paper. It should be stressed that we use the term “prime” to refer to the loan

rather than to the property on which the loan is made. For example, a loan on a newer, very high-quality property in an excellent location could be below-prime if the loan amount is too high. Similarly, a loan on an older, smaller property in a less-desirable location, could be a prime loan if the loan amount and other key business terms are prudent. In the mildly stressful conditions in which multifamily found itself in the 2007–09 period, serious delinquency rates in multifamily loans with GSE guarantees stayed in the 1 percent range or lower. Accordingly, prime multifamily mortgage loans are investment-grade assets with low risk of loss. The same cannot be said for below-prime multifamily mortgage loans.

**Below-Prime Multifamily Lending Is Risky.** Similarly, in our November 2011 paper we demonstrated that below-prime multifamily loans, such as those made by the Wall Street conduits in the mid-2000s, are on the order of five times as risky as prime multifamily loans. That is, when one moves from strong markets to weaker markets, from newer properties to older properties, from stabilized properties to properties in transition, and from completed/leased-up properties to properties to be constructed, risk does not increase slightly, risk increases *geometrically*. The same is true when one moves out the risk curve by lending at higher loan-to-value ratios and at lower debt-service-coverage levels. In the mid-2000s, many lenders made below-prime multifamily loans on a nonrecourse basis, with relatively high leverage; these were bad loans by any measure. Traditionally, below-prime multifamily loans have been made with recourse, at relatively low leverage, and only to borrowers with significant other assets. We believe that below-prime multifamily lending should return to those principles.

**Why the GSEs Succeeded in Multifamily.** We agree with the industry that the GSE multifamily portfolios have been successful and have not, to date, resulted in losses to taxpayers. However, we point out that from 1992 until recently:

- The GSEs were able to concentrate on prime multifamily mortgage loans, and for the most part did so (generally using their pricing advantage to obtain a large share of prime loans, rather than to expand into below-prime loans).
- The GSE affordable housing goals did not, for the most part, result in pressure on the GSE multifamily business units to loosen underwriting standards. By contrast, the GSE affordable housing goals had exactly that effect on the GSE single-family business units.
- The multifamily industry has experienced a sustained boom, with only a mild downturn in 2007–09. The last bottom-of-cycle in multifamily occurred in 1989–91.
- Multifamily interest rates have steadily trended downward and today are at an all-time low.

In other words, in hindsight the last 20 years were a very favorable time to have engaged in multifamily lending. Another significant factor is that, in 1992, the industry was recovering from bottom-of-cycle conditions in which both GSEs sustained heavy losses in multifamily. This had two significant effects on the GSEs. The first was that management was very risk-conscious and careful in its multifamily lending efforts. The second was that neither Congress nor the executive branch was inclined to push the GSEs toward more multifamily lending or toward more risky multifamily lending.

**Why It Is Particularly Risky to Continue the GSE Multifamily Guarantees Now.** We agree with the industry that the GSE multifamily guarantees of the past have not, at least not to date, exposed taxpayers to significant risk. That said, we think that the current GSE multifamily book of business *will* produce losses to taxpayers during the next bottom of cycle. Potential new GSE multifamily guarantees (going forward) are, however, an entirely different matter, for at least these reasons:

- The current GSE affordable housing goals (put in place in the 2008 HERA legislation) are structured so as to put pressure on GSE multifamily underwriting criteria. Thus, there is every reason to expect that, if the GSE guarantees continue, the GSEs will guarantee increasing amounts of below-prime multifamily loans, exposing taxpayers to very large risks.

- Absent economy-wide deflation (which would be devastating for multifamily and for commercial real estate generally), interest rates can only rise from here.
- There is much more leverage in the multifamily sector today than in 2000. As discussed in more detail later in this paper, we calculate that there was 60 percent more multifamily debt outstanding, per unit, in 2010 than in 2000.

In summary, in 1992, multifamily was emerging from bottom-of-cycle conditions, the GSEs were under no pressure to relax multifamily underwriting standards, and the industry was about to experience an extended boom, in which interest rates would drop dramatically. Currently, all of those factors are operating in reverse.

**In Short, Taxpayers Are at Risk.** With the GSEs in conservatorship, taxpayers have an opportunity to get out of the multifamily mortgage lending business. If taxpayers do not take this opportunity to stop the GSE multifamily guarantees now, taxpayers will later regret their failure to act now.

It should also be noted that that government guarantees of private loans have a public cost, even if fees charged to borrowers completely cover the taxpayers' risk of loss. The reason is that the resulting government-guaranteed investment securities compete with Treasury securities, thereby increasing interest costs on the public debt. In our view, this is one more reason to get the government out of the multifamily mortgage business.

**Withdrawal of the GSE Multifamily Guarantees Will Return the Multifamily Capital Markets to Their Natural State, Dominated by Private Capital and Private Risk-Taking.** Prime multifamily mortgage loans will experience little or no drop in availability but will experience a modest rise in interest rates, to levels currently experienced by prime loans in other commercial real estate sectors. Below-prime multifamily mortgage loans will experience variable availability (good availability in strong capital market conditions, moderate availability in normal capital market conditions, and weak availability in stressed capital market conditions), which we think is as it should be. Similarly, below-prime multifamily mortgage loans will experience variable interest rates (relatively low spreads versus prime loans in strong capital market conditions, moderate to significant spreads in normal capital market conditions depending on loan-specific risks, and very high spreads in stressed capital market conditions); again we think this is as it should be. Said differently, after the federal guarantee is phased out, mortgage financing availability and pricing in multifamily will mirror other commercial real estate asset classes.

In this paper, we will use the term MMBS to refer to multifamily-only mortgage backed securities, and we will use the term CMBS to refer to MBS backed by other types of commercial real estate loans (which may include multifamily loans).

Although no one can predict exactly how markets will respond to opportunities resulting from the removal of market distortion, we do know from all that history teaches us that capitalism and the free market system will effectively and creatively meet the needs of apartment financing once given the opportunity.

# I. Introduction

**The Genesis of This Paper**

In November 2011, we released a paper arguing for phasing out the current federal guarantee of Fannie Mae and Freddie Mac (the GSEs) multifamily lending activities and for restricting the federal footprint in the multifamily lending industry to a well-focused role for FHA.[3] We wrote this paper because no one in the industry was advocating, or for that matter even discussing, the merits of returning to a fully private multifamily finance system. Similarly, no one in the industry was discussing the risks to taxpayers and to the industry of continuing the status quo. Conversely, we thought, and continue to think, that the case for ending the federal guarantee is very strong.

The American Enterprise Institute convened a presentation of our November 2011 paper and provided partial funding for additional research.

In August 2012, we sent a letter to the Federal Housing Finance Agency in response to its request to the GSEs to analyze the potential for privatization of their multifamily business units.[4]

Discussions of our November 2011 paper with industry participants indicated a need to extend the discussion to encompass the practical questions of how such a phaseout might best be accomplished and of how multifamily lending might function in the absence of a federal guarantee. The purpose of this paper is to address those questions, based on further research including interviews with a large number of experts in the multifamily finance and capital markets fields. Our interviewees are listed in appendix A. The opinions expressed in this paper are those of the authors but were sharpened and informed by our discussions with interviewees.

Readers interested in mortgage debt issues regarding subsidized housing (other than LIHTC properties) should see our November 2011 paper. In the balance of this paper, we will be discussing loans on market-rate apartment properties.

In the interest of clarity, we point out that the industry continues to advocate strongly for continuation of the status quo in one form or another. Most (though not all) of our interviewees would prefer to see the status quo continued. Accordingly, readers should not assume that interviewees agree with the recommendations that we make in this paper. Rather, interviewees contributed expertise, gave us the benefit of their experience, pointed us to issues we had not considered, challenged us to sharpen our analysis, and generously engaged in the debate with us, while generally continuing to advocate for continuation of the federal guarantee.

**The Potential End State: A Multifamily Mortgage Market With No Federal Guarantee**

We believe it is appropriate to start by describing what the end state might look like. The future that this paper will investigate has at least the following important dimensions that differ markedly from the status quo:

- **Except for a Well-Focused FHA, No Federal Guarantee for New Multifamily Debt.** By contrast, in 2011, a federal guarantee (through FHA or a GSE) was provided for 73 percent of all new multifamily loans.[5] At the end of 2011, 42 percent of outstanding multifamily mortgage debt had a federal guarantee through the FHA or a GSE.[6]

- **GSE Federally Guaranteed Multifamily Origination Phased Out.** By contrast, in 2011, the GSEs originated 57 percent of new multifamily mortgage debt.[7]

- **Existing GSE-Guaranteed Multifamily Loans Wound Down.** By contrast, at the end of 2011, GSEs hold or have guaranteed roughly 41 percent of existing multifamily debt.[8]

- **FHA Active but Well Focused, Well Managed, and Restricted to Targeted Below-Prime Loans.** At the moment, the FHA is out-competing private lenders and (to an increasing extent) the GSEs for loans to properties that would qualify for prime loans outside the FHA. It also is offering better terms and higher loan amounts than many properties can achieve for prime non-FHA loans (for example, offering below-prime loans for no good reason, to borrowers who can obtain prime loans elsewhere). We think that these are bad outcomes for the same reasons that we object to the current federal guarantee for the GSEs. We think it is time to revisit what types of business the FHA should be authorized to pursue and time to revisit the FHA's underwriting standards, but those are topics for another discussion.

- **Secondary Market for Multifamily Mortgage Loans.** Currently, most secondary market activity for multifamily loans takes the form of GSE-guaranteed (that is, taxpayer-guaranteed) multifamily-only mortgage backed securities (MMBS). In the future we envision, there will be greater participation by private (non-government-guaranteed) MMBS and commercial mortgage-backed securities (CMBS), with this form of secondary market activity picking up much, perhaps most, of the volume now generated by GSE-guaranteed multifamily MMBS.

- **Increase in Primary Multifamily Lending.** We also expect that, once the current GSE guarantees are phased out, various sources of primary-market lending (loans that are not planned to be securitized) will increase their lending in the multifamily sector.

By contrast, until the 1990s, the multifamily debt markets operated without a federal guarantee (except for a small amount of FHA financing). Indeed, the GSE market share in multifamily did not expand dramatically until after 2000. Historically and currently, the debt markets for office, retail, industrial, and hotel properties operate without federal guarantees.

**A Future with No Federal Guarantee for Multifamily**

From this standpoint, the federal guarantee (implicit from 1992 until 2008 and explicit since GSE conservatorship began) can reasonably be seen as an anomaly. Similarly, a return to a multifamily debt market without a federal guarantee must be seen as a practical possibility. Whether or not one thinks that change would be well-advised, we should consider how such a multifamily financing system could be made to work most efficiently.

**Price and Availability.** It is useful to think about the multifamily debt market in three dimensions: the price at which capital is available, whether capital is available generally, and the extent to which capital is available to properties at various points on the quality curve. Both we and those we interviewed believe that if the current federal guarantee were discontinued, the effect on price would be relatively modest and that the primary effect would be on capital availability.

Regarding the effect on price, we believe that in the absence of the federal guarantee, multifamily interest rates would rise modestly for prime loans, in the range of 25 basis points for the highest-quality prime loans and in the range of 35–65 basis points for more typical prime loans. Because we do not think that a federal guarantee should be extended to below-prime loans in any circumstances (except for a small role for the FHA), we do not consider the impact on below-prime multifamily loans. That said, because the loan-loss risk for below-prime loans is geometrically higher than in prime loans, we can expect that below-prime loans would carry interest rates well above those for prime loans.

- **Price.** The industry's benchmark for price is to compare the interest rate on the loan to the then-current rate for 10-year Treasury notes (typical multifamily loans have a 7–12-year maturity term, so the 10-year Treasury rate is a good benchmark). Our commentators indicated that typical spreads have ranged from 75 basis points to 200 basis points, with short-term departures above and below that range. For the period from July 2000 through August 2012, the spread of single-family mortgage rates (as reported by Freddie Mac) to 10-year Treasuries averaged 179 basis points.[9] We understand that multifamily mortgage interest rates have tracked single-family mortgage interest rates relatively closely and thus, for purposes of this paper, we will assume that the presence of the GSE multifamily guarantee has kept multifamily mortgage interest rate spreads in the 175 basis point range. In the absence of a federal guarantee, spreads would widen in comparison to this historical range. The interesting question is: by how much?

