

**CHAPTER 4**

**MORTGAGE MARKETS AND THE  
ENTERPRISES IN 1997 AND EARLY 1998**

# MORTGAGE MARKETS AND THE ENTERPRISES IN 1997 AND EARLY 1998

Fannie Mae and Freddie Mac continued to prosper in 1997 and early 1998 as a strong housing market and reduced credit losses resulted in record profits. The record profits were driven by net interest income from growing mortgage investments. The Enterprises also experienced declining credit losses during 1997, reflecting an improving housing market, particularly in California. In addition, the credit risk profiles of the Enterprises' 1997 and early 1998 mortgage purchases benefited from a significant increase in the use of credit enhancements, principally pool insurance, to reduce the costs of future mortgage defaults.

While the Enterprises' market share benefited from a surge in refinance volumes early this year, increased competitive pressures from private security issuers and increased holdings of mortgages by depository institutions held down Enterprise market share during 1997. In an effort to maintain business growth, the Enterprises expanded the

range of their activities. In addition, the Enterprises continued to repurchase common stock shares last year rather than investing surplus funds at lower than target rates of return. Both Enterprises maintained sufficient capital to meet minimum regulatory requirements.

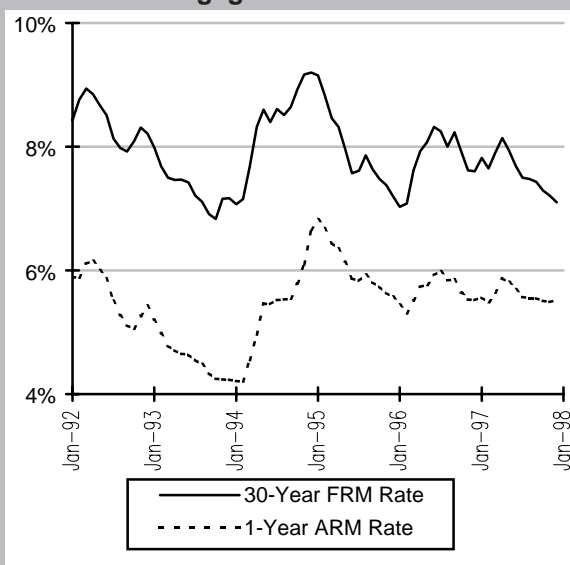
## Housing and Primary Mortgage Market Developments

### Record Housing and Mortgage Market Activity

Continued rapid growth in the economy coupled with low interest rates contributed to a banner year for housing and mortgage origination markets. Growth in gross domestic product was 3.6 percent in 1997, even stronger than the 3.3 percent pace in 1996. Unemployment remained low, while tame inflation and low interest rates kept consumer confidence high. Rising real wages, a strong stock market, and increases in house prices contributed to an estimated \$4 trillion rise in net household wealth during 1997.

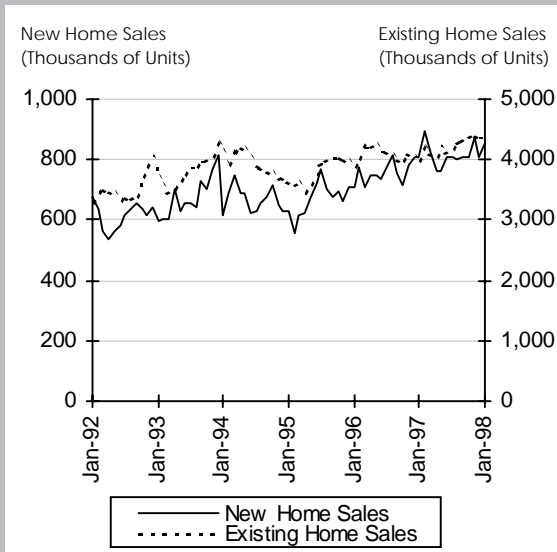
As a result of the favorable interest rate environment and unusually warm weather in many parts of the country, the primary housing activity indicators - housing starts and home sales - posted record performances in 1997. After peaking at just over 8 percent in April, the 30-year fixed mortgage rate declined to end 1997 with an average of 7.6 percent - its lowest annual level since 1993. The downward trend continued into 1998, with the 30-

**Figure 1**  
**Mortgage Interest Rates**



Source: Freddie Mac Primary Mortgage Market Survey

**Figure 2**  
New and Existing Single-Family Home Sales



Source: HUD

year rate at 7.1 percent by the end of the first quarter (See Figure 1). Housing starts maintained the 1996 rate of 1.5 million units in 1997, and then rose to an annual rate of 1.6 million units in the first quarter of this year.

The pace of single-family home sales tracked mortgage interest rates, declining briefly in the second quarter of last year as mortgage rates peaked, and then increasing through the first quarter of 1998 (See Figure 2). New single-family home sales increased 6 percent to 0.8 million units—the highest level since 1978—while existing single-family home sales reached a record 4.2 million sold during the year.

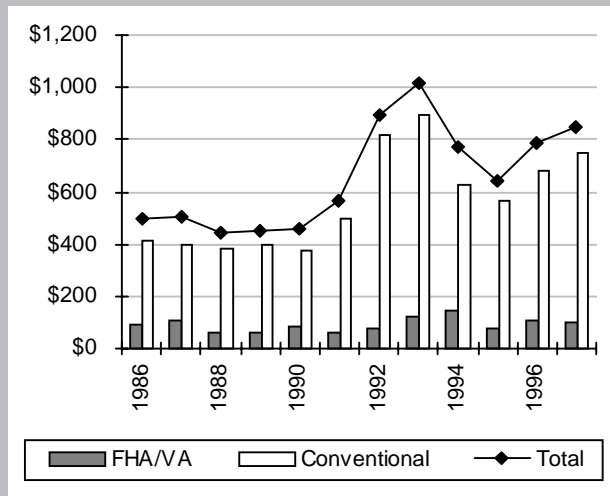
Single-family mortgage originations increased to an estimated \$834 billion in 1997 (See Figure 3), with the majority of the increase in conventional originations, while FHA and VA originations were relatively unchanged. Originations increased 6 percent from 1996 to the highest level since the refinance boom years of 1992 and 1993. Benefiting from a further decline in rates, origination volume in the first quarter of this

year surged to an estimated \$300 billion. This first quarter estimate exceeds the previous high of \$289 billion in the fourth quarter of 1993.

Record housing activity was accompanied by an increasing homeownership rate, rising from 65.4 percent of all households at year-end 1996 to a record rate of 65.7 percent by the end of 1997. Subsequently, the surge in home sales and originations in the first quarter of 1998 pushed the rate of homeownership to a new high of 65.9 percent of total households.

