INDUSTRY
PERSPECTIVES

How Deep Is the ‘Economic Moat’ Around the Two GSEs?

SEPTEMBER 2019 | DON LAYTON

JCHS
JOINT CENTER FOR
HOUSING STUDIES
OF HARVARD UNIVERSITY

How Deep Is the 'Economic Moat' Around the Two GSEs?

And Who Gets to Decide If It Is Likely Insurmountable?

Don Layton

September 2019

Papers in our *Industry Perspectives* series offer insights into the business of housing from people with broad experience in the industry. Any opinions expressed in *Industry Perspectives* papers are those of the author(s) and not those of the Joint Center for Housing Studies, Harvard University, or any persons or organizations providing support to the Joint Center for Housing Studies.

For more information on the Joint Center for Housing Studies, visit our website at www.jchs.harvard.edu.

Introduction

When policymakers are focusing on legislative reform of the GSEs, a core principle widely espoused is to increase competition, to get away from the Freddie Mac/Fannie Mae duopoly.[1]

The Trump administration is firmly in this camp: the Presidential Memorandum dated March 27, 2019, in listing objectives for GSE reform, puts "facilitating competition" second only to ending the conservatorships as an objective, and thus is core to the just-released Housing Reform Plan from the US Treasury. Also, in its 2018 Report to Congress, dated June 2019, the new director of the Federal Housing Finance Agency (FHFA), the regulator (and also currently the conservator) of the two GSEs, asked Congress for authority to issue new charters "to promote competition" versus the "current duopoly."

And this view is held by more than Republican officials. For example, in a recent report from this past August, the left-leaning Urban Institute discusses – in an approving tone – various issues related to reforms that can support an increased number of guarantors, noting how the recently implemented single security is a start in that direction.

However, in my prior article "Why Is the Administration Not Talking About Utility-Style Regulation of G-fees?" published July 16, 2019, I referred to the barriers to entry to competing with the two major government-sponsored enterprises (GSEs) of Freddie Mac and Fannie Mae as being maybe insurmountable, or at the least very high. In popular business terms, used heavily in the technology industry lately, the GSEs therefore seem to have an extremely deep and wide "economic moat" around them,

[1] Technically, it is a "duopsony" rather than a duopoly. A duopoly is where there are many buyers and two sellers; a duopsony is where there are many sellers and two buyers, which more accurately describes the GSE situation. But I will adhere to the common practice of calling it a duopoly.

preventing additional potential competitors from successfully entering. It may be so deep and wide, in fact, that it is not realistic to expect a new entrant to ever get through.

So, clearly there is a major divergence of views here. One is that the successful entry of new competitors into the GSE space is highly unlikely. The other is that increasing the number of guarantors should be at the core of housing finance reform policy. It is therefore important to explore in some detail the barriers to entry to determine just how significant or even insurmountable they are.

But, to be clear, this issue is only relevant in the case of GSE reform that occurs via legislative means. In the much more likely case of reform by administrative means, it is substantively a moot point: there will be two GSEs per the current Congressional Charters, no more and no less. This more likely scenario led me to the point of the prior article – the need for utility-style regulation of guarantee fees (G-fees) to avoid likely implicit collusion (also called tacit collusion) that would produce G-fees higher than they need to be.

I will follow up with a third article in this series to compare the two alternative strategic visions for the GSEs currently dominant among policymakers: 1) the view of the present administration and many others that their function should be performed, somehow, by a normal competitive industry with well more than two guarantors; or 2) the alternative, which I have not seen as well articulated, that the two GSEs are in fact two federal public benefit corporations,[2] tasked by Congress through their charters to provide a secondary mortgage market, and to that end have been given certain advantages, obligations and limitations. (Utility regulation is just an offshoot of this

[2] A public benefit corporation, also known as a public policy corporation, is generally defined as a specific type of corporation that allows for public benefit to be a charter purpose in addition to the traditional corporate goal of maximizing profit for shareholders.

view, because there are only two companies.) That third article will also show why the latter view, in my opinion, is the much more productive path for policymakers to take.

Based upon my experience as CEO of Freddie Mac for seven years, I see three major barriers to entry to competing with Freddie Mac and Fannie Mae that are important for policymakers to understand. I explore each in some detail below.

I will also address the question of "who gets to decide" if the economic moat is too deep – that is, likely insurmountable. The short answer: not officials or policy experts in Washington, but instead the financial community that will, ultimately, either invest the needed billions of dollars in such new entrants… or not.