- **Potential Interest Rate Increase for Prime Multifamily Mortgage Loans.** In this paper, we have approached the price question by looking at spreads between Treasury securities and corporate bonds, focusing on types of corporate bonds that have a risk profile similar to individual prime commercial real estate loans. We understand that investment-grade commercial mortgage loans are generally thought to be roughly equivalent in risk to BBB-rated corporate bonds. The spread of BBB corporate bond rates against Treasury obligations of the same maturity varies but, for July 2000 through August 2012, has averaged 237 basis points.[10] That is, in the absence of a federal guarantee, we would expect multifamily mortgage interest rates (for prime loans) to fall in the same general range as BBB corporate bond rates. A simple comparison between the spread of BBB corporate bonds to Treasuries (averaging 237 basis points) and the spread of single-family mortgage rates to Treasuries (averaging 179 basis points; see the previous bullet) suggests that the interest rate advantage to prime multifamily borrowers—because of the GSE guarantee—is in the 50 to 60 basis point range.

- **An Alternative Estimate for Prime Multifamily Loans.** Pools of prime multifamily mortgage loans, or individual multifamily mortgage loans with particularly strong characteristics such as a loan-to-value ratio (LTV) of 60 percent or below, might be equivalent in risk to A-rated corporate securities. The federal guarantee gives the GSEs an interest rate advantage roughly in the 35–50 basis point range when measured against A-rated corporate securities.[11] The GSEs do not pass that entire rate advantage to borrowers; they retain some of it as excess profit above the level of profit that would be acceptable to a non-GSE competitor.

- **Likely Impact on Interest Rates.** Accordingly, for especially low-risk prime multifamily loans (with risk characteristics similar to those of A-rated corporate securities), if the federal guarantee were withdrawn, the spread to 10-year Treasuries would likely rise, but probably by no more than 25 basis points. For more typical prime multifamily loans (with risk characteristics similar to those of BBB-rated corporate securities), the discussion above suggests to us that in the absence of a GSE guarantee, interest rates would rise modestly, perhaps by 35–65 basis points.

- **Interest Rate Effect on Below-Prime Multifamily Mortgage Loans.** The great majority of GSE multifamily loans have had what we call prime characteristics. Yet, it is clear that some GSE multifamily loans had below-prime characteristics, particularly in the 2005–07 boom years. Because we believe the GSEs should not have securitized any below-prime multifamily loans, we do not see the potential interest rate impact on below-prime borrowers as a factor that should affect the public debate about continuation of the GSE multifamily guarantee. That said, however, it seems clear that for any particular below-prime multifamily borrower who might otherwise have obtained a GSE-guaranteed loan, the withdrawal of the GSE guarantee would have a material adverse impact on loan pricing, likely in the 100 to 300 basis point range. As we have

noted, we see this as removal of a loophole or of an undeserved windfall and not as something that should receive any weight in the public debate.

Regarding the effect on availability, one effect of the current federal guarantee is that multifamily loans have been continuously available even during times in which loans generally were not available for other commercial real estate asset classes (for example, early in the single-family financial crisis). Another effect has been to reduce differences in loan terms across the spectrum of multifamily loan quality. In the absence of a federal guarantee, we expect that multifamily loans would be difficult or impossible to obtain periodically when global financial crises occur. We also expect that higher-risk loans would experience loan terms that better reflect the underlying loan-loss risk (in normal or stressed market conditions, lower-quality loans would experience less favorable loan terms than under the status quo). We discuss the question of capital availability across the multifamily risk spectrum in the next two bullets and also in the discussion below titled "A Thought Experiment Regarding Capital Availability."

We discuss the question of capital availability during global financial crises in sections VIII, IX, and X.

- **Availability for Multifamily Generally.** The GSE era (roughly 1992 until the present) has been a time of unprecedented near-constant availability of financing for multifamily properties. By contrast, in other commercial real estate asset classes, capital is periodically difficult or impossible to acquire for even the best properties. For example, when Russia defaulted on its debt in August 1998, the capital markets basically froze for two to three months while global investors evaluated the risk that the world financial system would melt down. During this period, governments (those that were considered stable) could sell debt, but almost no one else could. In the absence of a federal guarantee, availability would mirror other commercial real estate asset classes. We point out that this periodic lack of availability of financing may be necessary for a healthy market; by contrast, federal dominance of the single-family loan market led to 16 years with no correction, followed by a massive correction that threatened to bring down the world financial system.

- **Relative Availability for Lower-Quality (but Still Prime) Multifamily Loans.** The GSE era has been a time in which lower-quality (but still prime) multifamily loans have been made on terms that are less differentiated versus higher-quality loans than is the case in other commercial real estate asset classes. In the absence of a federal guarantee, availability would mirror other commercial real estate asset classes.

To a large extent, the discussion about whether a federal guarantee should be provided for multifamily debt is a conversation not about interest rates but rather about whether there should be more even availability of capital (both over time and to riskier borrowers), than would be the case in a purely private system. The policy question is whether the value of achieving those results is sufficient to justify the risk to taxpayers and the inevitable distortions inherent in a large government footprint. See our earlier paper[12] for a discussion of the policy question; this paper instead will attempt to shed light on how much capital availability volatility would result from a shift to a purely private system.

**A Thought Experiment Regarding Capital Availability.** One way to think about this possible future is to realize that, in the absence of any other changes, removing the federal guarantee would result in multifamily financing markets that behave very like the debt markets for other commercial real estate asset classes. A useful example is the debt market for strip shopping centers anchored by grocery stores. The following table illustrates how availability of first-mortgage financing has varied for this asset class under normal market conditions (March 2012), stressed market conditions (March 2009), and boom

market conditions (March 2006); this information is based on a conversation with one of our commentators.

**Table 1. First Mortgage Availability and Pricing Available for Strip Shopping Centers Anchored by Grocery Stores.**

| | March 2006 (Boom Conditions) | March 2009 (Stress Conditions) | March 2012 (Normal Conditions) |
|---|---|---|---|
| **Primary Market, Strong Anchor** | Readily available | Readily available | Readily available |
| **Secondary Market, Strong Anchor** | Readily available on prime terms | Thin market, high spread | Readily available at higher spread |
| **Secondary Market, Weak Anchor** | Readily available on near-prime terms | Not available, except with recourse | Available, but very thin market |

In apartment terms, the equivalent of "primary market, strong anchor" would be "primary market, class A or B" (clearly, prime loans); "secondary market, strong anchor" would translate as "primary market, class C or secondary market, class A or B" (also prime loans); "secondary market, weak anchor" would translate as "class C, outside primary markets" (some of which would be prime loans, with a larger percentage being below-prime).

In summary, without a federal guarantee, the multifamily market would find mortgage capital availability to be similar to what is shown in table 1: good availability at favorable pricing in strong market conditions, good availability at variable pricing (based on risk) during normal market conditions, and poor availability at high pricing (with the riskiest properties not able to obtain nonrecourse financing) during times of stress.

We see the preceding as an acceptable outcome from a policy standpoint and more desirable than the status quo from the standpoint of taxpayers.[13] Multifamily industry participants are less enthusiastic, because this potential future means lower capital availability than in the status quo. We see table 1 as an indication of what normal capital availability looks like; by that standard, multifamily has enjoyed above-normal capital availability for the past 20 years.

**Key Industry Concerns About a Future with No Federal Guarantee.** Specifically, our commentators raised the following concerns.

*Capital Availability for Small Properties, in Small Local Markets, and in Weak Local Markets.* Here we are speaking of loan amounts below about $1 million, properties in markets with populations below about 250,000, and properties in local markets with prevailing rental vacancy rates above about 8 percent. There is policy interest in these mortgage market segments because many low-income tenants live in the affected properties. Under the status quo, GSEs can (at least in theory) make these types of loans. However, the extent to which the GSEs *actually* make these types of loans is not clear; for reasons discussed below and in Section IV, we doubt that any national lending platform can be competitive and efficient in these market segments. On the other hand, the GSEs historically have purchased smaller loans

from banks, freeing up capital so the original lenders can make more such loans; we think that is a useful model, but we also think that a federal guarantee is not required to pursue that approach.

We also question whether nonrecourse first mortgage loans are the right solution for the market segments that have policy interest. We should first recognize that, in general, small properties, properties in small markets, and properties in weak markets have relatively lower value and relatively volatile cash flow and thus have relatively less capability to service and repay standard commercial mortgage debt. Most loans to such properties are made with recourse to the owner, and most lenders (correctly, in our view) view the owner's balance sheet—and not the property itself—as the primary collateral. That is, these are largely *personal* loans as opposed to *real estate* loans. So, at least in our view, it is appropriate—and certainly not surprising—that such properties are only infrequently financed through standard commercial real estate lending channels. Accordingly, our view is that a federal guarantee of commercial mortgage debt would be a wholly inappropriate method for addressing the financing needs of these types of properties. Said differently, the argument that a federal guarantee is needed to better serve these types of properties is hollow.

In summary: we do not believe that the status quo works very well for small properties, for small local markets or for weak local markets, and we think that (rather than try to preserve something that does not work very well) it makes more sense to see if there are innovations that could work better. See the related discussion in section IV of this paper.

*Capital Availability in Stressed Market Conditions.* In the status quo, the industry has become accustomed to having debt capital available in all market conditions to properties at most points on the quality curve. We will address this issue (often referred to as a "liquidity backstop" in the industry) in some detail later in this paper. See sections VIII, IX, and X.

In summary, we see no reason why capital should be available for multifamily in all market conditions or why capital should be generally available to riskier properties. If there were a defined "prime multifamily mortgage loan" concept, such as we outlined in our earlier paper, it would be possible for the government (the Federal Reserve or perhaps the Treasury Department) to purchase senior MMBS secured by prime multifamily mortgage loans,[14] during periodic financial crises, and without requiring any federal intervention in the multifamily debt markets during normal market conditions.

*Reducing the Government Footprint in the Multifamily Mortgage Market.* The status quo, in which the GSEs, the FHA, Ginnie Mae, and the USDA have powerful pricing advantages over private competitors, perpetuates the current large government footprint and prevents the reentry of private lenders and investors. GSE reform must begin quickly, and proceed predictably, for private lenders and investors to reenter the multifamily debt market. GSE reform also must be coordinated with reform of FHA and other government actors in the multifamily sector.

*Potential Overregulation of the Private-Label Commercial Mortgage-Backed Securities Market.* Reducing the government's provision of guarantees for multifamily mortgage debt must also be accompanied by regulation of the MMBS and CMBS markets that is appropriate and that will support the reentry of private lenders and investors into the multifamily market. Unfortunately, a variety of regulatory proposals would stifle the reemergence of the "private-label" (non-government-guaranteed) MBS markets if implemented.[15]

*Recent Position Papers Issued by the National Multi Housing Council and the Mortgage Bankers Association.* These industry papers[16] call for an ongoing federal role to ensure capital in all multifamily markets at all times. The objective of liquidity and stability is flawed and dangerous.

Proposing permanent intervention in the markets by creating an artificial system of federal support is flawed. In a market and industry that is uniquely local, such a system would pose grave threats. A centrally managed system will not protect the industry or economy from market readjustments, rather only mask and postpone developing imbalances. These include changing product type and geographic preferences. As in plate tectonics, smaller quakes are preferable to the big one.

The industry wants to be protected from what it believes to be extraneous financial circumstances (example: the Russian debt crisis). But this argument is flawed; see sections VIII, IX, and X, in which we find no compelling reason to provide special protection to this particular industry.

More practically, the industry welcomed the lower interest rates that resulted from the recent crisis and want to capture the value of lower rates with a government guarantee. As we note elsewhere, this has fueled an increase in debt and a reduction in equity.

The industry's call for liquidity and stability at all times will increase the fragility of the marketplace. The inevitable result will be the privatization of profits and the socialization of losses.

