

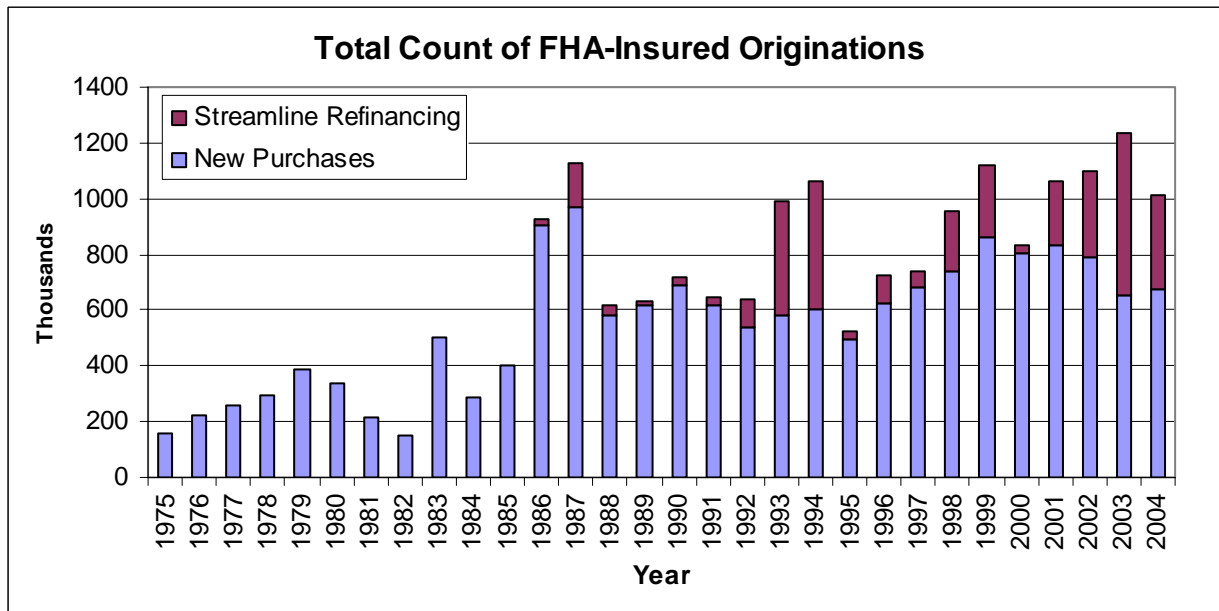
Section IV: Characteristics of the Fiscal Year 2004 Book of Business

This section takes a closer look at the characteristics of the FY 2004 book of business. The characteristic descriptions include: the analysis of loan origination volume and composition, the breakdown of new purchase versus refinancing, and the distribution of loans by relative loan size and loan-to-value ratios. This section also examines and compares the FY 2004 book with previous books in order to gain insights into how FY 2004 book is likely to influence future performance.

A. Volume of Mortgage Originations

In FY 2004, FHA insured about \$118.5 billion in single-family mortgages through the MMI Fund, bringing the fund’s total unamortized insurance-in-force to about \$424.3 billion. Exhibit IV-1 shows the annual FHA originations count as well as the streamline refinancing count from FY 1975 to FY 2004.

Exhibit IV-1



Source: FHA data warehouse, March 31, 2004 extract.

From Exhibit IV-1, the FY 2004 book of business was smaller than the FY 2003 book. A slight increase in the interest rates from FY 2003 to FY 2004 is a main driving force for the decrease in mortgage originations for the fiscal year of 2004. The decline concentrates in the streamline-refinancing portion, which fell about 42 percent. On the other hand, there is a slight increase in the new purchase portion of the FY 2004 book relative to that of the FY 2003.

With the slight increase in interest rates from 2003, the refinancing activities dropped significantly. On the other hand, there is an increasing concern that the interest rates may start rising in the future. There are still many borrowers trying to lock into the currently low rates before they rise further. As a result, the streamline refinancing origination volume is still one of the highest historically. On September 1, 2004, the Office of Federal Housing Enterprise Oversight (OFHEO) announced that its national house price index showed the largest one-year growth rate of 9.39 percent since the introduction of the index. This continued strong housing market expansion during 2004 has made the loss in home equity less a concern for potential borrowers. Combined with the still low interest rate, many borrowers are able to afford purchasing houses.

Even though FHA insures loans in all parts of the U.S., about half of FHA's total dollar volume is originated in only nine states. Exhibit IV-2 illustrates the percent of FHA's total dollar volume originated in these nine states between FYs 2000 and 2004.