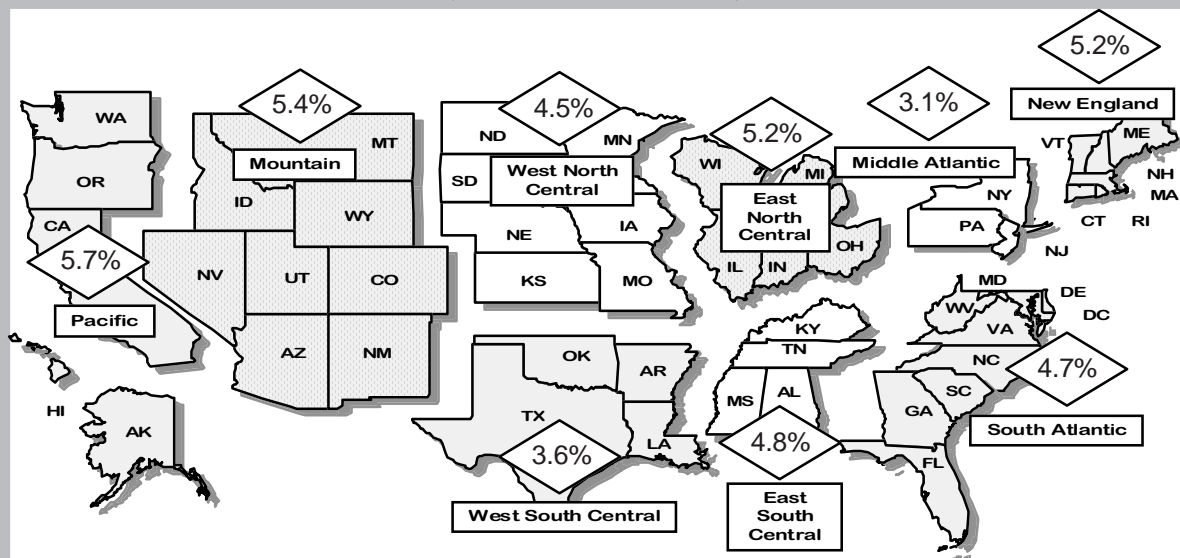
Single-family house prices, as measured by OFHEO's House Price Index (See Figure 4), increased an average of 4.7 percent in 1997, with the West Coast posting the highest gains.

**Figure 3**  
Originations of Single-Family Mortgages (\$ in Billions)



Source: HUD

**Figure 4**  
**One-Year Change in House Prices**  
**U.S. Census Divisions**  
**Fourth Quarter 1996 to Fourth Quarter 1997**



The 5.6 percent increase in the California market is especially notable after a series of declines dating back to 1995.

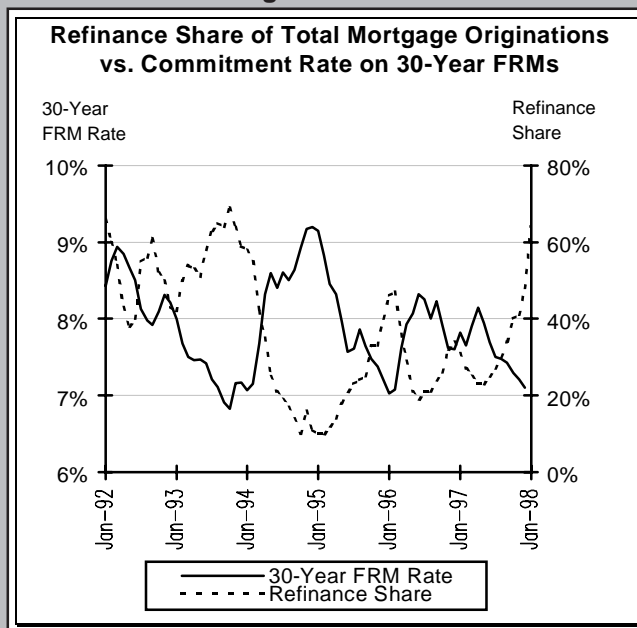
typically have more equity in the underlying property from principal repayments and house price appreciation. The level of borrower equity has proven

### **Credit Risk Profile of 1997 Originations Appears Relatively Unchanged**

The relative shares of purchase money mortgages and refinanced mortgages, as well as the mix of mortgage product type, affect the credit risk profile of mortgage loans. (A purchase money mortgage is a loan for the purchase of a single-family home. A refinance mortgage is a loan that refinances an existing mortgage.)

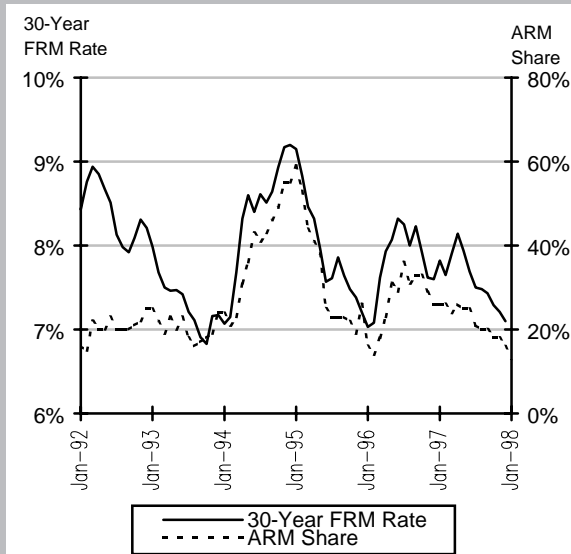
Refinance mortgage loans represented 31 percent of total single-family originations last year, down just one percentage point from 1996, although refinancing soared in early 1998 in response to lower interest rates (See Figure 5). Refinance mortgages typically have lower loan-to-value (LTV) ratios than purchase money mortgages because borrowers who refinance

**Figure 5**



Source: Freddie Mac Primary Mortgage Market Survey

**Figure 6**  
**ARM Share of Conventional Single-Family Loans vs. Commitment Rate on 30-Year FRMs**



Source: Freddie Mac and Federal Housing Finance Board

to be a key determinant in the incidence and severity of mortgage loan defaults. The average LTV ratio on conventional purchase money mortgages increased only slightly to 79.4 percent from 79.0 percent in 1996. The proportion of those loans originated with LTVs greater than 90 percent was unchanged from the prior year at 25 percent.