The First Barrier: Cost Economies of Scale

Freddie Mac and Fannie Mae are extremely large companies in terms of their balance sheets: respectively, they reported $2.1 trillion and $3.2 trillion in guarantees outstanding at year end 2018. Freddie Mac alone, even though the smaller of the two, has about 11 million single-family mortgages on its books and has issued more than 200,000 specific pass-through mortgage-backed securities. It has almost a thousand lender customers that sell it loans and over 500 firms that service those 11 million loans. (It also has a smaller multifamily business, which has a very significant market share of loans to owners of rental housing.) To support this substantial network and all its internal processes, it spends roughly half a billion dollars a year on information systems development alone.

Freddie Mac's total G&A (i.e., general and administrative expenses, such as salaries and fringe benefits, premises costs, consultant fees, technology costs, and so on) was reported in its financial statements as $2.3 billion in 2018. While that is a large number in absolute dollar terms, it is small in relative terms: it amounts to just 0.11% of Freddie Mac's outstanding mortgage guarantees (the vast majority of which are on single-family mortgages). The entire single-family guarantee fee revenue, by comparison, was reported to be 0.41% on recent mortgages; that means about one-fourth (i.e., 0.11% versus 0.41%) of the core revenue stream of guarantee fees is required for G&A expenses. (However, there are significant additional revenue streams beyond the core of guarantee fees.)

There is also a very heavy component of fixed cost to the G&A expense base. So, Freddie Mac, as the smaller of the two GSEs, has and continues to have a modestly higher ratio of G&A-to-guarantees, by about 0.02% (or about one-fifth more). Internal analysis by Freddie Mac estimated that, in practical terms, very roughly half of the expense base was fixed (i.e., about the same between Freddie Mac and Fannie Mae), regardless of volume.

So, how would a start-up fare against this kind of scale and fixed-cost environment? It would need to develop complex information systems to work with at least hundreds of lenders, maybe 100 or more servicers, and to properly administer thousands of pass-through mortgage securities. But it would have to do so with a very small "denominator" in comparison to the $2.1 trillion that Freddie Mac has. Would the result be 0.20% of outstanding guarantees for G&A expenses, or maybe 0.30%, or even worse? The difference is immense given that the core revenue stream of guarantee fees was only 0.41% per dollar of recent guarantees in 2018. In fact, each extra 0.10% of expenses would translate into very roughly a one-fifth to one-third decline in profitability for the entire company.

This is why, when I talk to people in the industry or who have familiarity with the business, I frequently hear the view that the classic cost economy of scale barrier to entry would be extremely difficult for a new entrant to overcome.

But we are in an era where large firms with great scale are being “disrupted” by smart technology firms with some frequency. And, thus, there is the hope that some firm, in fact several firms, might arise to overcome this seeming barrier to entry. (There was, in fact, a misconception that the Common Securitization Platform would eliminate the barrier of entry due to the cost economy of scale, but that was never true. See the box below.)

If cost economy of scale were the only barrier to entry, I would be cautious about my view that competition is very unlikely ever to successfully enter the business. But it’s not. It’s just the standard one that people seem to talk about because it is so common in so many industries. The real problem is barriers unique to the mortgage finance system.

The Common Securitization Platform and a Policy Misunderstanding

On February 21, 2012, the FHFA issued its first strategic plan for its conservatorship of Freddie Mac and Fannie Mae. In that plan, it highlighted several key objectives, one of which was to “build a new infrastructure for the secondary mortgage market,” as stated on the very first page. In the body of the document it defined this to be a “platform that bundles mortgages into any of an array of securities structures and provides <u>all the operational support to process and track the payments from borrowers through to the investors</u>*” (emphasis added).*

Thus began a program in which the FHFA, as conservator to the two GSEs, directed (i.e., ordered) that a joint back-office utility be developed to perform the securitization functions of the GSEs. The name adopted for that operation was the Common Securitization Platform (CSP).

With significant simplification, the systems and operations of the GSEs fall into four strategic categories: (1) the interface and processing with primary market lenders that originate and sell loans to the GSEs; (2) the interface and processing with the servicers of all the loans on the books of the two companies; (3) the interface and processing with investors in all the pass-through mortgage-backed securities issued to finance the mortgages; and (4) “everything else” – everything needed to support all the complex accounting, to manage all the credit risk, including credit risk transfer transactions, to ensure cyber-security, to manage the investment portfolio and its funding, to run the phones and email, and so on.