Exhibit IV-2

Percentage of FHA Dollar volume Originated Between FY 2000 and FY 2003					
State	2000	2001	2002	2003	2004
California	15.40	14.25	12.21	8.91	6.34
Colorado	4.04	4.71	4.98	5.54	4.89
Florida	5.43	5.21	5.08	4.77	5.35
Georgia	4.49	4.59	4.60	4.24	5.00
Illinois	4.80	4.89	4.80	4.98	5.08
New York	4.19	3.68	3.73	3.00	4.04
Pennsylvania	2.22	2.16	2.17	2.04	2.25
Tennessee	2.14	1.99	2.06	2.18	2.32
Texas	7.61	7.00	8.35	9.27	10.83
% of Total	50.33	48.48	47.97	44.96	46.10

Source: FHA data warehouse, March 31, 2004extract.

These nine states in Exhibit IV-2 have always been the largest portion of FHA's origination volume since FY 1975. It can be noted that California has been experiencing a gradual decrease in the percentage while Texas has been increasing its percentage share. This is partially due to the rapid growth in California house prices during the past few years, making fewer mortgage loans comply with the FHA loan size limit. This trend indicates that the MMI Fund has gradually becomes less sensitive to the economic conditions in California but more sensitive to economic conditions in Texas.

B. Originations by Mortgage Type

Exhibit IV-3 shows that historically 30-year FRM makes up almost all of FHA's business. This trend began to change in the early 1990's when FHA introduced the adjustable rate mortgage and streamline-refinancing mortgage (SR). Gradually, adjustable rate and streamline refinancing mortgages took on a bigger share of the annual originations. For the past few years, it is clear from Exhibit IV-3 that 30-year FRM share has decreased relative to SRs, with 2003 being the extreme condition. As indicated by Exhibit 3, as the market interest start rises, this trend is reversed. For FY 2004 book of business, 30-year FRMs increased from 49% to 59% while 30-year SR dropped from 40 percent to 25 percent.

The 15-year FRMs and 15-year SRs continue to be minor product types of the MMI Fund. With relatively low interest rates, some borrowers were able to convert a previously borrowed 30-year mortgage into 15 years without much increase in the payment burden. However, for the vast majority of cash-out refinancers, the 30-year FRM remains to be the popular choice.

The ARM share has decreased from its mid-1990 high to an insignificant level in the past few years. When interest rates remained close to their 40-year lows, most borrowers see the opportunity to lock in their mortgage rates for the long term by choosing 30-year FRMs. Only a small portion of borrowers choose to take adjustable rate loans. These could be the borrowers with shorter expected tenure in the houses or believe rates will remain low in the near future. However, there could be still some income-constrained borrowers who need the still-lower initial payments of ARMs in order to qualify for or afford the mortgage.

Exhibit IV-3

FHA-Insured Originations By Mortgage Type (Percentage of FHA-Insured Mortgages by Dollar Volume)						
Year	Purchase Mortgages			Streamline Refinancings		
	30-Year FRMs	15-Year FRMs	ARMs	30-Year SRs	15-Year SRs	ARM SRs
1975	99.76	0.24	n/a	n/a	n/a	n/a
1976	99.79	0.21	n/a	n/a	n/a	n/a
1977	99.85	0.15	n/a	n/a	n/a	n/a
1978	99.91	0.09	n/a	n/a	n/a	n/a
1979	99.94	0.06	n/a	n/a	n/a	n/a
1980	99.90	0.10	n/a	n/a	n/a	n/a
1981	99.84	0.15	n/a	n/a	n/a	n/a
1982	99.62	0.38	n/a	n/a	n/a	n/a
1983	93.71	6.28	n/a	n/a	n/a	n/a
1984	94.30	5.69	n/a	n/a	n/a	n/a
1985	92.06	7.78	0.14	0.02	n/a	n/a
1986	88.77	8.09	0.74	2.06	0.34	n/a
1987	79.56	4.96	1.47	12.10	1.86	0.06
1988	85.79	3.59	4.98	5.14	0.46	0.04
1989	92.82	2.69	1.52	2.77	0.19	0.00
1990	93.08	2.77	0.80	3.10	0.25	0.00
1991	88.15	3.12	4.43	3.67	0.58	0.04
1992	66.63	2.46	16.29	11.00	2.22	1.40
1993	45.29	1.98	12.05	30.45	8.02	2.21
1994	42.01	1.58	16.88	28.44	8.28	2.81
1995	64.87	1.22	29.18	3.01	1.00	0.72
1996	60.15	1.04	25.19	9.59	1.97	2.06
1997	56.52	0.94	34.72	4.28	0.86	2.68
1998	63.73	0.89	11.71	19.61	1.65	2.40
1999	72.01	0.91	4.16	19.91	1.96	1.05
2000	84.83	0.65	10.92	2.58	0.32	0.69
2001	74.17	0.77	2.00	21.44	0.81	0.81
2002	65.10	0.93	5.79	22.97	1.86	3.36
2003	48.84	0.92	3.63	39.54	3.53	3.54
2004	59.39	1.11	6.76	24.59	3.29	4.86

Source: FHA data warehouse, March 31, 2004 extract.

