

Updating *Nationalizing Mortgage Risk*

Nationalizing Mortgage Risk, the monograph AEI published last March, was framed around a single fact—the promise by Fannie Mae Chairman Franklin Raines in a September, 1999, speech to an investor conference, that Fannie would double its earnings by 2003. This represents a compound year-over-year growth in earnings of 15 percent, and implied very substantial growth in Fannie's revenues and its assumption of risk.

Given the fact that Fannie shared a huge market with only one other GSE, Freddie Mac, and that the high returns on equity of both companies implied relatively little competition between them, there were a number of ways Fannie could reach this goal:

1. It could increase the rate at which it acquired and retained whole mortgages or mortgage-backed securities (MBSs); in this way it could take interest rate risk as well as credit risk and earn more on the mortgages that came its way;
2. It could substantially increase the rate at which it was issuing mortgage backed securities, thus increasing the amount of its credit risk but not taking on additional interest rate risk;
3. It could take on more risky assets by acquiring and holding subprime mortgages, which entail higher risk and thus produce higher returns; or
4. It could repurchase its own shares and thus increase its earnings per share; simply by reducing its outstanding shares.

Fannie's choices would, we thought, be strongly influenced by the rate at which the mortgage market grew between 1998 and 2003. Chairman Raines told Wall Street investors in the same speech that at the end of 2003 Fannie would have 28 percent of the mortgage market. In doing so, he was assuming a certain rate of growth over the ensuing five years. Obviously, if the market grew faster, Fannie could reach its profit goals without having 28 percent of the market at the end of the period. And if the market grew more slowly than anticipated, Fannie would have to acquire a larger market share, and hence take on more risk, if it was to meet its profit projections.

In making our own projections, which were based on Fannie and Freddie's financial positions at the end of 1998, we assumed that both companies would use several of the strategies outlined above. We expected, accordingly, to see a large increase in their purchase of mortgages and mortgage-backed securities, a somewhat smaller increase in their MBS issuance, and significant growth in their subprime activity. We did not expect that they would resort to the repurchase of their shares unless they encountered a very difficult mortgage market. We also

assumed that the mortgage market would return to a normal rate of growth from the historically high rates in 1997 and 1998.

The attached tables substitute actual data for the years 1999 and 2000 in the projections we originally published in *Nationalizing Mortgage Risk*. For ease of reference, we have included our original projection for 2000 alongside the actual results for that year. The references in the discussion below are to the numbered lines in these tables, and these correspond to the line numbers in *Nationalizing Mortgage Risk*.

As shown in these tables, 1999 and 2000 were exceedingly strong growth years for the mortgage markets, much stronger than we had anticipated. We had forecast a gradual decline in the growth of the market—from its 9.3 percent 1998 growth rate (which revised Fed data later showed to be 9.8 percent) to 8 percent in 1999 and 7 percent in 2000. This forecast was based on historic relationships between growth in the economy and growth of the mortgage market.

However, in reality the mortgage market grew 10.1 percent in 1999 and 8.7 percent in 2000, enabling Fannie and Freddie to reach their profit objectives by taking on less overall risk than we had projected. Thus, Fannie's retained portfolio (line 8)—which includes both whole mortgages and MBSs—grew 46 percent from 1998 to the end of 2000, although we had projected growth of 53 percent. Similarly, we had projected growth of 28 percent in Fannie's total retained and guaranteed portfolio (line 11), but the actual growth was 17 percent. This clearly shows, incidentally, that the company chose to make its profit numbers by taking on more interest rate risk rather than by substantially increasing its credit risk through MBS guarantees.

For both companies, the same pattern holds. Together, Fannie and Freddie increased their retained portfolios by 48 percent (line 20), although we had predicted growth of 57 percent by the end of 2000. The combined growth for their retained and guaranteed mortgages (line 23), which we had projected to be 28 percent, turned out to be 23 percent.

Nevertheless, as these numbers indicate, their growth continued, and at a pace faster than the growth of the mortgage market as a whole. Between 1998 and 2000, the mortgage market grew 20 percent, but Fannie and Freddie grew 23 percent.

