

SUSTAINABLE HOUSING FINANCE, PART III

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HOUSING AND INSURANCE
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SUSTAINABLE HOUSING FINANCE, PART III

Tuesday, November 7, 2017

**U.S. HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON HOUSING
AND INSURANCE,
COMMITTEE ON FINANCIAL SERVICES,
*Washington, D.C.***

The Housing and Insurance Subcommittee met, pursuant to notice, at 10:05 a.m., in room 2128, Rayburn House Office Building, Hon. Sean Duffy [chairman of the subcommittee] presiding.

Present: Representatives Duffy, Ross, Royce, Posey, Luetkemeyer, Stivers, Hultgren, Rothfus, Zeldin, Trott, MacArthur, Budd, Cleaver, Capuano, Sherman, Beatty, and Kildee.

Also present: Representative Green.

Chairman DUFFY. The Subcommittee on Housing and Insurance will come to order. Today's hearing is entitled "Sustainable Housing Finance, Part Three." We have already had two hearings.

Without objection, the Chair is authorized to declare a recess of the subcommittee meeting at any time.

Without objection, members of the full committee who are not members of this subcommittee, may participate in today's hearing for the purpose of making an opening statement and questioning our witnesses. The Chair now recognizes himself for 3 minutes.

I first want to thank the panel, our distinguished panel, for coming in today and offering their insights into housing finance. We have already heard from stakeholders that represent several aspects of the housing finance system. We have heard from those who finance purchases of homes, those who build homes and those who help sellers and buyers meet for that buyer's slice of the American dream.

And before us, we have those who have done extensive work in this space, have policy ideas, probably have some recommendations for the must do's and must don'ts for this committee, and I look forward to all of your testimony as you advise our committee.

But for us, we recognize that the home purchase, is probably one of the largest, biggest financial and most important decisions that a person makes. Probably besides what ring you buy and who you decide to marry, this is the biggest decision that you will make in your financial life.

And making sure that we have a system that actually works for all Americans is incredibly important because we have seen when things go wrong—back in 2008. It doesn't only impact those who purchased a home. It wreaks havoc throughout the whole economy.

People in the industries that involve home purchases and home sales, they get ravaged. We have heard from many of those sectors where many of their colleagues and friends have lost their jobs. We have seen what it does to an economy as a whole.

But what we are focused on is what it does to actual home buyers, people who purchased homes and couldn't afford them, how that devastated their financial future, crushed their families. We don't want that to happen again.

And make no mistake that we are, what, almost 10 years on from the crisis, reforming housing finance is not easy. If we thought tax reform was tough, as we have seen right now play out in the House, housing finance I think is equally as challenging.

And I think after the crisis that there has been no reform in this space is unacceptable. I think we have an opportunity to work across party lines to get an American solution to housing finance. We want to make sure we bring in more private capital.

We want to bring in more market discipline. We want to make sure people can still get a mortgage that they can afford. Some might argue that should be a 10-year mortgage. Some are going to argue for a 30-year mortgage.

But what we want to do is have a system that works for homeowners to get their slice of the American dream and the American experience, which is home ownership.

So as we look to all of you, I don't know if we want to classify you as think tank world, but those of you who have worked on policy for a very long time, to give us your insight into the opportunity that presents itself to us today, and again, the advice that you have on how we can make the system work better for the American family.

With that my time has expired. I now recognize the gentleman from Missouri, the Ranking Member, Mr. Cleaver for 5 minutes.

Mr. CLEAVER. Thank you Mr. Chairman. Let me thank all of you for being here today.

This is our third in a series of housing finance reform hearings, which I hope you and others realize that because we are going through the third hearing that we are serious about trying to do something that would keep our mortgage financing system functioning at a high level or higher than it is now.

And so over the last few weeks we have had the opportunity to hear numerous stakeholders regarding their suggestions and proposals for housing finance reform. At these previous hearings there has been a general consensus that housing finance reform must preserve the 30-year fixed mortgage by including explicit government guarantee. And I believe this is an essential component of our conversation.

As I have mentioned in the past, housing affordability must also remain at the forefront of this discussion. Homeownership rates have been in decline, especially among minority populations where families have yet to recover from the financial crisis.

The path toward GSE (Government Sponsored Enterprise) reform must include a very strong plan to make homeownership options more available for qualified borrowers and to address the rental affordability crises.

Our discussion on housing finance reform should not take place in a vacuum. Currently, the Ways and Means Committee has been marking up the tax plan put forth by the majority that would make changes to the mortgage interest deduction. Specifically that bill would cap deductions for mortgages on new homes over \$500,000, which is an issue we will get into a little later.

But a number of groups have already raised concerns that this change could have a detrimental impact, not only on the housing market, but on the middle class. Home ownership is one of our most important tools for households to accrue wealth, and we should be concerned with proposals that would make this more difficult.

And so as our witnesses today, you may have a variety of proposals that can solve this problem today. We can solve it before we have the recess with the members of the housing intelligencia here. There is no question in my mind that you have the solution. We want you to give it to us before noon.

Thank you, Mr. Chairman, I yield back.

Chairman DUFFY. The gentleman yields back.

The Chair now recognizes the Vice Chair of this committee, the gentleman from Florida, Mr. Ross, for 2 minutes.

Mr. Ross. Thank you Chairman, and I thank the witnesses again for being here. The Federal Government's involvement in housing finance is predicated on the idea that it is not only helpful but it is also necessary.

Take a working class family, folks who are scraping by with a modest income, they are deciding that it would be best to purchase a home rather than to continue to pay rent. How are we helping that family?

Reasonable people will disagree, but what is most striking to me is that we don't ask a different question. Is it possible that we are hurting that family? Let us recognize that a family may not be able to afford a home. The prices may be too high and the family's income may not rise with those prices.

So the Federal Government says don't worry. We will make you a loan. This will be easy. We already know that the family can't afford the home.

That loan isn't a loan, it is an albatross. It is a moral hazard. We are inducing them to take on a risk that is unsustainable. Yet time and again we do it.

Why? Because we are told we are trying to broaden access to home ownership and to achieve wealth accumulation for low and moderate income home owners. That was the argument made during the three decades between 1964 and 1995, during which home ownership remained relatively static despite government intervention.

Perhaps we just need to try harder. Actually we did. The following 10 years saw an aggressive increase in the Federal Government's efforts to support homeownership for low and moderate income families. We placed mandates on the GSEs, first requiring that 30 percent of all mortgages they acquired be ones made to borrowers below medium income.

From 1996 on, we continued to increase the artificial ratio, until 2008 it reached 56 percent. And for a brief moment, home ownership reached new heights of 70 percent.

Then came the crash and now we are at 63.9 percent. And for those at home keeping score, that is just under where we started when we kicked off this project of increasing taxpayer exposure to risky lending. With little to show for it, this project has taken on enormous costs, not just to taxpayers but through bailouts.

For that family I mentioned earlier, the system has raised prices and reduced affordability of homes. The entire point was to help that family purchase a home. We have harmed it. The entire point was to help families keep their homes. I am afraid the current system makes that even harder. Let us find a better way.

Thank you, and I yield back.

Chairman. DUFFY. The gentleman yields back.

The Chair now recognizes the gentleman from California, Mr. Sherman, for 2 minutes.

Mr. SHERMAN. As I think the other hearings have established, we need a government agency to provide the guarantee if we are going to have 30-year fixed rate mortgages available to regular working families in the United States.

We had a bad program about a decade ago where we had entities that had an implicit Federal guarantee, but were private companies seeking private profit—socialized the risk, privatized the profit.

We have now a much better system where we basically have government entities, and these government entities are not losing money for the Federal Government. They are, in fact, making money for the Federal Government.

We are also dealing with the tax cut. Up at the board we have behind the witnesses, the total national debt. That clock will be going much more quickly if we pass \$1.5 billion in tax cuts.

I should point out that this tax bill will certainly make it more difficult for Fannie and Freddie because, as I think our witnesses have written, this is going to adversely affect home prices, particularly in high cost areas where homes could sell for \$500,000, \$600,000, \$700,000.

In addition, we are talking about a larger national debt, which will cause the fed to give us higher interest rates, again, making it tougher for Fannie and Freddie and the home market in general.

So I realize that the jurisdiction of this committee is on housing finance, but our purpose is to make sure that homes are affordable on the one hand and that people who have their nest egg invested in their homes do not see that wiped out on the other. And the tax bill, as well as some of the issues before us, pose real risks to that average homeowner and that average home buyer.

I yield back.

Chairman. DUFFY. The gentleman yields back.

We now welcome and recognize our panel of witnesses. First we have Peter Wallison, a Senior Fellow and Arthur F. Burns Fellow in Financial Policy at the American Enterprise Institute.

We next have Dr. Mark Zandi, Chief Economist at Moody's Analytics. Third witness, Dr. Lea, is Principal of Cardiff Consulting Services.

Next we have Ms. McCargo, Co-director of Housing Finance Policy Center for the Urban Institute. And finally, we have Mr. Ted Tozer, Senior Fellow for the Center for Financial Markets at the Milken Institute.

In a moment, the witnesses will be recognized for 5 minutes to give an oral presentation of their written testimony. Without objection, the witnesses' written statements will be made part of the record following remarks.

Once the witnesses have finished presenting the testimony, each member of the subcommittee will have 5 minutes within which to ask the panel questions.

On your table, most of you all know this, but you have three lights. Green light means go, yellow light means you have a minute left and the red light means that your time is up. The microphones are sensitive so please speak directly into them.

And with that, Mr. Wallison, you are now recognized for 5 minutes.

STATEMENT OF PETER WALLISON

Mr. WALLISON. Thank very much, Chairman Duffy and Ranking Member Cleaver. Thank you for this opportunity to testify on housing policy reform.

My view, as detailed in my written testimony, is that the best U.S. housing policy in the future would eliminate the Government role in housing finance, beginning with the GSEs.

I take this position for the following reasons. First the GSEs do not reduce interest rates. Our analysis at AEI (American Enterprise Institute) shows that since 2014, after controlling for mortgage interest characteristics, the private market, primarily banks, has been offering mortgages with lower interest rates than the GSEs.

In addition, the private sector mortgages we compared to GS mortgages with 30-year fixed rate loans, which are readily available from private sector lenders without a government guarantee. Many Members of Congress have been told for years that there would be no 30-year fixed rate mortgages without government backing. But our research shows that this is false.

Second, the GSEs' lending policy increases housing prices, making homes less affordable. Mortgage interest standards, not interest rates, are the key to housing prices.

Today the GSEs are willing to acquire mortgages with 3 percent down payments or less, so the buyer will be buying 97 percent of the price of the home. What this really means is that the buyer reaches for the most expensive house that the loan puts within reach. This exerts strong upward pressure on home prices, which are now again rising faster than wages. This particularly hurts first time homebuyers.

Third, GSEs do very little to help low and moderate income families buy homes. I think everyone would agree that if any families need help to buy homes, it would be families taking out loans for less than \$250,000.

Half of these households have estimated income below \$66,000, which is 120 percent of the U.S. median income, yet, only 11 percent of the GSEs' activities are helping these families buy homes.

An additional 27 percent of GSE activities are home purchase loans greater than \$250,000 with a median borrower income of \$122,000.

These loans could easily be made by the private sector, especially when the GSEs, as noted above, do not reduce interest rates. The rest of the GSEs' activities, about 60 percent, is refinancing old mortgages, financing second homes and financing investor purchases of houses for rental. None of this contributes to home ownership by families that want to buy a first home.

Fourth, the GSEs cost the treasury billions of dollars each year. The GSEs and their supporters often argue that because many investors, including foreign central banks, are required to invest only in sovereign guaranteed debt, the GSEs have a ready market around the world.

However, because the GSEs' debt pays slightly more than treasury securities, it is often a substitute for treasury securities. This means that when the GSEs sell debt abroad, or even in the U.S., they are reducing the demand for U.S. Treasuries and thus increasing what treasury has to pay. We estimate these costs at about \$17 billion to \$29 billion a year.

For the reasons I have described, government housing policies and particularly the GSEs, have been a failure. They are not reducing interest rates on mortgages. They are not necessary for 30-year fixed rate mortgages. They are increasing the prices of homes, especially for first time buyers. And they do not increase home ownership.

In 1964, as Mr. Ross mentioned, the home ownership rate in the United States was 64 percent. It was still 64 percent in 1994. After HUD's aggressive increase in the affordable housing goals using the GSEs, the homeownership rate almost reached 70 percent in 2004. Then came the crash and the homeownership rate today is 64 percent.

The housing finance market, home owners, home buyers and the treasury would be better off without the GSEs. The private sector is fully capable of handling mortgage finance, just as it currently handles the financing of automobiles, credit cards and other assets through a combination of banks and asset-backed securitization.

Thank again for this opportunity to testify.

[The prepared statement of Mr. Wallison can be found on page 132 of the appendix.]

Chairman DUFFY. Thank you, Mr. Wallison.

Dr. Zandi, you are now recognized for 5 minutes.

STATEMENT OF MARK ZANDI

Dr. ZANDI. Thank you, Chairman Duffy, Ranking Member Cleaver, and the rest of the committee. Thanks for the opportunity. And thank you for engaging in this conversation. I think, as you say, it is a very important one that is much too long to address this particular issue.

In addition to being the Chief Economist of Moody's Analytics, you should know I am also on the board of directors of MGIC, a private mortgage insurer. And I am also on the board of a CDFI (Community Development Financial Institutions) based in Philadelphia. And we do a lot of affordable housing through the CDFI, one of the largest in the country.

Let me make three quick points, maybe two. First, the future housing finance system that replaces the GSEs, in my view, must have an explicit catastrophic government guarantee that is fully paid for by borrowers. I think this is a necessary ingredient for any future housing finance system.

An explicit guarantee stands in contrast to the implicit guarantee that Fannie Mae and Freddie Mac enjoyed prior to the crisis. This is important. Catastrophic in that the government should not step into the system unless we face scenarios that are darker than the Great Recession, the 2008, 2009 financial crisis.

I do think it needs to be paid for by the borrowers in this part of the system that enjoy that government guarantee. I do think there has been a lot of work done, including some of my own, that shows we can do this and still maintain current mortgage rates.

In my view, without this explicit catastrophic government guarantee that is paid for, mortgage rates would be measurably higher than they are today.

Some of the work I did with regard to the PATH Act that was before this committee a few years ago showed that mortgage rates for the typical borrower would be as high as 100 basis points higher today than they would have been otherwise. That is for the typical borrower.

For those that are less credit worthy, toward the edge of the credit box, the impact on mortgage rates would be measurably higher, and thus, the ability of the system to provide affordable loans to these borrowers would be significantly impaired.

They would not be able to get loans. They would not be able to become homeowners. So point No. 1, we need that explicit catastrophic government guarantee that it is paid for.

Point No. 2, there has been a lot of work done in thinking about how we should reform the system. I thought about all of them. I have gone down all of the different paths.

And in my view the most viable proposal for reform, both from an economic perspective and given the current political environment, if we want to get this done anytime soon, is a multiple guarantor system.

So what that means is that Fannie Mae and Freddie Mac would only be reprivatized until the system was able to maintain a number of—several other viable guarantors, similar guarantors, that meet the same requirements as Fannie Mae, and future Fannie Mae and Freddie Mac would be required to hold as well.

This will ensure that the future system will promote competition. I think competition is key in the secondary market to make sure that borrowers get the best mortgage rates and, perhaps more importantly, we get innovation in the provision of mortgage credit because the demographics of the country are changing and the way people will access credit will change. And we need a system that will be able to keep up with that.

This multiple guarantor system will also ensure that we do away with too big to fail. Obviously the pre-crisis system with the duopoly, Fannie and Freddie, they were too big to fail, and thus, the Government had to step in and the resulting costs were enormous.

With multiple guarantors on equal footing competing in the marketplace, we will do away with too big to fail and that particular problem.

All of this can be done and ensure that there is plenty of private capital in front of taxpayers and we meet all of the access that we need for small lenders and for underserved communities, and we can maintain the current mortgage rates.

So it is very doable and even if you don't think that the multiple guarantor path is the right path, again, I think it is applaudable that you are thinking about this.

This is the time to do it. Do it now when, the economy is in good shape, house prices are rising, and so that way we don't have to do this in the next crisis. Thank you.

[The prepared statement of Dr. Zandi can be found on page 145 of the appendix.]

Chairman DUFFY. Thank you.

Dr. Lea, you are now recognized for 5 minutes.

STATEMENT OF MICHAEL LEA

Dr. LEA. Chairman Duffy, Ranking Member Cleaver, and members of the subcommittee, thank you for the opportunity to be here today. I have an extensive background both in U.S. housing finance and mortgage markets abroad, having worked in more than 30 countries over the last 25 years.

In addressing the subcommittee today, I have been asked to discuss how housing is financed in other major developed markets. My remarks will focus on five countries whose housing finance systems differ significantly from that of the U.S.: Australia, Canada, Denmark, Germany, and the United Kingdom.

I will cover what is common amongst those systems, what is different, and what the U.S. might learn from how housing is financed in different countries.

I begin with what is common. Current U.S. rates for adjustable and fixed-rate mortgages are comparable to mortgage rates in other countries. Recent house price increases are similar to those in the U.S. A third commonality is home ownership rates, which range between 62 percent and 67 percent, with the exception of Germany at 52 percent.

There are significant differences in the size of country markets relative to the size of their economy. The mortgage markets of all the comparable countries, say for Germany, are larger than the U.S. with mortgage debt-to-GDP ranging between 65 percent and 94 percent.

The U.S. has been as high as 73 percent in 2009, but is only 55 percent today, reflecting the effects of the mortgage crisis. Notably, of these countries, only Denmark and the U.S. have a mortgage interest tax deduction.

There are significant differences across countries as to which entities provide mortgage loans. In Europe, mortgage lenders must be regulated banks. Banks originate and hold a vast majority of mortgages in Australia, Canada and the UK.

This contract with the U.S., where banks originate only 40 percent of mortgage loans and most debt is held or backed by govern-

ment entities. There are significant differences in the predominant mortgage instruments across countries.

The U.S. is unique in the dominance of mortgages with rates that are fixed over the entire term of the loan and where the loan is pre-payable without penalty.

Denmark uses this instrument with one significant difference. While both Danish and U.S. mortgages allow pre-payment at par if rates fall, in Denmark, borrowers can repurchase the bond that funds their loan at a discount of rate rise. In this way, the borrower can deleverage as rates rise, reducing the likelihood of negative equity.

The standard product in Canada, Germany and many European countries is a short- to medium-term fixed-rate mortgage. The rate is fixed for a 1- to 10-year period over a longer amortization, after which the rate is reset at current market interest rates.

The borrower can select the same or a different fixed-rate term at reset, which allows them some protection against potential interest rate shock.

Australia and the UK are primarily short-term variable rate markets. Policymakers in both countries credit the predominance of variable rate loans for cushioning the impact of global recession.

Mortgage rates fell close to zero when base rates were lowered. Borrower payments fell without having to refinance, unlike in the U.S. where many borrowers who were unable to lower their mortgage rates and payment due to limited or negative equity.

Mortgage funding is also different across countries. The U.S. is unusual in the dominance of securitization. 65 percent of mortgage debt outstanding is securitized in the U.S. This reflects two factors, the domination of the fixed-rate mortgage and the presence of government-backed entities that guarantee the securities.

The only country that comes close to the U.S. is Canada at 31 percent. The main capital market funding instrument in Europe is covered bonds.

These are corporate bank-issued bonds backed by a ring-fenced portfolio of mortgage loans. They represent over 1.7 trillion in outstanding mortgage covered bonds, covering approximately 25 percent of European mortgage debt.

Mortgage underwriting is usually stricter in most other countries as well. In Europe, a typical down payment requirement is 20 percent. Canada tightened its underwriting requirements after the crisis. Purchase loans are required to have a minimum 10 percent down, refinance 20 percent.

Mortgage loans are recourse obligations in all countries surveyed, and default rates have been or are significantly less than the U.S. So what can the U.S. learn from housing finance systems in other countries? There is no ideal housing finance system. Individual arrangements reflect history, market structure and government policy.

No other country's housing finance system evolved with extensive reliance and securitization of GSEs. Lenders are subject to prudential regulation, but none are subject to mission regulation or housing goals.

Importantly, there is skin in the game in housing finance systems in most other countries. Banks are subject to domestic and

international capital rules and hold considerably more capital than that held by mortgage agencies in the U.S.

In no other country is the 30-year fixed rate mortgage the dominant instrument. As we learned from the savings and loan crisis, the fixed-rate mortgage is not a suitable product for bank lenders. Rather, it requires capital market financing, which in the U.S. is achieved through the U.S. Government guarantees.

Guarantees lower the relative cost of the fixed-rate mortgage, sustaining its dominance and that of the entities backing them. The result is the government, and thus taxpayers, backs the majority of mortgages in the U.S.

The experience of other countries shows that high rates of home ownership, stable well developed mortgage markets can be achieved with less systemic risk than found in the U.S. In that respect, the U.S. clearly learned from international housing finance systems.

Thank you for the opportunity to appear today.

[The prepared statement of Dr. Lea can be found on page 44 of the appendix.]

Chairman DUFFY. Thank you, Dr. Lea.

Ms. McCargo, you are recognized for 5 minutes.

STATEMENT OF ALANNA MCCARGO

Ms. MCCARGO. Good morning, Chairman Duffy, Ranking Member Cleaver and members of the committee. Thank you for the opportunity to testify.

My name is Alanna McCargo and I am the Co-director of the Housing Finance Policy Center at the Urban Institute. The views I express here today are my own and should not be attributed to the Urban Institute, its trustees or its funders.

In 1968, President Lyndon B. Johnson founded the Urban Institute to help solve the problems that weighed heavily on the hearts and minds of America, by bringing sound research, evidence, and perspective that could inform effective policymaking.

At the time, the problem was the American city and its people and the declaration of the war on poverty. Johnson signed the Fair Housing Act into law that same year, making housing discrimination against blacks and other protected groups for renting and owning homes illegal.

I mention this history as a reflection for this Congress as you consider the future, as we are facing some of the very same inequities that are plaguing not only our cities, but our suburbs and rural areas all over this country 50 years later.

I will focus on the serious issue surrounding the housing finance system and the ways Congress can address those issues with comprehensive reform.

Our country has changed as has its needs. Huge demographic shifts in race, age, income, and education are all significant drivers of what our future housing system needs to contemplate.

First, there is a growing wealth gap, and it is hurting low and middle income families. The gap persists both between races and between owners and renters.

We know that home ownership creates wealth through equity and asset building and it continues to be the primary way that

many middle class and working families build wealth and achieve economic stability, especially for families of color.

As an example, to emphasize this problem, the overall home ownership rate today for blacks is just below 42 percent, back to levels we have not seen since the 1960's before the Fair Housing Act was put in place.

Major housing policy changes are needed to address systemic constraints for people of color and avoid dire consequences for the financial security and generational wealth prospects of millions of Americans.

Second, we have insufficient affordable housing available for a growing number of diverse households. Over the next decade, there will be as many as 16 million new households formed and an overwhelming majority of that growth will be non-white.

Our housing inventory, rental and owner, is already deficient, continues to age, and is not being built or preserved to keep pace with demand for affordability.

Third, consumers have insufficient access to mortgage markets, hampering home ownership opportunity. This issue has its roots in underwriting standards and the lack of willingness from market participants to take on any default risk.

Urban Institute's research finds that more than 6.3 million mortgages would have been made between 2009 and 2015 to credit worthy borrowers under reasonable lending standards.

In the current system, mortgages are only being made to people with pristine credit quality, despite their overall credit worthiness. A systemic view of underwriting systems and credit scoring models should be considered.

Our country deserves a housing finance system that serves the people and communities that need investment and that provides access to sustainable and affordable credit.

I am going to highlight three critical elements for this reform. To start, consumers must have access to sustainable affordable mortgages. Long-term fixed-rate products allow access to credit with affordable monthly payments and without the risk of interest rate volatility.

This is essential in market stability and gives homeowners the ability to build equity. Ensuring the availability of these mortgages requires the explicit backing of the Federal Government.

Next, taxpayers must be protected. Private capital in the first loss position will protect taxpayers without undermining access to credit for credit worthy borrowers and access to the secondary market for lenders of all sizes. There must be a mechanism to ensure capital is available throughout the economic cycle to a broad set of financial institutions.

And finally, improvements are needed to FHA (Federal Housing Administration) so that it can work to fulfill its mission. Because FHA provides a critical source of financing to historically underserved renters and homeowners, and plays a pivotal role for low income renters, first-time home buyers and for seniors, we should ensure that FHA and Ginnie Mae have clarity and certainty in any housing finance reform.

FHA must work in a coordinated and efficient way in the housing finance ecosystem. In particular, FHA needs resources to sig-

nificantly modernize its technology and operations in order to meet the needs of today's consumer.

We have one U.S. housing market, and we should have one housing finance system and a national housing policy that safely and efficiently serves all communities and all demographics and is accessible at all times.

Thank you for the opportunity to testify. I look forward to your questions.

[The prepared statement of Ms. McCargo can be found on page 103 of the appendix.]

Chairman DUFFY. Thank you.

Mr. Tozer, you are recognized for 5 minutes.

STATEMENT OF THEODORE TOZER

Mr. TOZER. Good morning, Chairman Duffy, Ranking Member Cleaver, and members of the subcommittee. My name is Ted Tozer, and I appreciate the opportunity to testify today on behalf of the Milken Institute Center for Financial Markets where I am a Senior Fellow in the Housing Finance Program.

My background gives me a unique look into the question of housing finance reform. Prior to joining the Milken Institute, I spent 7 years running Ginnie Mae as its president. Prior to that, I spent 25 years running capital markets for a top 10 mortgage banker.

Any industry could find itself with the complacent status quo leaders. The challenge is when competitive disrupters are not able to break in. This is the situation in the mortgage market.

The GSE duopoly of Fannie Mae and Freddie Mac is restricting credit and slowing down innovation. A key chokepoint is restriction on the type of loans the GSE will allow to be sold into the capital markets.

A reformed housing finance systems should focus on fostering innovation driven by competition. I will give you an example to demonstrate the positive impact of competition.

When I joined Ginnie Mae in 2010, approximately 70 percent of the new Ginnie Mae guaranteed MBS (Mortgage Backed Securities) were issued by four large banks that had put in place credit overlays that prevented many low to moderate income borrowers from obtaining FHA financing.

The average credit score for an FHA loan was around 720, limiting FHA's ability to be a countercyclical force to support housing. Starting in 2011, smaller lenders instead became issuers themselves. This meant they could bypass the big banks and set their own credit standards within the limits prescribed by FHA.

Today, Ginnie Mae has approximately 440 approved issuers. And no issuer has more than a 7 percent market share of new issuance. The average FHA credit score is about 675, meeting the aim of the program in responsibly expanding access to mortgages.

Adding the competition of lenders was key. This goes to the heart of the difference between the various housing finance proposals. Should it be one, two, six or hundreds of guarantors? I believe the most advantageous approach was put forward by the Milken Institute, that hundreds of guarantors should be allowed.

The mortgage industry faces the challenge of changing demographics as minority borrowers become the major homebuying

group in the future. And lenders need to have the flexibility to create loan programs to meet the needs of these unique communities.

The strength of Ginnie Mae's structure is the guarantors have skin in the game, even while the U.S. backs the MBS. That is because the issuer is responsible to advance delinquent payments MBS whole owners and use their own funding sources to buy delinquent loans out of pools.

Competition also means that the firms that do not perform well can fail without hampering the whole housing finance system. That is a huge advantage over the previous or current system centered around the GSEs.

During my 10 years at Ginnie Mae, every issue we had to shut down was due to the lack of liquidity to make required payments to bond holders, not their exhaustion of capital.

The goal with Ginnie Mae was to spread the counterparty risk among hundreds of issuers to enable Ginnie Mae to transfer failed issuers' portfolios to other Ginnie Mae issuers, similar to the way that the FDIC (Federal Deposit Insurance Corporation) transfers deposits and assets from a failed bank to another FDIC-insured bank.

A future system must assure that small lenders and guarantors have equal access to credit enhancers. If not, the potential base of hundreds of issuers will reduce substantially, and the competition and community banks' lending will be minimized.

Ginnie Mae must make sure credit enhancement is equally available and credit enhancers are working with issuers to develop customized solutions to support the communities.

We need to look at other options that will increase underserved markets' access to housing finance. Having hundreds of guarantors will allow community-based solutions, not solutions that are just for a national level.

We need to build off the gains made by the GSEs' affordable national housing mandate at the national level and build an environment where lenders embrace affordable lending, not as a box that has to be checked, but as an economically viable part of their business model. I look forward to your questions.

[The prepared statement of Mr. Tozer can be found on page 122 of the appendix.]

Chairman DUFFY. Thank you, Mr. Tozer.

The Chair now recognizes himself for 5 minutes. I am going to cut to the chase on an issue that I know is going to come up today because we are talking about tax.

Miss McCargo, do you have a definition of kind of how much money someone makes to be middle income?

Ms. McCARGO. We have a definition. Standard area median incomes and it is all depending on what part of the country you live in.

Chairman DUFFY. Could it—if you make \$100,000 are you middle income?

Ms. McCARGO. You can be middle income at \$100,000 in—

Chairman DUFFY. What about 200?

Ms. McCARGO. —Part of the country.

Chairman DUFFY. How about \$200,000?

Ms. McCARGO. Yes.

Chairman DUFFY. Three hundred?

Ms. MCCARGO. I am not sure. I don't think so.

Chairman DUFFY. And if you are making \$300,000 a year, can you get a \$1 million mortgage? Pretty tough, wouldn't it be, to get a \$1 million mortgage? And I would agree with that. And I just want to make this point that when we have a conversation, which I am off topic, I am going to get back on topic in a second.

When we have folks who say I don't want tax breaks for the rich but they want to argue for a \$1 million mortgage interest deduction, they are not really focused on middle income Americans per your point, Miss McCargo. They are focused on rich Americans.

I don't have a problem with mortgage deduction at \$1 million. But it is interesting how rhetoric and policy all of sudden clash when a lot of my friends have very rich constituents, who they start fighting for in some of these loopholes and write-offs.

And I have to make sure my time is running. If you want to give me another full 5 minutes, I guess?

Mr. SHERMAN. Will the gentleman yield?

Chairman DUFFY. If I get all whole 5 minutes, yes, I will yield.

Mr. SHERMAN. Come to my district. I will show you the middle class, hardworking Americans, whose homes require—sell for many hundreds of thousands of dollars more than—

Chairman DUFFY. But a million? A million dollars.

Mr. SHERMAN. Unindexed. A few years from now, absolutely.

Chairman DUFFY. We could talk—

Mr. SHERMAN. Remember that million is not indexed, neither is the half million. But yes, even—

Chairman DUFFY. I am going to reclaim my time.

Mr. SHERMAN. —Even a million dollar home with two hard-working—a nurse married to a police officer—

Chairman DUFFY. I am going to reclaim my time. They actually took off a minute. But I just think that is an interesting point that we can't forget in this rhetoric is one thing, but when your constituents start to get hit by loopholes that benefit the wealthy, they start to go away. It is interesting to see people squirm. But I am not here for that.

Mr. Tozer, we are having a conversation about the MBA proposal, to DeMarco-Bright, Urban Institute. Have you reviewed those plans and do you have an opinion on what would be the best path forward for this committee?

Mr. TOZER. Yes, sir. I have looked at all of them, and again, I think the issue it comes down to is basically how many guarantors or issuers you want to have. That is really what it comes down to if you compare the MBA and the other programs.

I think they are all basically very similar, but it comes back to how many guarantors or issuers we should have. And again, like I mentioned in my statement, I think the concept is having as many as possible that can be successful. So more lenders getting back to community lending is really important to be able to respond to market conditions.

Chairman DUFFY. It is important that lenders have some skin in the game?

Mr. TOZER. I think it is really important for the institutions that are being backed up by the government to have skin in the game.

I think they should be aligned with the government and their interests.

Chairman DUFFY. I am interested in the panel's opinion because right now, Q.M. (qualified mortgage) has a debt-to-income (DTI) ratio of 43 percent. But Fannie and Freddie has bumped their own standard up to 50 percent debt-to-income ratio. I am wondering if lenders throughout America would be making a lot of loans at a debt-to-income ratio of 50 percent?

Mr. Wallison do you have an opinion on that? Or if they have some skin in the game might think, well, I might want a little different debt-to-income ratio if I actually am one of the first dollar losses here.

Mr. WALLISON. Lenders throughout the United States would be making these loans if they can sell them to the government.

Chairman DUFFY. But if they had to keep some skin in the game—

Mr. WALLISON. If they had to keep skin in the game, they would not be making those loans.

Chairman DUFFY. At 50 percent debt-to-income.

Mr. WALLISON. 50 percent debt-to-income. But if they do make the—

Chairman DUFFY. Why not, Mr. Wallison?

Mr. WALLISON. One of the reasons they would not be making those loans is that it is exceedingly risky. These loans are exceedingly risky. These people, by definition, with a DTI of 50 percent will have a lot of obligations in addition to their mortgage obligations.

And that kind of borrower is someone who has a high risk of failure, especially if housing prices should fall.

Chairman DUFFY. I heard a stat that half of Americans are a \$400 financial crisis away from being in financially hard times. And it seems like it is this very person who has a debt-to-income ratio of 50 percent that we are allowing to get into a home that maybe they should take a little more time.

Maybe they should write their debt or make some more money before they actually get a mortgage because, as Ms. McCargo indicated, you get people who their main investment is their home. And the government is subsidizing or incentivizing people to get mortgages that they probably shouldn't get, and when things go wrong for them it financially devastates them.

Mr. Zandi, I appreciate your testimony. I guess we have had a lot of agreement today. It was great. Do you—of the plans that you have evaluated, which one do you like the best in your viewpoint?

Dr. ZANDI. I think the most viable is the multiple guarantor system, which is similar to the MBA proposal. I agree with Mr. Tozer that it is not dissimilar for the DeMarco-Bright proposal, but the multiple guarantor system, I think, is just more doable. It is—

Chairman DUFFY. Why?

Dr. ZANDI. Because you are using the existing infrastructure, the common securitization platform, the risk transfer process, all those other things that the GSEs have been doing since they have been put into conservatorship.

So you are leveraging all of the work, the good work, that they have done to get private capital into the system and make sure that you can have entry of other guarantors into the system.

So I don't think we want to throw that away. I think that is very valuable and useful. And if we go down the DeMarco-Bright path, the sort of expanded Ginnie issuer system path, that is just a wholly different system and you are not using all the work, all the good work that we have done.

And it will be very hard to get, to be frank, from a political economy perspective, all of the stakeholders involved here to sign onto that. They just can't get their mind around it.

Chairman DUFFY. Right.

Dr. ZANDI. The multiple guarantor system, they can't—and you get a lot of the benefits that you want, the competition, the getting rid of too big to fail, a lot of private capital in front of the government guarantees. So I think that is just the most viable approach.

Chairman DUFFY. My time has long expired, but I look forward to more lengthy conversations with all of you as we go through this process.

The Chair now recognizes the Ranking Member, Mr. Cleaver for 5 minutes.

Mr. CLEAVER. Thank you, Mr. Chairman. Just a point of the average cost of a home in my State in Missouri is \$169,000. The median price of a home here in D.C. is \$551,000, and most of the people who live in those homes are not rich. They are struggling.

I look at many of our staff members will just rent an apartment with four of five people living in their apartment together because even the rental rates are very high. But I just mention that to speak to the mortgage cap being capped at \$500,000.

Mr. Zandi, thank you for being here again. In your opinion, why would the disadvantages of a private GSE system largely outweigh the advantages?

Dr. ZANDI. I am sorry, can you—

Mr. CLEAVER. But why would the disadvantages of a fully private GSE system—

Dr. ZANDI. Right. Right.

Mr. CLEAVER. —Largely outweigh the advantages?

Dr. ZANDI. So to go to a fully privatized system without a government backstop, without an explicit catastrophic guarantee that is paid by a borrower, that would result in my view, in significantly higher borrowing costs for everyone, everyone in that part of the system.

For the typical borrower, kind of in the middle of the distribution in terms of credit characteristics, the average mortgage rate would rise about 1 percentage point. So instead of 4 percent today, it would be 5 percent.

For those that have credit characteristics that are not as good as the typical borrower, their rates would be even higher than that.

So if you get toward the end of the credit box where the GSEs are able to make a loan or insure a loan, mortgage rates would be so high that these folks couldn't afford to buy a loan, so they would be locked out of the market.

So I think that is the most significant—

Mr. CLEAVER. Right.

Dr. ZANDI. —Disadvantage. And I will make another point, another second point. I am not sure it is even viable because if you get into the next crisis—think about it.

You get into the next Great Recession. The financial system is imploding. Hopefully, that is not in our lifetime, but it will be in someone's lifetime, do we really think the government won't step in? It will.

Mr. CLEAVER. Yes.

Dr. ZANDI. And so let us just recognize that, acknowledge it, and pay for it up front instead of waiting for that to happen and just taking our chances. So let us just be honest here about the reality of this.

Mr. CLEAVER. Yes. I agree. I was here. Mr. Chairman, and I don't want to get into it because I got too—time.

Because Mr. Wallison, you had mentioned earlier that in your opinion we could make it without the GSEs, and so if you could answer briefly because I want Ms. McCargo to also deal with it.

So Mortgage Company A in Kansas City, Missouri is financing all of these mortgages. Aren't they going to be limited if there is no secondary market?

There are just so many mortgages that a local mortgage company could handle. Aren't they going to face a problem which eventually falls on the whole population of our city?

Mr. WALLISON. No, because there is a private securitization system that will grow up to take those mortgages that the banks do not want to hold in portfolio.

Mr. CLEAVER. What do you base that on?

Mr. WALLISON. The existence of a private mortgage. The private mortgage system that we had before—the mortgage securitization system that we had before the financial crisis and the existence today, and before the financial crisis, of securitization systems for credit cards, for auto loans and for many other assets.

So the private sector is well able to handle all of these things, and there is no reason to have the government involved. And as I said in my testimony, the government causes higher prices so your constituents, as well as everyone else's constituents here, cannot afford even the entry level homes because of the way the government is driving up housing prices.

Mr. CLEAVER. Yes.

Ms. McCargo?

Ms. MCCARGO. Thank you, Congressman. The privatization of the GSEs: We have come out of an era when they were operating as both private and public under a dual mission and we learned a lesson from that. And that is something that I don't think we want to go back to.

Having the GSEs available to ensure that there is a guarantee, provide certainty, and protect taxpayers with others and with other private support in a first loss position is a healthy way to sort of move us forward.

I think the lack of an explicit guarantee takes away the opportunity for markets to open up—for lenders to participate in small communities, in rural communities—in a way that is meaningful.

And I think that, if we had a private market that was willing to take all these risks without anything we would have a much healthier situation right now.

No one is making—these loans are not being made without some sort of catastrophic loss guarantee from the government, and I think we need to make sure we keep that preserved for any future system.

Mr. CLEAVER. My time is up.

Chairman DUFFY. The gentleman's time has expired.