The CSP project, launched in June 2012,[i] *focused solely on the third category: replacing the interface and processing with the investors in the pass-through mortgage-backed securities by a newly created central utility, legally and operationally independent of the two GSEs. (This "independence" was meant to ensure that the mortgage system could continue to operate even if one or both of the GSEs fell into bankruptcy.) The CSP project also had a secondary scope of fully standardizing the terms and related policies of the pass-through securities issued by the two GSEs. The project had many twists and turns (which I will describe in a future article), but was completed after seven years in June 2019 at a total cost of $2.1 billion.*[ii] *It also delivered a "single security," which is extremely important to the housing finance system, but that was added to the project's scope in 2014, having been mentioned only peripherally in the February 2012 strategic plan document and not included in the original scope of work set by the FHFA at the June 2012 meeting.*

The problem was that in the housing finance policy community there developed a belief about the CSP that was at odds with what was actually being done. Simply put, the original FHFA strategic plan document described an ambitious vision to enable the private sector to compete with the GSEs in order to shrink the latter's "footprint," and maybe even fully replace the two companies. It then described what became the CSP project in a way that was easily misinterpreted to mean that <u>almost the entire operating functionality of the two GSEs was being put into the CSP</u>*. That is, it falsely appeared as if the CSP would encompass almost all of the four categories of systems and operations listed above. (Even reading it today, I can easily see how it could be so misunderstood.)*

With this incorrect characterization of the CSP project, a significant number of people in the housing finance policy community developed the idea that the barrier to entry due to the cost economy of scale, and others possibly as well, would be virtually eliminated, and therefore that almost any firm could enter the business if it just raised some capital, hired a modest-sized staff, and then tapped into the CSP's processing for a fee.[iii] *Those who wanted to hear that somehow there was a solution to housing finance reform that dramatically reduced or eliminated the GSE duopoly, or at least reduced the housing system's dependence upon their infrastructure, naturally tended to adopt this expansive view of the CSP in their thinking.*

Regardless, <u>it was simply not true</u>*. So, because the categories of expenses listed above as first, second and fourth are all untouched by the CSP, the barrier to entry due to cost economies of scale remains very real and very high.*

---

i. *This was done at a meeting at the FHFA's offices which I personally attended.*
ii. *As disclosed by the FHFA's Office of Inspector General in a report dated March 29, 2019.*
iii. *Also ignored was the need for any new user of the CSP to have the capital to buy into it in order to purchase an appropriate ownership share, and to fund whatever systems changes are needed to accommodate one or more additional guarantors. Today it is owned fifty-fifty by Freddie Mac and Fannie Mae as the only two users of its services.*

The Second Barrier: The Lender Economics of Automated Underwriting Systems

The business model of the GSEs starts with their purchase of mortgages from lenders, more than a thousand of which deal with the two companies. Recall that the GSEs then take on the full credit risk of those purchased mortgages. They must therefore make sure to determine that the creditworthiness of each and every mortgage is acceptable. And so each GSE developed an automated underwriting system (AUS) to communicate, for any specific possible mortgage, its acceptability (or not) for purchase by the GSE, as well as to facilitate the sale of those that are acceptable. (Because even the smaller Freddie Mac can purchase 100,000 mortgages a month or more, it is simply inconceivable for the process *not* to be automated.) The lenders, beyond wanting the GSEs to be as expansive as reasonably possible in their definition of acceptable credit quality, also want the process to be as operationally easy, inexpensive and quick as possible. Each GSE's AUS is therefore designed to deliver with regard to these twin goals: credit criteria acceptable to the GSE according to its policies but not unduly conservative in the eyes of lenders; and a process that lenders find easy and efficient to complete.

Each AUS is actually a complex and frequently changing suite of systems that interface with the lenders and their systems. The AUS allows lenders to find out quickly if a loan from a prospective customer of theirs is acceptable for sale to one or both GSEs, which in turn enables that lender to price the loan by matching it to the cost of selling the loan to at least one of the GSEs at that time. The "seller-servicer guide" that describes to lenders all the terms in the AUS (as well as other topics), when it was printed on paper (which it isn't anymore), ran to over one thousand pages.

