RETHINKING THE FHA

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Executive Summary

The Federal Housing Administration (FHA) has failed by any reasonable metric. Not only is its main mortgage insurance guarantee fund insolvent in the sense that it does not have sufficient capital resources to cover expected losses, but it is also failing far too many of its intended program beneficiaries in helping them achieve sustainable homeownership. These twin financial and policy failures call for a fundamental rethinking of how we might better achieve FHA's mission to help first-time homebuyers and financially constrained households make minimal down payments. This report argues that phasing out FHA over a period of years and replacing it with a new subsidized savings program for these households is far better than trying to reform FHA.

Recent research projects high default rates—between 15 and 30 percent—among borrowers whose mortgages FHA guaranteed since 2007. Hence, it is quite clear that very large numbers of program beneficiaries are not successful in becoming stable, long-term owners. FHA's most recent actuarial review for fiscal year 2012 shows that its Single-Family Mutual Mortgage Insurance Fund is underwater. My own research suggests that even this sobering conclusion by FHA's actuarial reviewer is too optimistic by tens of billions of dollars.

FHA's financial failure should not be so surprising because its underlying business model is fundamentally flawed. Both FHA and the borrowers whose mortgages it insures are leveraged by more than 30 to 1. This was always a financial accident waiting to happen: this leverage ratio is on par with those that were employed by Bear Stearns and Lehman Brothers just before their collapses. To be viable, such a highly leveraged business model requires that house values never fall. We have learned the hard way that actual market outcomes are not always so obliging.

Because it is folly to presume that prices will always rise in the future, we should take advantage of the breathing room provided by the recent housing market recovery to fundamentally rethink FHA's mission to serve its targeted program beneficiaries. The appropriate policy to support sustainable homeownership for these households should focus on building equity up front because the prime weakness of the FHA system is the virtual absence of meaningful equity anywhere along its chain of operations.

To do so, I propose replacing FHA with a new subsidized savings program that provides matches of qualified households' savings. The goal would be to help those households achieve a 10 percent down payment on the home they wish to purchase. As I describe in more detail in the report, the benefits of this new program include its simplicity, its transparency, its encouragement of increased equity in America's financially fragile housing system, and its subsidization of financial discipline and perseverance.

These benefits stand in stark contrast to the complexity and opaqueness of the current FHA system, as well as its subsidization of extremely highly leveraged bets on homes by financially fragile households. Not only will this new policy make the overall housing market less risky, especially for taxpayers, but it will also help many more households realize sustainable homeownership experiences.

Rethinking the FHA

Introduction

The Federal Housing Administration's (FHA) long history in the housing market dates back to its creation in 1934 during the Great Depression. However, its current policy focus was set by the National Affordable Housing Act (NAHA) of 1990, which encouraged the agency to help two groups—first-time homebuyers and financially constrained households without meaningful down payments—become successful owners. The NAHA envisioned FHA doing so by operating a mortgage insurance guarantee program that would be sustainable in the sense that it was self-supporting and would not require taxpayer bailouts via capital infusions from the US Department of the Treasury.

The evidence reviewed in this report shows that FHA has failed both its intended program beneficiaries and US taxpayers. Recent estimates project cumulative default rates of between 15 and 30 percent among borrowers who purchased since 2007, when FHA began a major program expansion that more than tripled the size of its mortgage guarantee portfolio.[1] Thus, sustainable homeownership is not being realized by a large fraction of the buyers whose loans FHA guarantees. Moreover, FHA's Single-Family Mutual Mortgage Insurance Fund is insolvent.[2] This insolvency might still be justified if FHA were successful at helping its two target populations achieve sustainable homeownership experiences. However, the twin financial and policy failures raise obvious questions of whether FHA should be allowed to continue, and if so, how to reform the agency.

I recommend terminating FHA by slowly but steadily phasing it out over the next few years and replacing it with a subsidized savings program that would provide government matches of individual household savings. A multiyear phaseout of at least three to five years is needed to ensure that there is no sudden negative shock to the residential mortgage market that would immediately depress the supply of debt capital to the housing sector. The goal of the new saving program is to help households build an economically meaningful 10 percent down payment so that the private credit markets would be willing to provide an appropriately priced mortgage for such a borrower.

Eliminating FHA will sound extreme to some, given that the agency has existed for over three-quarters of a century. I recommend phasing it out for a variety of reasons beyond the facts that it is broke and has not been able to discipline its risk-underwriting process so that substantially more of the borrowers whose mortgages it insures are successful in becoming long-term owners. In particular, I fear that FHA cannot be successfully reformed. One of the important lessons of the collapses of the giant housing government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac is that the incentives of politicians of both parties, of the senior executives of the GSEs, and of the owner-occupied housing industry to underestimate program costs and loss estimates are very strong and extremely difficult to counterbalance over time. There are strong parallels with FHA.

Perhaps even more important is that any government policy encouraging homeownership should by design target the current FHA system's core weakness, which is the virtual absence of equity anywhere along its chain of operations. FHA itself is grossly undercapitalized, as indicated by its own leverage ratio of over 40 to 1.That is, it has over $40 of outstanding insurance guarantees for every $1 of what it calls total capital resources available to pay off losses. This represents more than a threefold increase from the 12 to 1 ratio in fiscal year 2007. The borrowers whose mortgages it insures are almost as highly leveraged at about 33 to 1 on average, given that the typical down payment is no more than 3 percent. That this business model describes a financial accident waiting to happen is highlighted by the fact that these leverage ratios are higher than those that were employed by Lehman Brothers and Bear Stearns just before those firms collapsed. To be viable, such a business model requires housing prices to never fall. Housing markets are not always so obliging, leaving taxpayers to pick up the bill.