C. Initial Loan-to-Value Distributions

Based on the econometric studies of mortgage behavior, a borrower's equity position in the mortgaged house is one of the most important drivers of default behavior. The larger the equity position a borrower has, the greater the incentive to avoid a default on the loan. The LTV is an inverse measure of the equity of a borrower. Exhibit IV-4 shows the distribution of mortgage originations by initial LTV categories.

Exhibit IV-4

Distribution of Originations by Initial LTV Category (Percentage FHA-Insured Mortgages by Dollar Volume)									
Book of Business	Unknown LTV	0-75%	75-80%	80-90%	90-95%	95-97%	97-98%	98-100%	100-105%
1975	17.54	2.71	2.50	15.95	30.25	25.50	1.68	3.88	0.00
1976	18.28	2.05	2.03	12.53	32.21	26.98	1.85	4.07	0.00
1977	11.66	2.59	2.59	14.44	37.30	26.07	1.88	3.46	0.00
1978	18.06	2.73	2.16	12.38	30.75	28.89	2.36	2.66	0.00
1979	19.76	4.13	2.97	16.55	31.90	22.27	1.38	1.05	0.00
1980	11.45	7.62	5.13	27.86	26.91	19.43	0.98	0.62	0.00
1981	26.96	6.77	5.10	26.88	18.43	14.99	0.52	0.34	0.00
1982	16.54	11.84	7.31	26.68	22.49	14.52	0.38	0.26	0.00
1983	20.42	12.27	6.77	24.39	21.52	13.74	0.55	0.34	0.00
1984	2.78	10.04	6.18	26.16	26.31	22.11	1.89	4.41	0.11
1985	1.10	10.24	6.03	31.20	27.12	22.42	1.02	0.85	0.01
1986	0.54	11.57	7.04	30.45	27.15	21.61	0.87	0.74	0.01
1987	0.19	11.19	6.48	28.79	28.24	23.01	0.72	1.32	0.03
1988	0.08	5.68	3.17	20.39	34.74	32.32	1.23	2.37	0.00
1989	0.54	5.15	2.61	18.58	35.78	33.68	1.25	2.40	0.01
1990	1.35	4.90	2.47	18.29	35.86	33.47	1.43	2.22	0.01
1991	3.93	3.96	2.09	15.60	28.94	29.94	10.87	4.43	0.25
1992	10.40	3.05	1.82	13.72	25.62	33.76	7.26	3.98	0.38
1993	22.65	2.80	2.06	13.31	21.41	21.57	12.87	2.81	0.50
1994	19.49	3.11	2.17	13.11	21.31	21.82	15.29	3.03	0.63
1995	2.62	1.71	1.26	10.45	23.91	33.25	23.14	3.41	0.24
1996	6.27	1.83	1.49	11.37	24.05	31.55	20.49	2.71	0.23
1997	3.78	1.89	1.60	11.49	25.24	33.06	20.57	2.11	0.24
1998	8.24	2.20	1.89	12.90	24.65	30.00	17.47	2.23	0.35
1999	4.07	2.35	2.02	11.74	15.41	27.58	34.20	2.26	0.32
2000	0.61	1.33	1.31	6.83	7.19	33.52	47.70	1.35	0.14
2001	0.61	2.00	1.93	10.28	9.84	34.03	39.32	1.71	0.24
2002	0.00	2.50	2.21	11.12	10.02	35.33	35.30	3.24	0.24
2003	0.00	3.47	2.77	12.79	11.89	32.77	28.93	6.95	0.38
2004	0.11	4.10	3.01	12.48	10.58	34.33	29.47	5.58	0.30

Source: FHA data warehouse, March 31, 2004 extract, and the December 2003 extract prepared for FHA's external auditor

As Exhibit IV-4 indicates, the LTV distribution of FY 2004 originations is very similar to the LTV distribution of FY 2003 originations. Nearly 70 percent of the purchase mortgages originated in FY 2004 have LTV ratios of 95 percent or more, and over 80 percent have LTV ratios above 90 percent. The almost 6 percent concentration of greater than 98% LTV is higher than all previous books, except for the FY 2003 book.

