Housing, Housing Policy, and Housing Finance: Time for a Re-Assessment

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“The shapers of the American mortgage finance system hoped to achieve the security of government ownership, the integrity of local banking and the ingenuity of Wall Street. Instead they got the ingenuity of government, the security of local banking and the integrity of Wall Street” (David Frum, National Post, July 11, 2008)

“When it comes to housing subsidies, too much is never enough.” (anon.)

I. Introduction

The topic of housing – housing prices, housing policy, housing finance – has largely fallen by the wayside as a “hot” news item. That is probably a good thing. Only a few years ago, housing prices seemed to be in free fall in many metropolitan areas; millions of “underwater” mortgage borrowers were defaulting on their mortgages; and the future of the residential mortgage finance system in the U.S. seemed to be up for grabs.

After falling by about 35% (as a rough national average) between mid-2006 and 2012, housing prices have generally stabilized and even rebounded – though generally not back to 2006 levels. New mortgage defaults appear to be modest and unremarkable; borrowers and lenders have mostly worked through the trauma of the past eight or so years.

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But what still hasn’t been resolved is what the future of residential mortgage finance in the U.S. will look like. In a remarkable feat of political stasis, federal government policy with respect to housing finance remains in limbo. This is especially true with respect to Fannie Mae and Freddie Mac. These two “government-sponsored enterprises” (GSEs) became insolvent in the summer of 2008 and were placed into federal conservatorships in September of that year. The strong expectations at the time were that the GSEs would be wound down within a few years, with some new policy-designed structure for residential mortgage finance to replace them.

Over seven years later, that hasn’t happened. Fannie and Freddie are still functioning and are still at the center of the U.S. mortgage finance system. Ironically, they have become even more important for housing finance since they were put into conservatorships than before. Partly their continued importance is due to the general gridlock that has gripped Washington over the past five years; but partly it is a testament to the particular landscape of U.S. housing policy.

So, if we want to understand U.S. housing finance and consider ways in which it might be modified, it is worth starting more generally with U.S. housing policy.

II. Housing Policy

The essence of U.S. housing policy is easily summarized in a few words: widespread subsidy for the purchase and consumption of housing.

Let’s start with home ownership: Home buyers who borrow to finance their purchase (as almost all do) can deduct the interest that they pay on their mortgage against their federal and state income taxes; the state and local property taxes that they pay as a consequence of being homeowners are similarly deductible; and their capital gains when they sell the house for more
than they paid are usually exempt from tax as well.\textsuperscript{1} The function of Fannie and Freddie was (and continues to be) to reduce the interest rate that residential mortgage borrowers have to pay on their mortgages, as well as the size of the down payment that they have to make. The same is true for the Federal Housing Administration (FHA) and the mortgage insurance that it provides to lenders; the Department of Veterans Affairs (VA) does the same for military veterans, as does the U.S. Department of Agriculture for farmers and their residences. The Federal Home Loan Bank System (which is another GSE) is designed to provide low-cost financing to banks and savings & loan institutions (S&Ls), which are expected to pass through these lower financing costs to their mortgage borrowers.

But renters are also subsidized: Federal, state, and local programs provide direct subsidies (vouchers) to renters – especially households with low incomes. Subsidies are also provided to the builders of rental housing. Fannie and Freddie provide (subsidized) mortgage loans for the owners of rental housing, as well for single-family home-owner borrowers; the FHA does the same. And the direct provision of housing by government – “public housing” – has also been part of the mix (although little new public housing has been built in the U.S. for the past few decades, so public housing nowadays is the continued rental of units that were built by government in earlier times).

The aggregate of all these subsidies amounts to real money. The mortgage interest deduction alone currently translates to forgone federal tax collections of about $70 billion a year. The property tax deduction and the capital gains exclusion together lead to another $50 billion in

\textsuperscript{1} As a technical matter, the real subsidy is the fact that the implicit rent that a homeowner could otherwise be earning on her house isn’t added to her income and thereby isn’t potentially subject to the income tax. If that implicit income were potentially subject to tax, then the deduction of the expenses (including mortgage interest and property taxes) of maintaining the [rental] “enterprise” would be an entirely legitimate concept. In essence, homeowners can currently deduct some of the major expenses without concomitantly reporting the implicit income.
forgone federal tax collections. And the mortgage subsidies through Fannie, Freddie, and the FHA probably lead to another $20-30 billion. On the rental side, the annual HUD budget—which is mostly about rental subsidy—is currently around $45 billion. And none of these estimates include separate (i.e., not HUD pass-through) state and local programs and tax provisions that favor housing.

U.S. households have had an unsurprising response to these efforts to reduce the price that they pay for housing: They buy more house! From the 1940s through the mid 2010s, there was a generally steady increase in the square footage of new houses that were built and brought to market. In 1950, for example, the average new house had about 1,000 square feet; by 1980 it was over 1,700 square feet; and in 2014 the average new house encompassed well above 2,600 square feet.

Of course, much of that increase can be explained by the rising incomes of American households and their preference to devote some of that rising affluence to housing. But at least some of it is due to prices that are lower than they otherwise would be. Indeed, it has been estimated that the U.S. housing stock is 30% larger than it would otherwise be in the absence of this panoply of subsidies.

This larger housing stock, in turn, has had a number of “knock-on” effects: First, the excess resources that have been devoted to housing could instead have been devoted to alternative (and, at the margin) more socially effective uses: building/repairing infrastructure (roads, bridges, airports, hospitals, schools, etc.) and/or building human capital (improved schools and schooling) and/or just the alternative forms of household consumption that (in the absence of subsidy) those households would have valued more.
Next, these housing-encouragement policies have surely contributed to the spreading-out of suburban communities: suburban sprawl (which has also been encouraged by low gasoline prices and the absence of direct charges for road usage). Land that had better alternative uses – for agriculture or just as undeveloped countryside – instead has been devoted to housing and roads and shopping centers and their accompanying infrastructures.