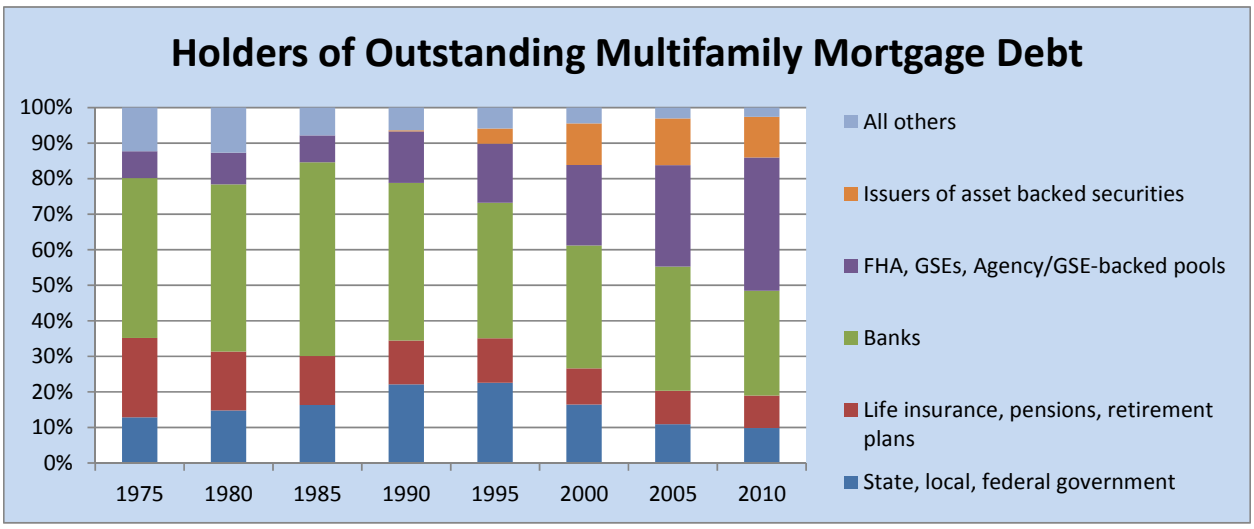
## II. An Overview of the Multifamily Debt Market

Since 2006, roughly $800 billion of multifamily mortgage debt has been outstanding.[17] In any given year, roughly $60 to $100 billion of new multifamily mortgage debt is originated.[18] Because most multifamily loans are relatively short term (a typical loan is due in 10 years or less, though its monthly payments typically are determined using a 25-year or 30-year amortization schedule), most of this $60 to $100 billion of annual volume represents refinancing of existing loans that are maturing.

Industry experts expect that the upcoming annual maturities of multifamily debt will be relatively low during 2012 and will peak in 2017. The best available data are for multifamily mortgages held or guaranteed by the GSEs, available in their quarterly 10-Q filings.

Market shares varied somewhat over time, as figure 1 shows.

**Figure 1**




Source: Federal Reserve flow of funds data.

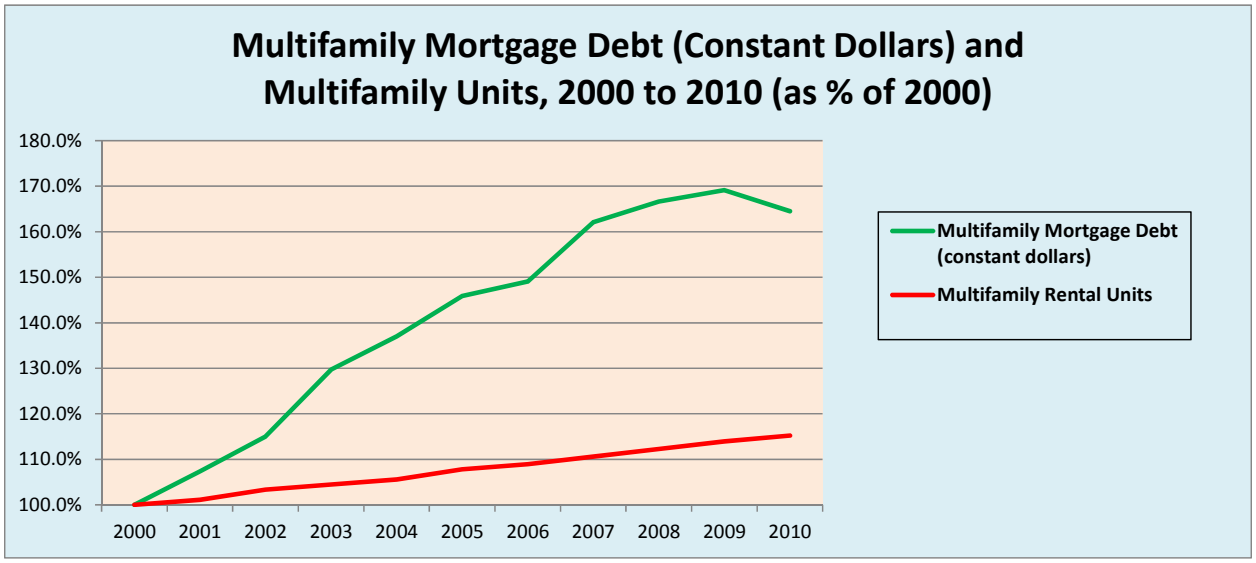
Focusing on the period from 1990 to 2010 (the current GSE multifamily programs started around 1992), it is evident that secondary market lenders (FHA, GSEs, CMBS backed by government agency or GSE guarantees, and private-label CMBS) gained significant market share, mostly at the expense of banks:

- Government direct loans[19] accounted for 20 percent of the market in 1990 but dropped to 15 percent in 2000 and to 10 percent in 2005.
- Life insurance companies, pension funds, and retirement plans maintained a relatively constant share in the 10 percent range. These lenders focused on the highest-quality properties in the largest markets.
- Banks maintained a market share of 45 percent in 1990, dropping to the 30 to 35 percent range thereafter. Bank loans tend to have short maturities of three to five years and floating interest rates.
- The aggregate share of FHA, the GSEs, and asset-backed securities guaranteed by GSEs or government agencies rose from 15 percent in 1990 to 35 percent in 2010. Most of this expansion occurred between 2000 and 2010.
- Other issuers of asset-backed securities became a significant force in the market (by acquiring multifamily mortgage loans for future CMBS issuance); their share was near zero in 1990, in the 15 percent range in 2005, and in the 10 percent range in 2010.

The key issue is how to best revive private-label MMBS and CMBS. From the preceding, it seems clear that to shrink or eliminate the GSE footprint in the multifamily debt markets, it will be necessary to grow the footprint of non-GSE MMBS and CMBS.[20] Currently, the private-label MBS markets are struggling at best. They were vibrant (in hindsight, clearly too vibrant) in the bubble years. One good way to think about a sound future system with no federal guarantee is to consider how to create and sustain a viable private-label MBS sector for multifamily financing.

During 2000–07, although multifamily *construction* continued at a normal pace, multifamily *lending* went through a boom that, though not as spectacular as the boom in single-family lending, still was quite remarkable. During these years, the total amount of outstanding multifamily mortgage debt rose from $402 billion to $785 billion,[21] a 95 percent increase (a 62 percent increase, adjusted for inflation[22]). Yet during the same period, the total number of multifamily rental units increased roughly 12 percent.[23] This boom was financed partially by the GSEs and partially by the Wall Street CMBS issuers. Essentially, the total number of apartments did not change very much, but the total debt outstanding went up significantly, considerably increasing leverage across the multifamily rental stock. (See figure 2.)

**Figure 2**




Sources: Authors' analysis based on Federal Reserve flow of funds data, Census Bureau data, and Consumer Price Index (All Urban Consumers) data.

Although one cannot conclude from the rise in multifamily mortgage debt described in the previous paragraph and chart that any particular multifamily property is overleveraged, the entire multifamily sector is clearly much more heavily leveraged today than was the case in 2000. The recent leverage boom has some important implications:

- Common sense suggests that this expansion of leverage has driven prices upward and thus that there is a risk of a price correction.

- Borrowers whose loans were originated during the housing bubble years are likely to find it difficult or impossible to "refinance out" (to be able to borrow enough to pay off the maturing loan) unless the borrower comes up with significant equity.

- The industry consensus is that the worst multifamily loans were made in the 2005–07 timeframe. Wall Street CMBS multifamily loans originated in this period currently have a delinquency rate in the 15 percent range,[24] versus a serious delinquency rate under 1 percent for multifamily loans made by the GSEs.[25] By contrast, our industry experts indicated that normal delinquency rates for multifamily loans are in the 1 to 3 percent range. So bubble-year multifamily loans are bad by historical multifamily standards, but nowhere nearly as bad as bubble-year single-family loans.

- Accordingly, industry observers worry about these particularly large cohorts of likely problematic refinancing:
  - 2015 maturities of 10-year loans made in 2005.
  - 2016 maturities of 10-year loans made in 2006.
  - 2017 maturities of 10-year loans made in 2007.

- Some industry observers worry about risk to tenants if overleveraged owners are not able to refinance out. We disagree; see sections VIII and IX.

- Some industry observers think that the current situation (very low interest rates, with multifamily considered a favored asset class) may be creating a pricing and leverage bubble that—if the status quo is allowed to continue—will lead to painful corrections in a few years. We share that concern.

One interpretation is that, since 2000, there has been a significant substitution of debt for equity in the apartment business. For example, the GSEs have made significant loans to multifamily real estate investment trusts (REITs), likely replacing what would have been equity financing through offerings of REIT shares. If so, it is time for additional equity capital to be invested to pay down debt that exceeds prudent levels.

## III. Key Questions

This section will discuss questions that we and our interviewees identified as being important to how well the multifamily debt markets would fare without a federal guarantee.

The first set of questions has to do with the basics of multifamily lending.

**Why Did the GSEs Succeed in Multifamily?**

1. The GSEs focused on prime multifamily loans.
2. The GSEs developed best-of-class lending practices, including delivery systems based on networks of expert private lenders.
3. In hindsight, 1992 to the present was a very favorable time to be in the multifamily lending business. The period started just after the most recent multifamily bottom-of-cycle (1989–91). Although conditions in 2007–09 were devastating in the single-family market, multifamily fundamentals (demand, rent growth, and cash flow growth) stayed relatively strong. During that same period (1992 to the present), multifamily interest rates remained stable and low and indeed today are at an all-time low level.
4. The GSE affordable housing goals that were in effect from 1992 to 2008 counted essentially all multifamily lending as "affordable."[26] Accordingly, *prime* multifamily loans contributed heavily to goal achievement, and there was no need to expand multifamily lending into below-prime loans or to loosen multifamily underwriting standards to achieve the goals; all that was needed was to guarantee as many prime multifamily loans as possible (that is, the GSEs largely gained market share by competing on price while maintaining loan quality).
5. It is important to understand that multifamily loans were quite "goals-rich" and, accordingly, that multifamily lending contributed heavily to the GSEs' achievement of their overall affordable housing goals. The Government Accountability Office reported: "For example, in 2008 the enterprises' multifamily business, which represented 4.5 percent of the enterprises' total unpaid principal balance financed, accounted for 32 percent of the units that met the low- and moderate-income total, 27 percent of units that met the underserved areas goal, and 39 percent of the units that met the special affordable goal."[27] The GSEs thus had a goals-related incentive to make multifamily loans generally. As noted earlier, the GSEs chose to pursue this incentive by making (for the most part) prime multifamily loans.
6. It should also be noted that Congress changed the affordable housing goals structure in the 2008 Housing and Economic Recovery Act legislation. In implementing the new goals structure, the FHFA established multifamily-specific goals, one for units

affordable at 80 percent of area median income (AMI), and one for units affordable at 50 percent AMI. We pay particular attention to two features of the new goals structure: first, there is now a separation between single-family and multifamily goals; and second, the targeted AMI levels continue to drop (the 80 percent AMI threshold was originally 90 percent AMI in the 1990s, and the 50 percent AMI threshold was 60 percent AMI until recently). Our view is that both of these features are likely to lead to pressure on multifamily underwriting standards, if the status quo is allowed to continue. That is, if the federal guarantee is continued, the risk of downward pressure on multifamily underwriting standards is very high in contrast to the past 20 years, when such pressure was modest at best.

