Privatizing Fannie and Freddie: Be Careful What You Ask For

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Privatizing Fannie and Freddie: Be Careful What You Ask For

Few are happy with the current housing finance system that has Fannie Mae and Freddie Mac in conservatorship and taxpayers backing most of the nation's residential mortgage loans. Yet legislative efforts to replace the system have largely faltered, raising concern that we may not have the political will or competence to replace it any time soon.

This has created an opening for those who contend that we should not replace the system at all, but simply recapitalize the government-sponsored enterprises and release them from conservatorship. Fannie and Freddie were remarkably profitable prior to the financial crisis, after all, and have been consistently in the black recently. Why embark on the laborious, risky and now stalled process of fundamental reform when we can simply return to a model that we know can provide steady access to affordable, long-term fixed-rate lending?

While we both have serious concerns with the wisdom of releasing the duopoly back into the market, we thought it useful to set those concerns aside for the moment to explore the economics of the move. The discussion often takes for granted that this path would take us back to the world precrisis, but economic conditions and the regulatory environment have changed in ways that would significantly affect how Fannie and Freddie would function as reprivatized institutions.

First, upon being released they would assuredly be designated by the Financial Stability Oversight Council to be "systemically important financial institutions" or SIFIs. Deemed by the FSOC to be too big to fail without threatening to undermine the entire financial system, SIFIs must hold enough capital to withstand stress scenarios at least as severe as the Great Recession and remain going concerns. For the GSEs, this would require at least a 10% capitalization.

Second, the GSEs would owe the government for the taxpayers' financial support.

Back in 2008, Treasury saved the institutions from imminent collapse with an injection of substantial capital and a line of credit.

Under the terms of their agreement with Treasury (Senior Preferred Stock Purchase Agreements or PSPAs), the GSEs are required to pay Treasury a dividend in return for its investment and a commitment fee in return for their line of credit.

The quarterly dividend was initially set to equal 10% of Treasury's investment per year, annualized, but as Treasury grew concerned that one or both of the institutions would be unable to pay the 10%, forcing them to borrow against their finite line of credit, the parties changed the dividend to equal all of the institutions' annual profits.

Under the PSPAs, the enterprises are required to pay a commitment fee equal to the market value of the line of credit at the time, but the fee was suspended before it was even determined out of concern for its impact on the still-precarious institutions. The fee was then suspended indefinitely when the dividend was converted to a profits sweep, because the institutions would have no profits from which to draw the revenue needed to pay the fee.

Depending on how the ongoing obligations to the government are determined, mortgage rates under the recap and release proposal will likely be 43 to 97 basis points higher than in the current system, and likely much higher for higher credit risk borrowers (see Table 1). The spreadsheets underlying the tables in this paper are available upon request to allow users to change assumptions and with them the impact on the results.

Breaking down the cost of reprivatization

Upon being reprivatized, the GSEs would have to increase their capitalization by approximately 2% in order to meet the 10% level required for SIFIs. Their line of credit with Treasury would provide about 5% capitalization and their current guarantee fee of 63 basis points would provide 3%, assuming the 10% after-tax return on equity that SIFIs are earning today. To cover the cost of the additional 2% capital needed, they would need to increase their guarantee fees by 27 basis points.

The cost of Treasury's credit line is difficult to calculate with precision given the lack of obvious corollaries. At the low end, they would be charged around 15 basis points, equal to the fee that well-capitalized depository institutions pay for FDIC deposit insurance. Like FDIC insurance, which is utilized only when a depository is insolvent, the Treasury's credit line would be tapped only in the catastrophic circumstance that the GSEs have depleted their common equity and threaten to fail.

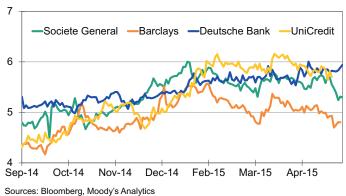
On the high end, the level of the fee would be more in line with what investors charge SIFIs for contingent capital, through what are called CoCo bonds. These bonds pay investors a yield unless a financial institution approaches insolvency, at which time the bond turns into equity in the institution, providing needed capital. A popular structure in Europe post-crisis, this approximates how the enterprises' line of credit would actually function and thus likely better reflects the value for which the Treasury would need to be compensated than does the FDIC fee.

