

Blueprint for Restoring Safety and Soundness to the GSEs: One Year Later

November 2018

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In June 2017, a detailed plan ("Safety and Soundness Blueprint") to restore safety and soundness to Fannie Mae ("Fannie") and Freddie Mac ("Freddie"), collectively the "GSEs," was developed and publicly released by Moelis & Company LLC as financial advisors to certain non-litigating junior preferred shareholders. The Safety and Soundness Blueprint laid out the means to rebuild capital at Fannie and Freddie as shareholder-owned single-purpose insurers, refocused on their core conventional mortgage guarantee business, de-levered, and held to the highest regulatory and capital standards. When implemented, this would largely complete the transformation of the GSEs, augmenting the substantial reforms that have been achieved during conservatorship. The Safety and Soundness Blueprint also outlined a path for the government to fully exit its ownership of both companies, substantially reduce ongoing risk borne by US taxpayers, and benefit every stakeholder in the housing finance ecosystem.



Blueprint for **Restoring Safety and** Soundness to the GSEs

June 2017

Executive Summary

The Safety and Soundness Blueprint was built upon a solid foundation of seven key principles designed to benefit American taxpayers and support the US housing finance system.

- 1. Protect taxpayers from future bailouts.
- 2. Promote homeownership and preserve the 30-year mortgage.
- 3. Reposition the GSEs as single-purpose insurers.
- 4. Rebuild private equity capital while winding down the government backstop.
- 5. Repay the government in full for its investment during the great recession.
- 6. Produce an additional \$100 to \$125 billion of profit for taxpayers.
- 7. Implement reform under existing authority.

One year after its release, the Safety and Soundness Blueprint continues to provide the only mathematically credible, detailed, and achievable path forward for the GSEs. It relies on existing infrastructure, as opposed to new and untested systems, to ensure stability and liquidity in the mortgage markets. The regulatory reforms enacted by FHFA under the Housing and Economic Recovery Act ("HERA")¹ are continued – so that the GSEs never again revert to their vulnerable pre-crisis business model. Social functions of the GSEs, such as the duty-to-serve and affordable housing goals would be safeguarded, consistent with current legislation. This is all achieved while maintaining a level playing field for all mortgage originators by providing smaller participants an outlet to the secondary market through the GSEs' cash windows. Implementation of the Blueprint would also remove all lingering uncertainty in the housing finance market, which plays a crucial role in our national economy.

The updated Safety and Soundness Blueprint calls for the following actions within the next 4 years: (1) earnings retention; (2) issuance of new GSE common and preferred stock into the capital markets; and (3) secondary offerings of Treasury's holdings of nearly 80% of common stock in the GSEs. It also envisions payment of an ongoing market-based commitment fee to Treasury for its explicit catastrophic support, and compliance with FHFA's recently proposed Enterprise Capital Requirements.

Substantial reforms enacted during the past 10 years can be made permanent through a combination of (1) strict regulatory oversight, (2) resolution of outstanding litigation, (3) regulatory consent orders, and (4) further covenants in Treasury support agreements. Combined with affirmative steps to raise and retain capital in excess of the proposed regulatory requirements, codification of these reforms would result in Fannie and Freddie becoming utility-style, single-purpose insurers, seeking to produce a 10% return on equity while providing a conservative income-stock-like return to its shareholders.

¹ The Housing and Economic Recovery Act ("HERA") was enacted in July 2008 just as the financial crisis intensified, but this was too late to adequately remedy the GSEs' existing undercapitalization. HERA was modeled on the Federal Deposit Insurance Act ("FDIA"), providing the new Federal Housing Finance Agency ("FHFA" or "Agency") with the same legal powers that the Federal Deposit Insurance Corporation ("FDIC") has successfully employed for decades to address bank under-capitalization by strong regulatory oversight directives, enforcement actions, management changes and, if necessary, conservatorships or receiverships.

The Safety and Soundness Blueprint ensures that homeownership for middle-class and working-class Americans remain available and affordable. The fixed rate pre-payable 30-year mortgage would remain the bedrock of U.S. housing finance.

This update reviews and comments on important developments since the launch of the Safety and Soundness Blueprint in June 2017. It also presents revised modeling and valuation of the GSEs, and of the government's warrants. These financial projections incorporate financial performance of the GSEs since the original Safety and Soundness Blueprint was released. Included are the write-down of the GSEs' deferred tax assets in relation to the passage of tax reform and the letter agreement between Treasury and FHFA executed in Q4 of 2017. The analysis also includes revised mortgage market projections that reflect a slowing housing market and the better-than-expected recent credit performance of the GSEs' mortgage guarantee portfolios. We have also incorporated the positive impacts of lower corporate tax rates, and updated equity-market valuations. Moelis & Company estimates that the value that can be realized from the government's warrants has increased to \$100 billion to \$125 billion (up from \$75 billion to \$100 billion in the June 2017 Safety and Soundness Blueprint).

A Decade of Reform, **Profitability, and No Capital**

This past September marked the ten-year anniversary of the government placing Fannie and Freddie into conservatorship. Of all the major financial institutions that faced distress at the time of the 2008 financial crisis, the GSEs remain the only companies that have not been directed by the government to raise private capital and thereby protect taxpayers, despite their ability to do so.

Fannie and Freddie were taken into conservatorship in 2008 not as a result of problems in their core mortgage insurance business, but due primarily to mounting GAAP losses from their \$1.5 trillion investment portfolio comprised largely of private-label securities backed by subprime and nonconforming mortgages. Over the past decade their conservator and regulator, the Federal Housing Finance Agency ("FHFA"), has made substantial reforms to how the GSEs operate. These reforms include strict limits on purchasing mortgages and investment assets beyond what is necessary to support the GSEs' core guarantee business.

Treasury provided the GSEs a lifeline in 2008 by committing to purchase senior preferred stock and receiving warrants for ownership of 79.9% of the GSEs (in addition to preferred stock liquidation preference). This investment largely mirrored the government's approach used with AIG, which also granted 79.9% equity ownership. It was similar as well to crisis-era investments in other too-big-to-fail behemoths such as Citi and GMAC. The government, however, has yet to exit its GSE investments the way it has exited all of its substantial crisis-era investments in financial institutions.

Since 2013 the GSEs have been overwhelmingly profitable. These profits were initially driven by the reversals in 2013 of loss-reserves and tax-related provisions taken during and immediately after the crisis (from 2008 to 2012), reflecting a substantial recovery in the housing market. They have been augmented by litigation recoveries received from third parties that had sold mortgage-backed securities to the GSEs prior to the financial crisis. The GSEs' strong profitability has continued in recent years, generating more than \$15 billion per annum in combined average post-tax net income from 2014 to present,2 thanks to solid credit underwriting and the consistent performance of their core guarantee businesses.

On this ten-year anniversary of the conservatorship, Fannie and Freddie have now returned over \$285 billion to Treasury, paying back all the money they borrowed at the time of their bailouts plus an additional \$94 billion. The returns received by Treasury now exceed the original 10% annualized rate established at the start of the conservatorship. Alex Pollock of the R Street Institute (formerly of AEI) has appropriately referred to this as "the 10% moment."3

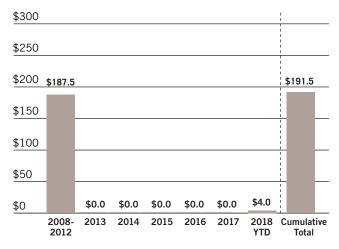
Despite having achieved this milestone, all GSE profits continue to be paid to Treasury through a 2012 amendment commonly referred to as the "net worth sweep," instead of being retained as capital by the GSEs to protect taxpayers against potential future losses. Fannie and Freddie currently rely solely on mandated capital cushions of \$3 billion each. In light of the high capital requirements imposed on the rest of the financial sector following the 2008 crisis, this minimal level of capital (\$6 billion in aggregate) is woefully inadequate to support \$5 trillion of assets held by the two GSEs (representing just over 0.1% of total assets). The government urgently needs to address this state of affairs.

² FNMA and FMCC filings (total combined net income from 2014 through Q2 2018)

³ Alex J. Pollock, "Fannie and Freddie and the 10% Moment," Wall Street Journal, 16 Mar. 2016.

Figure 1: Consolidated GSE Treasury Draws and Dividends Paid \$ Billions

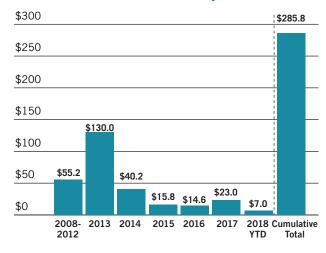
Consolidated Draws from Treasury



Source: Company filings, Bloomberg

As conservator using the powers of the GSEs' boards and management, FHFA has put in place a decade's worth of substantial reforms. As regulator, FHFA recently proposed robust post-conservatorship capital standards requiring core capital equal to approximately 3% of assets (equivalent to ~4x pre-crisis requirements). If implemented, these capital requirements will serve to protect both the GSEs and taxpayers if and when another severe housing downturn occurs. The private-label securities investments that got Fannie and Freddie into trouble are now gone and cannot return due to the strong regulations under HERA put in place after the financial crisis. Additionally, a broader credit risk transfer market has developed in recent years to share unexpected credit losses with the capital and insurance markets. While these risk transfer transactions do not in any way substitute for permanent equity over the course of complete financial cycles, they do serve to further reduce taxpayer risk.