The Chair now recognizes the Vice Chair, Mr. Ross.

Mr. Ross. Thank you, Chairman. 33 years ago, my wife and I purchased our first home. We did it under FHA, and we put 5 percent down. And at the time we also paid, what I learned, was co-PMI, private mortgage insurance.

And the reason we had to pay that is because unless we put 20 percent down and financed 80 percent, we had to have the guarantee in there just in case of a default.

And it led me to believe then I needed skin in the game, but more importantly, also to this day, shows me that there was capacity in the market from the private sector to take some of that risk.

And I guess what we have seen over the last two panels that appeared before you on this topic is that a government backstop is absolutely necessary because apparently the private sector cannot accurately price or set aside reserve for deep in the tail risk of a severe turndown on the housing market.

Is that something that each of you agrees with?

Mr. Wallison? Are we losing? Is the private sector so inept that we can't allow them to have confidence in their pricing in the event that we have another crash like we had in 2008?

Mr. WALLISON. One of the reasons we had the crash in 2008, or the major reason we had the crash in 2008, is that the government had driven up, through its policies, a housing crisis beyond the level where they made any economic sense because the government was buying those mortgages. And so, when we had the crash, the housing prices fell and a lot of people, especially low-income people, lost their homes.

Mr. Ross. To that end, let us assume that back then we had a viable private market of buying these mortgages, would it not almost self-regulate because it wouldn't take the risk that was being purchased then by the GSEs?

Mr. WALLISON. One of the things that we have to understand, and what doesn't seem to be understood here, is that there is a tradeoff between underwriting standards and housing prices.

And if you reduce down payments to a very low level, you increase the amount of debt that the homeowner takes on. When the homeowner takes on a lot of debt not only does that homeowner become a riskier credit, but in addition, that drives up housing prices and so fewer people can afford houses.

So in other words, when we reduce underwriting standards, especially down payments, we make it harder for people to enter the homeownership system because housing prices have risen much faster than wages are rising.

As a result, we are stuck at 64 percent. We could have a much more viable and a higher homeownership system in the United

States if we allowed prices to go to a level that the private sector would produce, and that would be through using solid underwriting standards including solid down payments.

Mr. TOZER. Can I answer your question?—

Mr. ROSS. Please.

Mr. TOZER. —Real quick. Basically, that is at the heart of our proposal because we look at the facts, and there are two sets of investors. There are investors that will invest in credit risk and investors in interest rate risk.

Mr. ROSS. Right.

Mr. TOZER. The proposal of Milken Institute is that the government will backstop the investors that invest in interest rate risk because they need to have a commodity that they can trade to manage their interest rate risk.

But our proposal is to let the private sector hold all the credit risk in the form of the issuer's holding the tail risk and the people who hold the credit risk in front of the issuer. You mentioned PMI.

Mr. ROSS. Right.

Mr. TOZER. I think PMI is the natural in a future state where the PMI companies can begin to take on, not only up to 20 percent down payment, but maybe let us go to even 40 percent. And that way the issuers are protected, but the government is simply stepping in to support interest rate investors the same way the FDIC protects depositors—

Mr. ROSS. Right.

Mr. TOZER. —Like depositors are protected by FDIC. FDIC does not guarantee the loans that are in the banks' portfolio—

Mr. ROSS. And there is enough capacity waiting to do this, isn't there?

Mr. TOZER. And that is exactly how Ginnie Mae works. Ginnie Mae does not guarantee any loans. We guarantee the issuer's ability—

Mr. ROSS. Right.

Mr. TOZER. —To handle their bond payments. And that is the heart of the Milken proposal is to say that we have hundreds of issuers. It doesn't mean we have hundreds of banks. And they are able to all go and get interest rate protection in the capital markets, but the credit risk is held by the private sector.

Dr. ZANDI. Congressman, the—

Mr. ROSS. Yes.

And Dr. Zandi, I am going to you.

Dr. ZANDI. Just to make clear, Mr. Tozer's proposal, though, has an explicit—

Mr. ROSS. Backstop.

Dr. ZANDI. —Has catastrophic government backstop as payment.

Mr. ROSS. Right.

Dr. ZANDI. And that is the point. If you want—

Mr. ROSS. But you seem—they can offload these credit relationships with incentives to the private sector?

Dr. ZANDI. They can offload all of the risk except the catastrophic risk. You need a government backstop to take the catastrophic. And if you don't, then mortgage rates will be higher in long-term fixed-rate loans.

Mr. ROSS. How much—

Dr. ZANDI. Thirty-year loans—

Mr. ROSS. How much—

Dr. ZANDI. Fifteen will—

Mr. ROSS. How much higher? Are we talking in terms of basis?

Dr. ZANDI. For the typical borrower, and I am just going back to the PATH Act. That was the last attempt at this.

Mr. ROSS. Right.

Dr. ZANDI. So let us take that as our benchmark. That would have raised mortgage rates for the typical borrower by almost a full percentage point without that government backstop.

So now, of course, there is a lot of other moving parts in PATH and that could be mitigated—

Mr. ROSS. Right.

Dr. ZANDI. —But that is what you are talking about. And that is the person in the middle, right, not—

Mr. ROSS. But that is the elimination of a taxpayer bailout for that extra point.

Dr. ZANDI. That is you have no government backstop.

Mr. ROSS. Right.

Dr. ZANDI. That is what you were giving up. And then if you did that, then basically you are saying we don't—30-year fixed rate loans, 15-year fixed rate loans, there would still be some out there like there are some in other systems—

Mr. ROSS. Some of them are—

Dr. ZANDI. —But they will be a very small piece of the pie.

Mr. ROSS. I see my time has expired. I yield back.

Chairman DUFFY. The gentleman's time has expired.

The Chair now recognizes the gentleman from California, Mr. Sherman, for 5 minutes.

Mr. SHERMAN. And Mr. Chairman, you paint a picture of luxury if someone has a mortgage of over a \$500,000 in California. I welcome you to go to the average home in your home State, knock on the door, say you have so many bedrooms in that most average home, you are living in luxury, because I assure you that the average home on the average lot in the State of Wisconsin would cost over a \$1 million if located within commuting distance of Silicon Valley.

Those are the prices. And perhaps we need to organize—we go on CODEL (congressional delegation) to strange and foreign countries. Perhaps we need a CODEL to California so that you will see that things are different in my State than they are in yours.

As to our housing finance system, we currently have a 30-year fixed rate, non-recourse—

Chairman DUFFY. Can we go in January or February?

Yes or no?

Mr. SHERMAN. Yes. Maybe when the Grammys, the Emmys, we will talk. It is about time. On foreign affairs, I never thought of a CODEL from this committee, but I think it would make sense.

We have the 30-year fixed rate, non-recourse, pre-payable loan. That is the best deal homebuyers have anywhere in the world, and oh, by the way, with a 10 percent down payment.

In so many countries, if you don't have parental help, if you don't—you can't buy a home. You can't get the down payment. The tradition in Iceland was that you work for many, many years on

ships in order to get the down payment. And so I think we have a system that is good for homebuyers.

It has also been profitable over the last few years for the government. It is not true that back in the 1960's we didn't have government involvement. What we had then was savings and loan institutions with enormously high leverage. All supported by the government. That provided good mortgages until it collapsed at government cost.

Ms. McCargo, you are absolutely, right. We need to build more homes.

Mr. Zandi, a lot of people in my district, which the Chairman will be visiting this winter—

Dr. ZANDI. Can I come too?

Chairman DUFFY. Absolutely.

Mr. SHERMAN. They have saved all their lives. They have put their kids through school, and what they have is about a 20 percent equity in a home that is worth between \$500,000 and \$1 million.

So let us say we limit the home mortgage deduction to \$500,000, we limit the property tax deduction at \$10,000, and they go to sell their home.

The buyer is going to know that those limits exist. And oh by the way, the buyer is going to know that the limits aren't indexed. So 10, 20 years from now when they go to sell their home, the word half a million dollars will mean a very different thing than it means now.

What happens to the value of that \$500,000 to \$1 million home if the tax law changes?

Dr. ZANDI. The analysis I have done is to take the entire House bill and that includes all the things you mentioned plus the increase in the standard deduction—

Mr. SHERMAN. Yes.

Dr. ZANDI. —Which reduces the value of the MID (mortgage-interest deduction), as well as the impact the larger budget deficits would have on interest rates, which matter for the housing market.

Mr. SHERMAN. Right.

Dr. ZANDI. So in that context, with all of those moving parts, including the \$10,000 cap on property tax and the \$500,000 cap on MID, nationwide all else being equal, house prices would decline by 3 percent to 5 percent.

In districts like yours, I don't know yours specifically, but I can guess—

Mr. SHERMAN. OK.

Dr. ZANDI. —In areas around where I live in suburban Philly, New York, New Jersey, the price declines will be double-digit, 10 percent, 12 percent.

Not that I am a fan of the MID. I am not. And we can talk about how you might want to do this is a better way. It is very costly, and I don't think it is as effective in promoting homeownership as it should be. So I am not a fan.

But I think it is important to recognize that if this plan were adopted, those are the kind of HPI (House Price Index) house price declines you should expect in those. And that is obviously, going to be a lot of stress for those people—

Mr. SHERMAN. Yes.

Dr. ZANDI. —For the lenders that made those loans. It is meaningful. The economy will—

Mr. SHERMAN. Or the Federal Government that has ensured those loans. And if you have 20 percent equity and your home goes down 12 percent in value and then you have some transactions cost to sell, you are just not going to be able to retire to Wisconsin after you sell your home.

And finally, there is this—oh, well, I have run out—I yield back.

Chairman DUFFY. The gentleman yields back.

The Chair now recognizes the gentleman from Illinois, Mr. Hultgren, for 5 minutes.

Mr. HULTGREN. Thank you, Mr. Chairman. Thank you all for being here. I appreciate your time and your expertise on this important discussion.

First, I would like to address my first question to Dr. Zandi. With respect to the concept of recap and release, you make the point that this might be the most politically feasible option, but I also think there is plenty of agreement that this would have its drawbacks. Can you please speak to the economics of recap and release?

Dr. ZANDI. Sure, and I don't think it is politically viable. You could argue it might be the least disruptive to the system because you are just basically going back to the future. In a sense, it is no reform at all. So I think there are a couple of very significant problems with it.

Most importantly, we are not changing anything. We are going to go back to a too big to fail duopoly that dominates the system.

And, yes, maybe the GSEs in the future system will be at higher levels of capitalization, regulatory oversight, but you are still left with a system that is very vulnerable to the thing that got us into this mess in the first place. Why would we do that?

Second, these institutions are going to be released into a system they are going to have to capitalize. It is systemically important because they are too big to fail.

They do have costs that they have agreements with treasury, and taxpayers paid a lot of money to bail them out. And I think taxpayers deserve some compensation for that.

If they have any kind of backstop, they will have to pay for that. So when you consider all of the costs that they will face as reprivatized institutions, in my view, it will mean that mortgage rates will be higher than they are today. So why would we do this exactly? So in my view, recap and release is a pretty bad idea.

Mr. HULTGREN. Yes, yes, OK. That is helpful. Let me drill in a little bit more, if I could, Dr. Zandi? Your testimony notes—and you kind of referenced this, and I will quote from your testimony.

“The GSEs would likely owe the government for the taxpayers' financial support,” end quote. How much do you believe they owe to the taxpayers or would owe to the taxpayers?

Dr. ZANDI. I don't know the exact number. And in fact, that is a matter of significant debate and discussion. It is in the legal system. Let me put it this way. I am an economist. This is at a higher pay grade than I have. It is a real thorny question.

I would say that the taxpayers bail these guys out and taxpayers should be repaid for that. And in the way they bailed out—this is an important point—the way they bailed out the Fannie Mae, Freddie Mac was not a loan.

This was equity. We took equity in these institutions and that is at a higher cost. And I think taxpayers should be reimbursed for that cost. What that number is, I am not sure.

Mr. HULTGREN. OK.

Dr. ZANDI. That is, again, a thorny question. I don't know. But I think that should be part of the calculation.

Mr. HULTGREN. That is helpful, thank you.

Mr. Wallison, your testimony points out that the United States is the only developed country with a housing finance system completely dominated by the government.

Why do you think that is? Do you think other countries have observed the lessons of U.S. policies?

Mr. WALLISON. I doubt it. I would like to believe that was true, but I think we really have a case of path dependency here and that is that the United States began to have a role in housing back in the 1920's. And we continue to grow that system using, for example, the S&L system.

When that failed, Fannie Mae and Freddie Mac came up to pick up their activities. So it is something that has grown in the U.S. system over time. And once that happens, it becomes very difficult to change—

Mr. HULTGREN. Right.

Mr. WALLISON. —As I am sure everyone here is finding. That there are a lot of people who have come to rely on this system, especially those like realtors and homebuilders who enjoy the fact that housing prices rise as a result of this government involvement. But then again, from time to time, we have these crashes which we had in 2008 as a result of these government policies.

So we really have to look at this whole thing again from the beginning and start talking about whether it makes any sense to have the government involved in the housing finance system.

And in my testimony, I have shown that all of the things that we are talking about here, the 30-year fixed rate loan, lower housing prices, or what we should have as lower housing prices, lower interest rates, helping the people who want to buy first homes, does not occur with a government program.

So we start all over again with a private system, which will produce, as the private system always does, the things that the American people want at a price they can afford.

And I would point out, in my testimony, I show what happens in the auto market, which is also a gigantic market. The prices there have been stable for 40 or 50 years in terms of the median income in the United States. And the reason for that is simply that this is a fully, private market where people, consumers, negotiate with the producers.

We don't have that in the United States for housing prices because we have the government inserting itself and requiring lower underwriting standards as a result of which we have much higher housing prices.

Mr. HULTGREN. My time has expired. I may follow up with some other written questions, if that is all right?

I yield back. Thank you.

Chairman DUFFY. The gentleman's time has expired.

The Chair now recognizes the gentleman from Massachusetts, Mr. Capuano—

Mr. CAPUANO. Thank you, Mr. Chairman.

Chairman DUFFY. —For 5 minutes.

Mr. CAPUANO. Mr. Chairman, I was in my office doing very important work until I decided to come over and have some fun.

First of all, Mr. Zandi, I appreciate your comments that without a government backstop the rates really wouldn't change a whole lot, but rates are only one factor in determining monthly expenses.

I am a homeowner, and to be perfectly honest, I own a two-family home because I needed the rent to be able to meet the mortgage when I first bought the home. And for me, and most homeowners, it is how much do I make every month and how much can I afford every month, monthly payment, not the general. All the other stuff works into it.

And if you are going to talk about the rates without a government backstop, we have only had this experience. We haven't had it since the 1930's.

Prior to the 1930's, it was a fully private market. There was no government backstop, no government involvement, and the rates were about the same as the rates today, pretty much. But it was a 50 percent down payment, 50 percent down payment.

I don't know anybody in any market who has 50 percent to pay down on a home. And it was a 5-year payback period which effectively takes the average monthly principal and interest and doubles or triples it, depending on the math you do, 2.5 times.

Tell that to the average American they love. You can keep your 30-year mortgage, if you can get in. And the answer is, most of us could never get in. We have done the purely private market before, it didn't work. We are not going back. Period.

And those of you who want to go back, I dare you—I dare you to put it on the floor of the House for a vote. It would be a wonderful debate, and it would be a wonderful result in the next election for those of you who thought that was a good system.

I also want to talk quickly about the tax bill that we are all debating, this million-dollar number. Sounds like a lot. Before I came over, in all of 10 seconds I looked up average home prices in Boston. And like most Americans that search brought me to Zillow.

Here is what Zillow says the average home price in Boston is \$561,400, just the city of Boston. That does not include our expensive suburbs. And by the way, Boston is geographically one of the smallest cities in the country—\$561,000 average median.

By the way, it sounds like well, gee, that must be a problem. That home price has increased 9.3 percent in the last 12 months, and it is expected to increase 3.9 percent more in the next year. That is a pretty good market, the way I look at it, even though it is expensive.

And by the way, I also looked it up, as of this very moment, as of right now, there are 428 homes for sale in Boston that are for \$1 million or more—428. I can't afford that.

But a \$500,000 mortgage is not out of the norm for most people in places like Boston and California and New York and Chicago and many places in Florida and on and on and on. And I just happened to purely circumstantially look up another town, a nice town. I have been there, actually.

Matter-of-fact, I did very well. I went there for John Kerry and they liked me there. I went to this town, and I looked up their average price. Purely circumstantially, I looked up Wausau, Wisconsin. It really is a nice town, and they did like me.

The average home in Wausau, Wisconsin is \$100,000, 20 percent of the cost in Boston. Now, I am sure it is a great home, but that is the difference. The geographics makes a difference. And that home has increased 5.4 percent, half of the increase in Boston—

Chairman DUFFY. Will the gentleman yield?

Mr. CAPUANO. —And is expected to increase 2.5 percent. It is not the same. And the bottom line is people in Boston make a little bit more, but not that much more.

Chairman DUFFY. Will the gentleman yield?

Mr. CAPUANO. Sure.

Chairman DUFFY. I appreciate you bringing up my hometown, but I would note that the \$500,000 of mortgage deduction which is included in the bill would include then the median income in Boston—

Mr. CAPUANO. On a median income—

Chairman DUFFY. —So you are covered.

Mr. CAPUANO. —But median is made up by people that are over it as well.

Chairman DUFFY. But you advocated that—

Mr. CAPUANO. —Because there are lots of homes in Boston that are at \$700,000, \$800,000, and they are not big expensive homes. For that kind of money—I have always known. I watch HGTV.

Chairman DUFFY. Me, too.

Mr. CAPUANO. For the amount of money I can get for a home in Boston, I can get the greatest home in the world in Waco, Texas, according to what they show on HGTV. I am shocked.

You cannot buy a parking space in my district for the amount of money you can get 40 acres in Waco. And that is not good or bad or indifferent. It is not a statement. It is just a fact.

And it doesn't make any good things about Boston or bad things about Waco or Wausau. It just means if we are going to make national policy it has to be adjusted to regional cost, No. 1, No. 2, and I appreciate the extra time.

As far as the 30-year year mortgage goes, it is not just one factor. There are multiple factors that lead into the decision that the average American makes, and those factors are totally played against them without a government backstop.

Mr. Chairman, I really appreciate the extra time, and I can't wait to get back to Wausau.

Chairman DUFFY. I might differ with you on that point.

The Chair now recognizes the gentleman from Pennsylvania, Mr. Rothfus, for 5 minutes.

Mr. ROTHFUS. Thank you, Mr. Chairman. Mr. Wallison, in your written testimony you debated the merits and the necessity of the

30-year fixed mortgage. You also discussed the role that the government has in insuring that this product exists.

Does the 30-year fixed rate jumbo loan mortgage market have a Federal backstop?

Mr. WALLISON. No.

Mr. ROTHFUS. Why has the jumbo market thrived without a Federal backstop?

Mr. WALLISON. Because we don't need a Federal backstop to have a 30-year fixed rate mortgage.

Mr. ROTHFUS. Dr. Lea, in your testimony, you compared the housing finance systems in similar developed markets. I was interested to see that Australia, Canada, Denmark, the UK and the U.S. all have fairly similar homeownership rates despite significant differences in the housing and finance systems in each country.

We are often told that the 30-year fixed rate mortgage is essential to ensuring that our homeownership rate remains high, yet you point out that, quote, "In no other country is the 30-year fixed rate mortgage the dominant instrument."

Of course, without the government support that we currently offer, this product likely would not be as ubiquitous as it is today. How important do you think the 30-year fixed-rate mortgage is?

Dr. LEA. As you can see, from the data, and I go beyond the countries that I specifically referenced, is that you don't see this instrument around because it has a lot of interest rate risk associated with it. So you have credit risk and interest rate risk that is inherent in mortgages, and you have to distribute that some way.

And other countries that have decided that customers can take or be exposed to a bit more interest rate risk, and as a result you don't need the government backstop in order to ensure that you get sufficient amounts of credit and high rates of homeownership.

So the fact that we use and built a system around the 30-year fixed rate mortgage has, by definition, almost meant that we have to provide this government support. And I would point out that this didn't work with the savings and loans.

We crashed the system back in the 1980's, and we crashed the system again in the mid-2000's. So the question is do we have to build a system based on the 30-year fixed rate mortgage? And if that requires government guarantees, you have a self-fulfilling prophecy.

Mr. ROTHFUS. Mr. Tozer, in your testimony you wrote, quote, "With their protected government advantage status and the powerful economic benefits that accompany it, the GSEs have achieved gains at the cost of crowding out a potentially significant measure of market competition and additional innovation."

Assuming that the government provided advantage to the GSEs was diminished or abolished altogether, what would some of the other impediments to private sector competition be?

Mr. TOZER. Again, the issue gets back to this whole concept, like Dr. Lea said, you have interest risk and you have credit risk.

And so the big impediment to this concept is that you need the government guarantee to support the interest rate investors who are able to take on the credit interest risk, like Mr. Lea said. Banks really can't do it. And the question is do borrowers continue

to avoid interest rate risk or do you shift interest rate risk to the borrowers with an adjustable mortgage?

And that is the big question.

So again, the impediment is that once you take Fannie and Freddie out of the mix and their duopoly, then you need to make sure that you have access to credit enhancement from all the various issuers that enables them to be able to compete on an even playing field with all of the other issuers so we have a well-functioning market for small to medium-sized lenders.

Dr. ZANDI. Congressman, can I make a quick point about the jumbo market?

Mr. ROTHFUS. Yes.

Dr. ZANDI. The jumbo market is dominated by large, banking institutions. Those banks are classified as systemically important financial institutions.

By definition, they are backstopped by the government, so there is a backstop there. It is not like they are operating in a vacuum without the government back there.

Mr. ROTHFUS. So there is no bank out there that is making a jumbo loan?

Dr. ZANDI. No, there are, but the—

Mr. ROTHFUS. OK.

Dr. ZANDI. —The market is dominated—

Mr. ROTHFUS. Yes.

Dr. ZANDI. —The vast, vast majority of those are—

Mr. ROTHFUS. Mr. Wallison, do you want to comment on that?

Mr. WALLISON. Yes. Those banks and other banks, not necessarily the too big to fail banks, are also making these loans. And the point is that we studied this market very carefully. We can provide a memorandum on what we found in this market, and in every case where a bank was making a loan since 2014, a mortgage loan, it was lower cost than a GSE loan.

Mr. ROTHFUS. If I can—

Mr. WALLISON. What we did was compare the jumbo market to the GSE market saying—just a little bit below the GSE market, a little bit higher than the GSE market for the jumbo loans and we found that those loans that when they were being made were being made at a lower interest rate.

So it is not necessary to have a government backing of any kind in order to keep the interest rate at a competitive level.

Dr. ZANDI. One other quick point—

Mr. ROTHFUS. My time is expired. I would like to go on, but my time is expired—

Dr. ZANDI. Oh, I am sorry.

Mr. ROTHFUS. —So I yield back.

Chairman DUFFY. The gentleman's time has expired.

The Chair now recognizes the gentlelady from Ohio, Mrs. Beatty, for 5 minutes.

Mrs. BEATTY. Thank you, Mr. Chairman, and thank you to our Ranking Member, and thank you to our witnesses here today. Before I go into my questions, I would like to make a few brief statements.

But first, I would like to say to my colleague, Congressman Sherman next to me, I would like to be included in that 30th Congressional District CODEL along with Duffy and Cleaver.

So I just want that entered into the record, Chairman Duffy, that I want to go on the CODEL.

Now to the witnesses—

Chairman DUFFY. Without objection.

Mrs. BEATTY. Thank you. To the witnesses here, thank you for being here. And certainly while we are here today to talk about sustainable housing finance part three, I noticed that we have certainly not been absent of talking about tax reform.

And I was very pleased to see in your written statement, Ms. McCargo, that you addressed the potential impact of the House Republicans' tax plan and the effects it can have on affordable housing.

As a matter-of-fact, Mr. Chairman, I would like to submit an article for the record from Politico entitled, "Tax Plan Would Cut Affordable Housing Supply by 60 percent."

Chairman DUFFY. Without objection.

Mrs. BEATTY. Thank you. Let me just take a few seconds of my time to quote from that article. And that article states that builders, local governments, and other housing advocates are rallying against a provision of the House Republican tax plan that would eliminate a key funding source for affordable rentals.

As a matter of fact, it says the tax proposal would do away with private activity bonds, which we all know is a growing source of financing for low cost housing.

The cuts would reduce the supply of new affordable rentals by more than 85,000 units a year or more than 60 percent, according to an analyst from the Novogradac and Company.

One last thing, private activity bonds are issued by local or State governments and are designed to attract private capital funds to large projects. They have evolved into a common financing mechanism for housing as the supply of low-income housing tax credit, the primary source of financing and it has been outpaced by the need of low rentals.

So with that and hearing from the articles, can you briefly describe the problem you see with regards to the affordable housing when it comes to the Republicans' tax cut bill?

Ms. McCargo, do you want to start?

Ms. MCCARGO. Certainly, thank you, Congresswoman. The fundamental concerns, even without the tax plan, the affordable housing issue is a significant issue both on the rental and buy side, on both sides the issue.

The Low Income Housing Tax Credit has already seen a lot of pressure going into this, and I think that one of the most important things as a houser, and thinking about what is happening with the tax plan, is that the fundamental decisions that are made—whether it is the mortgage interest deduction, low-income housing tax credits or other plans—is that we are continuously looking at how we can put money that is taken from one part of the plan back into housing.

One of the concerns in particular is for example the mortgage interest deduction. If we are looking to really spur home ownership

and move forward we might want to look at how we might be able to take—if that was to be reduced—those dollars and how do you put those back in the housing in the form of a tax credit, for example?

So I think affordability is a critical issue whether you are renting a home or owning a home across the Nation today. And that the tax plan and the decisions that are made to make cuts or any revisions that affect housing needs to be thought about in terms of how do we make sure that we are enabling affordable housing and finance?

Mrs. BEATTY. Thank you. My time is about to run out, but I would like to make a brief comment as we talked about earlier when you were asked the question of what is middle class. We all know the numbers that we are given, but I think it is important to say it depends on where you live.

Ms. McCARGO. Right.

Mrs. BEATTY. If you take my district, I have the entire city of Bexley, and we have \$10 million homes there and \$2 million homes, and some of those individuals would probably call themselves middle class that own a \$1 million home.

So I think to Mr. Sherman's point, it definitely depends on where you live. But also, I was elected to represent rich people and poor people.

So I don't think you could make it an either/or or say to her that it is unfair if people want a tax deduction on a \$1 million or a \$2 million house. So I think we have to figure out how to do both. Not to take away those things for those who are less than middle class, but not to punish others.

My time—

Chairman DUFFY. The gentlelady's time has expired.

The Chair now recognizes the gentleman from North Carolina, Mr. Budd, for 5 minutes.

Mr. BUDD. Thank you, Mr. Chairman. I am also interested in Mr. Sherman's CODEL California. My only fear is that I would check in but never leave.

So Dr. Lea, in your testimony you noted that Canada has a government guarantee, correct? Right. So what percentage of the Canadian mortgage market is covered by this guarantee?

Dr. LEA. The Canadian system is similar or pretty much modeled after the FHA-Ginnie Mae combination. So in Canada all loans over 80 percent loan-to-value ratio have to be insured, regardless of whether they are held by banks or in securitized form.

So the CMHC is providing most of that mortgage insurance, and I think roughly about 50 percent of all mortgages have government mortgage insurance.

The second element of that is, like Ginnie Mae, they provide a timely payment guarantee on securities, mortgage-backed securities that are issued and the market share there is about 31 percent.

Mr. BUDD. So that is a separate guarantee, the timely payment guarantee?

Dr. LEA. Correct. It is a layered guarantee. So if you hold the loan in portfolio you don't have that second guarantee, but if you sell the loan then they put that timely payment guarantee on that.

Mr. BUDD. So by contrast, about what percentage of the U.S. market is guaranteed by Ginnie, Fannie, and Freddie?

Dr. LEA. 61 percent is the number there that is the combination. Mr. BUDD. OK.

Dr. LEA. Oh, no, I am sorry—no. It is 65 percent. It is 31 percent in Canada, 65 percent and then looking around the rest of the world there is no other country that has more than 10 percent of loans securitized and almost all of those are private label. You don't see government guarantees in most other countries.

Mr. BUDD. So what are the credit characteristics of the loans that are covered by the Canadian government? For instance, what is the down payment requirement or the debt-to-income ratio of the borrowers? And you did mention an 80 percent number earlier, but if you would describe those requirements?

Dr. LEA. Right. So after the crisis they used to have 95 percent loan-to-value ratio maximums. They lowered that to 90 percent for purchase loans and 80 percent for refinance loans. They have since relaxed that a little bit and for loans under \$500,000 you can go back to 95 percent there.

Importantly, loans are recourse in Canada. So that also provides a significant deterrent against mortgage default.

Mr. BUDD. So is there a limit on the amount of a loan that is covered under Canada's guarantee?

Dr. LEA. Yes there is. And that was actually lowered after the crisis. I am trying to remember what the maximum is. There is a maximum cap. I think it is maybe something like \$400,000 or so, but I would have to actually check that. I don't remember off the top of my head.

Mr. BUDD. About \$400,000 then. So does Canada have a conforming loan limit?

Dr. LEA. No, because they don't distinguish between government and non-government loans.

Mr. BUDD. OK. And how about any limits on borrower income eligibility?

Dr. LEA. They also have that and the most recent numbers I think they will allow that to go up to 45 percent.

Mr. BUDD. Very good. Thank you Dr. Lea.

Mr. Chairman, I yield back.

Dr. ZANDI. I think it is important to point out that they are willing to move those standards up and down on a regular basis. Unlike here, once we make a change we generally don't change it. They are moving those thresholds all the time. It is a macro prudential tool they use.

Mr. BUDD. Yes, very good, noted. Thank you.

Chairman DUFFY. The gentleman yields back.

The Chair now recognizes the gentleman from—

Mr. ROYCE. Thank you, Mr. Chairman. We have a very distinguished—

Chairman DUFFY. So the gentleman from California, Mr. Royce, for 5 minutes.

Mr. ROYCE. Thank you very much, Chairman. And you have put together a very distinguished panel here of witnesses today.

And I wanted to ask Mr. Tozer, given your past experience, and this is an issue we have spoken about it in L.A. at the Milken In-

stitute out there. But given your expertise, again, if we wanted to explore what the risk transfer deals at Fannie and Freddie and NFIP (National Flood Insurance Program) have taught us thus far, if we look at risk transfer.

We have had some deals through the bond and reinsurance market. My understanding is that they could be doing a lot more than they are doing already. Gwen Moore and I have legislation to encourage them to do that.

In addition, I have recently been briefed that in light of the damage caused by the hurricanes, the contracts that the NFIP purchased will pay \$1 billion of reinsurance. And that would return to the taxpayers 85 cents on the dollar as a consequence of those reinsurance contracts.

So given these and other examples, is there any reason why the Federal Government as an entity should not seek to maximize the transfer of credit risk and the transfer of insurance risk and other taxpayer exposures to the capital markets and reinsurance market when practical?

Mr. TOZER. I agree. I think you should transfer as much of the expected credit loss as you can. The question you run into is diminishing returns.

Most analysis I have seen shows that if you transfer 40 percent of the loan amount, for example, you have a \$100,000 loan and you transfer \$40,000 of risk to a third party, you are going to cover 99.9 percent of the chance of issuer having to cover a loss.

So the question we run into is when does the cost become prohibitive? It is like buying too much insurance for yourself—

Mr. ROYCE. I understand the concept, but let me ask you, are we currently approaching, in your opinion, the point where—

Mr. TOZER. The thing we need to realize is with the GSEs and when they have a loan that has private mortgage insurance, they are insured down to 65 percent exposure right there.

The borrower is paying to get the issuers exposure to 65 percent, so the big area that they are concerned about are the loans with a 20 percent down payment. So I think the concern is making sure the loans that only have a 20 percent down payment are credit enhanced up to at least the 65 percent or 60 percent area.

The loans secured with private mortgage insurance are probably close to proper level of credit enhancement because they are at 65 percent coverage level. But I think you need to look at this whole concept what is a tipping point of the cost versus the benefit to the taxpayer.

So the question becomes between all of those layers, I think the question is the government should make sure that all the losses are absorbed by the private sector.

Mr. ROYCE. Right. And in your testimony you state that many have cited deficiencies and weaknesses in PLS (private-label securities) contracts, governance structures, and collateral as a leading cause of many billions of dollars of misallocated losses.

The misallocated losses spurred a crisis of confidence and the resulting trust gap on the part of the institutional investors who bore them. So we heard similar concerns at our hearings last week, right?

Mr. TOZER. Right.

Mr. ROYCE. My question is a straightforward one here to you. What reforms could we make to help prepare the trust gap and reignite the PLS market here?

Mr. TOZER. The key is I think we have to have an active master servicer, because what has happened is, for example in the Ginnie Mae world, if an issuer hires a servicer they are on the hook for the losses. So they are going to keep them honest to make sure there is no misallocation. If a servicer messes up, they pay the losses.

The same thing Fannie and Freddie are acting as a master servicer to make sure the servicers are held accountable, if the servicers mess up they lose. In the private label securities it was kind of like trust me. The servicer was the fox that kind of, guards the hen house.

So the key thing is having a layer of someone there to do the oversight over the servicers to make sure that if they make a mistake that causes losses, that those losses are absorbed by the servicer and not passed on to institutional investors by making stronger contracts, but also having an organization that actually has the teeth to enforce those contracts versus letting the servicers police themselves.

Mr. ROYCE. Anything else that could reignite the PLS market?

Mr. TOZER. The PLS market, in general, I think it is always going to be relatively small, not so much because of the credit side. I think there is tremendous appetite for credit investors.

The problem is interest rate investors want the homogeneity of being able to have a government-backed security that they could trade. They could trade large amounts in the TBA market. So I think the concept is—I think the PLS market as far as the credit side, through the support CRTs (credit risk transfer), I think it is critical to develop a PLS CRT market because if we can move to the point where more and more credit transfer is occurring, especially if we get to the point where we have more and more issuers that we talked about in the Milken proposal, we need to have a good working private sector credit transfer process. And I think that is what we need to make sure we have in place.

Chairman DUFFY. The gentleman's time has expired.

The Chair now recognizes the gentleman from Texas, Mr. Green for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman. I thank the Ranking Member as well. Thank the witnesses for appearing today.

Please permit me to ask a question that was a burning question some time ago. Was the CRA (Community Reinvestment Act) a cause of the 2008 downturn? If you believe that it was, the CRA created the 2008 economic debacle, would you kindly extend a hand into the air?

Thank you. Now do this for me, and I want you to be as terse as possible, but this is really important. I need for the record to reflect just who you are.

So if you would, let us start to my far left and just give your name and the company that you represent. Would you do so please, sir, at my far left. Your name and the company you represent.

Mr. WALLISON. My name is Peter Wallison, and I am appearing for myself. I am an employee, however, of the American Enterprise Institute.

Mr. GREEN. Thank you, sir.

Next please?

Dr. ZANDI. Yes, I am representing myself, but I am the Chief Economist of Moody's Analytics a division of the Moody's Corp. I am on the board of directors of MGIC, one of the Nation's largest private mortgage insurers and I am also soon to be the chair of the Board of Reinvestment Fund, which is a CDFI headquartered in Philadelphia that does affordable lending.

Mr. GREEN. Thank you, sir.

Dr. LEA. I am Michael Lea. I am a self-employed consultant in Sand Diego, California.

Mr. GREEN. Thank you, sir.

And ma'am?

Ms. McCARGO. Allana McCargo, I am representing myself. And I work for the Urban Institute as the Housing Finance Policy Center Co-director.

Mr. GREEN. Thank you.

Sir?

Mr. TOZER. I am Ted Tozer, and I am a Senior Fellow at the Milken Institute and basically representing myself as my background, as well as the Milken Institute.

Mr. GREEN. Thank you. This has been a concern that the committee has had to address. I just marvel at how we have gone from the CRA being the genesis of the crisis, and we really did have that debate in this committee.

I remember Mr. Frank talking to Ranking Member Cleaver and I about this. And if you recall Mr. Cleaver, we went to the floor because there was the widespread belief that it was the CRA that caused the economic downturn. And this is going to be of benefit to me as I go forward, dear friends. I just want to cite that it is Tuesday, November 7th, 11:43 a.m.

All of these noted experts, persons who have some degree of knowledge in this area have indicated to us that it was not the CRA. Now let us move onto something else before I come back to CRA.

The jumbos, Mr. Zandi, you wanted to say more about the jumbos and you didn't get the opportunity to. I would like for you, if you would, to be as pithy as you can but please speak on it.

Dr. ZANDI. Yes. I think the other point about the jumbo market is that it is to very high quality borrowers with very high credit scores, low loan-to-value ratios, low DTIs. So that isn't the market we are talking about here when we talk about housing finance reform. So it is a very, very different market.

Mr. GREEN. And you also mentioned that there is a backstop for it. While it may not be direct, there is an indirect backstop. Would you comment on that please?

Dr. ZANDI. I would say it is very direct. These are systemically important financial institutions that dominate this market and they have a backstop.

And I would also point out in the case of Canada and in most other countries across the world, the lending is done by large sys-

temically important institutions and there is no debate about it. And they have a government backstop. So the system is backstopped by the government explicitly.

Dr. LEA. But it is not a mortgage-specific backstop. So banks are diversified and aren't concentrated just in mortgages. What differs in the U.S. is we do that for mortgage-specific institutions.

Mr. GREEN. Thank you. Let us move to one other area quickly. Is there anyone who believes that there should be absolutely no government involvement at all? Remove the government completely, no backstop anywhere involved in this process at all? If so, will you kindly extend a hand in the air? I believe there is at least one.

All right sir, I would appreciate your comment. Would you tell me, Mr. Zandi, why you are of the opinion that there has to be some backstop, some government backstop?

Dr. ZANDI. I think if we want long-term, fixed rate, pre-payable mortgages to be the mainstay of our system, 30-year fixed rate, 15-year fixed rate loans, we need a catastrophic government backstop. It has to be explicit and it has to be paid for.

The borrowers have to pay for it. And that is a very doable thing, and we should do it because that is the system that we believe is the appropriate one and that provides the best service to the American citizen.

Mr. GREEN. Thank you very much.

I will put a to be continued, Mr. Chairman, on the CRA.

Chairman DUFFY. The gentleman yields back.

The committee is now going to go into a second round of questions, but we are not going to do 5-minute questions. We are going to do 2-minute questions.

The Chair now recognizes the gentleman from Pennsylvania, Mr. Rothfus, for 2 minutes.

Mr. ROTHFUS. Thank you, Mr. Chairman. I am just—during this hearing, really and hearing from all of you and thank you for being here.

Mr. Zandi, I just want to go back, and then we talked a little bit about this concept of a catastrophic backstop. Can we quantify that in any way?

Dr. ZANDI. Yes. I think that the system, the entire financial system is now coalescing around a capital standard for private capital that takes the first 5 percent of loss. After that, that would be considered catastrophic, just to put that in context.