And suburban sprawl, in turn, has led to more automobile driving (again, encouraged by low gasoline prices and the absence of direct road pricing) – and its concomitant negative externalities, including air pollutants (which nowadays include greenhouse gases, as well as the precursors to photochemical smog) and traffic congestion – and/or efforts at mass transit that are cost-inefficient because the sprawling suburban areas lack the population densities that are necessary for cost-efficiencies in mass transit.

So, why does American public policy focus so much on housing – as symbolized by the 1965 creation of HUD as a Presidential Cabinet-level department – and lean so heavily in the direction of subsidizing housing? There are an amalgam of reasons:

First, with respect to the subsidies for home ownership, there is the idea that home ownership is part of “The American Dream”: that home ownership provides a household with independence and financial stability (the household is not subject to the whims of arbitrary and greedy landlords), and an opportunity for wealth accumulation (on the assumption that housing prices generally rise), or at least as a hedge against inflation (if housing prices rise at least as fast as the general price level). Indeed, the home ownership rate – the national percentage of households that own their homes – has been an important political benchmark since the 1960s, with “higher” always being the desired direction. Also, one (small) program within HUD’s programs to encourage home ownership is actually entitled “The American Dream
Downpayment Initiative” and is based on the “American Dream Downpayment Assistance Act” of 2003.

Economists have added a slightly more sophisticated argument for this tilt toward home ownership: that there may be some social value – a positive externality or spillover effect – from home ownership. Arguably, the members of a home-owning household are more likely to be involved with their community – in short, be better citizens. In addition, the greater stability that is associated with home ownership may improve family outcomes (higher incomes, more education for children), with attendant benefits for their communities. Although such ideas have been forwarded by economists for many decades, until the early 1990s they remained as pure theory. Since then, however, a modest amount of empirical research has offered some support for these ideas.

More broadly, political lobbying groups that favor helping low-income households have seen housing expenditures as an area that is ripe for opportunities to improve the well-being of low-income households (and many of these lobbying groups often unembarrassedly describe themselves as “housers”). After all, housing expenditures (on average) accounts for about 20% of household budgets; for low-income families, the fraction of budgets that is spent on housing can exceed 50%. Thus, if a housing subsidy is sizeable, it can make a real difference in the well-being of a low-income subsidy-receiving household.

Further, the “house” is where a household spends most of the hours of a week. If a subsidy can accomplish a significant upgrading of that environment – whether it’s the interior of the housing unit itself or the neighborhood that surrounds the housing unit – this again can mean a real improvement in the quality of life of the subsidized household.
Much of what motivated the creation of HUD was the vision that improved housing – through subsidies and through improved neighborhoods – would help low-income households.

Although these lobbying groups are genuinely interested in helping lower-income households through subsidies, they are usually tolerant of housing subsidies for middle- and upper-income households: partly to build closer alliances with groups (like the home builders) who just want more subsidy and partly out of real-politic fears that housing subsidies for low-income households only would not be sufficiently popular to win the support of the broader electorate.

Finally, unabashedly self-interested political lobbying efforts are important as well: There are millions of workers who are employed by tens of thousands of enterprises that are directly or indirectly connected to housing: construction firms; banks and other finance firms; real estate brokerage agencies; lumber and plumbing suppliers; appliance makers; rug manufacturers, etc. Their voices (and the campaign-donation checks that are written by company owners and executives) surely contribute to the political perception that housing subsidy is a “good thing”.

But how effective are these subsidies? As was mentioned above, they certainly encourage households to occupy more “house”. This is surely true for ownership subsidies as well as rental subsidies. But – if we focus for the moment on ownership subsidies – do the subsidies for home ownership actually encourage higher ownership percentages? The answer is clear: No (or, at best, only a little bit). Instead, the ownership subsidies mostly encourage upper-income households – who likely would have bought anyway – to purchase larger, more expensive, better appointed homes on larger lots (there’s that suburban sprawl thing again). Although such responses must make the housing construction-selling-financing-outfitting
juggernaut purr happily, it is hard to see how such responses further the social goals of home ownership – whether expressed in the simple “American Dream” form or in its slightly more nuanced version of the positive externalities from ownership.

Further, the words “upper-income households” in the previous paragraph are worthy of additional discussion: The personal income tax-break subsidies – from their structure – are inherently skewed toward favoring higher-income households. First, they are structured as deductions (and not tax credits). Thus, a taxpayer has to decide to itemize her deductions on her tax filing rather than take the un-itemized “standard deduction”; higher-income households are far more likely to itemize than are lower-income households. Next, the higher-income household will be in a higher marginal tax bracket than is the lower-income household; hence, every deducted dollar yields comparatively more tax savings for the higher-income household. Finally, the higher-income household is far more likely to buy a more expensive house and have a larger mortgage, so there will be a larger amount to be deducted (that will then be subsidized at the higher marginal rate).

In addition, the GSEs’ mortgage loan guarantees for single-family residences have historically tended to favor more expensive houses. Although the median new house that was sold in the U.S. in 2015 had a price of around $220,000 – and thus an 80% mortgage on that median house would be about $175,000 – the ceiling amount on the size of the mortgage that Fannie or Freddie can guarantee is $417,000 in most areas, or substantially more than double that median mortgage; and in “high-cost” geographic areas (i.e., mostly California and the Northeast seaboard), the GSEs can guarantee mortgage loans that are as large as $625,500! There are few (if any) low-income households that have $625,500 mortgages. (As a testament to how far away
the GSE lending limits had gotten from the typical U.S. home: In 2008-2010 the upper limit for GSE mortgage loans in “high-cost” geographic areas was $729,750!