Consolidated Dividends to Treasury



Market and Economic Update

By restoring safety and soundness to Fannie and Freddie, the Administration can protect the American taxpayer. It can bring substantial private capital investment, allowing the GSEs to meet robust regulatory capital requirements consistent with other large financial institutions, and it can stimulate economic growth through the investment of well-regulated private capital.

The *first step* to accomplish these objectives must be to begin rebuilding capital at Fannie and Freddie by suspending dividends to Treasury. The second step is to recognize the government's historical profits, by acknowledging that Treasury's senior preferred stock has now been repaid in full, with the original 10% annual return. With the senior preferred outstanding, it will be impossible for the GSEs to raise equity from the private markets, as the senior preferred stock would effectively block any path to the return of invested capital. The **third step** is for FHFA to direct Fannie and Freddie to submit capital restoration plans, as authorized by and required under HERA.4

Taking these three steps immediately begins restoring safety and soundness to Fannie and Freddie, thereby protecting American taxpayers. FHFA and Treasury together have the legal authority to resolve the conservatorship. They can do so with the Administration's leadership, while Congress continues to work on other broader aspects of housing reform. The government's proceeds from exercise and sale of its warrants could be as high as \$125 billion. These amounts could be used to reduce the deficit.

In December of 2017, FHFA agreed with Treasury to put in place a \$3 billion floor for each of Fannie's and Freddie's individual capital reserve amounts. Had they not done this, under the terms of the 2012 Third Amendment to the PSPAs, the capital for each of the GSEs would have fallen to zero.

Moelis has updated the illustrative valuation analysis presented in the original, June 2017, Safety and Soundness Blueprint. Updates include incorporating these revised capital buffers, as well as the impact of FHFA's recently proposed Enterprise Capital Requirements for the GSEs (see Appendix A for further detail). Other key changes in modeling assumptions include lower realized credit losses - due to improved loan underwriting, a reduction in corporate tax rates reflecting the December 2017 passage of the Tax Cut & Jobs Act ("TCJA"), reductions in deferred-tax asset resulting from the TCJA, slower projected loan production volumes, and higher market-implied valuation metrics.

⁴ See Capital Restoration Plans, 12 U.S.C. § 4622.

Figure 2: Building a Fortress Balance Sheet \$ Billions

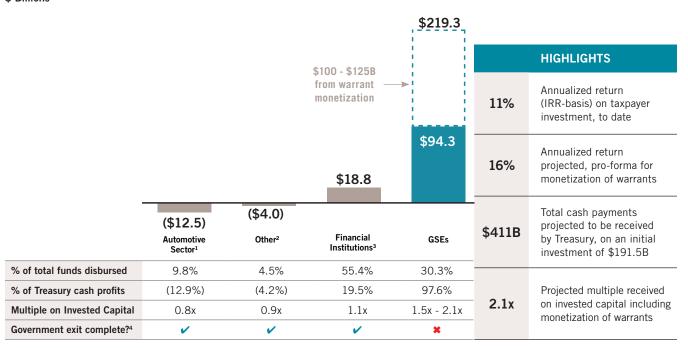
		BUILDING CORE CAPITAL	% ASSETS ³
Adj. 2018P Core Capital ¹	SPS principal reduced to reflect original contractual terms ² , earnings begin to be retained	\$12B	+0.2%
Retained Earnings ⁴	Dividends suspended until capital build is completed	\$54B	+1.0%
Common Equity Raised	Relisting offering, follow-on offering(s)	Initial Follow-on \$37.5B	+1.4%
Preferred Stock Issuances	Augment existing junior preferred stock (to the extent not converted)	\$2	25B +0.5%
Core Capital⁵	Dividends resume	\$167B	~3.0%

Source: Company filings, Moelis estimates

- 1. Reflects \$3.0 billion per GSE of net worth as of June 30, 2018 pro forma for dividends paid on September 30, 2018 plus Moelis projected net income for 2H 2018. Note, these projections may differ from actual 2H 2018 results
- 2. SPS principal is reduced to \$0 at Freddie Mac, reflecting amortization of past payments in excess of a 10% annualized rate. SPS principal balance at Fannie Mae, reflecting amortization of dividends paid in excess of a 10% annualized rate through Sep 30, 2018, is equal to \$276 million – which is assumed to be converted into common equity in connection with the relisting offering
- 3. Based on projected 2021 total assets & off balance sheet securitizations of \$5.5 trillion. In the June 2017 Safety and Soundness Blueprint, core capital of 3.25% was based on 2020 projected total assets of \$5.1 trillion
- 4. Retained earnings, 2019 through 2021, net of common and preferred dividends as applicable
- 5. Minimum capital requirements expected to be met by 2021 year-end, at which point dividends would resume

Taking all of these changes together, our assessment is that the ability of the GSEs to raise third party capital to meet proposed FHFA capital standards and provide a clear runway for the government to harvest its warrants for the benefit of taxpayers, remains feasible within a three-to-four year timeframe. Our estimate of the proceeds to Treasury from disposition of the government's warrants is \$100 billion to \$125 billion (up from last year's estimate of \$75 billion to \$100 billion). The biggest risks to achieving such a valuation range remain a downturn in the broader equity markets or in the domestic housing market. We note that the current domestic housing market remains fairly liquid and benign, and that strong performance in US equities (including financials) provide a solid environment for raising new capital. These robust financial conditions are a reason we believe that acting in a timely manner is critical.

Figure 3: Treasury's Cash Profits from Federal Financial Assistance Programs \$ Billions



Source: Pro Publica, Company filings, Moelis estimates

- 1. General Motors Company and Chrysler Group LLC
- 2. Includes investment funds, state housing organizations, TALF, SBA security purchases and the FHA refinance program fund
- 3. Includes banks, financial services organizations, insurance companies, and mortgage servicers
- 4. Excludes the approximately \$65 million of remaining TARP investments held by Treasury as of September 2018

A Win-Win-Win: Harvesting Treasury's warrants for up to \$125 billion would generate significant value for taxpayers in the near term. The absolute dollar amount of this return would dwarf all other crisis-era investments made by the Treasury. Adding this amount to the \$285 billion in dividends received since the conservatorship began – nearly \$95 billion more than the \$191.5 billion invested – taxpayers would earn a 16% annualized projected, pro-forma return. Such a return is comparable to the return a distressed investor on Wall Street would expect, and is entirely appropriate for the government's reluctant financial support following the crisis. This is clearly a win-win-win for the Administration, for Congress, and for taxpayers.

All possible end-states of housing finance reform require rebuilding and attracting new private capital. That capital should start to be rebuilt immediately, while still in this period of economic expansion. Doing so in future years could be more difficult, as market conditions may not remain as favorable as they are now.

Developments in Housing Finance Reform

Many voices have continued to call for GSE reform. Treasury Secretary Mnuchin has publicly stated and testified before Congress that it is in the best interest of the American taxpayers that the conservatorship ends. "I am determined," he said, "that we have a fix to the GSEs and that we don't leave them in conservatorship."5 He also stated, "we are determined to try to get Fannie and Freddie *restructured* [emphasis added] in some format so we don't put taxpayers at risk."6

After several failed legislative attempts, Congress has been unable to develop a practical solution that avoids disrupting the housing finance market while achieving affordable housing objectives. Still there is a strong and growing consensus that now is the time for administrative action around common goals, after which Congress can legislate to enact additional reforms that the Administration cannot achieve in the initial phase.

Trade Group Perspectives – The housing finance industry has recognized the need for an administrative solution. In September 2018, a group of 29 trade associations including the Mortgage Bankers Association, the Independent Community Bankers of America, the National Association of Realtors, the US Mortgage Insurers, and other leading voices on housing finance reform, sent an open letter to the Administration and Congress.7 The letter notes that Congress has not successfully addressed GSE reform despite "one of the longest economic expansions on record." It goes on to say that "reforms should reflect a pragmatic [emphasis added] understanding of the market and the mechanisms by which credit is delivered."

These trade groups have echoed Secretary Mnuchin by calling for "protect[ing] taxpayers" and "provid[ing] liquidity and ... stability" in the mortgage markets. The letter called for policymakers, as they "consider options to remove the GSEs from conservatorship, retain adequate capital to support GSE operations and foster a system that relies more heavily on private capital," to be mindful that "there is a pressing need to ensure that the existing progress is cemented rather than cast aside." They specifically urge policymakers to "tak[e] care not to roll back aspects of the GSEs' operations that are supporting the foundation of the housing market."8 We wholeheartedly agree with these principles, which are consistent with the Safety and Soundness Blueprint.

^{5 &}quot;Mnuchin on the Future of Fannie Mae and Freddie Mac," Fox Business News, 30 Apr. 2018. https://www.youtube.com/watch?v=i6T6B3hl4Sc

⁶ "Mnuchin on tariffs, Cohn's resignation, and Dodd-Frank," Bloomberg, March 7, 2018. https://www.bloomberg.com/news/videos/2018-03-07/mnuchin-on-tariffs-cohn-s-resignation-and-dodd-frank-video

⁷ "A Defining Moment for Housing Finance: The Need to Preserve Access and Affordability," 5 Sep. 2018.

⁸ Ihid

EXCERPTS FROM "AN OPEN LETTER TO THE ADMINISTRATION AND CONGRESS"

A Defining Moment for Housing Finance: The Need to Preserve Access and Affordability

"While the nation is in the midst of one of the longest economic expansions on record, the wounds of the 2008 financial crisis have not completely healed. Fannie Mae and Freddie Mac, the two government-sponsored enterprises (GSEs), remain mired in government conservatorship a decade later. And yet despite this limbo status, the housing market has recovered in many respects. Home prices have broadly recovered, the number of foreclosures and underwater borrowers have steadily fallen, and the multifamily market has responded to meet increased demand for rental housing..."