Focusing homeownership policy on increasing equity via a subsidized savings program is appropriate in a number of other ways, too. First, the equity shortfall can be addressed solely by helping borrowers accumulate a down payment without requiring a large bureaucracy to price a complex mortgage guarantee and manage a difficult foreclosure process. Moreover, the experience of big mutual-fund complexes demonstrates that such a savings program can be operated at scale at low cost, allowing more of the required subsidy to be used to match borrower savings.

Second, the focus on borrowers helps ensure that program benefits are not siphoned off by politicians or private actors (for example, realtors and homebuilders) in the housing industry. Third, the program is transparent in the sense that program costs are highly visible. They cannot be hidden as the true costs of Fannie Mae, Freddie Mac, and FHA were (and still are to some extent). This better allows us to right size the program by balancing costs and benefits on the margin.

Fourth, it will increase domestic savings, which is a good thing for a country like the United States, which has been borrowing a lot of money from foreigners. Fifth, it provides appropriate incentives and helps inculcate useful values in borrowers. Households that are able to demonstrate the financial discipline and long-term planning demanded by a multiyear savings program are subsidized under this plan. That is far different from the current program, which subsidizes the risky, highly leveraged gambles that Andrew Caplin and colleagues and Edward J. Pinto have shown are not paying off for a disturbingly high share of FHA-insured borrowers.[3] Of course, nothing is free, but the benefits of this new subsidy program would not be appreciably more expensive than would FHA under reasonable assumptions. And a much safer and less leveraged housing market would result in the bargain.

The first section of this paper reviews recent research and analysis of the financial soundness of FHA's main mortgage insurance fund, as well as the current and projected default experiences of borrowers FHA has insured since the beginning of the financial crisis. In the second section, I provide a more detailed discussion of my proposal to replace the FHA with a new, subsidized savings program designed to help first-time and financially constrained households amass an economically meaningful down payment equal to 10 percent of the value of the home they desire to purchase. Finally, my conclusion addresses some of the likely complaints regarding the termination of the FHA.

What Have We Learned about FHA Over the Past Year?

The Financial Condition of the Main Single-Family Mortgage Insurance Fund. The most important financial development over the past year is the formal acknowledgment in the latest actuarial review of FHA for fiscal year 2012 that the economic value of its main single-family mortgage insurance fund is in the red by over $13 billion.[4] This was news to many, and confirmed my 2011 claim that this fund was economically insolvent. It should not have been surprising, as FHA had been in violation of its 2 percent capital reserve requirement since 2009. This policy guideline implies that FHA's total capital resources available to pay off claims should not be below 2.00 percent of the aggregate amount of FHA's outstanding mortgage insurance guarantee balance; those reserves on its main single-family mortgage insurance fund had fallen to a miniscule 0.18 percent in fiscal year 2011. Obviously, they are now negative.

This was virtually preordained by the fact that FHA had nearly doubled its insurance guarantee portfolio since 2009, a time period characterized by falling house prices and persistently high unemployment. Much research into and experience with default tells us that negative equity and income losses from unemployment raise the likelihood of default, with the combination of the two for any given borrower being particularly influential.[5]

The only reason insolvency was not formally acknowledged before the 2012 actuarial review was because of systematic underestimation of default risk, which made the economic condition of the main insurance fund look much less precarious than it truly was. My 2011 AEI report detailed the four major reasons why unobserved credit risk is so high in the FHA insured mortgage portfolio: (1) default estimates were made without any attempt to control for unemployment risk; (2) no attempt was made to account for the high default risk resulting from unobserved gifts received by borrowers to fund down payments associated with the first-time homebuyer tax credit program in 2009–10; (3) program actuarial reviews underestimated negative equity in the portfolio of guaranteed loans because of the inappropriate use of a house price index based on conventionally financed home purchases; and (4) program reviews also underestimated future default risk associated with FHA's streamline refinance program.

US Department of Housing and Urban Development (HUD) leadership were for the most part dismissive of this critique, but FHA's outside actuary does appear to have taken some of my (and others') input as the constructive criticism it was intended to be.[6] While the latest actuarial review did not address the issues of heightened default risk because of unobserved gifting and underestimated negative equity, FHA did try to control for unemployment in the default models it used in the 2012 review by including the national unemployment rate (and changes in that rate) in its estimated specifications. FHA also took some steps to improve its analysis of streamline refinance mortgages.[7]

Unfortunately, as my 2013 paper with Joseph Tracy and my April 2013 AEI report show, the attempt to control for unemployment risk was not successful.[8] The two key conclusions are as follows.[9] First, FHA is still substantially underestimating the heightened default risk associated with one of its insured borrowers becoming unemployed. A very conservative evaluation suggests that the degree of underestimation at the individual borrower level is very large—by a factor of at least 25, and possibly by 100 or more.[10] Stated differently, becoming unemployed raises the probability of default for a given borrower by 25 to 100 times more than FHA's baseline models suggest. In economic terms, this makes unemployment risk more influential in predicting individual default than having even a low, subprime-level credit score (below 580) or a very high loan-to-value ratio at origination.

