



Accounting Concerns at Fannie Mae

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Introduction

- Fannie Mae's regulatory core capital measure is inadequate to measure the underlying capital adequacy of the business due to reliance on the distorting effects of GAAP accounting for derivatives.
- Fannie Mae has not earned as much in an economic sense in the last three years as it has reported on a GAAP accounting basis. The Company has used GAAP accounting rules for derivatives to smooth out economic losses it has suffered due to portfolio duration mismatches.
- The Company has taken a seemingly small impairment on its portfolio of manufactured housing securities. OFHEO announced it is examining Fannie Mae's accounting for impairments last week.



Fannie Mae's Businesses

Credit Guaranty

- Buys mortgages and resells them as Fannie Mae mortgage-backed securities (MBS).
- Earns annual fees of roughly 0.2% of mortgage value, while current annual credit loss rates are 0.006%.
- Fannie Mae faces credit risk, though minor, but no interest rate risk.

Portfolio Business

- Buys mortgages and mortgage-related securities and retains them.
- Constantly rebalances its portfolio to match the durations of its assets and liabilities.
- As interest rates move, the duration of its assets changes, so it adjusts the value of the corresponding liability.
- Fannie Mae faces little credit risk, but tremendous interest rate risk.



What is Duration?

- Duration determines how sensitive a bond is to changes in interest rates.
- The price of a 30-year bond goes up more if interest rates go down by 1% than does the price of a 2-year bond because the 30-year bond has a longer duration.
- A simple example ignoring convexity: Assume Fannie Mae has \$100 million in mortgages (asset) with a duration of 5 years, and \$100 million in debt (liability) with a duration of 6 years. Fannie Mae has a -12 month duration gap.
 - If interest rates drop by 1%, the mortgage value will rise to \$105 million, while the value of the debt will rise to \$106 million.
 - ***In this example, Fannie Mae has a \$1 million economic loss, which is not reflected in its earnings or its regulatory core capital.***



SFAS No. 133

Accounting for Derivatives and Hedging Activities

- Fannie Mae implemented SFAS No. 133 at the beginning of 2001.
- SFAS No. 133 established three types of classifications for derivatives with differing accounting treatments:
 - Fair value hedge These offset gains and losses of the value of the hedged asset. There is no effect on income or Accumulated Other Comprehensive Income (AOCI). (16% of Fannie Mae's derivatives)
 - Cash flow hedge These hedge the cash flows that a hedged asset will pay over its life. They are marked to market quarterly but their changes in value affect AOCI, *and not reported earnings*. If they are closed before expiration, the gain or loss is amortized into earnings over the life of the forecasted hedged transaction. (84% of Fannie Mae's derivatives)
 - No-hedge designation Hedge accounting is not elected. Derivative changes affect income immediately. (0% of Fannie Mae's derivatives)



Example: Assuming No Prepayment

Assumes a 5-year 6% \$100 million face value mortgage asset funded with:

- \$100 million of 5-year 5% debt, or
- Short-term debt with a \$100 million notional amount 5-year 5% pay-fixed swap

<i>Year:</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>TOTAL</i>
Interest Income	6	6	6	6	6	30
Interest Expense	(5)	(5)	(5)	(5)	(5)	(25)
Net Income:	1	1	1	1	1	5



Example: Rates Fall, Mortgage Prepays, & Debt Is Retired

1) Debt repurchased at 103, with the loss impacting earnings immediately:

<i>Year:</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>TOTAL</i>
Interest income	6	6				12
Interest expense	(5)	(5)				(10)
Debt extinguishment			(3)			(3)
Net Income	1	1	(3)	0	0	(1)

2) Swap is terminated (cash flow hedge):

<i>Year:</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>TOTAL</i>
Interest income	6	6				12
Interest expense	(5)	(5)	(1)	(1)	(1)	(13)
Net Income:	1	1	(1)	(1)	(1)	(1)
OCI:			(2)	1	1	0
Comprehensive Inc.	1	1	(3)	0	0	(1)

Methods of Shortening the Duration of Liabilities

- When Fannie's mortgage assets prepay and their durations shorten, the Company has a **choice** of four *economically identical* transactions it can use to shorten the duration of its liabilities. Assume the same parameters as our previous example.
 - Repurchase debt. The Company repurchases the debt for 103 and immediately recognizes a \$3 million loss in both income and core capital.
 - Close a pay-fixed swap. The Company closes a pay-fixed swap. This is considered a closed cash flow hedge in Fannie's new disclosure. *The \$3 million loss stays in AOCI and is amortized into income over the remaining 3 years.*