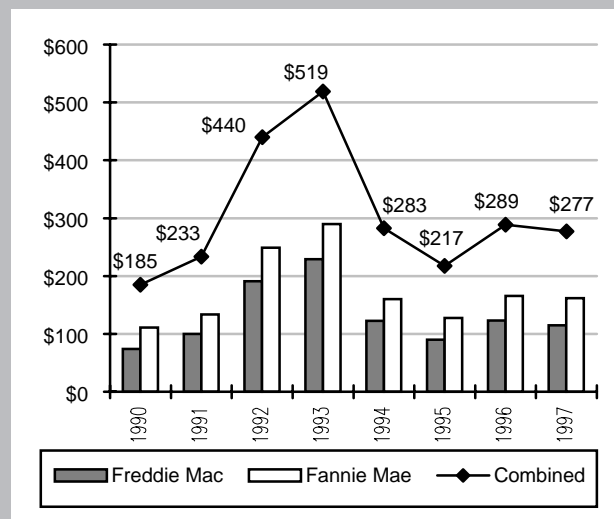
As mortgage rates declined throughout the second half of last year and the spread between fixed and adjustable mortgage interest rates narrowed, an increasing proportion of borrowers chose fixed-rate mortgage (FRM) loans. The adjustable-rate mortgage (ARM) share of conventional originations averaged 25 percent in the first half of the year -- slightly below the 1996 average -- then declined to a low of 13 percent early this year (See Figure 6). The decrease in the proportion of adjustable-rate loans has positive implications for the credit profile of 1997 and early 1998 originations. ARM loans

typically have a higher risk of default due to potential increases in borrower payment obligations when rates increase.

### Subprime Originations Surge

A surge in originations of subprime mortgage loans in 1997 was driven by a combination of easy access to capital markets for many subprime lenders and low interest rates that made debt consolidation refinancing attractive to borrowers. According to *Inside Mortgage Finance*, originations of these loans jumped to \$125 billion in 1997, an increase of 39 percent from 1996, outpacing the growth in overall originations. (*Inside Mortgage Finance* defines subprime originations as mortgage loans to borrowers with credit weaknesses. These loans include A-minus through D-rated borrowers.) Subprime loans represented 15 percent of total mortgage originations, up from 12 percent in 1996 and just 5 percent of all originations in 1994.

**Figure 7**  
**Enterprise Single-Family Mortgage Purchases (\$ in Billions)**



Source: Fannie Mae and Freddie Mac

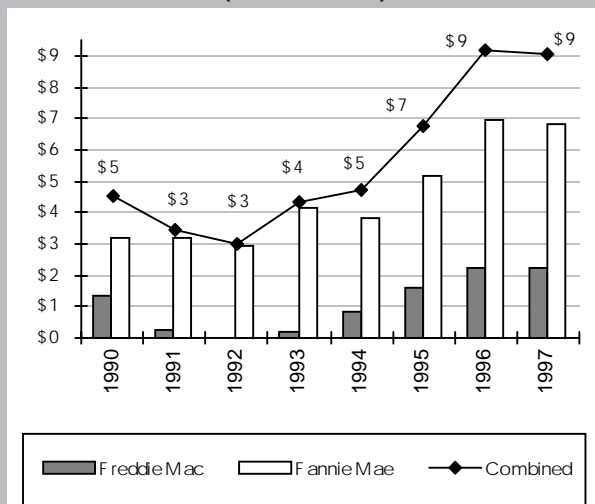
## Secondary Market Activities of the Enterprises

### Overall Secondary Mortgage Market Activity Declined in 1997

Despite robust origination activity during 1997, increased holdings of mortgage debt by depository institutions contributed to a decline in overall secondary market activity. The drop in sales of mortgages to the secondary market combined with increased competition from private label issuers posed challenges for the volume of secondary market activities for Fannie Mae and Freddie Mac.

Overall secondary mortgage market activity, as measured by the total rate of mortgage securitizations, declined slightly to an estimated 50 percent in 1997, and was well below the record 65 percent securitization rate for 1993. This decline occurred despite the increase in fixed-rate loans (and, conversely, the decrease in adjustable-rate

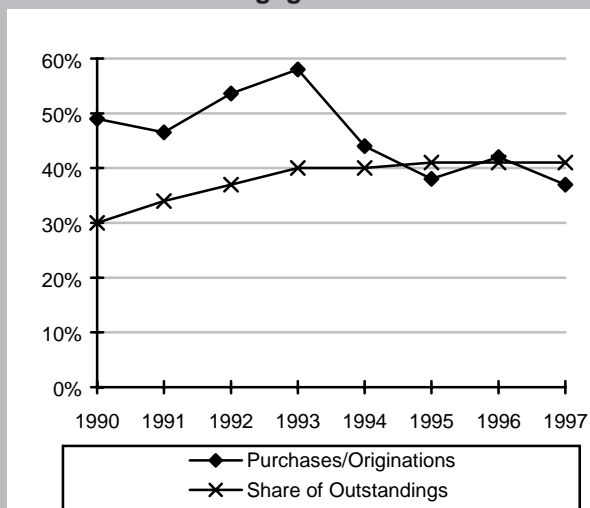
**Figure 8**  
Enterprise Multifamily Mortgage Purchases  
(\$ in Billions)



Source: Fannie Mae and Freddie Mac

loans) as a proportion of total originations. Typically, depository lending institutions prefer to securitize fixed-rate mortgage loans and hold adjustable-rate loans in their mortgage portfolios, because adjustable-rate loans better match the repricing characteristics of depository institution liabilities. However, as a result of strong capital positions and a decline in mortgage prepayment concerns, mortgage debt holdings of financial institutions increased at an annualized rate of 6 percent for the first three quarters of 1997 compared to 5 percent for 1996.

**Figure 9**  
Enterprise Share of Conventional Single-Family Mortgage Market

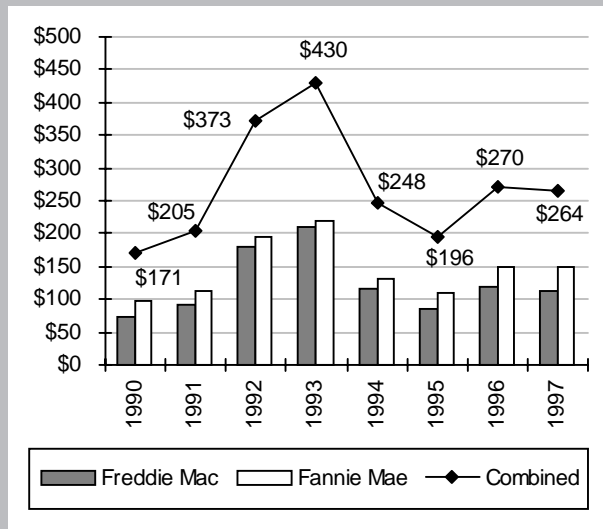


Source: Fannie Mae, Freddie Mac and Federal Reserve Board

The favorable credit environment that prevailed during 1997 reduced the credit risk premium for many private label issuers. Private label mortgage-backed security (MBS) issuance was \$64 billion in 1997 compared to \$39 billion the prior year. Private label issuance comprised 15 percent of all MBS issuances during the year, up from just 10 percent in 1996.