Thus, even with the startlingly high growth of the mortgage market over these two years, Fannie and Freddie had to grow even faster in order to reach their profit goals. This indicates that when mortgage market growth slows—as occurred at the end of 2000 and continues today—Fannie and Freddie will have to step up the pace at which they are assuming risk if they are to meet the earnings growth that they have led the financial markets to expect.

As a result, unless the mortgage market returns suddenly to the historically high growth rate it attained in 1998 and 1999, we can expect to see Fannie and Freddie grow at a very high rate relative to the mortgage market at the end of 2001. This will mean they will have taken on substantially more risk, for which the taxpayers of this country are ultimately liable.

In addition, and perhaps equally important, Fannie and Freddie will have moved closer to the day when they will have acquired or guaranteed substantially all the mortgages in the United States that the law permits them to acquire or guarantee. When this point arrives, they will have nationalized the residential mortgage market without a vote of Congress.

If this happens, moreover, Fannie and Freddie will have to stop growing, and their extraordinary profit growth will be a thing of the past. To prevent such an outcome, Fannie and Freddie must either break out of the secondary mortgage market or enlarge that market through a substantial increase in the conventional/conforming loan limit. Although it is hard to believe that Congress will make Fannie and Freddie's subsidies available to upper-income homebuyers, the political clout of these two organizations should not be underestimated. Nevertheless, such a step will only postpone the inevitable; they will still have to grow faster than the mortgage market, and eventually will be confined even by the larger market they have been given.

So the long term strategy must be to expand beyond the mortgage markets into other forms of finance, and we can see them taking steps to do that even today. The effort to create a Fannie Mae and a Freddie Mac brand—unnecessary for wholesale operators with what is essentially a monopoly of their market—foreshadows a program of dealing directly with consumers in the future.

This could be through arrangements with real estate brokers that amount to mortgage origination, through consumer finance based on home equity loans, or possibly even entry into the commercial mortgage market. All these and others are likely to be tried.

Thus, the important point demonstrated by the attached tables is that Fannie and Freddie—even under the most favorable circumstances they are ever likely to encounter—must still continue to grow faster than the mortgage market if they are to meet their promises to Wall Street, and therefore must find new areas of profitable activity before they run out of the assets they are permitted to acquire.

One of the more troubling implications of Fannie and Freddie's continuing growth is the rising level of residential mortgage debt relative to GDP, which increased from 50.3% at the end of 1995 to 55.6% at the end of 2000 (line 39). Home equity loans, which more than doubled from 1995 to 2000 (new line below line 7), accounted for only some of that increase. Housing values have been rising in recent years, which has helped to mitigate the rise in mortgage debt

as a percentage of GDP. Nonetheless, according to Federal Reserve data, owners' equity in household real estate declined 1.4 percentage points during the 1995-2000 period.

If mortgage debt grows at the forecasted rate (line 7), it will continue to increase as a percentage of GDP and housing values. That trend cannot continue indefinitely. The inevitable leveling in mortgage debt relative to GDP and housing values will trim growth in mortgage debt, making it harder for Fannie and Freddie to maintain a 15 percent annual earnings growth rate unless they can accelerate their growth in market share. That growth will come at the expense of their private-sector competitors.

Even if mortgage debt continues to grow faster than GDP, Fannie and Freddie still will have to steadily increase their market share, as noted above. But higher market share will come at the expense of lower net profits per dollar of mortgage business (lines 52 to 54 for Fannie; lines 55 to 57 for Freddie) as competition for those remaining mortgage dollars squeezes lending spreads. A recession or even a sustained slowing of the economy will magnify this problem. Consequently, net income growth is projected to slow for the two companies in the 2000 to 2003 period (lines 41 to 51, second column from the right).

Fannie and Freddie's credit loss experience has not been projected, but clearly their credit expense cannot go much lower. Fannie's credit cost in 2000, per dollar of risk exposure, was just .9 basis point (line 59); Freddie's comparable figure was only 1.2 basis points (line 65). The economic slowdown plus a continued leveraging up of owner-occupied housing suggests that the two companies' credit expense will begin to rise, which will cut into their profitability.

Continued growth in Fannie's mortgage portfolio as well as MBS held by third parties will drive up its minimum capital requirement by 70%, from \$20 billion at the end of 2000 to almost \$35 billion three years later (line 72). A higher projected growth rate for Freddie's mortgage portfolio will cause its capital requirement to grow even faster, 78% over the next three years (line 87). This projection does not reflect the pending risk-based capital rules for Fannie and Freddie, which may, or may not, permit them to increase their leverage.