"Indeed, as policymakers consider options to remove the GSEs from conservatorship, retain adequate capital to support GSE operations and foster a system that relies more heavily on private capital, there is a pressing need to ensure that the existing progress is cemented rather than cast aside."

"Together, we urge policymakers to lock in recent reforms to the GSEs and complete the necessary additional reforms to protect taxpayers, provide liquidity and promote stability while taking care not to roll back aspects of the GSEs' operations that are supporting the foundation of the housing market. Only through such efforts can we ensure an affordable, accessible housing finance system that works for American homeowners and renters alike." Sincerely,

Asian Real Estate Association of America Center for Responsible Lending Community Home Lenders Association The Community Mortgage Lenders of America Credit Union National Association Enterprise Community Partners, Inc. Habitat for Humanity International Housing Partnership Network Independent Community Bankers of America Leading Builders of America Local Initiatives Support Corporation Manufactured Housing Institute Make Room Mercy Housing Lakefront Mortgage Bankers Association

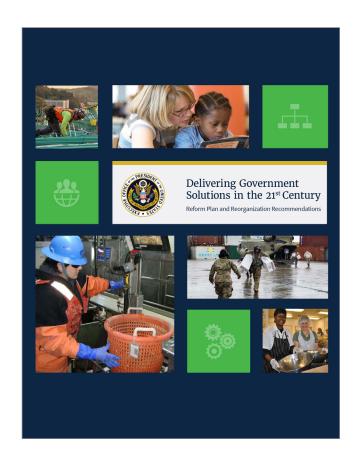
National Apartment Association National Association of Affordable Housing Lenders National Association of Home Builders National Association of REALTORS National Council of State Housing Agencies National Housing Conference National Housing Trust National Multifamily Housing Council Real Estate Services Providers Council The Realty Alliance Steward of Affordable Housing for the Future U.S. Mortgage Insurers Up for Growth Action United States Conference of Mayors

OMB – In June, OMB published "Delivering Government Solutions in the 21st Century, Reform Plan and Reorganization Recommendations.9" This paper proposed a substantial reorganization of several U.S. government departments and agencies, including those in the housing finance system. The plan's primary goal was to eliminate duplication and waste in government.

Many of the key private market solutions OMB suggests for the GSEs are compatible with the Safety and Soundness Blueprint. "[T]his system is challenged by the operation of two privately-owned Government sponsored-enterprises (GSEs), Fannie Mae and Freddie Mac, in conservatorship, a condition that has been maintained since 2008." OMB's plan recommends "end[ing] the conservatorship," and "transitioning Fannie Mae and Freddie Mac to fully private entities."10

OMB also suggests that new competition to Fannie Mae and Freddie Mac would decrease moral hazard and risk to the taxpayer. Under OMB's proposal, the GSEs and other market participants would have access to an explicit federal guarantee for mortgage-backed securities ("MBS"), which only provides coverage in limited catastrophic circumstances, and which would be both on-budget and fully paid-for. These elements of the OMB document (similar to FHFA's letter to the Senate Banking Committee) would require new legislation, which could be compatible with the Safety and Soundness Blueprint.

Finally, again echoing the two principles common to Secretary Mnuchin, industry stakeholders, FHFA, and the Safety and Soundness Blueprint, OMB's government reorganization plan looks to "minimize the risk of taxpayer-funded bailouts, and ensure that mortgage credit continues to be available in times of market stress for creditworthy borrowers."11



⁹ "Delivering Government Solutions in the 21st Century," OMB, www.performance.gov/GovReform

¹⁰ Ibid., p. 75.

¹¹ Ibid., p. 17.

FHFA – In January of this year, in response to requests from Congress for its guidance on reform efforts, FHFA outlined its own vision of GSE reform for the Senate Banking Committee.¹² The FHFA Director sent a letter and accompanying report to the Senate Banking Committee, which described the agency's perspectives on a post-conservatorship world. FHFA emphasized the need for "significant amounts of private capital at the center of the housing finance system," keeping in place reforms made to date, and establishing robust capital requirements and regulatory oversight.

Two leading objectives, "preserv[ing] the 30-year fixed-rate pre-payable mortgage" and "end[ing] taxpayer bailouts for failing firms," align directly with Treasury Secretary Mnuchin's stated goals. They are also consistent with the stated goals of leading trade groups (discussed in the preceding section), as well as with the Safety and Soundness Blueprint.

FHFA's Objectives for a Post-Conservatorship Housing Finance System

A future housing finance system should:

- Preserve the 30-year fixed-rate, pre-payable mortgage;
- End taxpayer bailouts for failing firms;
- Maintain liquidity in the housing finance market;
- Attract significant amounts of private capital to the center of the housing finance system through both robust equity capital requirements and credit risk transfer (CRT) participation;
- Provide for a single government-guaranteed mortgage-backed security that will improve the liquidity of the to-be-announced (TBA) market and promote a fair and competitive funding market for Secondary Market Entities (SMEs);
- Ensure access to affordable mortgages for creditworthy borrowers, sustainable rental options for families across income levels, and a focus on serving rural and other underserved markets:
- Provide a level playing field for institutions of all sizes to access the secondary market;
- Include tools for the regulator to anticipate and mitigate downturns in the housing market, including setting appropriate capital and liquidity requirements for SMEs, having prompt, corrective action authority for SMEs that are weak or troubled, and having authority to adjust CRT requirements as needed; and
- Provide a stable transition path that protects the housing finance market and the broader economy from potential disruptions and ensures that the new housing finance system operates as intended.

¹² "Federal Housing Finance Agency Perspectives on Housing Finance Reform," FHFA, 16 Jan. 2018

FHFA's perspectives on housing finance reform included a clear call for secondary market entities (e.g., the GSEs) to be "private, shareholder-owned institutions" with "appropriate capital requirements." FHFA specifically called for a "comprehensive risk-based capital standard ensuring the [guarantors] could survive a severe housing stress like the recent financial crisis and continue to write new business," complemented by "a leverage ratio standard" and "annual stress test requirements."

On this front, FHFA took an even more significant step forward this past June, when the Agency proposed a new post-conservatorship regulatory capital framework for the GSEs that outlined risk-based capital requirements, along with two alternatives for an updated minimum leverage capital requirement. The riskbased capital requirements set out in this framework provide a granular and transparent assessment of credit risk specific to various mortgage loan categories, and include capital requirements for market risk and operational risk, as well as a going-concern buffer.

The proposed rule would also maintain the existing definitions of core capital and total capital (set by statute), but implement new capital requirements for items like deferred tax assets, in an effort to more closely align with existing bank capital requirements. For reference, the proposed enterprise capital requirements. calculated as of September 30, 2017, would have required the GSEs to hold in excess of \$180.9 billion of core capital, equivalent to 3.24% of total on-and-off balance sheet assets, and representing over four-times the amount of capital that would be required under the GSEs' preferential pre-crisis capital standards. 13

The proposed Enterprise Capital Requirements released by the FHFA are broadly consistent with regulatory capital requirements for other regulated financial institutions. As summarized in the table below, and described in further detail in Moelis's public comments to the Enterprise Capital Requirements, differences between FHFA's proposed rule and US bank capital requirements are minor, explainable, and defensible.

Figure 4: Comparison of Minimum Capital Requirements

The differences between FHFA's proposed rule and U.S. bank capital requirements, or the requirements proposed in the Moelis Blueprint, are minor, explainable and defensible

Item	FHFA's Proposed Rule	Moelis Blueprint	Basel III (GSIB)	
Leverage Ratio	2.50%1	3.00%²	3.75 - 4.00%³	
Calculation of Credit Risk-Based Capital	PMIERs-style grids based on LTV, FICO and documentation terms	50% of RWA adjusted for CRT	50% of RWA, potentially adjusted for CRT	
Risk-Based Capital Requirements (Pro Forma 2020)	2.54%	3.00%4	3.60%5	
Deferred Tax Asset Treatment	Excess DTAs are added to risk-based capital requirement ⁶	DTAs included in core capital	Excess DTAs deducted from Tier 1 Capital	
Limitations on Junior Preferred Stock	No limitations (JPS included in core capital)	No limitations (JPS included in core capital)	JPS effectively limited to 1.5% of RWAs (or ~\$30B) at minimum capital requirements ⁷	

The Moelis Blueprint largely borrowed from international Basel III standards, with some minor adjustments to reflect the unique business model of the GSEs. FHFA's proposed rule makes further adjustments resulting in a more granular, but slightly less onerous, set of capital requirements than those used under the Basel III standard or those outlined in the Blueprint.

Source: FHFA, Company Filings, Federal Reserve, Bank for International Settlements (BIS), Moelis Blueprint Note: See Appendix for corresponding footnotes

^{13 2017} fiscal year-end combined requirement of \$41.4 billion. Comprised of \$23.0 billion for Fannie, and \$18.4 billion for Freddie, per their respective 10Ks.

FHFA's proposal is currently open to a public comment period (which extends through November 16, 2018), and remains subject to revision. Moelis public comments on the proposed Enterprise Capital Framework can be found at the FHFA's website.14

Moelis based prior estimates of capital requirements in the original Safety and Soundness Blueprint on a Basel bank-style approach, incorporating familiar concepts such as risk-based capital, Tier 1 capital, risk-weightings, and leverage ratio requirements. In this update to the Safety and Soundness Blueprint, Moelis assumes the implementation of FHFA's 2018 proposed Enterprise Capital Requirements. Our updated Blueprint continues to project that future earnings and private capital raises can meet or exceed these new requirements in a period of less than 4 years.