**Do Investors Need Better Loan-Level Information?** Do existing securitization platforms provide adequate loan-level information at origination and on an ongoing basis? If not, what improvements are needed? Our commentators informed us that CMBS issuers have already strengthened investor information generally, in response to market demand.

**What Improvements, If Any, Are Needed Regarding Loan Documents?** Our commentators thought that current CMBS documents are adequate, having already been strengthened in response to market pressure. See, however, the comments under "What Improvements, If Any, Are Needed Regarding Servicing Practices?," some of which point to potential weaknesses in legal documents.

**What Improvements, If Any, Are Needed Regarding Due Diligence and Underwriting Practices?** Our commentators agreed that recent GSE due diligence and underwriting practices provide an appropriate benchmark.

**What Improvements, If Any, Are Needed Regarding Servicing Practices?** Several commentators remarked that many borrowers currently are reluctant to pursue private-label MBS financing because of bad servicing experiences with loans currently in 2000s-vintage private-label CMBS. This concern took two forms:

1. For performing loans, some borrowers find nobody home when a normal servicing action is needed, such as lender approval of a new commercial lease.
2. For nonperforming loans, conflicts between senior and junior security holders have frequently led to gridlock in resolving nonperforming loans.

It seems that private-label CMBS issuers are going to have to change to overcome this objection. Our commentators had disparate views on this topic. Those in the private-label MBS industry generally thought that all necessary changes have been made. Those outside the industry generally thought these servicing flaws were fatal and would have to be corrected for private-label MBS to once again regain market share in multifamily.

**What Is the Role for Prime Multifamily Mortgage Loans?** In our first paper, we made the point that what we call prime multifamily mortgage loans (similar to those made by the GSEs in 1992–2012) have very low risk in an absolute sense and on the order of one-fifth of the risk for below-prime loans (similar to those made by the Wall Street conduits in the recent boom years).

*Is Below-Prime Risk Priced Accurately Today?* We asked our commentators whether the capital markets currently recognize the risk difference between prime (GSE-style) multifamily loans and below-prime (boom-year conduit-style) multifamily loans. The responses indicated some awareness of this distinction, but because of the current federal guarantee, investors in GSE-guaranteed securities do not have to think about this issue. Investors are protected by the federal guarantee, and for that reason, the real estate risk

does not matter to those investors. The real estate risk does, of course, matter to the GSEs (and thus, currently, to taxpayers in their role as owner of the GSEs).

An emerging market exists for nonguaranteed junior ("B-piece"[28]) MMBS issued by Freddie Mac in its "K series" securitizations (which we will cover more in appendix B). These B-piece buyers are sophisticated about risk. Because the underlying loans are all prime loans, this experience does not teach us anything about how these investors would evaluate lower-quality multifamily loans and thus how they would evaluate below-prime risk. One of our commentators noted that in the single-family arena post-2007, senior MBS backed by single-family mortgage loans—and not guaranteed by the government—initially traded at relatively high prices, but prices moderated once investors learned to evaluate loan quality accurately. We expect that the same would occur in multifamily if the federal government began phasing out issuance of new guarantees.

We believe that analyzing MMBS for risk is best done by sophisticated investors. In particular, we caution against relying on rating agencies.[29] During the boom years, many investors mistakenly relied on ratings and did not do any loan-level due diligence.

We conclude that there are sophisticated investors who are now on the sidelines but who would analyze and invest in nonguaranteed MMBS once it became clear that the current GSE guarantees would be phased out.

*What Would Need to Happen to Price Below-Prime Risk Accurately in the Future?* Some of the key questions in this area are: What entity(ies) would provide discipline for defining "prime" and 'below prime" loans? Would this be a regulatory role? A rating agency role? A private mortgage insurance role? Something else? A combination?

We did not find any commentators who thought that any external entity could provide this discipline. Instead, they thought (and we agree) that discipline must come from the market participants who are holding the risk. In the MMBS and CMBS segments, these are the "B piece" buyers.
We feel it is important to note that B-piece buyers would be able to provide discipline only if they actually *hold* the risk long-term. During the bubble years, B-piece buyers were able to sell the risk by creating collateralized debt obligations, reducing the level of discipline in all real estate finance markets.

Accordingly, we do not hold out hope that rating agencies or regulators could provide this discipline. It is conceivable, at least in theory, that private mortgage insurance could provide this discipline, but when our commentators considered how much capital an insurer would be required to hold, our commentators concluded that few companies if any would have an interest in playing this role.

We also are optimistic that one or more major market participants will make a market niche in issuing MMBS backed by what we called "prime multifamily mortgage loans" in our first paper, gaining competitive advantage by creating a trusted "brand" that investors can rely on to have favorable risk characteristics. One route to this outcome would be for one or both GSEs to spin off their multifamily business units.

These answers lead us to think that the best strategy for accurate pricing of prime versus below-prime risk is to make relevant loan-level information widely and easily available to market participants. As noted earlier, private-label MBS issuers will necessarily have to play a much larger role than they now play. But before thinking about private-label MBS, it is important to consider other important market segments.

**What Role Should/Will Community Banks Play?** Community banks cannot play much of a role through portfolio lending (origination of loans to be held on the community bank's balance sheet).

However, their local presence and knowledge could be extremely useful in determining which multifamily loans would be prudent for small properties, small local markets, and weak local markets. It also seems likely that reasonable changes in bank capital regulation (to recognize the favorable risk characteristics of prime multifamily loans) would stimulate some additional portfolio lending at the margin. Accordingly, in section IV, we discuss potential innovations that would allow community banks to originate such loans, season them, and resell them without a federal guarantee.

**What Role Should/Will Regional and National Banks Play?** Our commentators indicated that this would depend heavily on regulatory decisions regarding how much capital banks are required to hold against multifamily loans. Currently, banks are quite competitive even against GSEs. We expect that banks could and would expand their multifamily lending once GSE guarantees were phased out. Reasonable changes in bank capital regulation (to recognize the favorable risk characteristics of prime multifamily loans) would stimulate some additional portfolio lending at the margin.

**What Role Should/Will Insurance Companies and Pension Funds Play?** Our commentators told us, and we agree, that there is no particular reason to expect insurance companies and pension funds to play a dramatically larger role in future multifamily financing than they do at the present time. That said, it would be reasonable to expect some additional participation, if only because, particularly in the past 10 years, the GSEs have made many loans that in the past would have been made by insurance companies and pension funds.

**What Role Should/Will State Housing Finance Agencies Play?** As with community banks, housing finance agencies (HFAs) have little if any potential to act as portfolio lenders but, being closer to the local markets, could have or develop specialized local knowledge and expertise that could allow them to loan prudently to small properties, in small local markets, and in weak local markets. Accordingly, in section III, we discuss potential innovations that would allow HFAs to originate such loans, season them, and resell them without a federal guarantee.

As noted above, the question of how to create a robust and stable multifamily debt market in the absence of a federal guarantee more or less boils down to the question of how to create a robust and stable private-label MMBS/CMBS market.

**Do We Need a New Securitization Platform?** The FHFA is working toward an open source (nonproprietary) securitization platform for single-family loans.[30] Is something like that needed for multifamily as well? The CMBS market already provides significant capital for not only office, industrial, retail, and hotel real estate, but also for credit card loans, auto loans, and student loans. These are very large markets, so clearly it would not stress the existing private-label CMBS platforms to absorb a significantly larger share of multifamily financing. As one of our commentators put it: "In a $2 trillion market, another $300 billion or so of multifamily debt is no problem." That said, new CMBS issuance is currently at a low point; see, for example, Paul Vanderslice's testimony before the House Financial Services Committee on behalf of the Commercial Real Estate Council.[31]

**What Securitization Structures Would Be Appropriate?** The Freddie Mac K-series (see appendix B) seems to be a promising model for a future purely private financing approach. Our commentators expect that a range of securitization structures will continue to be offered, and they also expect continued innovation. Conversely, they did not see a need to standardize on any particular existing structure or a need to invent or facilitate any particular new structure.

**What about Aggregation Risk and Diversification Benefit?** Our interviews revealed two factors that are central to any securitization strategy.

*Aggregation Risk.* This is the risk that, while a CMBS issuer is originating and holding multifamily loans for a future securitization, the market interest rate rises, decreasing the value of the loans. Lenders have attempted a wide variety of sophisticated financial strategies to offset ("hedge") this risk, establishing through a series of spectacular failures that there is no "perfect hedge" that protects the lender in all market conditions. Thus, *any* securitization strategy that involves aggregation entails an additional risk that is not incurred if individual loans are securitized immediately after origination.

*Diversification Benefit.* Just as holding a wide variety of common stocks lowers portfolio risk for a common stock investor, a security collateralized by a large number of multifamily properties has a lower risk than a security collateralized by a single multifamily property of average quality.

Thus a single-loan securitization strategy (such as Fannie Mae has typically followed in its multifamily business unit) has the advantage of no aggregation risk but the disadvantage of no diversification benefit. Multi-loan securitization (such as the current Freddie Mac K-series) has the disadvantage of aggregation risk and the benefit of lower risk through diversification. Accordingly, our commentators expect that there will be a role for single-loan and multi-loan securitization over the long term. The pointed out, however, that in the short run, single-loan securitization will probably be very difficult to accomplish because there is an insufficient stock of global investors who are sufficiently expert in evaluating multifamily loans.

**What Can We Learn from Securitization Markets for Student Loans?** The 1996 privatization of Sallie Mae may provide an instructive comparison. In 1996, Sallie Mae gave up its GSE status with respect to student loans and made a successful privatization transition. Sallie Mae continued to service existing loans after the privatization. The implicit federal guarantee of Sallie Mae's existing corporate bonds was removed via a defeasance transaction. Subsequent to the privatization, Sallie Mae (like other lenders) offered federally guaranteed student loans, but Sallie Mae financed new non–federally guaranteed student loans through a combination of (non–federally guaranteed) asset-backed securitization and issuance of (non–federally guaranteed) corporate bonds. After privatization, Sallie Mae shifted its origination approach so that, today, most loans are made directly by Sallie Mae rather than through lender partners.[32]

We believe that the GSEs' multifamily divisions have great potential to play a significant role in a future financing system that does not involve a federal guarantee. The following questions focus on how to reuse the existing excellent multifamily underwriting and origination capabilities of the GSEs.

**How Can the GSEs' Existing Networks of Multifamily Lenders, and GSEs' Existing Multifamily Business Platforms, Best Be Preserved?** As noted in our first paper, we see value in the reputation for quality loans that both GSEs have built in their multifamily operations, their national partnerships with lenders, and their proven origination and servicing platforms. One route for preserving this value, and capturing it for taxpayers, is for one or both GSEs to spin off their multifamily business units (without federal guarantees of any sort).

**How Should Construction Lending Be Accomplished?** The status quo is that construction lending is done mostly by banks, with personal guarantees from credit-worthy guarantors. As noted in our first paper, we believe that is the appropriate approach. It is important to point out, however, that construction lenders need to be comfortable that a permanent "take-out" loan will be available after construction completion and lease-up. Thus, a robust construction lending business requires a robust permanent lending business.

## IV. Small Properties, Small Markets, Weak Markets

Here, we are speaking of loan amounts below about $1 million, properties in markets with populations below about 250,000, and properties in local markets with prevailing rental vacancy rates above about 8 percent. There is interest in the policy community in improving availability of capital for these types of loans because many working Americans (and many low-income Americans) live in such properties. The same can be said of mobile homes.

Advocates then go on to assert that the government should force more lending for these types of properties, but in our view this is a fallacy. Lending is a solution only when there is a reasonable prospect for repayment, and likelihood of repayment is often missing for these types of properties. More appropriate solutions for marginal rental properties, housing low-income people, are grants and soft loans such as those made under HUD's Home Investment Partnerships (HOME) and Community Development Block Grant (CDBG) programs.