Given that the yields on European CoCo bonds are currently approximately 550 basis points over the risk-free rate (see Chart 1) and the \$258 billion Treasury credit line would be approximately 5% of the GSEs' assets, the cost to the GSE would be an estimated 28 basis points (550 bps * 5%).

The dividend also admits of a range of possible outcomes. At the low end, the dividend would be extinguished in order for the institutions to build the capital needed to function outside of conservatorship. While it seems

Estimating the Cost of the Treasury's Credit Line

Spread between yields on CoCo and sovereign bonds, %



highly unlikely that Treasury would simply walk away from such a sizable sum owed the tax-payer, and doubtful that it even has the legal authority to, in order to set an absolute floor on the cost of the proposal, we will assume for purposes of the analysis that it does.

At the high end, the dividend would instead be reversed to the 10% owed before its conversion to a profits sweep. With such an obligation, Fannie would owe approximately \$12 billion a year to the Treasury and Freddie \$7 billion, assuming that neither has to draw down any of its current line of credit with the Treasury. To put the size of this obligation into perspective, it would constitute approximately 70% of the GSEs' profits in 2014, and significantly more than either of them made on guarantee fee revenue alone, which will become their primary source of revenue as their portfolios are wound down. The cost to the GSEs of meeting this obligation would be approximately 42 basis points.

Thus, under the lowest-cost scenario of recapitalizing and reprivatizing the GSEs, mortgage rates would increase by an average of 43 basis points (after rounding)—27 basis points for additional capital and 15 basis points for the commitment fee. And under the highest-cost scenario, rates would go up by an average of 97 basis points—27 basis points for capital, 28 basis points for the commitment fee and 42 basis points for the dividend. For the reasons stated above, we believe that the outcome is likely to fall closer to the higher end of the range.

A number of variables might move this range up or down incrementally: If the

dividend is reduced from a sweep to something other than 10%, the cost would move accordingly; if the regulator allows the GSEs to count future guarantee premiums toward their capital, the cost would come down; and if the GSEs are subject to new regulatory

burdens, including the securities laws, rules of Dodd-Frank and state and local taxes from which they are exempt today, the cost would go up.

Moreover, this range of 43 to 97 basis points represents the *average* increase in mortgage rates across all borrowers; the impact on higher credit risk borrowers could be substantially greater. As SIFI institutions, it would be difficult for the GSEs to cross-subsidize. They would need to hold more capital against riskier loans than against others, forcing them to either increase mortgage rates more for these borrowers or lend less to them. Either way, the range of averages understates the ultimate impact on pricing for many of the low-income borrowers most affected by price increases.

The magnitude of the impact on these borrowers depends on if and how the GSEs' duty to serve and affordable housing goals are implemented once they are reprivatized. If the GSEs stopped cross-subsidizing altogether, borrowers with loan-to-value ratios of over 80% and credit scores of below 700 would see their rates rise by as much as 147 basis points. Fannie and Freddie would in essence be priced out of the market, vis-à-vis the Federal Housing Administration and perhaps other executions, for almost half of the nation's borrowers.

Finally, this analysis assumes that the GSEs retain the line of credit to the Treasury. While it is prohibitively difficult under the terms of the PSPAs to forgo the line of credit, if they were somehow able to do so they would no longer owe the commitment fee.

The move would actually increase their cost and mortgage rates, however. Making up the 5% of capital provided by the line would cost the GSEs approximately 5 more basis points (assuming that 1% of capital comes from preferred equity and 4% from subordinated debt). And the spreads that they would have to provide on their mortgage-backed securities would expand by an estimated 40 basis points as investors demanded compensation for the perceived increase in credit risk on these securities. All told, this version of reprivatization would increase mortgage rates by 89 to 131 basis points on average, depending on whether they are required to pay a dividend, and much more at the margins of the credit box.

Pricing out the alternatives

It is useful to consider how this impact would compare with that under other possible paths for long-term reform. After all, no one defends the conservatorship status quo, so it is not the best baseline.

Under the system envisioned in the bill passed last year out of the Senate Banking Committee (Johnson-Crapo), the government provides reinsurance for qualified mortgagebacked securities, for which it charges an actuarially appropriate fee. While the amount of capital held ahead of the government's risk would go up under this model, the resulting increase in the cost of credit would be partially offset by the decrease in cost that would result from lower yields on the mortgagebacked securities. Investors would require lower yields because the securities would be backed by the full faith and credit of the government, not a finite line of credit. This difference is not unlike that between the yields in Ginnie Mae securities and those of Fannie and Freddie. Ginnies today have yields as much as 20 basis points lower than Fannie and Freddie securities because of the difference in perceived risk in a security backed by the full faith and credit of the government and one backed by a large line of credit.