Competition between the two GSEs these days, in fact, is heavily driven by improving their respective AUS to reduce costs and increase speed of processing by lenders (and also to improve the GSE's own risk management). For example, certain homeowner applications can use a big-data-driven estimate of the home's market value that is believed by the GSEs to be statistically more accurate – and quicker and cheaper – than a traditional appraisal. As another example, the ability of a lender to skip collecting and handling paperwork related to verifying a borrower's assets – by getting customer permission so Freddie Mac can access their financial accounts on a direct computer-to-computer basis – saves time and expense for the lender as well as reducing borrower hassle. These are just two of many such features embedded in AUS today. Each GSE is deciding what capabilities of this type to develop and how to develop them as they compete with each other during conservatorship.

For lenders, however, it is expensive and complicated to have two (or more) AUSs – one is much easier and less expensive to maintain and support, especially for smaller lenders. *The number of AUSs is a cost economy of scale issue to those lenders* – and they respond appropriately. As a result, Fannie Mae – as the bigger GSE – has the dominant AUS (called "DU," for Desktop Underwriter). In fact, Freddie Mac struggled (and still does to a degree) to get lenders to use its AUS (historically called "LP," for Loan Prospector) – so that, until very recently, about half of the loans purchased by Freddie Mac were actually underwritten through DU, giving DU an effective AUS market share of about 80 percent of all GSE loans. In other words, Freddie Mac generally accepted DU's (meaning Fannie Mae's) credit judgment that a loan was a good enough credit to be bought, despite not knowing exactly what credit policies are inside DU (such information being proprietary) – because it had little competitive choice. (With large technology investments in recent years, Freddie Mac has been able to improve significantly upon this historic practice.)

The GSEs' existing AUSs create a significant lender-driven barrier to entry for new potential competitors to the GSEs. To those in the industry, it is clear that lenders have little to no interest in installing and using a third AUS from a third GSE competitor – much less a fourth or a fifth! Those new competitors would thus have little choice but to accept DU's, or perhaps LP's, making a credit judgment for them as to what loans are acceptable to buy. And that means the credit risk decision-making of their book of guarantees would be out of their hands. And yet that is the most important function a GSE has – determining the credit quality of its portfolio of mortgages guaranteed.

Without that ability to control credit quality, new entrants would be hard pressed to describe why an equity investment in them – and billions of dollars would be needed for even a small competitor – would make sense, because it would not be clear why they would have any competitive advantage or how they would garner market share. (Freddie Mac's historically utilizing DU so much was not such a problem, given that it had an established book of business from long ago, before the current securitization-based business model for the GSEs was developed; it did historically have modestly higher credit losses on DU-originated loans but did strategically get enough extra market share so that its volumes could support fixed costs without inordinate disadvantage versus Fannie Mae.)

As described above, those who were under the false impression that the Common Securitization Platform (CSP) would replace almost all the operating (i.e., transactional) functionality of the GSEs assumed this AUS barrier to entry would largely if not totally disappear as well. When it became apparent to some, about 2017, that this was not true, there was some industry talk (e.g., by the Mortgage Bankers Association) about possibly calling for an "AUS utility" like the "securitization utility" that was still being built in the CSP at that time. But such talk was short-lived, for two reasons. First, given that the securitization utility then was on track to take seven years and cost about $2 billion, no one was calling for holding off on GSE reform for maybe another seven years and spending another $2 billion to build an AUS utility.[3] Second, given that the AUS was the "beating credit heart of a GSE" (to quote one senior Freddie Mac official's words to me), which had systems updates dozens of times per year as it utilized digital

[3] Furthermore, this $2 billion would otherwise go to the taxpayer, as generally all profits are currently "swept" to Treasury once per quarter.

technology to make it as efficient and easy to use as possible to evaluate and process a potential mortgage loan, it was unclear how one would ever actually build or operate such a utility. (By comparison, the securitization processing in CSP is fairly straightforward, standardized and stable.)

And so hopes by members of the housing finance policy community to overcome the AUS barrier remain based upon hypotheticals and speculation that somehow it will happen, but with no concrete specifics as to how.

Thus, the lender-economics-of-AUS barrier to entry remains.

The Third Barrier, Part 1: MBS Investor Preference for Liquidity

The third barrier to entry is to be found in the preferences of investors in the mortgage-backed securities (MBS) issued by the two GSEs. It is, unfortunately, a somewhat long and complex topic.