**Figure 10**  
Enterprise Single-Class MBS Issuance  
(\$ in Billions)

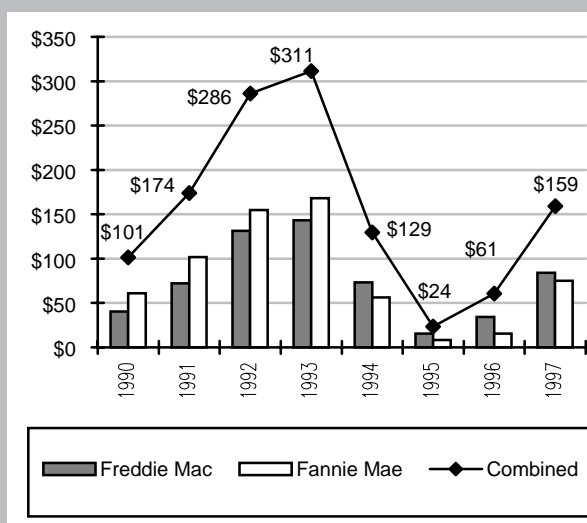


Source: Fannie Mae and Freddie Mac

## Enterprise Purchases and Issuances Decline

As a result of the increased competition for mortgage loans, Enterprise purchases and MBS issuances of single-family mortgage loans declined in 1997, while purchases of multifamily loans remained flat (See Figures 7 & 8). Single-family purchases com-

**Figure 11**  
Enterprise REMIC Issuances  
(\$ in Billions)



Source: Fannie Mae and Freddie Mac

prised 37 percent of total single-family conventional originations, down from their 42 percent market share of single-family conventional originations in 1996, and well below their 58 percent share in 1993 (See Figure 9). To maintain growth in business volumes in the face of declining market share, both Fannie Mae and Freddie Mac augmented their activities with purchases of non-current coupon, seasoned MBS.

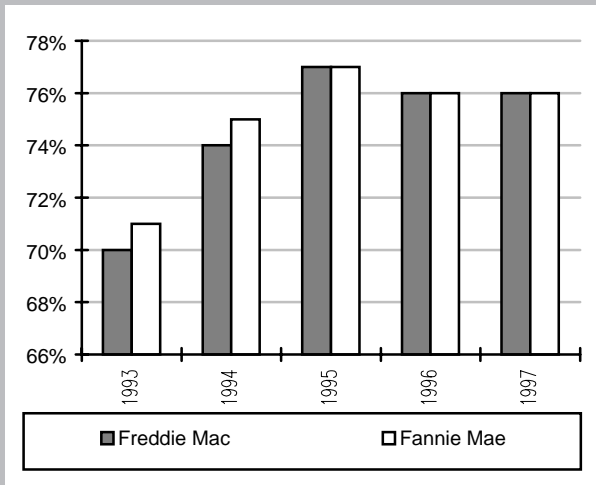
Enterprise issuances of MBS also declined slightly last year (See Figure 10). Resecuritization activity, however, driven by increased investor demand, was more than twice that of Real Estate Mortgage Investment Conduit (REMIC) issuances during 1996 (See Figure 11). In comparison, this represents a little more than half the REMIC volume posted in 1993.

## Fannie Mae and Freddie Mac Expand into Wider Range of Mortgage Products

Driven by competitive pressures for attractive mortgage investment opportunities coupled with their own double-digit growth targets, Freddie Mac and Fannie Mae have begun to expand into a wider range of mortgage products. Freddie Mac announced its intention to use its automated underwriting system, *Loan Prospector*, and risk-based pricing (the practice of pricing loans on the basis of projected costs) to expand into two markets: alternative-A mortgages, which are typically loans to low-risk borrowers with either reduced documentation or relaxed LTV requirements, and A-minus mortgages, which are loans with slightly more risk than traditional Enterprise mortgages.

In addition, Freddie Mac has participated in a small number of highly credit-enhanced structured transactions involving still higher risk mortgages - so called "B" and "C" credit grades. Freddie Mac has indicated that participation in these transactions might lead to improve-

**Figure 12**  
Average LTV on Enterprise Purchases



Source: Fannie Mae and Freddie Mac

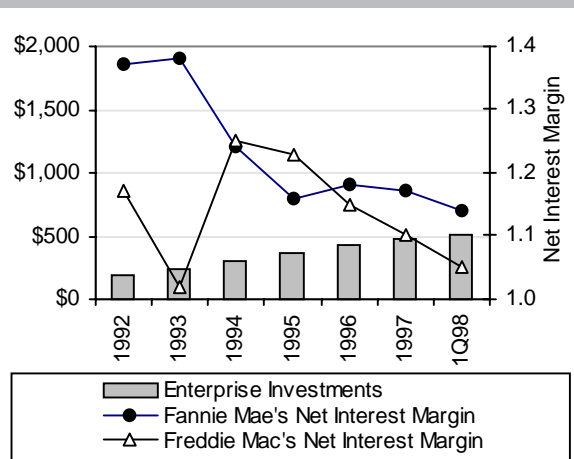
ments in underwriting and risk management systems for these types of loans. Other Freddie Mac initiatives in 1997 include pilot programs for assisted living rental housing loans, and single source loans for construction and permanent financing of selected new multifamily projects.

During the fourth quarter of 1997, Fannie Mae announced changes to its automated underwriting software, *Desktop Underwriter*, that will allow the Enterprise to become more competitive in the alternative-A mortgage market. In addition, the Enterprise initiated a pilot program that will allow purchases of higher risk loans through *Desktop Underwriter* with the placement of deeper private mortgage insurance. These loans would generally be classified as A-minus. Fannie Mae also is developing new product initiatives in the areas of manufactured housing, home improvement loans, low down payment mortgages, energy loans, and reverse mortgages.

### Increased Use of Credit Enhancements Improves Credit Risk Profile of Enterprise Purchases and Guarantees

The composition of purchases and guarantees by Fannie Mae and Freddie Mac reflected, in general, the composition of primary market originations during 1997. However, while 30-year fixed-rate loans continued to account for approximately 70 percent of total Enterprise purchases and guarantees, ARM product comprised an increased proportion of purchases and guarantees from 1996. ARMs accounted for approximately 11 percent of new volumes at Fannie Mae compared to 8 percent the prior year, and 8 percent at Freddie Mac compared to 7 percent in 1996. Despite the increase in ARMs as a proportion of new volume, heavy liquidations of this product during 1997 resulted in relatively little change in ARMs as a proportion of the Enterprises' total outstanding portfolios. Consistent with activity in the primary market, the proportion of 15-year loans purchased declined at both Enterprises and represented a decreasing percentage of their outstanding portfolios.

**Figure 13**  
Enterprise Mortgage Investments  
(\$ in Billions)



Source: Fannie Mae and Freddie Mac



The average LTV ratio on Enterprise single-family purchases and guarantees was unchanged in 1997 at 76 percent for Fannie Mae and Freddie Mac. The average LTV on new business has increased since 1993 due to the shift towards purchase money mortgages with higher LTVs relative to the heavy refinance environment in 1992 and 1993 (See **Figure 12**), but has also been higher than the average LTV prior to the refinance years. As a result of the increase in refinancings in the first quarter of 1998, the average LTV ratio on new purchases and guarantees declined for both Enterprises.