With respect to rental subsidies, the targeting does appear to be more appropriate: Rental subsidies are indeed focused on lower-income households. The eligibility to live in public housing usually has income limits that – despite the occasional cheating around the edges – does mean that the units are occupied by low-income households. Federal rental subsidies primarily take the form of housing rental vouchers that are distributed to lower-income households and that do reduce the net price that they pay for their housing.

Subsidies are also given to developers to encourage the construction and maintenance of rental housing that is targeted for lower-income households. These latter programs appear to be less successful: When the subsidies encourage the construction of housing in areas where the supply of rental housing is already relatively elastic, the added construction largely “crowds out” unsubsidized housing that would otherwise be built and thus neither adds significantly to the supply of rental housing nor reduces significantly the rents that are paid.

III. The Basics of Housing Finance

Let’s now return to the issue of residential housing finance.

A. Finance 101

Let’s start with “Finance 101”: When lenders make a loan to a borrower, they expect to be paid back at some specified future point in time (or over some specified future time period) – plus sufficient interest to cover the risks that accompany lending and to cover the time-value-of-
money opportunity cost of the lender. The risks primarily involve “credit risk” – the risk that the borrower may not repay the loan – and “interest-rate risk”: the risk that the general level of interest rates may change after the loan has been made and before it is fully repaid.

To protect themselves against credit risk – to try to assure themselves of repayment – lenders typically do one or more of the following (which is often described as “underwriting” the loan):

a) They check out the financial history of the borrower. If the borrower is an individual, then lenders will want to know about the borrower’s history of any borrowing/repayments, timely bill payments, etc., and the borrower’s employment history and current and prospective income, as well as the borrower’s current assets and liabilities. Nowadays all of that information is rolled into a single measure: the “FICO score” (which was developed by and is named after the Fair Isaac Corp.). If the borrower is an organization (e.g., a company or a government) and the borrower is floating bonds, then the lenders may turn to third-party evaluations – by credit rating agencies – of the creditworthiness of the issuer and the issuer’s bonds.

b) When possible, lenders seek collateral that can be seized (“repossessed”) in the event that the borrower doesn’t repay (i.e., the borrower defaults).

c) If possible, lenders want the collateral to be worth more than the loan, so as to cover transactions costs in the event that the collateral does have to be repossessed and sold.

d) If the purpose of the loan is to allow the borrower to purchase the item/object that will serve as collateral, then the insistence that the collateral be worth more than the loan will mean that the borrower has to find the resources to cover the difference between the purchase price of the item and the amount of the loan – i.e., the borrower has to provide a down payment. The
larger is the down payment, the greater is the buffer that protects the lender in the event that the borrower defaults and the collateral has to be repossessed and sold. In addition, the down payment means that the borrower has an “equity interest” in the item – has “skin in the game” – and is thereby less likely to default. And the ability of the borrower to marshal the resources for a significant down payment may be a favorable signal as to the borrower’s financial responsibility and capability for repaying the loan.

e) When possible, lenders look for a guarantor (or “co-signor”), as a back-up in the event that the borrower doesn’t repay, especially if the loan doesn’t involve collateral or if the collateral is considered to be likely to fluctuate in value.

f) Lenders may want periodic (e.g., monthly) payments – rather than waiting until the end of the loan period for a “balloon” repayment – so as to have a real-time monitoring of the borrower’s repayment capabilities. To the extent that the periodic payments involve the repayment of part of the principal amount of the loan as well as interest (i.e., the loan is “self-amortizing”), the borrower thereby builds a greater equity stake in the item/object and the lender is protected by a greater buffer.

Housing lenders, of course, generally employ most or all of these underwriting tools to help them deal with credit risk – especially as the standard mortgage loan since the 1950s has been a 30-year loan with self-amortizing monthly payments. Lenders seek information on the borrower’s financial suitability; the house serves as collateral; a down payment is required; monthly payments are the norm; guarantees by the GSEs or by the FHA are common; etc.

[As a side note, however, it is worth reflecting on how the widespread belief across housing markets (beginning in the late 1990s) that housing prices would always increase eroded
all of these normal underwriting protections during the 2000s: If a lender believed that housing prices would always increase, then whether a mortgage borrower defaulted was irrelevant, since the underlying collateral – the house – could be seized and sold at a higher price (since housing prices would always increase); or, instead of defaulting, the delinquent borrower herself could/would sell the house (at a profit, of course, since housing prices would always increase) and pay off the mortgage. And, in turn, that meant that the borrower’s credit history and current income, the size of the down payment, whether there was a guarantor, etc., were irrelevant as well. All that mattered was that the mortgage loan was about at the level of the value of the (sure-to-rise-in-value) house at the time of the loan. And this willingness to neglect the characteristics of the borrower carried through to the mortgage securities markets: If (because house prices would always rise) mortgages wouldn’t be a problem, then neither would mortgage-backed securities…]

With respect to interest-rate risk, lenders would generally prefer to make adjustable-rate loans, with the interest rate on the loan adjusting or floating in accordance with some measure of general interest rates. They thereby push all of the interest-rate risk on to the borrower (but competitive lending markets should reflect this in a lower base interest rate) However, borrowers usually prefer the certainty of a fixed interest rate – which usually means that the interest-rate risk is shared between the lender and the borrower: If interest rates increase, then the borrower has avoided the higher interest costs that would have accompanied a floating-rate loan; but the lender incurs opportunity costs in not receiving the higher interest rates (and if the loan is a traded financial instrument – a bond – then its value/price would be lower). If instead interest rates decrease, then the lender benefits by continuing to receive the higher fixed rate at a time when market rates are lower (and, again, if the loan is a traded instrument, its value/price
would increase); but the borrower now incurs the opportunity costs of not being able to pay the lower current interest rates.