Mr. ROTHFUS. 5 percent of loss of what? How would that play out?

Dr. ZANDI. Yes, just to give you context. In the Great Recession financial crisis, the Fannie Mae and Freddie Mac had total realized losses of not quite 3 percent. And you have to recognize that prior to the crisis, there was no Q.M. rule. There was no governor on the kinds of underwriting they were doing.

Post crisis we now have this governor and so the quality of the loans that they are able to purchase and to ensure is measurably higher. So even under the Great Recession scenario where unemployment would get 10 percent, house prices would decline to 30 percent.

The stress tests that are being required by all banks and financial institutions, including the Fannie Mae and Freddie Mac are being required to engage in, the losses would be measurably lower than that, probably if you did the arithmetic, 1.5 percent to 2 percent.

Mr. ROTHFUS. Yes, and my—

Dr. ZANDI. So 5 percent is a lot of capital.

Mr. ROTHFUS. I might want to follow up with you on that question just to again, get in some parameters—

Dr. ZANDI. That is it, it is 5 percent. After that it is catastrophic. That is—

Mr. ROTHFUS. The question I will follow up with in a written form is, like, 5 percent of what? That is what I am—

Dr. ZANDI. That is the number of loans that default times the loss would be incurred because of that default. That is the total loss.

Mr. ROTHFUS. If I could, real quick, go to Mr. Wallison? In your testimony you explained how reduced underwriting standards can actually make housing less affordable. You described our existing affordable housing policy as leading to, quote, “higher leverage, a lower home ownership rate and reduced affordability.” And I would guess higher home prices, too?

Mr. WALLISON. Yes. In fact that is the whole problem, that the—

Mr. ROTHFUS. And I guess, Ms. McCargo, can you respond? What is—because it makes sense to me what Mr. Wallison is saying, that all these policies have really driven up the cost of housing which it makes it a—it is an affordability issue, is it not?

Ms. McCARGO. So that we definitely have an affordability issue, I just cannot find the way to express that I don't think that issue comes from 30-year fixed rate mortgage or from the—

Mr. ROTHFUS. I don't think he is saying that.

Ms. McCARGO. Yes, or from the government guarantee or the government's involvement in this process.

Going back to 2008, if you look at the lending that was going on, which before 2008 leading up to the crisis, and you look at the people, the private label investors that were in the market at that time, and you look at the performance on the loans that were made prior to that period—I would just say 2005, 2006, and 2007—loans made prior to that period where you had a huge proliferation of risky products that were not 30-year straight mortgages.

Mr. ROTHFUS. But weren't Fannie and Freddie securitizing Alt-A's and some prime loans, too?

Ms. McCARGO. They were some. They were not all. There was a huge market called the private label securitization market that was a big market and had much more share at the time than Fannie or Freddie and they were holding those loans. And when 2008 happened, those players disappeared—

Mr. ROTHFUS. But the portfolio—

Ms. McCARGO. —From the market.

Mr. ROTHFUS. But the portfolio of Fannie and Freddie's paper, significant percentage of Alt-A and sub-prime, no?

Ms. McCARGO. There was a percentage of it. And but it was—

Mr. ROTHFUS. And my time is way over expired.

But Mr. Chairman, thank you. I am going to yield back.

Chairman DUFFY. The gentleman yields back. I am going to change the rules midstream. We are going to do 3 minutes because you did take 3 minutes.

Chairman DUFFY. So the gentleman from Missouri, Mr. Cleaver, is recognized for 3 minutes.

Mr. CLEAVER. Thank you, Ms. McCargo. Again, thank you for being here. The McKinsey Global Institute put out a study recently which says that by 2025, we will have about 1.6 billion people globally living in homes that are either unsafe and decrepit or housing that is unaffordable that would be available.

Do you have any suggestions on ways in which this committee and the U.S. Federal Government, can help create the atmosphere for a larger stock of affordable housing?

Ms. McCARGO. Thank you. The affordable housing issues have exploded since the crisis. We have seen a lower vacancy, less construction in the affordable space, a lot of constraint on builders.

A regulator and the cost of construction to build housing is incredibly high and that makes the building and the ability to create affordable housing stock very, very difficult.

One of the key things—and I am just going to go back to the GSEs for a moment—I think that is a good move, is the Duty to Serve rule that is requiring that the GSEs look at the preservation of affordable housing as part of how can they have more of a footprint and an impact on preservation of affordable housing?

Most affordable housing stock in America is old. And it needs to be preserved. It needs to be renovated. And there needs to be investment made there such that folks can afford to get into those homes, and we can have more stock brought to the marketplace.

I do believe we have a credit crisis on one side where people are having trouble getting into housing. Once this Congress fixes that problem, we then have a serious problem of there is not going to be enough housing stock available for people to buy or rent at this point in time given the direction.

Mr. CLEAVER. One of the problems when we are talking about rehabilitating housing, which I agree with it, we have done enough demolition, but the cost is going to exceed the value of the home or the property.

And so, you get criticized by giving a loan on a property that is not valued at the level of the money that went into it to rehab it. It is a conundrum that many urban areas are facing, and if any of you have any ideas on how to solve that problem, it would be helpful.

Ms. McCARGO. Can I—

Mr. CLEAVER. Yes?

Ms. McCARGO. One more thing on affordability and again, I will go back to Duty to Serve and the focus that has been put on manufactured housing, modular housing and different types of affordable housing stock.

I do think we have the opportunity to think about better financing structures to support those types of affordable housing opportunities is something that, again, the GSEs are looking at and exploring.

And I do think that is another space where in housing finance reform and what the GSEs are doing in housing policy there could

be help for finding more ways to get at that type of affordable housing as well.

Mr. CLEAVER. Thank you.

Chairman DUFFY. The gentleman yields back.

The Chair now recognizes himself for 3 minutes. Mr. Zandi, you have said several times, I believe, that you believe that the borrowers should pay for their guarantee. Is that correct?

Dr. ZANDI. Correct.

Chairman DUFFY. How do you set the guarantee? How do we know that we are collecting enough money to actually have enough resources for that guarantee? I think that becomes the context of the million-dollar question. I don't know, and then I have to get—

Dr. ZANDI. Yes, it is a great question. I don't think there is a good answer. I would set it high enough that I would feel very comfortable I am collecting enough money and building that mortgage. I would set up a mortgage insurance fund, just like a deposit insurance fund—

Chairman DUFFY. Like a contingency fund of some sort?

Dr. ZANDI. —And put the money in there and keep building it, and I wouldn't stop. You can do the arithmetic. Go back to the multiple guarantor system, and pay a 10-basis point fee.

Chairman DUFFY. If we feel like to raid those kind of funds.

Dr. ZANDI. Pardon me?

Chairman DUFFY. If we feel like to raid those kinds of funds.

Dr. ZANDI. No, no. You can't raid the DIF (Deposit Insurance Fund). You can't raid the DIF, so don't raid it—you can't. Just design it exactly the same way so you can't raid the MIF (Mortgage Insurance Fund). It is there to backstop that system if it ever gets in trouble, and just let it build. And it will, it will build.

If you put a 10-basis point fee on every mortgage that is insured by the future guarantors that take over for Fannie and Freddie, that will raise a boatload of money, and we will be fine. We will be very conservative.

Chairman DUFFY. Mr. Wallison, do you agree with that? I know you have thrown all these policies to the side—

Mr. WALLISON. Yes.

Chairman DUFFY. —I know, but—

Mr. WALLISON. The private system would work anyway, but just talking about mortgage insurance, the FHFA has required that all mortgage-backed securities be backed by mortgage insurance and has required the mortgage insurance industry to have sufficient tangible assets behind its insurance. So it would be the private system that would set mortgage insurance premiums.

The problem with that, of course, and Mr. Zandi didn't address it, is that very risky mortgages with low down payments, with low FICO scores, et cetera, are going to be very expensive under any system where you have a private mortgage insurance.

Chairman DUFFY. And therefore should you have a one-size-fits-all or do we have to have a guarantee fee that meets the risk of the mortgage?

Is that your position, Mr. Zandi?

Dr. ZANDI. For the catastrophic backstop, no. I wouldn't do that.

Chairman DUFFY. One-size-fits-all?

Dr. ZANDI. Yes. And what the other thing I would do, though, is that I would have a clawback ability so that if you ever got into the MIF and you blew away the MIF, and I can't even imagine that scenario, but let us—who could imagine the Great Recession, then you have the ability to claw that back with higher fees in the future to future borrowers on that system.

Chairman DUFFY. And I only have 30 seconds left. And Mrs. McCargo, I want to chat with you later. We have a housing issue in rural America that is very challenging for us that we aren't able to get our hands around.

Ms. MCCARGO. Absolutely.

Chairman DUFFY. I am concerned we only focus on urban America and because rural is sparsely populated we don't get the same resources and effort. And it is just as devastating for our communities.

I am sorry that we had a conversation about taxes today, but we have seen tax policy and housing policy intersect especially in the conversation of the day.

I would just say this. I think when we use economic warfare and talking points, but then we accommodate the talking point with tax policy, all of a sudden we see people get really squeamish. And we start saying that million-dollar homes are for poor people or middle-income people, and it is a head-scratcher for me.

Maybe we are better off not playing that economic warfare and go what is the best policy? Let us stop bludgeoning each other, because when you bludgeon each other, you might not get the best policy. And when you see that policy accommodates rhetoric, it doesn't end up being the best policy.

With that, my time has expired.

The Chair now recognizes the gentleman from California, Mr. Sherman, for 3 minutes.

Mr. SHERMAN. Mr. Chairman, I wish not to bludgeon you but to invite you to southern California for critically important committee business in January or February.

Chairman DUFFY. I have already agreed to come. I am there.

Mr. SHERMAN. Yes.

Ms. McCargo, you are absolutely right. We need to build more housing. In my area, the problem may be local government and land use planning as much as anything else.

We are told that we ought to blame Fannie and Freddie and the Federal guarantee. I would say that perhaps Fannie and Freddie are so pernicious that they caused the meltdown in 2008, 2009 in Iceland, Ireland, the United Kingdom and Denmark and that they have a pernicious effect on home affordability so great that they have made homes unaffordable in London, Tokyo, and Vancouver.

So we have meltdowns. Other places have meltdowns. We have some areas with high home prices that are difficult for people to afford. So do other places.

What is unique to the United States is that we have the 30-year fixed rate, pre-payable, non-recourse loan very often with a 10 percent down payment. And people whose parents can't afford to help them can still buy a home.

Mr. Zandi, the takeaway for me at this hearing is double-digit loss of value of homes in my district.

Dr. ZANDI. If you give me your address—no, only kidding.

Dr. ZANDI. In fact, I will send you, if you are interested, a worksheet that shows by county the HPI decline I would expect at—the peak HPI I would expect as a result of the bill.

Mr. SHERMAN. Yes. I need that.

Dr. ZANDI. I will give that to you.

Mr. SHERMAN. I will look forward to getting that from you and to sharing it with my colleagues from the variety of counties in California.

One, we have now, Mr. Tozer, is we have the GSEs. They have seller servicing guidelines. They both have underwriting standards.

It is not a race to the bottom in the underwriting standards. You can't have one guarantor cutting its underwriting standards to gain marketing share.

One could imagine that if there were a different system, that there would be a race to the bottom, and then many of the mortgages wouldn't have title insurance, wouldn't have insurance to say that it is, indeed, a first priority lien.

What are the ways we can prevent a race to the bottom in terms of lien quality if we have more than two guarantors or securitizers?

Mr. TOZER. The key is that you need to make sure that guarantors transfer the credit risk to a third party because that way that third party will play policeman to make sure that you don't get out of control.

I think the best place to start is the private mortgage insurance companies because they are taking on all the credit risk now. If you don't put 20 percent down, the PMI companies take on the credit risk.

So I think credit investors are the good policemen to put a floor in there because they are on the hook for the losses. And then as far as when it comes to the issue of mortgage insurance for it, it gets back to the point again that the guarantors have to take on the catastrophic credit risk because if the mortgage insurances aren't there, it affects them.

The government only steps in when the issuer completely fails, because it is a huge incentive to be viable financially before the government steps in. This will avoid the race to the bottom, because the government is not going to bail you out if you survive financially.

Mr. SHERMAN. I believe my time has expired.

Chairman DUFFY. The gentleman's time has expired.

The Chair now recognizes the gentleman from Texas, Mr. Green, for 3 minutes to talk more about CRA.

Mr. GREEN. Yes, the CRA, and other things. Let us start with the other things quickly. Is there anyone who believes that there won't be a government backstop regardless of the plan if we find that the economy is about to go under? I don't believe in government backstops. I would rather not have one.

It is better to plan one than to have to develop one when you find the economy about to go under, as we had to do after 2008 and 2009. Seems like we ought to look at having an orderly process as opposed to something that we have to do on the fly.

I remember when the Secretary came in and explained to us that we were about to have a crisis unlike we have seen in our lifetimes,

a good many of us. I don't want a government backstop. I just don't know that there is any other choice because we want our economy to continue.

And we could have refused to bail out the banks as we see it, but the results would have been catastrophic. If there is anybody who thinks that it wouldn't have been catastrophic, raise your hand, please?

You don't think that it would have been catastrophic? I am going to give you 10 seconds on that, maybe 20. Go ahead.

Mr. WALLISON. I am just saying it wouldn't have been catastrophic. We caused that problem.

Mr. GREEN. But let us talk about the point where the problem had to be dealt with. If we had not bailed them out, what would have happened?

Mr. WALLISON. Probably nothing because—

Mr. GREEN. Probably nothing?

Mr. WALLISON. Probably nothing.

Mr. GREEN. And banks wouldn't lend to each other?

Mr. WALLISON. The banks were lending to each. By the time—

Mr. GREEN. No, no, no, no. By the time of the—when we got involved, the banks were not lending to each other.

Mr. WALLISON. That is not correct.

Mr. GREEN. It is correct.

Mr. Zandi, would you give your commentary?

Dr. ZANDI. Yes, it would have been catastrophic. The system was shutting down. The commercial paper market wasn't working. The large non-financial corporates couldn't get funding. We were on the verge of a complete meltdown.

The loss—remember back, January 2009, we lost over a million jobs. In my book, that is catastrophic.

And it would have been much, much worse if we had not stepped in aggressively through the TARP. Yes, no one likes bailing out big banks or banks in general.

Mr. GREEN. I am one of those.

Dr. ZANDI. We actually had to do it.

Mr. GREEN. Yes.

Let us go to Mr. Tozer. Sir, would it have been catastrophic?

Mr. TOZER. Yes, it would have. I was a mortgage banker back then, and just to put an example, I had mortgage trade on where I had sold a Ginnie Mae or a Fannie Mae security to Goldman-Sachs.

And I had bought one from Morgan Stanley, and they wouldn't even take each other's trades. Normally, I would assign the trades. They wouldn't let me assign the trades.

Mr. GREEN. I hate to interrupt you, but I have to say this. This is the problem that we run into. We run into this problem of persons who still believe that the CRA caused the crisis, and that if we had done—you are not one of them, sir.

You are not one of them. But there are those who do believe this. And this is a part of the problem that we have in resolving the crisis that will come forward at some point in the future.

Trying to find a way to get beyond some of these fallacious arguments that dealt with the crisis that we had to encounter.

Look, thank you, Mr. Chairman. I have gone beyond my time.

Chairman DUFFY. The gentleman—

Mr. GREEN. I will yield to you time to respond.

Chairman DUFFY. You have no time left to yield, but I appreciate that.

Mr. GREEN. I will yield the time that I don't have to you.

Chairman DUFFY. But I thank the gentleman for yielding back. I want to thank our witnesses for their testimony today. I would just note that this is, as we can see, a complicated and involved process. I look forward to, and I think the committee does, to have more in-depth and longer conversations with all of you to make sure we get it right.

Thank you for taking the time today and providing your insight and expertise to the committee.

Hopefully, the panel will respond in a prompt and timely manner, so you get questions from the committee. With that, and without objection, our hearing is now adjourned.

The Chair notes that some Members may have additional questions for this panel, which they may wish to submit in writing. Without objection, the hearing record will remain open for 5 legislative days for Members to submit written questions to these witnesses and to place their responses in the record. Also, without objection, Members will have 5 legislative days to submit extraneous materials to the Chair for inclusion in the record.

[Whereupon, at 12:05 p.m., the subcommittee was adjourned.]

A P P E N D I X

November 7, 2017

Testimony of
Dr. Michael J. Lea
Principal
Cardiff Consulting Services

To the House Subcommittee on Housing and Insurance

Hearing on Sustainable Housing Finance Part III: Private Sector Perspectives on
Housing Finance Reform

November 7, 2017

Mr. Chairman, Ranking Member Cleaver and Members of the Subcommittee thank you for the opportunity to be here today. I am Michael Lea, Principal of Cardiff Consulting Services. I have an extensive background in housing finance in the US including senior executive positions at major mortgage lenders and as Chief Economist of Freddie Mac. I have also been actively involved in the study of international housing finance systems for more than 25 years having done consulting and business development work in 30 countries and serving as Director of Research for the International Union for Housing Finance. I have conducted several comparative studies of developed country mortgage markets including a study of mortgage instrument design released by the Research Institute for Housing America (RIHA) in 2010 and a country and policy study published by the Brookings Institution in 2011. I would request that the RIHA study be entered in the record as it provides empirical support for the points I will make today.

In addressing the subcommittee today I have been asked to discuss how housing is financed in major developed markets. My remarks will focus on 5 countries whose housing finance systems differ significantly from the US: Australia, Canada, Denmark, Germany and the United Kingdom. I will cover what is common across these systems, what is different and what the US might learn from how they finance housing.

Beginning with what is common: Mortgage interest rates are at or near record lows in all of these countries. The average mortgage interest rate in Europe was 2.4

percent within a range of 1.7 to 4.4 percent (for loans with adjustable to medium term fixed rates). Canadian mortgage rates range from 2.2 percent for variable rate loans to 3.7 percent for a 10 year fixed rate loan. Australian mortgage interest rates range from 4.4 percent for loans with rates fixed from 1 to 3 years to 5.1 percent for 5 year fixed rates. These rates are at similar levels as the current US 30 year fixed rate mortgage of slightly less than 4 percent and adjustable rate at 3.3 percent.

It may not be surprising in such a low interest rate environment that house prices have been rising in these countries. House prices have been rising throughout Europe with some country variation. The average year-to-year increase at the end of the third quarter 2017 in Denmark, Germany and the UK was approximately 5 percent. The Canadian housing market has cooled recently recording only a 3 percent year-on-year gain through September. This follows double digit increases in 2016. Australian house price increases have also slowed, with the 8-city average rising at an annual rate of 7.4 percent through mid-October. US house prices have been rising at approximately 6 percent per annum over the past 2 years though there is significant geographic variation.

A third commonality is homeownership. Australia, Canada, Denmark, the UK and the US all have homeownership rates between 62 percent (Denmark) and 67 percent (Australia). Germany has a lower homeownership rate of 52 percent reflecting a strong rental housing market and a cultural legacy of rental in the former East Germany.

There are significant differences in the size of country mortgage markets relative to the size of their economy. Australia has one of the world's largest mortgage markets with a mortgage debt-to-GDP of 94 percent. The Danish market is also quite large with a ratio of 88 percent. Canada and the UK are 69 and 65 percent respectively. The German market is much smaller at 42 percent. The US mortgage debt-to-GDP had been as high as 73 percent in 2009 but is only 55 percent currently reflecting

the effects of the mortgage market meltdown. Notably of these countries only Denmark and the US have a mortgage interest tax deduction.

There are significant differences across countries as to which entities provide mortgage loans. In Europe mortgage lenders must be regulated banks. In Denmark mortgage banks do almost all mortgage lending but they have the same regulation (e.g., capital requirements) as commercial banks. While there are no requirements for mortgage lenders to be banks in Australia and Canada, the market share of banks is 99 percent and 88 percent respectively. This contrasts with the US where banks originate only 40 percent of mortgage loans with non-bank originators now having a 60 percent market share.

There are also significant differences in the predominant mortgage instruments across countries. The US is unique in the dominance of mortgages with rates that are fixed over the entire term of the loan (usually 15 to 30 years) and where the loan is prepayable without penalty. Only Denmark has a comparable instrument. It was the dominant instrument until the early 2000s but has only a 40 percent current market share as Danish borrowers have shifted to adjustable rate and short-term fixed rate mortgages. The Danish instrument has one significant difference from the standard US fixed rate mortgage (FRM). While both the Danish and US mortgages allow prepayment at par (outstanding balance) if rates fall, in Denmark borrowers can repurchase the bond that funds their loan at a discount if rates rise. They can do this because there is a 1:1 correspondence between the loan and a mortgage bond that funds it (the balance principle). The rate and terms on the mortgage are identical to the bond (the lender adds a fee to cover administration and credit risk to the required payment). If rates rise the borrower can request the mortgage bank to buy back a bond, which sells at a discount as its rate is now below market. In this way the borrower deleverages as rates rise reducing the likelihood of negative equity (as house prices often fall with rising rates).

The standard mortgage instrument in other countries differs significantly from the US FRM. The standard product in Canada, Germany and many other European countries is a short to medium term fixed rate mortgage sometimes referred to as a rollover. The rate is fixed for a 1 to 5 year period (up to 10 years in Canada and Germany) after which the rate is reset at the current market interest rate. The loans have amortization terms of 25-30 years. The borrower can select the same or a different fixed rate term at reset. This feature allows borrowers some protection against potential interest rate shocks (e.g., if the reset rate is high and the borrower expects it to fall she can select a one year fixed rate term; conversely if she believes rates are low and likely to rise she can opt for a 5 or 10 year fixed rate term). There is a prepayment penalty during the fixed rate period (a yield maintenance penalty that removes the financial incentive for refinance). There is no penalty at reset and the borrower can typically make partial prepayments without penalty during the fixed rate term. The penalty makes it easier and less costly for the lender to finance the mortgage whereas the lack of a penalty makes US FRM more difficult and expensive to fund. In Germany for example, the lender making a 3-year fixed rate loan would finance it by issuing a 3-year fixed rate bond. At reset if the borrower selects a 5-year fixed rate period the lender would issue a 5-year fixed rate bond.

Australia and the UK are primarily short-term variable rate markets. Historically the predominant instrument is the standard variable rate mortgage. This is a discretionary adjustable rate loan meaning the lender can change the rate at its discretion. In practice the rate changes for all borrowers when the central bank base rate is changed. Recently both markets have moved to short term fixed rates at the beginning of the term (1 to 3 years) after which the loan converts to a standard variable rate loan. It is easy for lenders to fund these loans on similar terms so they have little interest rate risk. Policy makers in both countries credit the predominance of variable rate loans for cushioning the impact of the global recession. Mortgage rates fell close to zero when base rates were lowered. Therefore borrower payments fell without having to refinance, unlike in the US where many borrowers were unable to lower their mortgage rates and payments

due to limited or negative equity.. There is clearly some systemic risk however when rates rise. An advantage of these loans is their simplicity as compared to the US indexed adjustable that is complicated and hard for borrowers to understand.

Another major product difference between the US and the rest of the world is the prevalence of "points" on mortgages. The US is unique in this practice. No other major developed market offers rate-point combinations to borrowers. The use of points, which dates back to the days of FHA administered loan rates in the 1970s, allows borrowers to "buy up" or "buy down" their loan rates. This aids borrower qualification (e.g., if a borrower lacks the income to qualify at a certain rate she can buy down the rate with up-front payment of points (which are prepaid interest). Conversely if a borrower lacks the resources for a downpayment she can select a loan with a higher rate and fewer points. While useful to borrowers points greatly complicate loans and make it very difficult for borrowers to compare loan alternatives.

There are a couple of notable product innovations to mention. In both Australia and the UK, borrowers can redraw funds from an existing loan. Thus they can increase the size of their mortgage (up to an LTV limit) without having to refinance. This saves the transactions cost associated with a refinance. The other innovation, common in both countries, is an offset mortgage. This product links a checking account and mortgage loan. Deposits into the checking account reduce the loan balance and withdrawals increase it. By paying down the mortgage with deposits the customer effectively earns the mortgage rate on their savings rather than the typically lower savings account rate. Interest accrues daily and the loan amount is subject to a maximum loan-to-value ratio. As with the redraw there is flexibility in the amount of the mortgage outstanding. In theory the offset allows for a faster amortization of the mortgage (if deposits outpace withdrawals). In the event of the opposite occurring there is a fixed term and mandatory amortization or final bullet payment.

Mortgage funding is also different across countries. The US is unusual in the dominance of securitization. Sixty-five percent of mortgage debt outstanding is securitized in the US (94 percent of which is in agency MBS). This high percentage reflects two factors: the domination of the FRM and the presence of government-backed entities (Fannie Mae, Freddie Mac and Ginnie Mae) that guarantee the securities. The only other country that comes close to the US in the use of securitization is Canada at 31 percent. The Canada Mortgage and Housing Corporation provides mortgage default insurance and mortgage-backed security (MBS) guarantees. Japan also has a government mortgage-backed securitized guarantor, the Japan Housing Finance Agency (JHF). Approximately 9 percent of Japanese mortgage loans are securitized (of which two-thirds are guaranteed by JHF). Ten percent of European mortgages have been securitized but the vast majority issued since the financial crisis have not been sold but rather pledged against borrowing from the European Central Bank. There are no government guarantors of MBS in Europe.

The main capital market funding instrument in much of Europe is covered bonds. These are corporate (bank issued) bonds backed by a ring-fenced portfolio of mortgage loans. There are over € 1.7 trillion of outstanding mortgage covered bonds representing approximately 25 percent of European mortgage debt. Covered bonds fund 100 percent of Danish mortgages, 57 percent of Swedish, 43 percent of Spanish and 16 percent of German mortgage debt. Covered bonds are typically issued pursuant to specific law specifying allowable collateral, structure and matching requirements. Credit risk remains with the lender. They are viewed as quite safe (there has never been a default of a covered bond) due to the dual recourse structure wherein investors have priority claim on a pool of mortgages and a pari passu claim on unsecured assets of the issuer. An external monitor oversees the cover pool and asset-liability matching. With the exception of the Danish balance principle model, covered bonds are over-collateralized (meaning there are more assets than debt outstanding). There are strict matching requirements between the

cover pool and the bonds. There are no government guarantors of covered bonds in Europe.

There are also major differences in regulation between the US and other major developed markets. Most developed countries have a unitary financial regulator (the UK splits responsibility between the Prudential Regulation Authority (PRA) that ensures the stability of financial services firms and is part of the Bank of England and the Financial Conduct Authority (FCA) which oversees the business conduct of financial institutions). The US has a fragmented system with multiple bank regulators with separate insurance, pension, GSE and securities regulators. Almost all mortgage lenders in other developed countries are banks and regulated as banks including prudential capital requirements. Non-bank lenders in the US have a patchwork of regulators and do not have to maintain bank capital requirements. Fannie Mae and Freddie Mac have never been subject to bank level capital requirements and are currently operating with extremely little equity capital (though they have the backing of the U.S. Treasury).

Mortgage underwriting is usually stricter in other countries as well. In Europe the typical downpayment requirement is 20 percent. Canada tightened its underwriting requirements after the crisis. Purchase loans were required to have a minimum 10 percent downpayment requirement and refinance loans 20 percent. All loans with loan-to-value (LTV) of 80 percent or more are required to have mortgage insurance. Ninety-five percent LTV ratio mortgages are available in the UK but a survey of first time buyers in the first half of 2017 found an average downpayment of 16 percent. 95 percent LTV loans are available in Australia and the government has a first time homebuyer grant program.

Mortgage loans are recourse obligations in all of the countries surveyed and default rates have been and are significantly less than in the US. With recourse lenders have the right to pursue deficiency judgments against borrowers providing a significant deterrent to mortgage default.

Table 1 provides a summary comparison of major systems of housing finance discussed in this paper.

Housing Finance Model Comparison						
Feature	Canadian	Danish	Euro Covered Bond	AU/UK Depository	US	
Instrument	Rollover	LT and ST Fixed; ARM FRM no penalty, buy back option; ARM with penalty	Rollover, ARM	Reviewable ARM	LT Fixed, Hybrid ARM	
Prepayment	Penalty		Penalty if fixed	Penalty if discount	No penalty FRM	
Funding	Deposit/Secu ritization	Covered Bond	Deposit, Covered Bond	Deposits, securitization	Securitization , Deposits	
Govt. MI	Yes	No	NL only	No	Yes	
Govt. Security Guarantee	Yes	No	No	No	Yes	
GSE	No	No	No	No	Yes	
Regulation	Strong unitary; CB legislation	Strong Unitary; CB legislation	Strong Unitary; CB legislation	Consolidated CB legislation	No CB legislation	Fragmented.

Acronyms: FRM – fixed rate mortgage; ARM – adjustable rate mortgage; ST – short term; LT long term; CB – covered Bonds

What can the US learn from studying the housing finance systems in other countries? There is no ideal housing finance system. Individual country arrangements reflect history, market structure and government policy. Historically, some countries e.g., Australia, Canada -- as well as the US -- evolved from the British system of specialized deposit based lenders. Nordic countries, e.g., Denmark and Germany, evolved from a bond based system. No other country's housing finance system evolved with extensive reliance on securitization or GSEs. All lenders are subject to prudential regulation but none are subject to mission regulation (e.g., there are no "housing goals" in other countries). Other countries have achieved comparable or higher rates of homeownership and deep, well-developed and stable

mortgage markets with much less government support. And almost all developed country housing finance systems performed better during the crisis than the US.

Importantly, there is more “skin in the game” in the housing finance systems of most other countries. Banks that are subject to domestic and international capital rules hold considerably more capital than that held by government mortgage agencies in the US. Whether financed by deposits or covered bonds, credit risk remains on the balance sheet of the lender. This aligns incentives between lenders, depositors, investors and ultimately taxpayers. In addition, downpayment requirements are stricter and recourse common in other countries. These ensure that borrowers also have more incentive to borrow prudently and avoid default.

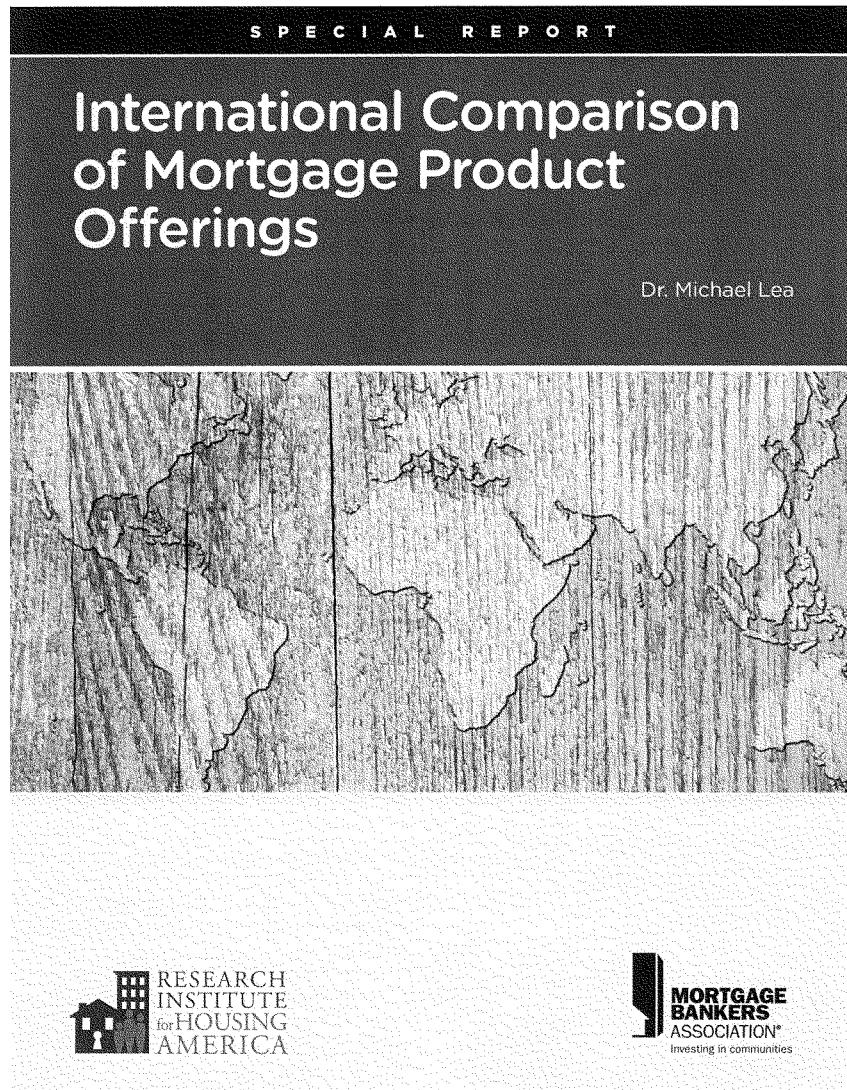
In no other country is the 30 year fixed rate mortgage the dominant instrument. As we learned from the savings and loan crisis, the FRM is not a suitable product for bank lenders. Rather it requires capital market financing which in the US is mainly achieved through the use of government guarantees. The high proportion of FRMs funded through securitization in the U.S. is both the outcome of government involvement and a justification for its continuation. Investors like government guarantees against loan or issuer default to invest in mortgage-backed securities with volatile cash flows. Thus the argument is made that the US needs to continue government support through the GSEs and/or Ginnie Mae to keep the mortgage market functioning. Their guarantees lower the relative cost of the FRM sustaining its dominance. The result is that the government, and thus taxpayers, backs the majority of mortgages in the U.S.

There is no intrinsic reason to build a mortgage market on the FRM. If government guarantees for mortgage-backed securities were reduced or withdrawn over time the U.S. market would most likely achieve a more balanced mix of products and funding sources. Adjustable rate mortgages, medium term fixed rate mortgages and long term fixed rate mortgages all have a place in a robust mortgage market. Likewise, funding through deposits, bank bonds, covered bonds and securitization

allows lenders to tap a variety of funding sources and manage the risks of the various instrument designs.

The experience of other countries shows that high rates of homeownership and stable well-developed mortgage markets can be achieved with less systemic risk than found in the US. In that respect the U.S. clearly can learn much from international housing finance systems.

Thank you for the opportunity to appear today.



International Comparison of Mortgage Product Offerings

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Executive Summary

The recently passed Dodd-Frank Financial Reform Bill has significant implications for the provision of mortgage credit in the United States. The bill stipulates the characteristics of qualified mortgages, which are likely to become the standard instruments in the market going forward. The bill bans or restricts the use of pre-payment penalties, balloon payments, interest-only payments and other features commonly offered in the mortgage choice set. A likely outcome of the bill is to perpetuate the use of the long-term fixed rate pre-payable mortgage (FRM) with implications for the future of the mortgage GSEs.

This study examines the issue of mortgage product design from the viewpoint of international experience. What mortgage designs and characteristics exist in different markets and why? How have they performed prior to and during the crisis? The study will focus on five important aspects of mortgage design:

- Interest rate determination: fixed versus adjustable-rate mortgages;
- Pre-payment penalties and restrictions;
- Loan-term and amortization limits;
- Mortgage default and foreclosure; and
- Consumer protection regulation

This comparison of mortgage product offerings in developed countries has revealed significant differences in the dominant product offerings. Countries differ in terms of the market share of adjustable versus fixed-rate mortgages, the use of pre-payment penalties, maximum term and the offering of features such as interest-only payments and assumability. Our findings suggest that the United States is internationally unusual in several respects:

- The United States has an unusually high proportion of long-term fixed-rate mortgages as well as use of securitization in the finance of housing. The dominance of the FRM and

securitization is driven in part by the presence of government-backed secondary mortgage market institutions that lower the relative price of this type of mortgage.

- The United States is unusual in the banning or restriction of pre-payment penalties on fixed-rate mortgages. Most countries in the survey allow such penalties to compensate lenders for loss associated with the financing of the instruments. As a result, mortgage rates do not include a significant pre-payment option premium and other financing techniques, such as covered bonds, are more common.
- The only other country that utilizes the FRM is Denmark. The Danish system offers a unique alternative in the form of the “Principal of Balance” that equates individual mortgages and bonds. This system allows borrowers to pre-pay their loans when rates fall, as in the United States, and allows them to buy back their bond when rates rise. This feature allows the borrower to adjust to interest rate increases and decreases and facilitates de-leveraging when rates rise, reducing the incidence of negative equity.
- Features that are restricted in the Dodd-Frank Bill such as longer terms, interest-only periods and flexible payment designs are quite common in other countries and do not appear to have been associated with higher rates of default.
- Mortgage default rates have been far lower in other countries than in the United States, despite the fact that several countries had greater house price volatility. The lack of subprime lending (outside of the United Kingdom) and less use of limited or no documentation lending were major factors. Mortgage product design did not play a major role in mortgage default – in fact the dominance of ARMs in several countries was noted as a reason for lower default rates.
- Mortgage foreclosure and repossession regimes are varied, with some more efficient and some less efficient than in the United States. However all other countries in the survey have recourse mortgages and lenders routinely pursue deficiencies. Research in Europe and the United States has found that recourse reduces the incidence of default.
- Consumer protection regulation has advanced in a number of countries. The focus has been on borrower qualification and suitability standards and for the most part has not constrained mortgage product design.

Introduction

In the aftermath of the U.S. mortgage-market crisis there have been numerous actions and proposals to restrict mortgage product design. The Federal Reserve Board created guidelines for high cost loans in 2008 that restrict or prohibit the use of certain features such as pre-payment penalties on high cost loans.¹ The trend continued with the passage of the Dodd-Frank Financial Reform Bill [2010] in July 2010, which contains a section entitled the "Mortgage Reform and Anti-Predatory Lending Act," that is likely to substantially change the mix of product offerings available in the U.S. market.

The bill introduces the concept of a "qualified" mortgage that seriously constrains the characteristics of available mortgages. The qualified mortgage is basically an instrument with low-risk characteristics such as fully amortizing payments and a term no longer than 30 years. Qualifying loans can be fixed rate or adjustable rate but qualification on the former has to be on a fully amortizing payment and on the latter is based on the highest possible rate in the first five years with full amortization. Pre-payment penalties on qualified fixed-rate mortgages are capped and not allowed on adjustable-rate mortgages. The law also allows regulators to prohibit or further restrict "...the use of balloon payments, negative amortization, pre-payment penalties, interest-only payments, and other features that have been demonstrated to exhibit a higher risk of borrower default." (p. 533).

Although the law allows lenders to make non-qualified mortgages, they too have constraints. For example, pre-payment penalties are not allowed on non-qualified mortgages. More importantly, lenders that make qualified mortgages enjoy a safe harbor where they are not subject to certain restrictions – in particular, that they must retain at least five percent of the credit risk on the loans. If a mortgage is qualified the lender is not obliged to retain any of the risk of loss. Furthermore, lenders that make loans that are not qualified or are later found to have violated qualification provisions may find themselves subject to penalties and loss of the ability to pursue deficiency judgments in foreclosure.