Moelis recommends that FHFA direct the GSEs to submit Capital Restoration Plans as contemplated by HERA.¹⁵ This recommendation echoes calls from trade associations representing community lenders (e.g., ICBA, CMLA, CHLA), who co-authored a letter to FHFA, along with leading civil rights organizations, calling for "development of capital restoration plans and suspen[sion] of the net-worth sweep" as "first steps [to] help protect the taxpayers and help enable the GSEs to fulfill their statutory mandate[s]."16 Creation and submission of Capital Restoration Plans by Fannie and Freddie would allow FHFA, along with Treasury and other relevant administrative agencies, to make fully informed decisions about potential paths for GSE reform.

Many of the objectives detailed in FHFA's outline could be implemented administratively by FHFA and Treasury under existing authority granted by HERA. Congress would need to enact legislation to implement certain aspects of the FHFA's outline, including a potential replacement of the entity-level government backstops

(currently provided under the preferred stock purchase agreements ("PSPAs")) with an unlimited full-faith-and credit guarantee of both MBS, as well as limited corporate debt issued exclusively to support only the cash window and delinquent mortgage buybacks, and not the investment portfolios of the pre-crisis era (which are almost entirely a thing of the past).

Congress – Over the course of 2018, Senator Bob Corker and House Financial Services Committee Chairman Jeb Hensarling (together with Representatives Delaney and Himes) floated separate legislative proposals for housing and GSE reforms. These two initiatives have limited prospects for passage, and have been viewed by the market as largely symbolic. Both bills called for the establishment of multiple guarantors, twin receiverships for the GSEs, revocation of Fannie's and Freddie's charters, and elimination of existing affordable housing goals. The replumbing of the financial system involved in these proposals was viewed by many market participants as too complicated and disruptive to the housing finance system to be feasible. Chairman Hensarling has called for administrative reform of the GSEs, in the absence of enacted legislation. In his recent OpEd in the Wall Street Journal, he stated "... if the political will to enact reform stalls, the Trump Administration can still effect change. The President will appoint a new Federal Housing Finance Agency director in January. The director has broad unilateral powers as conservator of Fannie and Freddie ... If Congress fails to act by early next year, the new director can still institute ... reforms administratively."17 Representative Blaine Leutkemeyer (R-MO), a member of the House Financial Services Committee, and a leading contender to chair that committee, has also called on the Administration to drive the process of GSE reform, stating "[t]he Administration needs to take the lead, period."18

¹⁴ https://www.fhfa.gov//SupervisionRegulation/Rules/Pages/Comment-Detail.aspx?CommentId=15245

¹⁵ For a more detailed description of FHFA's proposed Enterprise Capital Requirements, and further analysis of these requirements, please consult Moelis's public comment submitted to FHFA.

¹⁶ Joint Letter to FHFA Director Watt to suspend the quarter[ly] dividend sweep and direct Fannie Mae and Freddie Mac to develop capital restoration plans, June 18, 2018

¹⁷ Jeb Hensarling, "Fannie and Freddie, Make Way for Ginnie Mae," Wall Street Journal, 5 Sep. 2018.

¹⁸ "Trump's Fannie-Freddie Plan Needs Clarity, Key Republican Says," Bloomberg, 28 June 2018. https://www.bloomberg.com/news/articles/2018-06-28/trump-s-fannie-freddie-plan-needs-clarity-key-republican-says

The 2019 Outlook and State of the Debate

With the prospects for sweeping bipartisan legislation dimming, the market has begun to coalesce around administrative solutions.

Secretary Mnuchin and other leading voices in the Administration have stated publicly that housing finance reform will be a top priority in 2019. The primary focus of both policy makers and mortgage market participants in 2019 will be on the form and timing of any such administrative action.

The core objectives of successful GSE reform, to maintain liquidity and stability in the housing market through preserving GSE core functions, and to raise substantial private capital and locking in existing reforms to protect taxpayers – can be achieved through administrative action, under existing authority of FHFA and Treasury.

Some GSE reform proposals call for substantial changes to the housing finance system with the potential for significant negative side effects and unintended consequences. These changes include: (1) revoking Fannie and Freddie's statutory charters, in an attempt to replumb and overhaul the current affordable housing system; (2) allowing for multiple mortgage credit guarantors with the objective of increasing competition; (3) changing the government mortgage system backstop from its current entity-based form to an unlimited security-based guarantee; and (4) expanding the role of Ginnie Mae to largely replace Fannie and Freddie. Implementing any of these changes would require legislation. Some reform proposals even go so far as to advocate the use of (5) receivership as a legal process, moving assets and liabilities of the GSEs to different legal entities. Receivership of these entities would needlessly complicate reform, alarm the market, and be unprecedented in its size and scope. A final point, discussed below, is (6) stakeholder concerns related to mission creep.

All of these concepts risk substantial negative side effects, which should be weighed carefully by the government in assessing whether or not to support them.

1. Charter Revocation:

This past year the OMB, as well as Senator Corker and Chairman Hensarling, proposed revoking Fannie's and Freddie's congressionally mandated charters. Eliminating these statutory charters is typically bundled with mandating new additional guarantors, supported by an open-architecture securities-based, rather than entity-based, guarantee. Eliminating the statutory charters would (1) strip the GSEs of their existing statutory obligations related to affordable housing (such as duty-to-serve and affordable housing goals embedded in the charters), and (2) reduce investor expectations that Fannie and Freddie are supported by an implicit government guarantee.

A wide range of affordable housing advocates, mortgage industry trade groups, and policymakers staunchly oppose eliminating the charters. They reason that eliminating the cross-subsidies between borrowers will make homeownership unattainable. These cross-subsidies, however, lower the mortgage cost for many credit-worthy working class Americans. A study prepared by the National Urban League and Center for Responsible Lending, referencing the Senate legislative proposal which contemplated eliminating the statutory charters. stated "... the proposed legislation would jettison the very foundation blocks of the obligation of companies using government backing to promote the public interest, including: serving a national market, including rural and urban areas; serving all lenders equitably, including community banks and credit unions; promoting fair housing and increasing access to affordable mortgage credit for underserved borrowers; and meeting enforceable affordable housing goals and enforcement provisions."19

¹⁹ National Urban League and Center for Responsible Lending, "Senate GSE Reform Proposal, A Blow to Affordable Housing and Harmful to the Overall Housing Market." March 2018.

We believe pursuing charter revocation is an unnecessary distraction. The odds of any such legislation passing both houses of Congress are minimal. Insisting on such legislation will continue to put taxpayers at risk by not restoring safety and soundness to Fannie and Freddie.

A consensus is building across the political spectrum towards an administrative solution. To the extent that the Administration calls on Congress to enact additional legislation, the focus should be on incremental reforms, which are broadly supported and have the potential to be passed in a divided Congress.

Replumbing a large portion of the existing American affordable housing system does not fit into those categories. Further, any potential legislative action should no longer delay critical actions by Treasury and FHFA to rebuild capital at the GSEs.

Favorable market conditions and excess liquidity in the equity markets argue for beginning the process of ending the conservatorship now.

2. Multiple Guarantors:

Some housing finance industry commentators suggest that a move towards an open architecture, multiple-guarantor system is desirable because it would diffuse mortgage credit risk among a larger cohort of parties. They argue that such a system would mitigate the too-big-to-fail risk associated with the existing guarantors, and thereby reduce systemic risk. An additional alleged benefit of additional guarantors is enhanced competition. Elements of this approach are shared by both Senator Corker's and Chairman Hensarling's proposals.

While the Safety and Soundness Blueprint is compatible with the creation of additional guarantors, the potential benefits of such a system are questionable. The promised benefit of systemic risk reduction is largely non-existent, due to high correlation of risk across any such single-purpose guarantors.

History clearly shows that multiple guarantors would all likely experience financial difficulties at the same point in the housing cycle. Whether there are two entities or five, companies that have the same core business, similar credit and nationwide geographic profiles, and similar regulations would be highly correlated. The September 2008 conservatorship of both Fannie and Freddie at the same time demonstrates this correlation. Difficulties experienced by the private mortgage insurers during and immediately after the financial crisis provide another example. Three out of seven private mortgage insurers failed outright, while the rest experienced substantial financial distress.

Industries with the structural need for economics of scale, uniformity of product, and substantial barriers to entry - elements of the mortgage guarantee and securitization market - are traditionally policed by regulation rather than competition. Without regulatory barriers to entry, a race to the bottom on mortgage credit quality could result, triggering a future crisis that shuts down the housing finance market and seriously damage American homeowners.

In an environment where pricing, leverage, and access to basic market infrastructure are largely controlled by a regulator, how will multiple guarantors compete with each other in practice? Creating, supporting, and possibly subsidizing new entrants that cannot meaningfully compete with each other on an economic basis is not real competition.

New guarantors will not be created unless private investors are confident that these guarantors will be able to generate profits within a reasonable timeframe, pay appropriate dividends, and compete with the GSEs in the long term. A Congressional mandate that there be new guarantors will not lead to a truly competitive industry. One approach to creating additional guarantors - splitting Fannie and Freddie into multiple companies - would be extremely difficult. This approach would also be expensive, and could have vast unintended consequences on the TBA and rates markets. The architecture of such a strategy is unclear. Splitting the GSEs based on geography, for example, or by mortgage types or customers served, would greatly limit the benefit of diversification. Such an approach could also cripple the GSEs' ability to meet affordable housing goals.