Several large national mortgage banks have tried and failed to originate these sorts of loans, and we conclude that continuing to try to solve this through large national players is doomed to failure. However, Fannie Mae created a successful program to purchase existing loans on small properties once the borrowers and properties had demonstrated that the loans were sound (in industry parlance, once the loans were "seasoned"). We believe that community banks, and perhaps other existing lenders with geographic focus and expertise, could originate more of these loans if they could resell the loans after seasoning. Accordingly, we have these recommendations.

**Liquidity Facility for Loans on Small Multifamily Properties, Properties in Small Markets, and Properties in Weak Markets**

One important role the GSEs played was to buy seasoned loans that community banks had made on small multifamily properties. It was not cost-effective for the GSEs to originate such loans, but they found that they could buy these loans in bulk once the loans had proven themselves (with the selling bank retaining a share of loss risk).

We believe that it would be useful to create something similar, to allow banks of all sizes (including community banks) to originate loans on small properties, in small local markets, or in weak local markets and then to sell them to a bulk purchaser that would then issue CMBS secured by these loans (but not guaranteed by the federal government). One approach would be for the Federal Home Loan Bank to purchase the loans. We believe that it would be appropriate for these loans to have some recourse to the borrower in the event of default and for the selling bank to retain a share of risk. That is, the borrower, the originating lender, and the investor should share the risk.

**Additional Roles for State Housing Finance Agencies**

HFAs, like community banks, have the local presence and contacts necessary to evaluate risk accurately for loans on small properties, in small local markets, and in weak local markets. The same sort of liquidity facility mentioned in the previous section could be made available to HFAs as well. Perhaps multiple HFAs could collaborate to create such a liquidity facility themselves.

## V. How Best to Wind Down the Current GSE-Held Multifamily Portfolios

We understand that both GSEs bought CMBS and MMBS issued by others. To the extent that the GSEs still own such securities, the wind-down options discussed below would be reasonable, but we expect a stronger likelihood that selling the securities would be the optimum approach.

In terms of multifamily loans originated by the GSEs (and single-loan MMBS issued by the GSEs) that are held on GSEs' balance sheets (as distinct from MMBS that are guaranteed by a GSE but are held by investors),[33] as we discussed in our first paper, reasonable options include:

A. **Manage in Place.** Have the GSEs hold the loans until they are paid off in the normal course of business. Because most loans have maturities of 10 years or less, this would allow the problem to solve itself over time.
B. **Transfer to Trustee(s) for Management in Place.** If it is desirable to shrink the size of the GSEs, their existing portfolios of multifamily loans could be assigned to private or public trustees to manage until maturity.
C. **Sell after Seasoning.** An alternative strategy is to bundle seasoned loans (say, with two years' successful history since origination) and sell them with or without a federal guarantee.

We favor testing strategy C (sell after seasoning) and, if it proves to yield reasonable resale prices, selling most or all of the performing loans into the market. Then we favor strategy A (manage in place) for the marginally performing and nonperforming loans. The conservator (the Federal Housing Finance Agency) could shift to strategy B (transfer to trustee) if a decision were made to wind down a GSE completely or if a GSE's multifamily operations were sold in a way that prevented the purchaser from being a good choice to manage the legacy multifamily loans.

We should emphasize, however, that it is typical for the originating lender to retain servicing rights, and that those rights would survive sale of the loan.

Further, for loans on Fannie Mae's balance sheet, the originating DUS lender retains a share of loan loss risk. The Fannie Mae risk-sharing structure requires Fannie Mae to resolve a nonperforming loan, after which the originating DUS lender reimburses its share of the loss. Before selling such a loan, Fannie Mae would need to make decisions about whether the value of the DUS risk-sharing can and should be preserved (and if so, how best to do so).

## VI. How Best to Wind Down Existing MMBS Guaranteed by GSEs and Held by Investors

This section deals with GSE-guaranteed securities held by investors and backed by multifamily loans. As we discussed in our first paper, there is little reason to consider options other than managing the guarantee risk in place and to allow the existing guarantees to run off in the normal course of business. Because most underlying loans had maturity terms of 10 years or less, most of the risk would run off within a manageable timeframe.

## VII. How Best to Wind Down Federally Guaranteed Multifamily Origination by GSEs

This section deals with the currently very large GSE footprint in the multifamily loan origination space and how to shrink that footprint over time. Our interviews identified the following practical questions:

**Length of Transition Period**

All parties interested in ending the federal guarantee on the GSEs' multifamily activities agree it would be bad policy and bad economics to eliminate the GSE origination presence precipitously. The equivalent actually occurred in the LIHTC equity markets, in which the GSEs completely withdrew from these markets that they had dominated; it took roughly two years for other LIHTC equity buyers to replace the former GSE market share. This indicates that a transition should occur over a period of *at least* two years. We believe that five years is a reasonable period, especially if the transition rules are clearly communicated at the outset. Some in the industry argue for a longer transition period, but we see no reason to think that the capital markets would require more than five years to respond.

**Transition Options**

As we discussed in our first paper, reasonable options include:

- **Increasing Federal Guarantee Fee.** This refers to the cash guarantee fee borrowers pay to the GSEs. One transition option is to increase that fee steadily over the transition period, ending with a guarantee fee level well above the value of the guarantee in normal market conditions.[34] At the end of the transition period, the guarantee could either be withdrawn (as we argue) or left in place (so that in times of market stress capital would be available for multifamily, though at a relatively high interest rate). We believe increasing the guarantee fee is the most elegant transition option because it directly erodes the existing GSE pricing advantage, sending the clearest possible signal to private competitors while maintaining full availability of capital during the transition (by virtue of the fact that GSE origination volume would not be limited).

- **Decreasing GSE Origination Volume.** Under this option, each GSE would be given an annual origination volume cap (that is, a cap on aggregate loan amount that each GSE could originate in each year *with a federal guarantee*). Each GSE originated roughly $15 billion of guaranteed multifamily loans in calendar year 2011. For example, a transition plan that reduced the allowable volume by $3 billion per GSE per year would eliminate new federal guarantees by the beginning of year five. In our view, the most serious flaw with this approach is that the GSEs' 2011 origination volume was an all-time high, and thus the first year or two of transition might not produce any real new opportunity for private competitors.

- **Decreasing Market Share.** New GSE origination volume could be regulated as a share of the market. This has the same flaw as the preceding approach (the GSEs' 2011 market share was an all-time high) and also the practical flaw that market share is essentially impossible to measure dynamically; it can be measured only in hindsight, and then not with perfect accuracy.

- **Focus on Refinancing Existing Loans.** New GSE origination of loans *on properties for which there is no current GSE financing* could be tightly restricted (either by dollar volume or by restricting business terms), focusing GSE origination during the transition period on the refinancing of existing GSE loans.

- **Limit New Federal Guarantees to Refinances of Existing GSE Loans.** Another approach has the added advantage of reducing existing borrowers' fears of not being able to refinance: providing a one-time opportunity for existing borrowers to refinance (with a federal guarantee) on conservative terms including a loan amount limited to 90 percent of current indebtedness.[35] This would provide borrowers with comfort that refinancing would be available during the transition.

## VIII. The Flawed Argument that Properties Will Deteriorate Unless Financing is Always Available

In our November 2011 paper, we stressed the need for periodic significant reinvestment in apartment properties. Our commentators agreed and pointed out that much of this reinvestment occurs in conjunction with refinancing. Thus if cost-effective refinancing is not available for an extended period, underinvestment could be a risk. As discussed below, we conclude that this risk is mostly or completely illusory.

**Frequency and Duration of Past Market Crises**
Financing crises occur periodically. Industry experts cited the following recent crises:

- **Late Summer/Early Fall 1998.** When Russia defaulted on its debt, investors feared a global domino effect and there was a "flight to quality" in which borrowing was restricted only to governments, and further only to governments seen as particularly stable. During a two-to-three-month period, capital availability for commercial real estate was greatly reduced.

- **Mid-2007 to Early 2008.** The recent financial crisis, caused largely by excesses in single-family lending, similarly froze the global capital markets for a period of time. The concern in the global capital markets was that the demonstrated problems in single family would be followed by similar problems in commercial real estate. However, reductions in rental vacancy rates were followed by rent growth, and investors gained confidence in rental housing fundamentals.

Earlier financial crises included the following:

- **The Savings and Loan Crisis.** The mid-late 1980s collapse of the savings and loan industry led to an extended period of stress in commercial real estate. Several factors worked together to make 1989–91 a very difficult period: (1) The savings and loans precipitously reduced loan originations; (2) all forms of commercial real estate were overbuilt; (3) in a time of deteriorating fundamentals and decreased supply of capital, market participants faced great uncertainty regarding property values.

- **Monetary Tightening 1979–80.** During this period, capital was available but was priced so high that financing and refinancing were not cost-effective.

- **Recession 1973–75.** During this period, overbuilding of apartments in the late 1960s and early 1970s was followed by a period of low occupancy combined with increasing inflation. There was not a problem with capital availability per se, but owners typically found themselves owing more debt than could be refinanced based on current operating results.

Accordingly, absent some sort of government intervention, we can expect that every 10 to 15 years, there will be a period of reduced (perhaps greatly reduced) access to capital lasting perhaps three to four months. In addition, normal business cycles in the apartment industry can be expected to lead to periods of reduced occupancy and thus reduced ability to refinance without injecting additional equity.

**GSE-Style Reserve Sizing**
The GSE practice is to ensure that the foreseeable capital needs (for example, appliance replacements, heating and air-conditioning system replacements, reroofing) for the loan term *plus two years* are covered through a combination of initial rehab plus the replacement reserve. For example, for a 10-year loan, a third-party due diligence firm is engaged to estimate capital needs for the next 12 years. The first two

years' needs are required to be covered in initial rehab, the needs for years 3–12 are averaged, and the average becomes the annual replacement reserve deposit. A property financed in this way thus has enough funding in its replacement reserve to cover 100 percent of foreseeable capital needs not only for the 10-year loan term but for a further two years. Any positive cash flow from operations would provide additional cushion. It seems evident that if properties are financed in this way, there is no need to worry about deterioration risk if refinancing (at the end of the loan term) is delayed by as much as two years.

Our assessment of the preceding discussion is that the danger of underinvestment is not a matter of capital availability but, rather, a matter of owners finding themselves overleveraged and not being able or willing to secure the financing necessary to invest properly in the property. Similarly, to the extent that the government wishes to reduce the risk of underinvestment, the logical response is to focus on avoiding excessive leverage in apartment financing (and ensuring that loans are underwritten with adequate reserves) rather than to focus on expanding capital availability.

Put bluntly, if an apartment owner told a tenant "I can't replace your refrigerator [clean the hallways, paint the siding, mow the grass, etc.] because I haven't been able to refinance my building," the apartment owner would be lying. A truthful statement might be "I am choosing not to maintain the building because I'm struggling to make the mortgage payment on my last refinance loan, which I shouldn't have borrowed in the first place."

## IX. If Overleveraged Apartment Owners Have to Sell, or Are Foreclosed Upon, Is That a Bad Thing?

From a purely economic standpoint, overleveraged apartment borrowers (like overleveraged borrowers of any sort) should not be allowed to "refinance out."[36] Instead, the logical outcome is for them to deleverage their overleveraged properties by investing more equity, bringing in a partner who can invest more equity, or selling the property to another owner who can invest enough equity to refinance the property and pay for any needed rehab.

From a practical political standpoint, affected owners are understandably reluctant (and perhaps unable) to deleverage their properties. Of course, apartment owners would like for taxpayers to protect them from this problem, though we see no reason why taxpayers should agree.

Clearly, foreclosure (or forced sale) would be an undesirable outcome for the overleveraged owner. However, the property emerges in stronger hands, with a proper balance of debt and equity, which arguably would be a good outcome for the property, its tenants, and the general economy.

Thus, political tension exists between the interests of overleveraged apartment owners and the interests of everyone else. We believe that the best public policy is to do nothing to protect the overleveraged owner and, indeed, to lean in the opposite direction, using available government leverage (such as enforcement of housing codes and bankruptcy reform) to increase the pressure on overleveraged owners to resolve the situation quickly.