All told, mortgage rates under the recap and release model with the line of credit would run anywhere from 40 to 94 basis points higher, on average, than the system envisioned in Johnson-Crapo (see Chart 2).

On the other hand, the price increases would be similar to those under the full privatization of the housing finance system envisaged in the Protecting American Taxpayers and Homeowners legislation passed out of the House Financial Services Committee last year. Under the PATH Act, Fannie and Freddie would be wound down, leaving only the FHA, the Department of Agriculture, and Veterans Affairs to provide governmentsupported lending. This would lead to an increase in average pricing outside of these government channels in line with the higher end of the range for the recap and release proposal, and about 55 basis points higher than that under the low-cost recap and release scenario.

A long time getting there

Under any of these scenarios it would take a very long time to achieve the level of capitalization that would be required of the GSEs. Even under the low-cost recap and release scenario—in which the Treasury dividend is extinguished and the commitment fee is priced like deposit insurance—it could take as long as 18 years (see Table 2). And if they are required to pay the 10% dividend and a CoCo-like commitment fee, it is conceivable that

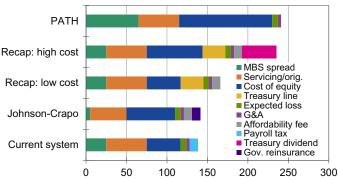
the GSEs would never be able to appropriately capitalize themselves.

Conclusion

The debate over whether to recapitalize and release the GSEs into the private market is often framed as a choice of whether or not to return to a prior period in lending. For all its

Recap and Release Is Comparatively Costly

Mortgage rate spread with Treasury yields, bps



Source: Moody's Analytics

shortcomings, the argument goes, at least we know what to expect in the cost and availability of mortgage credit. But this is a misconception. In releasing the GSEs into the private market again, we would release them into a very different regulatory and economic environment, and they would respond, not surprisingly, by charging very different mortgage rates.

Table 1: Comparing the Cost of Housing Finance Systems

		Recap and Release - Low-	Recap and Release -		
	Current System	Cost Case	High-Cost Case	Johnson-Crapo	PATH
Assumptions: Before-Tax Cost of Common Fauity	16%	16%	16%	16%	25%
After-Tax Cost of Common Equity	10%	10%	10%	10%	16%
After-Tax Cost of Preferred Equity	2%	2%	2%	2%	%/
Cost of Subordinated Debt (bps spread over Treasury)	300	300	0	300	300
Cost of Government Credit Line (bps)	0	300	550		
Pre-Tax Return on Unlevered Capital	2%	2%	2%	2%	2%
10-Yr Treasury Rate	4.5%	4.5%	4.5%	4.5%	4.5%
Dividend on Treasury Capital	%0.0	0.0%	10.0%	0.0%	0.0%
Treasury Draw (bil \$)	187	187	187	187	187
Tax Rate	37%	37%	37%	37%	37%
	Cost of				Cost of
	Capitalization Capital	Capitalization Capital	Capitalization	Capital Capitalization Capital	Capital Capitalization Capital
Common Equity	3.0% 48 bps	5.0% 79 bps	5.0% 79 bps	3.0% 48 bps	5.0% 125 bps
Preferred Equity	0.0% 0 bps	0.0% 0 bps	0.0% 0 bps	1.0% 11 bps	0.0% 0 bps
Subordinated Debt	0.0% 0 bps	0.0% 0 bps	0.0%	3.0%	0.0%
Government Credit Line	0.0% 0 bps	5.0%	5.0%		
Present Value of Future Guarantee Fees	0.0% 0 bps	0.0% 0 bps	0.0% 0 bps	3.0% 0 bps	0.0% 0 bps
Less: Return on Cash Reserves to Pay for Losses	-6 bps	-10 bps	-10 bps	sdq 8-	-10 bps
Total Capitalization and Cost of Capital	3.0% 42 bps	10.0% 84 bps	10.0% 97 bps	10.0% 60 bps	5.0% 115 bps
Expected Credit Losses	2 pbs	7 bps	7 bps	7 bps	7 bps
Administrative Costs	4 bps		4 bps	4 bps	
Government Reinsurance Fee	o bps	o pbs	o bps	10 bps	o pbs
Affordability Fee	o bps	1	10 bps		
Payroll Tax Surcharge	10 bps	0 bps	o bps	o bps	0 bps
Dividend on Treasury Capital	sdq 0	0 bps	42 bps	o bps	o bps
Guarantee Fee	63 bps	105 bps	159 bps	91 bps	126 bps
Spread on Mortgage Securities	25 bps	25 bps	25 bps		65 bps
Servicing and Origination Compensation	50 bps	50 bps	50 bps	45 bps	45 bps
Mortgage Rate	5.88%	6.30%	6.84%	5.91%	6.86%
Difference With Current System		0.43%	0.97%	0.03%	0.98%