While the average LTV on Enterprise purchases and guarantees was unchanged in 1997, the significant increase in the use of credit enhancements (which shifts the primary default risk of the mortgages to the lender or a third party) improved the credit risk profile of these mortgages. The growth in credit enhancements was driven by the favorable economic environment and increased competition among mortgage insurers, making the acquisition of pool insurance against credit losses attractive for lenders, who received lower guarantee fee rates from the Enterprises in return. Pool insurance covers a large group of loans and augments the protection provided by primary mortgage insurance on individual loans.

A significant 40 percent of Freddie Mac's 1997 purchases and guarantees were credit-enhanced, compared to 11 percent in 1996. As a result, the proportion of Freddie Mac's total outstanding portfolio that is supported by credit enhancements other than primary mortgage insurance increased to 16 percent from 10 percent in 1996. At Fannie Mae, 24 percent of guarantees were credit-enhanced compared to 9 percent in 1996. Similarly, the percentage of Fannie Mae's total portfolio outstanding that is credit-enhanced increased to 13 percent from 10 percent a year ago. While pool insurance transactions reduce the Enterprises' exposure to default losses, they do not eliminate their exposure. Pool insurance provides coverage for expected losses, but not for extraordinary losses.

## Financial Condition of the Enterprises

### Earnings Exceed \$4 Billion in 1997, as Mortgage Investments Increase

Combined earnings for the Enterprises grew 13 percent to \$4.5 billion in 1997 (See **Tables A & B**). Net interest income for both Enterprises rose to \$5.9 billion in 1997, from \$5.3 billion in 1996. Net interest income was impacted mainly by higher levels of mortgage investments, as the net interest margin of each Enterprise fell (See **Figure 13**).<sup>1</sup>

The Enterprises increased their purchases of seasoned MBS, REMICs, and other non-current coupon MBS during most of 1997, as the spreads on current coupon mortgages (recent production mortgages) remained tight. Enterprise earnings growth has become heavily dependent on volume as competition and other factors have put pressure on their net interest margins.

A comparison of the Enterprises' two principal lines of business - portfolio investments and mortgage guarantees - indicates that net interest income continues to be the primary source of income for the Enterprises (See **Figure 14**).

The combined mortgage guarantee fee income for the Enterprises rose slightly by 3.6 percent during 1997. Fannie Mae drove the increase in guarantee fee income, as Freddie Mac's guarantee fee income did not change from its 1996 level of approximately \$1.1 billion. Fannie Mae's guarantee fee income increased to approximately \$1.3 billion in 1997, compared with \$1.2 billion in 1996. The increase in guarantee fee income resulted from a \$27 billion increase in average net Fannie Mae MBS outstanding and an increase of 0.3 basis points in the average guarantee fee rate. Higher guarantee fee mortgages rolled off Freddie Mac's books through liquidations and were replaced by lower guarantee fee mortgages. These lower

Table A

<b>FANNIE MAE SELECTED FINANCIAL HIGHLIGHTS (Dollars in Billions)</b>					
	<b>1998Q1 Annualized</b>	<b>1997</b>	<b>1996</b>	<b>1995</b>	<b>1994</b>
<b>EARNINGS PERFORMANCE:</b>					
Earnings (\$)	3.30	3.06	2.72	2.14	2.13
Net Interest Income (\$)	4.14	3.95	3.59	3.05	2.82
Guarantee Fees (\$)	1.28	1.27	1.20	1.09	1.08
Net Interest Margin (%) <sup>1</sup>	1.14	1.17	1.18	1.16	1.24
Average Guarantee Fee (bp) <sup>2</sup>	21.9	22.7	22.4	22.0	22.5
Return on Common Equity (%)	25.0	24.6	24.1	20.9	24.3
Dividend Payout Ratio (%) <sup>3</sup>	32.2	30.9	31.5	34.6	30.8
<b>BALANCE SHEET POSITION:</b>					
Total Assets (\$)	404.0	391.7	351.0	316.5	272.5
Outstanding Debt (\$)	381.1	369.8	331.3	299.2	257.2
Mortgages:					
Retained Mtge. Portfolio (\$)	327.2	316.6	286.5	252.9	220.8
MBS (excl. MBS in Portfolio) (\$)	593.3	579.1	548.2	513.2	486.3
Retained as % of Total Mtgs. in Portfolio and MBS (%)	35.5	35.3	34.3	33.0	31.2
Capital:					
Equity/Assets & MBS (%)	1.41	1.42	1.42	1.32	1.26
Equity & Reserves/ Assets & MBS (%) <sup>4</sup>	1.49	1.50	1.50	1.41	1.37

Source: Fannie Mae

1. Taxable equivalent net interest income divided by average earning assets.
2. Guarantee fees divided by average MBS outstanding net of MBS held in portfolio.
3. Common and preferred dividends divided by net income.
4. Effective 1/1/95, reserves exclude valuation allowance related to impaired loans pursuant to SFAS 114.

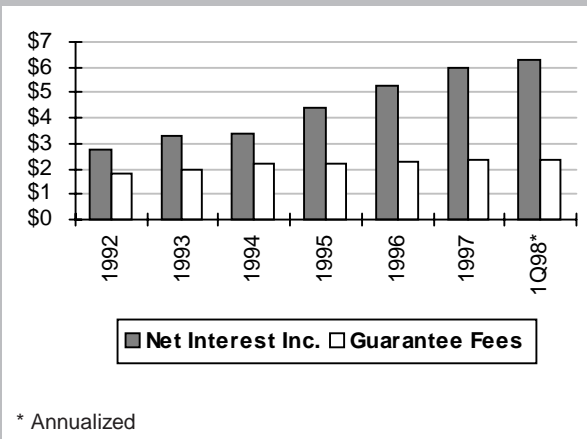
Table B

<b>FREDDIE MAC SELECTED FINANCIAL HIGHLIGHTS (Dollars in Billions)</b>					
	<b>1998Q1 Annualized</b>	<b>1997</b>	<b>1996</b>	<b>1995</b>	<b>1994</b>
<b>EARNINGS PERFORMANCE:</b>					
Earnings (\$)	1.57	1.40	1.24	1.09	0.98
Net Interest Income (\$) <sup>1,6</sup>	2.18	1.99	1.71	1.40	1.11
Guarantee Fees (\$) <sup>1</sup>	1.06	1.08	1.08	1.09	1.11
Net Interest Margin (%) <sup>1,2,6</sup>	1.05	1.07	1.15	1.23	1.25
Average Guarantee Fee (bp) <sup>3</sup>	22.4	22.9	23.4	23.8	24.4
Return on Common Equity (%)	22.7	23.1	22.6	22.1	23.3
Dividend Payout Ratio (%) <sup>4</sup>	27.0	26.4	26.0	25.8	25.7
<b>BALANCE SHEET POSITION:</b>					
Total Assets (\$)	226.6	194.6	173.9	137.2	106.2
Outstanding Debt (\$)	192.9	168.6	156.5	119.3	92.1
Mortgages:					
Retained Mtge. Portfolio (\$)	186.0	164.5	137.8	107.7	73.2
MBS(excl. MBS in Portfolio) (\$)	462.8	476.0	473.1	459.0	460.7
Retained as % of Total Mtgs. in Portfolio and MBS (%)	28.7	25.7	22.6	19.0	13.7
Capital:					
Equity/Assets & MBS (%)	1.19	1.12	1.04	0.98	0.91
Equity & Reserves/ Assets & MBS (%) <sup>5</sup>	1.29	1.21	1.14	1.09	1.04