Some horror stories during the recent crisis involving overleveraged multifamily borrowers and failure to maintain properties should be mentioned. These situations had the following features in common: an existing low-rent building was purchased by speculators, using more debt than the building's low-rent operations could support in the hope of increasing rents and thereby the value of the property. Many of these horror-story loans were made in New York City in the hope (later proved unfounded) of being able to end the property's regulation under the city's rent stabilization law. When the speculator-owner

discovered that it was not possible to increase rents as planned, the he or she lost not only any potential for profit but also any potential to recover any equity. At this point, the speculator-owner turned the property over to its lenders. The lenders discovered that, at the low achievable rents, they had little if any ability to recover the loans. The result was at least a lack of incentive to maintain the properties, and at worst a perverse incentive to extract as much cash as possible in the very short term and then abandon the property. It would be wrong to generalize from these horror stories that bad things will always occur when a property fails financially; to the contrary, in normal situations there is nothing to fear from a foreclosure or similar process.

One lesson from the horror stories is that the very high risks associated with multifamily transactions that are predicated on the hope of increasing rents in the future (because of physical upgrading, ending a regulatory rent limit, or both). In the industry, these are called "story loans" because their viability depends on believing "the story" told by the speculator-developer. Experience shows that "story loans" sometimes succeed during especially favorable market conditions but tend to struggle or fail under all other market conditions. Indeed, an increase in the volume of "story loans" is a reliable indicator that the multifamily financing markets have overheated.

Of course, in some situations it is feasible to upgrade market-rate properties and increase rents. However, these speculative transactions should be financed with equity, and any debt should be limited to the amount that can be supported by current (pre-rehab, pre-rent-increase) operations. Once operating results validate the assumption, only then should the owner refinance.

## X. The Flawed Argument for Constant Access to Capital

In a multifamily mortgage system without federal guarantees (such as we have for other commercial real estate asset classes), periods of reduced (perhaps greatly reduced) availability of capital for multifamily will periodically occur. For purposes of illustration, suppose that every 10–15 years there is a three-to-four-month period of restricted capital availability because of some systemic global financial crisis. Three months out of 180 is about 1.5 percent, and 4 months out of 120 is about 3 percent. So, some 2 to 3 percent of the time, a global financial problem may restrict a commercial real estate owner's access to debt capital.

In section VIII, we conclude that there is no reason to think that facilitating constant access to capital is necessary to prevent deterioration.

Moreover, in our view the risk that an owner may need to refinance during a period of global financial crisis is swamped by a much larger risk inherent in the apartment business. Any apartment owner always faces the risk that his or her 10-year loan may mature when the property's occupancy is low, its local market is weak, or interest rates are high. Occupancy, local market weakness, and high interest rates all likely will be low at least in one year out of five. Thus, the risk of unfortunate timing during the property's economic cycle obviously is dramatically larger than the risk that refinancing will fall in a period when capital availability is temporarily restricted because of a financial crisis.

It seems clear that other commercial real estate asset classes (for example, office and retail), which have no protection against periodic financial crises, manage to deal with the risk that the existing loan will mature during a financial crisis.

The preceding suggests to us that the issue of access to capital during periodic financial crises is utterly swamped by the simple business risk that financing matures at an inconvenient point in the normal

business cycle. The logical conclusion is that because apartment owners have to be prepared for the risk of (say) a one-year delay in refinancing (because of business cycle problems), that same preparation will be sufficient to deal with the risk of a global financial crisis when financing matures.

In saying the preceding, we do not intend to minimize how painful and difficult it may be to face a maturing loan when it cannot be paid off with new debt. Rather, our point is that this is one of the background conditions for participation in the commercial real estate business. As one of our commentators said, "Cycles are fine; at cycle bottoms, weaker players are forced out, which is good for the system."

Said differently, because there is no way (and, we would add, no reason) to eliminate the risk of normal economic cycles in the apartment business, all apartment owners necessarily have to be prepared either to inject new equity at the time of refinancing or to sell the property; the smaller risk that the property could be refinanced without a financial crisis can reasonably be seen as a small subset of the larger risk that the time for refinancing may fall when it is economically inconvenient.

Accordingly, our view is that no pressing public interest would be served by facilitating apartment owners' access to capital during periodic financial crises.

Further, as one of our commentators pointed out, an economy-wide liquidity backstop already exists: the Federal Reserve. From that standpoint, it would be redundant to create a separate liquidity backstop for multifamily.

If, however, Congress were to decide to do so, we have some thoughts on how that could be done while minimizing risk to taxpayers.

**Intervene at the Time of the Crisis, Not Before**

The first principle is to devise a "liquidity backstop" that does not require taxpayers to guarantee multifamily debt during normal market conditions. Said differently, if there is a three-to-four-month period of crisis once every 10–15 years, the problem has a 2 to 3 percent occurrence rate, so clearly it is unwise to make an intervention in the other 97 to 98 percent of market conditions solely in the interest of providing a backstop for the 2 to 3 percent occurrence. A difficulty of this approach is that the liquidity backstop would have to be designed so as to be able to spring into action on very short notice; see the discussion under "One Approach: Government Purchases Defined MMBS for the Duration of the Crisis)" as an example of an approach that might meet this requirement.

**Define an Appropriate Triggering Event**

We do not recommend this approach but provide the following discussion.

In theory, it would be possible to design an economic index that would signal the onset of a financial crisis. In practice, this is problematic; one issue is that the existence of a defined trigger might cause market participants to take actions that might result in the trigger being actuated.

A political trigger (such as action by the president) would avoid this problem but would have its own issues. Importantly, any such political decision would be controversial, with some saying it was made too soon and others saying it should have been made earlier.

Perhaps the most obvious candidate for an economic index is the spread between multifamily loan rates and Treasury rates for loans of the same duration. Generally, very high spreads signal that a financial crisis is in process.[37] However, there is a difficulty: the increased spread might be signaling a fundamental

increase in risk in the multifamily sector, such as decreased demand, threat of rent control, or a new environmental issue.

**Define the Ending Point**
If an economic index is used to define the triggering event, then the same index could be used to define the end of the crisis. There is, however, a political drawback: someone's interest rate will always go up because the liquidity backstop is no longer available. That borrower and lender will exert political pressure to extend the liquidity backstop. Accordingly, ending a liquidity backstop may be simple in theory but is likely to be difficult in practice.

**One Approach: Government Purchases Defined MMBS for the Duration of the Crisis**
For example, the government would agree to buy the AA-rated tranches of MMBS composed of prime multifamily loans (as we defined them in our earlier paper; basically, loans consistent with those made by the GSEs from 1992 to 2004). A variation on this theme would be for the government to agree to buy such MMBS from only certain issuers. The role of preferred MMBS issuer could be played by GSE successors.

- **Set an Appropriate Purchase Price.** If, for example, the benchmark for the triggering event is 10-year Treasuries plus 300 basis points, the multifamily borrowers should receive loan rates a bit higher than 10-year Treasuries plus 300 basis points, and the AA CMBS should be acquired by the government at a price consistent with those loan rates. The mortgage lender should make a normal fee, and the MMBS issuer should make a normal profit. Any remaining profit potential should accrue to taxpayers.

- **Do Not Restrict Government Resale of the MMBS.** The government could guarantee the MMBS and immediately resell, could hold the MMBS to maturity, or could take any other short-term or long-term action to realize value in exchange for its investment.

**Another Approach: Allow Expansion of Ginnie Mae during the Crisis**
We do not recommend this approach but provide the following discussion. Legislation could be enacted giving Ginnie Mae the authority to guarantee conventional loans during a defined crisis (but not prior to or following a crisis). This approach has the advantage of building on an existing platform (and not requiring a new organization, needing complex expertise and procedures and systems, to be created at the time of a crisis). We caution that the guarantee fee should be much higher than the fee that Ginnie Mae charges to supplement the guarantee of FHA,[38] and that to be eligible, loans would need to meet criteria similar to our definition of "prime multifamily mortgage loan".[39]

Using an approach based on these principles, a government liquidity backstop could be created that is narrowly targeted to the problem and that would minimize the risk to taxpayers.

## XI. What about Loans for LIHTC Properties?

**Commercial Mortgage Debt Is Not a Major Factor in LIHTC Property Financing**
LIHTC properties are financed primarily with equity and with soft debt; standard commercial first mortgage loans are a relatively minor feature of the capital structure of a typical LIHTC property. In fact, the most socially valuable LIHTC properties (those with the lowest rents) typically have no commercial first mortgage at all. Typical LIHTC properties have hard debt that is 20 percent of total development cost or less.

**Commercial Mortgage Rate and Terms Have Little Impact on LIHTC Properties**
For example, take a typical LIHTC project with total development cost of $150,000 per unit and a commercial first mortgage of $30,000 per unit. Favorable terms in today's market would be, say, 4.5 percent interest rate and 30-year amortization, producing a monthly payment of $152 per unit per month. If, instead, the terms were 5.5 percent interest rate and 25-year amortization, the monthly payment would be $184 per unit per month (a $32 per unit, per month difference).

For comparison, it is useful to note that the utility bill or the real estate tax bill often differs by $32 per unit per month from property to property. Similarly, if a property can only afford $152 per unit, per month, then instead of being able to afford a $30,000 per unit mortgage loan, it could afford a first mortgage loan of $24,750 per unit; the $5,250 per unit difference represents 3.5 percent of the total cost of the project. Put differently, normal variations in LIHTC equity pricing, and normal variations in mortgage interest rates, from year to year are much larger than the potential impact of having or not having access to a federal guarantee for the mortgage loan.

**Community Reinvestment Act (CRA)**
It should be noted that, just as banks are major LIHTC equity investors for CRA reasons, banks have a powerful CRA incentive to make mortgage loans to LIHTC properties.

## XII. Conclusion

The recent expansion of our research has strengthened our conviction that the current federal guarantee should be phased out, that it should not be replaced, and that other federal participants for example, the FHA) should not be allowed to increase their market share. However, we now have a larger appreciation for the importance of sound regulatory reform (for example, implementation of the Dodd-Frank Act and Basel III) for the future of the multifamily finance system (and, indeed, for the future of commercial real estate finance in general).

# Appendix A
# Multifamily Industry and Capital Markets Experts Interviewed

Doug Bibby (President, National Multi Housing Council)

Stuart Boesky (President, Pembrook Capital; Former President, CharterMac)

Ted Borter (Managing Director, Investment Banking Division, Goldman Sachs)

Jay Brinkmann (Chief Economist, Mortgage Bankers of America)

Albert Brooks, (President, Commercial Term Lending, J. P. Morgan)

David Cardwell (Vice President, National Multi Housing Council)

Bill Cumby (Senior Vice President and Portfolio Manager, Pimco)

Chris DiAngelo (Partner, Katten Muchin Rosenman LLP)

Peter Donovan (Senior Managing Director, CBRE Capital Markets)

Michael Flood (Vice President, Commercial Real Estate Finance Council)

Joseph Galligan (Principal and Founding Member, Doubleline Capital LP)

John Gibbons (Executive Vice President, Wells Fargo & Co.)

Ron Haynie, (Vice President, Independent Community Bankers Association)

Gary Horbacz (Principal, Structured Finance Group, Prudential Fixed Income Management)

Richard Lawch (Consultant, Formerly with Fannie Mae)

Fred Matera (Chief Investment Officer, Redwood Trust)

Michael Moran (Senior Portfolio Manager, Allstate Investments LLC)

Doug Moritz (Former CEO, Washington Mortgage Company)

Ed Pinto (Resident Fellow, American Enterprise Institute)

Thanh Roettele (Market Manager, Specialized Finance, J. P. Morgan)

Michael Stegman (Counselor for Housing Finance Policy, Department of the Treasury)

Chris Tawa (Manager, Multifamily Housing Policy, Federal Housing Finance Agency)

David Twardock (President, Prudential Mortgage Capital Company)

Paul Vanderslice (Managing Director, CitiGroup Global Markets)

Peter Wallison (Arthur Burns Fellow in Financial Policy Studies, American Enterprise Institute)

Tom Watt (Former Head of Multifamily for Freddie Mac)

John Weicher (Manhattan Institute; Former FHA Commissioner)

Brooke Williamson (Internal Advisor Consultant, Pimco)

# Appendix B
# Freddie Mac K-Series Securitizations

Starting in 2006, Freddie Mac began securitizing pools of multifamily mortgage loans in its "K Series." Additional information is available at www.freddiemac.com/mbs/html/product/kcerts.html.