The alternative – relying on new entrants to enhance competition with the GSEs – also presents substantial execution risk. Any new entrant would face difficulties raising, on a start-up basis, the amount of capital necessary to get to scale and establish themselves as a meaningful competitor to the existing GSEs. Under FHFA's proposed Enterprise Capital Requirements, a de novo competitor would need to raise nearly \$20 billion of capital just to support a 10% market share, an enormous task for a start-up company.

3. Securities-Based Guarantees:

Some GSE reform plans call for an unlimited government guarantee, and argue that such a guarantee should only apply to mortgage-backed securities issued by the GSEs, and not the corporate entities themselves. One stated objective of such an approach is to limit government support of the enterprises as a whole, which could lead to the perception that they are implicitly guaranteed. A securities-based guarantee would stand in contrast to the current PSPAs' entity-level backstop.

MBS investors, in particular, have called for an unlimited full-faith-and-credit government guarantee not only on future MBS issuances, but also on currently outstanding GSE MBS. This could potentially enhance market liquidity through greater fungibility, and would maintain an even playing field in the markets, between existing, or legacy, and to-be-issued GSE MBS. Implementing such a guarantee would require Congressional action, in the form of new legislation authorizing a full faith and credit guarantee. If such legislation were passed, investors in GSE MBS would benefit from substantial regulatory and capital relief advantages as a result.20 This would likely improve the trading price of not only newly-issued securities, but also of the newly-guaranteed legacy GSE securities - which could be partially offset by any guarantee fee paid to the Treasury for supporting the nearly \$5 trillion in legacy securities.

Today market stability for GSE debt (both MBS and agency debentures) is maintained through the remaining \$254.1²¹ billion of support provided by Treasury under the current, Congressionallyapproved, Preferred Stock Purchase Agreements. The market for GSE MBS and agency debentures remains robust thanks to this limited (although substantial), and explicit government support.

The consensus view, and one that we endorse, is that any government support should be explicit, and should be paid for. A market-based commitment fee paid directly to Treasury for its back-up support should be implemented, with the commitment fee set based on the risk assumed and the amount of any potential drawdown.

This precise arrangement is currently provided for under the PSPAs, and is analogous to a corporation paying a bank for a letter of credit or a revolving backstop facility, whereby a commitment fee is paid on undrawn capacity with a higher interest rate paid on the amount actually funded.

The Safety and Soundness Blueprint relies on the existing government support mechanics (the PSPA). This ensures continuity of a system that has supported liquidity in the GSE MBS and debenture markets for the past decade. Investors in GSE securities, in addition to government-support provided through the PSPAs, would be de-risked in two ways: (1) as private capital is raised and retained at Fannie and Freddie; and (2) through continued risk reduction in the GSEs core guarantee portfolios (via ongoing credit risk transfers). The Blueprint does contemplate reduction over time in the quantum of the PSPA commitment, allowing for part of Treasury's commitment to be replaced by fully funded private capital at the GSEs. Such a reduction, however,

²⁰ Under the Federal Reserve's adoption of Basel III, a bank exposure to GSE debt is subject to a 20% risk-weighting for regulatory capital purposes while exposures to Ginnie Mae MBS have a 0% risk-weighting as a result of the explicit U.S. government guarantee extended to Ginnie MBS. This favorable treatment extends to the Liquidity Coverage Ratio (LCR), whereby Ginnie Mae securities are treated as Level 1 assets for LCR high quality liquid assets (HQLA) purposes and GSE debt is treated as lower-quality Level 2A assets for HQLA and receive a 15% haircut. The federal banking regulatory agencies have long held the view that obligations of the US GSEs should not be accorded the same treatment as obligations that carry the explicit, unconditional guarantee of the US government. This treatment would potentially change if the GSEs' MBS and unsecured debt were to be afforded the same explicit guarantee as Ginnie Mae securities.

²¹ Fannie has drawn \$119.8 billion, paid back \$171.8 billion, and has \$113.9 billion undrawn capacity remaining. Freddie has drawn \$71.6 billion, paid back \$114.0 billion, and has \$140.2 billion undrawn capacity remaining.

would be limited to the degree it is deemed prudent by FHFA, ensuring housing finance market stability through continuous liquidity in these critical debt markets.

Further, it is important to note that the Safety and Soundness Blueprint was specifically designed to be compatible with a securities-based guarantee if Congress were to go in that direction. If such an approach were implemented, provision should be made to support, on a limited basis, corporate unsecured debentures issued by Fannie and Freddie. Such support could be restricted to corporate debt necessary to finance core GSE functions (specifically to provide low-cost funds to purchase loans at the cash window²², and to maintain prepayment stability by repurchasing delinquent loans from MBS trusts). Maintaining these functions allows non-bank originators, community banks, and others, equal access to the direct benefits of the securitization markets backstopped by the government.

4. Expanding the Role of Ginnie Mae:

When they both worked at the Milken Institute, Ed DeMarco (former FHFA Acting Director, now with the Housing Policy Council) and Michael Bright (former banking staffer for Sen. Corker, now Ginnie Mae's Executive Vice President and Chief Operating Officer) proposed using Ginnie Mae ("Ginnie") to wrap MBS that was backed by loans guaranteed by multiple FHFA-approved mortgage insurers.²³ A central goal of the DeMarco-Bright plan was to foster competition by eliminating Fannie's and Freddie's dominance over the market, as provided by their securitization infrastructure. DeMarco and Bright also sought to shift the government's support from entity-based to a securities-based full-faith-and-credit guarantee. In their mind, this shift away from entity-based support would eliminate any implicit government guarantee of the individual mortgage insurers, including Fannie and Freddie, in the future.

The recent proposal of Chairman Hensarling, Representative Delaney, and Representative Himes also called upon the use of Ginnie to reduce Fannie's and Freddie's market dominance. The authors appeared to believe that a Ginnie-centric multi-guarantor infrastructure would be capable of supporting a much larger MBS market.

Legislative proposals to use Ginnie in this broader context have not fully addressed the multitude of important technical issues that are critical to ensuring continuity in the mortgage securitization market. Many market participants are rightfully concerned about the potential unintended consequences and lack of clarity that would result from Congress attempting to migrate over to Ginnie critical market functions currently being performed by Fannie and Freddie. Key issues to be addressed include:

· Ginnie does not have the critical infrastructure to take the GSEs' place. Ginnie is a small organization in the context of the role proposed for it. It has limited staffing (only 134 permanent full-time employees²⁴), infrastructure, and oversight capabilities. Ginnie relies heavily on outside parties to manage risk. Bond administration and accounting, for example, are performed by Bank of New York Mellon rather than by Ginnie itself. It is unreasonable to think that Ginnie could take over mortgage securitization from Fannie and Freddie (or Common Securitization Solutions²⁵, "CSS") without substantial transition risk and a wholesale overhaul of Ginnie's operations. Ginnie would need to organically establish and implement an entirely new infrastructure, which would run the risk of largely duplicating systems currently in use at the GSEs, or alternatively, just use Fannie's and Freddie's systems. At this point, the question must be asked: why not just use Fannie and Freddie? We believe that the consensus view among most market participants is that Fannie and Freddie should continue performing their existing roles.

²² Loans purchased at the cash window are bundled by Fannie and Freddie into the securities that they issue.

²³ "Toward a New Secondary Mortgage Market," Milken Institute, Sep. 2016.

²⁴ 2018 Department of Housing and Urban Development, Salaries and Expenses, Government National Mortgage Association

²⁵ Common Securitization Solutions (CSS) is a joint venture owned by Fannie Mae and Freddie Mac. CSS was established to build a universal platform — or Common Securitization Platform (CSP) — for the issuance and management of mortgage-backed securities.

- Fannie and Freddie's substantial intellectual property is difficult to replicate. Fannie and Freddie have extensive systems and considerable intellectual property already in place to support their ~\$5 trillion of existing MBS securitization. FHFA has directed the GSEs to use these systems and intellectual property as the basic foundations for CSS. This common securitization platform's purpose is to eliminate trading differences between Fannie and Freddie securities, by issuing MBS with uniform terms. Some observers have sought unnecessarily to extend the platform to private mortgage security issuers, many of whom already have their own systems to create and issue MBS.
- A lengthy and uncertain transition period would be needed. In legislative proposals to expand Ginnie, FHFA-approved private mortgage insurers would assume roles comparable to those of FHA in a Ginnie II MBS.²⁶ Accordingly, the proponents sometimes call their proposed Ginnie-wrapped securities "Ginnie III" MBS. But this cannot happen overnight; in fact, such a transition would be lengthy and messy. Michael Bright (Ginnie EVP and Chief Operating Officer) testified to the House Subcommittee on Housing and Insurance that it would take at least 5 years to transition to such a system.²⁷ We at Moelis believe such an undertaking could take substantially longer. As a point of comparison, CSS's common securitization platform, a significantly less ambitious endeavor, has been under development since 2012 and remains unfinished.
- Ginnie's cumbersome mechanics limit its utility as a GSE replacement: Loans securitized in Ginnie securities often have strict, and oftentimes inflexible, servicing timelines (imposed by the FHA, VA or RHS – each of whom guarantee the loans in Ginnie MBS issuances). These servicing timelines can be onerous for servicers to comply with. If the servicers make any mistakes, irrespective of severity, the guarantors have the contractual right to not repay the servicer for funds advanced to service the delinquent loan. This is one of the many reasons why delinquent loan buyouts from Ginnie-wrapped securities may at times trade at a discount from par– despite the loans being fully guaranteed by the FHA, VA, or RHS. The complexity and risks associated with these timelines limit the desire of many mortgage originators to use Ginnie. It should be noted that Ginnie has roughly 350 single-family issuers utilizing its platform,²⁸ while the GSEs, on a combined basis, have approximately 2.000 seller/servicers.29

²⁶ In evaluating the potential role of Ginnie, it is important to understand how Ginnie works. Ginnie guarantees both single-class (including Ginnie I and the popular Ginnie II securities) and multi-class securities. In Ginnie mortgage-backed securities, mortgage originators purchase loan-level mortgage insurance from the FHA, VA, or RHS. Each of these mortgage originators become the direct issuers of Ginnie guaranteed securities as opposed to Ginnie. Ginnie issuers bear primary responsibility for the timely and complete monthly cash flows of Ginnie wrapped MBS. As a result, Ginnie wraps the mortgage originator's or servicer's performance obligations, including their indemnities and servicing practices.

