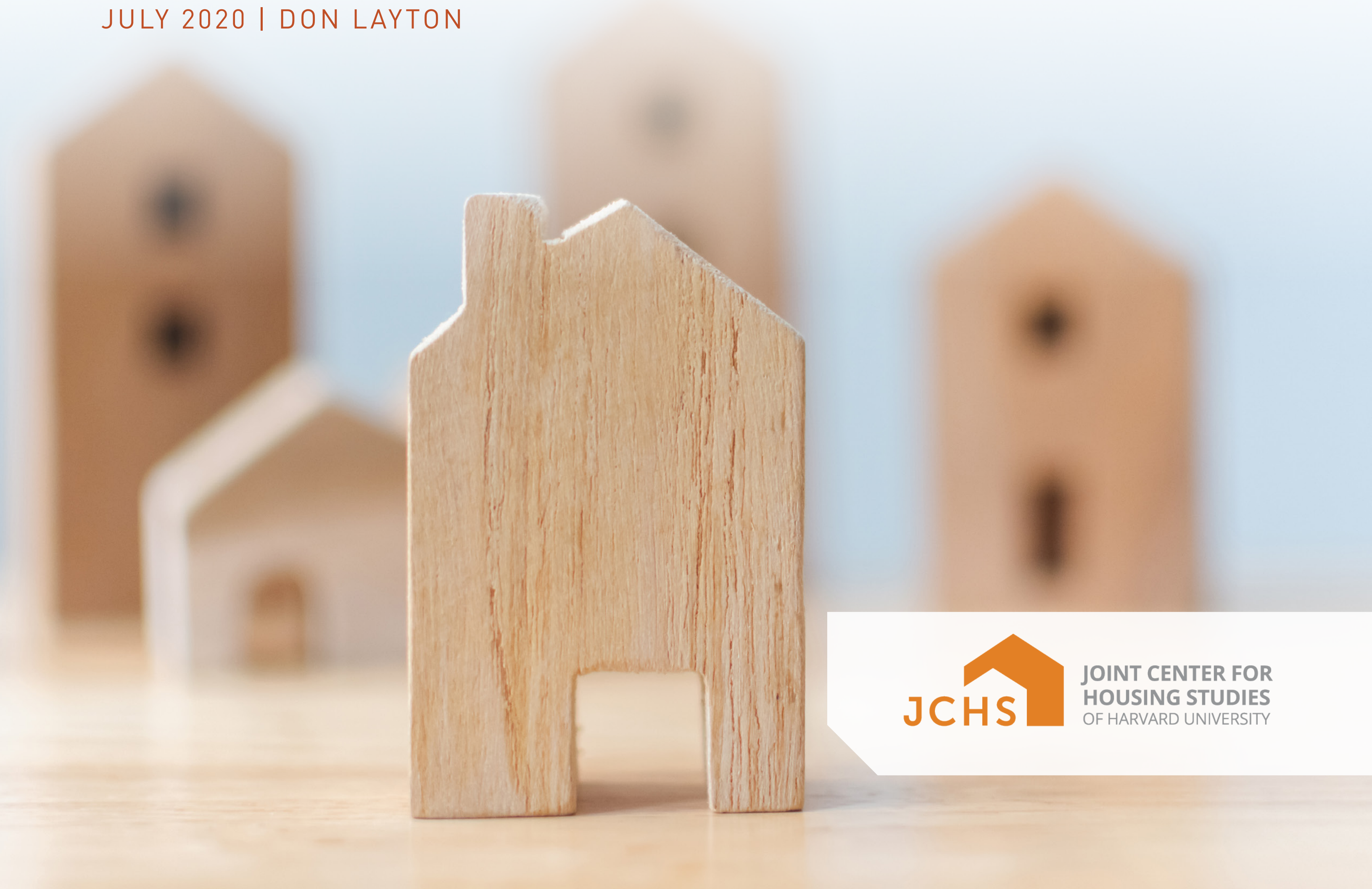
INDUSTRY
PERSPECTIVES

Demystifying GSE Credit Risk Transfer

Part III – Special Interests and Politicization

JULY 2020 | DON LAYTON



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Demystifying GSE Credit Risk Transfer: Part III - Special Interests and Politicization (2015–2019)

A Case Study

Don Layton
July 2020

Summary

"I don't give them Hell. I just tell the truth about them, and they think it's Hell."
President Harry S. Truman

“Sunlight is said to be the best of disinfectants.”
Supreme Court Justice Louis Brandeis

This third installment about demystifying single-family mortgage credit risk transfer (CRT) by the government-sponsored enterprises (GSEs) Freddie Mac and Fannie Mae describes a series of attempts to politicize CRT, including an analysis and correction of the many misconceptions integral to those attempts. For the purposes of this article, I define politicization as the attempt by special interests to force changes to their advantage through the power of government.

As stated many times in my writings, such politicization plays a major role in GSE activities, and in housing finance more broadly. However, unusually for a major change in the business model of the GSEs, CRT was developed largely off the special interest radar screen. This happened for two reasons: first, housing finance groups and policy specialists at that time (circa 2012-13) were heavily focused on developing proposals to *replace* the GSEs, rather than *reform* them; second, the development took place “inside of conservatorship” rather than via the more common and visible legislative or regulatory route. The GSE CRT program was therefore built free from the lobbying and influencing of special interests that otherwise would have attempted to force changes to their advantage; instead, it was primarily a business-like program to reduce the taxpayer’s exposure to GSE mortgage risks on an economically efficient basis.

Eventually, of course, CRT did show up on the special interests’ radar: it was recognized more broadly as a major change in the GSE business model starting in 2015, a full two years after the first CRT transactions and at a time when the program was already going strongly. At that point, the lobbying and influencing began. This effort was driven mostly by commercial groups seeking to protect or increase profits, but sometimes also by the ideological goals of either enhancing or reducing government’s role in the economy versus the private sector’s; once in a while, it was driven by the desire for political power – i.e., the ability to tell people what to do. At times, it was driven by a combination of these motives.

I have described below several specific attempts to utilize the power of government to change the direction of the CRT program, as well as the supporting narratives – often quite biased – that accompanied them or more broadly circulated within the housing finance policy community. Viewed in their entirety, these attempts constitute a classic case study of what politicization looks like at ground level, warts and all.

So far, against the odds, the attempts have had only minor impact on the CRT program, which is still based strongly upon economic efficiency rather than special interest considerations. It should not be taken for granted that this minor impact is the end of the story, as those attempts continued through the end of my tenure as CEO of Freddie Mac in mid-2019, with no obvious end in sight. Furthermore, these attempts at politicization have left a lot of still-circulating misconceptions about CRT in their wake, which I address in this third installment.

Importantly, a major new attempt to change the direction of the CRT program looms large right now in the form of the capital requirement rule recently proposed by the Federal Housing Finance Agency (FHFA) to apply to the two GSEs, which will be discussed below.

Note that this paper is a personal recounting of events in which I participated.

Background

As President Truman famously said, there is a lot of heat in the kitchen of Washington; it is definitely not for the squeamish. Advocacy for ideological and commercial reasons, and sometimes just for plain power, is a core function of the broader political community inside the Beltway, and it is pursued sometimes in a bare-knuckle manner in which intellectual honesty plays little part.

Government is naturally heavily involved in financial services of all types. Legislation has empowered regulators to create an envelope within which different types of financial firms must operate in the interest of "safety and soundness."[1] On a secondary basis, Congress sometimes goes further and puts specific social obligations on financial firms (perhaps the most famous example being the Community Reinvestment Act for banks).[2] I pursued my career in such financial firms for almost forty years before parachuting into the housing finance industry as CEO of Freddie Mac in May 2012.[3]

I found that the role of government in housing finance is different from its role in banking, securities or insurance, because housing finance is considered "special" in terms of policy and politics in Washington. It is special because housing is so important to the economy (about one-sixth of GDP is housing-related – only healthcare is larger); the cost of housing is the single largest item in the monthly

[1] "Safety and soundness" is a formal regulatory term. Banks, for example, are routinely examined by specialists from regulatory agencies against many criteria to ensure they are operating "safely and soundly."
[2] The logic is that because a bank benefits from a government-endowed license to operate as a bank with federally insured deposits, its having a social obligation in return is fair.
[3] I spent twenty-nine years at JPMorgan Chase and its predecessors, retiring as vice chairman responsible for half of its business activities. I was later chairman and CEO of E*TRADE Financial. I have also been a board member of several insurance companies. Thus, I had broad exposure to the banking, securities and insurance businesses before joining Freddie Mac in 2012.

budget of the typical American family; and housing is important in every single congressional district and state, so all 535 members of Congress care a lot about it. Recent actions by Congress and the government to intervene in residential mortgages in today's pandemic-induced economic downturn confirm this specialness – by comparison, the government does not have a priority focus on forbearance or loan modification for credit cards or auto loans, while they clearly do for mortgages.

So, instead of the government's role with respect to housing finance being limited mostly to regulation, it is instead pervasive, a trend which began in the Great Depression. The federal government has created large specialty financial institutions to support the mortgage market, the most prominent example being the $5 trillion government-sponsored enterprises (GSEs) Freddie Mac and Fannie Mae.[4] It backs the credit of about two out of every three dollars of single-family first mortgages in America through various arms. Congress also is habituated to and comfortable with micromanaging many aspects of housing finance, well past the role it plays in, say, commercial banking.

Government's pervasive role in housing finance has led to massive politicization, for if Congress is going to micromanage so much of housing finance, then firms in the industry are going to use all the predictable means of influencing that micromanagement to protect or expand revenues and profits. These means include campaign contributions, lobbying directly and indirectly, building very powerful industry associations headquartered in Washington to maximize influence (both defensively and offensively), and so on. The housing finance industry is well known for economics shaped not only by normal, free-market competition but also by this history of politically driven micromanagement, including hidden subsidies and excessive costs.[5]

Given such a large government role in something so big, housing finance is the object of battles over political ideology as well. Democrats generally like the government's heavy involvement in housing finance, seeing it as a continuation of the New Deal tradition of government intervention to help the less fortunate. Republicans do not like such heavy involvement, as it goes against their small government instincts and their belief that private market solutions are superior in properly meeting consumer needs for credit. This battle over ideology is played out not just in Congress, but among Washington-based think tanks through their papers, speeches, conferences, op-ed pieces and congressional testimony.

Sometimes the battles in housing finance are about neither economics nor ideology, but pure political power, meaning the ability to tell people what to do, a core feature of government.

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[4] The $1 trillion Federal Home Loan Bank system would be another, as would the Federal Housing Administration and Ginnie Mae.

[5] Some examples of these costs and subsidies will show up in this article with respect to credit risk transfer.

Credit risk transfer (CRT) stepped into this highly politicized environment when, in mid-2013, Freddie Mac pioneered the first modern credit risk transfer transaction. Officially, it did so in response to the FHFA which, as its conservator as well as regulator, set CRT as a goal in the first-ever Conservatorship Scorecard issued early in 2012.[6] Unofficially but importantly (as will be explained further below), CRT was something Freddie Mac wanted to do anyway as part of building a capital-efficient company to help strengthen the country's housing finance system.

Fannie Mae, the other large GSE, followed suit later that year.

In quick order – especially by government standards – this uncertain experiment became a permanent core of the GSE business model; by 2018-19, more than 70% of new single-family credit risk[7] was being routinely sold off to investors, cost-efficiently reducing the taxpayer's exposure to GSE risks during conservatorship and increasing the stability of the financial system, among other benefits.[8] This is one of the biggest reforms made to the long-standing GSE business model during conservatorship.

Normally, such a big change in the GSE business model would have been made via regulatory rulemaking or legislation (as the GSEs are very much creatures of Congress, with congressional charters which specify in some detail what they do and how they do it). The involved interest groups, both economic and ideological, would have gone into advocacy mode during those legislative or rulemaking processes, declaring their viewpoints and attempting to influence the outcome to their liking *before* CRT went live. Their advocacy would have included the publication of white papers; the holding of conferences; private meetings with congressional, Treasury or regulatory officials; testifying at congressional hearings; and much more – all the techniques of influence routinely practiced in Washington (on top of the well-observed technique of making campaign contributions).

Given how politicized housing finance is, the content of those papers, conferences, meetings and testimony would have included everything from unbiased and technocratic analysis to, at the extreme, economic and ideological interest groups trying to heavily distort CRT to their own advantage, or perhaps even trying to kill it. Such a process (which I heard referred to as the "meatgrinder") might

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[6] As "conservator," the FHFA was able to give directions to the GSEs with the authority of their shareholders and boards of directors. This was legally done in the form of "directives" issued to the two companies.