The likely effect of these regulations will be to limit the offering of products that are not deemed to be qualified. Those that are offered will have a higher price, reflecting the required risk retention, greater risk of rules violations and greater cost of documenting affordability and compliance. In particular the law may result in a greater proportion of long-term FRMs that enjoy favored status as qualified mortgages.

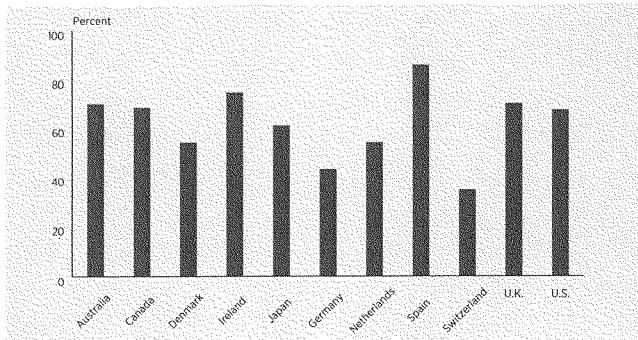
Is it a good idea to place restrictions on loan design? While many borrowers were offered inappropriate or highly risky products during the mortgage market boom, proposals to limit mortgage product offerings, either explicitly or implicitly, run the risk of eliminating valuable features from the mortgage marketplace and stifling mortgage product innovation.² For example, pre-payment penalties can be an efficient mechanism to lower mortgage rates and facilitate interest rate risk management for lenders and investors. Negative amortization can cushion the payment shock potential of adjustable-rate mortgages (ARMs). Lower start rates due to discounts, interest-only periods or graduated payments can reduce affordability constraints for borrowers. Arguably the problem with loan design during the crisis was one of a mismatch between borrowers and particular loan designs – not the existence of the loan features themselves. Furthermore, steering the market further towards FRMs has implications for the finance of mortgages, market structure and stability.

In this study we examine 12 major developed countries with distinctly different mortgage market and product configurations. The countries chosen have relatively large and well developed mortgage markets with a variety of instruments and funding mechanisms. They all have relatively high homeownership rates and mortgage indebtedness. The purpose of the study is to inform U.S. market participants and policy makers about the range of product offerings available in other countries and identify potential features or products that could safely expand market offerings in the United States.

Country Background

With the exception of Germany and Switzerland, the countries in this study have similar rates of homeownership (Figure 1). Australia, Ireland, Spain and the U.K. all have higher rates of homeownership and Canada's rate is comparable to that of the United States. This is noteworthy as these countries provide far less government support for homeownership than the United States does. Most western European countries have lower rates of homeownership, in part due to strong social rental systems. Germany provides incentives for rental investment but not for homeownership. Switzerland has historically had a low homeownership rate, reflecting a high cost of housing and a large foreign-born (often transient) population. Southern European countries like Italy, Greece and Spain have higher rates of homeownership, reflecting cultural values, discriminatory policies towards private rental housing and weaker support of social rental housing.

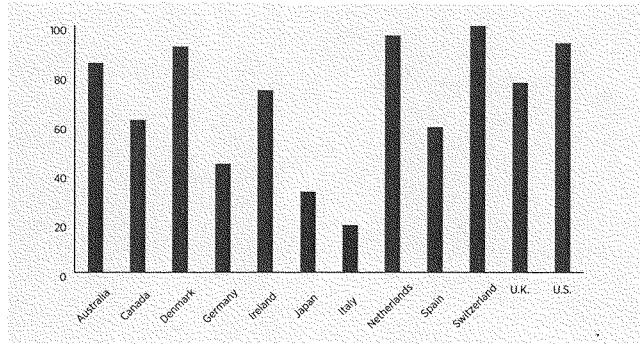
Figure 1
Homeownership Rate



Source: ABS, CHMC, Delft University, EMF, Bureau of the Census.

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Figure 2
Mortgage Debt Outstanding-to-GDP, 2008



Source: Central Banks, World Bank 2008 except, Japan 2006.

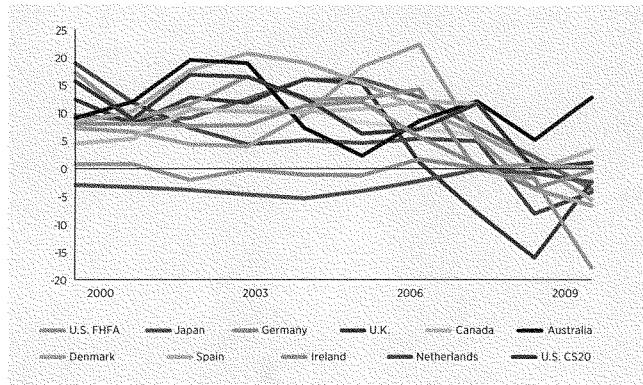
Mortgage indebtedness, as measured by mortgage debt outstanding relative to GDP, is also high in most countries — ranging from 38 percent in Japan to 100 percent in Switzerland (Figure 2). The ratios are low in Germany and Japan, reflecting more than a decade of stagnant house prices and mortgage lending. Many countries, including Australia, Ireland, the Netherlands and Spain had more rapid growth in mortgage indebtedness than the United States during the past decade.

Although the United States had an unprecedented run-up of house prices during the decade, it was not alone, as shown in Figure 3. Many OECD countries had greater house price increases between 2000 and 2006 than did the United States. Australia and the United States were the first of the bubble countries in which house prices fell (the Australian housing market has since recovered). The magnitude of the U.S. house price fall as measured by the S&P Case Shiller 20 Metro Area Index has been greater than that of other countries.

Mortgage interest rates in most countries declined during the decade except in Australia (Figure 4). The Reserve Bank of Australia increased interest rates in 2003, in part to head off a housing price bubble. The rates are specific to the dominant instrument. Australia, Ireland, Spain and the U.K. are predominately short-term variable-rate markets. Their mortgage rates declined more sharply than those in other countries during the crisis.

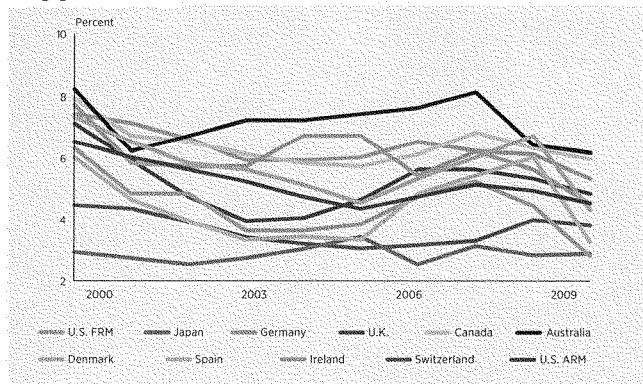
There are significant differences among countries in the presence of government-owned or -sponsored mortgage institutions. Table 1 compares select countries in this dimension. The United States is unusual in its use of all three types of government-supported mortgage institutions

Figure 3
House Price Change



Source: CMHC, EMF, FHFA, S&P.

Figure 4
Mortgage Interest Rates



Source: Central Banks, EMF, MBA.

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or guarantee programs: mortgage insurance, mortgage guarantees and government-sponsored mortgage enterprises. Canada and Japan have government guarantee programs and Canada and the Netherlands have government-backed mortgage insurance programs. Korea has a GSE modeled after those in the United States. The market share of government-backed institutions in Canada, Japan and Korea is significantly less than that of the United States.

Table 1
Government Mortgage Market Support

Country	Government Mortgage Insurer	Government Security Guarantees	Government Sponsored Enterprises
Denmark	No	No	No
Germany	No	No	No
Ireland	No	No	No
Netherlands	NHS	No	No
Spain	No	No	No
U.K.	No	No	No
Australia	No	No	No
Canada	CMHC	CMHC	No
Japan	No	JHF	Possible
Korea	No	No	Korean Housing Finance Corp.
Switzerland	No	No	No
U.S.	FHA	GNMA	Fannie Mae, Freddie Mac, FHLMCs

Mortgage Characteristics

A mortgage is a complex mix of different features.³ There are terms that dictate how the interest rate is determined, how the loan is amortized, its final maturity and the options for and requirements of the lender and borrower.

What are the desirable features in a mortgage instrument? The answer to this question is not straightforward as it depends on whether viewed from the borrower's or the lender /investor's perspective. Features attractive to borrowers may be costly or impossible for lenders to provide. Features attractive to lenders may not be acceptable to borrowers. A borrower is interested in the affordability of the loan, both at inception and over its life. The lender is interested in getting an acceptable risk-adjusted rate of return over the life of the loan. This presents a conundrum — often an attempt to improve the attractiveness of the loan for one party creates a problem for the other. For example, an interest rate cap on an ARM reduces potential payment shock and default risk for borrowers but can reduce yield for lenders.

There is no perfect mortgage — the dominant instrument in any country represents a balance between borrower and lender /investor needs. Regulation may have an important influence if it bans or dictates certain features. History too may play a role — an instrument that has been dominant in a market for a long period of time is familiar to both borrowers and lenders and may be difficult to dislodge.

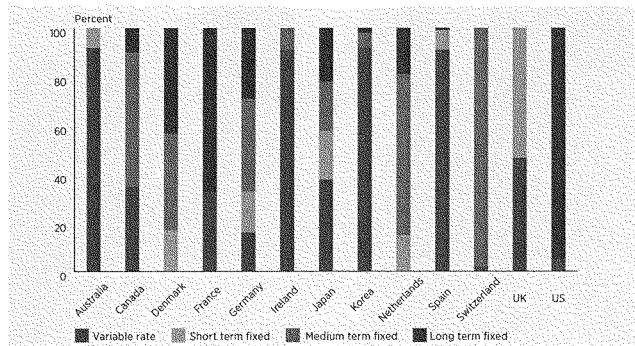
In general there is no one ideal mortgage instrument for a market. A wide variety of mortgage instrument designs have been created to meet the varying needs of borrowers and lenders. A robust mortgage market will have several different instruments that can be tailored to the varying needs of borrowers and lenders with the mix determined by market forces rather than prescriptive regulation.

Interest Rate Determination: Fixed Versus Adjustable Rate

Perhaps the most important parameter in mortgage instrument design is the determination of the periodic interest rate. There is a wide range of possibilities for setting interest rates. Table 2, adapted from a 2006 study by the European Mortgage Federation (EMF), defines the different types.

Type of interest rate	Description	Length of initial period of fixation	Definition
Fixed interest rate	Remains unchanged through the entire duration of the loan		
Initial period fixed rate	Starts with a period during which the interest rate is fixed. After this initial period, the interest rate can either be fixed for another period or vary	The initial fixed rate period is smaller than the loan maturity and can be broken into different maturity categories: <1 year 1-5 years 5-10 years >10 years	Rollover/Renegotiable refers to a series of fixed rate terms Hybrid refers to loans with an initial fixed rate period greater than 1 year that revert to a variable rate after the fixed term
Variable or adjustable rate	In a variable rate contract the interest rate can vary periodically (daily, weekly, monthly, quarterly) or remain fixed up to 1 year, varying thereafter	<1 year	Reviewable -- rate determined by the lender Indexed/Referenced -- rate adjustment determined by index value
Convertible	Loan can have initial fixed or variable rate with the borrower having an option to change either at a particular date or at the borrower's option	Can be variable, initial fixed rate	Convertible

Figure 5
Mortgage Product Interest Variability



Source: RBA, CHMC, KHFC, EMF, GPG, MBA and S&P.

Figure 5 shows market shares by interest rate variability for the subject countries as of 2009. The data reported in Figure 5 refer to new loans made during different parts of 2009.

There is considerable difference in interest determination across countries. Australia, Ireland, Korea, Spain and the United Kingdom (U.K.) are dominated by variable-rate mortgages often with a short-term initial fixed rate. Designs vary – in Australia, Ireland and the U.K. the standard variable-rate mortgage has a rate set by the lender at its discretion (a reviewable-rate loan).⁴ Rates on these loans are changed for all borrowers at the same time. Canada, Spain, Korea and the United States have indexed ARMs with rate changes determined by changes in the underlying index.⁵ Recently, “tracker” mortgages, which are indexed ARMs, have become common in the U.K. Initial fixed-rate discounts are prevalent in Australia and the U.K. The magnitudes of the discounts are less than those in U.S. ARMs during the boom – typically around 100 basis points, lasting one to two years.

Short- to medium-term fixed-rate mortgages are the dominant instrument in a number of countries, including Canada, Denmark (recently), Germany, the Netherlands and Switzerland. These instruments are rollover or renegotiable rate loans in which the rate is fixed typically for a period of one to five years with a longer amortization period (25 to 35 years – briefly up to 40 years in Canada).⁶ The rate is reset to the market rate at rollover. There is a substantial (as high as yield maintenance) pre-payment penalty during the fixed-rate period (discussed below).

The United States is unusual in the high proportion of long-term fixed-rate mortgages. Long-term fixed-rate pre-payable mortgages used to be the dominant product in Denmark, but low and falling short-

term rates have led Danish borrowers to shift to medium-term (one- to five-year) rollover mortgages in recent years.⁷ France is the only other country with a majority of fixed-rate mortgages. Unlike the penalty-free pre-payable Danish and U.S. FRMs, French fixed-rate loans have pre-payment penalties (maximum three percent of outstanding balance or three months' interest). German mortgages can be fixed up to 15 years with a 30-year amortization. The loans are subject to a yield maintenance pre-payment penalty during the time the rate is fixed, up to 10 years.

**Box 1
Foreign Currency Loans**

Loans denominated in a foreign currency have been quite popular in the transition countries of Central and Eastern Europe as well as Austria. The loans either require payments in the foreign currency or index amounts in domestic currency to the exchange rate. The most common indices have been the Euro and the Swiss franc. Use of these instruments typically arises as the result of domestic inflation. The appeal of the loans is a lower initial rate that spreads the payment burden more evenly over the life of the loan. Such loans carry significant default risk, however, as the income of most borrowers is not in the same currency as the mortgage. Regulatory response has ranged from information campaigns (Latvia), to LTV restrictions (Hungary), debt service stress tests (Poland) and outright product bans (Austria, Ukraine) [Dübel and Walley, 2010].

The dominant mortgage product in a country can change over time. During 2004–2006 between 30 and 35 percent of U.S. mortgages were hybrid ARMs with short- to medium-term initial fixed rates reverting to variable rates after the end of the fixed-rate period. These loans were designed to improve affordability compared to the FRM. The shift back to FRMs reflects their historically low rates (brought about in part by Federal Reserve purchases of mortgage-backed securities), the poor experience of subprime ARMs and possibly fears of future rate increases. In 2005, 50 percent of Danish mortgages were FRMs and another 20 percent were medium-term fixed-rate loans. The market shifted towards variable-rate and short-term fixed-rate loans as interest rates declined, with 80 percent of Danish borrowers taking such loans in 2009 [Realkreditrådet 2010]. Spanish mortgages shifted from fixed to variable after the government restricted the ability of lenders to charge pre-payment penalties in the mid-1990s. A declining interest rate environment after Spain moved to the Euro also contributed to the shift.

Indexed adjustable-rate loans in many countries have caps and floors (Appendix, Table A-1). The specific cap amounts are fixed by contract. In most cases loans will have both a cap and a floor. In Germany, borrowers can purchase interest rate risk insurance that will cap the loan rate at adjustment. Alternatively the borrower can execute a forward mortgage rate contract to lock in their rate up to three years prior to adjustment. In Switzerland lenders sell interest rate caps as separate contracts.

Small (one percentage point or less) initial rate discounts are common on ARMs, taking the form of initial fixed rates that are less than the fully indexed rate or standard variable rates (SVR) on

reviewable-rate ARMs. For reviewable-rate loans the rate may be fixed for a set period (one-three years) or variable when the SVR is changed.

Adjustable-rate mortgages in other countries have a number of interesting features. About half of Japanese loans are convertible (after the end of the fixed-rate term the borrower can select another fixed-rate period or switch to a variable rate) [Standard and Poors 2009]. Japanese floating-rate loans have fixed payments for five years with potential deferral and negative amortization. Conversion options (variable to fixed) are available in a number of countries. Several countries, including Australia, Canada, the Netherlands and Spain allow loans that are part fixed rate (short- to medium-term) and part variable rate. Borrowers can also manage interest rate risk by taking out multiple loans with varying short- to medium-term fixed rates (Canada, Germany and Switzerland) or fixed- and variable-rate loans (Australia, U.K.) secured by the same property. Canada, France and Japan offer flexible-term loans in which the payment remains constant but the term adjusts with interest rate changes. Flexible-term loans are subject to maximum term constraints (e.g., 35 years in Canada).

In summary, outside of the United States, Denmark, France and Germany, loans that allow frequent rate adjustments (ARMs or rollovers) are the standard product.

Pre-payment Penalties and Early Repayment

Other than Denmark, Japan and the United States, fixed-rate mortgages are typically subject to a pre-payment penalty.⁸ Table 3 shows the treatment of early repayment in different countries. In a number of countries early repayment is restricted to certain conditions (e.g., in Germany if the borrower is moving or the lender refuses a request to increase the mortgage). In Australia, Canada, Denmark, Germany, the Netherlands and Switzerland the penalties are designed to compensate the lender for lost interest over the remaining term of the fixed rate (yield maintenance). The specific

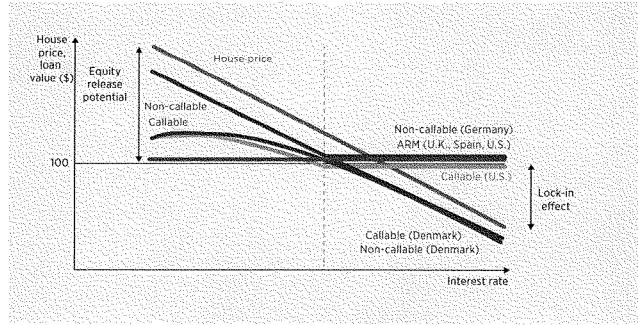
Table 3
Prepayment Penalties

Country	Amount	Applicability	Penalty Free Payment
Denmark	Yield maintenance	ST fixed: loans with non-callable bonds	
Germany	Interest margin damage and reinvestment loss	All fixed rate; no penalty on variable rate, maximum 10 year	No penalty if property sold
Spain	2.5% up to yield maintenance	Fixed rate	Maximum 10% per year
	0.5%	Variable rate	
France	Maximum 6 months interest or 3% of outstanding balance	Variable or fixed rate	No fee if unemployed, death, or job change
Netherlands	Yield maintenance	Fixed rate	10% per year, hardship or relocation with no penalty
U.K.	2-5% of amount repaid	Discounts and fixed rates in contract roughly 3 monthly payments	
Canada	Higher of lost interest or 3 months change in cost of funds	Lender may waive for own customer	up to 20% per year
Australia	Change in cost of funds	Discounts and fixed rates in contract	
U.S.	Up to 5%; more typically 3%	ARMs only. Typically declining over 5 years	20%
Korea	Declining over 3 years: 1.5%, 1%, 0.5%	ARMs	
Switzerland	Yield maintenance	Fixed rate	
Japan	None	Borrowers make semi-annual bonus payments	

penalty calculations differ and are typically set by contract as opposed to regulation. Lenders may also charge borrowers for the cost of processing the repayment (Denmark, Germany). Pre-payment penalties are capped by law in France and Spain (although the Spanish law was recently changed to allow lenders to charge yield maintenance penalties on fixed-rate mortgages). In some countries borrowers must give advance notice of early repayment (two months in Denmark, six months in Germany). Partial pre-payment is quite common in Japan, in part reflecting the practice of paying employees semi-annual bonuses.

Denmark has a unique system with respect to early repayment. The Danish system is based on the Principle of Balance (POB) [Realkreditrådet 2009]. When the borrower obtains a mortgage loan, the mortgage credit institution (MCI) issues a bond into an existing bond series. Thus there is a 1:1 equivalence between the loan and the bond.⁹ The Danish mortgage is cancelable at the lower of the market price or par. As in the U.S., the borrower can refinance the loan at par if rates fall. But in the Danish system, if rates rise the borrower can buy her loan out of the mortgage bond at a discount and present to the MCI to repay the mortgage. This feature has several important benefits. For example, it allows automatic de-leveraging as rates rise and reduces the probability of negative equity. Figure 6 from Boyce (2010) illustrates the difference between different mortgages as rates change. A non-callable mortgage (i.e., one with a pre-payment lock out or yield maintenance penalty) or a short-term ARM locks the borrower into the par (book) value of the loan when rates rise. This can create negative equity if house prices fall with a rate increase. In the Danish system the borrower buys back the bond at a discount and cancels the mortgage, allowing the mortgage balance to fall along with house prices. This applies to both callable and non-callable mortgages.

Figure 6
Price/Yield Graph of Various Mortgage Risk Transfer Structures



Source: Boyce 2010.

Danish lenders also offer mortgages with pre-payment penalties. Loans with fixed-interest periods of one and five years are funded by bullet bonds with corresponding maturity.¹⁰ The loans may have terms up to 30 years and initial interest-only periods of up to 10 or 30 years. In the event of an early repayment the lender would charge a yield-maintenance penalty plus processing cost.

Although the United States does not allow pre-payment penalties on most FRMs, it has been pointed out that points paid by the borrower can have an effect similar to a pre-payment penalty [Colwell and Dehring 1997]. Pre-payment penalties on FRMs are not allowed in a number of states. However, even in states that allow them, Fannie Mae and Freddie Mac have historically not enforced such penalties. Points are unique to the United States, arising in the 1970s in response to interest rate regulation. As mortgages in other countries are typically not subject to usury caps and lenders can charge early repayment penalties, there has been no apparent need to charge points.¹¹ Kiff [2009] points out that the transactions cost of mortgage refinance is more expensive in the United States than in Canada, which substantially offsets the cost of the pre-payment penalty.¹²

Amortization and Term

Mortgages in most countries are annuity loans with a level payment. Terms typically range between 20 and 40 years. The European Central Bank (ECB) reports that in 2007 the typical maturity in the Euro area was between 20 and 30 years. Longer maturity products exist in several countries — up to 50 years in Spain and France and up to 60 years in Finland, although these loans have a very low market share. The maximum maturity granted is often linked to the retirement age. At an extreme, Japan and Switzerland have 100-year (inter-generational) mortgages. Scanlon et. al. [2009] note that the maximum maturity was shortened in several countries, including France and Spain, during the crisis.

Interest-only loans are common in a number of countries. Scanlon et. al. [2008] reported that interest-only mortgages were available in at least 10 European countries as well as Australia and Korea. Table 4 provides data on the incidence of interest-only mortgages in a number of countries in 2005 and 2009.¹³

There are several factors in the rising importance of this feature. First are tax benefits. Mortgage interest is fully tax deductible in Denmark, Korea, the Netherlands and Switzerland.¹⁴ Even in countries like the Australia and the U.K. where there is no deductibility of mortgage interest, there can be a tax angle associated with interest-only loans. If mortgage repayment comes from a tax-advantaged insurance or savings account it may be preferable to de-link the mortgage and repayment vehicle. For example,

Table 4
Interest-Only Mortgages

Country	2005–2006	2009–2010
Australia	15%	27%
Denmark	32%	50%
Ireland	15%	10%
Korea	48%	43%
The Netherlands	88%	79%
U.K.	24%	43%

interest on a companion investment or savings account can accumulate free of tax during the term of the mortgage.

A second reason for interest-only mortgages is low interest rates. The repayment of principal accounts for a higher percentage of the monthly payment when interest rates are low. Thus, borrower ability to reduce mortgage payments through interest-only loans is greatest with low interest rates.

Interest-only loans vary across countries.¹⁵ In Denmark, the Netherlands and the U.K., the loan can be interest only to maturity (maximum 30 years).¹⁶ Switzerland has a unique instrument – the “infinite” mortgage, which does not have a maturity date and can be passed down through generations. Typically, the maximum LTV on an interest-only loan is 65 percent. This loan can be combined with an amortizing second loan of an additional 15 percent.

There are a number of different repayment options with interest-only loans. According to Scanlon et. al. [2008] in 2005, 20 percent of U.K. loans and 44 percent of Dutch interest-only loans had no identified repayment vehicle. In these cases it is assumed that the borrower will refinance or pay off the mortgage through sale of the house, business or through an inheritance. More commonly there is a companion repayment vehicle. The dominant instrument in the U.K. through the mid-1990s was the “endowment” mortgage. The borrower took out an interest-only mortgage to term and repaid with the proceeds of a life insurance policy on which she paid premiums throughout the life of the loan. Until 1984, endowment mortgages enjoyed a tax advantage through interest deductibility on the life insurance premiums.¹⁷ In addition, mortgage interest was tax deductible until the late 1990s. Endowment mortgages remained popular until hit by scandals and charges of mis-selling in the late 1990s. Many borrowers were lured into endowment mortgages by promises of high returns on invested premiums. When those high returns failed to materialize, borrowers reached the end of term with insufficient funds to repay the mortgage.

Despite the problems with U.K. endowment mortgages, interest-only loans with companion savings vehicles remain popular in the U.K., the Netherlands and Switzerland. In the U.K., the individual savings account (ISA) mortgage is linked with an account invested tax-free in equities. However, like the endowment mortgage, there is no guaranteee that there will be sufficient funds to fully repay the mortgage at term. Investment and pension-linked mortgages are significant in the Netherlands. According to the Netherlands Housing Survey (VROM 2009) approximately 35 percent of Dutch interest-only mortgages were linked to a savings or investment account.

“Flexible” mortgages that allow non-constant amortization are quite common outside the United States. Flexible mortgages allow borrowers to skip payments or take payment holidays. The flexible mortgage arose in Australia and the U.K. in the 1990s as a measure to deal with payment fluctuations arising from short-term unemployment or variable income. In both countries it has become a common feature whereby borrowers can underpay, take payment holidays, overpay and borrow back without taking a second mortgage. The number of missed payments per year is restricted and unpaid interest is capitalized

into the loan balance.¹⁸ A survey of major lenders in the subject countries found flexible mortgage options available in Canada, France, Germany, the Netherlands and Spain, as well as Australia and the U.K. According to the Council of Mortgage Lenders in the U.K. most mortgages there have a flexible option.

A more recent and sophisticated variant of the flexible mortgage is the “offset” or “current account” mortgage (Australia, U.K.), which allows the borrower to control mortgage borrowing through a current account. Salary is deposited into the current account, lowering the balance outstanding by the salary amount. As debits come through on the current account, the balance rises. An attraction of this instrument is the interest savings that arise from paying down the debt, as interest is charged daily. An offset mortgage allows the borrower to keep balances on mortgage, savings and current account in separate accounts but all balances are offset against each other, allowing the possibility of reducing the interest paid and the mortgage being repaid early. Offset mortgage rates can be fixed or variable and there is a maximum LTV.

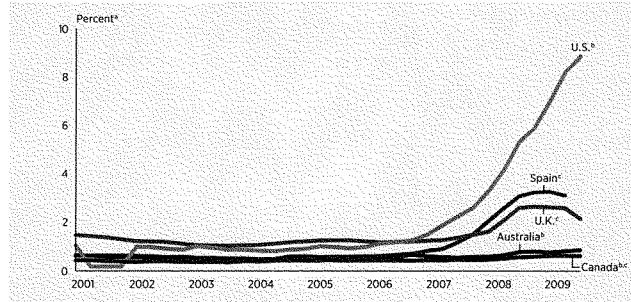
Loans with pre-programmed negative amortization (e.g., graduated payment mortgages or pay-option ARMs) are not common outside the United States. However, flexible mortgages have a maximum number of missed payments and LTV caps. Japanese loans have payments fixed for five years regardless of whether the interest rate changes. Unpaid interest is deferred and capitalized into the loan balance. At the end of five years the payment will change to amortize the balance over the remaining term, subject to a cap of 125 percent of the current payment.

Mortgage Default and Foreclosure

Mortgage default rates are far lower outside the United States (Figure 7). Of the countries in this survey only Spain and the U.K. have seen a significant increase in mortgage default during the crisis. Despite greater house price volatility than the United States on average, the incidence of default and prevalence of negative equity in other nations remains far below that of the United States.

Delinquencies on European securitized loans have increased during the crisis but remain well below those in the United States (Figure 8). Default rates on Australian securitized loans are less than 1.5 percent and in Canada less than 1 percent. These results reflect the fact that subprime lending was rare or non-existent outside of the United States. The only country with a significant subprime share was the U.K. (a peak of eight percent of mortgages in 2006). Subprime accounted for five percent of mortgages

Figure 7
Non-performing Housing Loans

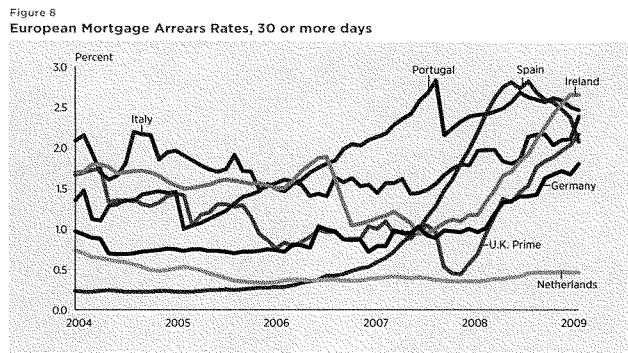


^a Percent of loans by value. Includes "impaired" loans unless otherwise stated. For Australia, only includes loans 90+ days in arrears prior to September 2003. ^b Banks only. ^c Per cent of loans by number that are 90+ days in arrears.

Sources: APRA, Bank of Spain; Canadian Bankers' Association; Council of Mortgage Lenders; FDIC, RBA

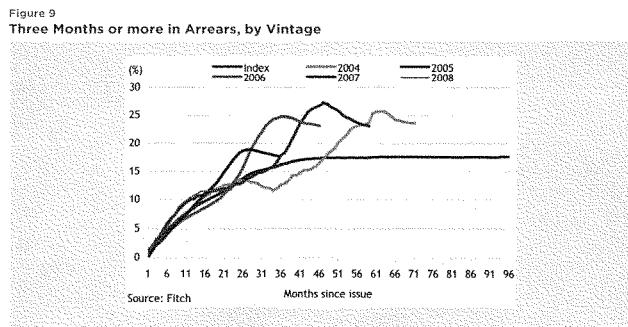
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in Canada, less than two percent in Australia and negligible proportions elsewhere. Subprime loans in Australia and Canada were more similar to U.S. Alt-A (limited documentation) than true subprime loans.

The only comparable performance experience to the United States is in U.K. non-conforming mortgages. U.K. lenders provided loans to borrowers with both adverse credit and low documentation. U.K. non-conforming securitized loans have high delinquency rates (Figure 9) but their foreclosure rate is far less than in the U.S.¹⁹



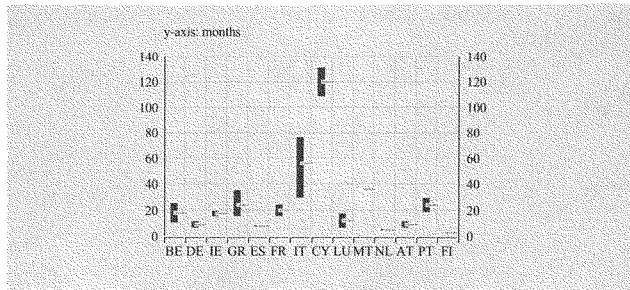
Source: Fitch Ratings 2010.

In the United States, mortgage product design has been linked to high rates of mortgage default, though underwriting variables appear to be the dominant factor.²⁰ To date, mortgage product design has not been implicated as a cause of mortgage default outside the United States.²¹ In fact the use of ARMs has been cited as a cause in lower than expected default rates in Spain and the U.K. In the U.K., borrowers have been helped by the high incidence of ARMs linked to the U.K. base rate (equivalent to the Fed Funds rate in the United States), which have kept rates low [CML 2009b]. In Spain, the decline in rates and dominance of variable-rate loans has reduced the proportion of income used to service a loan from 46 percent in 2006–2008 to 38.6 percent in 2009 [Hugh 2009]. Both sources note the vulnerability of borrowers to potential future rate increases and the systemic risk of an ARM-dominated market. Australian interest rates have been higher than those in other countries and have impacted default rates [RBA 2009]. The Reserve Bank of Australia notes: “Arrears rates are also likely to have been affected by movements in interest rates. The arrears rate on (securitised) variable-rate loans increased 35 basis points over the 12 months to December 2008, and has since declined by 20 basis points; this compares to an increase of 10 basis points for fixed-rate loan arrears over the same period, with no subsequent decline.”

An important factor in lower default rates in other countries is the foreclosure process and the possibility of deficiency judgments. The ECB [2009] reports that the duration of the foreclosure process in the Euro area has significant variation ranging between two months in Finland to 132 months in Italy (Figure 10). The average time frame is close to two years. In the U.K. the average time is 8–12 months [EMF 2008]. The cost of the enforcement procedure also varies across countries. The average cost (not including the loss on the mortgage after sale of the property) in 2007 was nine percent. In the U.K. the cost varied from 2.5 to 7 percent.

The mortgage arrears and foreclosure methods in Australia and Canada are very efficient. Both countries

Figure 10
Typical Duration of a Foreclosure Procedure



Source: ECB

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have judicial foreclosure processes, which are procedural unless the borrower mounts a defense. In both countries the lender or insurer can go after the borrower for a deficiency judgment. Per Canada Mortgage and Housing Corp. (CMHC), the time frame between reporting of arrears (three months in Canada) to possession of collateral is seven to nine months. In Australia, the process appears shorter (Hicks 2010). Once a notice of default is filed there are 21 days to serve and 28 days for the borrower to determine whether to mount a defense. If there is no defense, the court process for judgment takes two to four weeks with an additional two to four weeks to obtain a writ of possession. Eviction takes place seven to 30 days later. The typical loss per default in Australia is 20 to 25 percent of the initial loan balance. In Canada, CMHC claims appear to be somewhat lower – 18 to 20 percent of initial balance.²²

An important difference between much of the United States and the subject countries is the possibility of recourse, or allowing lenders to pursue deficiency judgments. Research in the United States has shown that recourse decreases the probability of default [Ghent and Kudylak 2009]. Research by Duygan-Bump and Grant [2008] find a similar result in Europe. *Mortgage loans in all the survey countries are recourse*. The EMF study on the efficiency of mortgage collateral [EMF 2007] found that borrowers remain liable for deficiencies in Belgium, Germany, Greece, the Netherlands, Spain, France, Ireland, Portugal and the U.K. The duration of debtor liability was without limit in Belgium, Germany, France and the Netherlands; 20 years in Greece; 15 years in Spain; and 12 years by law, six years in practice following voluntary industry agreement in the U.K. Loans are recourse in Australia, Canada, Japan and Korea as well.

The Reserve Bank of Australia [2009] sums up the difference in delinquency experience between Australia and the United States as follows:

- Lending standards were not eased to the same extent as elsewhere. For example, riskier types of mortgages, such as non-conforming and negative amortisation loans, that became common in the United States, were not features of Australian banks' lending.
- The level of interest rates in Australia did not reach the very low levels that had made it temporarily possible for many borrowers with limited repayment ability to obtain loans, as in some other countries.
- All Australian mortgages are "full recourse" following a court repossession action, and households generally understand that they cannot just hand the keys to the lender to extinguish the debt.
- The legal environment in Australia places a stronger obligation on lenders to make responsible lending decisions than is the case in the United States.
- The Australian Prudential Regulation Authority (APRA) has been relatively proactive in its approach to prudential supervision, conducting several stress tests of ADIs' housing loan portfolios and strengthening the capital requirements for higher-risk housing loans.

What Determines Mortgage Instrument Design?

The set of mortgage instruments offered in a country reflect demand and supply considerations as well as the legal and regulatory environment. Borrower mortgage choice literature is based on a framework wherein a risk-adverse borrower decides which type of debt to hold against the collateral of her house based on the trade-off she makes between current and future consumption, given uncertainty about future income, interest rates and house prices [Campbell and Cocco, 2002; Miles 2004]. Miles develops a simple numerical model to simulate borrower choice under different assumptions about the trend and volatility of interest rates and house prices. He finds that borrowers will prefer long-term fixed-rate mortgages when there is a significant positive correlation between inflation shocks and real interest rates and the borrower has a relatively high debt-to-income ratio. When the income risks are less extreme and inflation and real interest rates are not positively correlated, mortgages with a series of short fixed-rate periods are more favorable contracts. He also finds that households that are older, more indebted or with higher degree of unemployment certainty are more likely to prefer longer-term fixed-rate mortgages. Although his results apply only to the comparison between mortgages with rates fixed for two years versus those with rates fixed for the life of the contract, he infers that similar results would be obtained if comparing a variable-rate loan with a long-term fixed-rate loan.

Svenstrup [2002] analyzes the choice between capped ARMs (short-term fixed-rate loans) and the FRM in Denmark. ARMs are popular because of their low start rate, but he suggests that it is dangerous to qualify borrowers for a 30-year obligation based on the first-year payment, as is standard in short-term variable-rate mortgages. Conversely a long-term FRM has a substantial inflation risk premium built into the rate, reducing initial affordability. Furthermore, the FRM requires payment of transactions costs and a pre-payment risk premium by the borrower to manage interest rate risk. With the shorter term (one- to five-year) fixed rate and an out-of-the-money interest rate cap, the borrower can get interest rate risk protection at a modest cost. Svenstrup also finds that the delivery option (ability to buy back the bonds at a discount and cancel the mortgage) in the Danish model is an efficient means to ensure a tighter match between assets and liabilities in a household portfolio and can increase the mobility of the labor force as a whole.

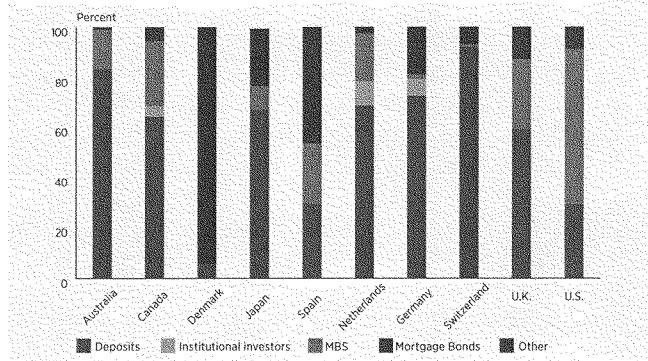
If the theoretical literature suggests that borrowers are better off with fixed-rate mortgages why do we see so many countries with ARMs as the dominant instrument and so few with long-term fixed-rate mortgages?

Miles points to several reasons for the dominance of ARMs in the U.K. These include relatively low debt-to-income ratios (at the time in 2003) for U.K. borrowers, belief by borrowers in their ability to manage interest rate and payment change and, most importantly, the greater attention borrowers pay to the initial mortgage payment than to any other factor in mortgage choice. The U.K. also was in the midst of an extended period of interest rate stability (since the early 1990s).

The dominance of ARMs in many countries has supply-side explanations as well. Banks (commercial, savings, cooperative) in most countries dominate mortgage lending. These institutions rely significantly on deposit funding (Figure 11). ARMs are a natural product for banks that hold loans on balance sheet funded with deposits, as they minimize interest rate risk. Of the ARM countries in this survey, only Spain relies on the capital markets for a majority of funding (over 70 percent of funding comes from covered bonds and securitization). The high use of the capital markets reflects the rapid growth in mortgage lending in Spain in the 2000 decade and the acceptance of AAA-rated security tranches and covered bonds as repo collateral at the ECB.