The GSEs, prior to their entering conservatorship in September 2008, enjoyed the belief in the marketplace that they had an "implied guarantee" from the US government.[4] On that basis, the mortgage-backed securities (MBS) issued by the GSEs were treated by the marketplace as having nil credit risk, almost as good in terms of credit quality as US Treasury securities themselves.

Under conservatorship, the government's support has been made formal; a legal agreement called the Preferred Stock Purchase Agreement (PSPA) explicitly makes the

---

[4] This belief was based upon their Congressional charters, special lines of credit from the U.S. Treasury, and various statements made by government officials over time. And it turned out to be a correct assumption, as the government placed the two GSEs in conservatorship in September 2008 rather than see them default.

commitment to support each GSE.[5] On that basis, the marketplace still treats the two companies as having nil credit risk.

But investors also prize liquidity, meaning the ability to buy and sell large quantities of MBS without their transactions moving market prices against them more than minimally. US Treasuries have the greatest liquidity in US securities markets, and over time mechanisms have been developed to allow GSE MBS to enjoy liquidity that is extremely high as well, although naturally not as high as that of US Treasuries.

So, for the last several decades, the two GSEs have issued their MBS at very favorable (i.e., low) interest rates versus other interest-rate-bearing securities – because the credit risk is nil and the liquidity is very high. (At a meeting I had at the U.S Treasury in 2012 shortly after my arrival as CEO of Freddie Mac, officials there told me point-blank to make sure we did not somehow interfere or disturb this situation, which is regarded as key to ensuring low mortgage rates to homeowners (as well as the 30-year fixed rate with free prepayment).

So far, so good. But there was a wrinkle: *the investor marketplace did not treat the MBS of the two GSEs the same*. They would take MBS from Freddie Mac only if investors could buy them a little cheaper than what they would pay for Fannie Mae's MBS.

This preference reflected the superior liquidity of MBS issued by Fannie Mae, which, as the larger firm, has a head start on that superior liquidity. But there is a well-observed phenomenon in trading markets that, between several competing similar investments, the more liquid alternative will tend to be *disproportionately* even more liquid. (This is similar to the "network effect" found in certain internet company

[5] This agreement takes the form of the U.S. Treasury legally committing to inject equity into each GSE should it ever incur losses greater than its net worth, so they can never have negative net worth.

business models.) In the GSE MBS case, while Fannie Mae is about 50% larger than Freddie Mac in terms of its MBS outstanding, the trading volume of its MBS is widely cited as being roughly 10 times that of Freddie Mac's![6]

The differential in price would move around over time, but historically it would average around 0.20% to 0.25% (meaning an investor willing to pay 100 cents on the dollar for a Fannie Mae MBS would only be willing to pay 99.75 - 99.80 cents for an equivalent Freddie Mac MBS), with considerable variation around this average over time for many reasons. While that may seem small in comparison to the total amount of a mortgage, it is a large share of what a mortgage banking company would generate as its total revenue stream from originating a specific homeowner's mortgage – and in aggregate would be a very large amount for the larger mortgage originators. Thus, to be competitive with Fannie Mae, Freddie Mac would often agree to offset this extra cost to the lender by reducing its guarantee fee (G-fee) by an equal amount[7] – otherwise, the lender simply could not afford to sell its origination volume to Freddie Mac.

Thus, prior to conservatorship, Freddie Mac earned somewhat less profit per dollar of its single-family guarantees than did Fannie Mae. It was still able to report good overall corporate profitability to its shareholders, however, by disproportionately building up its investment portfolio, which generated high profits mainly because it was funded by borrowings that were unusually low-cost due to the implied guarantee from the government (for which there was no charge). As such a large investment portfolio is not allowed in conservatorship, and likely not going to be allowed upon any exit from conservatorship, there will be a "level playing field" problem for Freddie Mac to

---

[6] And note how this superior liquidity is a result of the government's support of the two GSEs. If not for that support, the MBS would have significant credit risk that would make the MBS much less liquid overall, as the guarantee provided by the GSEs would be considered to leave MBS investors still with the corporate credit risk of the two GSEs doing the guaranteeing; trading of their MBS would be based less on liquidity and more on the creditworthiness of Freddie Mac or Fannie Mae as corporate entities.

[7] This is known in the industry as MAP – market adjusted pricing.

compete with Fannie Mae in any such exit. (See the discussion of the single security project below for how this problem is being addressed.)