D. Initial Loan Size Distributions

Exhibit IV-5 shows the percentage of new originations within each relative loan size category. Overall, the FY 2004 book of business has similar to the FY 2003 book of business. One noticeable difference is that FY 2004 book has a higher percentage share in the largest loan size category. Over the years, the largest loan size category (>140% of the average loan size) has been gradually increasing. Most of the increase results in a decrease in the percentage of 100-120% and 120-140% loan size categories.

One of the new risk factors introduced in this year's review is the relative loan size category. This variable is identified by comparing the loan size of a particular loan with the average loan size of all other FHA insured loans originated in the same period and within the same location. Existing literature has proven that using *relative* loan size categories eliminates the upward bias that occurs when classifying loans in higher-cost areas using absolute loan size categories. The upper limits for categories one through six are based on breakpoints determined by a percentage of the average loan amount in each of the forty-three largest metropolitan statistical areas (MSAs) and the nine Census regions.

Exhibit IV-5 shows the percentage of new originations within each relative loan size category. FHA experience indicates that larger loans tend to perform better in two respects compared with smaller loans in the same geographical area, all else being equal. Larger loans claim at a lower rate, and in those cases where a claim occurs, the percentage loss is smaller. The loss rate is defined as the percentage of a claim amount not recovered through the sale of the conveyed property or mortgage note. Those houses associated with larger FHA loans tend to be in the average house price range for their areas. Since this market is relatively liquid and there are a relatively large number of these similar-quality homes in the area, the house price volatility of these houses tends to be relatively small in comparison to the house price volatility of the extremely low- and high-priced houses. With similar initial LTVs, the higher priced houses tend to be associated with larger loan amounts. In addition, because a large portion of claim costs are fixed and do not vary with regard to loan or property value, larger loans are generally accompanied by lower loss rates.

Exhibit IV-5

Distribution of Originations by Relative Loan Size Category (Percentage FHA-Insured Mortgages by Dollar Volume)						
Book of Business	0-60% of Average Loan Size	60-80% of Average Loan Size	80-100% of Average Loan Size	100-120% of Average Loan Size	120-140% of Average Loan Size	>140% of Average Loan Size
1975	3.64	12.56	23.36	28.40	19.78	12.26
1976	3.56	12.51	23.57	28.36	20.22	11.78
1977	3.10	11.77	24.42	31.20	21.06	8.45
1978	3.53	12.16	25.13	27.32	21.57	10.30
1979	3.29	11.11	24.34	31.07	21.72	8.46
1980	3.50	10.70	23.49	33.89	19.55	8.86
1981	4.06	11.05	23.54	29.59	19.47	12.30
1982	4.86	11.31	21.39	27.84	20.81	13.80
1983	4.13	11.47	22.41	28.38	22.06	11.54
1984	4.30	11.70	22.28	28.22	21.29	12.21
1985	4.27	11.62	21.91	28.39	23.75	10.06
1986	3.60	11.48	23.02	30.17	23.98	7.76
1987	3.51	11.78	23.14	29.51	23.88	8.16
1988	4.22	12.18	21.71	28.58	21.36	11.94
1989	4.51	12.37	21.40	26.23	21.28	14.21
1990	4.79	12.64	21.42	25.59	18.93	16.63
1991	4.80	12.55	21.39	24.33	21.40	15.53
1992	4.43	12.35	21.97	25.62	21.60	14.03
1993	3.92	12.31	23.16	26.89	20.91	12.82
1994	4.33	12.81	22.34	24.93	20.31	15.27
1995	4.74	12.98	20.93	24.59	20.85	15.90
1996	4.56	12.87	21.01	25.27	21.54	14.74
1997	4.63	12.92	20.49	25.78	21.68	14.50
1998	4.29	12.53	21.14	27.71	21.53	12.79
1999	4.63	12.94	21.45	25.82	19.08	16.08
2000	5.27	12.82	20.80	23.98	18.93	18.20
2001	4.93	12.31	22.01	24.85	19.11	16.78
2002	5.14	12.29	21.72	24.52	18.87	17.46
2003	5.07	12.21	21.83	25.09	18.85	16.95
2004	5.97	12.37	19.99	23.08	18.81	19.78

Exhibit IV-6 provides a detailed breakdown of average loan sizes by mortgage type and relative loan size category.