[7] Measured as the percent reduction in the capital required to support that risk, as per the capital formulae used by the FHFA as the GSEs' conservator, which is called the Conservatorship Capital Framework (CCF). See http://www.freddiemac.com/investors/financials/pdf/10q_3q19.pdf.

[8] The other benefits are listed in "Demystifying GSE Credit Risk Transfer: Part I – What Problems Are We Trying to Solve?" JCHS, January 2020. Henceforth "CRT I."
https://www.jchs.harvard.edu/sites/default/files/harvard_jchs_gse_crt_part1_layton_2020_0.pdf.

have gone on for years before the first transaction was completed, and the CRT program that emerged at the end, if it emerged at all, might have been quite distorted compared to what we have today.[9]

Instead and unusually, CRT had been developed and implemented almost exclusively “inside conservatorship.” This does not mean it was a secret; in fact, the requirement for the GSEs to develop and then implement CRT was published by the FHFA in the fairly prominent “annual conservatorship scorecard” of goals for the companies while under direct FHFA control. But it does mean that there was no formal public input process required, as would normally be true for proposed regulations.[10] Furthermore, the housing finance policy community and mortgage industry took little interest in CRT in its earliest years, as they were almost totally focused not on reforming the existing GSEs but rather on winding them down and replacing them. This focus led to some fairly expansive or radical proposals to redesign America’s housing finance system to achieve the very same goal of reducing taxpayer exposure to mortgage risks (along with others goals, to be sure).[11] Such proposals became almost a cottage industry, which continues to this day.

So, the housing finance policy community and all the interest groups had to play catch-up after they realized starting in about 2015 (and for several more years after, as some reacted more slowly than others) that CRT was not some uncertain experiment. It was, on the contrary, a major business model change in how the GSEs performed their government-mandated function, and it was already implemented and well entrenched.[12]

That catch-up took the form of those various economic and ideological interest groups, with their long history of often successful interventions in the housing finance system, looking at CRT and asking the predictable questions. Ideological interest groups asked if it helped their cause or hurt it – and, if the latter was true, how to attack and undermine it. Commercial interest groups looked to determine if it hurt their revenues and profits, in which case they too had to attack and undermine it. It would be even better for them, though, if they could lobby the government to impose changes on the

[9] My read from mainstream investment industry participants is that the vast majority regard today’s CRT program as generally well designed and efficient.
[10] Unsurprisingly, “public input” mechanisms which I observed from 2012 to 2019 in terms of congressional committee testimony or regulatory proposal public input, for example, were overwhelmingly dominated by commercial and ideological special interest groups.
[11] Interestingly, all such proposals have come to naught, as it seems that the current administration’s plans for the two GSEs to exit conservatorship by administrative means will leave them in roughly their traditional role, although reformed in key ways. Perhaps because the debate about GSE reform in those years was about replacing rather than reforming them, none of the policy specialists in the housing finance policy community came up with the idea of CRT, which exclusively came out of the conservatorship.
[12] It was initially commonly talked about as a “pilot” program; to my surprise, this continued for years after it was firmly established and transacting major volumes of business, all of which was publicly disclosed.

program to redirect revenues and profits to themselves (in other words, classic rent-seeking); if the result was an ineffective or high-cost program – which, of course, was ceremoniously denied – well, that was someone else's concern. Finally, some groups looked for opportunities to accumulate power – to grab control of CRT to attain more industry or government influence, or perhaps to generate campaign contributions.

This all translated into the FHFA, Treasury and the GSEs facing a seemingly never-ending series of episodes in which interest groups in Washington sought to influence the live-and-operating CRT program to their advantage. Then, to support their self-serving advocacy, the interest groups produced supporting "advocacy narratives" and "advocacy research" – sometimes with significant truth, sometimes with classic half-truths and sometimes with basically little or even no truth at all – that are the source of many misconceptions about CRT. Naturally, as per the standard political etiquette, all were packaged as selflessly done in the public interest.

Revealingly, the fact that the CRT program was generally regarded at that time by the financial markets and the relevant parts of the federal government (i.e., the FHFA and Treasury) as well-designed and efficient provided little protection from these interference attempts. Politicization, very much including through Congress, is a core feature of America's housing finance system, and apparently CRT wasn't going to be exempted from it just because it worked well!

Meanwhile, many technocratic specialists produced non-advocacy analysis of CRT, which actually *was* done in the public interest. These analyses were intermingled with all the advocacy proposals into a swirling mass – let's call it a "fog" – of competing "expert" opinions that varied all over the lot in terms of competence and implications for housing finance.[13]

So, to anyone but a true expert on GSE CRT – of which there were and still are precious few given how new and technical a field it is – the confusion created by all the competing so-called expert opinions and narratives was and is so powerful that even the most open-minded and well-meaning policymakers outside the conservatorship could tell neither exactly what was going on, nor how well CRT worked, nor what changes might or might not make sense to address weaknesses or build on strengths. Nor could

[13] I want to clarify the definitions I am using of two terms: *advocates* (and advocacy) versus *analysts* (and analysis). The distinction is best understood by envisioning the typical courtroom drama in literature or TV. The lawyers representing the two sides are *advocates* – their job is to start with the answer (e.g., "my client is innocent") and work backwards, cherry-picking data, slanting arguments, attacking the credibility of opposing information, and so on, all in the interest of winning. Intellectual honesty is not part of this role; intellectual dishonesty on behalf of the lawyer's client, but within the rules of the trial, is. Analysts are more like the jury, trying to discern the truth by considering data from both sides; they are intellectually honest. If you look, it is usually easy to tell which is which (even though almost all advocates claim, as yet one more way of exerting their influence, to be analysts).

they tell, indeed, if it would be better to just to leave it to the GSEs and the FHFA to do their jobs, rather than succumb to the usual tendency to micromanage from outside. For policymakers who wanted to support specific interest group agendas for a political reason, the resulting fog gave them cover to claim, as politicians commonly do, that this support was justifiable for good and altruistic public policy reasons.[14] And the fog was very thick indeed given that it was in the interest of advocates to spend time and money heavily publicizing their biased narratives within the Beltway. It's no wonder there are so many misconceptions about CRT.

This paper's core purpose is to review and analyze episodes in which the GSEs, FHFA and Treasury faced attempts to use the power of government to force changes in the CRT program to the advantage of special interests, reducing its effectiveness in efficiently reducing taxpayer exposure to GSE mortgage credit risks, and creating confusion about the program that still bedevils it today.

The good news is that the FHFA and Treasury – because they understood CRT well enough to separate myth from reality in advocacy narratives and other influencing techniques – were largely successful in fending off all the interference attempts during my tenure at Freddie Mac's CEO (which ended last June 30), so the program continued to work well on behalf of taxpayers and to be well-regarded in the markets.[15] The bad news is that, beyond such attempts generally continuing without much evident success, recent new leadership at the FHFA – with a strong small-government ideological pedigree – has indicated that it believes many of the anti-CRT myths; as a result, its proposed GSE capital rule, now beginning its comment period, appears to many to be designed to minimize if not eliminate CRT. This proposed capital rule presents a major public policy issue that will play out during the rest of 2020 (as discussed below).

The attempts at politicization described below are presented in roughly chronological order.

#1 – A Proper Debate: Policy Objectives or Economic Efficiency to Drive CRT?

I am taking a liberty in this first example, as it is not about interest groups trying to derail CRT to their advantage. It is instead about the earlier and necessary "inside-the-conservatorship" discussions and decisions to actually make economic efficiency CRT's primary and driving goal, with other government policy objectives being attained as byproducts. This story has never been told in public, and will be a

[14] The political reasons for supporting such agendas include (1) strong ideological alignment in terms of the substance or optics; (2) economic importance to people and/or companies in the policymaker's home district or state; and (3) alignment with the interest of groups that financially support the policymaker.
[15] In conservatorship, the GSEs themselves are not allowed to engage in lobbying. Instead, the FHFA and, at times, Treasury speak on their behalf. The GSEs' role is therefore to support the FHFA and Treasury in such activities.

surprise to many in the industry and policy community, as even today the CRT program has a strong aura of being centrally planned and policy-driven, with economic efficiency playing little or no role.[16]

The FHFA website's page about CRT says, "In 2012, the Federal Housing Finance Agency (FHFA) initiated development of a credit risk transfer program intended to reduce Fannie Mae's and Freddie Mac's (the Enterprises') overall risk and, therefore, the risk they pose to taxpayers while in conservatorship."[17] And that's true, but it's not the whole truth. I arrived at Freddie Mac in May, 2012, just two months after the very first conservatorship scorecard had been published to set CRT as a goal. I found that the inclusion of CRT in that first scorecard was a general directional policy statement, with little substance behind it concerning what an entire CRT program would look like or mean. Even more unusual, I found that Ed DeMarco, the acting director of the FHFA at that time, strongly looked at the program as a way to help jump-start an expansion of the private label securitization (PLS) market by helping to establish standards that, he believed, would improve PLS liquidity and volume.[18] As part of his broad push to help grow that market, he and his staff pushed for CRT to be done in a very particular way – i.e., utilizing what is called a senior-subordinate bond structure – that was the same as that used by the PLS market. As a political conservative, Acting Director DeMarco regarded PLS's expansion as a key policy objective to shrink the GSEs down by creating a more robust private-sector alternative to their taxpayer-supported business models.

The problem was that the PLS-type structure proved incompatible with the way the GSE mortgage-backed securities business (MBS) worked in its very DNA.[19] It was, in short, a dead end. So, we had to look elsewhere to build a CRT program.

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[16] That aura comes at least partly from the annual FHFA conservatorship scorecards. Here's an example from 2015: "Freddie Mac will transact credit risk transfers on reference pools of single-family mortgages with a [principal amount] of at least $120 billion. This [volume] requirement will be reviewed periodically and adjusted as necessary to reflect market conditions… In meeting the above targets, the Enterprises must each utilize at least two types of risk transfer structures." Notice the lack of anything about economic efficiency. The directions got more specific in the public scorecards the following year, with only the slightest hint that economic efficiency was relevant, further adding to the image of the whole program as policy-driven and centrally planned. And while there definitely was an aspect of central planning to the CRT program, its core of being economically efficient – as described in this article – was simply not transmitted to the public in any substantive manner in those early years when opinions were formed. A semi-annual report on CRT activities by the FHFA, instituted later, was more informative but not so well known.

[17] https://www.fhfa.gov/PolicyProgramsResearch/Policy/Pages/Credit-Risk-Transfer.aspx.

[18] PLS securitizations have no government involvement in supporting the resulting securities; volume securitized by PLS was almost non-existent after the 2008 Financial Crisis.

[19] In particular, it was incompatible with the TBA (to-be-announced) trading aspect of the GSE MBS market that is universally regarded as a linchpin to high trading liquidity, which translates into lower mortgage rates. Treasury, in my early meetings with them as the provider of capital support to the company, had told me point blank they did not want to see me doing anything that would jeopardize in any way the high trading liquidity of the TBA market.

Upon my arrival at Freddie Mae, a small team – inconsistently supported by top management but given enough room to do development work by a supportive senior manager – had developed an alternative approach, utilizing the catastrophe bond structure that became the successful first CRT transaction, i.e. the STACR bond.[20] (Fannie Mae, at that time, was not enthusiastic about CRT, and so played little role in this development work.) With my background in managing at large financial institutions, where I had lived through the entire evolution of how to do efficient capital management from its crude days in the 1980s to its sophisticated ways by the 2000s, I took over – on just my fourth day on the job – hands-on direction of the company's CRT program to implement it in accordance with how sophisticated large banks manage capital and the cost of capital.

In this approach, we had to have a robust and modernized set of formulae to determine first how much capital we needed to support our risks, and then how much our capital need was reduced by doing CRT transactions.[21] Such calculations are at the core of the "cost of capital minimization" approach with which I was familiar from my banking days. But there was no modernized set of GSE capital requirement formulae then in place; the earlier, and very inadequate, formulae from before 2008 had been suspended, and there was no regulatory direction from the FHFA on anything new. So, we at Freddie Mac stepped into this vacuum and just developed our own – making our approach consistent with what applied to the largest banks in the country after the 2008 Financial Crisis.[22]

So, we developed a CRT program based upon reducing the cost of capital using those formulae; if a proposed transaction reduced the total capital we needed as a firm at a cost that was acceptable, we did it; if the cost was not acceptable, we would not.[23] (A government organization doing a transaction at a cost that was too high is known on Wall Street as a "wealth transfer to the private sector." Such a transaction would have been totally inappropriate.) Translated into government policy terms, it meant

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[20] See Don Layton, "Demystifying GSE Credit Risk Transfer: Part II – How, and How Well, Does It Work?" JCHS, February 2020, p. 5. Henceforth "CRT II." https://www.jchs.harvard.edu/sites/default/files/harvard_jchs_gse_crt_part2_layton_2020.pdf.