Reduced profitability per dollar of mortgage business will lower Fannie and Freddie's return on equity capital (ROE) if they cannot increase their leverage under the risk-based capital rules. Fannie's ROE is projected to decline from 23.0% in 2000 to 18.8% in 2003 (line 85) while Freddie's ROE is projected to decline from 18.8% in 2000 to 15.1% in 2003.

Fannie and Freddie's outstanding indebtedness will rise significantly over the next three years due to continuing balance sheet growth caused by their increased emphasis on holding mortgages and MBS in portfolio. Fannie's debt is projected to jump by \$500 billion, or 78% (line 101). Freddie's debt will increase

by a smaller amount, \$375 billion, but by a larger percentage -- 88%.

Together, the on-balance-sheet debt of the two companies will increase by almost \$900 billion, reaching nearly \$2 trillion dollars (line 105). That debt, coupled with their off-balance-sheet guarantees, will boost Fannie and Freddie's total obligations to \$3 1/3 trillion by the end of 2003, an amount greater than the likely amount of Treasury debt held by the general public. If the American people believe that the national debt is being reduced, they are in for a shock.

Paralleling this growth will be a substantial increase in Fannie and Freddie's implicit subsidy. According to a just released Congressional Budget Office report, "Federal Subsidies and the Housing GSEs," Fannie and Freddie's subsidy grew from \$5.5 billion in 1995 to \$10.9 billion in 2000.

In late May, CBO projected that the subsidy for the three housing GSEs (Fannie, Freddie and the Federal Home Loan Banks) could reach \$28 billion by 2011, if their debt and MBS grew at the rate of nominal GDP growth plus 2 percent. That is a relatively modest growth rate given that Fannie and Freddie's debt plus MBS grew from 1995 to 2000 at the rate of nominal GDP growth plus 4.2 percent. Interpolating from Figure 3 in the CBO report (page 24) suggests that Fannie and Freddie's subsidy will be in the \$12-\$13 billion range in 2003.

Their subsidy will be much larger than that if, as projected in the accompanying tables, they grow their debt and MBS by 9.2 percentage points faster than the projected growth in nominal GDP. This acceleration in Fannie and Freddie's debt and guarantee commitments, relative to the GDP growth rate, highlights the increasing dominance of the mortgage marketplace they must achieve in order to honor their earnings growth pledge to Wall Street.

Several numbers in the accompanying tables underscore Fannie and Freddie's rationale for growing their mortgage portfolios at a faster rate than MBSs owned by third parties. Even though each company earns a higher ROE on its mortgage guarantee business than on its investment portfolio, both earn more profit per dollar of portfolio investment than per dollar of mortgages simply guaranteed. In effect, Fannie and Freddie prize high earnings growth over a higher ROE. Their tilt towards faster portfolio growth, relative to growth in mortgage guarantees, also explains the declining ROE noted above.

As lines 52 and 53 show, in 2000 Fannie earned three times as much per dollar of mortgages owned compared to mortgages guaranteed (48.6 basis points versus 15.5 basis points). The additional profit compensates Fannie for the interest rate risk it assumes when acquiring mortgages or MBSs. Fannie pursues these additional profit dollars even though, as the two new lines following line 85 show, Fannie earns a higher ROE on its guarantee activities (29.8% in 2000) than it does on its investment portfolio (20.1% in 2000).

Freddie's numbers illustrate the same phenomenon. In 2000, it earned four

times as much per mortgage dollar on its investment portfolio (45.4 basis points; line 55) as it did on its guarantee activities (10.8 basis points; line 56). However, it earned a higher ROE on its guarantee activities in 2000 -- 22.0% -- than it earned on its investment portfolio -- 17.4% (two new lines following line 100).

As is evident from the CBO report, though, much of Fannie and Freddie's high ROE comes from the retained portion of their implicit subsidy. Working from estimates in Table 8 in the CBO report (page 28), it is clear that Fannie's return on the equity of its common stockholders in 2000 would have dropped by approximately one-third, from a reported 25.6 percent to 16.7 percent, absent its retained subsidy. Fannie's retained subsidy gave its return on common equity a similar boost in earlier years.