Methods of Shortening the Duration of Liabilities

- Open a new receive-fixed swap to offset an open pay-fixed swap.
The Company opens a new receive-fixed swap to economically close a pay-fixed swap. This is considered an open cash flow hedge in Fannie's new disclosure. *The \$3 million loss stays in AOCI and is amortized into income over the remaining 3 years.*
- Open a new receive-fixed swap to offset a debt position. The Company opens a new receive-fixed swap to economically retire outstanding debt. This is considered a fair value hedge. *There is no effect on AOCI and the \$3 million loss is amortized into income over the remaining 3 years.*



Fannie Mae Has Relied Heavily on Closing Derivative Positions and Deferring Losses, Rather Than on Debt Repurchases to Immediately Recognize Them

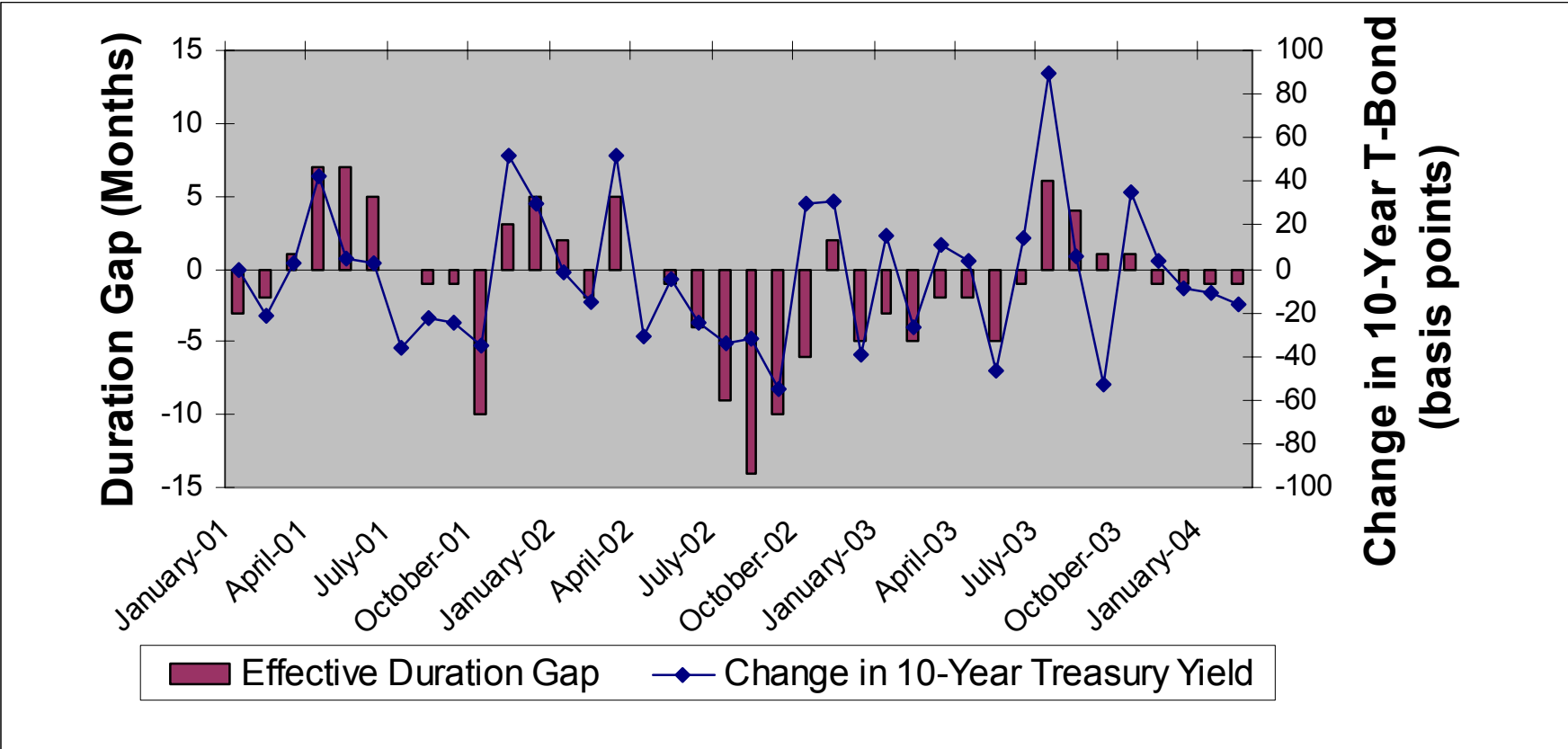
(\$ billions)	2003	2002	2001
Receive-fixed Swap Cash Flow Hedge Notional Amounts	149	23	N/A
Receive-fixed Swap Fair Value Hedge Notional Amounts	54	30	N/A

(\$ billions)	2003	2002	2001
Maturities, Reported at Year-End	58	80	31
Expected Maturities at Beginning of Year	26	26	13
<i>CFRA estimated Positions Closed During the Year</i>	32	54	18

(\$ billions, except %)	2003	2002	2001
Debt Repurchases	20	8	9
Losses Recognized on Debt Repurchases	2.3	0.7	0.5
Losses as % of Repurchased Amount	11%	9%	6%



Fannie Mae Had Large Duration Gaps in Periods of Rapidly Declining Interest Rates



What is Regulatory Core Capital?