Since the 1930s American housing finance markets have tended to involve fixed-rate mortgages (FRMs). The FRM was a 1930s innovation that was championed by the FHA: Initially the typical term was 20 years – but since the 1950s the term more typically has been 30 years). But one additional common element – the ability of the borrower to repay the loan (or any portion of it) before the due date, without any fee for doing so, has meant that all of the interest-rate risk is borne by mortgage lenders: When interest rates decrease, mortgage borrowers will find it worthwhile to refinance their mortgages (at the new, lower rate); and the lender of the original mortgage will not experience the gain that would otherwise accrue to a fixed-rate instrument. Thus, with this option of fee-free early repayment, all of the interest-rate risk is borne by the lender. And in competitive lending markets most or all of this cost will be passed through to borrowers; one estimate has placed this cost at an extra half percentage point in interest that is charged to all mortgage borrowers (whether or not they exercise the option).

B. A Brief History of Recent U.S. Mortgage Finance

Until the 1990s, the dominant structure of residential mortgage finance in the U.S. involved a depository institution – typically a savings & loan or savings institution, but sometimes a commercial bank – as the lender. This was a vertically integrated structure: The depository institution originated the loan – i.e., was the first-instance lender to the borrower (after having assessed the borrower’s creditworthiness and determined the appropriate terms of the loan – e.g., size of down payment and interest rate); the institution retained the loan in its portfolio (and thus the loan became an asset on the institution’s balance sheet); the institution obtained the funding for the loan through receiving deposits from depositors in the institution
(the deposits would be liabilities on the institution’s balance sheet); and the institution was the “servicer” of the mortgage: The institution made sure that the borrower made the requisite monthly payments and dealt with delinquent borrowers, arranged for foreclosures when borrowers defaulted, etc.

A big plus for this vertically integrated structure was its alignment of incentives: Since the originating, lending/investing, funding, and servicing were all conducted “under the same roof”, the institution had largely the right incentives to make reasonably safe mortgage loans with competitive terms. And where borrowers might have spottier credit histories and/or be capable of only a smaller down payment than the standard 20%, the institutions could look to a third-party government guarantor: the FHA.

But a big negative was the inevitable interest-rate mis-match between the 30-year fixed-rate mortgages that these institutions originated and held and the relatively short-term deposit liabilities that they were using to fund those mortgages. This was an especially severe problem for S&Ls and savings institutions that often (by law) were prevented from diversifying their portfolios into other kinds of loan assets or even from originating adjustable-rate mortgages (ARMs); i.e., they were restricted to specializing in residential mortgage loans – and FRMs at that. If interest rates were to rise sharply – which they did in the late 1970s and early 1980s – these kinds of institutions would experience a painful and possibly existence-threatening dilemma: If they raised interest rates that they paid to their depositors, so as to dissuade the depositors from taking their money to a competitive repository for those funds, the institution would experience losses: The fixed-rate mortgages in their portfolios yielded lower interest rates, and these lower-rate mortgages would be replaced only slowly with the higher-yielding
new mortgages of the new (higher-interest-rate) environment. If the institutions didn’t raise interest rates, they would lose the depositors and their deposits and thus face a funding squeeze.

The S&L industry did face this problem in the late 1970s and early 1980s; and when the industry was subsequently allowed to diversify their portfolios into other kinds of investments, too many of them took the opportunity to engage in excessively risky activities in the 1980s that failed to pay off. The result of both the initial interest-rate stress and the subsequent failed risk-taking was a shrunken industry. An alternative mortgage-finance structure, however, was ready to take its place: securitization.

Securitization of residential mortgages began in the U.S. in 1970 and picked up steam in the 1990s as the S&L industry fell by the wayside. Today it is the dominant structure. With securitization, hundreds (or sometimes thousands) of mortgages are bundled/package into a security – a bond – that can be bought by third-party investors. The monthly interest and principal repayments by the underlying mortgage borrowers are passed through to the security holders (which is why the simple versions are described as “pass-through securities”).

With securitization the vertically integrated structure of mortgage finance via the depository institution becomes dis-integrated: One party can do the origination of the mortgage; another party bundles/packages the mortgage with hundreds (or sometimes thousands) of other mortgages into a tradable security and sells that security to third-party investors, who provide the funding; yet another party can service the mortgage.

A major advantage to this dis-integrated structure is that it can attract funds for mortgages from a wider spectrum of investors than just those who want to hold deposits in an institution that invests those deposits in mortgages. For some institutional investors – such as life insurance
companies and pension funds, that have long-lived obligations – the opportunity to match their lengthy obligations with the lengthy maturity of the mortgages that underlie the packaged security may be a plus rather than a problem. It is often forgotten that life insurance companies were significant lenders in the mortgage markets until the 1940s.

Another advantage is that the securitization structure allows greater specialization: Some businesses may be good at originating, but not much else; others at packaging; yet others at servicing; and many investors are unlikely to be good at any of those tasks but nevertheless want to invest in mortgages – i.e., want to be a lender to mortgage borrowers. Each can play a role in a securitized structure.

But the dis-integrated structure has a major drawback: Each “hand-off” – from originator to packager to investor – places the investor farther away from the borrower and thus subjects the investor to credit risk: How can the investor/lender be sure that the originators (who placed the mortgages in the bundled security that the investor buys) have properly screened and vetted the borrowers and have issued mortgages only to creditworthy borrowers?

Consequently, it was no accident that the initial securitization of residential mortgages in 1970 was arranged by the Government National Mortgage Association – now known as Ginnie Mae – which was (and still is) an arm of HUD. The mortgages that were being securitized were insured by FHA, and Ginnie “wrapped” FHA’s insurance with its own promise of prompt payment to mortgage security investors in the event that the underlying mortgage borrower defaulted. Investors in these securities thus had a guarantor, which lenders often seek when they are unsure as to the creditworthiness of the borrower; in this case, it was the U.S. Government.
It was also no accident that the next entity to arrange mortgage securitizations (in 1971) was Freddie Mac: As a GSE, it (along with Fannie Mae) enjoyed a special status among investors: Although Freddie Mac’s (and Fannie’s) debt securities explicitly stated that they were not obligations of the U.S. Government, investors treated them as if there was a high likelihood that the Federal Government would back them if Freddie (or Fannie) got into financial difficulties. For the same reasons, Fannie Mae (in 1981) was the next arranger of mortgage securitizations.