In the early years of conservatorship, Freddie Mac had a lack of competitiveness that resulted in the price difference demanded by investors growing beyond its historic level, and so the required subsidy (i.e., MAP costs) to offset the liquidity advantage held by Fannie Mae grew well beyond its usual level. At its maximum in 2012 to 2013, it exceeded $500 million per year,[8] a rather significant amount of reduced profits to Freddie Mac (and the taxpayers behind it during conservatorship).

Given this well-established dynamic, should a third or fourth GSE attempt to enter the marketplace, the reality is that investors will also demand a higher return than they do for Fannie Mae. Where Freddie Mac – with its large scale, nationwide and diversified portfolio, and track record – needed to pay a small amount extra, one can only guess how much a start-up, having absolutely no track record of liquidity or trading history, and a guarantee portfolio tiny in comparison to what the two GSEs have today, would have to "pay up" to sell its MBS to investors. There is simply no history to guide such an estimate, but those familiar with the business and with whom I have talked over the years all believe it to be very significant, well more than the average 0.20% to 0.25% that was required of Freddie Mac.

If a new entrant has to have reduced revenues and profits to win business by making up for this significant differential, then it is very difficult to see how the entrant's sponsors can make a case that it will be competitive and win market share on terms that allow it to earn a reasonable return for its investors. Simply put, it can't. Which in turn makes raising equity highly problematic.

---

[8] Measured as the present value of how much less revenue would be received on the mortgages purchased during the calendar year.

That further difficulty made a very big barrier to entry seemingly insurmountable.

The Third Barrier, Part 2: MBS Investor Preference for Equal Prepayment Speeds

But then there was an attempt to surmount that barrier!

In May 2014, the FHFA announced in its annual Conservatorship Scorecard that it had added to the CSP project a goal of developing a “single security.” The idea was to blend together the Freddie Mac and Fannie Mae MBS so they traded on an equal basis, to achieve two desired policy objectives. First, Freddie Mac would no longer have to subsidize its MBS issuance to be able to compete head-to-head with Fannie Mae; thus, Freddie Mac’s guarantee business profits would be higher, enabling it to pay higher dividends to the taxpayers who support it. Second, the interest rate paid by Fannie, as the benchmark issuer for both companies, would go down because the combined liquidity of both firms would be substantially larger than Fannie Mae’s alone (thereby benefitting homeowners with slightly lower interest rates).[9]

This single security project took the form of making the MBS issued by Freddie Mac and Fannie Mae exactly the same as to all their terms, and establishing other mechanisms (very complex, and unnecessary to describe in this document) to make the two interchangeable so they would “trade together” and thus neither would have a noticeable liquidity or interest rate advantage over the other.

It became the belief – widely held, including at the GSEs and FHFA – that this single security mechanism would, in a future reform done via legislative means, also allow new entrants to overcome the investor preference for liquidity barrier to entry. New entrants could join the interchangeable trading of MBS just like Freddie Mac would

[9] Thus, with the implementation of the CSP in June, 2019, there are real benefits that are accruing today while the companies are in conservatorship: the taxpayer is beginning to get more profits from Freddie Mac, and the average interest rate on new mortgages is slightly lower (although how much is hard to determine).

do versus Fannie Mae upon the completion of the single security project. In fact, the US Treasury very explicitly stated in various meetings I attended that this was one of the reasons it supported the single security.

But events transpired to make it otherwise. In the following recap of what happened, the key fact to keep in mind is that individual institutional investors can refuse to accept the interchangeability of Freddie Mac and Fannie Mae MBS; the single security's success depends not on Treasury's hopes, but on the independent choices of investors.

Please recall that the typical mortgage loans behind a GSE MBS have a free option to prepay on the part of the homeowner. So, when mortgage interest rates go down, there will be a surge in prepayments as homeowners refinance at those lower rates. When rates go up, such prepayments are reduced as homeowners sit on their existing mortgages that have rates below the new market rate.

Investors in GSE MBS, since there is nil credit risk given the backing of the US government, thus focus heavily upon the "prepayment speed" that results from that homeowner behavior as interest rates change, since it is a major mathematical factor in determining the market value of any specific MBS.

Different pools of mortgages can display very different prepayment speeds, and prepayment speeds change over time as well. To be able to model and predict prepayment speeds is therefore a major driver of success in GSE MBS investing for institutional investors (like mutual funds, for example) and for Wall Street firms that are dealers in MBS securities. Those institutional investors and dealers are thus very concerned – "obsessed" would not be too strong a word – with anything that can impact prepayment speeds.