[21] This is more fully explained in "CRT II." Because of the terms of conservatorship, this capital was "notional capital" to measure our risks ("capital usage"), rather than actual capital on Freddie Mac's books ("capital available"), since its capital was really on the books of Treasury, reflecting taxpayer support to the company.

[22] That is, we made our approach "SIFI-consistent," where SIFI stands for "Systemically Important Financial Institutions," regulatory terminology for the very biggest banks. The FHFA later developed its own framework for usage during conservatorship to ensure that risk-reward decision-making inside the two GSEs was being done on an efficient and consistent basis; it was called the Conservatorship Capital Framework (CCF), and was completed four years later. It was very similar to what Freddie Mac had been using all along.

[23] The cost of capital, given that the company was in conservatorship, was estimated using other large financial institutions as adequate proxies. It has ranged between 9% and 10%, after tax, ever since.

the taxpayer supporting the company laid off credit risk to the markets at a price that was reasonable and acceptable to the taxpayer, and not “at any cost.”[24]

The FHFA accepted this approach – it delivered the desired risk reduction, and the agency liked that it did so at a cost that was defensible as being “economically sensible” (the phrase chosen by the agency) rather than being a taxpayer give-away, even if it did not support the original objective of helping to re-start the PLS business. However, Treasury – which was not officially “inside the conservatorship” but was unofficially so because it was the support agreements from Treasury that enabled the two companies to keep operating – was not immediately in favor of the program as designed.[25]

Treasury, as its officials explained to me at meetings there, had an overarching goal at that time to reduce taxpayer exposure – which ran through Treasury – to the GSEs’ risks. Simply put, the Treasury was worried that some additional downturn (like an aftershock from 2008) would again cause major losses at the GSEs, necessitating what would look like a second rescue. They considered both GSEs to have been inadequately focused on such risk and not aggressive enough in reducing it; after some investigating, I found that they were right. Such risk reduction was about more than CRT – it also heavily focused on troubled loans already on the GSEs’ books, known as “legacy” assets – but a well-constructed CRT program would be a core part of the reduction.

Treasury’s concern about our proposed CRT program was therefore not that it wouldn’t work, or that it was somehow not a smart thing to do. Quite the opposite. Treasury worried that by basing our CRT program upon reducing capital at an acceptable cost (i.e., on an economically efficient basis), as we had defined it, we were being too timid, that not enough risk would be transferred. After a series of constructive discussions on this topic, Treasury relented. We then proceeded on our proposed economic efficiency basis, which then become the cornerstone of the entire CRT program of both GSEs and the FHFA, as our conservator. Perhaps, if CRT volumes had been tepid, Treasury would have come back to insist upon its policy objective of reducing risk overriding the economics, but as the program was so successful that volumes exceeded all expectations in quick order, it became a moot point. We had killed both proverbial birds with the same stone!

[24] There were other benefits from doing CRT, as listed in “CRT I.” However, the primary operating guidance of the CRT program was to reduce the taxpayer risk at an acceptable cost, utilizing the best economic analysis of how to calculate that cost. The other benefits, like reducing a systemic concentration of risk, were thus cost-free.

[25] The support agreements are known officially as the Senior Preferred Stock Purchase Agreements, usually shortened to “PSPA.”

Demystification Conclusion: The general image that the CRT program is primarily driven by FHFA on a central planning/policy basis is simply not true, although policy objectives are certainly being achieved. Rather, at the very beginning, the program was developed to do business-like capital management, selling off credit risk only when doing so is more economically efficient than holding it.[26] This practice was consistent with the GSEs' being not on-budget government agencies but rather shareholder-owned companies (even if temporarily under government control) operating to efficiently achieve the objectives given by Congress through their charters. Other policy objectives held by government officials at various times, even if reasonable, simply were inconsistent with the legal structure of the GSEs as being stockholder-owned, rather than, say, government departments like the Federal Housing Administration (FHA). In fact, the FHFA's volume targets in the annual conservatorship scorecard were, at least to Freddie Mac, non-binding; they were mostly just minimums that were modestly under what our CRT specialists were projecting would be done anyway.

#2 – Madison Avenue Securities: A Failed Advocacy Narrative of Lower G-Fees

Would the FHFA Permit Arbitrage of its Own Rules?

In October, 2015, just two years after CRT began, a new type of transaction was announced by JPMorgan, the investment banking arm of JPMorgan Chase, in conjunction with Fannie Mae.[27] In this transaction, JPMorgan sold a package of loans from its Chase mortgage affiliate to Fannie Mae, and had already itself arranged a CRT transaction on those loans.[28] It was touted as being more efficient than the existing STACR and CAS transactions then providing most CRT protection – and so able to produce a

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[26] In conservatorship, the shareholder was, in all practical terms, the taxpayers who supported the company. This efficient management of risk was thus done on their behalf.

[27] In the interest of full disclosure, I was co-head of this unit of JPMorgan Chase from 2000 through 2002, and one of the top three executives of JPMorgan Chase from 2002 through 2004, when I retired from the organization.

[28] In other words, the JPM capital markets staff rather than Fannie Mae had arranged the CRT transaction, directly dealing with investors, structuring the terms, and setting the prices involved; Fannie Mae's role was to approve it as consistent with its needs. A key was that Fannie Mae also lowered the G-fee charged to JPMorgan to reflect the lower risk it was taking upon purchase of the loans, as the CRT investors – already in place – took some of the risk away. In conventional back-end CRT, the loans required the usual G-fee, as at that point they had no risk reduced by a CRT transaction, which occurred at a later date and was arranged by the GSE. Interestingly, the amount of such a reduction in the G-fee is arguable, depending upon analysis of the risk reduction by the front-end arranged CRT; small lender industry associations got suspicious fast that front-end CRT could also hide a G-fee discount to a large lender like JPMorgan Chase, which was otherwise not allowed during conservatorship. The same was true for lender recourse transactions, as referenced in "CRT II"; one of the reasons the FHFA recently announced their elimination was, in fact, the suspicion that they were being used in this manner to circumvent the requirement that G-fees were not to be lower for larger lenders.

lower guarantee fee (G-fee) for lenders, and presumably through them to homeowners. Because of the claim of lower G-fees, I recall the transaction caused quite a stir in the mortgage community.[29]

Some Freddie Mac executives almost immediately reported to me that JPMorgan was going to smaller mortgage lenders offering to buy certain of their loans to do similar transactions, all supposedly at lower cost to lenders and homeowners through the claimed greater efficiency of its transaction structure. I recall housing and mortgage industry associations being enthralled by the claim of cheaper mortgage credit – without seeming at all skeptical that such a claim might be spurious or based upon some loophole.

The transaction was done through a special purpose vehicle, quite common in the field, called Madison Avenue Securities (MAS), named after the address of the JPMorgan Chase headquarters building where the people involved were located. The transaction became known as the Madison Avenue Securities transaction. Not only did JPMorgan do several such transactions, but Wells Fargo, then the largest mortgage lender, also did several to try to unlock for itself the claimed "greater efficiency" for a lower cost of mortgage credit.

Within about 18 to 24 months, this approach was totally dead, thrown onto the trash heap of GSE history. The "lower cost" advocacy narrative proved false.

In fact, the lower cost of credit due to the "efficiency" of the Madison Avenue Securities transaction structure was actually based upon JPMorgan finding a loophole – and maybe two of them – through which they arbitraged regulatory rules. When the FHFA closed the loopholes, the new structure's lack of any real economic cost advantage over the existing STACR and CAS transactions was revealed.[30]

The Arbitrage

The two GSEs, when they buy loans from lenders, risk-adjust their pricing. This means they seek a higher interest rate for higher-risk mortgages, and seek a lower interest rate for lower-risk mortgages. This is normal private-sector financial market practice, as well as just common

[29] See "CRT II" for the explanation of STACR and CAS transactions.

[30] To experts in the field, the claim of "efficiency" was counter to common sense. The investors in JPM's transaction came from the same investor pool that the GSEs accessed in their CRT transactions. But the GSEs did larger, more standardized and therefore more liquid transactions, which meant investors required less payment; the GSEs also did CRT on their entire nationwide flow of mortgages, so there was no possibility of "adverse selection," which was very much present in the case of the JPM transaction, requiring investors to spend money ensuring the pool was not somehow cherry-picked to look lower-risk than it actually was. In other words, on any kind of common-sense basis, the cost of a JPM Madison Avenue transaction had to actually be higher, not lower, than that of one from the GSEs.

sense. The amounts of these adjustments, however, were set in conservatorship by the FHFA, not by the market or the GSEs. And the adjustments were consciously designed by the FHFA to be only partial, not full: the higher rates charged for higher-risk mortgages were not as high as required by the actual loss statistics; similarly, the lower rates charged for lower-risk mortgages were not as low as allowed by the actual loss statistics. The result was a substantial cross-subsidy from lower-risk borrowers to higher-risk ones. (In aggregate, it is worth billions of dollars every year.)[31]

When the Madison Avenue transaction hit the markets, Freddie Mac's CRT specialists came to me, claiming that JPMorgan was arbitraging the FHFA's risk adjustment system by doing its own CRT on loans that were, in reality, selected to be lower-risk than average. In particular, this arbitrage would allow JPM to sell a CRT to the marketplace at a cost reflective solely of the actual loss statistics, which implied a lower G-fee than the rates the GSEs charged (which also included the cross-subsidy). In other words, JPM was supposedly just getting out of having to pay into the cross-subsidy on its low-risk loans. To us at Freddie Mac, that margin – the difference between paying into the cross-subsidy versus not – therefore seemed to be the likely source of the claimed efficiency, rather than its being a real economic savings.

This was all in turn reported and turned over to the FHFA, which – after doing its own homework – made two policy changes. First, to counter the accusation of JPMorgan arbitraging the cross-subsidy, the FHFA instituted a requirement that all loan sellers had to sell (and attest that they did so) a "representative mix" of loans to the two GSEs, with no allowed cherry-picking of better- or worse-than-average quality. The FHFA also determined that there was possibly a second type of arbitrage in which JPMorgan could be avoiding certain SEC-specified risk retention rules by issuing the securitization through Fannie Mae, to which such rules did not apply. The FHFA also eliminated that loophole.

(I should note that a senior JPMorgan executive involved in the transaction denied to me that they had cherry-picked the loans used for their CRT to be of higher-than-average quality; we never discussed risk retention.)

[31] See Michael Stegman and Richard Cooperstein, "A Missing Piece of the Administrative Reform Puzzle: How the GSEs Generate Cross-Subsidies," JCHS, October 2019, https://www.jchs.harvard.edu/sites/default/files/harvard_jchs_gse_cross_subsidies_stegman_cooperstein_2019.pdf. The subsidy, while targeted to borrowers by their credit riskiness, is based upon a strong correlation between risk and income levels, thus serving to enable more working-class families to qualify for mortgages.

Nevertheless, after the “representative sample” and risk-retention fixes were put into place by the FHFA, the transaction structure died out.

So, an abuse of the GSE CRT program was not successful because the FHFA, seeing an arbitrage of its own rules, was willing to institute the appropriate remedy. As stated above, within 18 to 24 months, it had all played out and disappeared.

The Madison Avenue transaction structure was definitely not a case of JPMorgan doing hard-edged lobbying and influencing to get the power of government behind it to distort the GSEs’ CRT program to its advantage. It was milder than that, just an attempt to use the government’s own rules against it. The history of financial regulatory agencies closing such loopholes is, in my long experience, quite mixed (there is often strong political pressure not to); in this case, the FHFA stood up not just for an efficient CRT program but also for regulatory integrity.[32]

However, the Mortgage Bankers Association, the largest industry association in housing finance, pretty aggressively took up the cause of the Madison Avenue Securities trades in Washington, taking a relatively technical arbitrage situation and turning it into something overtly political. It supported the claims of lower cost and also the virtue of the transaction’s being “front-end” (see below), as opposed to the “back-end” transactions of the GSEs (i.e., performed after they purchased loans). When I asked a senior government official why the MBA would take this position, since by then it was so clear the efficiency was just regulatory arbitrage, I was told that the MBA, under its leadership at the time, had a simple policy: if something took power away from the GSEs, it was a good thing and to be supported. This policy perhaps reflected fear that the GSEs, upon exiting conservatorship at some point, could return to their pre-2008 behavior when they were considered bullies by many in the industry (with real justification).