In all instances, the GSEs provided guarantees to the buyers of the mortgage-backed bonds that the investors would be protected against defaults by the underlying mortgage borrowers; i.e., the investors were protected against credit risk. And the GSEs’ special status made those guarantees sufficiently credible for the bond investors.

These securitization arrangements were so attractive to mortgage borrowers and bond market investors that, by year-end 2007, the two GSEs’ mortgage-backed securities (MBS) accounted for over $3.5 trillion in mortgages when the overall amount of residential mortgages outstanding was around $12 trillion. In addition, because the GSEs could borrow cheaply (because of their GSE status), they had bought another $1.5 trillion in mortgages and held them as direct investments on their balance sheets. Thus, through the combination of their MBS and the mortgages that they owned, the GSEs “touched” over 40% of the residential mortgage market.

The events of September 2008 proved that the investors in the GSEs’ securities were correct in believing that the federal government would come to the rescue of the GSEs (or, really, to the rescue of the creditors to the GSEs).
Although there had been sporadic efforts to arrange private-sector structured mortgage securitizations starting in the mid 1980s, these efforts were initially sparse and did not gain momentum: The assurances against credit risk that the investors/lenders needed could not be provided by private-sector entities.

Eventually, however, in the late 1990s a “senior/junior” structure evolved for mortgage bond securities that provided the necessary assurances – at least to the holders of the senior securities: When the monthly payments were received from the mortgage borrowers that underlay a security, the senior security holders had the first claim on those payments. If all of the borrowers made their payments in a timely fashion, then the junior security holders would also receive all of their due payments. But if there were any shortfalls in borrower payments, it was the junior security holders that would first experience the shortfall. Only if the borrower repayment shortfall was so severe that the junior security holders received nothing and still the payments were not large enough to cover the requisite amount that was due the senior security holders would this latter group experience losses. Equivalently, the junior security holders were providing a buffer that protected the senior security holders; and only when that buffer was wholly eroded would the senior security holders experience losses.

In order further to reassure the bond investors/lenders – and, for many financial institutions at the time, this was required by their regulators before they could buy these securities – the major credit rating agencies were asked to provide creditworthiness assessments of these senior/junior structures: i.e., to provide “ratings” for these bonds.

Although the simple senior/junior structure just described provides the essence of the arrangement, the actual structures of these securitizations involved many more gradations of priority: Sometimes there were as many as 15 to 20 “tranches” of separate securities that were
layered from the bundle of mortgages. Nevertheless, the essential nature of the arrangement remained intact: Each tranche (starting with the most junior) provided a buffer for the next-most-senior tranche. Equivalently, the securities industry described this arrangement with the metaphor of a “waterfall”: The cascade of payments from the mortgage borrowers would first flow to satisfy the obligations to the most senior tranche securities holders, and then leftover funds would flow/cascade to the next-most-senior tranche, etc.

Unfortunately, as was mentioned above, the widespread belief that started in the late 1990s that housing prices would always increase caused all of the participants to become less wary and more complacent. Mortgage originators, especially, took advantage of this belief in ever-rising prices to provide mortgages to ever-less-creditworthy mortgage borrowers. Even Fannie and Freddie – which previously had maintained tight creditworthiness standards with respect to the mortgages that they would securitize or hold in their own portfolios – succumbed around 2004 and lowered their underwriting standards as well.

Of course, housing prices could not continue to rise indefinitely. After a few years of sharp annual rises in the early 2000s (which seemingly confirmed the idea that mortgages could be granted to weaker borrowers – the “sub-prime” mortgage – without adverse consequences), housing price increases did moderate. Housing prices (on a national basis) peaked in mid 2006 and then began to slide. Mortgage borrowers who had expected to be able to repay their existing mortgages by refinancing or by selling their houses at a profit could not do so; delinquencies and then defaults followed. The annual flow of “private-label” mortgage securitizations that had no government guarantor and that relied on the tranching structure just described – which had been in the hundreds of billions of dollars annually as late as 2006 – fell to close to zero by 2008. There has been almost no revival of this form of securitization since then.
Although the Fannie, Freddie, and Ginnie securitizations continued largely unhindered, Fannie and Freddie were badly weakened by the deterioration of the mortgages from 2004 onward that they had securitized (with their guarantees to investors) and/or held in their own portfolios. By the summer of 2008 the two GSEs were perceived to be insolvent; and even their GSE status was not sufficient to make the financial markets – at a time of great nervousness about the financial stability of a number of large financial institutions – willing to lend to Fannie or Freddie for even short periods. In early September 2008 the two GSEs were put into government conservatorships, where they have remained to this day.

IV. What Is to Be Done?

In order to understand the U.S. housing finance system, we first had to describe the overall set of policies that apply to U.S. housing. A similar pattern will be necessary in order then to address proposed changes in housing finance.

A. Some Overall Housing Policy Goals

Surely the overall goal should be to reduce the aggregate amount of subsidy that is channeled to housing – especially the subsidies that are defended under the guise of promoting home ownership. Perhaps the best place to start would be to decouple home ownership from the “American dream”. Owning a home ought to be seen as just another investment choice; homes ought to be seen as just another potential asset in a household’s portfolio. One of the clear lessons that should have been learned from the collapse of the housing bubble of the 2000s is that housing prices don’t always go up, so that house-price appreciation is not a sure-fire basis for wealth-building by home-owning households. Rhetoric that links wealth-building and home
ownership as a no-brainer ought to fall out of favor. Similarly, the idea that the minimum possible down payment – the maximum possible leverage – should be the goal of those home-owning households should be jettisoned.