²⁷ "Sustainable Housing Finance: the Role of Ginnie Mae in the Housing Finance System," 29 Nov. 2017, https://financialservices.house.gov/uploadedfiles/115-59.pdf

²⁸ Ginnie Mae Approved Issuers Directory, https://www.ginniemae.gov/issuers/issuer_tools/Pages/issuers.aspx?letter=A&TypeDropDown=Single-Family

²⁹ Fannie Mae 2017 10-K; "Freddie Mac Whole Loan Securities Trust, Series 2017-SC01," Investor Presentation, https://crt.freddiemac.com/docs/fwls_17sc01_investor_presentation_final.pdf

- Ginnie and FHA combined are undercapitalized. In order to compare Ginnie's performance to Fannie's and Freddie's, one also needs to consider the economic performance of the FHA, VA, and RHS in underwriting and managing mortgage credit risk. It is not an apples-to-apples comparison otherwise. Policymakers have been attracted to the fact that claims at Ginnie, both during and after the financial crisis, have been limited. For reference, Ginnie claims typically stem from fraud, and not from loan performance. Policymakers may not appreciate, however, that the government did experience substantial losses at the FHA, which was responsible for guaranteeing mortgages that went bad and were backing Ginnie securities. At various times since the financial crisis, actuarial reviews have pointed out that the federal mutual mortgage insurance fund, which is used to backstop FHA loan guarantees, has not met minimum capital requirements.³⁰ In fact, in 2013 the FHA needed a bail-out from Treasury.
- Elimination of cash windows hurts smaller originators. Some supporters of the Ginnie model hope to limit the use of Fannie's and Freddie's cash windows. At the cash window, mortgages are purchased directly by the GSEs from mortgage originators, who get to retain their customer servicing relationships. The cash window provides a mechanism for smaller banks, non-bank originators, and credit unions, to gain the benefits of the secondary market by selling their loans directly to Fannie and Freddie. Otherwise these smaller players would be forced to sell their conventional loans to larger banks that may not provide the highest price. Without the cash window, these smaller originators would be put in an unenviable competitive position. The Independent Community Bankers of America (the "ICBA") has observed that using a Ginnie-based structure would put their members at a great disadvantage. "Lenders should have

- competitive, equal, direct access on a single loan basis. The GSE secondary market must continue to be impartial and provide competitive, equitable, direct access for all lenders on a single loan basis that does not require the lender to securitize its own loans."31
- **GSE** purchases of delinquent loans help small originators and provide prepayment stability. Advocates for using the Ginnie model also want to eliminate Fannie's and Freddie's practice of buying delinquent loans from MBS trusts, to maintain prepayment stability by limiting their funds available for such purchases. This prepayment stability is an attractive hallmark of the US dollar rates markets. Overhauling these mechanics, especially when combined with limiting the use of the cash windows, would greatly reduce the need for Fannie and Freddie or other guarantors to issue debentures to support these activities.

In a Ginnie security, the issuers will typically buy delinquent loans from MBS trusts only if it is profitable to modify the terms of the loan, and then re-pool or re-securitize them. The exception is when delinquency standards for the entire Ginnie security exceed pre-established levels. When this happens, the issuers are then required to repurchase enough delinquent loans to again meet the pre-established level. The problem with this arrangement is that it pushes back on the issuers the need to keep excess funds available to repurchase loans. This is a burden for smaller issuers since these funds will then be tied up until either the loan can be re-pooled, or the claim is eventually settled by the FHA, VA or RHS once the property has been liquidated and the loss is known. Such an approach clearly disrupts the level playing field by creating a bias against smaller originators, who may not have as much excess liquidity as larger originators.

³⁰ In the years following the housing and mortgage market turmoil that began around 2007, increased foreclosure rates, as well as economic factors such as falling house prices, contributed to increases in expected losses on FHA-insured loans. This put pressure on the MMI Fund and reduced the amount of resources that FHA had available to pay for additional, unexpected future losses. The capital ratio fell below 2% in FY2009 and remained below 2% for several years thereafter, turning negative in FY2012 and FY2013. Concerns about FHA's finances culminated at the end of FY2013, when FHA announced that it would need \$1.7 billion from Treasury to cover an increase in anticipated costs of insured loans. This marked the first time that FHA needed funds from Treasury to make the required transfer of funds between the primary and secondary reserve accounts.

³¹ "ICBA Principles for GSE Reform and a Way Forward," Independent Community Bankers of America, 25 Apr. 2017.

Policymakers can achieve a far better and more efficient outcome by guaranteeing "Qualifying Debt" issued by the GSEs, which could be defined as unsecured debentures issued for the exclusive purposes of (1) maintaining the cash window, or (2) supporting delinquency buy-backs from mortgage-backed securities.

5. The Problems with Receivership:

During the past year several policy commentators and legislators on the right side of the political spectrum have suggested putting Fannie and Freddie through receivership, whether under HERA or under new legislation. One objective of such an approach is the elimination of the GSEs' charters (and by extension their affordable housing goals). HERA receivership provisions do not expressly provide for elimination of the charters, which suggests that new legislation would be required.

There are alternative ways to remove the GSEs from conservatorship, and establish them as more closely regulated entities. These alternatives do not present the unintended consequences and profound impacts that a receivership could have on the markets. In evaluating these options, the government should consider the implications of receivership, including the following:

- Mandatory establishment of limited life regulatory entities (LLREs) under HERA would effectively wipe out both the Treasury's senior preferred stock and the value of its warrants in Fannie and Freddie - which Moelis currently estimates at \$100 to \$125 billion. The Safety and Soundness Blueprint, which does not involve receivership, is the only proposed plan that recognizes the massive franchise value of the GSEs.
- While receiverships are routinely used to facilitate purchase and assumption rescues of failed FDIC-insured depository institutions, the FDIC almost always has a larger, healthy rescuing bank in the wings to stabilize and continue the business of the failed bank without interruption. A comprehensive HERA-initiated receivership of the GSEs would be complex and unprecedented in size, scope, completion time, and administrative expense - which collectively create a potential for significant

market disruption. There are no healthy insurers waiting in the wings that are large enough to pick up the receivership remains of either Fannie or Freddie. SIFI banks could not step in to this role either, without introducing enormous policy and political issues. If used, a receivership could transfer trillions of dollars in assets and liabilities to LLREs, whose operation, governance, eventual ownership, and financial strength would create market uncertainty, since no one has ever dealt with LLREs on anything approaching the scale of the GSEs.

- A receivership would, among other things, automatically trigger a global claims process, not to mention significant litigation³² related to market uncertainties regarding (1) whether and how assets and liabilities were transferred or assumed by the LLREs or other entities; (2) the receiver's potential repudiation of valid contracts for the benefit of the receivership; (3) its handling of qualified financial contracts; and (4) the potential commencement of a 90-day stay in favor of the receivership.
- A receivership would also *compromise the* value of existing GSE assets (e.g., deferred tax assets, etc.), at best creating the need for new legislation to allow these assets to be transferred or reinstated, and at worst permanently destroying economic value for all stakeholders, and most notably the American taxpayer.
- An approach that relies on running the legacy guarantee portfolios off over time would fail to protect taxpayers, as private capital would only be raised by new guarantors, leaving the old GSEs effectively nationalized, with any and all risk associated with the \$5 trillion existing book of business fully borne by taxpayers for decades to come.
- A comprehensive receivership that eliminates or financially degrades the economic property interests of the current shareholders could significantly increase the challenge of raising the new capital necessary to get the government out of its current position of bearing all credit losses at the GSEs.

³² In the 10-year FDIC receivership of the \$300 billion asset Washington Mutual Bank, so far, more than 1500 lawsuits have been filed.

A receivership of entities with the size, scope and the complexities of the GSEs has never been tried, and is likely impractical. Such an approach would force too much risk on the taxpayer and has the potential to create significant unintended consequences for the markets. The perceived benefits of such a receivership structure are greatly outweighed by the risks. Most importantly, there are more effective and less disruptive alternative structures available to achieve important government policy goals.

6. Mission Creep and Locking In Existing Reforms:

Past sins of the GSEs, which include unpaid-for implicit government backstops, huge debt-financed MBS portfolios built to increase share price growth and returns (as well as to possibly meet mandated affordable housing goals), favorable g-fee pricing to larger originators putting smaller ones at a competitive disadvantage, preferential capital standards allowing the GSEs to operate with insufficient levels of private capital, very aggressive lobbying tactics, and more – cast long shadows on today's debate. With this in mind, mission creep remains a legitimate concern of mortgage market stakeholders, and policymakers.