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This should not be surprising, as becoming unemployed for any meaningful length of time implies a huge fall in income for the typical household. Once a jobless household depletes its savings, it literally cannot make the monthly mortgage payment, which causes a default.[11] In addition, FHA's own surveys of special servicers tell it that the primary reason a mortgage became delinquent is because of a loss of income (typically from a job loss or substantial cutback in hours).[12] Hence, this analysis accords with what common sense, HUD's own survey data, and basic default decision theory show—which is that unemployment risk has a huge impact on the probability of default for a given borrower.

From a taxpayer's perspective, it is more important for FHA to correctly estimate the level of default risk on its overall portfolio than it is for FHA to accurately predict when any one borrower will default. Unfortunately, a second important conclusion of my 2013 AEI report and my and Tracy's 2013 report is that FHA's most recent effort to include a market-level unemployment rate in its default models does not appear to help FHA generate more reliable forecasts of default risk on its aggregate insurance portfolio. The relevance of this conclusion is that it implies that unemployment risk largely remains unpriced in terms of evaluating the financial soundness of the FHA mortgage guarantee portfolio. Clearly, this is a critical reason why FHA program risks have been systematically underestimated in the past. This unfortunately also implies that this is likely to be the case going forward because, as Tracy and I note in our 2013 paper, there is no immediate, short-term fix to this problem.

Continuing to allow FHA to expand and essentially betting that its future books of business will be so profitable that it can grow out of its present insolvency is unwise.

It is important to note that the very large impact of unemployment risk on the probability of default exists when the credit score of the borrower and the initial loan-to-value ratio are held constant. Thus, these effects occur even though FHA's guarantee pool has a much higher average credit score than it has had in the past. This may surprise some, but it is readily understood. A credit score is based on a household's past payment history and the length of that history. It does not change when a household becomes unemployed, unless some type of late payment or delinquency occurs simultaneously.

Hence, credit scores should not be expected to capture everything that there is to know about the credit risk of a borrower; they clearly do not. Nor should one expect them to control for an unpriced risk such as that associated with future unemployment. Hence, one should not anticipate that restricting loan guarantees to borrowers with high initial credit scores at the time of loan origination will protect the insurance fund from future losses associated with macroeconomic risks such as borrowers losing their jobs.

In sum, new research helps us better understand why FHA systematically underestimates default risk and future losses. However, fixing those problems is technically challenging. We know that current actuarial forecasts still underestimate default risk by a significant amount, but not by exactly how much. Thus, going forward, we should still expect higher losses than FHA is currently projecting, which implies that continuing to allow it to expand and essentially betting that its future books of business will be so profitable that it can grow out of its present insolvency is unwise. The present insolvency condition will continue and likely worsen absent a large capital infusion by the US Congress or dramatically stronger recoveries in the labor and housing markets that materially reduce negative equity and unemployment risks.

The Failure to Support Sustainable Homeownership. The past year has also seen important new research that documents an alarmingly high failure rate of supporting sustainable homeownership for many of the buyers whose mortgages FHA guarantees. Caplin, and colleagues' 2012 study of default rates on FHA's 2007–09 books of business, which considered data through September 2011, documented that 15 percent of the borrowers insured by FHA in 2007–09 had already been in serious delinquency in that they were at least 90 days late on their loan payments.[13] That is an important precursor to foreclosure, as in this data, more than 80 percent of borrowers who become 90 days delinquent end up losing their homes.[14] Those authors also projected that more than 30 percent of all borrowers in the 2007–09 pools were likely to default within the next five years. That projection is higher than FHA's, but it is also more credible for reasons discussed earlier and in my 2011 report. That failure rate is also double the 15 percent of the borrowers that Caplin and colleagues project to have paid off their FHA-insured mortgages at any time within the next five years.[15]

Pinto's 2012 paper documents that this problem of financing unsustainable homeownership is not confined to books of business from the beginning of the financial crisis. His research focuses on the more recent 2009 and 2010 books of business guaranteed by FHA, and shows that high failure rates of 15 percent or more are projected among borrowers with incomes below their metropolitan-area median level. It is noteworthy that these borrowers tend to be geographically concentrated in working-class neighborhoods across the country.[16] Pinto points out that this means that the adverse ramifications of unsustainable homeownership spells extend beyond the financial and personal distress of the borrowers who lose their homes. The negative spillovers on nearby property values imply that those who do not default are also harmed.

That many of these defaulting borrowers are physically concentrated in the same low- and moderate-income neighborhoods in virtually all of the nation's major metropolitan areas also increases the likelihood of poor social, not just economic, outcomes for those places. FHA should not be held solely responsible for such outcomes, to be sure. The foundation of this problem is the risky subprime mortgage product that was not guaranteed by FHA. Still, there is little doubt that FHA's policies and practices are making that proplem worse, and that certainly must be considered a serious policy failure.

So What Should We Do about FHA?

Shutting down a program that is insolvent and that is leading to far too many cases of unsustainable homeownership is easily justified, and—many might argue—necessary for signaling to others that such failure will not be tolerated. However, we need to be careful not to harm the intended program beneficiaries when doing so. Even if one disagrees with the premise of FHA, the historical fact is that Congress has charged it with the responsibility of helping first-time buyers and financially constrained households without sizable down payments become successful homeowners.