Property owners in inner cities in the 1960s and 1970s had already learned these lessons, as did home owners near cities and towns that de-industrialized during the 1970s and 1980s. By now the suburbanites in other areas should have learned these lessons as well.

It is true that home ownership can be a vehicle for the forced saving that accompanies the paying-off of principal that is embedded in the monthly payments on a 30-year self-amortizing mortgage loan. However, that wealth-building is modest in the absence of significant house-price appreciation. The first five years of monthly payments on a $200,000 30-year fixed-rate mortgage with an interest rate of 5% will total $65,000. Of that $65,000, only $16,500 is devoted to principal reduction. Of course, that is better than no saving. Still, no one should think of this as a get-rich-quick scheme. And that $65,000 doesn’t count insurance, maintenance costs, and property taxes (none of which, of course, are themselves wealth-building expenditures).

Consistent with this de-emphasis, renting should be made respectable – and not just considered to be a second-class choice for the young and the poor. It should be emphasized that home ownership is not for everyone: that a home is a large, risky asset; it greatly over-weights a household’s portfolio in one, very narrow direction; the transactions costs of a “round-trip” buying and selling of this asset are substantial – easily 6% or more; and these sizable round-trip transactions costs are a hindrance to household mobility and can thus impede a household’s ability to respond to better employment opportunities in other areas.
[As a side note: Despite over four decades of federal efforts to fix the problem – the Real Estate Settlements Practices Act of 1974 was supposed to provide this fix – the “closing” process in the purchase of a house (including sizable real estate brokerage fees, as well as title insurance fees and appraiser fees and legal fees and local taxes and…) remains a horror: far too complicated and costly.]

Further, the program of forced saving through monthly mortgage payments requires budgeting discipline and a steady income without a lot of adverse shocks. Those transactions costs become much larger in the event of delinquency and default and can easily swallow that $16,500 as well as any initial down payment.

Next, of course, the mortgage interest income tax deduction and other home-owning tax favoritism should be phased out – perhaps over a 10-year period. This favoritism is costly and encourages households to buy larger houses and to borrow – use leverage – to do so; and it mostly favors higher-income households, while really not encouraging home ownership all that much. What’s not to dislike about this favoritism?

If political realism requires that some form of home ownership favoritism remain in the tax code, then – at least – the deduction ought to be converted to an overall revenue-neutral refundable tax credit that could realistically have value for low-income households. Even better – to account for those possible positive spillover effects from home ownership (or maybe as a concession to the “American Dream” advocates) – would be to have the tax credit gradually morph into a one-time-only-per-household refundable tax credit for home ownership of, say, $5,000 per year for each of the first five years of ownership. Again, a refundable tax credit has an equal value for a low-income and high-income home buyer. This fixed amount doesn’t
encourage buying a larger house, and it doesn’t encourage leverage. And it can help the low-income household marshal the funds toward the down payment on its first house.

With respect to rent subsidies: Policy makers should constantly be reminded that as a general matter transferring cash to a household is likely to be the most efficient way of making that household better off. (This is a standard exercise that appears in many Econ 101 texts.) But the American polity has a long tradition of favoring in-kind transfers: Not only does the tradition of public housing go back to the 1930s, but local politicians were providing turkeys or a coal deliveries to constituents (and not cash!) even before then. And some of the recent findings of behavioral economics support the idea that better housing opportunities in particular may have beneficial outcomes for low-income households.

So, let there be rental subsidies. But let them be in the form of vouchers for low-income households.

Finally, since reducing the costs of housing to households is a clear political goal, efficiency-improving ways of reducing the costs of housing should be pursued. First, restrictions (quotas) on the import of lumber from Canada ought to be dismantled; the same is true for restrictions (anti-dumping duties) on the import of cement. Most important, suburban land-use zoning restrictions that prevent rental housing (or small-lot single-family homes) from being built ought to be eliminated.

B. Housing Finance

And now we can turn to the reform of the mortgage finance system:

Let’s start with what the goal of a housing finance system ought to be: Housing finance should embody the true costs – the social opportunity costs – of lending for home purchases.
These costs encompass the time value of money; the costs of credit risk; the costs of interest-rate risk; and the costs of a mortgage’s being a relatively illiquid financial instrument.

It is equally important to recognize what the goals of a housing finance system ought not to be:

-- A housing finance system ought not to be a vehicle for income-redistribution-oriented subsidy or cross-subsidy that would favor low- and moderate-income households. Subsidy is best carried out through explicit, narrowly focused, on-budget, transparent programs and/or through (explicit, narrowly focused, transparent) provisions of the tax system. Unfortunately, housing advocates constantly raise the issue of “affordability” in connection with housing finance; but “affordability” is just a code word for “subsidy” and should be recognized as such.

There is a second code word – “accessibility” – that also often shows up in housing finance discussions. Partly it is another veiled version of subsidy advocacy: the belief that even households with spotty credit histories and/or financial circumstances that private-sector lenders – despite their profit-seeking tendencies – judge to be too sketchy should nevertheless somehow be allowed to borrow/obtain a mortgage to buy a house; if necessary, those lenders should have a mandate to serve – provide finance to – those mortgage seekers (with a cross-subsidy coming either from the more creditworthy borrowers or from the owners of the lending institution). And partly it is an argument that lenders should not be discriminating against minority households of any kind.

With respect to the subsidy version of this code word, again the appropriate way to address subsidy is through transparent programs and/or tax provisions. With respect to
discrimination, vigorous enforcement of existing anti-discrimination laws – including jail sentences for violators – is the appropriate direction for policy.