Demystification Conclusion: The Madison Avenue transaction’s original claim to be able to reduce G-fees, while debunked, did produce a hope in the industry that somehow someone could do so via some type of CRT transacted away from the GSEs. Since the mortgage industry is always interested in anything that lowers the cost of housing credit, that hope is still alive, although the bar to do so (given the GSEs’ scale) is very high, maybe even insurmountable, absent an overt or hidden subsidy. Also, the concept

[32] The most famous mortgage industry case of pressure against such regulation may be the GSEs’ response to the George W. Bush administration’s attempt, jointly with the Federal Reserve, to limit the GSEs’ abuse of their implied guarantee by having such large, discretionary investment portfolios. Such limitation required legislation, and the GSEs lobbied so effectively that the required legislation was never passed.

that "front-end" CRT transactions were desirable developed its own momentum, which continues to this day (more on this below).

#3 - The Milliman Report: Classic Advocacy Research… Immediately Debunked

The Private Mortgage Insurers Try Full-On Politicization

Also in October 2015, the respected actuary firm of Milliman issued a report entitled "Analysis of Deep Coverage Mortgage Insurance."[33] The report was prepared for US Mortgage Insurers (USMI), the industry association representing five of the six current private mortgage insurers.[34] When the GSEs purchase a high-LTV loan – that is, a loan with an LTV over 80% – their congressional charters require the loan to have private mortgage insurance covering losses down to that 80% threshold. The Milliman report examines a proposal by USMI for private mortgage insurers to cover losses on these high-LTV loans down to 50%.[35] This "deeper" coverage would represent a significant shift of risk-taking from the GSEs to the PMIs. (Later, the industry began indicating they wanted to expand this idea dramatically to apply to all loans, not just those with LTV over 80%. That would have represented a move in risk-taking from the GSEs to the PMI firms of massive proportion.)

USMI's proposal would have moved a significant amount of the CRT activity *away* from being done by the GSEs through capital and reinsurance markets and *towards* the PMI firms, with the PMI firms growing their revenues and profits accordingly. And Milliman made the same claim for USMI's proposal that JPMorgan had made for the Madison Avenue transaction: it could enable lower G-fees (a reduction specified in the report as being, on average, worth about $8 per month for the average borrower). With the report in hand, the industry then went on a major lobbying campaign in Washington by going to other industry associations and then Congress to force the FHFA to change the CRT program in its favor; interestingly, they came to the actual GSEs themselves – the ones whose risk was being impacted – only after the campaign was well underway. This lobbying campaign included press releases and articles, speeches at industry and think tank conferences, and visits to government officials – all the usual activities associated with broad-range lobbying.

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[33] See http://www.usmi.org/wp-content/uploads/2015/10/Milliman-Report-Analysis-of-Deep-Coverage-MI-FINAL.pdf. Though the report is dated October 2015, the idea behind it had apparently been percolating for some time before then, even back to the first half of 2014.

[34] Strangely, the one PMI firm which is not a member of USMI is the largest one in the industry.

[35] Despite the charter requirement, the GSEs years earlier had changed their policies to use PMI firms to transfer risk on such over-80% LTV loans down to 65%. It's a convoluted story to be told another day, heavily based on politics. Thus, the Milliman document was examining reducing the 65% down to 50%.

Naturally, the leadership of USMI made a big public push to convince policymakers of the benefits supposedly "proven" by the Milliman report. The report had lots of complicated mathematical tables and made reference to complex formulae. The report listed five authors.

The allure of lower G-fees naturally attracted industry attention and sometimes support. The MBA, of which the PMI firms are also members, visibly and strongly supported the Milliman report. On top of the promise of lower G-fees, the MBA once again liked that this program would reduce the power of the GSEs, reported to be a key objective of theirs at the time.

However, just as in the Madison Avenue Securities case, the advocacy narrative in this case was easily proved untrue, and so it failed. Milliman had, making reference to various regulations or other sources, developed its own assumption that the capital required by a PMI company to support the credit risk being incrementally taken on was about 2% ... but that the two GSEs would require about 5% on that very same risk if they held it! This assumption was buried deep in the report, and defies economic logic. (It would, in fact, be an outrageous regulatory arbitrage if true.) And presto, magic, the PMIs could charge less, as the return on the capital required is usually the largest component of a G-fee, and the PMIs would need only 40% of the capital required by the GSEs.

Note that the FHFA at that time was discussing no post-conservatorship capital system in public (or much in private either), so there was no actual working government proposal upon which Milliman could base the 5% assumption. In fact, at that time, I recall that members of the housing finance policy community discussing what an appropriate level of capital would be were focusing mainly on a number in the range of 3% to 4% of assets, as this tied into the actual losses the two GSEs took in the Financial Crisis. Assuming that the PMI firms would require just 2% was bizarre: if policy specialists talked about the GSEs needing 3% to 4%, then PMI firms with their riskier profile – as they only do loans with high loan-to-value ratios – would require materially *more*, not less, than the 2% assumed.[36]

It all defied financial common sense, by a lot.

In addition, the issue of reimbursement (i.e., counterparty) risk, in which the GSEs would need to keep capital against the possibility that the PMIs would not pay fully and on time, as they had not in the 2008 Financial Crisis, was conveniently deemed by Milliman (in a conversation at a meeting which I

[36] As part of their lobbying campaign, USMI, with the Milliman expert, visited me and other executives at Freddie Mac. It was clear that the 2%/5% inconsistent capital assumption was what the Milliman expert extrapolated from certain regulations to be what he thought the regulators were using. He either did not realize or did not care that it was financially nonsensical. So, in essence, he was supporting a program to severely arbitrage between inconsistent regulations.

attended) to be “out of scope” of their assignment. Inside the conservatorship, that assertion eroded the reputation of the report’s intellectual honesty even more.

So, the Milliman report turned out to be classic advocacy research, not just biased but in this case totally incorrect, to support the bottom line of their client.

The FHFA, after doing its homework, then called in USMI and told them their making this claim was unacceptable and misleading, that the principle they should assume was that for the *same* risk the PMI firms and the GSEs would require the *same* capital, and so please cease and desist making the spurious claim of lower G-fees, especially to members of Congress. It took reminders by the FHFA to get USMI to stop, and it is unclear to me whether they ever really have fully stopped.

In contrast to the Madison Avenue Securities episode, this is an excellent example of hardball politicization in action: a special interest (in this case, a commercial one) went into heavy lobbying and influencing mode to get the power of government (especially via Congress) to force the FHFA to change the efficiency-driven CRT program of the GSEs to their benefit of higher revenues and profits. Even worse, because mortgage insurance is not a truly effective form of CRT (as discussed in “CRT II”), it would have also undermined the entire credibility of the CRT program and exposed the taxpayer to even bigger losses in a severe downturn than the use of truly effective CRT products (like STACR or CAS, or their reinsurance cousins).

This type of special interest lobbying might well have worked, given the historical penchant of politicians to interfere in and micromanage housing finance, if not for the FHFA as conservator once again pushing back and sticking up for efficiency on behalf of the taxpayer and the homeowner, rejecting the long history of extensive politicization and rent-seeking in the industry.

Demystification Conclusion: The Milliman report’s claim that “Deep MI” could be used as a form of CRT to somehow reduce G-fees was in fact based totally upon a conjectured extreme regulatory arbitrage, and thus it quickly collapsed. This collapse proved once again that the bar is very high, possibly even insurmountable, to get lower G-fees via a CRT structure other than the ones already used by the two GSEs. The PMI firms, because CRT so overlaps with their underlying business, continue to quietly keep alive the idea that giving them more of a role can somehow reduce G-fees, although there is no evidence they can actually do so without compromising the resulting transaction’s effectiveness (e.g., its nil reimbursement risk, full certainty of coverage, or low cost) or via a regulatory arbitrage.

#4 – Many Advocacy Narratives: Analyzing Four Impactful Ones

Once the broader mortgage industry and housing finance policy community became aware that CRT was no longer some small pilot but a major part of the GSEs' business model, there began a whole series of narratives.[37] Some were unbiased technical analyses and had real value.[38] Many, though, were advocacy narratives, questionable because motivated by various forms of self-interest. Of course, being self-interested doesn't mean such advocacy narratives are incorrect. I review below, in relatively condensed format, the four advocacy narratives which I believe have been the most impactful in terms of the industry and policy community discussion around CRT policy and politics.

The "Front-End" Narrative Gains Lasting Prominence

When the Madison Avenue Securities first performed its CRT transaction, as described above, it created a brand-new concept to label it: "front-end CRT." The existing GSE transactions, where the GSE sold off the credit risk approximately six months after first purchasing it, were therefore dubbed "back-end."[39] These labels outlived the disappearance of the Madison Avenue transactions. The advocacy narrative was that when a CRT transaction was established prior to a loan's being sold to a GSE – established, that is, on the "front end" – it was somehow greatly superior to a "back-end" transaction, and thus policymakers should force the GSEs to do such front-end transactions partially or entirely. This theme was picked up by those (like the MBA) that wished to reduce the power of the GSEs, and then by the PMI firms, as it clearly was to their advantage. It even applied to lender risk sharing transactions (as described in "CRT II").

The argument has some merit. The key claims by the advocates for front-end transactions are:

Risk reduction starts earlier. This is true: with a front-end CRT, the period for which credit losses are absorbed by the CRT provider starts when the loan is sold to the GSEs, not four to six months later when a back-end transaction would occur. In routine times, since few loans go bad in this particular timeframe, the difference between front-end and back-end is of only very

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[37] These narratives created the "fog" mentioned earlier, making it hard for open-minded policymakers to know what the reality actually is.

[38] An example would be the observation that capital provided by CRT was not as valuable as the formulas used by the FHFA indicated, since that capital was "locked up" in just the loans associated with each CRT transaction, whereas shareholders' equity was available to all loans, and thus more loss-absorbing. It was a very correct point, made by Andrew Davidson of ADCO, a well-respected analytical firm in the mortgage markets, in his comments upon the proposed capital rule published by the FHFA in 2018.

[39] When CRT transactions just started in 2013-14, the delay between the purchase of credit risk and a CRT transaction was above six months. Prior to the pandemic, it was averaging materially under six months.

modest value; the exception would be at that rare time of an extraordinary shock, such as the pandemic right now, when this earlier absorption of credit risk would have been worthwhile.[40]

The GSEs are less in control; the transaction takes place totally away from them. This is partially true. The GSEs do not arrange a front-end CRT transaction. But the transaction, once the loan is bought by the GSE, is totally integrated with GSE activities and is not "away from them" at all. When there is a credit loss, for example, the usual mechanism by which the GSE makes whole the investors in the related MBS, with the CRT provider later reimbursing the GSE for the loss, is no different than for a back-end transaction. A front-end CRT is thus more accurately described as "front-end arranged." This reality was a surprise to many industry observers, who superficially thought an up-front transaction somehow was totally separate in all aspects from the GSEs, rather than just the initial arrangement process.

The value of this reduction in GSE power – again, just related to the arrangement of the transaction – is very much in the eye of the beholder, as it is purely political in nature, not economic.

Front-end CRT transactions can also be truly effective. In reality, this claim is questionable. As made clear in "CRT II," the specifics of a CRT can make a huge difference in whether it is truly effective transaction or a Potemkin village one. For a front-end transaction, the details are arranged by the lender, an investment banking firm or a PMI. As this process excludes the GSE – the actual entity at risk for the loss if a CRT is not truly effective – there must be a mechanism for the GSE to approve each transaction structure. History shows clearly that, in such situations, various special interests will attempt to lobby and utilize political power to override that GSE approval requirement and force less-than-truly-effective transactions upon the two companies. (Classic PMI already fits into this category.) Such a situation presents an immense strategic risk to the GSEs, and is a strong argument against front-end CRT.