That is the foundation on which reform proposals such as that of Pinto's 2012 paper rest. His recommendations include tightening underwriting standards so that no loan with a probable default rate of greater than 10 percent would be guaranteed. He also recommends that FHA aim for an aggregate default rate of 5 percent. Importantly, Pinto's 2012 report calls for risk-based pricing that recognizes layered risks and prices them appropriately. By this he means that some combinations of borrower traits, such as low initial credit scores and high loan-to-value ratios, create higher default risk, and that those borrowers should be charged more.

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Individually and collectively, these recommendations make very good sense. They would make FHA much safer, and many lower-income borrowers and the neighborhoods in which they live would be much the better for them. However, I believe we should move in a different direction that involves a more radical reform of FHA and housing policy pertaining to FHA's intended program beneficiaries. I recommend that FHA be phased out completely over some well-defined period (for example, three to five years) and replaced with a new subsidy program that would help first-time homebuyers and other specially targeted groups amass a 10 percent down payment that would then allow them to obtain financing at market rates from a private market lender.

The appropriate housing policy to support truly sustainable homeownership should focus on building equity up front because, as noted previously, the dearth of equity throughout the FHA system is its prime weakness.[17] I envisage a simple system in which qualified households would pay into a special savings vehicle and receive some type of match from the government. These funds would accumulate on a tax-free basis until they were large enough to provide a 10 percent down payment on a home. Thus, if a typical starter home in the average market costs about $100,000, the program would be designed to help qualified households amass $10,000 in savings.

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To reward success and financial discipline, borrowers would receive the matching funds only if they achieved their targeted down payment by continuing to make their monthly savings contributions. Their monthly statements would clearly indicate the matching funds that would be at risk if they were to withdraw from the program. Some private firms in the home mortgage sector use a similar scheme (for example, the Loan Value Group).This strategy is also in accord with an important lesson learned from behavioral economics regarding loss aversion: most people find the pain that results from losing $1,000 to be greater than the joy that results from winning $1,000. Hence, they will work hard to avoid losses. In this case, the program makes salient the extent of the financial loss resulting from the failure to continue saving, with the obvious goal of nudging households to stay in the program.

Households that complete the program will be in a strong position to be successful in paying their mortgage, both because they have meaningful equity in their homes from the outset, and because they have demonstrated the ability to save consistently over a lengthy period of time leading up to the purchase.[18] Lastly, I strongly prefer means testing of the households to determine program eligibility so that the program is not open to all. But I leave those details to future development.

My proposal focuses solely on the borrower side because the entire policy goal can be addressed there without having to include a large, poorly run entity such as FHA on the other side of the policy intervention. This simplicity and singular focus help ensure that program benefits accrue to the intended beneficiaries—specific borrowers the government believes would benefit from having access to homeownership—without getting somehow transferred to others in the real-estate industry or government.

It also makes the program costs more visible. This is essential for getting the size of the program right. The economically efficient outcome is a program size that guarantees that the last subsidy dollar spent generates social benefits equal to the costs to the taxpayers who funded the subsidy. The catastrophic failures of Fannie Mae and Freddie Mac show us that they were able to grow far too large because they "lowballed" costs by underestimating program risks within their complex fields of operations. For a considerable period of time, this allowed politicians, GSEs, and their allies in the owner-occupied housing industry to claim that substantial benefits were being generated without large costs being incurred. In reality, the risks taken on were huge and so were the expected costs, but the opaque nature of Fannie and Freddie allowed that fiction to last far longer than it should have. If this sounds like what has been happening with FHA, that is because it is.

Hence, any new program structure should be as transparent as possible about costs, and my proposal passes that test because there would be no way to hide whatever matching dollars the federal government put into the household savings accounts. Moreover, we know there are mutual-fund complexes that could operate these accounts in large scale at low cost. Hence, a big public bureaucracy is not needed (although the Internal Revenue Service probably could play a useful role) so that a larger fraction of overall program costs could be devoted to the government match amount.

My proposal would also help increase domestic savings, which would be good for the nation. In the proposal's current form, the savings would be targeted toward the owner-occupied housing industry. That is not an unabashedly good thing, if you believe as I do that the benefits of homeownership are overestimated by many households. Given the government's general pro-homeownership stance and its explicit encouragement of highly leveraged purchases by owners within the FHA system in particular, it should not be surprising that some citizens would conclude that buying an expensive asset such as a home with little or no money down must be a pretty good thing in general and not very risky in particular.

When combined with the natural incentives of private-sector builders, of mortgage brokers, and of realtors to maximize profits by enhancing the visibility of the benefits of owning and of reducing the visibility of the costs, it should also not be surprising that many households have excessively optimistic expectations regarding the financial returns to homeownership. Thus, I certainly would not be opposed to including an educational component to the program that helped people understand the actual tradeoffs between owning and renting, as well as the true long-run costs of maintaining a home.[19] That well might lead one to allow the accumulated funds to be used for another purpose such as education, but that is a detail best left to future discussion.

Last but not least, this program would also help instill appropriate incentives for subsidy recipients by conveying the need to sacrifice and defer consumption to sustainably afford an expensive, durable good such as a home. Unless one had the very good fortune to be born rich, this wise prudence has always been true, at least until policymakers and bankers decided during the most recent boom that meaningful equity was no longer necessary to buy homes. The last few years have highlighted the folly of that decision. Moreover, the long-term perspective this type of subsidy program would encourage in program recipients stands in stark contrast to current policy, which facilitates highly leveraged bets by financially weak households that have not shown the discipline to defer consumption to save for a meaningful down payment. As Caplin and colleagues documented in their 2012 paper and Pinto documented in his 2012 study, this has only led to more of those gambles failing in recent years.