Funding availability and characteristics are also major factors in the dominance of short- to medium-term fixed-rate mortgages in many countries. In developed markets, such instruments are easy for banks to fund on balance sheet. The bank can swap its short-term deposits for medium maturity fixed-

Figure 11
Developed Country Mortgage Funding



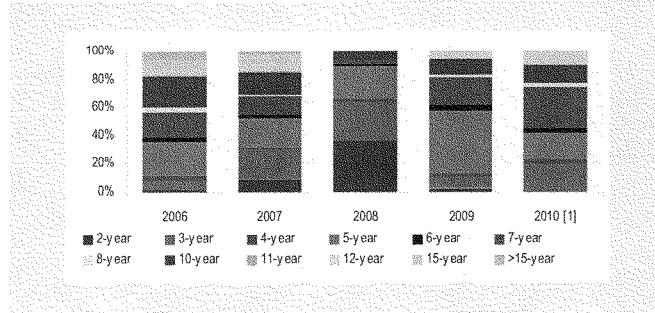
Source: ABS, CMHC, EMF, ESF, FRB, Merrill Lynch Europe, AU, CA, U.S. 2008, Japan 2006.

rate liabilities. Or it can use corporate or covered bond markets to issue medium-term fixed-rate debt. Figure 12 shows maturities of covered bond debt with a significant proportion of issuance in three- to five-year maturities. In early 2010, issuers took advantage of low rates to extend maturities. This funding approach has implications for mortgage design as well. Outside the United States almost all corporate debt is non-callable. Thus, a lender using covered bond or non-callable corporate debt will incorporate a pre-payment penalty in order to maintain a relative match with its funding. The importance of pre-payment penalties has increased with the strengthening of asset-liability matching requirements in European covered bond legislation. Nearly all such legislation requires strict matching with requirements to match balances, coupons and cash flows between the cover pool and bonds.²³ In addition to matching requirements, covered bond legislation also restricts LTV ratios and loan purpose for cover pool assets.

Mortgage pricing has a major impact on the dominant instruments offered in various countries. Miles points to the relative expense of long-term finance as a significant factor in the U.K. preference for ARMs. He notes that the practice of offering initial period discounts on variable-rate mortgages offered to new borrowers, subsidized by the (above market) rates paid by existing borrowers (the back book) for whom the discounts had expired, also contributes to the dominance of ARMs. Specifically:

The two-year discounted deals are likely to be very attractive to borrowers focusing on the scale of their initial repayments on mortgages. The two-year discounted deals are probably only feasible because a substantial gap exists between such rates and the Standard Variable Rate – a gap of over 180 basis points for many lenders. The substantial number of borrowers paying Standard Variable Rates – a group that may currently constitute more than a third of all borrowers and a little over 20 per cent of all mortgage loans outstanding – allows pricing

Figure 12
Taking the Opportunity to Move Up Along the Curve



Source: Sabine Winkler Covered Bond Analyst and Alexander Batchvarov CFA International Strategy Financial Strategist Bank of America Merrill Lynch.

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of this sort to be feasible... This apparent cross-subsidisation, which in itself is undesirable, has as a side effect that longer-term fixed-rate mortgages with flat repayment schedules — where sustainable margins over the marginal cost of funds are unlikely to be under 50 basis — appear expensive. Miles (p. 47.)

Despite Miles' view of the unsustainability of such pricing, it remains a major factor in U.K. mortgage pricing to this day. The prevalence of initial period discounts on reviewable-rate mortgages in Australia also likely explains the dominance of this instrument there.

The pricing and availability of capital market funding is a significant factor in the dominance of FRMs in Denmark and the U.S. The deep and liquid Danish mortgage bond market provides efficient pricing and risk allocation for Danish lenders, allowing them to offer FRMs. The Danish P0B has created a system where banks do not offer mortgages funded by deposits for competitive reasons. In the P0B the mortgage rate is the same as the security coupon. The mortgage lender adds a small margin (50 basis points) to cover its administrative costs, credit risk and profit. Thus, even for short-term fixed-rate or indexed variable-rate mortgages the bond-funded loan is cheaper than that offered by a commercial bank with deposit funding.

Recent research in the United States points to the support of FRMs by the GSEs as a significant factor in the predominance of the FRM.²⁴ Vickery [2007] analyzes the FRM / ARM market share as a function of the relative price of the instruments, controlling for the term structure of interest rates and other time-series factors. He finds that a 20 basis-point increase in the retail FRM interest rate is estimated to cause a 17 percentage-point decline in the FRM market share. He compares the U.K. and U.S. markets in terms of mortgage product. His estimates imply that if U.S. mortgages were priced by lenders at the same margins to the risk-free rate as in the U.K., the average U.S. FRM share in the non-jumbo market would decline from 76 percent to only 37 percent. In his view, differences in secondary market liquidity are the most plausible explanation for these pricing differences. Although the GSEs purchase ARMs and have issued ARM securities, their pricing has not been attractive to depository institutions and the securities are not as liquid.

Krainer [2010] finds more recently that the Federal Reserve policy of buying agency MBS has lowered FRM rates and the FRM-ARM spread and contributed to the declining share of ARMs. Krainer's research finds that the FRM-ARM spread is the most important explanatory variable in an estimation of the ARM share. This spread is typically highly related to the Treasury term spread (10 year to one year).²⁵ This latter relationship broke down in 2009 due to heavy Federal Reserve purchasing of FRM-backed securities. The FRM-ARM spread declined to near zero in early 2009 and has remained depressed (50 basis points or less) ever since. The decline in spread reflects a widening ARM to one-year Treasury spread and a narrowing FRM to 10-year Treasury spread.

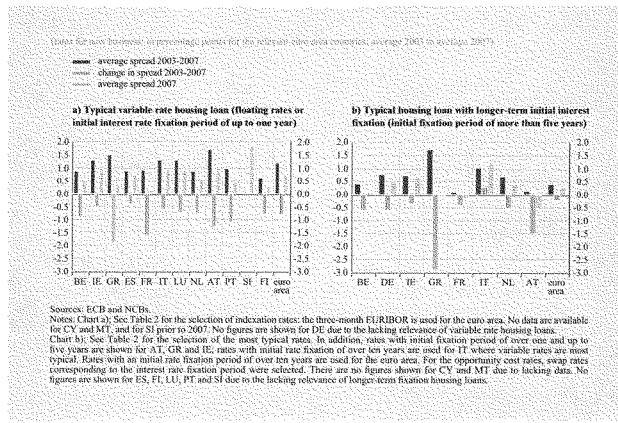
Pre-crisis mortgage spreads in Europe appear lower than those in the United States Figure 13 shows spreads on variable and fixed-rate mortgages relative to an index or benchmark rate. Spreads declined

in most countries between 2003 and 2007. Fixed-rate spreads are lower in Europe than in the United States due to the widespread use of pre-payment penalties. Thus the value of the pre-payment option is not reflected in mortgage rates.

As shown in Table A-1, U.S. ARM margins are higher than those in most other countries. European indexed ARM margins are typically in the one-two percentage point range. U.S. ARM margins have been constant at 275 basis points since 1990 [Freddie Mac 2010].²⁸ Spreads between reviewable ARMs and lender cost of funds in Australia and the U.K. were in the 100–150 basis point range pre-crisis. Recently U.K. tracker margins have risen to 300 basis points reflecting the historically low level of the base rate (50 basis points).

The U.K. Council of Mortgage Lenders [2009] analyzed margins in the summer of 2009. They note several reasons for the widening of margins. For example, lenders are under greater pressure from the Financial Services Authority (FSA) to have a better match between the duration of their sources of funding and their mortgage assets. As more borrowers have taken short-term fixed-rate loans, lenders have had to respond to the regulatory requirement by raising more medium-term funding — at greater expense (relative to deposits).

Figure 13
Spread of the Lending Rate for a Typical Housing Loan
over the Opportunity Cost or Interest Indexation Rate

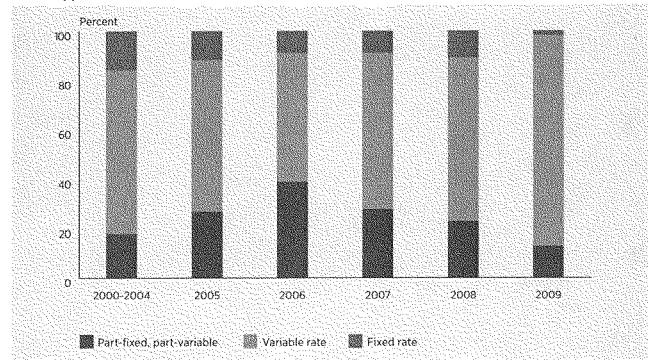


Source: ECB and NCBs.

Rising rates of arrears have added to the costs of mortgage lending, putting pressure on margins. The implementation of the Basel 2 regime also has meant that the cost of capital is greater for loans with higher LTVs. Thus there has been both a tightening of lending criteria and higher borrowing costs. Investors providing equity for lenders now expect higher returns, which is exerting upward pressure on mortgage pricing.

A similar pricing change has developed in Australia [2010]. The Reserve Bank of Australia reports that mortgage rates have risen by 110 basis points relative to the cash rate. However margins in Australia have been squeezed as funding costs have risen by 130 to 140 basis points. Part of the margin squeeze has been funded by cross-subsidization from the bank book, similar to that in the U.K. Australian mortgage rates were declining through most of 2009 and borrowers shifted from short-term fixed to variable-rate loans [Figure 14, Genworth 2009]. Fixed-rate loans declined from 28 percent to 13 percent and mixed (part fixed, part variable) loans declined from 10 percent to one percent.

Figure 14
What Type of Interest Rate Did You Choose Originally?



Source: Genworth 2009, Retail Finance Intelligence (RFI).

The Role of Regulation

Both consumer protection and financial safety and soundness regulation can have an impact on mortgage design. The virtual absence of pre-payment penalties on FRMs in the United States is an example of such an impact. The borrower preference for FRMs in the United States also has its origins in the preclusion of ARMs for most lenders prior to 1981.

The treatment of pre-payment penalties has been a contentious issue and a major influence on European mortgage design. The European Commission (EC) has been pushing for a market-wide Mortgage Directive for more than 15 years to harmonize mortgage product offerings and encourage more cross-border lending [Dübel et. al 1997]. One of the Commission's key objectives is to establish a right of early repayment for borrowers, with limits on pre-payment penalties.²⁷ To date such limits have been passed in several countries, notably France, Italy and Spain.²⁸ French law caps the pre-payment penalty at [the greater of] six months' interest or 3 percent of the outstanding balance. The penalty cap does not appear to have deterred French lenders from offering long-term FRMs.²⁹ Legislation in Spain has had a more significant effect on product offerings. Prior to Spain's adoption of the Euro, lenders offered long-term fixed-rate loans with refinance penalties and restrictions. In order to allow borrowers to benefit from falling interest rates prior to and after introduction of the Euro, the government allowed borrowers the right to refinance existing mortgages and capped the pre-payment penalties [specific reference]. More recently there has been concern about the high proportion of Spanish mortgages that are variable rate (in terms of the ability of borrowers to manage interest rate risk). The government has raised the cap on fixed-rate pre-payment penalties – first to 2.5 percent and now to yield maintenance – in an effort to stimulate the offering of such loans. Italy (as of 2007) and Latvia are the only countries in Europe that ban pre-payment penalties on mortgages.

A European Commission Staff White Paper [2007] has suggested the need to restrict certain product offerings. They recommended allowing early repayment in certain circumstances (mobility, hardship) and capping the penalty. Commission staff also recommended standardization of borrower qualification, requiring suitability standards or tests of borrower ability to repay.

European legislation and regulation also impacts adjustable-rate mortgage design. Several countries (Denmark, France, Spain, Switzerland) require ARMs to be indexed. Other countries (particularly those with reviewable-rate mortgages) have no such requirements.

European consumer protection legislation has been blamed for a lack of product competition in the EU [Dübel 2008]. For example, France rejects the German yield maintenance pre-payment indemnity protecting fixed-rate lenders against reinvestment loss upon pre-payment, Spain rejects British practices of reviewable-rate mortgages (standard variable rate) and Germany rejects indexed contracts dominant in the Spanish market. Dübel states:

- National legal-regulatory regimes tend to be biased “in favour” of lenders providing national core products, which draw the greatest lobbyist pressure. Consider again the cases of Spain and Germany when dealing with early repayment, which is a focus of the Commission’s White Paper.
- In Spain, adjustable-rate mortgages may fetch a 1 percent early repayment fee to stem the loss of servicing profit. Fees on adjustable-rate loans are strictly prohibited by German law, a legal relic of two periods of hyperinflation in the 20th century.
- In striking contrast, under German law, a consumer willing to prepay a fixed-rate mortgage has to pay a yield maintenance indemnity that not only compensates the lender for reinvestment loss but also includes a considerable element of lost servicing profit. In Spain, until a very recent reform, pre-payment fees for fixed-rate loans were capped at 2.5 percent, which did not even cover reinvestment loss.

As a result of the crisis, lenders are tightening guidelines in many countries.³⁰ Scanlon et. al. conducted a survey in early 2009 to assess the types of mortgage tightening taking place. As shown in Table 5, mortgage product availability was lessened in a number of the countries surveyed. The maximum mortgage term was reduced in four countries (also Canada) and the availability of interest-only mortgages was reduced or constrained in five countries (including the United States).

New or forthcoming consumer protection legislation may have a significant impact on mortgage product design in the future. Canada made several regulatory changes in response to the crisis in late 2007 including reductions in the maximum amortization period (from 40 to 35 years), an increase in the minimum downpayment (with mortgage insurance) from zero to 5 percent. More recently (February 2010) the Ministry of Finance lowered the maximum LTV on refinance loans to 90 percent and on insured non-owner occupied loans to 20 percent [CMHC Observer 2010]. More significantly they now require borrowers taking out mortgages with variable rates or fixed-rate terms less than five years to be qualified at the average major lender posted five-year rate. This change is likely to reduce demand for variable-rate mortgages reflecting both the use of a longer-term interest rate and the posted rate for qualification.

**Table 5
Change in Mortgage Product Characteristics, Late 2007-Late 2008**

Country	Lower Loan-to-Value Ratios	100% Mortgages Less Available	Loan-to-Income Criteria Tightened	Maximum Mortgage Term Shortened	Reduction in Interest Only Loan Availability	Introduction of New Loan Types to Deal with the Crisis
Australia	x	x	x			
Denmark	x					
France	x	x	x			
Iceland						
Ireland	x	x	x	x	x	x
Netherlands	x	x	x		x	
Norway	x				x	x
Poland				x		
Portugal					x	
Russia	x	x	x	x		
Spain	x		x	x		
Sweden	x	x			Lower Maximum LTV	
U.K.	x	x	x	x	x	x
U.S.	x	x	x	x		

Source: Scanlon et al. 2009.

The FSA in the U.K. has gone the furthest in Europe in contemplating tightened mortgage regulation. Their Mortgage Market Review of October 2009 lays out a number of proposals under consideration. In the area of product regulation, however, the FSA notes that LTV or debt-to-income (DTI) caps are not yet warranted by the evidence. They recommend restrictions on risk layering (prohibiting loans that are a mix of high-risk factors, for example, prohibiting high LTV loans to credit-impaired borrowers who have an unstable income or other similar "toxic" mixes) and requiring income verification on all mortgages. Requirements to fully document borrower income will result in the disappearance of "self-certification" mortgages. Affordability must be based on a repayment mortgage, rather than an interest-only one, while it must take account of future interest rate rises and be based on a 25-year mortgage term, even if the loan is being taken out over a longer period [CML 2010].

The FSA has promulgated suitability standards for mortgage lenders. Specifically, a product will be suitable if there are reasonable grounds to conclude that:

- The client can afford it over the repayment term.
- It is appropriate to the client's needs and circumstances.
- It is the most suitable of those available within the scope of service provided to the client.
- The lender cannot recommend the "least worst" product if it does not have access to a product that is appropriate to the client's needs and circumstances.

Australia also has suitability standards. The new National Consumer Bill requires licensees to assess each consumer's capacity to repay credit to ensure that the credit contract is not unsuitable for the consumer's objectives, needs and financial circumstances [ASIC 2010].

The EC [2009] is looking at additional mortgage regulation in response to the crisis.^{31,32} The EC has suggested restricting the use of teaser rates to "induce" borrowers to move to "higher repayment levels or different foreign currency exposures."

Conclusions

This comparison of mortgage product offerings in developed countries has revealed significant differences in the dominant product offerings across countries. Countries differ in terms of the market share of adjustable versus fixed-rate mortgages, the use of pre-payment penalties, maximum term and the offering of features such as interest-only payments and assumability. Our findings suggest that the United States is internationally unusual in several respects:

- The United States has an unusually high proportion of long-term fixed-rate mortgages as well as an unusually high use of securitization in the financing of housing. The dominance of the FRM and securitization is driven in part by the presence of government-backed secondary mortgage market institutions that lower the relative price of this type of mortgage.
- The United States is unusual in the banning or restriction of pre-payment penalties on fixed-rate mortgages. Most countries in the survey allow such penalties to compensate lenders for loss associated with the financing of mortgages. As a result, mortgage rates do not include a significant pre-payment option premium and other financing techniques, such as covered bonds, are more common.
- The only other country that utilizes the FRM is Denmark. The Danish system offers a unique alternative in the form of the POB that equates individual mortgages and bonds. This system allows borrowers to prepay their loans when rates fall, as in the United States, and allows them to buy back their bond when rates rise. This feature allows the borrower to adjust to interest rate increases and decreases and facilitates de-leveraging when rates rise, reducing the incidence of negative equity. Features that are restricted in the Dodd-Frank Bill such as longer terms, interest-only periods and flexible payment designs are quite common in other countries and do not appear to have been associated with higher rates of default.
- Mortgage default rates have been far lower in other countries than in the United States, despite the fact that several countries had greater house price volatility. The lack of subprime lending

(outside of the U.K.) and less use of limited or no documentation lending were major factors. Mortgage products did not play a role in mortgage default — in fact the dominance of ARMs in several countries was noted as a reason for lower default rates.

- Mortgage foreclosure and repossession regimes are varied, with some more efficient and some less efficient than those in the United States. However all other countries in the survey have recourse mortgages, and lenders routinely pursue deficiencies. Research in Europe and the United States has found that recourse reduces the incidence of default.
- Consumer protection regulation has advanced in a number of countries. The focus has been on borrower qualification and suitability standards, and for the most part has not constrained mortgage product design.

What are the likely effects of Dodd-Frank on mortgage product design? Prior to the crisis the United States had one of the richest sets of product offerings among the subject countries, offering a wide variety of ARMs, amortization choices and terms, along with long-term fixed-rate mortgages. As a result of the crisis the market has seen a decided shift to FRMs, driven in large part by historically low FRM rates. Rates are low in part because of low long-term Treasury rates, but their levels also reflect the impact of government policy in which almost all financing is from government-backed institutions, bolstered by unprecedented purchases of mortgage securities by the Federal Reserve.

Dodd-Frank is likely to perpetuate this trend. The market is likely to gravitate towards vanilla, qualified mortgages. Limiting or banning pre-payment penalties constrains the ability of lenders to match fund medium-term fixed-rate mortgages like the Canadian rollover. This provision will reduce the effectiveness of covered bonds as a financing technique for lenders. Qualifying ARM borrowers at a fully amortizing payment at the highest possible rate over a five-year period is likely to reduce ARM qualification and volume.

Is this state of the world sustainable or desirable? International experience suggests that comparable rates of homeownership and mortgage indebtedness can be achieved with different products and funding structures. While it is widely believed that the FRM is an ideal consumer mortgage instrument, its use does have significant drawbacks. In effect, the cost of the pre-payment option is socialized, with everyone paying a premium in the mortgage rate for the option. This contrasts with the European view that only borrowers who exercise the option for financial advantage should pay the cost (loss to the lender). As a result, European fixed-rate mortgages have lower spreads-to-benchmark rates. If the FRM is the instrument of choice, then the Danish option could be explored, as it provides options to borrowers throughout the interest rate cycle and reduces systemic risk that accompanies an interest rate increase.

Refinancing of FRMs creates significant volatility in the mortgage market as evidenced by the dramatic expansion and subsequent contraction in origination volume accompanying the 2003 refinance boom.

Such volatility has implications for operational costs and profitability of lenders (e.g., in hedging mortgage servicing rights). The pre-payment option has spawned an industry of traders in mortgage-backed securities (MBS). The turnover of MBS has little to do with the availability of housing or mortgage finance, but rather reflects speculation regarding the risky and uncertain embedded pre-payment option.

Transferring interest rate risk to borrowers through ARMs may not be good policy either. Excessive dependence on ARMs as in Australia, Spain and the U.K. runs the risk of significant credit deterioration when interest rates rise and may constrain monetary policy. Use of rolling short-term fixed-rate instruments, as in Canada and several countries in Europe, offers a trade off. Borrowers can adjust the fixed-rate term according to the level and expected direction of interest rates — shortening the term when rates are high and expected to fall, and lengthening when rates are low and expected to rise — allowing them to manage interest rate risk.

Legislative and regulatory restrictions on features like interest-only payments, low start rates and negative amortization will reduce credit availability for many households who need lower payments in the earlier years to afford a mortgage. The lack of such mortgages means there is less ability to offset the tilt effect of the FRM in which the real burden of the mortgage is higher in the early years.³³ Putting product restrictions and prohibitions into law will make it much more difficult to be flexible in underwriting borrowers in the future.

Mortgage product design outside the United States does not appear to have had a role in the financial crisis. However, evidence suggests that it was the lack of underwriting and the mis-match between borrower ability to pay and loan characteristics that led to the mortgage meltdown, not the loan features in and of themselves. The predominance of ARMs in other countries may, in fact have reduced mortgage default rates. However, borrowers in these countries have significant vulnerability to rate increases that may cause problems in the years to come.

Finally, lower default rates in countries outside the United States, even in the presence of more volatile housing markets, may reflect stricter enforcement of lender rights. All countries in the survey have recourse lending, and anecdotal questioning by the author suggests it is enforced. Lenders with a greater certainty of recovering loan proceeds are more likely to extend credit and loan rates are likely to have lower credit risk premiums.

Appendix: Details of Variable-Rate Mortgages

Adjustable-Rate Loan Characteristics: In most countries the dominant ARM is an indexed instrument (Table A-1). The index is typically a money market rate (LIBOR, CIBOR, EURIBOR). Canada and Japan use the prime rate and Korea uses either a CD or cost of funds index. The adjustment period is one year or less. Initial rate discounts are common but modest — typically no more than 1 percent.

**Table A-1
Variable-Rate Loan Characteristics**

Country	Type	Caps	Margin	Period	Options	Discount
Denmark	Indexed CIBOR	Life of loan by contract (5%)	0.5%	6 months	5 year max.	No
Germany	Reviewable	Rate of insurance policy available	N/A	Lender discretion	Mixed	
Spain	Indexed Euribor	Caps and floors -30% of lenders	-2%	6-12 months		Slight
France	Indexed Euribor	2-3%	1-3%	3-12 months	Flex term; conversion; mixed	up to 1%
Netherlands	Indexed Euribor		-2.5%	1-6 months	Conversion	0.4%
U.K.	Reviewable; indexed (tracker)	Caps and collars available (tracker)	0.5-1.5% to base rate	Monthly		Up to 1%
Canada	Indexed; prime rate	Yes; term of mortgage	-0.5%	With prime change	Mixed; conversion	Yes
Australia	Reviewable	None	1.2-2.2% average spread-to-cash rate	Lender discretion		-1%
U.S.	Indexed; hybrid	Yes; periodic; life of loan	2.5%	1 year; 31, 51	Conversion	Yes
Korea	Indexed CD rate of COP	None	~2%	3 months		
Switzerland	Indexed CHF Libor	Optional caps separate from mortgage	0.5%	3-6 months	Conversion; mixed fix/float	
Japan	Indexed; prime rate	Payment cap associated with flex term		6 months	Flex term; conversion; mixed	On rollover 1-2%

International Comparison of Mortgage Product Offerings
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End Notes

1. The final "HOEPA Rule," amending Truth in Lending Rules, Regulation Z was adopted by the Federal Reserve on July 14, 2008. HOEPA rules restrict product characteristics and underwriting on high-cost loans.
2. See for example Bostic et. al., [2009]
3. We will not address the legal aspects of the mortgage in this study. Rather our focus is on the financial characteristics.
4. Rates on reviewable mortgages are typically adjusted after a change in the central bank target rate (base rate in U.K., cash rate in Australia).
5. See Table A-1 in the Appendix for details on indices.
6. Longer fixed rate periods are available in some countries (up to 10 years in Canada and the Netherlands and 15 years in Germany). Infinite life mortgages are common in Switzerland and are discussed below.
7. These loans are referred to as adjustable-rate loans in Denmark. They differ from variable-rate loans which are indexed to the Copenhagen interbank lending rate. Realkreditrådet [2010].
8. Mortgage contracts can contain several options including assumability (the right of a new borrower to assume an existing mortgage on the same property) and portability (the right of a borrower to keep his mortgage when moving and have it secured by a new property). Mortgages in most European countries and Canada are assumable subject to lender review. Countries that allow assumability also restrict or penalize early repayment. Allowing assumption (subject to qualification) enables the lender to maintain an asset liability match that is required for covered bond financing. Only Ireland and the U.K. do not allow assumption and the Netherlands restricts it. Although portable mortgages exist in several countries (Australia, Canada, Germany, U.K.) there appears to be no data on their volume of use.
9. Typically the borrower takes out a new mortgage for the lower balance — pocketing the gain. The new loan has a higher rate on a lower balance. The loan can be refinanced to a lower rate if market rates subsequently fall. For a more detailed description of the buyback option see Svenstrup and Willeman [2006].
10. Bullet bonds pay period interest with the principal repaid at maturity.
11. A number of European countries have theoretical usury limits but they are set much higher than recent historical mortgage rates. See [EMF 2007].
12. United States origination costs are higher than in many other countries. An EMF survey found average mortgage origination costs of 1.1 percent in Europe [EMF 2010]. United States loan origination fees are higher in part because they are a function of the loan amount. In many other countries, including Canada, origination charges are a flat typically low fee. Also most other countries do not have title insurance and

the cost of title search is less than in the United States. Some countries, including Denmark and Spain, have taxes on mortgage registration that raise their total costs to 2-2.5 percent.

13. Scanlon et. al [2009] report that the use of interest-only mortgages has fallen in several countries, including Ireland and the Netherlands, as both borrowers and lenders gravitate to less risky mortgages. 2005-2006 data from Scanlon et. al. 2009-2010 data from Scanlon 2009, Reserve Bank of Australia, Council of Mortgage Lenders, Korea Housing Finance Agency.

14. Korea interest is deductible if mortgage term is 10 years or more, subject to maximum income limit. There are caps on deductibility in other countries (e.g. a maximum 33 percent rate in Denmark, a 15 percent rate in Spain and a 25 percent rate in Ireland).

15. In Germany, the lender can immediately cancel the loan if the borrower goes into negative equity, even if the borrower's payments are up to date, although the facility is little used in practice.

16. Interest-only mortgages in the Netherlands have a maximum 75 percent LTV. Amortizing mortgages can be as high as 100 percent LTV where value is defined as "foreclosure value," the likely proceeds from a foreclosure sale.

17. Another quirk that favored endowments over repayment mortgages was the fact that U.K. lenders charged interest on an annual basis. Thus the borrower with an amortizing loan did not get benefit of the principal reduction during the year, raising the effective interest rate. Life insurance premiums could be invested during the year, effectively lowering the amount of premiums necessary to repay the loan relative to the interest-only repayment loan. This practice was phased out in the 1990s.

18. For example on the Nationwide Building Society website a payment holiday of between three and twelve months can be taken if the mortgage for more than one year old and is less than 80 percent of the value of the home at the end of the payment holiday. The borrow back feature allows a drawdown of past overpayments subject to the LTV constraint.

19. The U.K. Homeowners Mortgage Support Program assists with mortgage payments for unemployed borrowers for up to two years, which may contribute to lower foreclosures. As in the United States, lenders have been slow in repossessing houses — in part because house prices began rising at the end of 2009.

20. Subprime ARMS, balloons and interest-only mortgages have significantly higher default rates than prime fixed rates [Chomisengphet and Pennington-Cross 2008]. However when controlling for other factors such as LTV, FICO score and geographic area, mortgage product variables appear less important. Demanyan and Van Hemert [2008] find that ARM and hybrid loan variables were insignificant in explaining the probability of default. Loan margin and a pre-payment penalty were significant but had small effect.

21. There tends to less product variety in most countries as compared to the United States. Thus there are no statistics relating product characteristics to default. Rather the focus is on underwriting variables such as LTV, adverse credit and low documentation.

22. Australian estimate from Genworth July 2010. Canadian estimate from CMHC and based on average loan size from CanEquity.com.

23. Covered bonds are corporate obligations of the lender. Investors have priority rights to the pool of mortgages ("the cover" pledged to the bondholders). For detail on covered bond requirements see ECBC [2009].

24. Among the subject countries only Canada and Japan have government-supported secondary market institutions. The Canada Mortgage and Housing Corporation and Japan Housing Finance Agency play a similar role to Ginnie Mae in the United States. See Lea [2010] for a more in-depth discussion.

25. Kojien et. al. [2009] find that the long-term bond risk premium is a more powerful determinant of mortgage choice than the simple spread.

26. Effective margins are less due to the widespread use of initial period discounts or "teaser rates."

27. Most recently in the European Commission White Paper [2008]. The European Mortgage Federation response [2008] recommends keeping the right of early repayment as a contractual option. They note

"As a general rule, individual consumers should bear the consequences of the choice they make, i.e. borrowers not choosing an option to repay early should not pay for the costs of this option on an individual basis. The EMF considers that a cross-subsidisation/mutualisation model, under which all customers would have to foot the bill for the pre-payment option whether they opt for it or not, is not a proportionate solution."

28. For a survey of European national legislation regarding early repayment see EMF [2007].

29. French banks have a large pool of long-term funds dedicated to real estate through the l'Épargne Logement system of contract savings. This source of funds effects the pricing of mortgages (interest is tax exempt and thus lower than market rates on a pre-tax basis) as well as the ability to match fund longer-term FRMs. See Diamond and Lea [1992].

30. Scanlon et. al. (2009). Japan went the opposite direction by loosening underwriting in the crisis. The loan-to-cost ratio was allowed to increase to 100 percent from 90 percent Standard and Poors (2010).

31. The EC is looking into suitability standards for EC lenders [EC 2009]. They note: The requirement to assess the suitability of mortgage products to the personal circumstances of the consumer is set out in the national law of Austria, Belgium, Hungary, Ireland, Malta and the Netherlands. In the U.K. the requirement to assess the suitability of the product for the borrower is only relevant where advice is given.

32. DG MARKT (EC financial markets committee) is conducting a research study on interest rate restrictions in "consumer credit" – understood to include mortgage credit – in the EU. The study aims to identify the different types of interest rate restrictions, e.g. rate ceilings/caps, limits on interest rate variability, restrictions on the use of compound interest rates etc. and identify the Member States applying these and their reasons for doing so. The study also analyzes the economic, financial and social impacts of such restrictions on various stakeholders.

33. The tilt effect is created when markets incorporate inflationary expectations into nominal interest rates, increasing their level reducing affordability.

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Korea Housing Finance Corporation (Korea)

Realkreditrådet (Denmark)

Australia Prudential Regulation Authority (Australia)

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From 2000 through 2004, Dr. Lea served as Executive Vice President for Global Market Development at Countrywide Financial Corporation. He was responsible for developing global strategy, analyzing market opportunities and creating proposals and business plans for new international initiatives. Dr. Lea was also President of Countrywide International Consulting Services LLC, which conducted analysis of and provided technical assistance to primary and secondary mortgage market institutions worldwide. From 1991 through 1999, Dr. Lea was President of Cardiff Consulting Services, a firm specializing in the analysis of housing finance markets and institutions in the US and abroad.

Dr. Lea has a unique combination of research experience, senior operational responsibility in major financial institutions and high-level participation in public policy formulation. He was Senior Vice President of Finance and Capital Markets at the Imperial Corporation of America from 1987 to 1991. In this capacity he was responsible for the corporate finance, portfolio management and strategic planning functions of a \$12 billion diversified financial institution and managed a staff of 40 professionals.

Dr. Lea was Chief Economist at the Federal Home Loan Mortgage Corporation (Freddie Mac) from 1983 to 1987 with responsibilities for primary and secondary mortgage market analysis and forecasting. He also served as a staff member for the President's Commission on Housing and was a Brookings Institution economic policy fellow at the U.S. Department of Housing and Urban Development in 1980 and 1981.

Dr. Lea is an internationally known authority on housing and mortgage finance. He has published over 75 articles and book chapters, organized several conferences and made numerous presentations to government agencies, legislative committees, multi-lateral institutions, corporate boards and management, trade groups and academic and professional organizations. He has taught at Cornell University, San Diego State University, the University of California, San Diego and the Wharton International Housing Finance Program at the University of Pennsylvania. He received his Ph.D. in economics from the University of North Carolina, Chapel Hill.





Statement of
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before the

Subcommittee on Housing and Insurance,
Committee on Financial Services,
United States House of Representatives

**SUSTAINABLE HOUSING FINANCE: PRIVATE-SECTOR
PERSPECTIVES ON HOUSING FINANCE REFORM, PART III**

Tuesday, November 7, 2017

***The views expressed are her own and should not be attributed to the Urban Institute, its trustees
or its funders.**

Mr. Chairman, Ranking Member Cleaver, and members of the subcommittee, thank you very much for the opportunity to testify today. My name is Alanna McCargo, and I am the codirector of the Housing Finance Policy Center (HFPC) at the nonprofit Urban Institute, the United States' leading research organization dedicated to developing evidence-based insights that improve people's lives and strengthen communities. The Housing Finance Policy Center provides timely, impartial data and analysis on how the housing finance system affects households, communities, and the broader economy. I have seen how the housing market operates from many vantage points, having spent more than 20 years of my career in financial services and housing finance policy. A decade of that time, from 2002 to 2012, I was at Fannie Mae including when Fannie was first taken into conservatorship and the subsequent housing market boom, bust, and recovery.

The views I express today are my own and should not be attributed to the Urban Institute, its trustees, or its funders.

Almost 50 years ago, in 1968, President Lyndon B. Johnson founded the Urban Institute to help solve the problems that weighed heavily on the hearts and minds of America by bringing sound research, evidence, and perspective that could inform effective policymaking. At the time, the problem was the American city and its people, and the declaration of war on poverty. Johnson passed the Fair Housing Act that same year, making housing discrimination against blacks and other protected groups for renting and owning homes illegal. I mention this history as a reflection for this Congress as you consider the future, as we are facing some of the very same inequities that are plaguing not only our cities, but our suburbs and rural areas all over this country 50 years later.

In the 1992 Housing and Community Development Act, Congress called for a housing finance system that is **affordable, accessible, and stable.**¹ Such a system would provide access to sustainable financing options for all creditworthy borrowers from all communities in all economic conditions and business cycles. Unfortunately, we are far short of this goal even today. The country's housing finance system suffers from three interrelated and significant problems: a **growing wealth gap**; a **shortage of housing, particularly affordable housing**; and a **lack of access to mortgage financing for those who want to buy a home.**

The current housing finance system has remained in a state of uncertainty for far too long, and the work of this Congress to return confidence, trust, and stability to the system will go a long way in restoring housing credit markets, stabilizing regulation, and reestablishing a well-functioning housing finance system in the United States. One clear lesson from recent years is that the country needs one solid, interconnected housing finance system that serves all people and protects taxpayers.

Congress and the administration can address these critical issues by providing broad access to sustainable long-term, fixed-rate lending for all creditworthy borrowers who need it while protecting taxpayers, ensuring competitive private capital participation, and maintaining an explicit government guarantee. Housing finance reform must include improving the Federal Housing Administration (FHA), as FHA is essential to providing broad access to credit, especially for lower-income and first-time

¹ [Pub. L. 102-550](#).

homebuyers. Finally, Congress should also focus on other issues in our housing system, including the lack of affordable housing for owners and renters that is significantly delaying homeownership.

Three Important Facts about Our Current System

It's been just over 10 years since the start of the US residential foreclosure crisis, during which more than 7.5 million families lost their homes and millions more lost equity and wealth.² A combination of poor underwriting standards (for both purchase and refinance lending), predatory lending practices, proliferation of exotic and risky mortgage products, lax regulatory oversight, and the disappearance of the private-label securities market led to the collapse of the housing market and one of the worst financial crises our country has seen.³ The housing crisis left taxpayers in this country at great risk and exposed critical deficiencies in how the primary and secondary markets were functioning. Housing finance stakeholders have learned a tremendous amount by reflecting on the years before the Great Recession, and we must be sure to incorporate the facts and lessons learned in any future housing finance reform proposal.

Because of these systemic failures, three serious issues have emerged or worsened since the crisis.

1. The wealth gap has widened, and it is hurting lower-income and middle-class families

The wealth gap in our country is growing, both between races/ethnicities and between owner and renters. Research shows that homeownership creates wealth through equity and asset building, and continues to be the primary way many middle-class and working-class families become upwardly mobile and achieve economic stability. This is especially true for families of color, who hold most of their net worth in their home equity, and who are lagging in other savings and investments, creating financial insecurity. While some debate whether homeownership has caused the gap between owners and renters, I believe that people are better off when they own property and build assets. Homeownership is one of the best ways to achieve this.

In 2016, the net wealth of white families was seven times greater than the net wealth of black families.⁴ White family wealth also was five times greater than Hispanic family wealth.⁵ This gap is exacerbated by a dramatic difference in homeownership. For many families, their primary residence is an important component of their balance sheet. Close to three-quarters of white households are homeowners, compared with just under half of black and Hispanic households.⁶ White households also

² Molly Boesel, "Foreclosure Report Highlights: 10-Year Retrospect of the US Residential Foreclosure Crisis," Insights Blog, CoreLogic, March 14, 2017, <http://www.corelogic.com/blog/authors/molly-boesel/2017/03/foreclosure-report-highlights-10-year-retrospect-of-the-us-residential-foreclosure-crisis.aspx#.Wf1KHGTythE>.