Trade groups remain concerned that many of the successful administrative reforms put in place by FHFA over the past 10 years could be overturned by new agency leadership. Many of these same groups are also concerned that Fannie and Freddie, even now, are encroaching on what they believe is the traditional business of their members. Recent examples of potential encroachment include (1) mortgage servicing rights financing, (2) a blurring of the lines between the primary and secondary markets based on GSE-placed alternatives to the private mortgage insurance market, and (3) pilot programs that are not seen as transparent (thereby potentially creating uneven playing fields). These forms of encroachment have contributed, at times, to an unwillingness to support the incremental steps necessary to allow Fannie and Freddie to build capital and emerge from conservatorship. These groups need to be assured that a comprehensive set of reforms, provided in a holistic package, will both codify existing reforms and stop mission creep.

In that spirit, FHFA can take steps to make permanent the many administrative reforms the agency has implemented during conservatorship. Potential approaches to cement these reforms can include (1) enforcement consent orders, which are regulatory remediation tools negotiated between the GSEs and their regulator; (2) implementation of additional restrictions in amended Treasury PSPAs; (3) agreements resolving outstanding securities litigation; (4) new securities issued in the recapitalization of the GSEs, which ensures that government support is only provided to the extent reforms are maintained; and (5) tailored requests to Congress for incremental targeted legislation, as necessary and feasible. The overriding objective should be to ensure that Fannie and Freddie cannot ever re-establish business practices that led to the government assisted bail-out and conservatorship.

Summary and Recommendations

By restoring safety and soundness to Fannie and Freddie, the Administration can (a) protect the American taxpayer; (b) attract substantial private capital investment allowing the GSEs to meet robust regulatory capital requirements consistent with those on other large financial institutions; (c) stimulate economic growth through the investment of well-regulated private capital; and (d) earn an additional \$100 billion to \$125 billion for deficit reduction by harvesting the taxpayer's warrants in Fannie and Freddie.

FHFA has the legal authority under HERA to end the conservatorship and can do so with the Administration's partnership and leadership. The private markets are willing and prepared to provide the capital resources necessary to ensure (1) that the 30-year fixed-rate pre-payable mortgage is preserved; (2) that enough private capital is available to end taxpayer bailouts; and (3) that liquidity in the secondary market is deep enough, in both good times and bad, to support American homeownership.

The *first step* must be to begin rebuilding capital by suspending dividends paid to Treasury. The *second step* is to recognize the government's profits by acknowledging that Treasury's senior preferred stock has been repaid with interest. While the senior preferred remains outstanding, it will be impossible for the GSEs to raise equity from the private markets. The *third step* is for FHFA to direct Fannie and Freddie to submit capital restoration plans, as authorized by HERA. Taking these three steps immediately starts on the path towards restoring safety and soundness to protect American taxpayers.

Putting Fannie and Freddie on sound footing and ending the conservatorship remains the final piece of outstanding crisis-era financial reform. It is time for the Administration to finally act at this 10-year anniversary of conservatorship.

APPENDIX A:

Safety and Soundness Blueprint Implementation

Figure 5: Full Implementation and Treasury Exit by 2021

	2018 Q4	2019	2020	2021	\$ CAPITAL	%ASSETS ¹
Turn off Net Worth Sweep and retain earnings until regulated minimum first-loss equity is built ²	•				\$67B 	+1.2%
Adjust SPS balance to reflect original contractual terms	•					
Announce future, not immediate, exit from conservatorship		•				
Establish regulatory framework and mechanics for G-fees		•				
Agree terms to partially equitize JPS ³		•				
Companies issue primary common equity through an IPO		•			\$37.5B	+0.7%
Companies issue primary common equity through a follow-on offering			•		\$37.5B	+0.7%
Companies issue new junior preferred stock			•		\$25B	+0.5%
Treasury sells remaining equity interest via secondary offerings						
GSEs emerge as rebuilt organizations and taxpayers profitably exit their only remaining financial crisis federal financial assistance program				~	\$167B	3.0%

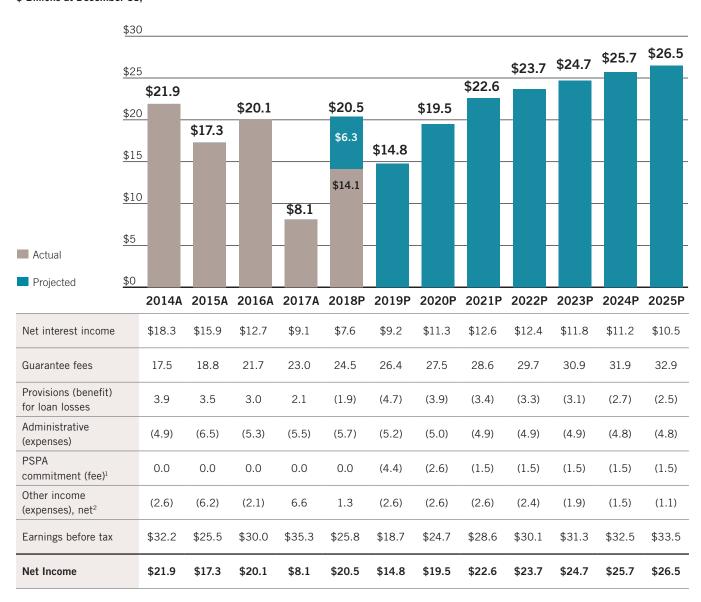
Source: Company filings, Moelis estimates

- 1. Based on projected 2021 total assets & off balance sheet securitizations of \$5.5 trillion. In the June 2017 Safety and Soundness Blueprint, core capital of 3.25% was based on 2020 projected total assets of \$5.1 trillion
- 2. Retained earnings net of common and preferred dividends
- 3. Conversion price and terms can be pre-established (consistent with the approach used by Treasury in AIG), or can be set at the IPO price

APPENDIX B:

Company Projections and Assumptions

Figure 6: Fannie and Freddie Combined Summary Earnings Forecast \$ Billions at December 31,

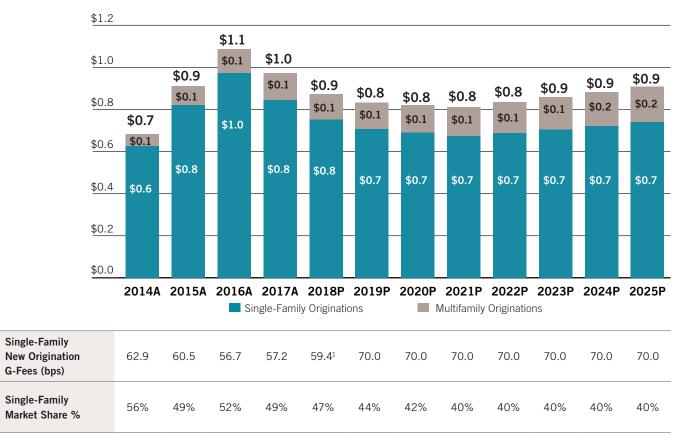


Source: Company filings, Moelis estimates

^{1.} Assumes periodic commitment fee of 200bps until the relisting offering, 150bps until core capital exceeds regulatory minimums (based on Moelis projections of FHFA's proposed Enterprise Capital Requirements), and 100bps thereafter

^{2.} Includes fees and other income, other non-interest expenses, other operating expenses, other income, derivative market-to-market gains (losses), other gains (losses) on investment securities recognized in earnings and one-time items

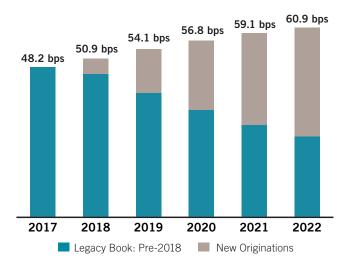
Figure 7: Fannie and Freddie Combined Summary Origination Volume Forecast \$ Trillions at December 31,



Source: Company filings, Mortgage Bankers Association, Moelis estimates

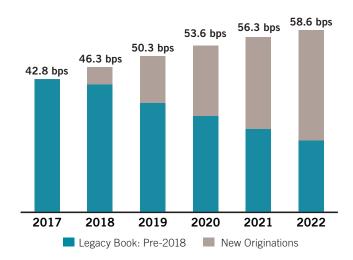
Figure 8: Overview of the Weighted Average G-Fees over Time

Fannie Mae Single Family Portfolio Weighted Average G-Fee



Source: Company filings, Moelis estimates

Freddie Mac Single Family Portfolio Weighted Average G-Fee

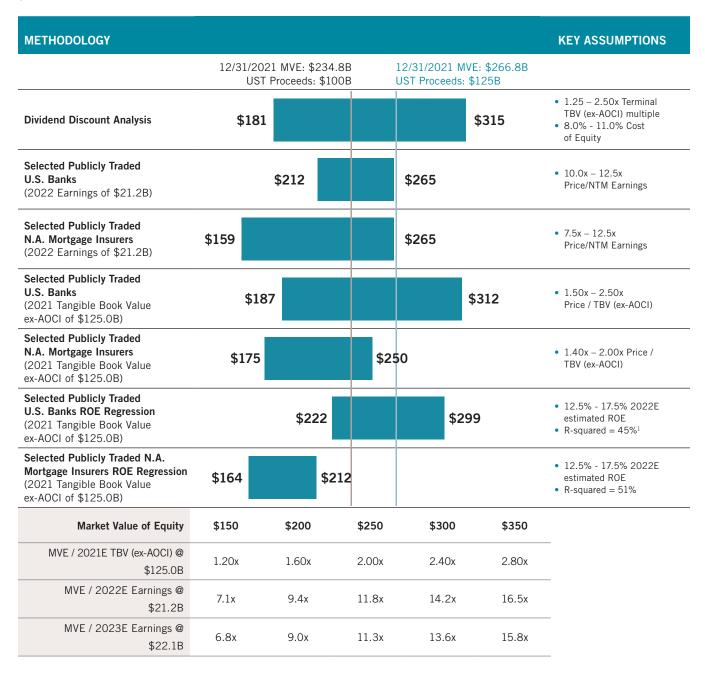


^{1. 2018}P Single-Family New Origination G-Fee assumes Q4 G-Fee increase to 70bps