This new subsidy program and its benefits are not free, but continuing FHA mortgage guarantees on highly leveraged borrowers is not free either. I do not provide a detailed cost comparison analysis in this paper, but a very generous subsidy should not be appreciably more expensive than FHA is likely to be under reasonable assumptions.

FHA guaranteed the mortgages on nearly 750,000 home purchases in the last fiscal year (2012). That is a high number historically, as FHA increased its market share substantially since the onset of the financial crisis. Hence, a sensible presumption is that FHA will be guaranteeing no more than 500,000 purchase mortgages a year by the time it is wound down. With a few added assumptions, an estimate of the subsidy flow required from taxpayers can be provided.

My back-of-the-envelope calculation presumes a very generous subsidy rate for modest-income households earning $50,000 per year that purchase homes for $150,000. Further assuming that no more than a 2 percent gross savings rate is feasible for such households and that we want them to be able to own within five years of entering the program, taxpayers would be responsible for $2,000 per year per household in subsidy flow. That amounts to $1 billion per year across 500,000 program recipients, plus the administrative costs of managing the individual savings accounts.[20]

Up until now, that would not have been expensive compared to the true costs of operating FHA over past housing market cycles. FHA's latest actuarial review reported that its single-family mortgage insurance fund had a net worth of –$13.5 billion at the end of fiscal year 2012. Others such as AEI's Edward Pinto believe that number is far too optimistic. Pinto's calculations suggest a net worth of –$27.4 billion based on generally accepted accounting principles according to his May 2013 *FHA Watch*.[21] He puts FHA's total capital shortfall in the $47 to $67 billion range. My own research suggests that between $50 and $100 billion is needed to recapitalize FHA. The point is that we can help many millions of households amass meaningful down payments over many years for no more than the likely costs of putting FHA on a sound financial footing after years of mismanagement.

The catastrophic failures of Fannie Mae and Freddie Mac show us that they were able to grow far too large because they "lowballed" costs by underestimating program risks within their complex fields of operations.

The cost comparison is less favorable for the new subsidy program given recent changes to FHA. Based on FHA's new upfront insurance premium of 175 basis points and its higher annual fee of 125 basis points, in their 2012 paper, Caplin and colleagues calculate that FHA will roughly break even if cumulative default rates fall much below 14 percent. That is still less than the default rates on recent books of business according to Caplin and colleagues' paper, but one can imagine better outcomes for FHA as the housing market improves. If this happens, the subsidy program will not be less expensive, but we will still get a much safer and less leveraged housing market with a lower level of defaults and much better outcomes for tens of thousands of borrowers—and for relatively little added net cost.[22]

Conclusions

Some homeownership advocates will argue that this policy proposal will harm the housing market and the broader economy for a couple of reasons. One is that it will lower the homeownership rate by increasing the time many households remain renters while they are saving for their down payment. Another is that eliminating FHA removes an important tool of countercyclical economic policy.

It will no doubt take most modest-income households many years to amass a 10 percent down payment, even with a generous government match rate. Ten percent of a modest, $100,000 starter home is $10,000. For a household earning $50,000 a year, a not unreasonable 2 percent gross saving rate generates only $1,000 per year. That implies a decade-long period of saving given the lack of current yield available on any safe savings vehicle. A 100 percent government match would halve that period, with shorter savings periods requiring greater subsidies, as illustrated in my most recent example. Thus, targeted households will still remain renters for longer than they would under the current regime, which allows quicker access to owning via the subsidization of very low down-payment mortgages. That delayed entry into homeownership will lower the overall rate of ownership, so the first claim from homeownership advocates is accurate.

What this would not do, however, is harm the broader economy. The targeted households do not cease being part of the economic life of the country while they are saving for a down payment. They are merely renters, rather than owners. This will cause transfers between businesses in the owner-occupied and rental housing sectors, with the former losing and the latter gaining. However, there is no reason to believe that homebuilders are more deserving than rental landlords, and thus that the government should not care about this. More importantly, there will be no first-order impact on the broader economy. The funds not spent on buying a home will be deployed elsewhere in the economy, including through the lending out of the higher domestic savings generated by this program. Just because one is not buying a home does not mean a household's income or wealth disappears or somehow leaks outside the national economy. It does not.

In addition, the likelihood that the homeownership experience will be sustainable will be much higher because there is a meaningful equity cushion to absorb the effects of negative economic shocks. Even if a lengthy unemployment spell occurs that prevents payment of monthly debt service, default is not the only possible outcome because the sale proceeds are much more likely to be sufficient to pay off the outstanding mortgage balance. Hence, the household would not suffer long-term damage to its credit rating if it could not make monthly debt service payments and had to sell.

