Section III: Current Status of the MMI Fund

As of the end of FY 2006, the MMI Fund had an estimated economic value of $22.021 billion and a capital ratio of 6.82 percent. This economic value is about 4.7 percent higher than it was at the end of the FY 2005, a growth rate similar to the rate of return of a one-year Treasury bond during the same time period. This modest growth rate resulted from two offsetting effects. The stronger-than-expected house price growth rates throughout the entire FY 2005 and into FY 2006 made existing books more protected from claims. On the other hand, the rising loss severity rates observed in the last two years caused a nearly offsetting reduction in the economic value. While the numerator of the capital ratio did not change by much, the denominator, IIF, decreased significantly from last year, causing the estimated capital ratio to be much higher than in FY 2005.

In this section, we present a more detailed analysis of the MMI Fund's current status. The analysis examines the situation of the Fund at the end of FY 2006 and the projected future performance for new books of business through 2013. This section includes a description of the basic components of the Fund's economic value and how they are expected to change through FY 2013.

A. Estimating the Current Economic Value of the MMI Fund

According to the NAHA legislation, the economic value (or economic net worth) of the Fund is defined as the "cash available to the Fund, plus the net present value of all future cash inflows and outflows expected to result from the outstanding mortgages in the Fund". We base our estimate of this value on the level of capital resources projected for the end of the FY 2006 plus the present value of expected future cash flows of the existing loan portfolio as estimated from our financial models.

The MMI Fund assets are comprised of cash, Treasury investments, properties and mortgages held by HUD, and other assets and receivables. Capital resources are the total assets net of the liabilities of the Fund. Due to the accelerated schedule required for delivery of this Actuarial Review, the actual amount of the capital resources as of the end of FY 2006 was not available at the time this Review was prepared. We had to project the end-of-FY 2006 capital resources based on the audited capital resources as of the beginning of the year and then add an estimate of the net cash flows occurring during the year.

The present value of expected future cash flows is calculated by a financial model that uses the most current information available to estimate cash flows. Cash inflows include upfront premiums, annual premiums and investment returns. Cash outflows include claim payments, premium refunds, administrative expenses, and distributive shares.[5] The cash flows included in these calculations are those from the origination year to the year of maturity, *e.g.*, 30 years for 30-year mortgages. The steps in calculating the current economic value and capital ratio of the MMI Fund are tabulated as Exhibit III-1.

1. Capital Resources

Capital resources are the net assets of the MMI Fund that, if necessary, could be converted into cash to meet Fund obligations. It is computed by subtracting total liabilities from total assets. These assets consist of cash, Treasury investments, properties and mortgages, other assets and miscellaneous receivables net of payables. Exhibit III-1 reports the audited MMI Fund's capital resources at the end of FY 2005/beginning of FY 2006 at $23.060 billion.

The next step in estimating the capital resources as of the end of FY 2006 is to estimate the sources and uses of funds generated by the MMI Fund portfolio. Two sources of cash flows are estimated: (1) the net gain/loss from investment of the capital resources available at the beginning of FY 2006 and (2) the net cash income from the mortgage insurance policies. The net total returns on the beginning capital resources was estimated to be $964 million during FY 2006, assuming the capital resources realize an investment return of 4.18 percent.

Based on the econometric models and economic forecast, we estimated the cash flows that were generated by the FY 1977 to FY 2006 books of business during FY 2006. These cash flows and any interest earned from reinvestment become part of the total assets of the Fund. Exhibit III-2 shows the results of this analysis. The net cash flow received during FY 2006 was calculated as positive $50 million.

Finally, a special loss reserve for damages directly relate to Hurricanes Katrina, Rita, and Wilma of $613 million was deducted from the account, making the projected FY 2006 year-end capital resource to be $23.461 billion.

[5] The administrative expense was discontinued since the FY 2002 Actuarial Review according to the federal credit reform requirement. The distributive share has been suspended since 1990. There is no indication that it would be resumed in the foreseeable future.