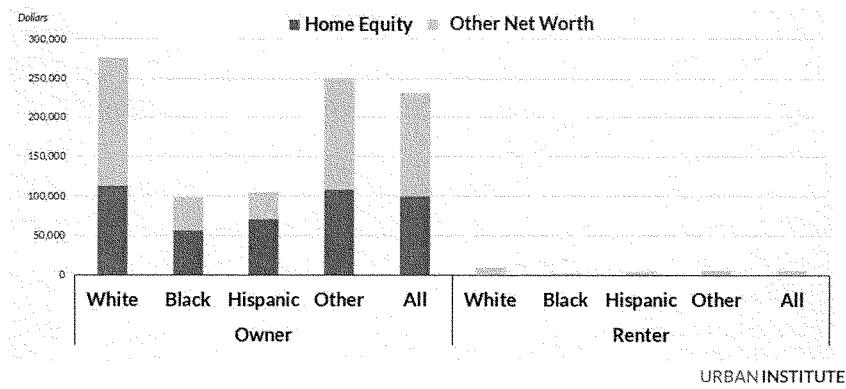
³ "The Financial Crisis Inquiry Report," The Financial Crisis Inquiry Commission, January 2011, http://fcic-static.law.stanford.edu/cdn_media/fcic-reports/fcic_final_report_full.pdf.

⁴ Signe-Mary McKernan, Caroline Ratcliffe, C. Eugene Steuerle, Caleb Quakenbush, and Emma Kalish, "Nine Charts about Wealth Inequality in America (Updated)," Urban Institute, October 5, 2017, <http://apps.urban.org/features/wealth-inequality-charts/>.

⁵ Ibid.

⁶ Lisa J. Dettling, Joanne W. Hsu, Lindsay Jacobs, Kevin B. Moore and Jeffrey P. Thompson, "Recent Trends in Wealth-Holding by Race and Ethnicity: Evidence from the Survey of Consumer Finances," *FEDS Notes*, September

hold considerably more equity in their homes. Mean net housing wealth (the value of the home, less any debts on it) is \$215,800 among white homeowners but only \$94,400 among black homeowners and \$129,800 among Hispanic homeowners.⁷ White homeowners hold more home equity, yet housing accounts for only 32 percent of their total assets, compared with 37 to 39 percent for black and Hispanic homeowners.⁸ The recent Survey of Consumer Finances shows the dramatic difference in wealth by owner and renter, and the vulnerabilities and inequity across race and ethnicity.



Sources: 2016 Federal Reserve Survey of Consumer Finances and Urban Institute calculations.

Notably, racial and economic inequality magnifies the critical issue that a growing wealth gap creates. The housing finance system is currently serving creditworthy families of color particularly poorly, with the homeownership rate among Hispanics at 45 percent and among African Americans at 43 percent, compared with 73 percent for whites—numbers particularly disconcerting given that families of color are gradually becoming the majority of new households formed in this country. Knowing how important homeownership and equity building are for family wealth, there is growing concern about how far the recent housing crisis and current instability of our housing finance system has set back families of color.

According to research conducted by my colleagues at Urban Institute, many of the gains minorities made in homeownership at the end of the 20th century have been lost. For blacks, the homeownership rate rose modestly after the Fair Housing Act was passed in 1968, but the rate is now back to levels we have not seen since the 1960s.⁹ The projections suggest that absent major changes in housing policy,

²⁷ 2017, <https://www.federalreserve.gov/econres/notes/feds-notes/recent-trends-in-wealth-holding-by-race-and-ethnicity-evidence-from-the-survey-of-consumer-finances-20170927.htm>.

⁷ Ibid.

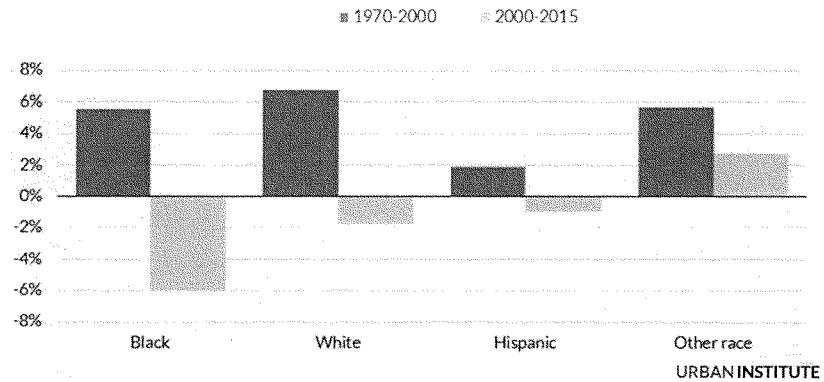
⁸ Ibid.

⁹ Laurie Goodman, Jun Zhu, and Rolf Pendall. "Are Gains in Black Homeownership History?" *Urban Wire*, Urban Institute, February 15, 2017, <https://www.urban.org/urban-wire/are-gains-black-homeownership-history>.

the black homeownership rate will continue to decline and have major consequences for the financial security and generational wealth prospects for the entire race.

All Gains in Black Homeownership since the Fair Housing Act Have Been Erased since 2000

Percentage-point change in homeownership by homeowner's race/ethnicity



2. Affordable housing supply is inadequate for growing number of diverse household needs

Over the next decade, an additional 13–16 million new households will be formed, the US population will get older and have different housing needs, and the housing needs of people of color will increase rapidly. This poses a significant problem: the national housing inventory is already deficient, continues to age, and is not being built to keep pace with the emerging demand for affordability. In 2015, while 1 million new households were created, only 620,000 new housing units were completed, creating a shortage of 430,000 units.¹⁰ This leads to increases in home prices and rents, a trend that will continue for the foreseeable future, absent significant policy changes.

Between 2010 and 2030, household growth will be reasonably robust; and, notably, the overwhelming majority of that growth will be nonwhite: 77 percent between 2010 and 2020, and 88 percent between 2020 and 2030.¹¹ By 2030, Hispanic families will account for 56 percent of new homeowners.¹² Households headed by someone age 65 or older will also expand dramatically, by nearly 20 million between 2010 and 2030.¹³

¹⁰ Laurie Goodman and Rolf Pendall, "Housing Supply Falls Short of Demand by 430,000 Units," *Urban Wire*, Urban Institute, June 21, 2016, <https://www.urban.org/urban-wire/housing-supply-falls-short-demand-430000-units>.

¹¹ Laurie Goodman, Rolf Pendall, and Jun Zhu, *Headship and Homeownership: What Does the Future Hold?* (Washington, DC: Urban Institute, 2015).

¹² Goodman, Pendall, and Zhu, *Headship and Homeownership*.

¹³ Goodman, Pendall, and Zhu, *Headship and Homeownership*.

Housing finance reform is happening amid a serious challenge for the housing market: a critical shortage of housing, particularly affordable housing. This affordability shortage has many causes, well beyond housing finance. But housing finance needs to do its part to mitigate the problem, and certainly not to exacerbate it. The housing goals and duty to serve mandate for the government-sponsored enterprises (GSEs) direct housing finance supported by the government to be part of the supply solution. As noted in a recent publication by my Urban Institute colleagues:

Our existing housing system has a set of rules, regulations, and incentives that fail to motivate market actors to produce and preserve affordable, inclusive, and sustainable housing and communities in sufficient volume to meet current and future demand. The risks and costs associated with developing or preserving housing, especially housing affordable to low- and moderate-income households, can negatively affect the risk-return calculus and reduce private investors' interest in these deals.¹⁴

There are many causes for this, including the pent-up demand created by the lack of household formation during the recession, the lack of construction during the recession, the millions of families who lost their homes during the recession, and failure to preserve the housing we have. The problem is particularly acute for affordable housing, especially rental housing.

As Congress considers tax reform, I want to note that tax policy can play a key role in affordable housing with tax credits and incentives for more affordable housing production. The primary source of development funding is the Low-Income Housing Tax Credit (LIHTC), a federal tax credit administered by state agencies. I encourage the Committee to take a serious look at how tax reforms can continue to support and fuel the necessary tax credits needed for affordable sustainable housing development

3. Consumers have insufficient access to credit, hampering homeownership opportunity

As a result of the default and foreclosure crisis in 2008, and the instability and uncertainty in parts of the system (including the GSEs and the FHA), access to credit is too tight. Several factors contributing to the tight credit box include the high costs of servicing delinquent loans, along with lender concerns of litigation and other enforcement risks associated with making imperfect FHA loans.¹⁵

According to Urban research, roughly 6.3 million mortgage loans are completely missing from the market since 2009 for borrowers who are creditworthy based on reasonable lending standards.¹⁶ These tight standards mean that fewer families will become homeowners, depriving them of a critical wealth-

¹⁴ Maya Brennan, Pam Blumenthal, Laurie Goodman, Ellen Seidman, and Brady Meixell, *Housing as an Asset Class* (Washington, DC: Urban Institute, 2017), p. 1.

¹⁵ Urban researchers also note that many credit box constraints disproportionately hurt purchase money mortgages, when problems during the housing crisis were largely driven by cash-out refinances. For more discussion, see Laurie Goodman, "Using Homes as ATMs, Not Homebuying Fervor, Was More to Blame for the Housing Crisis," *Urban Wire*, Urban Institute, May 11, 2017, <https://www.urban.org/urban-wire/using-homes-atms-not-homebuying-fervor-was-more-blame-housing-crisis>.

¹⁶ Laurie Goodman, Jun Zhu, and Bing Bai, "Overly Tight Credit Killed 1.1 Million Mortgages in 2015," *Urban Wire*, Urban Institute, November 21, 2016, <https://www.urban.org/urban-wire/overly-tight-credit-killed-11-million-mortgages-2015>.

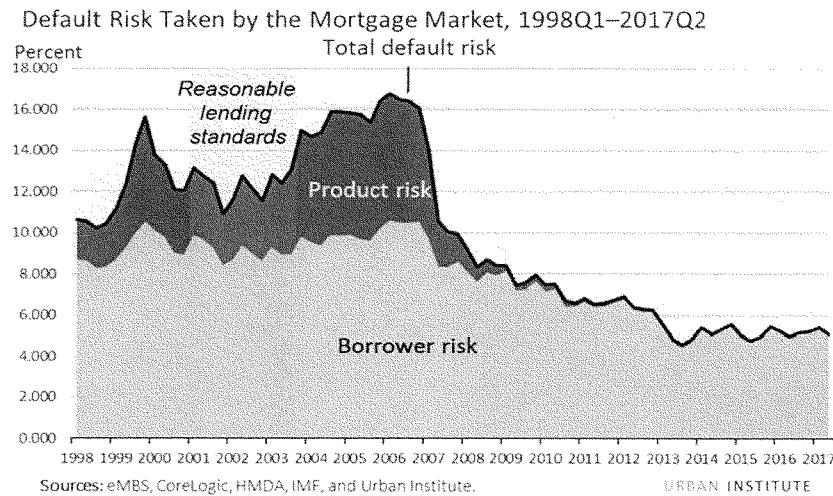
building opportunity. Limiting the pool of potential borrowers is also slowing the housing market recovery.

In 2014 HFPC researchers released the Housing Credit Availability Index (HCAI), which has since illuminated a serious problem in the housing finance system that must be addressed with reforms. The HCAI, which measures how much product and borrower risk lenders are taking in the market, clearly demonstrates that risky products and lending practices, not risky borrowers, caused the housing crisis. There is virtually no product risk in the system today, given the regulatory reforms enacted under Dodd-Frank and the lending rules of the Consumer Financial Protection Bureau, such as the qualified mortgage rule or QM. These important consumer protections have eliminated risky and unsafe products. In fact, HFPC research finds that the rule has had little impact on the availability of mortgage credit, largely because the market eliminated these products before the rule took effect. Borrowers are just as creditworthy today as they were before the foreclosure crisis, yet few financing options are available to those who have anything less than perfect credit.

The HCAI calculates the share of owner-occupied purchase loans/home purchase loans that are likely to default—that is, go unpaid for more than 90 days past their due date. A lower HCAI indicates that lenders are unwilling to tolerate defaults and are imposing tighter lending standards, making it harder to get a loan. A higher HCAI indicates that lenders are willing to tolerate defaults and are taking more risks, making it easier to get a loan. The latest data show that credit availability decreased slightly in the second quarter of 2017, down from the first quarter of the year, which was the highest level since 2016.¹⁷ This decline was driven largely by a shift in market composition from the first quarter of 2017 to the second quarter of 2017. During that period, mortgage loans backed by the government (e.g., FHA and Veterans Administration loans) lost market share to the conventional loans held by banks and other lenders, where lending standards are tighter. Lenders are taking less than half the credit risk they were taking in 2001—a period of reasonable credit standards—and less than one-third the credit risk they were taking in 2005–06, when credit standards were too loose.¹⁸

¹⁷ Housing Finance Policy Center, *Housing Finance at a Glance: A Monthly Chartbook* (Washington, DC: Urban Institute, October 2017).

¹⁸ Laurie Goodman and Alanna McCargo, "Increasing Access to Mortgages for Minorities," *Urban Wire*, Urban Institute, December 1, 2016, <https://www.urban.org/urban-wire/increasing-access-mortgages-minorities>.



The data also show that access to credit has become extremely tight, especially for borrowers with lower credit scores, for both GSE and FHA channels. The mean and median credit scores on new purchase loans have increased 21 and 20 basis points over the past 10 years, respectively. As of July 2017, a borrower needed a credit score of more than 649 to qualify for a mortgage. Before the housing crisis, a borrower could qualify for a mortgage with a credit score in the low 600s. For context, here is the latest borrower composition for first-time and repeat homebuyers in both GSE and FHA origination channels. Note the average loan amounts, which are far higher than they have been, and the average credit scores, which are well over 670—even for FHA.

Comparison of First-Time and Repeat Homebuyers, GSE and FHA Originations

Characteristics	GSEs		FHA		GSEs and FHA	
	First-time	Repeat	First-time	Repeat	First-time	Repeat
Loan Amount (\$)	227,311	253,197	201,672	221,138	215,898	218,166
Credit Score	739.9	755.6	676.6	684.3	711.7	743.1
LTV (%)	87.0	78.8	95.5	94.1	90.8	81.5
DTI (%)	34.3	34.8	42.2	43.3	37.8	36.3
Loan Rate (%)	4.19	4.05	4.2	4.1	4.19	4.06

Sources: eMBS and Urban Institute.

Note: Based on owner-occupied purchase mortgages originated in July 2017.

Certain thresholds in underwriting have a detrimental impact on creditworthy borrowers, especially minorities. Changes in debt-to-income (DTI) ratios are an example. Studies have shown that DTI ratios are less powerful predictors of default than loan-to-value (LTV) ratios or FICO scores.¹⁹ Recently, Fannie Mae announced it would consider mortgage applications with a DTI ratio of up to 50 percent, up from 45 percent. HFPC researchers estimate that this change could result in 95,000 new mortgage loans approved annually.²⁰ Research also estimates that the probability of default on a mortgage with a DTI ratio between 45 and 50 percent is 31 percent greater than a mortgage with similar characteristics and a DTI of 35 percent. Assuming default costs are approximately 5 basis points a year, the extra cost on loans with a 50 percent DTI would be approximately 1.5 basis points a year. In other words, the increase to 50 percent DTI was an important step to opening the credit box without appreciably increasing the cost to Fannie Mae. If Fannie Mae were to increase the limit further to 55 percent DTI, HFPC researchers estimate that would result in about 120,000 new mortgages per year. Underwriting thresholds and caps, such as DTI ratios, restrain affordable access to credit for creditworthy borrowers.

Housing Finance Reform

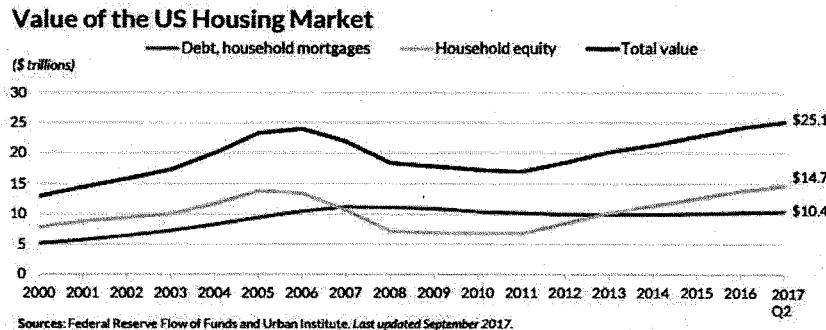
The United States needs a housing finance system that serves the people and communities needing investment and that provides access to sustainable and affordable credit for all creditworthy borrowers across all ethnicities and socioeconomic levels. Toward that end, housing finance reform should (1) ensure that consumers have access to sustainable, affordable mortgages; (2) protect taxpayers by having private capital share the risk; and (3) reform the FHA so it can fulfill its mission and be a healthy part of a unified system.

The core takeaway is that we have one housing market and should have one housing finance system that safely supports all communities and all demographics, and that is available at all times.

As of the second quarter of 2017, the housing market had reached \$25.1 trillion in value, surpassing the pre-crisis peak of \$23.9 trillion in 2006, with total debt and mortgages stable at \$10.4 trillion and household equity reaching a new high of \$23.9 trillion. Agency mortgage-backed securities make up 59.6 percent of the total mortgage market today, 30.1 percent is unsecuritized GSE first liens and portfolio loans, and 4.7 percent is private-label securities. The majority of new mortgages originated in the US are backed by a government guarantee or insurance program. Most of the rest are issued by private banks, credit unions, and other entities which make loans and hold them in their portfolio.

¹⁹ For example, Richard Green, "The Trouble with DTI as an Underwriting Variable—and as an Overlay," *Richard's Real Estate and Urban Economics Blog*, December 7, 2016, <http://real-estate-and-urban.blogspot.com/2016/12/the-trouble-with-dti-as-underwriting.html>.

²⁰ Edward Golding, Laurie Goodman and Jun Zhu, "Fannie Mae Raises the DTI Limit" (Washington, DC: Urban Institute, 2017). As detailed in that analysis, an estimated 16.5 percent, or 16,000, of the 95,000 new mortgages will be to black or Latino families.



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The private-label securities market, where the risky players and products that lead to the housing boom and bust arose, is no longer originating mortgages to any significant degree. While having a safely-operating private market adds liquidity and competition, we cannot allow unregulated chaos to ensue again. Housing finance reform legislation must explicitly include this critical area, and regulators must ensure that new private-market entrants taking on credit risk are adequately capitalized, stress tested, and able to sustain market shocks.

When considering reforms to the housing finance system, I encourage building on the aspects of the system that are working, emphasize correcting what went wrong during the crisis, and be careful not to exacerbate existing problems. There have been a number of reform proposals introduced, and a great number of ideas put forth about how to ensure a stable system for the future.

Last year, the Housing Finance Policy Center hosted the [Housing Finance Reform Incubator](#), a series of essays from a cross section of stakeholders and experts on what a post-conservatorship housing finance system should look like and ideas about how to move the system forward. I encourage Members of Congress to review these proposals, several of which have emerged in plans (such as the promising road proposal, which incorporates ideas from Mark Zandi and my colleague Jim Parrott and others.) I am not an architect of nor do I endorse any particular housing reform plan. My goal is to ensure that whatever plan Congress moves forward on creates a system that ensures equity of opportunity at reasonable costs for consumers. I also believe the major plans that this committee has been reviewing, including the MBA plan and the Milken plan, have more in common than not; perhaps, with compromise, such plans can be the starting point for the future.

Access to Sustainable, Affordable Mortgages

American homeowners need access to long-term, self-amortizing, level-payment, prepayable mortgages at reasonable prices. Long-term fixed-rate products have been helpful in the past because they allow access to credit repaid over a longer period that makes the monthly payment affordable. Fixed-rate mortgage products help remove risk of interest rate volatility from consumers' list of things to worry about, and they allow for affordability of payment. Fixed-rate loans over time have also shown better

default performance and provide certainty of cost for homeowners. The standard fixed-rate long-term mortgage product, most notably the 30-year fixed-rate mortgage, must be preserved. Not all homeowners will choose a 30-year fixed-rate mortgage; a shorter-term self-amortizing mortgage with higher payments may be more appropriate for consumers who can afford it. However, the opportunity for long-term stable housing payments is an essential element of the stability of the market, and it gives homeowners the ability to build equity over time.

The downside to 30-year fixed-rate mortgages for lenders is that they carry significant credit and interest rate risk for long durations. Thus, ensuring the availability of these mortgages requires backing by the federal government, and mitigation of risk through credit risk sharing with mortgage insurers and others. By removing the credit risk from mortgage-backed securities through the government guarantee, more investors will invest in long-term mortgages, and that investment will lower the cost of mortgages and provide widespread access to long-term, fixed-rate lending. Without an explicit government guarantee, the costs of mortgages will increase and the availability of long-term fixed-rate mortgage loans will be severely limited, hurting access to mortgages for most Americans.

A liquid mortgage market is needed to provide sustainable, affordable mortgages. Despite the flaws in their design, the GSEs have facilitated a highly liquid housing finance market, which relies on the standardization of products, documentation, and processes. Liquidity increases the amount of capital available for mortgage loans and decreases the price of those loans. It also reduces the geographic differences in the availability and price of mortgages. The ability to sell mortgages forward into the To Be Announced market also enables borrowers to lock in interest in rates, and it helps provide certainty for all parties involved.

A liquid market also should facilitate some cross-subsidization to ensure access to reasonably priced mortgage credit for lower income borrowers. Pure risk-based pricing can have destabilizing effects on regional and national housing markets, as well as on the lives of individual households. Some level of cross-subsidization permits more uniform pricing across the housing cycle and in different markets. The reforms to the US housing finance system should accommodate this as it will improve access to credit. A note on *risk-based pricing*: the current model has several pricing layers built in that are ultimately impacting cost to homebuyers. The path forward cannot put the burden of systemic risk into consumers' mortgage payments. As the HCAI shows (see pages 6–7), very little borrower risk is being taken in the market today, and most of the defaults of the past came from risky products that are no longer available. Ultimately, the reformed system must carefully balance subsidy and risk sharing.

Other improvements to increase access to sustainable, affordable mortgages include the following:

- **Improving credit scoring systems and including additional credit indicators:** Outdated credit scoring systems keep some creditworthy borrowers from having mortgage applications considered or even from applying. Millions of renters in America are creditworthy and would qualify for mortgages, but they are unable to become first-time homebuyers based on lack of payment history information. Most landlords do not report rents to major credit bureaus, nor do utility companies, cell phone companies, and others. The tools and methods used to extend credit must be brought up to modern times. Americans are being poorly served by the traditional credit bureau reporting and scoring. Broader payment habits need to be brought

into view to assess creditworthiness of consumers, and credit should not be restricted because borrowers are unable to report their pay history. Several bills from this Congress have tried to address this and need consideration. For example, the Credit Score Competition Act of 2017 (H.R. 898/S. 1685), introduced by Representatives Royce and Sewell and Senators Scott and Warner, would require the GSEs to consider alternative credit scoring in order to promote more lending to creditworthy consumers.²¹ The Federal Housing Finance Agency is continuing to explore the GSEs' ability to use alternative credit scores, although this issue is complicated.²² Such activities related to the underwriting of mortgage credit should be seriously considered in a reform package.

- **Low-down payment lending options:** Access to sustainable mortgage credit is often only possible with options for lower-down payment loans. In addition, borrower's need to be able to access down payment assistance, beyond government guaranteed loans. HFPC is studying the availability of down payment assistance for conventional as well as government-guaranteed loans across the nation, and how to better match those needing such assistance with available funds, education, and access. There are down payment assistance programs, particularly through most state housing finance agencies, that are healthy and viable. Few data have been collected about historical use and types of programs, but looking at borrower loan data, it appears consumers are not taking advantage of the programs, essentially leaving money on the table. This is because these programs are not being aggressively sought out, referred, and communicated to potential homebuyers. There is a need to increase the visibility of these programs, and to ensure borrowers in every mortgage transaction know about what assistance they could be getting. Not all down payment assistance programs are created equal, and they come in different forms. Homebuyers need to be educated and made aware that funds are available. It could be the difference maker for a first-time homebuyer in a higher-cost city, for example, who really needs the assistance to bring their payment down even more. The GSEs could play a bigger role in first-time homebuyer access to credit as they work to make low-down payment lending programs more widely accessible.
- **Modernize underwriting standards and models:** Underwriting models should be improved to recognize changes in households and job employment trends. The GSEs are exploring some ideas in this area, such as considering income of nonborrower household members. Similar initiatives need to be undertaken recognizing income variability, and recognizing that freelance, part-time, and self-employment work are increasingly important sources of incomes for individuals and families. Removal of certain thresholds and caps in underwriting standards would help address some of these issues and would improve accessibility to sustainable mortgages for creditworthy people (see page 8). Reevaluating the right levels for debt to income, opening credit scoring alternatives, including different forms of credit history,

²¹ In March 2017, Urban Institute held a data event, "Can New and Alternative Credit-Scoring Tools Mean Greater Access to Credit?" Information about the event can be found here: <https://www.urban.org/events/can-new-and-alternative-credit-scoring-tools-mean-greater-access-to-credit>.

²² For a discussion of that issue, see Prepared Remarks of Melvin L. Watt, Director of FHFA, at Mortgage Bankers Association Annual Convention and Expo 2017, October 23, 2017, <https://www.fhfa.gov/Media/PublicAffairs/Pages/Prepared-Remarks-of-Melvin-L-Watt-Director-of-FHFA-at-Mortgage-Bankers-Association-Annual-Convention-and-Expo-2017.aspx>.

determining what the right level of savings and assets needs to be. These are all ways in which underwriting can be modernized to meet the needs of current and future consumers.

- Encourage well-funded, high-quality homeownership counseling: Homebuyer counseling, financial coaching, and literacy programs also have an important place in ensuring access to sustainable mortgage credit. Such programs help to ensure that borrowers understand the mortgage loan process and fully appreciate the relationship between homeownership and their finances. This is critical in every stage of homeownership—pre-purchase and post-purchase, as well as during financial and retirement planning. The Urban Institute has researched the impact of homeownership counseling.²³ In one study, researchers found that those who received pre-purchase counseling were more likely to be African American, Hispanic, low income, and female than the general population of home purchase borrowers.²⁴ Additionally, the research found that, holding all other factors equal, delinquency rates for borrowers that received pre-purchase counseling were 16 percent lower than for borrowers who did not receive such counseling.²⁵ Housing finance reform should encourage well-funded and high-quality financial counseling and coaching programs. The housing finance system of the future should ensure that there is a healthy network of informed housing counselors who can work on the ground in communities. In the years before the crisis, the GSEs played a significant role in counseling, with resources in states and in offices with a local reach. The GSEs have moved away from that in conservatorship. Part of reform should be rethinking how the GSEs can be most effective working in communities, partnering with local nonprofits, lenders, community development block grants, housing finance agencies, and others.
- Increasing the availability of other programs: There should be better access to quality mortgages for manufactured and modular housing. In addition, there is a dearth of small-dollar mortgage lending in lower-cost rural communities which stymies homeownership in these areas. The work that the FHFA has directed the GSEs to do under the duty-to-serve rule is a critical step in expanding affordable housing. We need to scale new ideas and bring more liquidity into the markets that need it most, to increase affordable housing and preservation.

Protecting Taxpayers

The housing finance system should have an appropriate sharing of risk among parties, with private capital taking first loss credit risk and operational risk before the federal government. My colleagues at the Urban Institute, Laurie Goodman and Jim Parrott, have written extensively on how much private capital should be required to guard against all but catastrophic risk.²⁶ No matter what the amount,

²³ See, for example, Kenneth M. Temkin, Neil S. Mayer, Charles A. Calhoun and Peter A. Tatian, "National Foreclosure Mitigation Counseling Program Evaluation: Final Report, Rounds 3 through 5" (Washington, DC: NeighborWorks America, 2014); and Brett Theodos and Ellen Seidman, "Housing Counseling Should Help with More Than Just Homebuying," *Urban Wire*, Urban Institute, August 1, 2016, <https://www.urban.org/urban-wire/housing-counseling-should-help-more-just-homebuying>.

²⁴ Wei Li, Bing Bai, Laurie Goodman and Jun Zhu, *NeighborWorks America's Homeownership Education and Counseling: Who Receives It and Is It Effective?* (Washington, DC: Urban Institute, 2016).

²⁵ Ibid.

²⁶ Laurie Goodman and Jun Zhu, "The GSE Reform Debate: How Much Capital Is Enough?" (Washington, DC: Urban Institute, 2013); and Jim Parrott, Lewis Ranieri, Gene Sperling, Mark M. Zandi and Barry Zigas, "A More Promising Road to GSE Reform: Governance and Capital" (Washington, DC: Urban Institute, 2016).

however, private capital needs to be in a first-loss position and needs to be stable. Placing layers of private capital, such as through credit enhancements, risk transfers, and a mortgage insurance fund, ahead of the taxpayer's risk will protect the taxpayer without undermining access to credit for creditworthy borrowers and access to the secondary market for lenders of all sizes. There must be a mechanism to ensure capital is available throughout the business cycle. The GSEs' current experiments with credit risk sharing are useful in understanding the availability and pricing of capital in the current housing market, but these models have not been tested in periods of stress.

FHA Reform

Most discussions about housing reform since 2008 have focused on the GSEs. This moment is an opportunity for us to think differently about the future, and take a broader view of housing reform that includes all the federal housing programs involved in supporting primary and secondary markets. One system that serves all people. A national housing policy. The FHA and other federal housing guarantee programs also should be a key part of housing finance reform. In today's disjointed structure, FHA and government programs are operating one way and GSEs are operating another, and an entire system of lenders, servicers, and investors must adapt to all the differences. It is highly inefficient, incredibly costly, more opaque than it could be, and unfair to consumers. The United States cannot rely on the private mortgage market to keep the housing finance system robust for first-time homebuyers or seniors who want to downsize or age in place. The FHA, as well as the USDA and the Department of Veterans Affairs, are particularly critical for the first-time homebuyers, minority borrowers, veterans and military families, and lower-income borrowers with limited wealth for a down payment.

As a threshold matter, the FHA needs increased appropriations to improve its 30-year old technology. The current underinvestment and inept systems are costly, and they cannot keep pace with the rapidly changing lending environment. Other FHA reforms can be dealt with administratively—and the FHA leadership has indicated they are starting to do just that. Today, I want to highlight two key aspects that would strengthen the agency.

First, remove the cloud of uncertainty created by the False Claims Act (FCA). Currently, if a lender submits a claim on an FHA-insured loan that is found to have an underwriting defect, the lender can be sued by the Department of Justice for submitting a "false claim" under the FCA. The FCA provides for a penalty of three times the size of the loan. The federal government's use of the FCA has led to well-capitalized lenders pulling back dramatically, constraining FHA lending and increasing taxpayers' exposure. Lenders need greater certainty that minor mistakes will not lead to suits under the FCA. To resolve these issues, the FHA should use its defect taxonomy to clarify that minor and nonmaterial mistakes in loan underwriting standards will not lead to suits under the FCA. Research suggests this will help bring well-capitalized lenders back to the FHA program, strengthening the FHA and increasing the number of loans it originates.²⁷

²⁷ For additional discussion on FHA and FCA, see Laurie Goodman, "Fannie and Freddie Eased Access to Credit. Now It's the FHA's Turn," *Urban Wire*, Urban Institute, March 24, 2017, <https://www.urban.org/urban-wire/fannie-and-freddie-eased-access-credit-now-its-fhas-turn>; and Laurie Goodman and Jim Parrott, "To the Next HUD Secretary: Two Steps to Strengthen the FHA," Urban Institute, December 6, 2016, <https://www.urban.org/2016-analysis/next-hud-secretary-two-steps-strengthen-fha>.

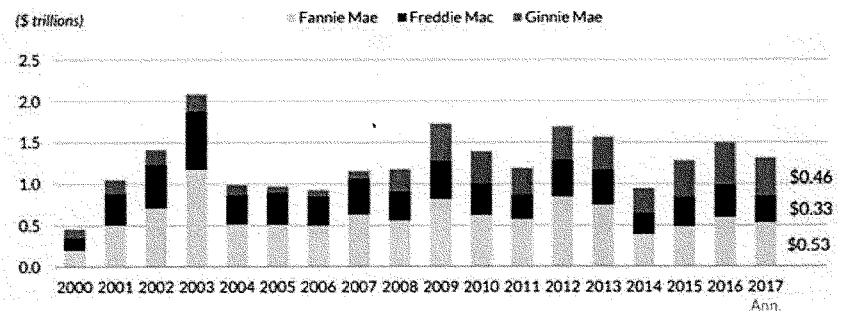
Second, fix the serious problems in the FHA's rules for servicing delinquent loans. The current servicing rules for FHA loans are inadequate, costly, and risky, and they are inhibiting access to credit for potential FHA borrowers as a result. FHA must improve its processes for servicing for delinquent loans, enhance its loss mitigation toolkit, and overhaul the property conveyance for foreclosed properties. FHA servicing rules are so burdensome that the costs of servicing FHA loans in default have become uneconomical, which, again, is pushing well-capitalized lenders from originating FHA products. The FHA needs to be more clear about the servicing of delinquent loans, make deadlines more realistic without requiring special waivers, and, ideally, conform to prevalent industry standards, such as GSE conveyance standards, where appropriate. For example, instead of requiring servicers to keep foreclosed properties in their name until the properties are conveyed to the FHA (a process that takes one year on average), servicers should be allowed to transfer the property to the FHA immediately upon foreclosure. Immediate transfers will reduce significant expenses for managing and maintaining foreclosed properties and result in properties being resold more quickly. Additionally, the FHA requires the servicer to put the home into conveyable condition before transferring it to the FHA. While the FHA provides a budget for repairs, the amount typically is well short of what is needed, leaving servicers to cover the difference. The FHA should raise these repair budgets to levels consistent with what is needed to repair badly damaged homes to the levels required for FHA conveyance. Finally, the FHA's timelines for loss mitigation are unnecessarily tight, leaving servicers unable to comply without harming the borrower or running afoul of other requirements, such as those imposed by the Consumer Financial Protection Bureau. To avoid penalties for delays, servicers must go through a cumbersome and expensive process for special dispensation on a loan by loan basis. The FHA should allow for more servicer discretion and an expanded timeline.²⁸

To some extent, similar issues affect USDA and VA. The processes and systems of all these agencies should be robust, transparent, and, to the maximum extent possible, consistent. Again, much of this work will require improved systems and additional staff.

Standing behind the government insured housing finance channels is a woefully underresourced Ginnie Mae, which is now supporting more of the market than Freddie Mac. Ginnie Mae and its issuers play a critical role in providing capital and liquidity through the global capital markets. Ginnie Mae enables government lending is available so millions of households can purchase, refinance, and rent homes.

²⁸ For additional discussion on FHA servicing, see Goodman and Parrott, "To the Next HUD Secretary: Two Steps to Strengthen the FHA"; and Laurie Goodman, "FHA's Proposed Servicing Reforms Need More Thought" (Washington, DC: Urban Institute, 2015).

Agency Gross Issuance



Sources: eMBS and Urban Institute.

Note: Annualized figure based on data from September 2017.

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Other Issues for Congress to Consider

Beyond housing finance reform, other significant problems are contributing to the wealth gap, affordability crisis, and access to credit issues in our current system. As the committee works on Housing Finance reform, it may also want to consider the following issues.

Rental Housing

Almost 40 million Americans live in housing they cannot afford, and more than half of all renters are experiencing cost burdens due to high rents. My colleagues at the Urban institute have done extensive work to map America's rental housing crisis, and across the entire country we find communities without enough affordable rental housing. Almost everyone rents at the start of their household experience. Without affordable rentals, it is hard to save for a down payment and build a savings cushion to deal with emergencies.

Rental housing serves millions of households, who are disproportionately young, lower income, or minority. Additionally, an increasing percentage of the senior population will be renters. An estimated 22 million new households will form between 2010 and 2030, and 59 percent of these new households will be renters.²⁹ Renters ages 55 and older accounted for over 40 percent of the growth in renters between 2004 and 2014, and the share of older Americans who own a home is projected to decrease

²⁹ Martha Galvez, Maya Brennan, Brady Meixell, and Rolf Pendall, *Housing as a Safety Net: Ensuring Housing Security for the Most Vulnerable* (Washington, DC: Urban Institute, 2017), p. 6.

from 80 percent to 74 percent by 2065.³⁰ These trends in rental housing have big implications for the growing affordable housing crisis.³¹

A mobile labor market requires a significant supply of rental housing at all price points. However, availability of affordable rental housing is limited. In 2016, rental vacancy rates nationally hit their lowest point in three decades at 6.9 percent.³² In 2014, none of the nation's 100 largest counties had sufficient rental housing to meet the needs of the lowest-income families.³³ One-quarter of renters, or 11.1 million households, are spending at least half their income on rental housing. Workers earning the federal minimum wage would need to work 117 hours a week to earn enough income to afford the average rent for a two-bedroom apartment.³⁴

The GSEs' multifamily lines of business weathered the recession well, and in fact provided critical support to financing of multifamily housing during that period. These businesses, with the guidance and direction provided by the housing goals and duty to serve rules, need to continue.

Given the demographics of the renter population, federally subsidized rental programs are essential to affordable rental housing. In 2014, more than half of units affordable to extremely low-income households were federally subsidized.³⁵ While these federal programs, whether through HUD, US Department of Agriculture, the Treasury's Capital Magnet Fund, or the LIHTC, have worked well, these programs need continued and increased support. As of 2016, about 5.2 million households lived in federally assisted housing, about three quarters of whom were extremely low income. But over 19 million households are eligible for assistance based on their income.³⁶

Mortgage Servicing

Sustainable homeownership also requires changes in the mortgage servicing system. One critical thing we learned in the crisis is that we had an entire system that was ill prepared to take on the sheer volume of defaults that happened and be responsive to the needs of millions of consumers who found themselves unable to pay their mortgages. The lessons learned from the default crisis clearly point to a need for us to standardize mortgage servicing rules, loss mitigation processes, and foreclosure processes. Fixing mortgage servicing can have a direct impact on making access to credit available.³⁷ The costs involved in servicing a loan that goes delinquent are prohibitively high, and that fear of default risk is finding its way into the system. The Housing Finance Policy Center is hosting a multiyear

³⁰ Ibid.

³¹ Alanna McCargo, "These Four Trends in Rental Housing Have Big Implications for the Growing Affordable Housing Crisis," *Urban Wire*, Urban Institute, July 27, 2017, <https://www.urban.org/urban-wire/these-four-trends-rental-housing-have-big-implications-growing-affordable-housing-crisis>.

³² Galvez et al., *Housing as a Safety Net*, p. 5.

³³ Ibid.

³⁴ Galvez et al., *Housing as a Safety Net*, p. 6.

³⁵ Galvez et al., *Housing as a Safety Net*, p. 7.

³⁶ Ibid.

³⁷ Alanna McCargo and Laurie Goodman, "Updating Mortgage Servicing Now Will Ensure the Mortgage Market Better Serves All Americans," *Urban Wire*, Urban Institute, February 2, 2017, <https://www.urban.org/urban-wire/updating-mortgage-servicing-now-will-ensure-mortgage-market-better-serves-all-americans>.

Mortgage Servicing Collaborative to identify improvements in mortgage servicing.³⁸ That effort includes stakeholders from all parts of the servicing system, including lenders, servicers, academics, civil rights and consumer groups. We are gathering evidence that will support policy recommendations for improvements that can be implemented by servicers, the GSEs, and the government agencies. I look forward to sharing this work with the Committee as it is published.