There is also no meaningful loss of a countercyclical policy tool from FHA's elimination. This is not to deny that FHA and HUD officials have recently claimed that the newly recognized losses on FHA's main insurance fund are the price that had to be paid for using FHA as part of a countercyclical economic policy. However, it is important to note that no such claims were made when FHA was expanding its guarantee portfolio by nearly 400 percent since fiscal year 2007, before FHA's formal recognition of the negative economic value of its insurance guarantees this year. In fact, HUD's and FHA's senior leadership consistently claimed that the huge increase in FHA activity involved guaranteeing safe loans that would not generate net losses to the insurance fund. In addition to relying on its outside actuary's conclusion each year that the main insurance fund was solvent, one of FHA's standard defenses was to point to the increasingly high credit scores of the borrowers it insured, among other factors. Hence, this strikes me as little more than an ex post facto rationalization of a major risk underwriting failure.[23]

Even if I am wrong about that, it is hard to imagine a worse vehicle for countercyclical economic policy than ramping up FHA's insurance fund. The problem is that its structure correlates or concentrates risk, as opposed to diversifying it. Because FHA guarantees pools of highly leveraged assets with little or no equity available to absorb losses in the event of a general economic downturn, many mortgages are likely to default at the same time. The reason is that most of the mortgages FHA guarantees share the same weakness (too little equity to absorb any property value declines), and thus are vulnerable to one common, negative economic shock. As I have written elsewhere, this means that FHA's insurance fund shares a key risk trait with so-called CDO^{2}s (collateralized debt obligations squared), which were among the first financial securities to fail and helped initiate the downward spiral when the financial crisis hit.[24] Simply put, countercyclical policy initiatives should be implemented via the much less risky structures and mechanisms available to the Federal Reserve System and Congress. There is absolutely no need to keep FHA around for this purpose.

In addition, the recent claim by one economic consulting firm (Moody's Analytics) that FHA "saved the housing market" through its actions in the aftermath of the financial crisis does not justify keeping it around. I have not seen Moody's Analytics' report (nor do I know who funded it), so I cannot comment on the underlying statistical analysis that leads it to conclude that house prices would have fallen by another 25 percent and transactions volumes would have fallen by as much as 40 percent had FHA not done what it did. However, I do not find it implausible that in the midst of the greatest financial crisis since the Great Depression, abruptly shutting down the one remaining guarantor of what had effectively become a nationalized housing finance system would have had major negative consequences for the housing market. Doing so clearly would have made the market even more illiquid.[25]

Of course, that still does not justify guaranteeing large fractions of poorly underwritten loans that have either failed or will do so over the next few years.[26] A far better strategy would have been to allow Fannie Mae and Freddie Mac to continue serving the market for borrowers with more substantial down payments. For political reasons, those two GSEs were virtually shut down from doing new business beyond refinancing existing holdings after they were put into conservatorship. While politically understandable, it was economically unwise, as important liquidity for much more soundly underwritten loans could have been provided to the market. The data tell us that Fannie Mae's and Freddie Mac's losses were minimal for loans they guaranteed that had more than a 10 percent down payment in front of the mortgage. Hence, the damage to financially fragile borrowers and many local markets from FHA's poor underwriting policies could have been avoided. Finally, even today, critics are not arguing for an abrupt agency shutdown. A multiyear phase out is required even now.

Finally, there is no better time to fundamentally rethink a program than right after it has failed. And there is no doubt that FHA has done so. It is running an insolvent mortgage insurance guarantee platform with a total risk exposure equal to about 7 percent of national output, and has shown itself unable to discipline its underwriting process to prevent a much too high share of its intended beneficiaries from achieving sustainable homeownership. For FHA to be broke on a program of this scale and to be failing at such a core part of its policy mission cannot be categorized any other way. Some propose that FHA toughen and reform underwriting standards so that sensible risk-based pricing of layered risks can occur.[27] I greatly respect that position and agree that those reforms make excellent sense if the agency is to continue existing.

However, I argue we should go in a different direction that involves phasing out FHA completely over the next few years and replacing it with a new subsidy scheme that directly encourages borrowers to save for a 10 percent down payment by providing matching funds from the government. We need to address the lack of equity that characterizes FHA's basic business model so that taxpayers and households that want to own homes are better served. I believe that is best achieved via a subsidized savings program that will enable deserving households to achieve sustainable homeownership, not via some temporary access to owning based on extremely high financial leverage that will always be dependent on the vagaries of the market and economy.

Notes

I am grateful to Henry Olsen for encouraging me to begin studying this topic. I have benefitted from many conversations and collaborations with Joe Tracy on this and related issues, but he bears no responsibility for the conclusions (or any errors) in this report.

1. For all references to the 2012 paper by Caplin and colleagues, see Andrew Caplin, Anna Cororaton, and Joseph Tracy, "Is the FHA Creating Sustainable Homeownership?" (working paper, National Bureau of Economic Research, Cambridge, MA, June 2012); for all references to Edward J. Pinto's 2012 paper, see Edward J. Pinto, *How the FHA Hurts Working-Class Families and Communities* (Washington, DC: AEI, December 2012).

2. See Integrated Financial Engineering Inc., *Actuarial Review of the Federal Housing Administration Mutual Mortgage Insurance Fund Forward Loans for Fiscal Year 2012* (November 5, 2012). For all references to my 2011 AEI paper, see Joseph Gyourko, *Is FHA the Next Housing Bailout?* (Washington, DC: AEI, November 2011).