Source: Freddie Mac

1. Effective 1/1/96, Freddie Mac reports guarantee fees on retained Freddie Mac MBS as guarantee fee income. Previously estimated and included in net interest income rather than fee income.
2. Taxable equivalent net interest income divided by average earning assets.
3. Guarantee fees divided by average MBS outstanding net of MBS held in portfolio.
4. Common and preferred dividends divided by net income.
5. Effective 1/1/95, reserves exclude valuation allowance related to impaired loans pursuant to SFAS 114.
6. Adjusted to exclude the formation of REIT subsidiaries during 1Q97, issuances of step-down preferred stock, and associated investment activities. Dividends paid by REIT subsidiaries are reported on Freddie Mac's Consolidated Statements of Income as Minority interest in earnings of real estate investment trusts."

**Figure 14**  
Enterprise Primary Sources of Revenue  
(\$ in Billions)



Source: Fannie Mae and Freddie Mac

guarantee fee mortgages were the result of increased purchases of credit-enhanced mortgages by Freddie Mac.

### **Enterprise Credit Losses Decline, while Delinquencies Remain Low**

Credit losses for the Enterprises (charge-offs plus foreclosure expenses) fell approximately 17 percent in 1997. The drop in credit losses was primarily due to an improving housing market (especially in California) that reduced foreclosure expenses for the Enterprises.

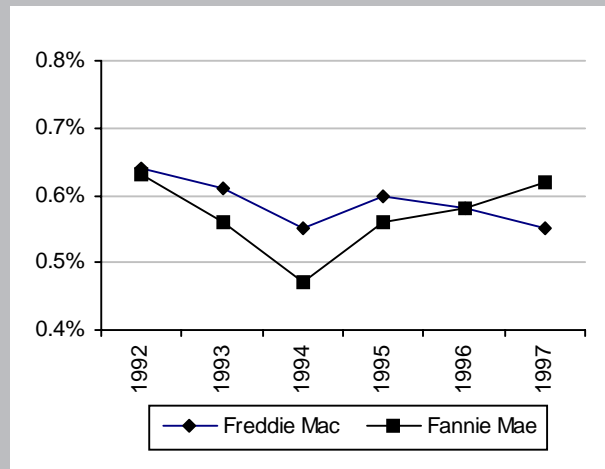
Freddie Mac's single-family delinquency rate fell to 0.55 percent during the year, while Fannie Mae's rose to 0.62 percent (See Figure 15). While this was the third consecutive annual increase for Fannie Mae, the rate was still less than half as large as it was in the mid-1980s.

Losses in future years may benefit from actions taken by the Enterprises in recent years. Three years ago, both Fannie Mae and Freddie Mac raised private mortgage insurance requirements on high LTV loans. Some of those loans will soon begin to enter their peak default years.

Also, the Enterprises continue to implement new loss mitigation initiatives that appear to have worked well in the current favorable housing market. Last year, Freddie Mac introduced a new delinquency management tool called *Early Indicator*, created through a strategic alliance with Mortgage Guaranty Insurance Corp. *Early Indicator* is designed to determine the probability of delinquent loans continuing through to foreclosure. Fannie Mae introduced its own delinquency management tool, *Risk Profiler*, in 1997. *Risk Profiler* provides servicers with monthly data on both performing and nonperforming loans to assist them in identifying and focusing on loans which have the greatest foreclosure potential.

Multifamily delinquency rates fell for both Enterprises in 1997. Freddie Mac's multifamily delinquency rate dropped to 0.96 percent in 1997, from 1.96 percent in 1996. Fannie Mae's multifamily delinquency rate declined to a very low of 0.37 percent in 1997, down from 0.68 percent in 1996. Freddie Mac continues to benefit from the reduction of poor credit quality multifamily loans purchased prior to 1991. Fannie Mae and Freddie Mac's decline in multifamily delinquency

**Figure 15**  
Single-Family Delinquency Rates  
(Loans Delinquent 90 Days or More  
or in Foreclosure)



Source: Fannie Mae and Freddie Mac

rates also can be attributed to lower vacancy rates and increasing market rents in various parts of the country.

### **Year 2000 Costs Add to Administrative Expenses**

Administrative expenses increased more rapidly than the combined Enterprises' revenue growth rate of 10 percent in 1997. Administrative expenses increased 14 percent at Fannie Mae and 13 percent at Freddie Mac. Higher administrative expenses were partly driven by increased costs associated with the Year 2000 date change issue. In particular, the Enterprises had to pay a premium to retain systems professionals due to the industry-wide shortage of skillful systems professionals to effect the Year 2000 date change.

Fannie Mae is planning to have all of its major systems Year 2000 compliant by December 31, 1998. In addition, Fannie Mae expects that all of the systems of its lenders (sellers and servicers) will be Year 2000 compliant by March 31, 1999. Freddie Mac also plans to have all of its systems ready for the Year 2000 date change by the end of 1998. Freddie Mac is requiring its seller servicers to be Year 2000 compliant by December 31, 1998.

Both Enterprises are participating in the Mortgage Bankers Association Year 2000 Inter-Industry Work Group. The group collects general Year 2000 information, identifies risks specific to the industry, shares ideas on topics such as effective testing plans and contingencies, and serves as an industry resource on Year 2000 planning.

### **Refinance Activity Affects First Quarter 1998 Enterprise Earnings**

The Enterprises experienced double-digit earnings growth during the first quarter of 1998; Fannie Mae's earnings were \$824 million, and Freddie Mac earned \$393 million. Although mortgage

investments increased during the quarter, growth in earnings was mainly attributable to continued declines in credit losses and gains in other income.

The decline in interest rates from September 1997 through January 1998 raised MBS investor prepayment fears during first quarter 1998. As investors began to sell their MBS, prices became more attractive to the Enterprises because they are able to hedge prepayment risks more cheaply than most other investors. Fannie Mae experienced growth in its mortgage investment portfolio at an annualized rate of 13.3 percent during the first quarter of 1998. Freddie Mac increased its retained portfolio by a record \$22 billion during the quarter.