Demystification Conclusion. Net, then, front-end CRT has only a small upside benefit in normal times, and a somewhat bigger one in times of rapid downturn such as today's pandemic, while it is potentially quite risky if ineffective structures are politically forced upon the GSEs. It is far from a panacea. Interestingly, two of the three categories of front-end CRT have disappeared since this narrative began; the only one remaining is PMI, which is less than truly effective as currently

[40] There is also a potential benefit from the pricing of the CRT being set earlier. This earlier pricing can work for or against the GSE, although in a time of severely adverse conditions that arise relatively quickly, it will likely work to the benefit of the GSE.

constructed.[41] But the appeal to many groups of reduced GSE power, supported by some important think tank commentary, has kept "front-end" CRT very much alive as an issue, even today.[42]

Of course, a front-end structure that also is truly effective and doesn't require some hidden subsidy to make it economically viable, would be a good thing. In many ways, it would be a natural evolution towards the best possible CRT. So far, something close (see below) has been developed but is available only in comparatively small amounts at this time.

Cost Can Be Ignored

No one ever wrote an article or gave a speech that said "let's ignore the cost of CRT and the question of whether that cost is acceptable or too high." Instead, I recall that almost every article and speech simply ignored the issue as if it did not exist. This was perhaps not surprising since the FHFA, in its reporting on CRT, did not noticeably discuss cost; their reticence was based on the fact that a cost calculation requires a regulatory minimum required capital system, and no such thing existed.[43] So, cost as an issue remained just hidden, and thus hardly ever discussed outside of the conservatorship, even though cost is the key to the efficiency-driven CRT program actually in operation. (One result of cost being a hidden issue is the image of the CRT program as policy-driven and centrally planned.)

Hence, for example, you had a serious congressional bill on CRT that talked not once about the cost being acceptable, especially to taxpayers while the two companies were in conservatorship.[44] Instead, it just built on the central planning mindset, focusing on volumes and other things as being goals. You had the modest number of serious articles on CRT – since it is such a technical topic, not many analysts focused on it – similarly ignoring cost, like one from June 2018 written by Robert Pozen of

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[41] As described above, the Madison Avenue Securities structure (and others like it) died out when the regulatory arbitrage loophole was closed. Since then, the FHFA has announced the elimination of lender risk sharing, in favor of bond and reinsurance structures, stating that the objective is to avoid bilateral transactions that cannot be available to all lenders on an equal basis (and could hide pricing discounts to selected lenders), and to help market liquidity. That leaves PMI as the only standard version of a front-end transaction still standing today. It seems to me that a standardized, available-to-all lender risk sharing structure (i.e., with lender recourse) integrated with back-end CRT could possibly create an excellent way to have both the advantages of CRT and the advantages of a front-end structure.

[42] See for example "How to Improve Fannie and Freddie's Risk Sharing Effort," Urban Institute and Moody's Analytics, August 2016, https://www.economy.com/mark-zandi/documents/2016-08-25-How-to-Improve-Fannie-and-Freddiess-Risk-Sharing-Effort.pdf; Laurie Goodman, "Credit Risk Transfer: A Fork in the Road," Urban Institute, June 2018, https://www.urban.org/sites/default/files/publication/98578/credit_risk_transfer_a_fork_in_the_road_0.pdf.

[43] Even after they developed a capital system to use informally in conservatorship, this reticence continued.

[44] HR 6500, "To establish a Mortgage Credit Risk Sharing Pilot Program at Fannie Mae and Freddie Mac, and for other purposes," December 8, 2016. See below for a discussion of this bill.

MIT (and a former top executive at Fidelity Investments) in a Brookings Institution publication, or several articles from the Urban Institute.[45]

This silence about cost is a major handicap to everyone outside of conservatorship in thinking about or researching or recommending policy about CRT. Despite their good intentions and expertise, the authors just don't have enough facts to really be reaching solid conclusions in many cases.[46] The FHFA, in its future reporting on CRT, should begin to address the issue of cost sooner rather than later. To do so would help reduce politicization by showing how the program is more market-driven, and less policy- and central planning-driven, than realized.

Demystification Conclusion. Simple: cost does matter and can't be ignored. Recommendations for or analysis of the GSEs' CRT program that ignore it are very likely flawed.

CRT Can Reduce G-Fees

One of the constants in housing finance is that the policy analysts from left-aligned think tanks at all times believe that the GSEs' credit requirements are too tough and G-fees too high, while at the same time policy analysts from right-aligned think tanks at all times believe the exact opposite, that credit requirements are too lax and G-fees too low.[47] While such analysts seem always to claim to be "data-driven," their unchanging views are a reminder of how, in such a politicized field as housing finance, one can always seem to find data to support an ideologically desirable conclusion.

In this case, several CRT commentators on the left have focused on the potential for CRT to reduce G-fees,[48] which fits well with their policy agenda. In fact, they have a half-right story, but with more policy risk than they realize.

The Imprecision of the FHFA's "Implied G-Fee" Calculation. The usual calculation of what a G-fee should be starts with a basic buy-and-hold economics calculation: operating expenses and

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[45] Robert C. Pozen and Clayton Pfannenstiel, "Shifting the Risk of Mortgage Defaults from Taxpayers to Investors," Brookings Institution, June 5, 2018, https://www.brookings.edu/research/shifting-the-risk-of-mortgage-defaults-from-taxpayers-to-investors/. The Urban Institute articles are those referenced in note 42 above

[46] One conclusion that appears in various articles is that the GSEs should do "more risk transfer." In reality, this conclusion, to produce a very different and much more acceptable recommendation, should be modified by an important caveat: the GSEs should do "all risk transfer *that is economically efficient*." That is what we at Freddie Mac were actually doing.

[47] Every day at Freddie Mac we received a daily summary of news articles about the GSEs. It seemed each week, unless there was some hot topic dominating news coverage, there would be one or two articles from each side of this debate.

[48] In "Shifting the Risk of Mortgage Defaults," Pozen and Pfannenstiel write that "the FHFA … should promptly lower the guarantee fees charged by the GSEs to mortgage originators."

annual credit provisions plus an estimate of the cost of the capital required to be held against those guarantees. However, with CRT substituting for much of the "capital required to be held against the guarantees," the cost of that CRT very correctly should factor into the calculation. To that end, the FHFA has produced semi-annually a progress report on CRT that included, for a few years, an estimate of an "implied guarantee fee" calculation to compare against actual average G-fees.[49] The estimate was qualified with words like "approximation," "simplifying assumptions" and "general indication."[50] The results showed a range or a point estimate, depending upon the year; this estimate has not been produced in recent years.

The upshot of these numbers, in those years when the estimate was disclosed, was that actual G-fees were in a range of the calculated implied G-fees, allowing for a reasonable variance to reflect the approximate nature of the estimate. But in the latter years that the estimate was produced, the implied G-fees seemed to be on the low end. On this basis, one could argue for slightly lower G-fees.[51]

However, the whole calculation also missed one major cost: what would the government eventually charge the company for its support of the guaranteed MBS? That cost has been included in just about every proposal for GSE reform, whether by legislative or administrative means. Most commonly suggested was 10 basis points, but I recall the suggestions ranged from 6 bp to 20 bp.[52] And this amount would more than offset any slight G-fee reduction generated via the "implied guarantee fee" calculations.

Net, then, a call from left-aligned advocates to reduce G-fees because of the implied G-fee calculation would be of marginal impact at best.

Up as Well as Down. Unfortunately, those left-aligned individuals totally missed a rather important point. If one bases the G-fees on CRT costs, then as the CRT costs go up and down

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[49] For the 2019 Q4 report, see https://www.fhfa.gov/AboutUs/Reports/ReportDocuments/CRT-Progress-Report-4Q2019.pdf.

[50] These words are totally appropriate. Almost every number (other than operating costs) used in the calculation was an estimate that could change over time; furthermore, the calculation required extrapolations of what the market would absorb for specific parts of the mortgage credit risk profile in much greater volumes than actually executed. The resulting calculation therefore had a significantly high error of estimate.

[51] In fact, I proposed to the FHFA that we should seriously consider a small reduction in G-fees back in 2017-18 for this very reason, and partially to show how impactful and important CRT had become. For the reasons cited below in this document, they disagreed.

[52] There is no obvious actuarial or statistical approach to calculate such a cost, as the data for losses so large that the government would be called on to absorb them beyond a SIFI-consistent capital level (which consists of an estimate of loss to be incurred in a severe adverse event *plus* a going-concern buffer) just doesn't exist. It will be a policy-based charge.

with the market, G-fees would inevitably become variable, going up as well as down. The years when the FHFA produced its estimate had very friendly markets, so there was a possibility of a reduction. But in other economic environments, things could well go the other way; in fact, current (i.e., June 2020) secondary market trading in GSE CRT bonds implies G-fees would have to be about 20 basis points (or more) higher than pre-pandemic if the two were rigorously tied together. And that would not at all be liked by those on the political left.

In fact, the implications of basing G-fees upon CRT (at least partially) were specifically discussed and debated inside the conservatorship, at least on a conceptual basis for post-conservatorship. Considerations included whether to fully base current G-fees on the level of CRT, possibly justifying a small reduction (thus ignoring the cost the government would eventually charge until that charge became known), as well as how one would vary the fees: monthly, annually, or with a twelve-month running average? In the end, G-fees were left as they were; the issues involved with tying them to CRT, both as to level and variability, were left for another day when more will be known. For now, then, the ups and downs of CRT cost are just absorbed on average in the very large GSE book of guarantees.

Demystification Conclusion. There was no good straight line between pre-pandemic CRT costs and the conclusion that G-fees should be lower. There is too much estimation required, lacking things like a settled capital requirement system and certainty as to what the government will eventually charge for its support of the GSEs. In addition, the inevitable need to make G-fees variable (even if on a "slow" moving average basis) will eventually produce G-fees both lower and higher, depending upon market conditions. The notion that basing G-fees on CRT costs is a one-way adjustment, just lower in good times, is clearly inadequately thought-through; as proof of this, current market trading mid-June 2020 implies pricing should be increased by at least 20 basis points.

"Always There": Entity-Based CRT, Forward Commitments and Reality

One weakness in the current CRT program – although the degree of this weakness is debated – is that capital and reinsurance markets for CRT transactions can't be guaranteed to be "always there" (the phrase used by those who advocate for entity-based CRT), which renders them less valuable as an effective part of the core GSE business model. However, claims that access is "fleeting"[53] are clearly

[53] Laurie Goodman et al., "How to Improve Fannie and Freddie's Risk Sharing Effort," Moody's Analytics and the Urban Institute, August 2016. This article mainly advocates for "institution-based capital," which translates into more mortgage insurance and also lender risk sharing to reduce exposure to the existing GSE "transaction-based"

untrue and contrary to history: CRT markets were available smoothly from 2013 until the pandemic hit with perhaps five or ten days of questioned availability, too few to matter in a period of over six years. The working assumption inside conservatorship had been that the GSEs might have to be a shock absorber (see below) to keep new mortgage credit risk, without doing associated CRT, in some crisis that disrupted the market for maybe up to a year or more.

The pandemic then created a "teachable moment" stress test of how CRT would perform in such market-disrupted circumstances. There is enough CRT outstanding so that, despite its being a highly structured debt product, secondary trading has in fact generally continued throughout the market stress, stabilizing in a matter of weeks at price levels that reflect the greater perceived credit risk of mortgages (which of course is totally rational, especially given the generous forbearance program available to newly made mortgages), equating to a G-fee increase of about 20 to 30 bp. By early May – that is, in under two months – the market was apparently ready for re-opening to new issues of CRT.[54] It all just awaits the FHFA's giving approval to go ahead. This result is better than all but the most optimistic had expected – and so CRT has passed its first, live stress test in relatively good shape.

So, a way to ensure greater certainty that one can continually engage in CRT transactions is warranted, if not by anywhere near as much as the CRT-skeptics had estimated. The caveats, of course, are that it still has to be a "truly effective" CRT transaction, and that it has to be available at an absorbable cost. If it is not available in enough size to be material to the GSE flow (which is extremely large), then it's not really going to solve anything.

> ***GSEs as shock absorber.*** There is one narrative that has circulated that first needs full debunking. According to this narrative, should the existing bond and reinsurance markets for CRT be closed for more than just a few days, the GSEs would somehow be rendered unable to continue purchasing loans. This narrative is simply untrue. The GSEs are not bond underwriters, which by their business model are able to take intermediation risk only for a short period. They are long-term mortgage loan investors (almost like a mortgage credit utility) that decide if it is more economically efficient to hold on to credit risk or lay it off after purchasing the loans. This fact is being proven right now, as their purchase activity continues unabated through the pandemic. The reality is that the two GSEs previously held on to loans for their full 30-year term; holding on to them for a quarter or a year before engaging in a CRT transaction when the

CRT transactions. The FHFA has ordered the discontinuation of lender risk sharing, leaving the argument as seemingly applying solely to PMIs.