3. Caplin, Cororaton, and Tracy, "Is the FHA Creating Sustainable Homeownership?"; and Pinto, *How the FHA Hurts Working-Class Families.*

4. Integrated Financial Engineering Inc., *Actuarial Review of the Federal Housing Administration.*

5. For a classic paper in this area, see Yongheng Deng, John Quigley, and Rober Van Order, "Mortgage Terminations, Heterogeneity and the Exercise of Mortgage Options," *Econometrica* 68, no. 2 (2000): 275–307. For more recent analyses of the so-called "double trigger" hypothesis that negative equity and income loss associated with unemployment combine to generate very high default probabilities, see Chris Foote, Kristopher Gerardi, and Paul Willen, "Negative Equity and Foreclosure: Theory and Evidence," *Journal of Urban Economics* 64, no. 2 (2008): 234–45; Chris Foote et al., *Reducing Foreclosures: No Easy Answers* (working paper, National Bureau of Economic Research, Cambridge, MA, June 2009); and Ronel Elul et al., "What 'Triggers' Mortgage Default?" *American Economic Review* 100, no. 2 (May 2010): 404–94.

6. The assistant secretary for research and development at the US Department of Housing and Urban Development (HUD) posted a response on an internal site called the HUDdle blog, which denied each of my claims. It was available at http://blog.hud.gov/2011/11/18/continued-strength-fha, but has since been taken down.

7. That latter effort is not reviewed here. It is quite complex, and we must rely on Caplin and colleagues to work with FHA to determine how much of the underestimation of default risk relating to streamline refinancing has been addressed.

8. For this and all other references to my 2013 AEI report, see Joseph Gyourko, *Unfounded Optimism: The Danger of FHA's Mispriced Unemployment Risk* (Washington, DC: AEI, April 2013). For this and all other references to my and Tracy's 2013 report, see Joseph Gyourko and Joseph Tracy, "Unemployment and Unobserved Credit Risk in the FHA Single Family Mortgage Insurance Portfolio" (working paper, National Bureau of Economic Research, March 2013).

9. For more details, see Gyourko and Tracy's 2013 report.

10. The reason for the huge underestimation of the true impact of unemployment risk on the probability of default is technical in nature and has to do with what statisticians call "attenuation bias." The underlying cause is that FHA does not observe whether any given borrower whose mortgage it guarantees is employed at any point in time. Hence, FHA must use the market unemployment rate to proxy for a borrower's unemployment status. Unfortunately, the correlation between the change in the aggregate unemployment rate and any given borrower's unemployment status turns out to be quite low. Why? Because even a very high unemployment rate of (say) 10 percent does not mean most borrowers have been laid off. In this case, 9 out of 10 still have jobs. Moreover, increases in that rate to 11 percent do not imply that most employed borrowers lost their jobs. They did not, as only 10 percent more were laid off. This makes the aggregate unemployment rate a noisy (measured with substantial error) proxy for any given borrower's unemployment status, and noisy proxies cause attenuation bias, which essentially means that the true impact of becoming unemployed is underestimated. In this particular case, the degree of downward bias in the estimate is dramatic. See Gyourko and Tracy's 2013 report for the details.

11. The combination of suffering a severe negative income shock and negative equity is known to be particularly influential in leading households to default. For more on these two triggers of default in the most recent housing cycle, see Foote, Gerardi, and Willen, "Negative Equity and Foreclosure"; and Foote et. al., *Reducing Foreclosures*.

12. For some recent data, see US Department of Housing and Urban Development, *Annual Report to Congress, Fiscal Year 2011 Financial Status, FHA Mutual Mortgage Insurance Fund* (November 15, 2011), table 5.

13. FHA's terminology for a foreclosure event that leads to an insurance fund loss is a "claim." Analogously, what are called "default rates" in this paper, FHA terms "claims rates." Technically, a default can be (and sometimes is) cured with no loss to FHA. I use these terms interchangeably throughout this report.

14. Caplin, Cororaton, and Tracy, "Is the FHA Creating Sustainable Homeownership?," table 2.

15. The typical way to pay off the loan is to have it refinanced outside the FHA system, which Caplin and colleagues considered to represent a transition to sustainable homeownership because it involved a nonsubsidized financing by the private mortgage market.

16. In his 2012 report, Pinto uses FHA's projections of future cumulative claims rates. I believe those estimates are too low for the reasons discussed previously in this report and in my 2011 and 2013 papers. If this is correct, then his already very somber conclusions are likely to prove optimistic.

17. In his 2012 report, Pinto also proposes helping households build equity by using shorter-term mortgages that have faster amortization speeds. That is another excellent idea that could easily be added on to my proposal to amass sufficient equity before one takes out a mortgage.

18. The importance of this latter point is demonstrated by the fact that FHA experiences very high default rates on borrowers who did not fund the meager down payments currently required by their program rules. It is a very bad credit-quality sign if a household has to use gifts from an outside source (including other family members) to fund a down payment.

19. The costs of being a homeowner are not restricted to the upfront equity investment needed for purchase and the subsequent monthly mortgage payments. Housing is a durable good akin to a complex machine. All such machines depreciate in quality over time and ultimately break down. The same is true of a home. Recent research by James Poterba and Todd Sinai indicates that annual depreciation and maintenance costs amount to about 2.5 percent of overall house value. Note that this is not much different

from the magnitude of the initial down payment made by the typical FHA borrower. However, it is an annual cost. Unlike one's mortgage payment, maintenance can be deferred, but doing so lowers the house's value, which only diminishes the small amount of home equity most FHA-insured borrowers have in the first place. This is one among many reasons why many households underestimate the risk of highly leveraged home purchases—namely, they do not understand that the future costs of owning are going to be far higher than the initial down payment or even the regularly scheduled mortgage payments. See James Poterba and Todd Sinai, "Tax Expenditures for Owner-Occupied Housing: Deductions for Property Taxes and Mortgage Interest and the Exclusion of Imputed Rental Income," *American Economic Review* 96, no. 2 (May 2008): 84–89.