Although mortgage investments rose at the Enterprises during the quarter, net interest income increased only marginally as both Enterprises experienced compression in their net interest margins. Fannie Mae's net interest margin fell 3 basis points to 1.14 percent from fourth quarter 1997, while Freddie Mac's net interest margin dropped 5 basis points to 1.05 percent. The Enterprises' decline in net interest margins was due to incomplete hedging of prepayment risk for previously acquired mortgages and narrower spreads on new mortgage assets acquired during the first quarter of 1998.

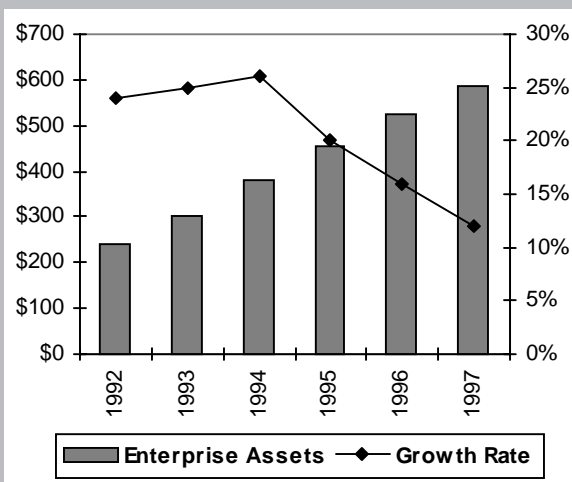
Fannie Mae's credit losses dropped approximately 8 percent from fourth quarter 1997, while Freddie Mac's credit losses fell 15 percent. Both Enterprises experienced gains in other income (res securitization fees, MBS-related fees, and gains or losses on the sale of securities). Fannie Mae's other income rose \$26 million, while Freddie Mac's increased \$8 million.

### **The Enterprises' Asset Growth Rate Continues to Decline**

Total assets for the Enterprises increased 12 percent to \$586 billion during 1997, in spite of a generally lower supply of attractive mortgage investment



**Figure 16**  
**Combined Enterprise Assets and Growth Rate**  
 (\$ in Billions)



Source: Fannie Mae and Freddie Mac

opportunities. The decline in supply of attractive mortgage investments was due to tight mortgage-to-debt spreads throughout the year.

Although total Enterprise assets grew 12 percent in 1997, the rate of asset growth declined for the third consecutive year (See Figure 16). As the Enterprises continue to grow, it has become more difficult to increase asset size at previous growth rates. Asset growth has become more important for the Enterprises as they continue to experience declining margins. In an effort to address asset growth and margin pressures, the Enterprises are increasing their purchases in a wider range of mortgage products.

The average balance of non-mortgage investments increased steadily at Fannie Mae to \$68 billion during fourth quarter 1997, up from \$60 billion during the first quarter of 1997 (See Figure 17). Freddie Mac's non-mortgage investments fell \$1 billion over the same period to an average balance of \$34 billion during fourth quarter 1997. However, Freddie Mac's non-mortgage investment activity was more volatile than Fannie Mae's during 1997. Examples of non-mortgage investments for the Enterprises include U.S. Treasury and agency

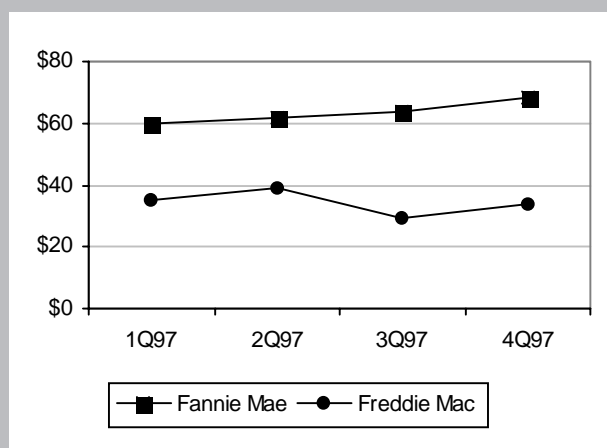
securities, federal funds, repurchase agreements, commercial paper, municipal bonds, corporate and Eurodollar securities, and asset-backed securities.<sup>2</sup>

### **As Debt Grows, Enterprises Expand Funding Sources and Seek New Types of Funding Vehicles**

The Enterprises' total combined debt outstanding reached \$538 billion in 1997, an increase of 10 percent from 1996. While most of the Enterprises' debt outstanding is long-term (See Figure 18), Freddie Mac's long-term debt was callable or had downward rate adjustment features in 1997. Forty-six percent of Fannie Mae's long-term debt outstanding in 1997 was callable. Callable debt is attractive to the Enterprises because it reduces the risk associated with the prepayment uncertainty of their mortgage-related assets.

Debt issuance also increased for the Enterprises in 1997. Debt issuance increased by 43 percent at Freddie Mac and 18 percent at Fannie Mae. Heavy debt issuance continued in first quarter 1998 following the exercise of call options on high-

**Figure 17**  
**Enterprise Average Non-Mortgage Investments**  
 (\$ in Billions)



Source: Fannie Mae and Freddie Mac



coupon debt. Fannie Mae called \$20 billion during first quarter 1998, compared with \$9 billion in fourth quarter 1997. Freddie Mac called \$14 billion during first quarter 1998, up from the fourth quarter 1997 call amount of approximately \$6 billion.

The Enterprises' increasing demands for debt have caused Freddie Mac and Fannie Mae to expand their funding sources and seek new types of funding vehicles. The primary funding source for the Enterprises continues to be institutional investors. Fannie Mae's global debt outstanding increased 53 percent to \$21.8 billion, while Freddie Mac issued \$3.5 billion of debt in the international markets, including \$700 million of debt securities denominated in foreign currencies. The expansion of funding sources improves the Enterprises' potential for lower cost funding.

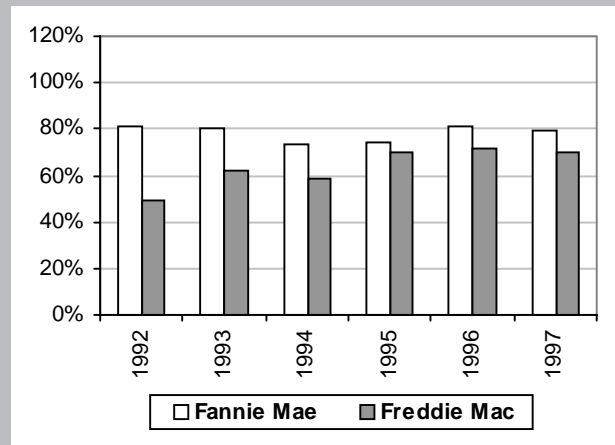
In addition to expanding their sources of funds, the Enterprises are also exploring new debt programs. Fannie Mae and Freddie Mac both introduced new debt programs during first quarter 1998 (See Box 3). Fannie Mae's new debt program is called *Benchmark Notes* and Freddie Mac's is called *Reference Notes*. Both programs will be used by the Enterprises respectively to potentially reduce

their funding costs by taking advantage of market opportunities created by the decline in Treasury funding demand. Treasury funding needs have tapered off due to the shift from a federal budget deficit to a surplus. The reduction in supply of new Treasury securities has opened a window of opportunity for other instruments with Treasury-like qualities such as liquidity and agency status.