Note: This analysis is for 30-year fixed-rate mortgage borrowers with loan-to-value ratios and credit scores consistent with the current distribution of Fannie Mae and Freddie Mac loans. It also assumes that the economy is in equilibrium, meaning that it is at full employment and inflation is consistent with the Federal Reserve's 2% target.

Source: Moody's Analytics

Table 2: How Long Will Capitalization Take Under the Low Cost Recapitalization and Release Scenario?

	2014	2015	2016	2017	2018	2019	2020	2021 2	2022 20	2023 20	2024 2025	25 2026	26 2027	27 2028	8 2029) 2030	2031	2032	2033	2034	2035
Required Capital (\$ bil)	274.7	276.4	287.4	300.4	305.4	319.2	328.1	343.2 3	349.8 36	364.1 37	370.0 384.5	.5 391.4	.4 406.0	.0 422.1	.1 438.7	7 456.4	474.4	491.8	500.0	519.9	540.6
Actual Capital (\$ bil)	0	0	12.3	27.3	44.2	63.7	85.4	109.5		163.2 19	192.5 223.7	.7 256.1		1.1 325.9		5 402.9	444.0		530.6	576.2	623.8
After-Tax Profits (\$ bil)	22.0	21.9	12.3	15.0	16.9	19.6	21.6	24.1	25.8 2	28.0 2	29.3 31	.2 32.	4.	34.0 35.8	.8 37.6	5 39.4	41.2	42.9	43.7	45.6	47.5
Single-Family Guarantee Business																					
Before-Tax Profits (\$ bil)	8.3	10.3	9.6	15.3	19.8	24.2	27.7	31.5	34.1 3	37.2 3	39.2 41	41.9 43.	.6 46.1	.1 48.7	.7 51.2	2 53.8	56.4	59.1	60.2	67.9	65.7
GSE SF Mortgage Debt Outstanding (\$ bil)	4,357	4,460	4,750	5,085	5,210	5,477	5,632 5	5,912 6	6,038 6,3	6,302 6,4	6,413 6,682	82 6,796	96 7,082	82 7,379	7,685	5 8,012	8,344	8,686	8,821	9,189	695,6
GSE Share of SF Mortgage Debt Outstanding (%)	0.45	0.45	0.45	0.45	0.44	0.44	0.43	0.43	0.42 0	0.42 0	0.41 0.41		0.40 0.40	40 0.40	0.40	0.40	0.40	0.40	0.39	0.39	0.39
GSE Guarantee Fee (bps)	40	44	99	99	74	80	85	68	92	95	26	99 1	100 10	101 102	2 103	3 103	104	104	104	104	105
Costs (bps)	21	21	36	36	36	36	36	36	36	36	36	36	36	36 3	36 36	5 36	36	36	36	36	36
Single-Family Mortgage Debt Outstanding (\$ bil)	9,682	9,910 10,556		11,301	11,841 1	12,447 13	13,097 13	13,749 14	14,376 15,005	005 15,642	542 16,298	98 16,990	90 17,706	06 18,447	7 19,213	3 20,030	20,861	21,716	22,617	23,560 2	24,536
% Change	-0.3	2.4	6.5	7.1	4.8	5.1	5.2	5.0	4.6	4.4	4.3	4.2 4	4.3 4	4.2 4.	4.2 4.2	2 4.3	3 4.2	4.1	4.2	4.2	4.1
Freddie Mac Fixed Mortgage Rate (%)	4.17	4.41	5.51	6.12	5.99	6.01	6.01	60.9	6.15 6	6.16 6	6.16 6.	6.17 6.	6.16 6.16	16 6.15	5 6.17	7 6.17	6.17	6.17	6.16	6.16	6.15
New- and Existing-Home Sales (mil)	5.36	6.26	96.9	5.88	5.76	5.9	6.18	6.55	6.83 6	6.97 6	6.95 6.	6.79 6.	6.59 6.48	48 6.52	52 6.57	7 6.61	6.72	6.87	7.05	7.23	7.39
FHFA House Price Index	342.5	353.16	355.48	362.12 3	367.31	377 39	393.41 41	415.14 43	439.41 462.77	.77 483.23	.23 500.13	13 513.6	.6 524.35	35 533.68	8 543.27	7 554.19	566.82	581.42	598.16	617.33 6	638.86
% Change	5.7	3.1	0.7	1.9	1.4	2.6	4.4	5.5	5.9	5.3	4.4	3.5 2.	2.7 2.	I	1.8 1.8	8 2.0) 2.3	2.6	2.9	3.2	3.5
Multifamily Guarantee Business																					