If Fannie further had to meet a private-sector leveraging standard of equity capital equal to 4 percent of its on-balance-sheet assets, its return on common equity would have dropped to about 14 percent for 2000. Earlier years show approximately the same benefit for Fannie from its retained subsidy. In effect, Fannie's superior ROE, relative to its private-sector competitors, flows entirely from its retained subsidy.

The same story holds for Freddie. Its retained subsidy in 2000 raised its return on common stockholders' equity from 13.3 percent to a reported 23.7 percent. Hence, Freddie's subsidy accounted for almost half of its ROE in 2000. In the previous four years, Freddie's retained subsidy ranged from one-third to one-half of its reported return on common equity. A 4 percent common equity ratio for Freddie would have further decreased its return on common equity in 2000 to approximately 10 percent. Like Fannie, Freddie owes its superior ROE to its retained subsidy.

To conclude, the numbers in the attached tables demonstrate that the problem we identified in 1998 continues to haunt policymakers and taxpayers. Fannie Mae and Freddie Mac are out of control, unrestricted by competition, market discipline, Congressional oversight or a strict enforcement of their charters. As a result, they are able to use their subsidies to expand as fast as necessary to reach the extraordinary rates of profit growth they have promised to Wall Street. At some point in the future, they will have fully nationalized the residential mortgage markets in the United States, but they will not stop growing at that point. Instead, they will attempt to expand into other areas of the economy, using their subsidized financing to drive out private sector competitors.

Data for update to "Nationalizing Mortgage Risk"