20. A 10 percent down payment on a $150,000 home amounts to $15,000, which implies $3,000 in savings are needed per year for five years. A 2 percent gross savings rate on households earning $50,000 annually implies that they would contribute $1,000 per year in savings ($50,000 times 0.02 equals $1,000). In this particular case, the other $2,000 per year per household would come from the taxpayers. That reflects an extremely generous match rate, but provides a ballpark estimate of required subsidy under such conditions.

21. See Edward J. Pinto, *FHA Watch* 2, no. 5 (May 2013), www.aei.org/article/economics/financial-services/housing-finance/fha-watch-may-2013-vol-2-no-5/.

22. That cost is about $1 billion per year given the assumptions used here. This also presumes that Congress and FHA maintain pricing discipline and do not lower their insurance fees as surpluses build before the next housing market downturn. Otherwise, the cost disadvantage rapidly turns into a cost advantage for the new subsidy program. Given the natural incentive to underprice the insurance guarantee for political gain, this seems a likely outcome and is another reason to replace the current program with a new, more straightforward subsidy scheme.

23. Page 1 of the introduction to HUD Secretary Shaun Donovan's statement in his 2009 *Annual Report to Congress Regarding the Financial Status of the FHA Mutual Mortgage Insurance Fund* is typical in this regard. It claims the 2009 book of business has higher underwriting quality compared to previous years, with higher borrower credit scores being a prime reason. The introduction to this annual report and each subsequent one also explicitly notes that "sustainable" homeownership is a key goal and that underwriting standards are such that that goal will be achieved. See US Department of Housing and Urban Development, *Annual Report to Congress Regarding the Financial Status of the FHA Mutual Mortgage Insurance Fund* (November 12, 2009).

24. This argument and comparison with CDO^{2}s is presented in more detail in Joseph Gyourko, "The Government's Overleveraged Housing Bet," *The American,* November 16, 2011, www.american.com/archive/2011/november/the-governments-overleveraged-housing-bet

25. That said, it seems likely that the Moody's Analytics report overestimates FHA's true impact on prices. One reason is that, absent access to FHA's subsidized guarantees, it is not clear how much further house prices would have fallen before investors would have entered the market in sufficient quantity to allow prices to stabilize. Given the existing supply of homes in the market, house prices depend on the overall demand for housing, not just the demand from owner occupants. Stated differently, underpriced FHA financing guarantees may have crowded out at least some investor demand for housing that would have placed the homes in stronger financial hands and helped hold down upward pressure on rents. Moreover, when many of the FHA-insured mortgages subsequently defaulted, the resulting distress sales themselves likely exerted downward pressure on home prices, thereby prolonging the period of weakness in house prices.

26. Caplin, Cororaton, and Tracy, "Is the FHA Creating Sustainable Homeownership?"

27. Pinto, *How the FHA Hurts Working-Class Families.*

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KEY FINDINGS

Current Federal Housing Administration (FHA) policy fails in its mission to help many first-time and financially constrained homebuyers achieve homeownership. To make matters worse, it has failed to remain financially solvent. These twin failures underscore the need for bold reforms:

- **FHA is a policy failure:** Far too many of FHA's intended beneficiaries fail to achieve sustainable homeownership. Recent research projects that between 15 and 30 percent of borrowers whose mortgages FHA has guaranteed since 2007 will default.
- **FHA is a financial failure:** FHA's main mortgage insurance guarantee fund is under water. It does not have sufficient funds to cover its expected losses, and its most recent actuarial review puts its net worth at a –$13.5 billion. My research concludes that FHA needs at least a $50 to $100 billion capital infusion to put it on a sound financial footing.
- **FHA's business model is fundamentally flawed:** Both FHA and the borrowers whose mortgages it insures are leveraged by more than 30 to 1. To be viable, such a highly leveraged business model virtually requires that housing values never fall. As we have learned from the recent housing crash, this is not a realistic expectation.

How to Reform FHA

Replace FHA with a New Subsidized Savings Plan. Phasing out FHA over a period of years and replacing it would be far better than trying to reform such a flawed program. The replacement program would offer the following benefits:

- **Simplicity:** This straightforward plan would allow qualified households to pay in to a special savings vehicle and receive some type of match from the government. This stands in stark contrast to the current system, which requires a large bureaucracy to price a complex mortgage guarantee and to manage a difficult foreclosure process. The funds would accumulate on a tax-free basis until they were large enough to provide a 10 percent down payment on a home.
- **Transparency:** Focusing on borrowers helps ensure that program benefits accrue to the targeted households—not to politicians or private actors such as housing financiers, realtors, or builders. Policy should subsidize those households directly rather than indirectly through an opaque mortgage insurance guarantee. Because costs would not be hidden (as those for Fannie Mae and Freddie Mac were), policymakers could more appropriately balance costs and benefits.
- **Sustainability:** By incentivizing potential homebuyers to demonstrate financial discipline and long-term planning, this program would help inculcate values that will decrease a household's likelihood of default once it purchases a home. And because the household will have developed meaningful equity in a home before purchase, it will be less vulnerable to fluctuations in the housing market.
- **Safety:** Helping riskier borrowers build equity over time will result in a much safer and less leveraged housing finance system. This benefits taxpayers and will result in much better housing outcomes for tens of thousands of borrowers.

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