Exhibit III-1

Estimates of MMI Fund Economic Value for FYs 2005 and 2006 ($ Millions)		
Item	**End of FY 2005[a]**	**End of FY 2006**
Cash	$ 5,471	
Investments	22,738	
Properties and Mortgages	1,321	
Other Assets and Receivables	485	
Total Assets	$ 30,016	
Liabilities	6,956	
Total Capital Resources	$ 23,060	
Net Gain from Investments		964 [b]
Net Insurance Income in FY 2006		50
Special Loss Reserve for Damages by 2005 Hurricanes		(613)
Total Capital Resources		**23,461**
PV of Future Cash Flows on Outstanding Business		(1,440)
Economic Value	**$ 21,621**[c]	**22,021**
Unamortized Insurance-In-Force	358,871[c]	323,028
Current Capital Ratio	**6.02%**[c]	**6.82%**
Amortized Insurance-In-Force		298,542
Current Capital Ratio with Amortized Insurance-In-Force		**7.38%**

[a] Source: Audited Financial Statements for FY 2005.
[b] Estimated by assuming the total capital resources as of the end of FY 2005 earns an investment return equal to 1-year Treasury Constant-maturity Rate, which averaged 4.18 percent during FY 2006. (Source: Board of Governors of the Federal Reserve System).
[c] From the FY 2005 Actuarial Review.

Exhibit III-2

Net Cash Flow During FY 2006 by Origination Fiscal Year and Mortgage Type[a] ($ Millions)							
Fiscal Year	**FRM 30**	**FRM 15**	**ARM**	**SR 30**	**SR 15**	**SR ARM**	**Total**
1977	0						0
1978	0						0
1979	1						1
1980	1						1
1981	0						0
1982	0						0
1983	1						1
1984	0		0				0
1985	-1		0				-1
1986	-2		0	0		0	-2
1987	-3		0	0		0	-3
1988	-2		0	0		0	-2
1989	-2		0	0			-2
1990	-3		0	0			-3
1991	-4	0	0	0	0	0	-4
1992	-4	0	0	0	0	0	-4
1993	-6	0	0	-2	0	0	-8
1994	-6	0	-1	-3	0	0	-10
1995	-6	0	0	0	0	0	-6
1996	-19	0	-2	-1	0	0	-22
1997	-18	0	-3	-1	0	0	-22
1998	-35	0	-3	-4	0	0	-43
1999	-69	0	-3	-4	0	0	-77
2000	-84	0	-8	0	0	0	-93
2001	-116	-1	-3	-3	0	0	-123
2002	-150	-1	-13	-4	0	-5	-174
2003	-152	-2	-14	31	4	-9	-142
2004	-150	-2	-24	15	2	-10	-169
2005	42	0	0	30	1	-1	72
2006[b]	627	7	57	161	11	22	886
Total	-159	1	-19	213	18	-4	50

[a] See Section IV for description of loans included in each loan type category
[b] Based on forecasted volume and composition distribution between the second quarter of FY 2005 and the first quarter of FY 2006.

2. Present Value of Future Cash Flows

The present value of future cash flows of the MMI Fund is aggregated from separate estimates of the present value of future cash flows from each book of business and for each major mortgage type. Exhibit III-3 shows the present values of future cash flows of major mortgage types from FY 1977 through FY 2006 books. These present values are computed from the projected cash flows during FY 2007 and future years. This exhibit is offered to facilitate comparison among books of business and mortgage types according to cash flows that would not have been realized as of the end of FY 2006. From Exhibit III-3, the total present value of future cash flow is a negative $1.440 billion dollars. Compared to the same number estimated in the FY 2005 Review, this amount improved by $104 million. This is a consequence of the stronger-than-expected house price growth rates realized in FY 2005 and early FY 2006. Rapid house price growth contributed to higher equity in the collateral houses for most existing loans, making claim events less likely to occur in the future on most of the outstanding books.