Fannie/Freddie Financial Projection
Dollars in millions

Line No.	<----- History (year-end) ----->					Comparison for 2000:		Revised year-end projections based on year-end 2000 data			Annual growth rate: 1995 - 2000 (percent)	Annual growth rate: 2000 - 2003 (percent)	Growth Rate Difference	
	1995	1996	1997	1998	1999	Actual	Initial projection	2001	2002	2003				
Table 3-1 - The Size of the Residential Mortgage Market, Past, Present, and Projected, 1995-2003														
Composition of outstanding mortgage market:														
1-to-4 family mortgages:														
1	Jumbo mortgages	568,008	601,128	641,397	704,223	775,284	843,075	808,325	893,660	956,216	1,023,151	8.2	6.7	-1.6
2	Conventional/conforming	1,969,096	2,083,910	2,223,511	2,441,306	2,687,652	2,922,660	2,802,194	3,098,020	3,314,881	3,546,923	8.2	6.7	-1.6
3	FHA/VA mortgages	466,620	497,590	525,000	524,354	567,047	606,306	566,456	625,405	648,388	672,217	5.4	3.5	-1.9
4	Other 1-4 family mortgages	505,997	536,055	583,783	692,816	763,982	837,359	818,051	904,880	989,017	1,079,807	10.6	8.8	-1.8
5	Multi-family mortgages: all kinds	277,002	288,837	302,291	332,121	374,596	411,100	393,808	435,766	466,270	498,908	8.2	6.7	-1.6
6	Total residential mortgages	3,786,723	4,007,520	4,275,983	4,694,820	5,168,562	5,620,500	5,388,834	5,957,730	6,374,771	6,821,005	8.2	6.7	-1.6
7	Annual growth rate, in percent	4.3	5.8	6.7	9.8	10.1	8.7	7.0	6.0	7.0	7.0			
Memo data -- breakout of line 4:														
New	Home equity loans	289,300	335,300	407,600	462,500	512,800	606,100					15.9		
New	Other than home equity loans	216,697	200,755	176,183	230,316	251,182	231,259					1.3		
Table 3-2 -- Fannie and Freddie Market Shares, Past, Present, and Projected, 1995-2003														
Fannie/Freddie retained portfolios, total mortgages outstanding:														
Fannie Mae:														
8	Retained portfolio:	252,868	286,527	316,592	415,434	522,977	607,602	635,882	786,420	924,342	1,084,540	19.2	21.3	2.1
9	% total residential	6.7%	7.1%	7.4%	8.8%	10.1%	10.8%	11.8%	13.2%	14.5%	15.9%			
10	% conv/conf & all other	9.2%	9.9%	10.2%	12.0%	13.7%	14.6%	15.8%	17.7%	19.4%	21.2%			
11	Retained + guaranteed:	766,098	834,700	895,730	1,052,577	1,202,181	1,229,680	1,347,209	1,549,010	1,721,188	1,909,881	9.9	15.8	5.9
12	% total residential	20.2%	20.8%	20.9%	22.4%	23.3%	21.9%	25.0%	26.0%	27.0%	28.0%			
13	% conv/conf & all other	27.8%	28.7%	28.8%	30.4%	31.4%	29.5%	33.6%	34.9%	36.1%	37.3%			
Freddie Mac:														
14	Retained portfolio:	107,424	137,755	164,421	255,009	324,443	385,693	420,329	530,238	637,477	757,132	29.1	25.2	-3.9
15	% total residential	2.8%	3.4%	3.8%	5.4%	6.3%	6.9%	7.8%	8.9%	10.0%	11.1%			
16	% conv/conf & other	3.9%	4.7%	5.3%	7.4%	8.5%	9.2%	10.5%	11.9%	13.4%	14.8%			
17	Retained + guaranteed:	566,469	610,820	640,406	733,360	862,326	961,794	943,046	1,084,307	1,204,832	1,336,917	11.2	11.6	0.4
18	% total residential	15.0%	15.2%	15.0%	15.6%	16.7%	17.1%	17.5%	18.2%	18.9%	19.6%			
19	% conv/conf & all other	20.6%	21.0%	20.6%	21.2%	22.5%	23.1%	23.5%	24.4%	25.3%	26.1%			
Fannie + Freddie:														
20	Retained portfolio:	360,292	424,282	481,013	670,443	847,420	993,295	1,056,212	1,316,658	1,561,819	1,841,671	22.5	22.9	0.4
21	% total residential	9.5%	10.6%	11.2%	14.3%	16.4%	17.7%	19.6%	22.1%	24.5%	27.0%			
22	% conv/conf & all other	13.1%	14.6%	15.5%	19.3%	22.1%	23.8%	26.3%	29.7%	32.7%	35.9%			
23	Retained + guaranteed:	1,332,567	1,445,520	1,536,136	1,785,937	2,064,507	2,191,474	2,290,255	2,633,317	2,926,020	3,246,798	10.5	14.0	3.5
24	% total residential	35.2%	36.1%	35.9%	38.0%	39.9%	39.0%	42.5%	44.2%	45.9%	47.6%			
25	% conv/conf & all other	48.4%	49.7%	49.4%	51.5%	54.0%	52.5%	57.1%	59.3%	61.3%	63.3%			
26	% conv/conf	67.7%	69.4%	69.1%	73.2%	76.8%	75.0%	81.7%	85.0%	88.3%	91.5%			

	<----- History (year-end) ----->					Comparison for 2000:		Revised year-end projections based on year-end 2000 data			Annual growth rate: 1995 - 2000 (percent)	Annual growth rate: 2000 - 2003 (percent)	Growth Rate Difference	
	1995	1996	1997	1998	1999	Actual	Initial projection	<----->		2003				
								2001	2002					
Table 4-1 -- Growth in Residential Mortgages -- Fannie and Freddie Versus the Mortgage Totals, Past, Present, and Projected, 1995-2003														
Annual growth in residential														
27	mortgage market - total:	220,797	268,463	418,837	473,742	451,938	352,541	337,230	417,041	446,234	19.6	-0.4	-20.0	
28	Growth in GSE portion	112,953	90,616	249,801	278,570	126,967	235,447	441,843	292,703	320,778	3.0	36.2	33.2	
29	GSE portion of total	51.2%	33.8%	59.6%	58.8%	28.1%	66.8%	131.0%	70.2%	71.9%				
30	Growth in conv/conf - total:	114,814	139,601	217,795	246,346	235,008	183,321	175,360	216,861	232,042	19.6	-0.4	-20.0	
31	Growth in GSE portion	112,953	90,616	249,801	278,570	126,967	235,447	441,843	292,703	320,778	3.0	36.2	33.2	
32	GSE portion of total	98.4%	64.9%	114.7%	113.1%	54.0%	128.4%	252.0%	135.0%	138.2%				
Growth in conv/conf + all other mortgages - total:														
33		156,707	200,784	356,657	359,988	344,888	279,580	267,547	331,501	355,471	21.8	1.0	-20.8	
34	Growth in GSE portion	112,953	90,616	249,801	278,570	126,967	235,348	441,843	292,703	320,778	3.0	36.2	33.2	
35	GSE portion of total	72.1%	45.1%	70.0%	77.4%	36.8%	84.2%	165.1%	88.3%	90.2%				
36	Nominal GDP -- 4th quarter	7,529,300	7,981,400	8,478,600	8,974,900	9,559,700	10,114,400	9,864,729	10,468,404	10,991,824	11,596,375	6.1	4.7	-1.4
37	GDP annual growth rate		6.0%	6.2%	5.9%	6.5%	5.8%	5.0%						
38	Assumed growth rate after 2000								3.5%	5.0%	5.5%			
39	Total mortgages outstanding/GDP	50.3%	50.2%	50.4%	52.3%	54.1%	55.6%	54.6%	56.9%	58.0%	58.8%			
40	Change in mortgage/GDP ratio	0.6%	-0.1%	0.2%	1.9%	1.8%	1.5%	1.0%	1.3%	1.1%	0.8%			