[54] As is usual in the capital markets in such circumstances, the first new CRT transactions would be smaller and more conservative than pre-pandemic, in order to not overwhelm the markets as they return to normal over time.

markets open up again is not going to critically stress them. In fact, as current circumstances are proving, the GSEs may be the biggest shock absorber in the mortgage system.

Therefore, the objective of CRT markets that are "always there" is to reduce the need for the GSEs to be shock absorbers for some period of time on newly made mortgages. That goal has value, but it is not clear how much, and thus it is also unclear what degree of trouble or expense is warranted to achieve the goal. As shown in the Appendix, all existing CRT transactions – because they are truly effective – stay in place and still perform as expected. The CRT-related shock absorbed by the GSEs comes only from a temporarily weakened market for *new* CRT transactions, and the GSEs are more than capable of holding credit risk for long enough to weather such downturns.

Entity-based CRT: pros and cons. Advocates for entity-based CRT, sometimes called institution-based CRT, claim its superiority for several reasons.[55] They claim it is "always there," especially when provided by monolines that have no other business to which they could dedicate their capital.[56] They also claim entity-based types of CRT are a source of stability to the financial system, as capital markets are too subject to downward spirals in times of severe adverse stress. And, of course, as already described above, there is the semi-hidden objective of reducing the power of the GSEs, which is attractive to many.

Does this argument for entity-based CRT really hold water? The answer is: a little. The idea's advocates point out the "pros" of their argument, so what are the "cons"? Here are the three arguments against doing additional PMI. (I focus only on PMI, as lender risk sharing is being eliminated by the FHFA).

(1) PMI-based CRT is not truly effective exactly *because* PMIs are monolines. There is the rather large risk that they are needed most to pay out claims in a period of severe stress when they are themselves extremely weak.[57] This is called "wrong way risk" in financial regulation, and is the reason stated by bank regulators to explain why they do not give capital relief to a bank that has PMI on some of its

[55] Goodman et al., "How to Improve Fannie and Freddie's Risk Sharing Effort."
[56] Because of the GSE charter requirement that loans with high loan-to-value ratios (i.e., over 80%) require PMI (the other two alternatives in the charter largely being defunct at this time), the PMI firms must also be able to continue purchasing loans with high LTVs, or the GSEs could not buy those loans. In the Financial Crisis, this requirement proved problematic and is a reason why the government covertly bailed out the PMI firms by relaxing the criteria for their financial strength from requiring a AA credit rating to allowing deep-below-investment-grade ratings.
[57] As a reminder, three of the seven PMI firms failed during the Financial Crisis; almost all the rest were downgraded to credit ratings just above bankruptcy level. See "CRT II."

mortgages. So, PMIs are not "always there" exactly because they are monolines, as was proven a decade ago. The four PMIs that survived after three failed had to be given special dispensation by the FHFA (i.e., an indirect bailout) to keep doing business so that high-LTV lending by the GSEs could continue.[58] "Always there," but only with special bail-out-style government support, is not a proper objective.

(2) Advocates of entity-based CRT make no mention of cost. If more credit risk is transferred through PMI and less through capital-markets-based transactions, the cost of CRT will on average go up. This cost increase is hidden because PMI charges homeowners directly rather than negotiating the appropriate price with the GSEs, which are the ones actually laying off the risk. In times of stress like the 2008 Financial Crisis, the PMIs raised prices (which was the intelligent thing to do) like all other private-market providers of credit, and there is no promise that they won't do so again in the future. In fact, in today's pandemic, the PMIs – as shareholder-owned firms – are reported to have both somewhat raised pricing and constricted credit availability. This behavior further reduces the degree to which PMIs are "always there."

(3) When the PMI firms originally lobbied for the superiority of entity-based CRT, they were themselves fully "buy and hold" credit risk investors. But for all the reasons listed in "CRT I," which apply to the PMIs as much as they do to the GSEs, the PMI firms have begun to emulate the GSEs and use CRT.[59] Thus, they themselves are going to face market access issues at the same time as the GSEs do, making them less able to be "always there." And their capacity to act as a shock absorber is clearly inferior to that of the GSEs.

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[58] In the current economic downturn, the cause of the crisis is not a housing price bubble, so the extent of mortgage-related credit losses will depend upon the future performance of the economy in terms of employment and household income. The many reforms of mortgage lending practices have, everything else being equal, also reduced the potential for losses some. So far, the PMIs, which underwrite the riskier end of the mortgage credit spectrum, have all just been put on notice for credit downgrading. It is too early to tell how bad the cycle will be for them – it will probably take well into 2021 to determine.

[59] Additionally, the fact that the PMI firms are doing CRT to lay off their risks raises questions about the efficiency of the whole regime. Basically, the GSEs are forced by their charters to lay off risk to the PMI firms, which then go to the CRT markets, at least partially; this structure positions the PMIs as middlemen between the GSEs and the CRT markets for that risk, which creates an economic inefficiency that raises costs. This inefficiency relates to double operating expenses and increased capital expenses, as the GSEs have to manage the reimbursement risk from the PMI firms which requires additional capital, which in turn requires a return as well. Ultimately, homeowners pay for these extra costs.

So, PMI flunks the test of being an “always there” alternative – it is not truly always there (unless bailed out by the government), it is not truly effective, and it is high-cost.

See the Appendix for a graphic display of how PMI compares to transaction-based CRT in times of severe distress.

Forward Reinsurance Commitments. Nevertheless, the objective of the GSEs obtaining CRT protection that is less subject to market conditions is a good one, and the FHFA encouraged the two companies to see what they could do to address it consistent with safety and soundness, in this case meaning a truly effective CRT. The result was a modest volume of forward-commitment reinsurance transactions, where reinsurance companies agreed to take specified volumes (subject to various credit quality requirements) up to two years ahead of time at a pre-set price. Naturally, the reinsurers charged for this, but not unduly so. Such transactions are available only in modest volume, as the business model of reinsurers does not let them easily commit ahead of time in this manner. Forward reinsurance commitments are therefore not a game-changer, but they provide a measured increase in the GSEs’ ability to lay off risk in times of severe adverse stress. And they are done in a way that is truly effective, with no material wrong-way risk, and at just a modest extra cost.

Demystification Conclusion. The reality is that finding a CRT that can be “always there while still being truly effective and having an acceptable cost” is not easy. The only version so far that passes the necessary tests are the forward commitments from reinsurers, and this sort of CRT is available only in modest volume and at some extra cost. Deep coverage PMI does not meet the necessary criteria.

There is also a second demystification conclusion that applies to all four narratives above: housing finance policy analysts should focus on understanding the policy implications of the GSEs’ CRT program, not on attempting to drive the program’s particulars. Given that CRT is so highly technical, and given that the information needed to fully understand the program is not currently available outside of the conservatorship, the GSEs should be left to efficiently manage the details of their own risks with appropriate supervision by the FHFA as their regulator; after all, such risk management works well for other regulated financial entities (e.g., the PMI firms themselves, banks, insurance companies). Until the FHFA releases fuller data about the CRT program, including data about the capital system when it is eventually finalized, policy analysts won’t be able to draw sound conclusions about its details.

#5 - Enshrined in Legislation: An Attempt in Congress to Take Control

In December 2016, three Democratic congressmen (Messrs. Delaney, Carney and Himes) sponsored a bill addressing the CRT program of the GSEs.[60] The language behind the effort, as it was told to me, was that "CRT is so important it deserves to be enshrined in legislation." When I first heard this, I thought that would be a good thing. The congressmen were in fact CRT supporters, and wanted the program to be big and successful.

I was wrong. The bill was very bad.

I knew there was trouble when the bill talked about establishing a CRT pilot program and then, after a minimum of three years, transitioning "to a regular standardized program of credit risk transfers that establish a stable and liquid market for mortgage credit risk." *This goal was disconnected from reality, as such a stable and liquid market already existed! The two GSEs were doing major volumes of CRT every quarter and had been for three years at that point, all publicly disclosed.*

In fact, the proposed bill had terms whereby Congress took strategic control of the CRT program and put itself in charge, with the result that CRT would very likely become subject to full-bore politicization, totally undoing the history where it had been developed inside of conservatorship on a technocratic and efficient basis. The result was going to be a worse CRT program, maybe much worse, as economic efficiency would inevitably be pushed aside.

Here are four key features of the bill that show how bad it was in terms of the CRT program remaining professional, well-run and efficient.

Congress would set CRT goals. The FHFA as conservator had for some years set some public top-level goals for the CRT program each year. The bill partially replaced the FHFA with Congress through several goals in the bill set for the next three years. These included volume goals (with the GSEs not able to adjust to market conditions except in extreme circumstances) as well as specifications of the exact risks to be transferred on the loans that went through a specified "pilot." Such goals amounted to a classic central-planning approach. In fact, the concept of what a truly effective CRT requires was not adequately understood in the bill; for example, while it worried (but in a poorly constructed way) about reimbursement risk (which it called counterparty risk, a more general name), it totally ignored requirements for certainty of coverage.

And note the inconsistency here. The FHFA set CRT goals as conservator. Conservatorship was and still is meant to be temporary. Congress was now permanently putting itself in charge of setting

[60] HR 6500, "To establish a Mortgage Credit Risk Sharing Pilot Program at Fannie Mae and Freddie Mac, and for other purposes," December 8, 2016.

goals that would apply when the GSEs, at some point, would likely be operating normally again, with shareholders in charge. Why would Congress be intervening to tell a shareholder-owned company how to manage its risks on top of the relevant regulator (the FHFA in this case) supervising its safety and soundness?[61] Furthermore, when it came to the loans insured by the Federal Housing Administration and the Department of Veterans Affairs, both fully on the books of the government and doing no CRT at all, the bill said nothing. That's just backwards.

Cost was ignored. The bill had no mention or concept of the cost of CRT or whether a cost was acceptable to the taxpayer, as opposed to being a "wealth transfer to the private sector." In its call for a stable and liquid market, the bill conspicuously omitted to say that such a market should also be "efficient" or "cost-effective." This inattention to cost was another aspect of the central planning mentality behind the bill and its lack of understanding of what CRT is supposed to do.[62]

Politicization was built in. In taking control of the existing CRT program and establishing a pilot for three years, the bill listed how public input was required for the FHFA to determine what the permanent program should be. The FHFA had to report to Congress exactly how it intended to "solicit new ideas for new and innovative ways to transfer credit risk … including on catastrophic risk." That input process was in practice almost completely an opportunity for more politicization – for special interests, doing all the influencing things they do, to get the CRT program changed to benefit them, either commercially or ideologically. In fact, those special interests were already making their influence felt – the bill had a paragraph specifically requiring the FHFA to say "how [it] intends to move forward with mortgage insurance focused transactions."

Reporting and operational requirements would be set by law. The bill called for the FHFA and GSEs to do many things that were already being done, like certain public reporting, developing capital standards to utilize in the program, and so on. Such apparently redundant requirements may seem innocuous, but they aren't. Writing them into the legislation meant that they could not be changed one iota without going back to Congress. At the GSEs, we were aware of the precedent of the FHA and Ginnie Mae, for which similar requirements were set in law – not inappropriately, either, since they

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[61] Since the companies would have to raise immense amounts of equity as part of exiting conservatorship, why would shareholders want to put their money into a company with which Congress intervened to micromanage in this manner? Either the company was private with a public purpose (with strong regulation), or it was a micro-managed-by-Congress government agency. It could not be both. This important issue was totally missed by the bill's authors.

[62] As stated earlier, this inattention to cost may have been an unintended consequence of how the FHFA communicated about the program in its annual conservatorship scorecard, which left a wrong impression of how CRT was being driven.

were units inside the government and thus fully under government control. Yet their officials had been bitterly complaining for years about how hard it was to get anything changed through Congress, and how the process ended up with all the usual horse-trading. Legislating such requirements was a recipe for rendering the GSEs unable to be dynamic and change with the times, and for politicization to intrude even more through the horse-trading.