It will be critical that servicing be a key consideration for reforms, because mortgage servicing is the critical part of the housing system that must create stability through any crisis. Servicers are critical points in the system in times of crisis, whether it's an economic crisis or a natural disaster. When homeowners are in distress, the system they rely on and the options that they have need to be clear and responsive. There is a real opportunity to take the entire default servicing mechanism today, especially with the diversity of different servicing models and regulations in place, and standardize and eliminate risks, inefficiency and costs in the mortgage servicing system. Mortgage servicers have long term responsibility for the life of the loan, and ensuring payments to all parties to the loan. The long-term risk inherent in servicing requires a rethinking of the way it works, and a clear set of standards that work for borrowers across the board, regardless of who the investor or insurer of their loan is. I urge us to continue to keep mortgage servicing in the reform conversations, to ensure stability in times of distress. This is where the greatest vulnerabilities of the system be in the future, and where we can apply lessons from failures of the past.

A Note on Data Transparency and Standardization

The ability for the Urban Institute, or any policy and economic research organization, to understand the state of the mortgage market, how the system is servicing consumers and how programs are servicing the American public have been enhanced over the last four decades, as more data about the housing market has moved into the public domain. Data made available under the Home Mortgage Disclosure Act (HMDA) and the Community Reinvestment Act, and public data released by the GSEs and the FHA in recent years, including data on new credit risk transfer structures, offer a transparent comprehensive view of the housing market and communities across America. The Housing Finance Policy Center has developed important tools that offer evidence of lending progress across the country.³⁹ That is possible because of transparency of government and public datasets such as these.

Yet, greater transparency into the housing market is needed to support evidence-based policy making. Much of the critical data, especially portfolio performance data and servicing data remains in private hands and is available only at substantial cost, if at all. Additionally, the GSEs, the FHA, and the VA could make more data available to the public as part of their missions. Continuing to improve this data, and gain as much participation as possible in reporting would help Congress, regulators, market participants, and the public better understand the housing market and helps ensure evidence is

³⁸ For more information, see <https://www.urban.org/policy-centers/housing-finance-policy-center/projects/mortgage-servicing-collaborative>.

³⁹ For more information, see <https://www.urban.org/policy-centers/housing-finance-policy-center/projects/home-mortgage-disclosure-act-data>.

available to support changes in law, new regulations, and industry practices that facilitate a housing finance system that is affordable, accessible, and stable.

Conclusion

We are at a pivotal moment to make significant changes that can positively impact millions of Americans. There is significant evidence regarding the causes of the housing crisis and flaws in our system. We have an opportunity to help solve the three challenges that persist in our housing system—the wealth gap, the housing affordability challenge, and the lack of access to credit.

Our country has changed. The path ahead needs to begin, and during a time when housing is finding some solid footing, yet still fragile. Neither the status quo nor the way we used to do things is the answer. The demographic shifts in age, race, income, and education are all significant drivers of what our future housing system needs to be able to meet the diverse needs of the market.

This is a unique time because there is more agreement and in common on the path forward for housing reform than ever before. We cannot continue to let the GSEs linger in uncertainty. Clarity is key to moving forward with a healthy housing market. We must stabilize and bring more certainty to FHA and other government lending programs. It is critical that our future housing finance system provide sustainable access to affordable credit for all creditworthy borrowers across all demographics and communities, at all times.

Written Testimony of Theodore W. Tozer

Senior Fellow, Milken Institute – Center for Financial Markets (Housing Finance Program)

On behalf of the Milken Institute

Before the U.S. House of Representatives Committee on Financial Services

Subcommittee on Housing and Insurance

Hearing entitled

"Sustainable Housing Finance, Part III"

November 7, 2017

Good morning, Chairman Duffy, Ranking Member Cleaver and members of the Subcommittee. My name is Ted Tozer, and I appreciate the opportunity to testify today on behalf of the Milken Institute Center for Financial Markets, where I am a Senior Fellow in the Housing Finance Program. Most of you know me from my previous role as President of Ginnie Mae from 2010 through January of this year, overseeing Ginnie Mae's growth and development for most of the post-Financial Crisis period to date. Prior to Ginnie Mae, I spent nearly 25 years at National City Mortgage, where I ran Capital Markets as Senior Vice President. I have also served in a variety of capacities in industry organizations, including tenures on the Mortgage Bankers Association (MBA) Board of Governors and as chairman of the MBA Capital Markets Committee.

Our team within the Milken Institute's Housing Finance Program has a very broad and deep collective housing finance background. We have recently come together to focus on reform in several areas, including:

- A balanced deployment of government and private capital in support of a fairer and more efficient housing finance system;
- Policy, regulatory, and industry-based reforms to the housing finance system that are commercially practical, and that foster safety, soundness, and best practices;
- Enhancing broad access to affordable credit, and liquidity within both the single and multifamily housing sectors; and
- Evaluating and promoting technological innovations that improve the housing finance system.

Accordingly, I would like to present my thoughts today on several elements that are part of the timely conversation on getting bipartisan comprehensive housing finance reform legislation over the finish line.

Ending the GSE Duopoly

A safe and sound housing finance system should support the overall reduction of the public capital footprint as more private capital re-enters the system at different points in the primary and secondary

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mortgage markets. For most of the post-crisis period, the collective Fannie Mae and Freddie Mac (the Government Sponsored Enterprises, or GSEs) footprint has comprised half or more of the mortgage market, and it would undoubtedly be larger today if not for Ginnie Mae's growth during this period. Ginnie Mae's ability to inject liquidity into the mortgage market during this critical time fueled this growth; the U.S. full faith and credit guarantee that backs Ginnie Mae mortgage-backed securities (MBS) enabled continued availability of FHA, VA, and RHS products to the four corners of the credit box that neither private capital nor the GSEs were able to provide.¹ This evidences Ginnie Mae's countercyclical ability to keep credit flowing when other sources of liquidity are constrained.²

Significant administrative and operational reforms within the GSE conservatorships – now in their ninth year – have enhanced the GSEs' continued outsized role in the mortgage market. Despite the constraints of conservatorship, both GSEs have been able to retain smart, talented management and support teams to pursue many successful initiatives that have reduced their operational, business, and market risks, and taxpayer exposure as they continue to provide market liquidity. They are also modernizing critical securitization infrastructure through the development of a Common Securitization Platform (CSP) and, if they adhere to the current schedule, will begin issuing a Single Agency Security through the CSP in early 2019.³ These are all developments that should play an important role in a reformed secondary market system.⁴

As dominant and protected gateways to the secondary market for conventional mortgages, the GSEs have also been able to infuse within their respective proprietary underwriting systems and processes a wide range of new and innovative financial technology, or "FinTech" products, to improve their operational efficiency and customer service. And they are effectively using the Qualified Mortgage (QM) Patch to begin to extend their reach to more "harder to serve" consumers.⁵ Arguably, however, with their protected, government-advantaged status and the powerful economic benefits that accompany it, the GSEs have achieved these gains at the cost of crowding out a potentially significant measure of market competition and additional innovation. As I will discuss, this is neither a sustainable nor advisable model over the longer term. Whatever other principles guide lawmakers' efforts as they pursue legislative reform, they should focus on the priorities of (i) ending the current GSE duopoly and creating a more competitive secondary market that would compete away economic rents (thereby reducing costs to all consumers), (ii) encourage innovation, and (iii) reward those who responsibly and sustainably provide credit to harder and more costly to serve populations and geographies.

¹ See, e.g., <http://www.dsnews.com/daily-dose/06-26-2017/end-%E2%80%A8of-era-tozer-talks>.

² During my tenure at Ginnie Mae, the total unpaid principal balance of Ginnie Mae MBS grew from \$900 billion to over \$1.8 trillion (surpassing outstanding Freddie Mac MBS volume in mid-2016). If Congress can accomplish legislative housing finance reform, the outsized FHA footprint would reduce over time into a more strategic role.

³ The first such security through the CSP in 2019. See Federal Housing Finance Agency, *An Update on Implementation of the Single Security and the Common Securitization Platform* (June 2017).

⁴ Many commenters have discussed the potential application of the CSP in support of not only GSE, but also Ginnie Mae and private label securitizations. In this respect, the CSP can be an effective utility that can serve the entire mortgage market.

⁵ See 12 C.F.R. § 1026.43(e)(4)(2)(A).

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Improving on the GSE-based Model

There are elements of the GSEs' systems and processes that are critical to maintain and improve upon in any future housing finance system. In discussing this principle, I will use the terminology of "issuer" and "guarantor" interchangeably. I do so because issuers under the Ginnie Mae construct have the same legal responsibility to absorb delinquent principal and interest payments and loan losses as do Fannie Mae and Freddie Mac acting as guarantors under the current GSE construct. In particular:

1. *The "To Be Announced" or "TBA" Market.* The TBA Market, which was developed in 1970 to support the explicitly guaranteed Ginnie Mae MBS, has grown into the most liquid and important secondary market for mortgage loans. It is second in daily volume only to the U.S. Treasury market, with trading of roughly \$200 billion per day.⁶ The TBA Market relies on the homogeneity of the underlying loans and the issued securities, and the government guarantee backing the securities. These features effectively eliminate credit risk and analytical complexities for investors, and TBA traded securities are one of the primary hedging instruments for managing interest rate risk. The TBA Market's elimination of credit risk is critical to the ability to offer American borrowers a pre-payable fixed rate 30-year mortgage, which remains the cornerstone of low- and moderate-income borrowers' ability to finance a home. Preservation of the TBA Market is one of the most important features to maintain in a future housing finance system, which evidences our support for an explicit full faith and credit government guarantee of TBA securities.

While preserving the TBA Market is essential, some observers have noted that converting the federal government guarantee of the GSE's (or their successor entities') MBS from their current charter-based implicit guarantee to an explicit Ginnie Mae full faith and credit guarantee, could put pricing pressures on the market for existing Ginnie Mae securities – and therefore on the cost of the underlying FHA, VA, and RHS loans. This is because the conventional Ginnie wrapped MBS would be much more liquid and price competitive relative to current Ginnie Mae securities due to their volume advantage. Stakeholders and policymakers should explore this possibility and carefully consider the best way of mitigating any market dynamics that could raise the cost of FHA, VA, and RHS loans.

The September 2016 Milken Institute Proposal (the Milken Institute Proposal) and the more recent MBA Proposal both agree on the need to preserve a robust TBA Market. However, one way in which the two proposals differ is that MBA recommends that the Ginnie Mae MBS Platform continue to support current government-guaranteed lending programs (FHA, VA, and RHS), while the GSEs' CSP should serve as the issuance platform for collateralized pools of conventional loans. In each case, the securities would enjoy a full faith and credit federal guarantee. At this time, however, the GSEs' CSP, which is jointly owned by the two enterprises, is still under construction and not fully operational. Its ultimate capabilities and timeline to full functionality, as well as its adaptability to non-GSE guarantors' systems, will become clearer

⁶ SIFMA, *TBA Market Fact Sheet* (2015).

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over time. While Ginnie Mae would have to gain new capacity to oversee private counterparties providing credit enhancement to pools of non-government guaranteed mortgage pools, the existing Ginnie Mae platform could accommodate conventional pools without burdensome and costly alterations. Unlike the GSEs' CSP, which is currently designed to serve just two issuer/guarantors, the Ginnie Mae MBS Platform – which has been modernized using 21st century technology – is capable of accommodating multiple issuers delivering into single or multi-lender securities, and currently accommodates approximately 430 different issuers (with no single issuer dominating the program). As such, the Ginnie Mae MBS Platform can play a valuable role in a reformed housing finance system. While there are pros and cons of maintaining the use of parallel securitization platforms – one for current government-program (i.e., FHA/VA/RHS) Ginnie Mae wrapped MBS and another for conventional Ginnie Mae wrapped MBS – policymakers should strongly consider the option of using the Ginnie Mae MBS Platform for issuing both government and conventional mortgage backed securities. This would preserve a single TBA Market and avoid any potential pricing differentials that could arise in the case of parallel platforms featuring the same Ginnie Mae wrap, but with differential volumes and liquidity attributes.

2. *Affordable housing.* Affordable housing goals and charter-based requirements to serve low- and moderate-income households have not been fully satisfied in post-crisis practice, as broad segments of affected borrowers and markets continue to be underserved by the market and by the GSEs in conservatorship. A reformed housing finance system should provide broad access to affordable mortgage credit to all qualified consumers and geographies. Toward that end, both the Milken Institute and MBA Proposals support a modest affordable housing strip of about 10 basis points on the outstanding balance of guaranteed MBS to support the production and preservation of rental and homeowner housing for low- and moderate-income consumers.

The Milken Institute Proposal would continue Ginnie Mae's policy of allowing any entity that has the requisite financial resources and operational capacity to become an approved issuer of government-guaranteed securities, and compete to find economic success in the marketplace without the imposition of affordable housing mandates beyond the aforementioned strip. This approach stands in contrast to the MBA Proposal, which would impose firm-level affordable housing and duty to serve requirements on the two or more private guarantor/issuers. Using Ginnie Mae as contemplated under the Milken Institute Proposal allows for innovation and specialization to develop among its large issuer base. For example, the average FHA credit score fell from around 720 in 2010 when four issuers dominated the Ginnie Mae market, to 675 presently, when no issuer has more than a 7% Ginnie Mae issuance share. This drop in credit score did not result from regulatory mandates but from compliant credit box expansion by lenders deriving from their respective competitive strengths – for example, having strong ties to minority communities, or expertise in dealing fairly and effectively with distressed borrowers.

Furthermore, in comparison to the MBA approach, which imposes affordable housing requirements at the guarantor/issuer level, the Milken Institute Proposal relies more upon statutory and regulatory affordable lending requirements imposed upon originators in the

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primary market. To the extent that such requirements are found wanting, I would support finding ways through regulatory and/or legislative approaches to improving and strengthening requirements to help close primary market lending gaps. Another potential way to close the lending gap is by conferring upon Ginnie Mae the statutory power to increase and decrease (within stated bounds) the affordable housing strip paid by individual issuers, encourage existing issuers to expand lending to low-and moderate-income and underserved borrowers, and incentivize new issuers to focus on ways to serve those markets responsibly and sustainably. Ginnie Mae would thus be mandated by statute and provided economic tools to ensure that the system as a whole creates an environment which will allow affordable credit and homeownership for every American who has the ability and desire to become a successful homeowner.

Whichever model reform efforts pursue, the future housing finance system must serve the needs of underserved borrowers who are ready for and able to succeed at homeownership, but who cannot access to affordable credit in the present system. At the same time, we must remain vigilant against not only discriminatory practices against protected classes, but also overly restrictive or lax lending practices. We must also remain aware of, and be ready to address, market-driven forces that cause any such dynamic. For example:

- The GSEs currently charge loan level pricing adjustments (LLPAs) for lower credit score and lower down payment loans. These LLPAs operate to increase the cost of the loan to the consumer. Because of the low down payments, these loans must have a Mortgage Insurance (MI) product that stands in first loss position attached to them. However, based on the GSEs' analysis of the MI companies' claims-paying abilities, the GSEs do not give full economic credit to the MI first-loss protection in setting the related LLPAs – despite the fact that MI companies are now subject to much more stringent post-crisis capital and financial standards imposed by the Federal Housing Finance Agency. Thus, the consumer ultimately bears not only the cost of the MI product, but an additional economic charge that derives from the economic inefficiency created by the GSEs' LLPAs with respect to MI products.
- Additionally, the GSEs determine which MI products are eligible for purchase. By reducing the MI products that are eligible for purchase, the GSEs reduce the ability of borrowers to access credit (for example, a borrower may be able to obtain an MI product at a potentially higher – but still affordable – MI premium, but the GSEs may have declared such product ineligible for purchase).
- In contrast, Ginnie Mae allows FHA lenders to decide which FHA programs (which include FHA insurance premiums) they wish to offer and allows such lenders to include

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these loans in their own pools.⁷ Removing the veto power of the GSEs on MI offerings will create an environment that fosters healthy MI company competition and encourages fairly priced products that meet the needs of the market.

3. *Equal access to the secondary market for lenders of all sizes.* Prior to the financial crisis, the GSEs extended preferential volume-based guarantee fee pricing to larger lenders, effectively raising the cost of lending to – and therefore hurting the ability to compete by – smaller and mid-sized lenders. Smaller and mid-sized lenders were limited in their options because the system required all conventional loans to go through the GSE “door” to access the capital markets. The system did not allow for any disruptors to provide an alternative pathway to the capital markets. Guarantee fees are now uniform across the board, and any future housing finance system must preserve this feature in the interest of fairness and equal access to the government-backed secondary market through regulation and dynamic competition.

Key Elements of any Path Forward

It is important to focus on some of the key elements embedded in a number of the thoughtful plans that have been proposed in the government/industry housing finance reform dialogue. Most importantly, a future housing finance system must:

- Put an end to the GSEs’ pre-conservatorship business models that allowed profits to be privatized and losses socialized and paid for by taxpayers;
- Oppose any efforts to recapitalize and release the GSEs from conservatorship with their flawed and conflicted business models intact, along with their implicit government guarantee and protected market positions; and
- Foster a more competitive secondary market system where no entity is too big to fail, and one in which sufficient private capital stands in front of an explicit and paid-for government guarantee of qualified mortgage-backed securities.

And, in considering future possibilities, lawmakers must:

- Decide how to incorporate the considerable tangible and intangible assets of the GSEs into a modern and sustainable housing finance system;
- Decide whether the GSEs should continue as shareholder-owned companies, regulated as public utilities, or become government-owned entities;

⁷ For example, the four large bank issuers that dominated Ginnie Mae MBS issuance early in my tenure at Ginnie Mae included credit overlays in their origination programs that disallowed FHA originations at the lower end of the credit spectrum. Other Ginnie Mae issuers recognized the opportunity in this lending space and, under the Ginnie Mae construct, were able to originate such loans and include them in their own Ginnie Mae MBS issuance.

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- Utilize existing infrastructure to the greatest extent possible, even if that means shifting some tools, functions, units, personnel, or information (including GSE historical data) from one entity to another, or from one platform to another; and
- No matter what the future state of the housing finance system, remain dedicated to the goals of creating a safe, sound, and resilient U.S. housing finance system that serves the needs of all consumers.

Encourage the Return of a Safe Private Label Securities Market as a Meaningful Source of Private Capital

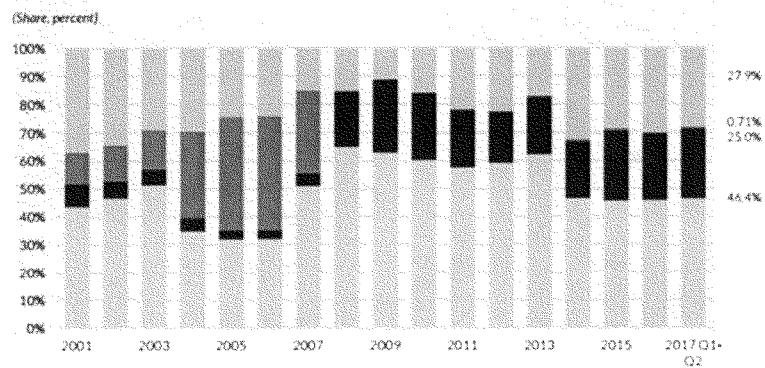
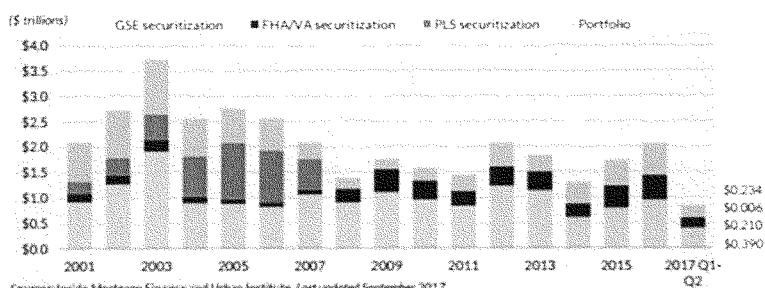
Private capital is the other side of the coin from a government guarantee. Private capital comes in the form of down payments, private mortgage insurance, portfolio lending, secondary market purchases, credit risk transfer structures, issuer/guarantor capital, financial institutions' balance sheets, and also private label securitization (PLS). The PLS market has been virtually non-existent in the post-crisis world not only because economics have favored GSE or Ginnie Mae execution and bank balance sheet portfolio activity, but also because of the role PLS played in the Financial Crisis. For example, the following charts illustrate the relative sizes of the different market shares by dollar volumes and by percentages.⁸

⁸ Urban Institute, *Housing Finance at a Glance: A Monthly Chartbook* (October 2017), p. 8.

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First Lien Origination Volume

After a record high origination year in 2016 (\$2.1 trillion), the first lien originations totaled \$840 billion in the first half of 2017, down 6 percent from the same period last year, mostly due to the elevated interest rates. The share of portfolio originations was 28 percent, down slightly from 30 percent in 2016, despite an increase in Q2 2017. The GSE share stayed at about 46 percent. The FHA/VA share was slightly up: 25 percent for the first half of 2017 versus 24 percent in 2016. Origination of private-label securities was well under 1 percent in both periods.



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Many have cited deficiencies and weaknesses in PLS contracts, governance, structures, and collateral as a leading cause of many billions of dollars of “misallocated losses.” By misallocated losses, I mean losses that were supposed to be borne by one party in a PLS deal (typically – but not exclusively – the seller, issuer, or servicer) but were instead borne by another party (typically the investor) because the architecture of the trusts lacked sufficient means or mechanisms to detect, pursue, and enforce contractual breaches and violations. These misallocated losses spurred a crisis of confidence and resultant “trust gap” on the part of the institutional investors who bore them, and who are necessary parties to the re-emergence of PLS as a meaningful part of a future housing finance landscape.

Industry efforts – in particular, the Structured Finance Industry Group task force “RMBS 3.0”, which one of my Milken Institute colleagues chairs – are working to address and solve for the issues that plagued the PLS market in the few years running up to the Financial Crisis. This effort will also include an analysis of GSE credit risk transfer (CRT) deals, which, by directly exposing investors to credit risk of the underlying loans, are essentially no different than PLS transactions. In that light, the contractual standards and disclosures in CRT deals should mirror those in PLS, notwithstanding certain differences in existing laws and regulations relating to PLS and GSE issuances. At present, some of the post-crisis rules and practices relating to PLS issuance represent vast improvements over their pre-crisis counterparts, while other post-crisis rules and practices that were intended to represent improvements have or will have little to no impact. Additionally, in some cases new practices are emerging that actually weaken investor protections vis-à-vis pre-crisis transactions – not through contractual weakness or deficiencies, but through relatively transparent provisions that ring-fence issuer liability at the expense of investor protections or limit the investor’s ability to take action against an issuer. Some investors are comfortable buying securities from these latter transactions, while others deliberately steer clear of them. It remains to be seen how much traction these deals will generate, and whether they or the deals with stronger investor protections become the longer-term PLS template.

As a gating matter, however, the economics and potential market size of PLS are the critical governors to its resurgence. The large institutional investors necessary to support such a market will likely not participate in it if the economics and market share do not support a large and liquid investment opportunity relative to other potential investments. Because of this, it is imperative that conforming loan limits be reduced over time no matter which housing finance reform plan is enacted. The post-crisis political and economic conditions that drove the rise in limits to help ensure liquid markets and access to credit have greatly subsided, and there should be – preferably through administrative action rather than by legislation – a systematic ratcheting down of first the super-conforming loan limits, and then the conforming loan limits as the PLS market develops. In addition, policymakers, regulators, and industry should review whether the government should continue backstopping certain types of products, such as vacation homes, investment properties, and high combined loan-to-value cash-out refinances where the cash-out proceeds are not used to pay for designated expenses such as home improvement, medical expenses, school tuition, and similar purposes.

This is why the work on PLS (and for that matter, GSE) reform efforts must be accomplished before or concurrently with a resurgence in the PLS market; safer PLS architecture must accompany attractive economics if the PLS market is to help create new, competitive lending channels without the

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weaknesses and deficiencies embedded in many pre-crisis deals. The PLS market must be ready to handle the potential volume that would follow a decrease in conforming loan limits in order to ensure a PLS price execution that would support compliant, competitively priced lending to many Americans who might otherwise find it difficult to access mortgage credit.⁹

Ultimately, securitization is a tool that, when transacted properly with well-underwritten loans and accurately disclosed information, can provide a meaningfully sized, scalable, and liquid pathway for private capital to stand in front of a catastrophic government guarantee. It is therefore imperative that, as an industry, we work together with policymakers, regulators, and other industry participants on this effort.

Conclusion

The U.S. housing market has rebounded in significant and positive ways since the Financial Crisis, and I commend policymakers, regulators and industry for working together in the face of tremendous adversity to navigate perhaps the most challenging socioeconomic event since the Great Depression. However, we have much yet to do to cement the foundations of a reformed housing finance system that will serve the needs of the market and of the American people now and in the future. On behalf of the Milken Institute Housing Finance Program within the Center for Financial Markets, I urge the Committee and all of Congress to seize this opportunity and collaborate in crafting legislation that would accomplish this critical mission. We stand ready, willing and able to assist the Committee and all other policymakers, regulators and industry in this undertaking.

Thank you.

⁹ Also, we believe that the promulgation of clearer lending regulations – as opposed to “rulemaking by enforcement” – would also greatly benefit the healthy resurgence of the PLS market. Rulemaking by enforcement imparts ambiguity into the primary and secondary markets and poses potentially significant damages for industry participants, which chills the proper functioning of markets and, ultimately, hurts the consumer by restricting access to credit or driving up the price of that credit.



Statement before the House Committee on Financial Services
Subcommittee on Housing and Insurance
On

Sustainable Housing Finance

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November 7, 2017

Testimony before the House Financial Services Committee, Subcommittee on
Housing and Insurance

November 7, 2017

Peter J. Wallison

Chairman Duffy and Ranking Member Cleaver:

I am grateful to the Subcommittee for the opportunity to testify today. In its invitation letter, the Subcommittee asked for my “perspective on the need for comprehensive housing finance reform, the legal, statutory or regulatory impediments to the return of private capital to the housing finance system and what factors and metrics Congress should consider to reform the housing finance system.”

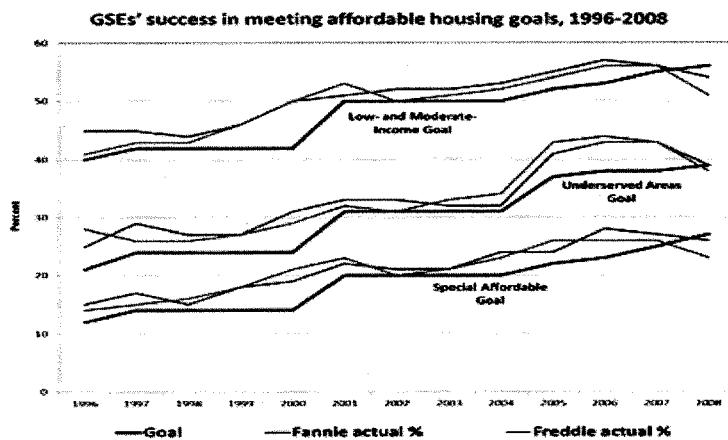
My view is that the best and most effective housing finance reform would be to completely eliminate the government’s role in housing finance, and to let private capital and the private sector operate the housing finance system. There is nothing about the way the government has managed the housing finance system for the last 50 years that would remotely recommend a continuing government role.

Later in this testimony, I will show that the government’s policies—and particularly those implemented by the government-sponsored entities (GSEs) Fannie Mae and Freddie Mac—have done nothing to advance home ownership. In fact, they have seriously impeded the growth of home ownership in the United States and continue to do so in the government conservatorship that currently controls them. But first, I want to describe briefly the relationship between government housing policies and the 2008 financial crisis—a genuine catastrophe for the US and world economy that was caused directly by the US government’s housing policies.

In 1992, Congress adopted a program called the Affordable Housing Goals. These required the GSEs to meet an annual quota of low and moderate income (LMI) mortgages when they purchased mortgages from banks and other originators. Initially, the goal was 30%—that is, in any year, 30% of all the mortgages Fannie and Freddie acquired had to have been made to borrowers at or below median income where they lived.

Before 1992, the GSEs acquired only prime mortgages, and this was thought by community activists and many in Congress to have limited the ability of LMI borrowers to buy homes; the goals were adopted to address this concern. Although the initial quota was 30%, HUD was given authority to increase the goals in later years. Beginning in 1996, and continuing until 2008, HUD aggressively increased the goals, so that by the year 2000 the goal was 50%, and by the year 2008 it was 56%. This meant that in 2008, more than 50% of all mortgages the GSEs acquired had to be made to borrowers who were at or below median income. The chart below shows the increase in the goals between 1996 and 2008, together with the GSEs’ compliance through 2008. As can also be seen from the chart, the sharpest increases in goals occurred in the Underserved and Special Affordable categories, thus requiring ever greater loosening of credit standards.

The chart shows clearly that as the goals increased over these years, so did the GSEs' purchases of mortgages made to borrowers at or below the median income.

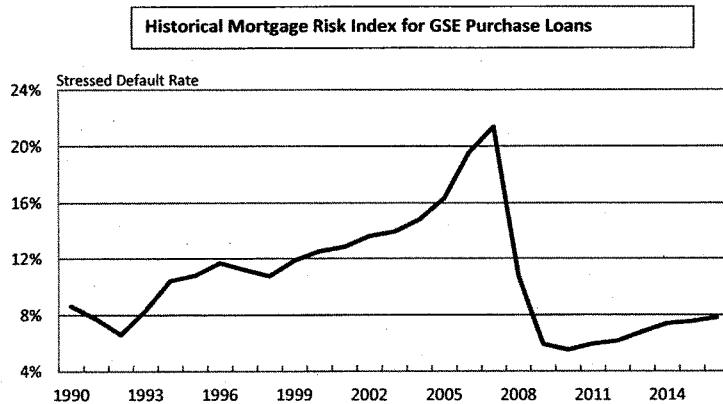


Source: FHFA

As the goals increased, the GSEs could not find a sufficient number of prime mortgages to meet the goals, and they began to reduce their underwriting standards. The most significant change was a reduction in the downpayment they were willing to accept. Although a prime mortgage usually required a 10 to 20% downpayment, beginning the mid-1990s the GSEs began to accept 3% downpayments, and by 2000 they were accepting 0% downpayments.

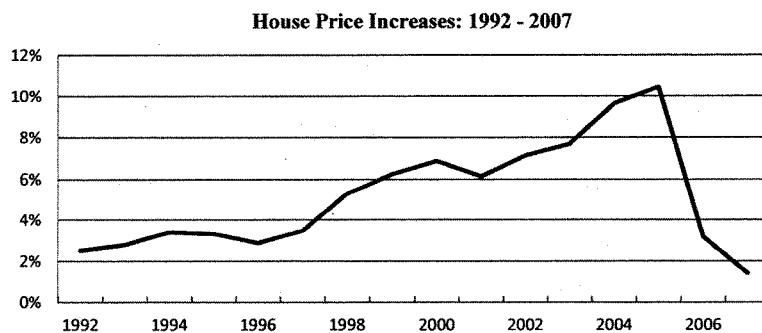
Because the GSEs were the dominant players in the housing finance market, acquiring almost 50% of all loans during the boom years, their willingness to acquire loans with low downpayments meant that banks and other originators could make those loans and still sell them to the GSEs. In fact, top officials of the GSEs were telling the banks that they wanted those loans to meet the goals. In addition, and importantly, there was no way to limit the lower underwriting standards and downpayments to LMI borrowers. By the year 2000, 30% of the mortgages with low down payments that the GSEs were acquiring were made to borrowers above the median income. In this way, underwriting standards throughout the housing market declined.

The chart below, which uses internal FHFA data in part, shows how the risks of the GSEs increased over the period after the adoption of the goals 1992. It is important and telling to note how closely the increase in the GSEs' risks matches the growing bubble in housing prices.



Note: Data pertain to 1-4 unit, first-lien home purchase loans. Source: Internal FHFA data.

Low downpayments mean that home buyers use more leverage to buy homes—that is, they borrow more to buy more expensive houses. For example, if a potential buyer has \$10,000 to buy a home and the downpayment required is 10%, the buyer can purchase a \$100,000 home. But if the downpayment becomes 5%, the buyer can purchase a \$200,000 home with the same \$10,000 downpayment. He simply borrows \$190,000, instead of \$90,000. This additional leverage puts upward pressure on housing prices—and that is exactly what happened, beginning in the mid-1990s, as the GSEs reduced their underwriting standards in order to meet the goals. This is clearly shown in the chart below.

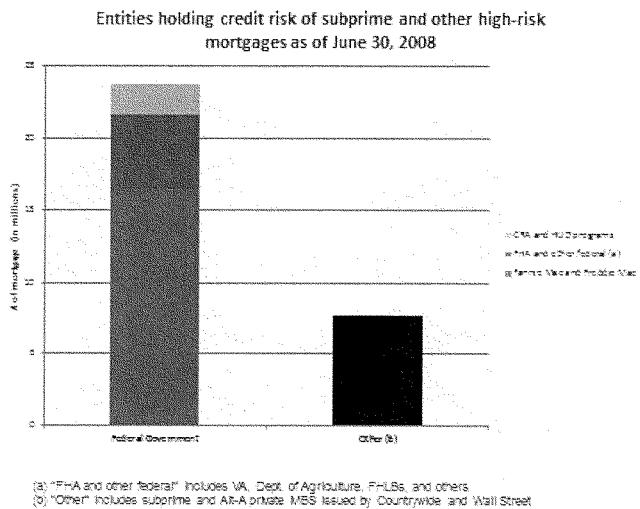


Note: Chart displays percent change from fourth quarter of prior year to fourth quarter of year shown for U.S. as a whole.
Source: FHFA expanded-data house price index.

As a result, throughout the late 1990s and into the 2000s, the GSEs became avid buyers of subprime and Alt-A mortgages, including private mortgage-backed securities (PMBS) secured by mortgages within the conforming loan size limits. Between 2003 and 2006, the peak years of

the housing bubble, Fannie and Freddie acquired about 50 percent of all Alt-A loans and 40 percent of all subprime loans originated nationally (including both whole loans and PMBS backed by Alt-A and subprime loans). This included about 25 percent of all the AAA rated PMBS backed by prime, subprime, and Alt-A mortgages and about 43 percent of all PMBS (whether or not rated AAA) backed by subprime and Alt-A mortgages. Since the GSEs were limited to PMBS backed by mortgages within the conforming loan limits, their percentage of conforming subprime and Alt-A PMBS was certainly well above 50 percent.

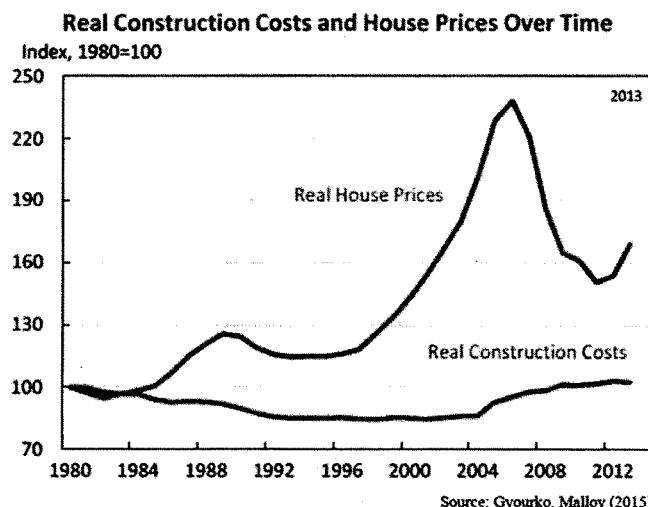
By 2008, more than half of all mortgages in the US were subprime or Alt-A, and 76% of them were on the books of government agencies, primarily Fannie and Freddie, as shown in the graph below. The other government holders were FHA and other HUD programs. This shows, without question, that it was the government that created the demand for these mortgages, causing the unprecedented housing price bubble and the 2008 financial crisis when the bubble collapsed. In addition, of course, the financial crisis caused billions of dollars in losses for US taxpayers and—because the crisis was falsely blamed on insufficient regulation of the financial system—it was also responsible for the enactment of the Dodd-Frank Act, which caused 8 years of slow growth for the US economy.



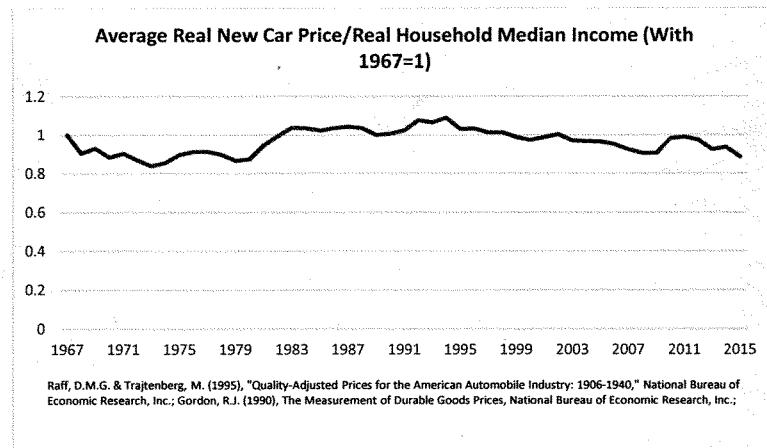
Notwithstanding trillions of dollars in direct and indirect subsidies, the current homeownership rate of 63.9% is statistically no different than the average rate of 64.3% since 1964 (excluding the bubble years). Thus, the US government's housing policies over all these years have failed to provide a reliable and stable system of economical or affordable housing all Americans, and particularly for moderate and low income homebuyers. The United States, a

country which has grown to world dominance because of its free and innovative economy, is the only developed country with a housing finance system completely dominated by the government. Yet, amazingly, in spite of all the funds the government spends on subsidizing housing—including various tax benefits—the US ranks only 17th among developed countries in home ownership.

The chart below really tells the whole story. We can see the enormous bubble between 1997 and 2007, but during the same period the growth in construction costs were stable. The difference between the two is that the government controls the housing finance system, while the government has no role in housing construction. Construction costs, instead, are negotiated between developers and contractors.



In case anyone thinks that the housing market is an anomaly because it is so large, the chart below shows the US automobile market—another market where the government has no role, and pricing is based on negotiation between consumers and manufacturers. As the chart shows, prices in that market have remained stable in terms of median household income even though the quality of automobiles has improved markedly over this period.



Accordingly, anyone who looks at the US housing market today can tell that it is badly afflicted by government control and government policies. For that reason, a sound housing finance reform would simply eliminate Fannie Mae and Freddie Mac. This would go a long way toward creating the kind of stable market in which—as in the auto market—the private sector produces what the public demands at a price the public is willing and able to pay.

Nevertheless, those who want continued government involvement in housing finance support their position by claiming a lot of benefits that can be proven to be false. Once this is clear, it also becomes clear that the government should have no significant role in the housing finance system, and that should be the recommendation of this committee.