Table 6-1 -- Fannie and Freddie Net Income by Line of Business, Past, Present, and Projected, 1995-2003

Net income by line of business:														
Fannie Mae:														
41	Portfolio investment	1,369	1,694	1,894	1,878	2,315	2,745	2,621	2,997	3,593	4,118	14.9	14.5	-0.5
42	Credit guarantee	1,003	1,031	1,162	1,540	1,597	1,703	1,661	1,737	1,962	2,088	11.2	7.0	-4.1
43	Total	2,372	2,725	3,056	3,418	3,912	4,448	4,282	4,734	5,555	6,206	13.4	11.7	-1.7
44	Federal tax rate	28.0%	29.5%	29.3%	25.9%	27.9%	26.2%							
Freddie Mac:														
45	Portfolio investment	???	785	892	1,021	1,415	1,613	1,591	1,832	2,277	2,650	19.7	18.0	-1.7
46	Credit guarantee	???	458	503	679	808	934	760	870	916	953	19.5	0.7	-18.8
47	Total	1,091	1,243	1,395	1,700	2,223	2,547	2,352	2,701	3,193	3,603	19.6	12.3	-7.4
48	Federal tax rate	31.2%	30.0%	29.0%	27.8%	29.8%	28.2%							
Fannie + Freddie:														
49	Portfolio investment	???	2,479	2,786	2,899	3,730	4,358	4,212	4,829	5,870	6,768	15.1	15.8	0.7
50	Credit guarantee	???	1,489	1,665	2,219	2,405	2,637	2,422	2,606	2,878	3,041	15.4	4.9	-10.5
51	Total	3,463	3,968	4,451	5,118	6,135	6,995	6,634	7,435	8,747	9,809	15.2	11.9	-3.3
Net income per \$ of business (basis points):														
Fannie Mae:														
52	Portfolio investment		62.8	62.8	51.3	49.3	48.6	45.0	43.0	42.0	41.0			
53	Credit guarantee (1)		13.3	14.0	16.9	15.5	15.5	13.0	12.5	12.0	11.5			
54	Total		34.0	35.3	35.1	34.7	36.6	33.5	34.1	34.0	34.2			
Freddie Mac:														
55	Portfolio investment		64.0	59.0	48.7	48.8	45.4	42.0	40.0	39.0	38.0			
56	Credit guarantee (1)		7.9	8.2	10.1	10.5	10.8	8.5	8.5	8.0	7.5			
57	Total		21.1	22.3	24.7	27.9	27.9	26.3	26.4	27.9	28.3			

(1) Assumes no credit risk on GSE/government-guaranteed debt held in portfolio.