### Enterprises Meet Regulatory Minimum Capital Requirements, while Exercising Capital Management

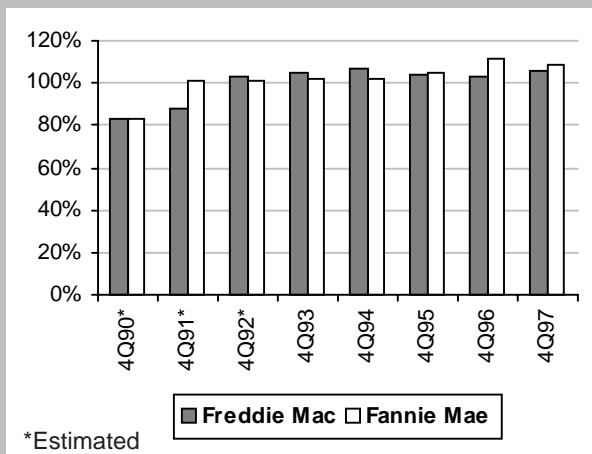
The Enterprises exceeded their regulatory minimum capital requirements by approximately \$1.5 billion in 1997. Fannie Mae's minimum capital requirement was \$12.7 billion at year-end 1997. The Enterprise held surplus capital of approximately \$1.1 billion (See Figure 19). Freddie Mac held \$440 million above its minimum capital requirement of nearly \$7.1 billion. The Enterprises were required to hold \$1.8 billion

**Figure 18**  
Effective Long-Term Debt as a Percent of Total Debt



Source: Fannie Mae and Freddie Mac

**Figure 19**  
Enterprise Core Capital as a Percent of Minimum Capital Requirements



Source: OFHEO

more in regulatory capital at year-end 1997 compared with 1996, due to higher levels of assets.

The Enterprises were engaged in active capital management during 1997, as attractive mortgage investment opportunities were limited. In particular, the Enterprises repurchased shares of their common stock to reduce their levels of capital in excess of internal and regulatory requirements. Freddie Mac repurchased \$557 million in common stock, while Fannie Mae repurchased \$1.3 million in common stock. The board of directors at each Enterprise authorized the return of capital to shareholders as an alternative to deploying capital in assets at lower than target rates of return.

The repurchasing of common stock shares has a positive impact on earnings per share (net earnings divided by average shares of common stock outstanding) because it lowers the number of shares outstanding. Both Enterprises experienced double-digit increases in their earnings per share during 1997.

During 1997, Freddie Mac redeemed a \$563 million preferred stock issue and replaced it with \$600 million of lower cost preferred stock. Freddie Mac's refinancing of capital at a lower dividend rate is expected to generate annual savings of \$10 million. The Enterprise also issued an additional \$150 million of preferred stock in 1997.

<sup>1</sup> Freddie Mac's figures on net interest income, guarantee fees, and net interest margin are adjusted to shift guarantee fees on portfolio holdings of its MBS from guarantee fee income as reported to net interest income. This adjustment makes the data comparable to Fannie Mae's. In addition, Freddie Mac's figures have been adjusted to exclude the formation of REIT subsidiaries established during first quarter 1997.

<sup>2</sup> The Department of Housing and Urban Development (HUD) published an advanced notice of proposed rulemaking in December 1997 to seek comments regarding possible regulations concerning non-mortgage investments by the Enterprises. HUD seeks to make certain that in carrying out its regulatory responsibilities with respect to the Enterprises, the Department has the necessary tools to ascertain and ensure that these non-mortgage investments are consistent with the Enterprises' charter purposes.

## Benchmark and Reference Notes

In December 1997, Fannie Mae announced a new issuance initiative called *Benchmark Notes*. The notes, issued through the Enterprise's global debt facility, are bullet instruments designed to serve as a liquidity alternative for investors at a time of reduced government borrowing.

Benchmark Notes	3-year	5-year	5-year	10-year (Reopened by \$750 million on March 3)	10-year
Size	\$4 billion	\$4 billion	\$4 billion	\$4.75 billion	\$3 Billion
Interest Rate	5.625%	5.25%	5.75%	5.75%	6.00%
Issue Date	Mar 6, 1998	Jan 15, 1998	Apr 6, 1998	Feb 5, 1998	May 11, 1998
Price at Issue	99.779	99.662	99.723	99.659	99.954
Maturity Date	Mar 15, 2001	Jan 15, 2003	Apr 15, 2003	Feb 15, 2008	May 15, 2008

Fannie Mae announced that as much as \$40 billion of *Benchmark Notes* could be issued in 1998, which would account for approximately half of its long-term debt issuance this year. Through May, the Enterprise had issued \$19.75 billion. There have been four issues of \$4 billion each, one of which was reopened for an additional \$750 million, and one \$3 billion issue.

Fannie Mae states that the minimum new issue size for the *Benchmark Notes* is \$2 billion, and the minimum size for a reopening is \$500 million. The average par amount of Fannie Mae's bullet issues in 1997 was only \$166.5 million. Thus, there is substantially more liquidity in the *Benchmark Notes* than in previous bullet issues.

On April 9, 1998, Freddie Mac issued its first *Reference Notes*, issued under terms of its global bond program, with proceeds of \$5 billion. The 10-year *Reference Note* have traded within two basis points in yield to the 10-year *Benchmark Notes*. Subsequent offerings will have a minimum size of \$4 billion. Freddie Mac sold approximately \$15 billion of bullet debt in 1997 with maturities in the 5- to 10-year range.

<i>Reference Notes</i>	<i>10-year</i>
Size	\$5 billion
Interest Rate	5.75%
Issue Date	Apr 9, 1998
Price at Issue	99.256
Maturity Date	Apr 15, 2008

For the *Benchmark* and *Reference Notes*, spreads over U.S. Treasury issues have been considerably tighter than for the Enterprises' other bullet issues. Total funding costs are also reduced by the fact that underwriting fees, as a percentage of the amount of debt issued, have been less than the fees for issuing smaller bullet bonds.

In addition to the mere size of the *Benchmark* and *Reference Notes*, liquidity for these bonds has been enhanced by the visibility of pricing. This enhanced liquidity has enabled traders to use *Benchmark* and *Reference Notes* as hedge vehicles, since these bonds can be borrowed in the security repurchase market.