Because the GSEs are the principal element of the government's policies, I'll focus in the rest of this testimony on what they do and what effect their actions have. The same arguments generally apply to FHA, although a smaller, carefully controlled, government role in assisting low income borrowers could have some value.

a. The GSEs do not reduce interest rates

Two facts are largely unknown even to those who regularly participate in the debate over housing finance policy. First, our analysis at AEI shows that since 2014—even after controlling for the risk characteristics of the mortgages—the private market (primarily banks acquiring mortgages for portfolio) has been offering mortgage loans with *lower* interest rates than the GSEs. Accordingly, despite their government backing and the subsidies and costs that entails, the GSEs do not offer lower rates than banks and other portfolio lenders.¹ This will certainly come

¹ Since 2014, jumbo rates on closed 30-year term loans have been about 25 basis points below GSE rates for loans with the same risk characteristics. See: [Jumbo-GSE Rate Spreads Before, During, and After the Financial Crisis](#) presented at the Sixth Annual AEI-CRN Conference on Housing Risk. Unpublished research found similar risk adjusted rate differentials on smaller balance loans, loan term, various LTV bands, and loan tenure.

as a surprise to the members of Congress who have been told for years by the Housing Lobby that the GSEs' lower mortgage interest rates were helping put Americans in homes.

In addition, as noted above, the private sector mortgages that we compared to GSE mortgages were 30 year fixed rate loans, which are readily available from private sector lenders without a government guarantee. Many members of Congress have been told by the Housing Lobby over the years that there would be no 30 year fixed rate mortgages without government backing, but our research—described above—shows that this is false.

In saying this, I do not mean to imply that a 30 year fixed rate mortgage is a good idea for a family. It is not. It is favored by Realtors and homebuilders because—by lowering the monthly mortgage payment—it increases home prices and thus their profits, but it prevents families from developing equity in their homes. Indeed, a buyer could get a lower interest rate by negotiating a 15 or 20 year mortgage, because the build-up of equity on these mortgages in the early years decreases their riskiness to the lender.

b. GSEs do very little to help low or moderate income families buy homes

This will certainly be another surprise to members of Congress who have been told that the GSEs were the mainstays of a housing finance system that was directed at increasing home ownership. It turns out that only a small percentage of GSE activities is involved in helping people buy first homes, especially LMI borrowers; most of what they do is refinance mortgages—something that the private sector could easily do.

The pie chart below shows all the government's activity in housing finance, including loans for both purchasing and refinancing a home. For the purpose of this discussion, I will focus only on those families taking out loans for less than \$250,000 with a downpayment of less than 15 percent.² I think everyone would agree that the families trying to buy a home in this range are the ones who we should most want to help through government policies. Half of these households have an estimated income below \$66,000, which is 120 percent of US median household income.³

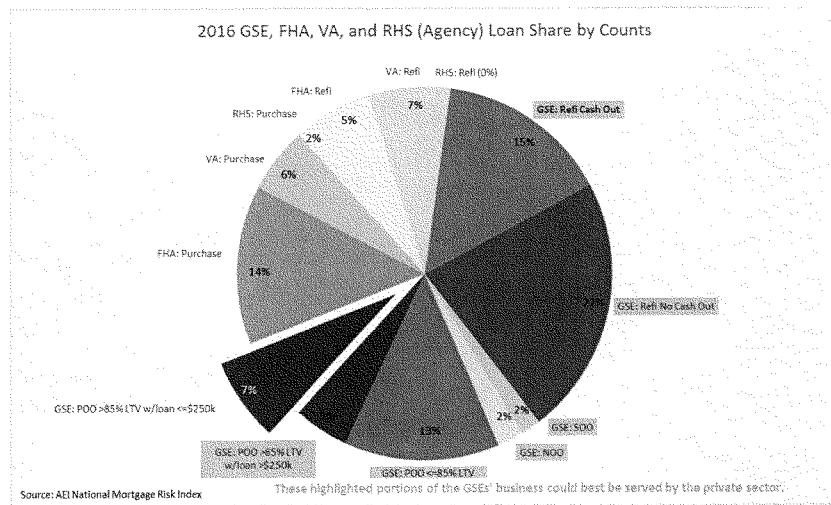
As the chart below shows, GSEs' activities in helping these families buy homes are only 7% of all the government's residential finance activities, and that is only 11% of all GSE home finance activity. So the taxpayers are at risk for about \$5 trillion in GSE debt in order to help only 7% of those LMI borrowers whom the government should most want to help. Indeed, as I pointed out earlier, the GSEs' policies actually drove up housing prices and thus hurt, rather than helped, LMI as well as other borrowers.

About 18% (or 27% of total GSE activity) were home purchase loans greater than \$250,000, with a median borrower income of \$122,000 or with downpayments of 15 percent or less. The median sales price for a US home in 2016 was around \$275,000. These were loans that could easily have been made by the private sector. The GSEs were not necessary to help these

² A \$250,000 mortgage with less than 15 percent down represents a downpayment of about 10 percent and a sales price of about \$275,000, slightly above the median sales price for new and existing homes purchased in 2016.

³ Source: HMDA 2015

homebuyers, especially when the GSEs do not—as noted above—reduce interest rates. They would get a better deal borrowing from a bank or credit union.



Note: POO: Primary Owner Occupied, SOO: Secondary Owner Occupied or second homes, and NOO: Non-Owner Occupied.

As noted earlier, the balance of the GSEs' activity is involved with refinancing of mortgages, financing second homes (second owner occupied, SOO), or financing investor purchases of houses (non-owner occupied, or NOO) which are used for rental. This GSE activity, which was 41 percent of all government activity (and 62 percent of total GSE activity), involved cash-out and other refinances, non-owner occupied loans, and loans on second homes. None of these activities contributes to home ownership by the families who want to buy a first home, and all of these activities can be done by the private sector at rates commensurate with the risks they reflect; there is no reason the government should subsidize these products or that the taxpayers should be burdened with the risks and costs they entail.

The GSEs' cost to the Treasury. All this GSE activity, which has nothing to do with promoting home ownership, is very costly to the Treasury and thus to the taxpayers. The GSEs and their supporters often argue that because many investors, including foreign central banks, are required to invest only in sovereign or sovereign-guaranteed debt, the GSEs have a ready market around the world. This is often treated as a great benefit—attracting global credit to the US housing market—but it is actually a burden for the taxpayers. Because the GSEs' debt pays slightly more than Treasury securities, and is regarded as a legal investment for many sovereign

and private investors that are restricted to acquiring only sovereign debt, it is often a *substitute* for Treasury securities. This means that to the extent that the GSEs sell debt abroad—or even in the US—they are reducing the demand, and thus increasing the interest costs, of US Treasuries.

Our calculations show that competition from the GSEs' debt costs the Treasury about \$17 billion to \$29 billion each year. The GSEs' small contribution to assisting buyers of more modest homes cannot possibly justify the GSEs continued dominance of the housing finance market, free taxpayer support, or this large a cost to the US Treasury.

c. The GSEs and other housing policies increase housing prices and makes homes less affordable

US housing policy has created a housing finance system that is an “economics free zone,” substituting government intervention and its inevitable market distortions for the price signals a true housing finance market would provide. This government-dominated system has promoted a massive liberalization of mortgage terms, countless trillions of dollars in lending, and many millions in home foreclosures, yet housing has become less—not more—affordable, and less—not more—accessible.

Mortgage underwriting standards, and not interest rates, are the key determinants of housing prices. To some extent, of course, all things being equal, housing prices will be higher in a market where interest rates are low, but the most important factor in housing prices is leverage—the amount of money that a home purchaser is able to borrow and still qualify for a mortgage.

Today, for example, the GSEs are willing to acquire mortgages with 3 percent (or even 1 percent⁴) downpayments, which—as described earlier—means that the homebuyer will be borrowing 97 percent or more of the price of the home. What this really means in practical terms is that the buyer reaches for the most expensive house that the loan puts within reach. This exerts strong upward pressure on home prices. The GSEs are also willing to accept mortgages from borrowers who have debt-to-income (DTI) ratios higher than 43 percent and recently announced a willingness to accept DTIs as high as 50 percent.⁵ This increase in income leverage further accelerates housing prices.

As explained above, it is easy to see how this works to hurt first time home buyers. By subsidizing home ownership through tax benefits (deductibility of interest on mortgages) and other home ownership programs, the government increases demand; by subsidizing such agencies as Fannie and Freddie to acquire mortgages with low down-payments and high debt-to-income (DTI) ratios, the government increases the leverage in the housing market, which raises home prices.

Policies like this drive up housing prices and make houses less affordable for first-time home buyers. In 1989, nearly 90 percent of U.S. housing markets were rated as affordable (a median home price to median income ratio of 3.0 or less) with only 4 percent rated as severely

⁴ <http://www.chicagotribune.com/classified/realestate/ct-re-0618-kenneth-harney-20170614-column.html>

⁵ Desktop Underwriter/Desktop Originator Release Notes - Fannie Mae June 29, 2017

unaffordable (a ratio of greater than 5.0). However, fueled by 13 years of continuous growth in loan leverage, the median house price nationally increased from 2.86 times the median income at the end of 1992 to 4.05 times median income in 2006. After more than a decade of government affordable housing policies, when lending standards had been hollowed out, less than a third of markets were affordable, and 30 percent of markets were severely unaffordable. Today, after the collapse of house prices in 2008, the affordability index stands at 3.32, up from its low point of 3.03 in 2012, an increase of about 10%. Although homeownership hit a high of 69.2 percent in 2004, it now stands at 63.9 percent. The result of affordable housing policies? Higher leverage, a lower homeownership rate, and reduced affordability.

In the New York City and Los Angeles areas, affordability numbers are even worse, standing at 5.51 and 8.81, times median income, respectively.⁶ This may be endurable for people who already own homes, since they will benefit from the rising prices in the market. They can sell their existing home and use the proceeds of sale for the purchase of another or larger home. But first time homebuyers—who have to scrape together the funds to buy a home—are the ones who are hurt by these policies which continuously drive home prices higher than incomes rise.

As of September 2017 we have had 61 straight months of a seller's market (defined by the National Association of Realtors as less than 6 months of housing inventory for sale). As a result, national real home prices are 28 percent above their 2012 trough. This is roughly the pace that eventually led to an enormous housing price bubble in 2007 and the financial crisis when the bubble collapsed in 2008. More ominously, prices on entry-level homes are rising at an even faster rate.

d. Government policies and low-income homeownership

For the reasons described above, the underwriting policies of the GSEs (and other government guarantee agencies) cause home prices to rise and make homes for low-income first-home buyers unaffordable. It is not too much to say that US homeownership policy—notwithstanding the countless trillions of dollars in home loans and the massive liberalization of credit terms—has completely failed to achieve its two primary goals: broadening access to homeownership, and achieving wealth accumulation for low- and moderate-income homeowners.

Government housing policies—implemented primarily through the GSEs, but also including the FHA, VA and others—try simultaneously to expand demand, increase liquidity and leverage, and provide subsidies to “fill in” the resulting “price or affordability gap.” It is all, ostensibly, in the name of increasing home ownership, but that too has been a failure. In 1964, the homeownership rate in the US was 64 percent. It was still 64% in 1995. After HUD's aggressive increase in the goals quotas, beginning in 1996, the homeownership rate reached almost 70%. Then came the crash in 2008, and the homeownership rate in the US today is now 63.9%. So all the activities of the GSEs and other government agencies between 1992 and 2008 achieved nothing in terms a long term increase in homeownership, but it produced a financial

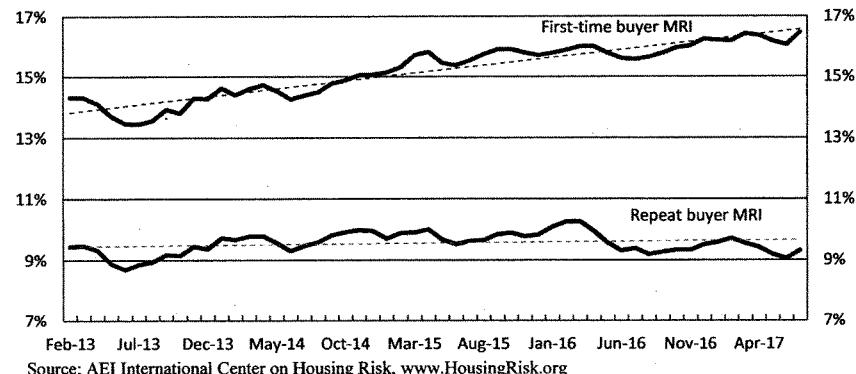
⁶ Source: created by AEI scholar Ed Pinto where price is *ZHVI All Homes* series and income is seasonally adjusted *Median Household Income* series for all homes, <https://www.zillow.com/research/data/>

crisis, huge taxpayer losses, and legislation—in the form of the Dodd-Frank Act—that has given us almost a decade of slow economic growth.

The consequences were particularly dire for first-time low-income homebuyers. They were faced with rising prices that exceeded the increases in their incomes. The government attempted to mitigate the consequences of its policies by doubling down on them—pressing agencies like the GSEs to further reduce their underwriting standards, especially downpayments and debt ratios. Many of these buyers, lured into buying homes that they couldn't afford, lost their homes in the collapse of the housing bubble. .

The chart below shows that the same thing is happening again, with first-time buyers taking on more risk than repeat buyers. This is because the most substantial effect of the government's leverage policies occur at the first-time buyer level. Repeat buyers usually benefit from an increase in the value of the home they are selling.

Agency First-Time and Repeat Buyer Mortgage Risk Indices



e. The high cost loan limits are unnecessary and contribute to higher home prices

The purpose of the high-cost limits is to promote home buying in high cost areas. As noted earlier, the people who live in any of these areas do not need government help to buy homes. They have significant family incomes. But the way the high cost area loan limits work is to artificially raise housing prices by encouraging all buyers to make maximum use of what they believe—wrongly, as it turns out—is a government subsidy.

For example, in our work at AEI, we studied what happens when the GSEs' loan limits are raised. We found that the higher limits did little to spur new demand for homes. Instead, we found that as the limits were raised there was immediate bunching at the higher limit, and all the bunching at the lower limit disappeared. This suggests that the main effect of the high cost area

limits is to induce borrowers to take out the maximum loan amount they can get to either increase the amount of their purchase price or to reduce their downpayment, or both. In either case, the benefits to homeownership are minimal; what occurs is an increase in home prices.

Because the shift that occurs is instantaneous, the system is likely gamed by borrowers/realtors/loan officers, who suggest to buyers that the higher limit offers a subsidy that they should not miss using. This conclusion is reinforced by further research that found that about one-third of GSE high cost area loans have LTVs in excess of 80 percent vs. only 17 percent of private loans in the same high cost areas, suggesting that buyers stretched for more debt under the high cost limits to buy more expensive homes.

Conclusion

It is not possible to arrest this process when the government controls the housing finance system, as it does today.

The government itself has strong incentives to take and keep control of the housing finance system. One of the quickest ways to boost economic growth is to increase the sale of homes. This promotes the purchase of rugs, furniture and construction materials, spurs employment, and can be presented as realizing the American dream.

The result is always the same. A housing boom feeds on itself as buyers, lenders, and government guaranty agencies conclude that the growth will continue and thus the risks of lending and borrowing are low; and the boom continues until house prices are so high that no amount of concessionary lending will enable buyers to pay for them. Then the decline begins, as it did in 2007, and large percentages of first-time buyers lose their homes and whatever downpayments they made—and/or taxpayers suffer a loss bailing out the government agencies like the GSEs that bought the risky mortgages.

The only way to stop this process is to gradually remove the government from the housing finance system. What will happen then is that the private sector will gradually return to create a market in which prime mortgages will predominate. With leverage declining, house prices will stabilize. Then the private homebuilding market takes over, providing homes in the size—and with the amenities—that first-time buyers can afford. While price booms cannot be eliminated completely, the pain caused by bubbles and crashes is much less in a market where prime loans predominate.⁷

Even if private mortgage rates rose to the rates currently found on GES-guaranteed loans, and downpayments have been raised to at least 10 percent, it will be easier for first-time buyers to find a home they can afford because homebuilders will build them to be sold in that market.

⁷ In July 2017, only about 57 percent of agency guaranteed home purchase loans had a risk rating of prime (an NMRI value of 6 percent or less). For the same month, only 2 percent of FHA insured loans had a risk rating of prime.

Written Testimony of Mark Zandi
Chief Economist, Moody's Analytics

Before the House Financial Services Committee Subcommittee on Housing and Insurance

"Sustainable Housing Finance Part III: Private Sector Perspectives on Housing Finance Reform"

November 7, 2017

What to do with Fannie Mae and Freddie Mac? This question has plagued policymakers since the mortgage behemoths were placed into government conservatorship during the financial crisis almost a decade ago. Various legislative efforts to restructure the government-sponsored enterprises and significantly scale back government support and taxpayer backing have failed. Yet no one is happy with Fannie and Freddie in this limbo. This testimony considers the critical criteria that must be met for housing finance reform to succeed and how the principal proposals to reform the system stack up relative to these criteria.

Defining successful reform

The success of any housing finance reform depends on its ability to satisfy six essential criteria, including ending too-big-to-fail, fully protecting taxpayers, providing equal access to the system for underserved communities and lenders of all sizes, maintaining affordable mortgage rates for borrowers under all market conditions, promoting competition, and easing the transition from the current system to the future system.

The future housing finance system must end the reliance on too-big-to-fail financial institutions. Fannie and Freddie were too-big-to-fail, and the cost to taxpayers of forestalling their failure during the financial crisis was considerable. In the future system, no private institutions should be indispensable to a healthy, well-functioning secondary mortgage market, or be able to dominate the market by controlling its infrastructure or taking a significant share of the system's credit risk.

Taxpayers must be fully protected from suffering any losses in the future system. This requires that there is substantial private capital in the system, sufficient to withstand losses in all but the most catastrophic economic scenarios. The federal government should stand behind the system, backstopping it against these dark scenarios, but mortgage borrowers should pay taxpayers for the cost of this backstop. Taxpayers should also have the ability to claw back from borrowers any costs they incur in backstopping the system.

Maintaining broad access to mortgage credit for those in a position to become sustainable homeowners is one of the most important and widely supported objectives of housing finance reform. For this to mean anything, though, not only must borrowers be able to find a lender willing to make them a loan, they must be able to find one willing to make them a loan on terms that they can afford.

Equal access for lenders of all sizes is also necessary to ensure sufficient competition in the future system.

The future system must not result in significantly higher mortgage rates while still providing the necessary capital buffer to protect taxpayers and the appropriate access for underserved borrowers. The system must also be flexible enough to ease the impact on mortgage rates and credit availability during tough economic times when private sources of capital will either be unwilling to provide capital or require such a high return that it would cause rates to spike. This requires a catastrophic government backstop.

Competition in the future system is necessary to ensure that mortgage borrowers are offered innovative loan products with attractive terms and interest rates. This includes promoting competition in the primary lending market, the markets for taking credit risk, and the secondary market. It is also critical that competition in the system is not based on inappropriate underwriting standards, which will result in unsustainable lending and an unstable system.

Finally, the transition from the current system to a future one must occur with as little disruption, uncertainty and risk as possible, building upon steps already under way. This includes Fannie and Freddie's current work to build a common securitization platform, or CSP, and the GSEs' current risk-transfer efforts. It is critical to move in an incremental fashion because the deep structural reform called for will require significant change to a complex and critically important system. The process of transition should be approached with an appropriate level of humility and flexibility in the face of the difficulty and importance of the challenge.

Reform proposals

A wide range of proposals have been put forward to reform the housing finance system since Fannie and Freddie were put into conservatorship during the financial crisis. They differ in many ways, but most fundamentally with regard to what to do with Fannie and Freddie, the role of the government in the future system, and the reliance on the current secondary market infrastructure. The most notable proposals, rank ordered from least to most viable when considering economic and current political factors, include a system with no government backstop, recapitalization and repivatization of Fannie and Freddie, an expanded Ginnie Mae issuer-based system, a government corporation, and a multiple guarantor system. Each of these proposals is described briefly, and their advantages and shortcomings assessed in the context of the six critical criteria for reform.

No government backstop

Arguably the most disruptive GSE reform proposal would be to put Fannie and Freddie into receivership and sell off their assets. Outside of the FHA, there would be no government support to the housing finance system—the system would be privatized. This is the future system envisaged by legislation that passed the House Financial Services Committee in 2013, known as the PATH Act.¹

The principal advantage of a privatized system lies in its stronger incentives for prudent mortgage lending. Mortgage originators, issuers, rating agencies and investors would understand that if things go badly and defaults rise, they will suffer the consequences. Of course the incentive depends on how strongly investors believe that the government will not intervene, even in bad times. Moreover, the

collapse of the private label securities market during the recent housing bust demonstrated that imprudent risk-taking can occur in a private market, even where enormous losses are possible.

A privatized system would also protect taxpayers by restricting the government's ability to provide implicit subsidies to the mortgage and housing markets. The FHA would still be a potential source of subsidy, but this would be explicit. There is thus less risk that capital would be misallocated toward housing and away from more productive activities.

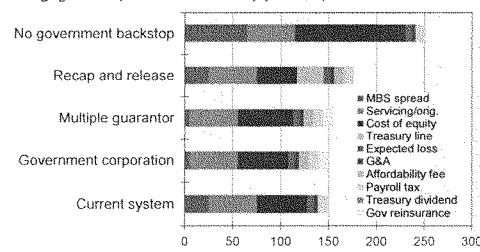
The systemic risks borne by taxpayers should also be reduced, at least in theory. In a truly competitive private market, Fannie and Freddie's roles would presumably be filled by smaller institutions that would not threaten the system if they fail. However, given scale economies in mortgage lending and servicing and historical precedent, it is very possible that the market would become more concentrated, with greater too-big-to-fail risks.

Complete privatization is much more plausible in theory than it would be in practice. Private capital is not limitless, and there are plausible catastrophic scenarios, similar to the Great Recession, that would completely wipe it out. At that point, the government would have little choice but to intervene, or the system would collapse. Regardless of what policymakers say, global investors will almost surely continue to believe the U.S. government would step in if housing foundered. This was amply demonstrated in the financial panic when the government rescued Fannie and Freddie, after saying for years that it would not do so. After Congress' approval of the Troubled Asset Relief Program and the bank bailouts, investors believe Washington will inevitably act if the broader financial system is in danger.

The potential advantages of privatization would also be overwhelmed by disadvantages in the form of much higher mortgage rates and a much less stable source of mortgage funding across the economy's ups and downs. The 30-year fixed-rate mortgage, the bedrock of mortgage lending since the Great Depression, would also be significantly diminished. Under the kind of system envisaged in the PATH, providing the system with enough capital to withstand a mortgage default loss rate of 5%—about the system's current capitalization level—would drive mortgage rates nearly 90 basis points higher than they currently are (see Chart 1).

Chart 1: Housing Finance Reform Impact on Mortgage Rates

Mortgage rate spread with Treasury yields, bps



Source: Moody's Analytics

Recap and release

Perhaps the least disruptive approach to GSE reform would be for the GSEs to be simply recapitalized and then reprivatized.¹¹ Since Fannie and Freddie were remarkably profitable prior to the crisis, and have consistently been in the black in recent years, the logic for this proposal is that we can simply return to the system that prevailed prior to the crisis, albeit one that is more highly capitalized and regulated and that has an explicit government guarantee that is paid for by borrowers.

There are a number of concerns with the wisdom of releasing the GSE duopoly back into the private market. Most significant, the secondary market would be reliant on two too-big-to-fail financial institutions. They would continue to handle the securitization in this part of the secondary market and ultimately be responsible for all of its credit risk. Given our reliance on them, everyone in the market would know that they would be bailed out if they ever stumbled. Their shareholders would thus continue to be incented to take excessive risk to chase greater profits, knowing that if their bets did not pay off, the taxpayer would step in to cover them. And that, of course, is precisely what happened pre-crisis. Coming out of the crisis, there was thus almost universal agreement that we should reduce our reliance on this duopoly and shift more risk into a competitive private market.

The economics of recap and release are also problematic. There is no going back to the world pre-crisis, since economic conditions and the regulatory environment have changed in ways that would significantly affect how Fannie and Freddie would function as reprivatized institutions. First, upon being released they would assuredly be designated as systemically important financial institutions, or SIFIs. Once deemed by regulators as too-big-to-fail without threatening to undermine the entire financial system, SIFIs must hold enough capital to withstand very stressful scenarios and remain going concerns. For the GSEs, this could require very high levels of capitalization, resulting in meaningfully higher mortgage rates.

Second, the GSEs would likely owe the government for the taxpayers' financial support. Back in 2008, Treasury saved the institutions from imminent collapse with an injection of substantial capital and a line of credit. Under the terms of their agreement with Treasury (Senior Preferred Stock Purchase Agreements, or PSPAs), the GSEs are required to pay Treasury a dividend in return for its investment and a commitment fee in return for their line of credit. The dividend was initially set to equal 10% of Treasury's investment per year, but as Treasury grew concerned that one or both of the institutions would be unable to pay the 10%, forcing them to borrow against their finite line of credit, the parties changed the dividend to equal all of the institutions' annual profits.

Under the PSPAs, the enterprises are also required to pay a commitment fee equal to the market value of the line of credit at the time, but the fee was suspended before it was even determined, out of concern for its impact on the still-precarious institutions. The fee was then suspended indefinitely when the dividend was converted to a profits sweep, because the institutions would have no profits from which to draw the revenue needed to pay the fee.

Depending on how the ongoing obligations to the government are determined, mortgage rates under the recap and release proposal would be 50 to 100 basis points higher than in the current system, and likely much higher for higher credit risk underserved borrowers (see Chart 1).

Expanded Ginnie-issuer system

A more recent GSE reform proposal would turn Fannie and Freddie into mutual institutions—owned by the nation’s lenders—that would be a source of credit enhancement in the current Ginnie-issuer system.ⁱⁱⁱ The reconstituted Fannie and Freddie would provide this credit enhancement alongside the FHA, VA and USDA, and potentially other sources of private capital. Fannie and Freddie’s common securitization platform would become unnecessary, but they would continue to transfer risk to other private investors through their credit risk transfer processes. As in the current Ginnie-issuer system, the securities would be backed by Ginnie Mae, which would be spun out of HUD into a new government corporation. Ginnie would continue to guarantee the timely payment of principal and interest on the securities.

Too-big-to-fail risk in this system would be addressed by converting Fannie and Freddie into lender-owned mutual institutions, which should constrain any inclination for them to take on excessive risk, as lenders can be expected to be careful in the management of an infrastructure on which they will be so reliant for their own survival. Moreover, by opening the Ginnie-issuer system to other approved sources of credit enhancement, this presumably would reduce the reliance on a limited set of government-run entities to provide mortgage insurance, and allow for greater disruption and innovation in the secondary mortgage market from new competitors. It should also result in a wider dispersion of credit risk, reducing the systemic risk of the entire financial system.

Expanding the current Ginnie-issuer system takes advantage of the current strong demand by global investors for Ginnie securities. These securities have the full faith and credit of the U.S. and are deemed by investors to be nearly as risk-free as Treasury securities. This is critical to keeping mortgage rates down in the future system given the added fees that will be necessary in most future systems, including a fee for the government’s explicit catastrophic reinsurance, and an affordability fee for funding activities to support access to the system for underserved communities. These costs will be offset by the lower yields on Ginnie securities.^{iv}

A shortcoming of the proposed expanded Ginnie-issuer system is the transition costs of moving to it from the current system. Stakeholders in the current GSE-based system, including lenders, servicers, private mortgage insurers, and others will have a difficult time accepting the new system. This reticence is likely in part caused by their recent experiences with the current Ginnie-issuer system, which could be addressed by converting Ginnie into a government corporation that is able to fund itself and is independent from HUD, but more broadly there is a worry that Ginnie is simply not up to the enormous demands that would be placed on it in this proposed system.

There is also a reasonable concern that lenders may not get true sale accounting in the new system if the credit enhancement comes from sources other than the government via the FHA, VA and USDA. True sale is necessary for lenders to get the mortgage originate off their balance sheets. This is an accounting question, but a critical one, and may create a significant amount of complexity in including other sources of capital into the expanded Ginnie-issuer system.

Finally, small lenders will likely be nervous about getting equal access in this proposed system. If large lenders are permitted to provide credit enhancement to get the Ginnie-guarantee, even via their role in the Fannie and Freddie mutual institutions, small lenders will rightly worry they will not have access to that guarantee on the same favorable terms.

Government corporation

Another approach to GSE reform would combine Fannie and Freddie into a single government corporation. The corporation would handle all of the operations that the GSEs perform today, while transferring most non-catastrophic credit risk into the private market and providing an explicit federal guarantee on mortgage-backed securities that is paid for by borrowers.⁷

By putting the infrastructure that mortgage market participants depend on into a government corporation, and spreading the lion's share of the credit risk across a diverse range of private sector actors, including the capital markets, reinsurers, private mortgage insurers, lenders, and other private entities, this system would end the reliance of the housing finance system on a few too-big-to-fail financial institutions.

It would also ensure broad access for underserved communities and smaller lenders. The government corporation would be required to meet duty-to-serve and affordability goals defined by the FHFA, the same as Fannie and Freddie must do today. As with the GSEs, to help meet these obligations, the corporation will set its guarantee fees in a manner that cross-subsidizes underserved borrowers who are creditworthy but may not be able to afford a mortgage loan otherwise. Community banks and small lenders will also have access to the system in the way they have it today, by using the cash window through the corporation.

The government corporation would be insulated behind enough capital to guard against economic stresses, and since there are no too-big-to-fail institutions in this system, the amount of capital required to support the system would be lower than in other systems dependent on too-big-to-fail institutions. Less required capital means lower costs and thus lower mortgage rates. Indeed, the corporation will be able to maintain current mortgage rates, despite the added fees for the government's catastrophic backstop and funding access to the system for underserved communities.

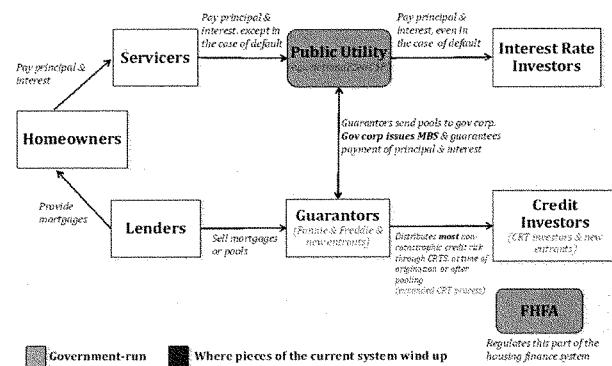
Finally, under this proposal the transition from the current to future system will occur with little disruption as it builds upon steps already under way. Fannie and Freddie would continue to build their common securitization platform, and the current effort to synchronize some of the processes at the enterprises would gradually be extended to all of them, from purchasing mortgages to securitizing them and overseeing their servicing. The GSEs' current risk-transfer efforts would also gradually be expanded from an effort to share some non-catastrophic risk with the private market, to one in which they share much of the non-catastrophic risk.

This reform proposal has some potential shortcomings, including that it may be overly reliant on sources of capital that will become more costly during times of financial market and economic stress. The system may also get bogged down in a government bureaucracy, although a government corporation has considerably more flexibility and autonomy on rule-making, employee compensation, and other key areas than a government agency. The system also eliminates competition in the secondary market, although by putting the infrastructure of the market into a government corporation rather than a privately owned too-big-to-fail institution or two, this opens up more competition in the primary market and creates an entire new market for credit risk in the secondary market.

Multiple guarantors

The most viable proposal to reform the housing finance system is known as the multiple guarantor system (see Chart 2).^{vi} Fannie and Freddie are turned into privately owned, heavily regulated, guarantor utilities that would compete with other similarly chartered guarantors. Various steps would be taken to facilitate entry into the secondary market by these new guarantors, and the new system would only begin when there was sufficient entry. Fannie and Freddie's common securitization platform would turn into a mutually owned private institution, with all of the guarantors having a stake in the platform. The guarantors would also be incented to offload credit risk to other private investors through the credit risk transfer processes. The securities issued by the CSP would receive an explicit government guarantee via Ginnie Mae, although Ginnie would have no oversight of this part of the system.

Chart 2: Future Multiple Guarantor System



The multiple guarantor system should significantly curtail too-big-to-fail risk, as the guarantors should be much smaller than in a duopoly. Competition among the guarantors will also be maximized, which should lead to more innovation in the market and lower costs for borrowers. By turning Fannie and Freddie into utilities with heightened regulation, including rates of return, this would check any incentive to take on excessive risk. And it turns the CSP into a government corporation that issues the securities of Fannie, Freddie, and any other chartered guarantors and guarantees to investors the timely payment of principal and interest on their investments.

With the benefit of the explicit government guarantee, the multiple guarantor system can capitalize to an appropriately high level to protect taxpayers and still be able to keep mortgage rates where they are today, even after charging fees for the government's backstop and to help meets its mandate to provide broad access to underserved borrowers. The guarantors would also have a guarantor-level broad duty to serve all markets under all economic conditions. And to maintain small lender access to

the system, the guarantors would be required to maintain a cash window to purchase loans from these lenders on equal terms with large lenders.

Vital to the success of a multiple guarantor system is entry by a sufficient number of guarantors to compete with the future Fannie and Freddie. While it is hard to know what is sufficient, if the private mortgage insurance industry is a guide, then it is reasonable to expect that five to seven strong guarantors are feasible and would make for a healthy market. Entry will be facilitated by the mutually owned CSP, the risk transfer process, and efforts by the system's regulator to help new entrants be cost competitive with the entrenched Fannie and Freddie. Fannie and Freddie's current guarantee book should also be separated from the future Fannie and Freddie guarantors, supported by the current PSPA, to reduce the amount of private capital that will need to be raised to stand up the new system and to reduce Fannie and Freddie's competitive advantage against new entrants. However, despite all these efforts, whether there will be sufficient entry into the new system will not be known for sure until the reform process is under way.

Another potential complication with the multiple guarantor system is ensuring appropriate access for underserved borrowers. Given a guarantor duty-to-serve, a fee to finance efforts to expand affordability, and strong regulatory oversight, a multiple guarantor system should be able to achieve the appropriate level of access, but this will be more complicated to ensure in a system with many guarantors, particularly compared with a system with a single government corporation or even a duopoly.

Conclusions

It is critically important for lawmakers to re-engage on the issue of housing finance reform. The unsustainability of the current system makes reform inevitable. There are numerous proposals to reform the system, each with its pluses and minuses, but the most viable from both an economic and political perspective is the multiple guarantor system. It is vastly preferable to the current system, shedding its problems but not its benefits in a way that minimizes the risk and uncertainty of transition. Whether one agrees with this view or instead prefers one of the other reform paths offered in this testimony, it is necessary to engage in the reform discussion in earnest now, in a moment of relative calm, rather than when another crisis forces our hand.

¹ For a more detailed analysis of the PATH Act, see "[Evaluating PATH](#)," Mark Zandi, Moody's Analytics white paper, July 2013.

² For a more detailed analysis of the recap and release GSE reform proposal, see "[Privatizing Fannie and Freddie: Be Careful What You Ask For](#)," Jim Parrott and Mark Zandi, Moody's Analytics and Urban Institute white paper, May 15, 2015.

³ The GSE reform proposal is described in more detail in "[Toward a New Secondary Mortgage Market](#)," Michael Bright and Ed DeMarco, Milken Institute, September 2016.

⁴ Unlike Fannie and Freddie's MBS, Ginnie Mae's MBS is explicitly backed by the full faith and credit of the U.S. government, and thus trade historically at a much lower yield than Fannie and Freddie MBS.

⁵ The details of this reform proposal are available in "[A More Promising Road to GSE Reform](#)," Parrott, Zandi, et al.

^{vi} The most recent example of a proposed multiple guarantor system is provided in "GSE Reform Principles and Guardrails," Mortgage Bankers Association, January 2017.

Tax plan would cut affordable housing supply by 60 percent, *Politico Pro*

Lorraine Woellert

11/03/2017

Builders, local governments and other housing advocates are rallying against a provision of the House Republican tax plan that would eliminate a key funding source for affordable rentals.

The tax proposal would do away with private activity bonds, a growing source of financing for low-cost housing. The cuts would reduce the supply of new affordable rentals by more than 85,000 units a year, or more than 60 percent, according to an analysis from Novogradac and Co.

Private activity bonds are issued by local or state governments and are designed to attract private capital to fund large projects. They have evolved into a common financing mechanism for housing as the supply of low-income housing tax credits — the primary source of financing — has been outpaced by the need for low-cost rentals.

"Communities all across the country are feeling the pinch of the drastic shortage of homes that people of modest means can afford," said Marion McFadden, vice president of public policy at Enterprise Community Partners. "Getting rid of the best tools that we have to address the shortage is moving the country absolutely in the wrong direction."

The ACTION Campaign, a coalition of 2,100 housing groups, municipal agencies, builders and others, will push for changes in the Senate bill.

"We have a demonstrated housing crisis — we've got 11 million or 12 million people paying more than half their income in rent, we have a family being evicted every 11 seconds," said Bob Moss, director of governmental affairs at accounting firm CohnReznick. "I feel like we can fight our way back once people know the facts."

In New York, where private activity bonds are widely used for housing, the cuts "will devastate both the mayor's and governor's housing plans," said Rachel Fee, executive director of the New York Housing Conference. "It is a huge blow to renters."

Eliminating private activity bonds would save about \$39 billion over the next 10 years, according to a congressional estimate.

The National Low Income Housing Coalition praised another provision of the House plan — a cut to the mortgage-interest deduction, a tax benefit that flows disproportionately to wealthier homeowners — but condemned lawmakers for not using the savings to aid low-income households.

The House plan would limit the mortgage deduction to interest on the first \$500,000 in home debt, a change that would affect less than 6 percent of mortgages and save an estimated \$95.5 billion in the first decade.

"The legislation uses the savings generated by the MID reform to pay for lower tax rates for billionaires and corporations without addressing the affordable housing crisis in America," said NLIHC President Diane Yentel. "This proposal is a non-starter."

Congressman Brad Sherman

Question for the Record

Financial Services Housing and Insurance Hearing "Sustainable Housing Finance: Private Sector
Perspectives on Housing Finance Reform"

November 7, 2017

Question for Mr. Zandi, Chief Economist, Moody's Analytics:

- Can you explain the importance of the Federal Housing Authority (FHA) and the need to have them available and ready in all markets should they be needed to fill a counter-cyclical role?

The FHA has historically played a vital role in providing mortgage credit during times of economic crisis, which is critical to supporting the housing market and the broader economy. FHA played this role admirably during the recent financial crisis and Great Recession. The private label mortgage securities market collapsed during the crisis, resulting in a large void in mortgage lending, significantly exacerbating the severe downturn in the housing market, financial system and economy. FHA admirably filled this void, with its share of mortgage origination surging from close to 5% before the crisis to a peak of close to one-third of originations. Indeed, FHA was established in the 1930s Great Depression in order to provide mortgage loans at a time when private banks and savings and loans were unable to provide any credit. It is very important that policymakers maintain the FHA's ability to play this counter-cyclical role in any future reform of the FHA.