	<----- History (year-end) ----->					Comparison for 2000:		Revised year-end projections based on year-end 2000 data			Annual growth rate:	Annual growth rate:	Growth Rate Difference	
	1995	1996	1997	1998	1999	Actual	Initial projection	2001	2002	2003	1995 - 2000 (percent)	2000 - 2003 (percent)		
Table 6-2 -- Credit-Related Expenses for Fannie and Freddie, Past, 1996-2000														
Fannie Mae:														
58	Pre-tax credit-related expenses	409	375	261	127	94								
59	Pre-tax credit cost in B.P.	5.3	4.5	2.9	1.2	0.9								
60	Credit guaranty tax rate	31.4%	31.1%	24.3%	27.7%	23.7%								
61	After-tax credit cost	281	258	198	92	72								
62	After-tax credit cost in B.P.	3.6	3.1	2.2	0.9	0.7								
63	Credit income before credit exp.	16.9	17.1	19.1	16.4	16.1								
Freddie Mac														
64	Pre-tax credit-related expenses	608	529	342	159	106								
65	Pre-tax credit cost in B.P.	10.5	8.6	5.1	2.1	1.2								
66	Credit guaranty tax rate	28.2%	28.4%	28.2%	27.9%	26.7%								
67	After-tax credit cost	437	379	246	115	78								
68	After-tax credit cost in B.P.	7.5	6.2	3.7	1.5	0.9								
69	Credit income before credit exp.	15.4	14.4	13.8	12.0	11.7								
70	Difference: Fannie-Freddie	1.5	2.8	5.3	4.4	4.4								
B.P. = 1 basis point (.01%)														
Memoranda data -- government/GSE securities in portfolio. They presumably have no credit risk														
	Fannie Mae	22,200	29,200	43,200	83,600	111,500	121,400							
	% of total portfolio	8.8%	10.2%	13.6%	20.1%	21.3%	20.0%							
	Freddie Mac	7,665	10,056	12,567	19,700	32,803	60,940							
	% of total portfolio	7.1%	7.3%	7.6%	7.7%	10.1%	15.8%							
Table 6-3 -- Fannie and Freddie Capital Requirements, Past, Present, and Projected, 1995-2003														
Fannie Mae:														
71	Core capital (OFHEO define.)	10,959	12,773	13,793	15,465	17,876	20,827	22,109	26,543	30,609	35,281	13.7	19.2	5.5
72	Required minimum capital	10,451	11,466	12,703	15,334	17,770	20,294	21,359	25,793	29,859	34,531	14.2	19.4	5.2
73	Core - required minimum	508	1,307	1,090	131	106	533	750	750	750	750			
74	Mortgage portfolio (net)	252,588	286,259	316,316	415,223	522,780	607,399	635,882	786,420	924,342	1,084,540	19.2	21.3	2.1
75	Other assets	63,962	64,782	75,357	69,791	52,387	67,673	73,360	87,380	102,705	120,504	1.1	21.2	20.1
76	Total assets on B/S	316,550	351,041	391,673	485,014	575,167	675,072	709,242	873,800	1,027,046	1,205,044	16.4	21.3	5.0
77	Other assets/total assets	20.2%	18.5%	19.2%	14.4%	9.1%	10.0%	10.3%	10.0%	10.0%	10.0%			
Calculated minimum capital														
78	Assets on B/S (2.5%)	7,914	8,776	9,792	12,125	14,379	16,877	17,731	21,845	25,676	30,126	16.4	21.3	5.0
79	MBS, other off-B/S (.45%)	2,310	2,467	2,606	2,867	3,056	2,799	3,201	3,432	3,586	3,714	3.9	9.9	6.0
80	Other capital requirement	228	223	305	342	334	618	427	516	597	691	22.1	3.8	-18.3
81	Other/tot cap required	2.2%	1.9%	2.4%	2.2%	1.9%	3.0%	2.0%	3.0%	3.0%	3.0%			
A-T income for dividends, stock buy-backs, other														
82	Percent of net income		911	2,036	1,746	1,501	1,497	841	(982)	1,488	1,534			
83	Dividend payout rate (2)		33.4%	66.6%	51.1%	38.4%	33.7%	19.6%	-20.7%	26.8%	24.7%			
84	Dividend payout rate (2)		31.5%	30.9%	30.9%	30.3%	28.0%							
After-tax return on core capital, before preferred dividends														
85	After-tax return on core capital, before preferred dividends		23.0%	23.0%	23.4%	23.5%	23.0%	21.0%	20.0%	19.4%	18.8%			
Estimated after-tax return by line of business:														
New	Investment portfolio		21.5%	21.3%	18.9%	20.2%	20.1%							
New	Guarantee activities		25.9%	26.6%	32.9%	30.6%	29.8%							