In a K-Series securitization, the senior securities are guaranteed by Freddie Mac (and thus are guaranteed by the federal government so long as conservatorship continues). One or more classes of junior securities are also sold, without guarantees.

The following is a summary of the classes of securities issued in Freddie Mac's K-006 securitization, in which the underlying mortgage loans were mostly of 10-year maturities.

**Freddie Mac K-006**

**Settlement Date 04/06/10**

| | Amount | Rate | Wtd Avg Life | Realpoint Est'd Rating | Guaranteed by Freddie Mac |
|---|---|---|---|---|---|
| A1 Principal & Interest | $204,250,000 | 3.398% | 5.7 | AAA | Yes |
| A2 Principal & Interest | $876,817,000 | 4.251% | 9.7 | AAA | Yes |
| B | $57,238,000 | 5.357% | 9.8 | AA | No |
| C1 | $92,389,005 | N/A | 9.8 | N/A | No |
| C2 (note 1) | $1,150,430 | N/A | 9.5 | N/A | No |
| **Subtotal** | **$1,231,844,435** | **3.838%** | **9.1** | | |
| AX1 Interest Only | $1,138,305,000 | 1.070% | 9.0 | AAA | Yes |
| BX1 Interest Only | $93,539,435 | 5.357% | 9.8 | N/A | Yes |
| **Subtotal** | **$1,231,844,435** | **1.396%** | **9.1** | | |
| **Underlying Loans** | **$1,230,694,005** | **5.500%** | **9.9** | **Wtd avg: LTV 70%, DSC 1.39** | |
| **Per Loan** | **$18,098,441** | | **68 loans** | | |

Note 1 -- the C2 class has the right to receive, in certain default situations, some of the principal recovery on some of the loans

Note 2 -- losses, and default-related expenses, will be borne first by C1, then by B, and lastly by A1/A2

In K-006, the A1, A2, AX1, and AX2 classes had federal guarantees. The B, C1, and C2 classes did not have guarantees.

The K-series structure would allow for the future creation of senior securities without federal guarantees. Using this approach, Freddie Mac could test and establish a market for senior securities without federal guarantees.

# Appendix C
# Our Definitions for "Prime Multifamily Mortgage Loans"

The following repeats section 6 of our November 2011 paper.

## A. Proposed Definition of 'Prime Tier One Multifamily Mortgage Loan'

Our proposed definition of 'prime tier one multifamily mortgage loan' is based on the recent successful GSE multifamily lending programs. The table below shows the key characteristics of multifamily loans, and the standards we propose for 'prime tier one' status.

*A note regarding 'stable market area'.* In the table that follows, we propose that one criterion for a prime tier one multifamily mortgage loan should be a 'stable market area'. This recognizes that the lender's level of risk is strongly influenced by market-wide factors. We believe that the following market-wide factors should be taken into account when determining whether a market area is acceptable for prime multifamily loans:

(1) The overall size of the market (i.e., total population). All else equal, the lender's risk is lower if the market population is large. This is commonly recognized in the industry through the industry-wide designation of 'primary markets' with lowest risk, 'secondary markets' with moderate risk, and 'tertiary markets' with higher risk. We do not propose any particular standard for the market population level that is consistent with a 'stable market area'.

(2) The historical trend for population growth in the market. All else equal, the lender's risk is lower in markets with consistent positive population growth. Similarly, the lender's risk escalates significantly in markets with declining population. We do not propose any particular standard for the rate of population change that is consistent with a 'stable market area'.

(3) The market-wide rental vacancy rate. All else equal, the lender's risk is lower where market vacancy rates are also low. Where the market vacancy rate is high, the lender's risk escalates significantly. We do not propose any particular standard for the market-wide rental vacancy rate that is consistent with a 'stable market area'.

(4) Volatility. There is risk in apartment loans in rapidly-growing markets. Recent experience in Phoenix and Las Vegas is one example; the devastating experience in Houston in 1989-1991 is another. We do not propose any particular standard, but we note that it could be a prudent counter-cyclical policy to require increased Debt Service Coverage Ratio (DSCR) and decreased LTV when recent population growth has been very high.

We acknowledge that barriers to entry are a factor. Examples of barriers include lack of buildable land (e.g. Boston and San Francisco) and growth boundaries (e.g. Portland Oregon). Conversely, some cities have little or no barriers to entry; examples include Houston, Phoenix and Las Vegas. In general, we think that barriers act to make otherwise 'prime' areas more attractive for lenders, and that a lack of barriers act to make otherwise 'prime' areas less attractive for lenders.

We recognize that the optimal approach may be to consider all four factors together, in combination. We also recognize that the optimal approach may involve three levels: 'stable market areas' that qualify multifamily loans for prime tier one status, a second category of market areas that can qualify for prime tier two status with offsetting strengths in other key

loan characteristics (e.g., higher DSCR / lower LTV), and a third category of market areas in which multifamily loans would be below-prime by definition.

*A note regarding requirements for owner experience and liquidity*. To be considered 'prime', a loan needs not only a sound property as collateral, a sound underwriting process, and key business terms consistent with low risk, but also a sound borrower. In the table that follows, we list borrower experience as a key factor. We also list borrower liquidity. We believe there are two relevant aspects to liquidity. The first is a 'balance sheet' measurement of liquid and near-liquid assets. The second is a 'P&L' measurement of the cash flow potential of the borrower's real estate portfolio. Both are important, and we intend that the eventual standard would take both factors into account. In the table that follows, we recommend standards that mirror recent GSE practice.

**Proposed Definition of 'Prime Tier One Multifamily Mortgage Loan'**

| Multifamily Loan Characteristic | Requirement for Tier One Prime Status |
|---|---|
| 1. **Project Size** | 50 units or more |
| 2. **Seasoning** | At least 12 months have elapsed since achievement of at least 93% physical and economic occupancy. An average 93% physical and economic occupancy has been maintained, on average, during the most recent 12 months. |
| 3. **Minimum Debt Service Coverage** | 1.20:1 DSCR |
| 4. **Maximum Loan to Value** | 75% at 1.20 DSCR or 80% at 1.25 DSCR |
| 5. **Underwriting of Rents** | Current lease rates, with no adjustment for the time period between underwriting and closing |
| 6. **Unit Features** | At least one full bath. Full kitchen. |
| 7. **Maximum Amortization Term** | 25 years. |
| 8. **Balloon Payments** | If the maturity is shorter than the amortization period, the loan must meet reasonable stress tests, consistent with current GSE practice, for refinancing at the end of the maturity term. |
| 9. **Interest Rate** | Fixed. Floating rate loans are allowable but will be underwritten at the contractual maximum interest rate. |
| 10. **Secondary Financing** | Not allowed. An exception would be available for secondary loans with debt service that is limited to available cash flow, and whose lender executed a standard subordination agreement. |
| 11. **Documentation** | Standard state of the art documents (loan agreement, note, mortgage, …). We propose the current Fannie Mae documents as the initial standard. |
| 12. **Process** | Rigorous underwriting and verification process, including periodic audits of originating lenders. |
| 13. **Evaluation of Capital Needs** | Third party physical needs assessment commissioned by the lender, establishing required initial improvements, and establishing the level of reserve deposits needed so that anticipated capital needs, for the entire maturity term, can be funded solely from the reserve. |
| 14. **Market Area** | Meeting a 'stable market area' definition as demonstrated in the appraisal. |
| 15. **Owner Liquidity** | Appropriate standards mirroring current GSE practice. |
| 16. **Owner Experience** | Appropriate standards mirroring current GSE practice. |
| 17. **Occupancy** | General Occupancy only (no age restrictions, no income restrictions). |
| 18. **Office / Retail Component** | Not allowed, except for management office. |

B. **Proposed Definition of 'Prime Tier Two Multifamily Mortgage Loan'**

A loan could fail one of the tier one loan characteristics noted below as not being required for tier two status, provided that the loan also had the required offsetting strengths.

See the table below for our proposal for defining tier two prime status.

| Tier One Multifamily Loan Characteristic | Required for Tier Two? | Offsetting Strength |
|---|---|---|
| 1. **Project Size (50+)** | 30-49 OK for Tier Two | Higher DSCR / Lower LTV |
| 2. **Seasoning (12 mos+)** | Yes | |
| 3. **Minimum DSCR (1.20+)** | Yes | |
| 4. **Maximum LTV (80%)** | Yes | |
| 5. **Underwriting of Rents** | Yes | |
| 6. **Unit Features** | Yes | |
| 7. **Max Amortization (25)** | Up to 30 OK for Tier Two | Higher DSCR / Lower LTV |
| 8. **Balloon Payments** | Yes | |
| 9. **Interest Rate** | Yes | |
| 10. **Secondary Financing** | Yes | |
| 11. **Documentation** | Yes | |
| 12. **Evaluation of Capital Needs** | Yes | |
| 13. **Market Area** | Yes (but see below) | |
| 14. **Owner Liquidity** | Yes | |
| 15. **Owner Experience** | Yes | |
| 16. **Occupancy** | LIHTC Allowed for Tier Two | Maximum 20 year amortization[40], rents must be at least 10% below market[41] |
| 17. **Occupancy** | 55+ Allowed for Tier Two | Higher DSCR / Lower LTV |
| 18. **Office / Retail** | Up to 10% for Tier Two | Underwrite only 50% of gross possible commercial rent |

As discussed above, we believe that it may be possible to define a secondary type of market area that does not meet the 'stable market area' criterion for tier one status but that is sufficiently close to 'stable' that tier two status could be achieved with offsetting strengths such as higher DSCR / lower LTV.

C. **Relative Capital Requirements for Prime and Below Prime Loans**

As discussed earlier in this paper, the current bank capital requirement of 8.0% is far too high for prime multifamily loans. Below, we provide thoughts on how capital requirements might be tiered, to reflect risk differences between prime tier one, prime tier two, and below-prime multifamily loans.

Our over-arching point is this: prime multifamily loans are dramatically less risky than below-prime multifamily loans. Accordingly, capital requirements should not be 'one size fits all'.

For prime multifamily loans, the recent track record of the GSEs is instructive. From the start of their current multifamily programs through the mid-2000s, serious delinquency was well under one-half percent. Recently, serious delinquency approached one percent. Because much

serious delinquency is cured by the borrower short of foreclosure, the frequency of actual loss to the lender will always be somewhat less than the serious delinquency rate. All of this suggests a loss frequency well below one percent, over the last 15-20 years. However, the last twenty years have been relatively favorable for multifamily, and allowances need to be made for more difficult market conditions such as those that prevailed in the late 1980s and early 1990s. Say, then, that the likely loss formula for a prime tier one multifamily mortgage loan assumes a loss frequency of 2.0% (a frequency twice as high, or more, than the frequency indicated by actual GSE experience in the last twenty years). Combined with the industry rule of thumb of 50% as an average loss severity, this indicates a likely loss of 1.0% (100 basis points) for what we call 'prime tier one multifamily mortgage loans'.

For what we call 'prime tier two multifamily loans', each departure from tier one criteria must be offset by higher DSCR / lower LTV or some similar strengthening of another key loan feature. Logically, tier two loans should perform nearly as well as tier one loans. Say, however, that in the interest of prudence we assume that tier two loans are twice as risky as tier one loans, with a likely loss rate of two hundred basis points.

For the remaining loans (loans to very small properties, loans in shaky markets, loans to properties under construction or under lease-up, …),we need to look at the relative serious delinquency rates for GSE multifamily loans (generally matching our prime tier one criteria) and for Wall Street conduit multifamily loans (generally representing below-prime loans).[42] It seems fair to say that, in the early to mid 2000s, the serious delinquency rate for below-prime multifamily was at least five times as high as for prime multifamily. This implies a likely loss rate in the range of 500 basis points or more.