Exhibit III-3

Present Value of Future Cash Flows as of the End of FY 2006[a] by Origination Fiscal Year & Mortgage Type ($ Millions)							
Fiscal Year	**FRM 30**	**FRM 15**	**ARM**	**SR 30**	**SR 15**	**SR ARM**	**Total**
1977	0						0
1978	0						0
1979	1						1
1980	1						1
1981	0						0
1982	0						0
1983	1						1
1984	0		0				0
1985	-1		0				-1
1986	-3		0	0		0	-3
1987	-4		0	-1		0	-4
1988	-3		0	0		0	-3
1989	-4		0	0			-4
1990	-5		0	0			-5
1991	-5		0	0		0	-6
1992	-5	0	0	0	0	0	-6
1993	-7	0	-1	-3	0	0	-10
1994	-9	0	-1	-4	0	0	-15
1995	-10	0	-1	0	0	0	-11
1996	-23	0	-2	-1	0	0	-27
1997	-24	0	-4	-1	0	0	-29
1998	-45	0	-4	-4	0	0	-54
1999	-94	0	-4	-8	0	-1	-107
2000	-105	0	-12	-1	0	0	-118
2001	-54	-1	-4	14	0	0	-45
2002	-43	-2	-17	38	-1	-1	-26
2003	-21	-4	-24	312	-2	-6	256
2004	-217	-5	-63	154	0	-14	-144
2005	-269	-5	-65	115	2	-8	-230
2006[a]	-833	-6	-68	66	3	-14	-853
Total	-1,778	-24	-271	677	2	-45	-1,440

[a]Based on forecasted volume and composition distribution during the first two quarters.

3. Amortization of Current Books of Business

In order to calculate the MMI Fund capital ratio, we also need to estimate the unamortized IIF. At the same time, it is instructive to consider the capital ratio based on amortized IIF, which is the basis the General Accounting Office (GAO) used for its MMI Fund capital ratio estimation in the early 1990s. At any given time, the dollar value that is actually at risk is the amortized IIF. Exhibit III-4 shows the total volume of new mortgage originations for all types of mortgages for each year’s book of business, the unamortized IIF and the amortized IIF, as of the end of FY 2006.

As can be inferred from Exhibit III-4, the FY 2006 book of business constitutes approximately 12 percent of the Fund's total amortized IIF. The FY 2003 book of business contributed the largest portion of mortgage endorsement volume. Mortgage endorsements dropped significantly afterward. The four most recent books together represent over 65 percent of the total unamortized IIF of the current MMI Fund. Since the FY 2003 book of business, which has the highest outstanding volume, has already entered its projected peak claim period, the overall claim rate of the MMI Fund is likely to remain stable over the next few years.

The decrease of mortgage endorsement volume since FY 2003 reflects both a decline in refinance volume and the continued decline in FHA's market share of home purchase mortgages. The FHA market share of all purchase mortgages decreased from 12.2 percent in FY 2002 to 4.1 percent in FY 2005 and is estimated by HUD to remain low in FY 2006 at 3.8 percent. Based on HUD’s projections, the volume of future books will gradually recover from the low level observed in FY 2006.

Exhibit III-4

Endorsements and Insurance-in-Force of the MMI Fund As of End of FY 2006 (in $ Millions)			
Book of Business[a]	**Mortgage Endorsements**	**Unamortized Insurance in Force**[b]	**Amortized Insurance in Force**[b]
1977	6,932	220	10
1978	9,627	417	51
1979	14,996	616	134
1980	14,216	326	103
1981	9,732	123	52
1982	6,894	25	14
1983	25,654	188	105
1984	15,696	370	231
1985	24,059	677	447
1986	57,728	2,540	1,637
1987	70,216	4,267	2,793
1988	37,425	1,791	1,268
1989	39,759	1,659	1,236
1990	47,124	1,755	1,344
1991	44,035	1,696	1,328
1992	44,923	2,471	1,822
1993	73,665	5,109	3,504
1994	79,539	7,130	5,037
1995	41,417	2,467	2,020
1996	61,565	4,146	3,421
1997	65,359	4,169	3,579
1998	88,456	8,041	6,995
1999	109,969	12,981	11,478
2000	86,742	6,595	6,080
2001	119,812	12,820	11,939
2002	128,885	23,699	22,180
2003	150,558	65,469	61,866
2004	92,858	54,004	51,927
2005	57,513	46,882	45,847
2006	51,728[c]	50,375	50,097
Total	1,677,082	323,028	298,542

[a] End of year insurance-in-force
[b] Based on February 28, 2006 data extract from HUD and the performance of outstanding loans projected by the econometric model for the last two quarters of fiscal year 2006
[c] Based on the FHA August 2006 projection.