		<----- History (year-end) ----->					Comparison for 2000:		Revised year-end projections based on year-end 2000 data			Annual growth rate: 1995 - 2000	Annual growth rate: 2000 - 2003	Growth Rate Difference
		1995	1996	1997	1998	1999	Actual	Initial projection	2001	2002	2003	(percent)	(percent)	
Table 6-3 -- Fannie and Freddie Capital Requirements, Past, Present, and Projected, 1995-2003 -- Continued														
Freddie Mac:														
86	Core capital (OFHEO define.)	5,829	6,743	7,376	10,715	12,692	14,381	14,728	18,847	22,107	25,733	19.8	21.4	1.6
87	Required minimum capital	5,584	6,517	7,082	10,333	12,287	14,178	14,228	18,347	21,607	25,233	20.5	21.2	0.7
88	Core - required minimum	245	226	294	382	405	203	500	500	500	500			
89	Mortgage portfolio (net)	107,424	137,520	164,250	255,348	322,569	385,117	420,329	530,238	637,477	757,132	29.1	25.3	-3.8
90	Other assets	29,757	36,346	30,347	66,073	64,115	74,180	46,703	93,571	112,496	133,611	20.0	21.7	1.6
91	Total assets on B/S	137,181	173,866	194,597	321,421	386,684	459,297	467,632	623,809	749,973	890,743	27.3	24.7	-2.6
92	Other asts/total assets	21.7%	20.9%	15.6%	20.6%	16.6%	16.2%	10.0%	15.0%	15.0%	15.0%			
Calculated minimum capital														
93	Assets on B/S (2.5%)	3,430	4,347	4,865	8,036	9,667	11,482	11,676	15,595	18,749	22,269	27.3	24.7	-2.6
94	MBS, other off-B/S (.45%)	2,066	2,129	2,142	2,153	2,420	2,592	2,352	2,493	2,553	2,609	4.6	0.2	-4.4
95	Other cap. requirement	89	42	75	145	199	103	200	258	304	355	3.0	51.1	48.0
96	Other/total cap. required	1.6%	0.6%	1.1%	1.4%	1.6%	0.7%	2.0%	1.5%	1.5%	1.5%			
A-T income for dividends, stock buy-backs, other														
97			329	762	(1,639)	246	858	(148)	(1,764)	(67)	(23)			
98	Percent of net income		26.5%	54.6%	-96.4%	11.1%	33.7%	-6.3%	-65.3%	-2.1%	-0.6%			
99	Dividend payout rate (2)		26.0%	26.5%	26.3%	25.6%	25.7%							
After-tax return on core capital, before preferred dividends														
100			19.8%	19.8%	18.8%	19.0%	18.8%	17.4%	16.3%	15.6%	15.1%			
Estimated after-tax return by line of business:														
New	Investment portfolio		22.4%	21.7%	17.6%	17.8%	17.4%							
New	Guarantee activities		16.5%	17.1%	20.9%	21.4%	22.0%							
(2) Common + preferred dividends as a percent of net income.														

Table 6-4 -- Fannie and Freddie Interest-Bearing Debt Outstanding, Past, Present, and Projected, 1995-2003

Fannie Mae:														
101	Interest-bearing debt O/S	299,174	331,270	369,774	460,291	547,619	642,682	673,780	830,110	975,694	1,144,792	16.5	21.2	4.7
102	O/S debt as % of total assets	94.5%	94.4%	94.4%	94.9%	95.2%	95.2%	95.0%	95.0%	95.0%	95.0%			
Freddie Mac:														
103	Interest-bearing debt O/S	119,328	156,491	172,321	287,234	360,581	426,754	420,329	561,428	674,976	801,669	29.0	23.4	-5.6
104	O/S debt as % of total assets	87.0%	90.0%	88.6%	89.4%	93.2%	92.9%	90.0%	90.0%	90.0%	90.0%			
105	Total O/S int.-bearing F&F debt	418,502	487,761	542,095	747,525	908,200	1,069,436	1,094,109	1,391,539	1,650,670	1,946,461	20.6	22.1	1.5