APPENDIX C:

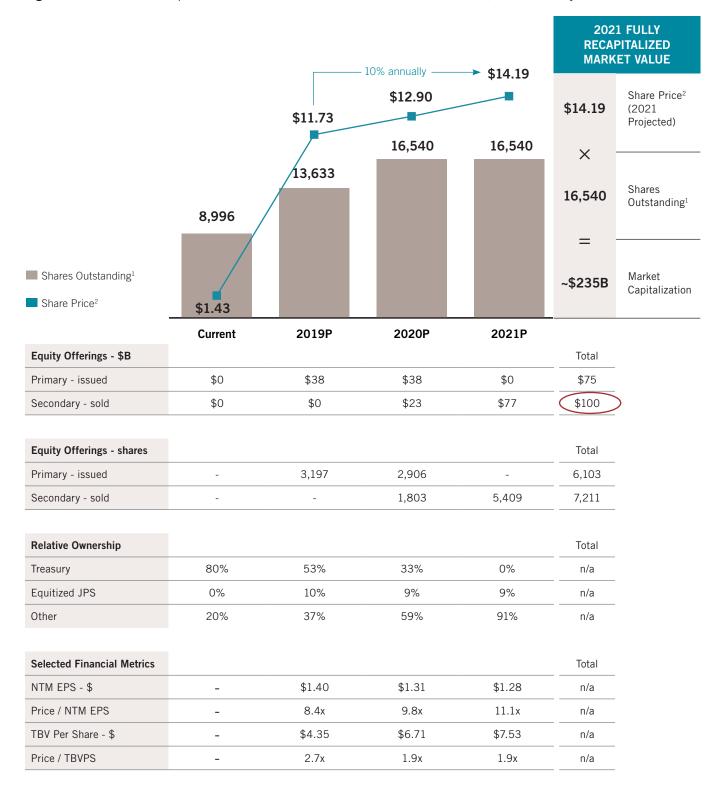
Illustrative Valuation Analysis

Figure 9: Summary Market Value of Combined Fannie and Freddie Equity Range \$ Billions



Source: SNL, CapitallQ, Company Fillings, Moelis estimates. Wall Street estimates. Market data as of September 30, 2018 Note: Earnings defined as Net Income available to Common Equity (i.e. Net income less dividends to Junior Preferred Stock) 1. Selected Publicly Traded U.S. Banks ROE regression analysis excludes BB&T and M&T Bank.

Figure 10: Illustrative Recapitalization Timeline - Fannie and Freddie Combined - \$100B Treasury Proceeds

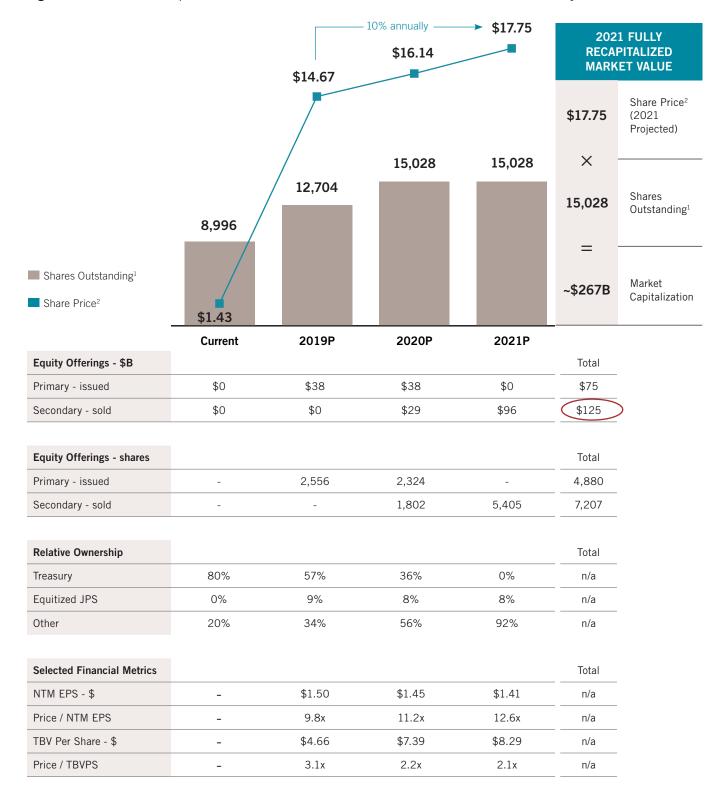


Source: Company filings, Moelis estimates. Market data as of September 30, 2018

^{1.} Based on combined fully diluted shares outstanding for Fannie Mae and Freddie Mac

^{2.} Based on weighted average share price of Fannie Mae and Freddie Mac

Figure 11: Illustrative Recapitalization Timeline - Fannie and Freddie Combined - \$125B Treasury Proceeds



Source: Company filings, Moelis estimates. Market data as of September 30, 2018

^{1.} Based on combined fully diluted shares outstanding for Fannie Mae and Freddie Mac

^{2.} Based on weighted average share price of Fannie Mae and Freddie Mac

Notes to Figure 4: Comparison of Minimum Capital Requirements

- 1. FHFA's proposal presents two alternative leverage ratio methodologies. The first methodology is a simple leverage ratio, requiring that core capital exceed 2.50% of total on-and-off balance sheet assets and guarantees. The second methodology (1.50% of on-balance sheet assets) + (4.0% of off-balance sheet guarantees) produces a lower result which is equivalent to approximately 1.9% of total assets and guarantees
- 2. The Moelis Safety and Soundness Blueprint's primary leverage ratio requires core capital to exceed 3.0% of total on-and-off balance sheet assets. Note that the Safety and Soundness Blueprint also includes a secondary leverage ratio (core capital + outstanding CRT >= 5.0% of total assets), which could increase core capital requirements to the extent CRT issued and outstanding is below 2.0%. This secondary leverage ratio has been excluded from the table for the purposes of simplification
- 3. The U.S. Basel III enhanced Supplementary Leverage Ratio ("eSLR") requires GSIBs to hold Tier 1 Capital (roughly, but not exactly, analogous to core capital) in excess of 5.0% of total on-andoff balance sheet assets plus other adjustments for bank holding companies. However, international Basel III standards only require banks to hold Tier 1 Capital in excess of 3.0% of total on-and-off balance sheet assets plus other adjustments. U.S. and international regulators appear to be converging towards a new approach with GSIB leverage ratios being set at 3.0% + 50% x (GSIB Add-On), which would put U.S. GSIB requirements (e.g., for JPM, Citi, BONY, etc.) in the 3.5% - 4.25% range. Using the FSB framework, Moelis estimates the GSIB add-ons for Fannie Mae and Freddie Mac at 2.0% and 1.50% respectively, implying a leverage ratio of 3.75% - 4.0% for the GSEs to the extent they were subject to the proposed U.S. and international banks standards

- Based on figures from the Moelis Safety and Soundness Blueprint
- 5. The Moelis Safety and Soundness Blueprint uses an RBC requirement of 8.5% x Risk-Weighted Assets and estimates application of the international Basel III approach using the SSFA to provide RBC-relief for CRT transactions. The Safety and Soundness Blueprint projects 2020 RWAs at ~36% of balance sheet assets, leading to an RBC requirement of ~3.0% (equal to 36% x 8.5% RBC requirement). GSIB capital requirements of ~10% of RWAs for the GSEs would increase the RBC requirement to ~3.6% (equal to 36% x 10%). Note further that, unlike international regulators, U.S. bank regulators have not granted RBC relief for synthetic securitizations
- 6. Note that, while FHFA's framework in some ways mirrors bank requirements (which deduct NOL DTAs and timing DTAs in excess of 10% of minimum capital), there are 2 key differences: (1) FHFA's proposed rule adds excess DTAs to the minimum capital requirement, rather than deducting them from the definition of capital (this has the effect of grossing up the headline number, e.g., in Q3 2017 FHFA's definition of core capital must exceed \$181bn - o/w \$26bn is excess DTAs, equivalent to a Tier 1 Capital requirement of \$155bn), and (2) FHFA's adjustment for DTAs applies only to the risk-based capital requirements (and not to the leverage ratio requirement)
- 7. Basel III rules include risk-based capital minimums of: (1) Tier 1 Capital > 8.5% (+ GSIB add-on) x RWA, and (2) Common Equity Tier 1 Capital > 7.0% (+ GSIB add-on) x RWA. While a bank can issue more than 1.5% junior preferred stock, which can be counted as Tier 1 capital, the minimum of 7.0% CET1 would effectively limit Junior Preferred Stock to 1.5% of RWAs (at minimum capital standards)