B. Projected Future Economic Values and Capital Ratios

In this section both the future economic values and the capital ratios of the Fund are projected, based on HUD's forecast of endorsement volumes and the cash flow projections by the econometric and cash flow models. The initial economic values of individual future books of business are first projected, and then applied in estimating the economic values and capital ratios of the entire MMI Fund.

1. Present Values of Future Books

The present values of future books discounted to the end of each corresponding future fiscal year (through FY 2013) are tabulated in Exhibit III-5. Notice that these values are lower than the projections from the FY 2005 Review, reflecting the slowdown of house price growth rates projected for the second half of FY 2006 and for all future years. On the other hand, following the IRS ruling on non-profit downpayment providers, there is projected to be fewer loans in the future business that utilize gift letters from non-profit organizations. Under the assumption that these high-claim-rate loans would gradually fade out during the next three years, the expected present values are more favorable for FY 2009 and future books. Note that the present value for the FRM-30 product is negative for the FY 2007 book of business, indicating the current premium structure is not sufficient to pay for the expected future claim losses when a nontrivial portion of the book still receives downpayment assistance from seller-contributed non-profit organizations. As the share of these riskier loans diminishes over time, the present value for FRM-30 loans becomes positive in FY 2008 and beyond. However, even for the FY 2007 book, the negative value in the FRM-30 product is offset by the positive present values realized in the other product types, so there is still a positive value for that entire book of business.

Exhibit III-5

Present Value of Future Books of Business[a] by Origination Year & Mortgage Type (in $ Million)							
Fiscal Year	**FRM 30**	**FRM 15**	**ARM**	**SR 30**	**SR 15**	**SR ARM**	**Total**
2007	-154	3	6	195	14	13	77
2008	50	3	25	206	14	15	313
2009	233	5	46	208	15	17	523
2010	341	5	55	233	17	19	670
2011	384	6	62	260	19	23	754
2012	392	6	63	272	20	22	776
2013	406	7	67	284	21	24	809

[a.] Present values are estimated as of the end of each corresponding fiscal years.

2. Projected Future Economic Values and Capital Ratios

Exhibit III-6 shows the projected capital ratios of the Fund using amortized IIF while unamortized IIF is used elsewhere in this Review. If amortized IIF were substituted for unamortized IIF, the Fund's estimated capital ratios for FY 2006 and FY 2013 would be 7.38 percent and 7.32 percent, respectively. The slight decrease from FY 2006 to FY 2013 is driven mainly by the increase in the IIF over the next 7 years. Following the definition given in NAHA, however, we continue to use the unamortized IIF measure (as generally defined) in calculating the capital ratio elsewhere in this Review.

Exhibit III-6

Projected MMI Fund Performance for FY 2006 to FY 2013[a]
($ Millions)

Fiscal Year	Economic Value of the Fund	Capital Ratio (%)	Volume of New Endorsements	Amortized Insurance in Force	Economic Value of Each New Book of Business	Investment Earnings on Fund Balances
2006	22,021	7.38	51,728	298,542	33	
2007	23,127	7.48	53,868	309,312	81	1,025
2008	24,610	7.62	57,115	322,912	344	1,139
2009	26,463	7.69	62,888	344,016	604	1,249
2010	28,646	7.64	74,586	374,892	814	1,369
2011	31,113	7.53	87,049	413,136	964	1,504
2012	33,808	7.42	97,751	455,801	1,044	1,651
2013	36,763	7.32	108,668	502,384	1,146	1,809

[a] All values are as of the end of each fiscal year.