Accordingly, we believe that the relative risks of prime tier one, prime tier two, and below-prime multifamily loans are very different. This implies that the relative capital requirements for these three types of loans also should be very different.

One illustration of this is the recent experience with below-prime loans originated by the Wall Street conduits during the speculative lending boom of the mid-2000s. Conduit multifamily loans have been experiencing serious delinquency rates in the 8% to 12% range, whereas GSE multifamily loans have been experiencing serious delinquency rates below 1%.

Translating the likely loss into a capital requirement requires taking into consideration how losses would actually be funded. In an ideal system, where cash is set aside at the time a loan is made, and left in the reserve account (invested safely) until the loan is repaid, the likely loss would be the capital requirement. However, in the United States banking and tax systems, losses are actually funded by banks in the year when the losses occur, largely by borrowing. Accordingly, bank capital requirements must be somewhat higher than the likely loss rate, because at the time a loss occurs, it is the financial strength of the bank -- rather than a funded reserve account -- that matters.

This paper will not address the question of how much higher a bank capital requirement needs to be, over and above the loss rate. That said, the capital requirement does not need to be eight times the loss rate.

We leave it to banking regulators and other relevant experts, to translate these large differences in risk into appropriate differences in capital requirements.

In summary, we believe that appropriately differentiated capital requirements would more accurately reflect the relative risks in prime and below-prime multifamily loans, would provide appropriate signals to retail investors (with respect to multifamily loans that are securitized), and would allow a wide array of private competitors to serve the multifamily lending market.

## D. Potential for Counter-Cyclical Adjustments

Using this approach, it would also be possible to track, over time, the relative market shares of prime tier one, prime tier two and below-prime multifamily mortgage loans. Such tracking could be quite useful in gauging whether the multifamily lending market is over-heating (a high percentage of below-prime loans would be a strong warning signal).

For example, if in the preceding year the share of below-prime multifamily loans rose above the long-term average, the capital requirement for below-prime multifamily loans could be automatically increased above the normal level. This type of automatic increase would be an effective counter-cyclical force that would help to avoid the speculative excesses that tend to occur at the top of market cycles (such as we experienced in the mid-2000s).

## Notes

[1] FHA multifamily reform is a separate and large topic that we do not address, other than to say that (a) we think that the FHA currently has too large a footprint in conventional multifamily finance; and (b) we think that FHA should return to its traditional roughly 10 percent market share, primarily supporting new production of affordable rental housing.
[2] Tom White and Charlie Wilkins, *No Federal Guaranty for Multifamily and Other Ideas for Multifamily Housing Finance Reform* (Compass Group, July 28, 2011), www.compassgroup.net/files/White%20Wilkins%20Multifamily%20Finance%20Reform%2007-28-11%20FINAL.pdf.
[3] Ibid.
[4] Letter is available at www.compassgroup.net/gsereform.htm.
[5] In 2011, the GSEs and FHA accounted for roughly $56 billion of $77 billion total multifamily origination. See Jamie Woodwell, "The GSEs, FHA, and Multifamily—Just the Facts," *Mortgage Banking*, May 2012.
[6] Ibid.
[7] Ibid.
[8] Federal Reserve, Flow of Funds data, 2011, table L219, www.federalreserve.gov/releases/z1/.
[9] Data obtained from Board of Governors of the Federal Reserve System, "Selected Interest Rates (Weekly) - H.15," www.federalreserve.gov/releases/h15/ (accessed July 6, 2012).
[10] Bank of America/Merrill Lynch data series reported by the Federal Reserve Bank of St. Louis, "BofA Merrill Lynch US Corporate BBB Option-Adjusted Spread (BAMLC0A4CBBB)," http://research.stlouisfed.org/fred2/series/BAMLC0A4CBBB (accessed July 6, 2012).
[11] The spread varies by maturity and varies over time but tends to fall in the 35–50 basis point range.
[12] White and Wilkins, *No Federal Guaranty for Multifamily*.
[13] Taxpayers would not be assuming loan-loss risk and thus would be better off.
[14] We understand that legislation would be needed to add these securities to the list of those eligible for purchase by the Federal Reserve. We also intend that the government would have no restrictions on its options for disposing of these securities once the crisis had passed.
[15] A review of these regulatory issues is beyond the scope of this paper. For an overview, see Peter J. Wallison, "Why and How to Revive the Private Securitization of Mortgages," Testimony before the House Financial Services Committee, November 3, 2011, http://financialservices.house.gov/UploadedFiles/110311wallison.pdf; and Paul Vanderslice, Testimony before the House Financial Services Committee on behalf of the Commercial Real Estate Council, July 10, 2012, http://financialservices.house.gov/uploadedfiles/hhrg-112-ba16-wstate-pvanderslice-20120710.pdf.
[16] Mortgage Bankers Association, *Ensuring Liquidity and Stability: The Future of Multifamily Housing Finance and the Government-Sponsored Enterprises*, December 2012, http://mba.informz.net/MBA/data/images/whitepapergsemf120412.pdf and National Multi Housing Council, *Key Principles for Preserving Liquidity and Stability for Multifamily in a Reformed Housing Finance System*, December 2012, www.nmhc.org/WhitePaper.cfm?ItemNumber=61015.
[17] Federal Reserve flow of funds data indicate $785 billion outstanding at the end of 2007 and $844 billion outstanding at the end of 2011.
[18] Woodwell, "The GSEs, FHA, and Multifamily," indicated $77 billion of originations during 2011.
[19] For example, HUD made direct loans under Section 202 through 1991, and USDA makes direct loans under Section 515.
[20] This footprint might include MMBS issued by spin-offs of the current GSE multifamily business units, without federal guarantees.
[21] See Federal Reserve, Flow of Funds data.
[22] Ibid., adjusted for inflation using the Consumer Price Index—All Urban Consumers, annual average.
[23] Authors' estimates based on 2000 and 2010 Census data.
[24] Trepp data indicate a 5 percent serious delinquency rate for CMBS loans originated in 2005, a 25 percent serious delinquency rate for CMBS loans originated in 2006, and a 17 percent serious delinquency rate for CMBS loans originated in 2007.
[25] GSE Securities and Exchange Commission filings.
[26] The goal structure that was in place from 1992 to 2008 rewarded the GSEs for making loans on units that were affordable to households below 90 percent (subsequently, 80 percent) of area median income, a target that virtually

all multifamily loans meet. There was an additional goal for units affordable at 60 percent AMI, which is much easier to achieve in multifamily than in single family. During this same period, multifamily lending counted toward the GSEs' overall goal performance.

[27] US Government Accountability Office, *Fannie Mae and Freddie Mac's Multifamily Housing Activities Have Increased*, Report GAO-12-849, September 2012, 52.

[28] Typical MMBS and CMBS transactions issue a variety of securities that vary in risk level. Although many securitizations feature multiple levels of risk, it is simplest to think about senior (low-risk) securities and junior (high-risk) securities. The senior (lowest-risk) securities are referred to as "A pieces" in industry parlance. The most junior (riskiest) securities are referred to as "B pieces" in industry parlance. Basically, monthly cash flows (and repayment proceeds when loans mature) are paid first to the A-piece holders, and payments to the B-piece holders are made only after all required payments have been made to the A-piece holders. Thus, a B-piece buyer needs to do careful due diligence to estimate whether there will be income to the B-piece holder, and if so how much (and when that B-piece income will be received).

[29] For historical evidence supporting this conclusion see "Report to the Governor of New York by Commissioner George Alger (Alger Report) Regarding the Operation, Conduct, and Management of Mortgage Guaranty Corporations," October 5, 1934, www.aei.org/files/2012/05/22/-alger-commission-report_13595669733.pdf. This report documents the purchase of mortgage-backed bonds by unsophisticated investors and the losses they sustained during the Great Depression.

[30] See Federal Housing Finance Agency, "FHFA Sends Congress Strategic Plan for Fannie Mae and Freddie Mac Conservatorships," news release, February 21, 2012, www.fhfa.gov/webfiles/23344/StrategicPlanConservatorshipsFINAL.pdf. An "open source" securitization platform could be used by any issuer, increasing competition and transparency.

[31] Vanderslice, Testimony before the House Financial Services Committee.

[32] "Lessons Learned from the Privatization of Sallie Mae, Department of the Treasury, Office of Sallie Mae Oversight, March 2006. See also Michael Lea, "Privatizing a Government Sponsored Enterprise: Lessons from the Sallie Mae Experience," Cardiff Economic Consulting (paper presented at conference on "Fixing the Housing Finance System," Wharton School, University of Pennsylvania, April 26–27, 2005).

[33] Generally, Freddie Mac considers the portfolio to be part of the multifamily business unit, and Fannie Mae considers the portfolio to be outside the multifamily business unit.

[34] In October 2012, for a 10-year Fannie Mae DUS loan, the guarantee fees range from 68 basis points for a "tier 4" loan (maximum 55 percent LTV ratio, minimum 1.55 DSCR) to 91 basis points for a "tier 2" loan (maximum 75 percent LTV ratio, minimum 1.30 DSCR). Because the GSE share of multifamily origination is still quite high, clearly these levels of guarantee fees are below the value of the guarantee. To create an effective phaseout, we believe that guarantee fees will need to rise by at least 50 basis points, and perhaps as much as 100, above current levels.

[35] We favor limiting this opportunity to existing borrowers (that is, the opportunity to refinance cannot be assigned to a purchaser), limiting the opportunity to performing loans, and specifying appropriately conservative underwriting criteria such as a 70 percent maximum LTV ratio, a 1.40:1 minimum debt service coverage ratio, a maximum 25-year amortization period, and a maximum 10-year maturity. The opportunity to refinance could be limited to only those loans that mature during the transition period or could be extended to loans that mature soon after the transition period expires.

[36] In industry parlance, an overleveraged borrower "refinances out" by obtaining a new loan large enough to pay off the existing debt without requiring any new equity investment.

[37] The underlying notion is that in a crisis investors will make a "flight to quality," buying Treasury securities and selling all other forms of debt out of fear that there will be a global financial meltdown in which only the very strongest borrowers will survive. If a flight to quality occurs, Treasury interest rates will drop relative to all other borrowers, including multifamily borrowers, thereby widening spreads. For example, multifamily rates could remain unchanged, with Treasury rates dropping (a situation in which a liquidity backstop might not be needed). If, however, Treasury rates remained stable while multifamily rates skyrocketed, the case for a liquidity backstop would be stronger.

[38] The Ginnie Mae supplemental guarantee fee is in the range of 15 basis points, in the context of a loan that already has FHA mortgage insurance basically covering 99 percent of potential loss risk. When providing a guarantee to a conventional loan, Ginnie Mae would bear the full loss risk, requiring a much higher guarantee fee, probably in the 200 basis point range, strong risk sharing with the originating lender, or both.

[39] White and Wilkins, *No Federal Guaranty for Multifamily*.

[40] The most socially valuable LIHTC projects (those serving the lowest-income tenants) typically have *no* private debt, and typical LIHTC projects have private debt of $25,000 per unit or less. At 6 percent and 20 years, the monthly payment on a $25,000 loan is $179. At 6 percent and 30 years, the payment is $150. In other words, no reason exists to believe that 30-year amortization is essential for LIHTC projects, rather than the 20-year amortization that is prudent, given the very aggressive way that typical LIHTC projects are underwritten and given the statutory 30-year extended affordability period.

[41] A LIHTC property whose estimated rents are close to market is an especially risky proposition for a lender. When underwriting rents, a lender will seek to balance downside risk (the risk that actual rents will be lower) with upside potential (the potential that actual rents will be higher), but in a LIHTC project, the upside potential is capped by the LIHTC rent restriction. Another risk factor is that a LIHTC property cannot be expected to command the same rents as it would in the absence of regulation because knowledgeable tenants would not willingly pay the same rent while being subjected to LIHTC requirements, such as the requirement to disclose and verify income and assets annually. We also point out that the public policy benefit of such a property is minimal compared to an otherwise similar property with rents well below market.

[42] See, for example, the Mortgage Bankers Association February 2010 update, presented at the MBA meeting in Las Vegas (in authors' files).