Exhibit IV-6

Average Loan Size by Mortgage Type in FY 2004 (\$)						
Mortgage Type	0-60% of Average Loan Size	60-80% of Average Loan Size	80-100% of Average Loan Size	100-120% of Average Loan Size	120-140% of Average Loan Size	140-160% of Average Loan Size
30-Year Fixed Rate	38,848	53,319	67,052	81,729	96,311	121,669
30-Year Streamline	53,390	70,939	88,930	107,077	123,384	157,738
Adjustable Rate Mortgage	48,586	66,208	83,323	101,508	118,124	140,425
15-Year Fixed Rate	31,081	46,658	60,450	74,381	84,851	101,985
15-Year Streamline	43,374	58,087	70,692	83,248	95,894	121,189
Adjustable Rate Streamline	59,562	78,090	97,669	117,257	135,167	168,008

Source: FHA data warehouse, March 31, 2004 extract.

Typically, ARM originations tend to be larger than those of FRM. Holding everything else the same, this implies that ARM should have lower claim rates. However, as an ARM usually has an initial interest rate lower than a concurrent FRM, it attracts more borrowers with lower income that can only be qualified for the mortgage with the lower ARM rate. Such borrowers tend to be more sensitive to any income and payment shocks. The econometric model estimates that this factor offsets the benefit of larger loan size, causing future ARM claim rates would be higher than those of FRM.

E. Initial Contract Interest Rate

Exhibit IV-7 shows the average contract rate by mortgage type since FY 1988. Over the years, the average contract rate has been gradually decreasing. In most loan types, FY 2004 book of business has the lowest average contract rate since FY 1988. Even though the FY 2004 book of business has a lower overall average contract rate than FY 2003 book of business, the rates of most mortgage types are actually increasing. All mortgage types, except the streamline ARM, have experienced slight increases in rates.

Research has found that, in general, an FRM with a lower contract rate tends to experience fewer claims. On the other hand, mortgages with low contract rates are also found to prepay more slowly. Slower prepayment rates imply that mortgages are exposed to default risk for longer periods of time. Recent research has confirmed the competing risk theory of prepayments and claims. That is, a borrower can only exercise either the prepayment or the default option. Under an environment in favor of prepayment, the conditional claims rate would be lower than otherwise identical situations. Likewise, during a housing recession where default is more likely, the conditional prepayment rate also tends to be low. This competing risk nature of prepayments and claims drives the performance of FRMs in particular. As the interest rate is expected to rise, the prepayment rate of the FY 2004 book would be low, which would leave more loans subject to claim risk for a longer period. Meanwhile, the low house price growth rate forecasted by Global Insight, Inc. also suggest the claim probability could rise from the past few books of business. Therefore, relative to the early 2000's books of business, the expected lower prepayment rates of the FY 2004 book of business could lead to higher cumulative claim rates. In summary, the FY 2004 book of business is likely to have lower conditional prepayment and higher cumulative claim rates.

Exhibit IV-7

Average Contract Interest Rate by Loan Type and Aggregate (Percentage)							
Year	F30s	S30s	ARMs	F15s	S15s	SRARMs	Average
1988	10.08	10.85	8.87	9.73	10.07	8.99	10.05
1989	10.06	11.16	9.08	9.87	10.23	9.21	10.07
1990	9.69	10.70	8.54	9.48	9.95	8.86	9.71
1991	9.46	10.09	7.56	9.15	9.31	7.74	9.40
1992	8.54	8.91	6.47	8.35	8.37	6.51	8.26
1993	7.76	8.16	5.87	7.41	7.58	6.27	7.64
1994	7.57	7.75	6.06	7.14	7.42	6.08	7.36
1995	8.39	8.67	7.18	8.25	8.69	7.32	8.10
1996	7.84	7.98	6.49	7.57	7.65	6.75	7.53
1997	7.97	8.23	6.53	7.77	7.97	6.77	7.51
1998	7.37	7.55	6.12	7.22	7.16	6.45	7.25
1999	7.24	7.16	6.00	7.00	6.88	6.05	7.16
2000	8.29	8.32	6.95	8.08	8.04	6.30	8.16
2001	7.56	7.41	6.19	7.16	6.85	6.12	7.49
2002	7.00	6.95	5.28	6.57	6.41	5.31	6.84
2003	6.08	6.01	4.37	5.54	5.48	4.44	5.92
2004	6.14	6.03	4.37	5.58	5.51	4.33	5.90

Source: FHA data warehouse, March 31, 2004 extract.