So, near the end of the single security project, in 2018, the investment community made clear that its support of the project was contingent on *the FHFA's putting in place extraordinary measures to ensure that the prepayment speeds of the two GSEs' mortgages were almost exactly the same and that they would not drift apart*, as any emerging difference between them would render the interchangeability meaningless to those investors, causing them in turn to likely suffer losses. (Historically, Freddie Mac's mortgages prepaid faster than Fannie Mae's;[10] actions by Freddie Mac during recent conservatorship years to get its mortgages to mimic the prepayment speed of Fannie Mae's had generally been effective, but they were discretionary on the part of Freddie Mac, and so could not be assumed to last long-term.)

In response to the investment community's concerns, the FHFA developed an official regulatory rule – put out for comment September 2018 and finalized February 2019 – to manage all the aspects of mortgage loan purchases by the GSEs, with approvals and enforcement mechanisms, to ensure the prepayment speeds do indeed, as promised, stay in line with each other. (Some in the industry are skeptical this can be made to work in the long run as it is such a change from long-standing practice.)

But how would such a rule work with a new entrant? Even though Freddie Mac has the same nationwide origination flow as Fannie Mae; the same full product line as Fannie Mae; a tremendous overlap with Fannie Mae as to which mortgage lenders each has as customers; and even though many features of how the two companies operate are similar because their long-standing competition has driven each to keep up with the other – in spite of all this, the MBS investment and dealer community was still vehement (and that is not too strong a word) that the FHFA put in its rule to keep prepayment speeds aligned!

---

[10] This prepayment speeds differed for two reasons. First, Freddie Mac usually had slightly higher mortgage loan credit quality than did Fannie Mae – so its average borrower could more likely qualify to refinance, when rates dropped, by being more creditworthy. Second, some mortgage lenders are better than others in encouraging refinancing when rates drop, and Freddie Mac traditionally had a modestly higher mix of them as customers than did Fannie Mae.

It is almost inconceivable, then, that the major GSE MBS investors would allow a new entrant with *none* of these similarities to Fannie Mae into the single security mechanism. And, as stated above, investors always have the option to override the single security mechanism if their belief that prepayment speeds will not align is strong enough.

The barrier to entry posed by MBS investor preference – where the marketplace is in charge, not the government – is therefore still alive and well, and very much a problem for any new entrant.

Who Gets to Decide?

I found in policy discussions in DC that there is often an assumption that the government could mandate any outcome it wished. On this assumption, if policymakers and Congress could be convinced that a third or fourth or more GSE could emerge as a vibrant competitor, that was it – game, set, and match.

But not in this case. A new competitor will need to convince equity investors that it can indeed compete and earn a full return on its activities. And not just a niche investor or two. Currently, the existing proposal for capital requirements for the two GSEs calls for something on the order of $100 billion to $150 billion of equity to support their activities in aggregate. So, if a firm aimed at a market share of 5% – which is not that much – it would need to raise over time maybe $5 billion to $7.5B of equity. That's an awful lot.

Raising that much equity would require very large public stock offerings, convincing both underwriters and institutional equity investors that the business model of the proposed new entrant would generate returns good enough to justify buying the stock. And if potential equity investors do not buy into the story, if they see the competitive barriers I have listed above – the deep economic moat - then they will not invest at the large scale required. And that means no third or fourth GSE.

In other words, the market gets to decide, not Washington.

Conclusion

The three barriers to entry described above – cost economy of scale, lender economics for AUS, and MBS investor preference – add up to an impressive economic moat enjoyed by the two existing GSEs. I have heard people in the housing finance policy community talk about new competition emerging on a general or conceptual basis, with lots of unspecific expectations that somehow the barriers listed above will be overcome, but I have never seen any in-depth or rigorous analysis of how an actual company is going to do so – and on a convincing enough basis to raise very large amounts of equity on reasonable terms.

Having seen firsthand as the CEO of Freddie Mac how hard it was to compete with the larger Fannie Mae, despite being far better positioned to do so than any new entrant competitor could ever be, it is my personal conclusion that those three barriers add up to an insurmountable economic moat.

And that means legislative reform structured around the core concept of more competitors is simply at odds with the reality of the situation. And therefore not a good basis for public policy going forward.