-- A housing finance system ought not be a vehicle for addressing the externalities that may accompany home ownership. Those externalities are best addressed through targeted programs that focus on the externality itself – and not through the broad brush of the mortgage finance system itself.

-- A housing finance system should not be a vehicle for propping up house prices.

-- A housing finance system should not be a vehicle for supporting employment in the home-building, real estate, mortgage-lending, or related industries.

So, what should the future of residential mortgage finance in the U.S. look like?

First, let’s deal with the subsidy issue: As recommended above, the replacement of the existing mortgage interest (and related) income tax deduction with a refundable tax credit would go a long way toward improving the equitable distribution of housing subsidies for home ownership. However, there may well be room for more effort in this direction: The FHA – as an on-budget agency within HUD – ought to be the locus of efforts to provide subsidies to first-time low- and moderate-income households to encourage them to become home owners. This is where the “margin” of households who may be on the cusp between renting and owning and who can become home owners with a little encouragement (and thus there is a direct and focused addressing of the externality) are likely to be found. They may also be the group who private-sector lenders might turn away because of concerns as to credit histories and/or financial capabilities.
Reducing the interest rate paid by this group ought to be one form of help by the FHA: by providing explicitly underpriced guarantees on their mortgages. But allowing this group to buy with only small down payments is not a good direction for policy – though it is quite popular and prevalent – since this means that modest decreases in home values will wipe out the buyer’s equity and increase the likelihood of default. Instead, the FHA should establish programs that help – through subsidy – households build up a sufficient pool of resources so as to make a sizable down payment. Down payments of 20% ought to be the target; even down payments of 10% would be an improvement over the 3-4% down payments that are currently allowed under FHA programs.

And, overall, the maximum size of mortgage that the FHA can guarantee ought to be shrunk substantially. Currently, the FHA can guarantee mortgage loans as large as $625,500 in “high-cost” areas and $271,050 elsewhere. If the FHA is to be focused on low- and moderate-income households, then the FHA ought to be focused on the mortgages that these households will want for the houses that they are likely to buy. Recall that the median home sold in the U.S. is currently around $220,000; an 80% mortgage would be around $175,000; even a 90% mortgage would be around $200,000. A ceiling for FHA of 90% of the national median value of houses sold seems like a reasonable target for FHA guarantees, regardless of whether an area is “high-cost” or not.

All of this, of course, ought to be done in a transparent, on-budget fashion. And this means that the FHA should be expected not to break even but instead to involve a net budgetary cost. After all, that’s exactly what should be expected of a subsidy program.

Next, we have to confront the conundrum of the 30-year fixed-rate mortgage (FRM). It’s clear that this is an extremely popular financing instrument – both politically and in the market
place. But it is also clear that the 30-year FRM poses substantial problems for the financing market place: If depository institutions are providing the finance through their vertically integrated model, then there is the severe maturity mis-match between their long-maturity mortgage loan assets and their short-maturity deposits. And if bond investors/lenders are providing the finance through their purchase of pooled/securitized mortgage-backed securities (MBS), then there is the moral-hazard/handoff problem that brought private-label MBS crashing down in 2007. Further, under either model, allowing the borrower to have a fee-free option to repay the mortgage early exacerbates the interest-rate risk of the lender.

The popularity of the 30-year FRM – but also its costs – need to be acknowledged. Again, transparency is key.

Let’s start with an easy way to reduce those costs: Fees for the prepayment of mortgages a standard and respectable part of the mortgage contract. Recall that prepayment is an “option” for the borrower – and that this option is most likely to be “exercised” (e.g., through a refinancing) when current interest rates are lower than the level at which the mortgage was originally issued. This option is valuable for the borrower – but costly for the lender (since the lender gets the repaid principal at a time when the funds can be lent only at a lower rate). Attaching a fee for the exercising of the option is a natural way to reduce this risk for the lender, which could reduce mortgage interest rates by as much as a half percentage point.

Unfortunately prepayment fees have generally been termed “prepayment penalties”, which has made them seem unfair to borrowers. But they are a normal element in commercial loan arrangements, including commercial real estate mortgages. They should become normal in residential real estate mortgages.
Next, let’s address depository institutions: In 2007, just prior to the financial crisis, depository institutions directly or indirectly held 30% of all outstanding residential mortgages. That percentage is surely smaller today; but it would be reasonable to expect a return to that level – if these institutions could find a way to hedge or otherwise deal with their maturity mis-match problem. Recall also that insurance companies – especially life insurance companies – and pension funds have long-lived obligations to their insureds and to their current and future pension claimants. It would seem to be a natural for markets to bridge these two needs with derivative products: options, futures, and swaps. And it would be in the interests of regulators – of banks, of insurance companies, of pension funds, and of securities and derivatives markets – to encourage the development of these instruments. Indeed, it ought to be a priority.

Of course, the use of these derivative instruments will not be cost-free. This will mean a higher interest rate for mortgages than if the mortgages are not hedged. But these costs should be acknowledged as necessary for the preservation of the 30-year FRM. And if these costs are perceived to pose an “affordability” problem, then appropriate – and, of course, transparent – subsidies should be explicitly arranged.

The remainder of mortgages will have to be securitized. And a simple two-part tranching structure – a senior tranche that is protected by a junior tranche and by an absorbing-the-first-loss “equity” slice by the securities packager – would seem to be a natural. Investors that seek safety (and are not afraid of long-maturity assets) would gravitate toward the senior tranche; again, this would seem to be the domain of insurance companies and pension funds (who currently invest less than 10% of their assets in mortgage securities). Hedge funds and risk-bearing mutual funds would be the likely investors in the junior tranche. Creditworthiness advisory firms – whether the current credit rating agencies, or some different institutional arrangement – would provide
information about the riskiness of the pieces. And mutual memories of what went wrong in the 2000s should help keep the parties honest.