The bill therefore represented a movement backwards in time, a reversal of the CRT program's development inside of conservatorship on a technocratic and low-politics basis and a starting up anew of the "meatgrinder" that had been evaded back in 2012 and 2013. *In other words, the CRT program was now to be placed on a fully politicized basis.* This would maximize rent-seeking opportunities – and also, perhaps not coincidentally, campaign contributions. Efficiency on behalf of the taxpayer in shedding risk would likely disappear as the program became heavily politicized, as is so true all throughout housing finance.

As the saying goes, "With friends like these…"

Since the three Democratic congressmen were from the minority party in the House at the time and did not hold leadership positions (i.e., chair or ranking member of the relevant committee or subcommittee), this whole episode can be dismissed as of little import. However, as someone once said to me, bad ideas are the ones that die hardest. Some of the ideas in the 2016 bill were in fact taken from a 2014 bill on comprehensive GSE reform from the same three Congressman. And, sure enough, much of the CRT-related content of the 2016 bill, only slightly rejiggered, re-appeared in 2018 as part of a proposal for comprehensive GSE reform that was sponsored by Jeb Hensarling (R-TX), then chairman of the House Financial Services Committee – a power position in Congress. Fortunately, that proposal did not advance, as shortly thereafter Hensarling retired and elections turned control of the House over to the Democrats.

There is no reason to believe it won't reappear again. It's a reminder that once a sphere of life – in this case housing finance – is heavily politicized, it is hard for any aspect of it to escape and be run on a business-like and efficient basis, as all the groups that thrive on politicization just keep coming after it, seemingly relentless. It's also a reminder that, as Congress thrives on political power and money, it should be no surprise that members of Congress were attempting to use the power of government to give themselves power by micromanaging the GSEs' CRT program. Such politicization has been happening in housing finance, including the GSEs, for decades, so why would CRT be exempt? It's a terrible habit, nevertheless, and the proposed bill indicates Congress may be unable to break its addiction to it.

Demystification Conclusion. The main myth to counter here is that Congress should have a role in micromanaging how the GSEs manage their risk. It should not. The two companies are set up as shareholder-owned companies, with the FHFA as their safety-and-soundness regulator: should that not be enough? More involvement by Congress, which is hardly an expert on a topic so technical and specialized, very likely means more politicization and distortion away from a CRT program operated by the GSEs with efficiency as the core driving motive, and towards one with all sorts of interest group or other political objectives.

#6 - The Ideological Attack: "CRT Doesn't Work"

As described above, the GSEs generally were supported by Democrats and not by Republicans, based upon their respective philosophies about the role of government. As the CRT program put private capital in front of the taxpayer exposure to the risks of the GSEs, however, it enjoyed broad bipartisan support for some time – Republicans liked more private capital taking mortgage risk, and Democrats liked that it also improved the business model of the GSEs. However, as the years went by and the prospect for "comprehensive GSE reform" – a phrase that often meant the wind-down of the GSEs and their replacement with something else – declined, this situation changed. CRT was one of the key reforms that improved the business model of the GSEs enough to make their resurrection (with those key reforms kept in place, to be sure) politically viable. Still wishing to wind down the GSEs, the more extreme free-market conservatives began to dislike CRT exactly because it had worked so well.

So, there arose the ideologically driven campaign to undermine CRT, claiming somehow that "it doesn't work."

The *Wall Street Journal*, whose editorial page – obviously favoring small government – is well known to be very negative on the GSEs, made a premature foray in December 2015. It claimed that the CRT program had nothing to do with economics and was all about politics, and that if there were significant losses investors would be made whole by the government anyway.[63] To those with substantial familiarity with mortgages, the GSEs and the CRT program, the editorial came across as so over-the-top and rife with specious finance and contorted arguments that it was ignored; it quickly disappeared from sight.

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[63] "Fannie and Freddie Forever," *Wall Street Journal*, December 30, 2015: "Since the two companies are backed by the government and can borrow money at rock-bottom rates, there's not much incentive to create this kind of instrument – except a political one. … [H]istory shows that Washington will protect debt investors who buy paper from Freddie or Fannie no matter what the companies claimed beforehand."

Starting up again more recently, the "it doesn't work" campaign has two active arguments in play.

One is that CRT providers are getting snookered by the GSEs, which are releasing flawed historic data on credit losses so that the "private sector may be severely underpricing risk."[64] Since major financial institutions that invest in credit risk instruments apparently think they know how to analyze that risk better than policy researchers at a Washington think tank do, this argument has not impacted the actual market, which continued doing new CRT transactions right up until the pandemic overwhelmed the markets in mid-March. It therefore seems to be more aimed at an inside-the-Beltway audience, as part of an ideological campaign to undermine the CRT program.

The second argument is circulating only orally. It has not been written down, perhaps because it is so easily proven wrong. This argument is that "CRT doesn't work" because "it's a credit default swap (CDS) and AIG proved they don't work."

I first heard this argument in the spring of 2019, as I was preparing to retire from Freddie Mac, when I talked to a specialist at a very prestigious think tank in Washington. He dismissed CRT out of hand with a quick "Hey, it's a CDS program and we saw with AIG that CDS doesn't work" – end of story, with zero interest in hearing otherwise. More recently, I heard the same thing repeated – again orally only, nothing in writing – specifically by people associated with the proudly free-market and therefore GSE-skeptic end of the Washington think tank world.

This is a classic advocacy narrative at work, because it sounds reasonable enough that policymakers who do not have the expertise or time to study the issue will become skeptical about the GSEs' CRT program. It's a clear-cut case of the fog of politicization.

The problem with this second argument is that the GSE CRT program is not a CDS – the two have different legal and financial structures – and it is not at all like the cited AIG situation. In some ways, it is exactly the opposite. This narrative is the classic red herring; it is also provably just plain wrong.[65]

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[64] Tobias Peter, "GSE Investors Better Beware Underlying Risks," *American Banker*, January 2, 2020. Peter is affiliated with the American Enterprise Institute, also renowned for its free-market and therefore proudly GSE-skeptic posture. The argument is that, because the released data does not include mortgages with characteristics not purchased since 2008, it is biased and reflects "censorship" to, in essence, misstate the actual risk.

[65] In the interest of full disclosure, I want to cite my unusually specific expertise for commenting upon this claim. First, I professionally grew up with derivatives – I was a direct market participant starting in the earliest days of interest rate futures and swaps (circa 1982-84), and stayed involved with it as I held increasingly more senior positions during the years when equity derivatives and later credit derivatives (including CDS) were developed. For several years (2000–02), among my management responsibilities was supervising the largest derivatives business in the world. Second, I was appointed in 2010 to AIG's Board of Directors by Treasury, a right it got as part of the government rescue of the company, and so for several years dealt as an insider with some of the aftermath of the failure of CDS there.

The fact that it has been circulating orally but never in writing reflected what I took to be a particularly sly method of ideological interests attempting to attack the credibility of the CRT program inside the Beltway, where expertise about the difference between CRT and CDS would be rather scarce.

Without going into all the complexity of how CDS usage at AIG and the CRT program at the GSEs are fundamentally not at all the same, I do wish to highlight what I consider to be the two most important differences:

The concentration of risk versus the dispersal of risk. AIG's business model was to concentrate massive amounts of mortgage credit risk onto its balance sheet in search of a profit. By contrast, the business model of the GSEs historically, by the nature of their congressional charters, already had concentrated massive amounts of mortgage credit risk onto their own balance sheets to achieve the policy goal of their charters; CRT was then designed to reduce that concentration of risk by selling it off to many diversified investors, resulting in a reduction of profit (with, of course, a commensurate reduction of risk). The former business model created systemic risk, while the latter is taking an existing systemic risk and reducing it. The two are exact opposites in terms of what they do to systemic risk.

The management of reimbursement risk in CDS is volatile and can be destabilizing, whereas for CRT it is extremely stable. In CRT, as described in "CRT II" for STACR and CAS, the entire potential maximum loss to be absorbed by investors in the bonds was deposited up-front with a trustee, with any funds not used to absorb a loss returned to those investors after the period of risk coverage ended. (That's part of the catastrophe bond structure after which CRT is patterned.) Thus, there is nil reimbursement risk, and volatile markets do not generate any movement of cash to fund the trustee once a transaction is initially completed.

By contrast, CDS handles reimbursement risk in an entirely different manner, one which requires cash to move as markets move. Specifically, if the prices of mortgage securities go down (implying greater losses in the future), then AIG had to send cash to post as collateral to cover that possible loss in order for their customers to believe they would absolutely eventually get paid on their CDS contracts.[66] Given the massive decline in mortgage securities prices in 2007 and 2008, this created an intolerable cash drain upon AIG that it could not meet.

So, again, CDS and GSE CRT are totally different in how they operate to manage reimbursement risk, one being unstable versus the other being extremely stable.

[66] This is similar to how exchange-traded futures work.

Demystification Conclusion. Thus, the advocacy narrative summarized as "CRT is a CDS, AIG Proved They Don't Work" is just plain wrong. It's not half-true, or a quarter true – it is zero true. AIG's CDS failure does not in any way mean that the GSE CRT program is deficient or unstable or "won't work." In fact, the GSE CRT program was designed with the knowledge that the AIG CDS program didn't work properly (along with many other lessons learned in the 2008 Financial Crisis), and so avoided its mistakes. This design is well understood in the financial community of mortgage securities dealers and investors, the regulatory community, the reinsurance industry and the credit rating agencies. Many of these organizations put real money at risk based upon that understanding; given how many were seriously burned in the 2008 Financial Crisis, they are very knowledgeable about what didn't work properly, and also why CRT, with its different legal structure and stable method to manage reimbursement risk, is not CDS. So, this advocacy narrative seems to also be really aimed at an inside-the-Beltway audience which, for good reason, has no significant expertise to understand why the CRT and CDS instruments are so different. The ideological objective seems to be to undermine the credibility of the CRT program and thereby make it less likely that the two GSEs would get resurrected in some fashion and more likely they would be wound down and replaced.

#7 - The Upcoming Capital Rule: CRT as Collateral Damage?

The economics of CRT is strongly tied to how much capital is required before and after a CRT transaction. This, as explained in "CRT II," means there must be a proper, economically driven, risk-based capital system in place for the GSEs, just as there is for banks, in particular the largest banks (i.e., SIFIs).

When Freddie Mac did the first CRT in 2013, there was no extant regulatory risk-based capital system applicable to the two companies while in conservatorship. The pre-2008 GSE regulatory capital requirement was not just suspended during conservatorship; its design was clearly inadequate in light of concepts developed to apply to SIFIs after the financial crisis. At that point, there was no work at all at the FHFA about what would replace it. So, starting in 2013, Freddie Mac developed its own SIFI-consistent risk-based capital system and used that, as the best available, to guide its decision-making about whether its CRT transactions were economically beneficial or not.

In 2017, the FHFA – after years of development – unveiled inside the conservatorship the Conservatorship Capital Framework (CCF) to use in decision-making, including for CRT transactions. Because the CCF was also meant to be SIFI-consistent and was thus quite similar to the framework used by Freddie Mac for the past four years, it replaced that framework with little impact on our CRT transactions.

Then, in 2018, the FHFA under Director Mel Watt issued a proposed regulation for minimum capital to be required by the GSEs after they came out of conservatorship. It was regarded as a necessary building block for any conservatorship exit, and would be used by the two companies for their internal decision-making in the meantime. It was in fact just the CCF repackaged when it came to determining risk-based decisions.

The problem is that a regulatory capital system also conventionally has a minimum leverage ratio – i.e., just a simple capital-to-total-accounting-assets calculation.[67] As explained in a prior article of mine,[68] the minimum leverage ratio is a vestigial appendage to financial capital systems, a leftover from a bygone era that has relatively little real economic meaning at this point.[69]

A minimum leverage ratio, if constructed without adequate thought, has the potential to – with no exaggeration – completely and fully stop cold all CRT transactions. Consider a simple example, using a 5% minimum leverage ratio (as applies to banks). If $1 billion of mortgages on a GSE's books has no CRT, the leverage-based capital requirement is simply calculated at $50 million. If the GSE then pays away money to providers of CRT through, e.g., a STACR or CAS bond issuance, it has a lower profit. But the leverage-based capital requirement is still $50 million, as the assets which are referenced by the CRT bond are still, according to the required accounting, on the books of the GSEs *with no change*. As explained in "CRT II," almost all of the economic benefit of CRT is a reduction in required risk-based capital. So, if capital is tied to risk, it all works properly… but if it is tied to accounting assets, it most assuredly does not.