Before-Tax Profits (\$ bil)	1.72	1.88	2.08	2.46	2.82	3.00	3.22	3.39	3.48 3	3.77 3	3.92 4.	4.17 4.	4.42 4.53	53 4.78	8 5.02	2 5.27	5.52	5.59	5.85	6.12	6:39
GSE MF Mortgage Debt Outstanding (\$ bil)	337.4	367.8	397.5	422.7	447.5	457.0	479.4	501.1 5	507.9 53	530.0 53	535.8 558.1	1.1 581.4	.4 587.1	.1 612.6	6 638.6	5 665.5	693.4	699.4	728.9	760.2	792.1
GSE Share of SF Mortgage Debt Outstanding (%)	0.35	0.35	0.35	0.35	0.35	0.34	0.34	0.34	0.33 0	0.33 0	0.32 0.	0.32 0.	0.32 0.31	31 0.31	1 0.31	0.31	0.31	0.30	0.30	0.30	0.30
GSE Guarantee Fee (bps)	65	65	81	87	92	95	96	26	97	100	102	104	105 10	106 107	108	3 108	901	109	109	109	110
Costs (bps)	14	14	29	29	29	29	29	29	29	29	29	29	29	29 2	29 29	9 29) 29	29	29	29	29
MF Mortgage Debt Outstanding (\$ bil)	0.96	1.05	1.14	1.21	1.28	1.34	1.41	1.47	1.54	1.61	1.67	1.74 1.3	1.82 1.89	89 1.98	98 2.06	5 2.15	5 2.24	2.33	2.43	2.53	2.64
% Change	7.1	9.0	8.1	6.3	5.9	5.1	4.9	4.5	4.4	4.3	4.3	4.2 4	4.2 4	4.2 4.	4.3 4.3	3 4.2	9.7	4.2	4.2	4.3	4.2
Portfolio																					
Before-Tax Profits (\$ bil)	12.00	9.80	7.80	00.9	4.28	3.83	3.38	3.38	3.38 3	3.38 3	3.38 3.	3.38 3.	3.38 3.3	3.38 3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
Assets (\$ bil)	800	700	009	200	450	450	450	450	450 4	450 4	450 4	450 4	450 45	450 450	0 450) 450	450	450	450	450	450
Interest Rate Spread (bps)	150	140	130	120	95	85	75	75	75	75	75	75	75	75 7	75 75	5 75	75	75	75	75	75
Assumptions:																					
Required Capitalization	5.0																				
Tax Rate (%)	37%																				
Cost of Government Credit Line (bps)	15																				
Dividend on Treasury Capital	0																				

Note: This analysis assumes that the GSEs do not engage in signficant risk sharing. Even if they did it would not materially change the result that it would take 18 years for the GSEs to fully recapitalize.

Source: Moody's Analytics

About the Authors

Jim Parrott

Jim Parrott is a senior fellow at the Urban Institute and owner of Falling Creek Advisors, which provides financial institutions with strategic advice on housing finance issues. Jim spent several years in the White House as a senior advisor on the National Economic Council, where he led the team of advisors charged with counseling the cabinet and president on housing issues. He was on point for developing the administration's major housing policy positions; articulating and defending those positions with Congress, the press and public; and counseling White House leadership on related communications and legislative strategy. Prior to his time with the NEC, Jim was counsel to Secretary Shaun Donovan at the Department of Housing and Urban Development. He has a JD from Columbia University School of Law, an MA from the University of Washington, and a BA from the University of North Carolina.

Mark Zandi

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