But this simple securitization structure hasn’t arisen in the years since 2008. Indeed, private-label securitization has largely withered. The only securitization games in town are Fannie, Freddie, and Ginnie.

The reason for this dearth of private activity remains somewhat of a puzzle. Initially after 2008, it seemed that the GSEs were underpricing their guarantees and thus making competition from the private sector difficult, if not impossible. Prior to 2008, the GSEs had charged “guarantee fees” of approximately 0.20 percentage points per year on the unpaid balance of a mortgage – at a time when the interest-rate differential between GSE-backed mortgages and equal-quality mortgages that were too large for the GSEs to securitize was around 0.25 percentage points. It seemed that an increase in the “G-fees” of about that latter amount ought to level the playing field and lead to expanded private-sector securitization. But G-fees were increased by an even larger amount – they are now around 0.60 percentage points annually – and still the private-sector securitization has not revived. In a tautological sense, one could still claim that the GSEs are underpricing their guarantees in the current environment; but that doesn’t appear to be an especially interesting or useful insight.

Perhaps the current policy uncertainty has created a “Catch 22”: The private sector doesn’t want to invest the resources in securitization platforms that might be legislated out of existence; but until a viable private-sector alternative develops, policy can’t move forward and uncertainty abounds. Or perhaps those potential investors in private-label securitizations have learned the lessons of the 2008 debacle too well – that originators and securitizers (and the credit rating agencies) are simply not to be trusted.
In any event, we seem to be stuck with the existing Fannie and Freddie organizations: tightly regulated by the Federal Housing Finance Agency (FHFA) and not engaging in the slack underwriting that led to their insolvencies and conservatorships in 2008. Indeed, they have become quite profitable, with a current arrangement (which is being challenged in court) whereby all of the profits are sent to the U.S. Treasury.

One danger in the continued existence of the GSEs is that they could be actively used – because of their GSE status – for politically inspired efforts to subsidize or cross-subsidize housing. Indeed, at the end of 2015 the FHFA proposed regulations that would impose a “Duty to Serve” on the GSEs with respect to very low-, low-, and moderate-income households and those households’ purchases of manufactured housing, involvement in housing preservation, and rural housing. If the proposals have any “bite”, then they will require additional effort: in essence, subsidy. Since the GSEs are currently profitable and their profits are going entirely to the Federal Government, the government will be the funder of the subsidy – which is entirely appropriate. Nevertheless, this is best described as an off-budget and veiled subsidy rather than on-budget and transparent.

One promising development over the past four years or so has been a FHFA directive – with which the GSEs have complied – for the GSEs to arrange for the private sector to share some of the credit risk on the MBS that the GSEs are issuing. In essence, the GSEs have been buying insurance against limited amounts of the credit losses on the pools of mortgages that underlie the GSEs’ MBS. In a few instances, they really have bought insurance. But over 90% of these transactions nowadays involve the GSEs’ issuance of “catastrophe” bonds: The GSEs sell bonds to the public, on which the GSEs pay interest. But the terms of the bonds are such that the bond investors will receive less than their full principal repaid to them in the event that the
mortgages that underlie a specific MBS experience the credit losses that are specified in those catastrophe bond contracts.

It appears that over 90% of new MBS that are issued by the GSEs have a separate risk-sharing arrangement for some of the credit risk. That percentage should be widened to 100%, and the amounts of credit risk that are involved should be increased.

These kinds of risk transfers are costly and will be reflected in mortgage interest rates. But, of course, that is the point: Mortgage rates should reflect the full costs of the finance system that supports the mortgages.

Further, over time, investors in these bonds may become more comfortable with credit risk more generally, which might open the possibility of a revival of private-label MBS issuances in significant numbers and the receding of the GSEs’ importance. This process would be aided by a reduction in the GSEs’ conforming loan limit (the maximum size mortgage that the GSEs can buy or securitize), which is currently $417,000 in most areas and as high as $625,500 in “high-cost” areas. Reductions in both numbers of 10% per year for a period of five years would expand the opportunity for private-sector securitization to revive.

These are not radical changes in the U.S. system of residential mortgage finance. But they would “push the needle” in a sensible direction: toward a better reflection of the costs of finance, a more transparent path for housing policy, and a reduced role for the GSEs (and their ability to be used for veiled policy initiatives).

V. Conclusion:
As of early 2016, housing markets in the U.S. have largely healed from the deep wounds that the collapsed bubble of the 2000s inflicted. But housing policy still provides too much and badly misguided subsidy for housing, especially with respect to efforts that are supposed to encourage home ownership. And housing finance is still stuck in the pattern that quickly developed during the financial crisis: Despite their placement in government conservatorships in September 2008, Fannie Mae and Freddie Mac plus the Federal Housing Administration continue to be involved in – provide their guarantees on – approximately 90% of all new residential mortgages that are originated in the U.S.

Such extensive and direct federal involvement in mortgage residential mortgage markets is unprecedented and unhealthy. It needs to be rolled back.

Along the way, home ownership needs to be unlinked from “the American Dream”. Most U.S. households will want to pursue home ownership anyway, which markets will happily accommodate. And there is a case for a modest effort to encourage home ownership by low- and moderate-income households that might otherwise be on the cusp of owning versus renting. But renting generally ought to be seen as a wholly respectable alternative to owning; and subsidy that is intended to improve outcomes for low- and moderate-income households ought to be focused on rental markets.

Housing finance should similarly be moving away from subsidy and more toward market-based reflections of the true costs of mortgage borrowing. This must mean focusing the FHA on helping first-time buyers marshal the resources for sizable down payments as well as explicitly reducing their mortgage costs, and shrinking the roles of Fannie Mae and Freddie Mac.
“Never let a good crisis go to waste” was one of the maxims that emerged from the financial crisis of 2008. It may be a little late to be linking housing policy and finance changes to the 2008 experience. But “better late than never” is another maxim that is worthy of consideration.