Reflecting this truth, the 2018 minimum regulatory capital proposal carefully constructed its minimum leverage ratio to NOT be binding (i.e., higher than the risk-based calculation). It also avoided a

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[67] By definition, this treats all assets as equally risky, which clearly is not the case.

[68] Don Layton, "Four Big Things the FHFA Needs to Get Right in Its GSE Capital Rule," JCHS, October 2019, https://www.jchs.harvard.edu/research-areas/working-papers/four-big-things-fhfa-needs-get-right-its-gse-capital-rule, 2-4.

[69] The one valid usage for a minimum leverage ratio, as agreed by the Basle multinational regulatory process, and employed in Europe, is to be a low figure to act as a backstop if somehow risk-based formulae just go awry or are somehow gamed and thus lead to a clearly too low requirement. For banks, that figure is 3%. US bank regulators discretionarily added an additional 2% for reasons that appear to me to be mainly political in nature.

bank-style 5% ratio and proposed two alternatives, both much lower, reflecting the much lower risk-per-dollar-of-accounting-asset of a GSE versus a bank.[70]

It is worth reiterating why the GSEs have so much lower risk-per-dollar-of-asset than a bank. First, the GSEs lay off interest rate and liquidity risk on over 90% of their mortgages via issuing pass-through MBS, whereas banks retain those risks. Second, the majority (it's over 70% actually) of credit risk on new GSE loan purchases is sold to the market via CRT, which banks (with almost no exceptions) do not do. So, the risk per dollar of the typical mortgage loan on a GSE's books is just a fraction of what it is for mortgages owned by banks, which hold on to virtually 100% of interest rate, liquidity and credit risks.

This whole history and the support of CRT by the FHFA was all put into question when Mark Calabria became the new director of the agency in April 2019. He, along with the many senior political appointees he has hired to run the agency over its civil servants, has a strong conservative and libertarian policy pedigree that, as explained above, is grounded in small-government philosophy and thus strongly skeptical of the GSEs; that philosophy has led to a similar skepticism of CRT. Director Calabria himself has stated in private conversations (some at which I was present) that he is similarly very skeptical of CRT, and he has even repeated the "CRT doesn't work because it's just CDS" myth. The GSE-skeptic view on capital, which of course is integral to how to measure whether CRT transactions are economic or not, had become dominated by a focus on a simple minimum leverage ratio of about 5%, a figure chosen because it would be "the same as for banks." As discussed above, since that figure is not tied to risk and would not take into account the risk laid off through CRT transactions, it has the power to stop the program cold.

These concerns became realized when the Calabria-led FHFA issued its capital proposal on May 20, which has received an awkward industry and market reception. The risk-based calculation of a capital requirement is almost overwhelmed by the addition of large judgmental buffers, which together account for over 40% of the total; this addition in turn makes it hard to determine what exactly is the incremental benefit from a particular transaction. As feared, it also adopts a high minimum leverage ratio (4%) that would be, in the proposal's present form, binding at this time – i.e., higher than the risk-based calculation (including the buffers) – so that, on individual CRT transactions, there is no reduction in capital required. On top of all that, its treatment of CRT more specifically has also immediately

[70] The proposal gave two alternatives to a minimum leverage ratio, but both maintained the underlying concept that a leverage ratio should not generally be binding, and that its purpose is to provide a floor in case, somehow, the risk-based formula do not work properly or are gamed.

become controversial because it reveals a very negative view of it, giving little capital relief even in the risk-based calculations that are not currently binding. Lastly, it has adopted a totally different approach to capital with respect to CRT than for PMI, adopting what seems to be a very friendly and thus inconsistent treatment of PMI. The proposal thus all looks very political and ideological rather than based upon neutrally technocratic regulation.[71]

We shall see the comments from the public, both informally via the media and formally via the written submissions to the FHFA as part of the rule-making process (which will be in the public domain). I note that Director Calabria, who admits he has a philosophy of "I came into the job with preconceived notions, but I'm data driven so I will change my mind if warranted,"[72] has in fact had a series of such pre-conceived notion controversies.[73] Sometimes, he has indeed changed his stance after learning more. So, maybe the proposed rule will be significantly revised to make it more neutrally technocratic. Only time will tell.

However, if the CRT program, often cited as a major success of conservatorship by a wide range of policymakers and industry officials, is unduly damaged by the final capital rule, that damage will become one more reason that the Calabria capital rule will likely not survive longer than it takes the next director that is appointed by a Democratic president to revise it, along with many other aspects of the capital rule that seem dominated by a strong GSE-skeptic political and ideological viewpoint.

Demystification Conclusion. The FHFA proposed capital rule has largely adopted the GSE-skeptic view about CRT that produces a result outside the mainstream of neutral technocratic regulation; it seems instead to be based instead upon ideological small-government objectives. The question is whether the comment period to come will result in a change in that outcome or not. If there is no change, the question then becomes only how long it will take for a successor agency director to revise the rule so as to recapture one of the great successes of conservatorship that is reducing what is arguably the largest systemic concentration of risk in today's financial system.

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[71] The two different treatments of CRT and PMI violate the usual regulatory principle of "same capital for same risk." Although one can sometimes find such a discrepancy between how different regulators treat similar risks, it is rather unusual to see a single regulator in a single regulation propose such inconsistent treatments.

[72] Calabria described his philosophy to me in this way during the short overlapping period after he had become director of the FHFA but prior to my retirement as CEO of Freddie Mac.

[73] A great example of such a controversy would be his telling MBS investors in 2019 that, if the GSEs have strong capital and strong underwriting, there is no reason that GSE MBS needs government support. There was a very negative reaction to this claim, as participants in the MBS business know it is not true. He has never repeated this claim since, to my knowledge.

Conclusion

CRT is now at an inflection point as the FHFA prepares for the two companies to exit conservatorship in the next several years. It was, as explained above, developed “inside conservatorship” as a straight, business-like mechanism to manage the risk of the GSEs on an efficient basis, especially for the benefit of the taxpayers who support the companies in conservatorship. This program would serve the GSEs well in any exit, as they will attract capital more readily because they have become capital-efficient, including through the use of CRT. But staying business-like in this manner is an exception to the norms of the housing finance system, which has had decades of heavy politicization and so is known for hidden subsidies and various inefficiencies of many kinds.

Since 2015, when the forces of politicization “discovered” CRT and went on the offensive, there has been a steady stream of proposals and supporting narratives to reduce its business-like nature, almost always on behalf of commercial and ideological interests. Not every proposal about or analysis of CRT is politicized or biased, of course; some have real value. But most are, sometimes heavily. This is, unfortunately, the historic standard operating procedure in housing finance, and since 2015, such politicization has attempted to subvert the business-like nature of the CRT program. Amazingly, though, these efforts have found little success. Treasury and the FHFA during my tenure (which ended just as Director Calabria’s was starting) are to be commended for standing up against political pressures to keep the program operating effectively and efficiently on behalf of the taxpayer, rather than being distorted to deliver benefits to special interests.

Unfortunately, Director Calabria has upended this record of keeping politicization out of the CRT program, putting in play whether his capital rule might in fact end the successful CRT program due to his apparent ideologically driven viewpoint. We shall see the shaping of the capital rule play out during 2020, with the final rule targeted for finalization by year-end. We shall also see how it plays out longer-term when a new director, eventually to be nominated by a Democratic president, might change the capital rule again to be (let’s hope) more neutrally technocratic or (let’s hope not) similarly ideologically driven but on the opposite side of the political spectrum.

Appendix: Entity- vs. Transaction-based CRT

What is the potential damage under severely adverse market conditions for transaction-based CRT versus entity-based CRT, in practical terms meaning PMI? This is the key analysis in understanding the extent to which entity-based CRT is or is not superior to transaction-based CRT.

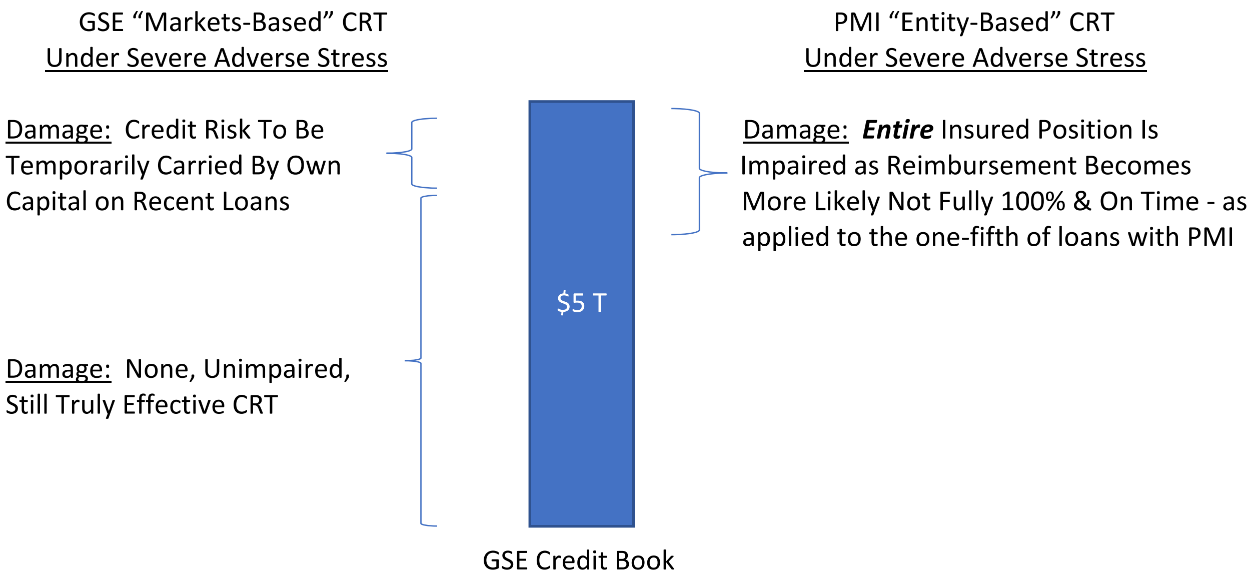
If markets-based CRT is unavailable in a severely adverse markets scenario, the only "damage" is that the latest mortgage transactions have to be carried fully by the GSEs' own capital until CRT markets open again. The truly effective CRT on all prior transactions – almost the entire book of GSE guarantees – still stays in place, with nil reimbursement risk (because 100% cash collateral is provided for STACR and CAS transactions[74]), covering those trillions of dollars of mortgage credit.[75] Transaction-based CRT is so far playing out in just this way in today's pandemic-stressed markets.

In entity-based CRT, as the PMI firms get downgraded (especially if more go below-investment grade), it is the *entire book* of their CRT (which is outstanding for about one-fifth of all mortgages, a ratio that has been increasing in the last few years) that becomes credit-impaired. If any of the PMIs fail, as happened in the last financial crisis, the situation gets even worse. Failing and credit-impaired PMIs would be a much larger source of damage to the GSEs – potentially causing them billions of dollars of credit losses (as happened in 2008) – than the inability to do CRT on new transactions for a period of time until the market opens up again.

[74] For reinsurance transactions, the combination of cash collateral and high credit ratings combines to make the risk very low, but not as low as for STACR and CAS with their 100% cash collateral requirement.

[75] As discussed in "CRT II," the oldest outstanding CRT contracts, which evolved in their structure over time, have some undesirable accounting. This is, in the pandemic, showing up as fair value gains, which some press reportage has interpreted as the entire impact of CRT. It is not. The most ideal accounting, achieved in 2018, has CRT contracts providing benefits at the same time as credit provisions on the underlying loans are taken.

Economic Damage In Severely Adverse Economic Conditions vs. Types of Credit Risk Transfer



In addition, this analysis makes clear a hidden subsidy from the GSEs (and thus, while they are in conservatorship, from the taxpayer). The GSEs take risk on their exposure to the PMI firms.[76] As PMI credit ratings are only on average BBB (with warnings for downgrades in the current environment), this risk is non-negligible and measurable. A proper regulatory capital system should therefore include a capital requirement on that reimbursement risk. As the GSEs have no mechanism to charge the PMI firms to compensate them for holding that capital, the cost of that risk comprises a hidden subsidy to the PMI firms. And because the risk goes up in severely stressed markets, such as we have today, so would that hidden subsidy.

[76] In CRT transactions which cover loans that already have PMI, the investors in the CRT refuse to directly take on the reimbursement risk from the PMIs as it is so material. Instead, those investors demand the GSEs stand in front of the PMIs to make those payments regardless. It's one more piece of evidence that PMI does not have "nil reimbursement risk."