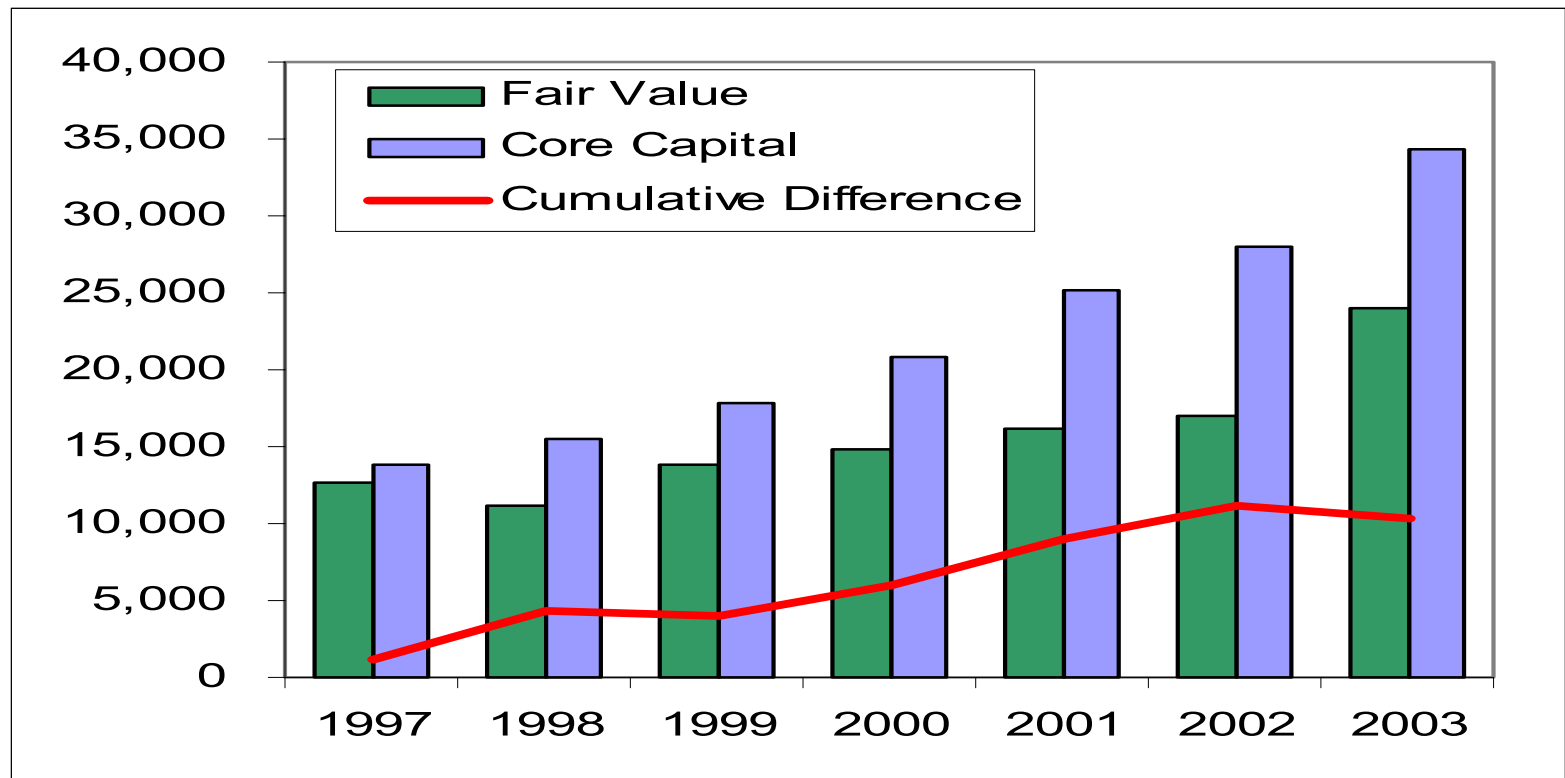
- Fannie Mae's regulatory core capital encompasses its GAAP shareholder equity *excluding AOCI*.
- The standard was developed in 1992, before AOCI or accounting for derivatives had ever been developed.
- *Fannie Mae can manipulate its current core capital measure through its choice of whether to repurchase debt or close derivative positions.*

(\$ billions)	2003	2002	2001
Core Capital	34.4	28.1	25.2
Required Minimum Capital	31.5	27.2	24.2



Fair Value of Net Assets Has Lagged Core Capital

- Fannie Mae's fair value of net assets was the only measure to pick up the portfolio losses the Company suffered due to its wide duration gap.

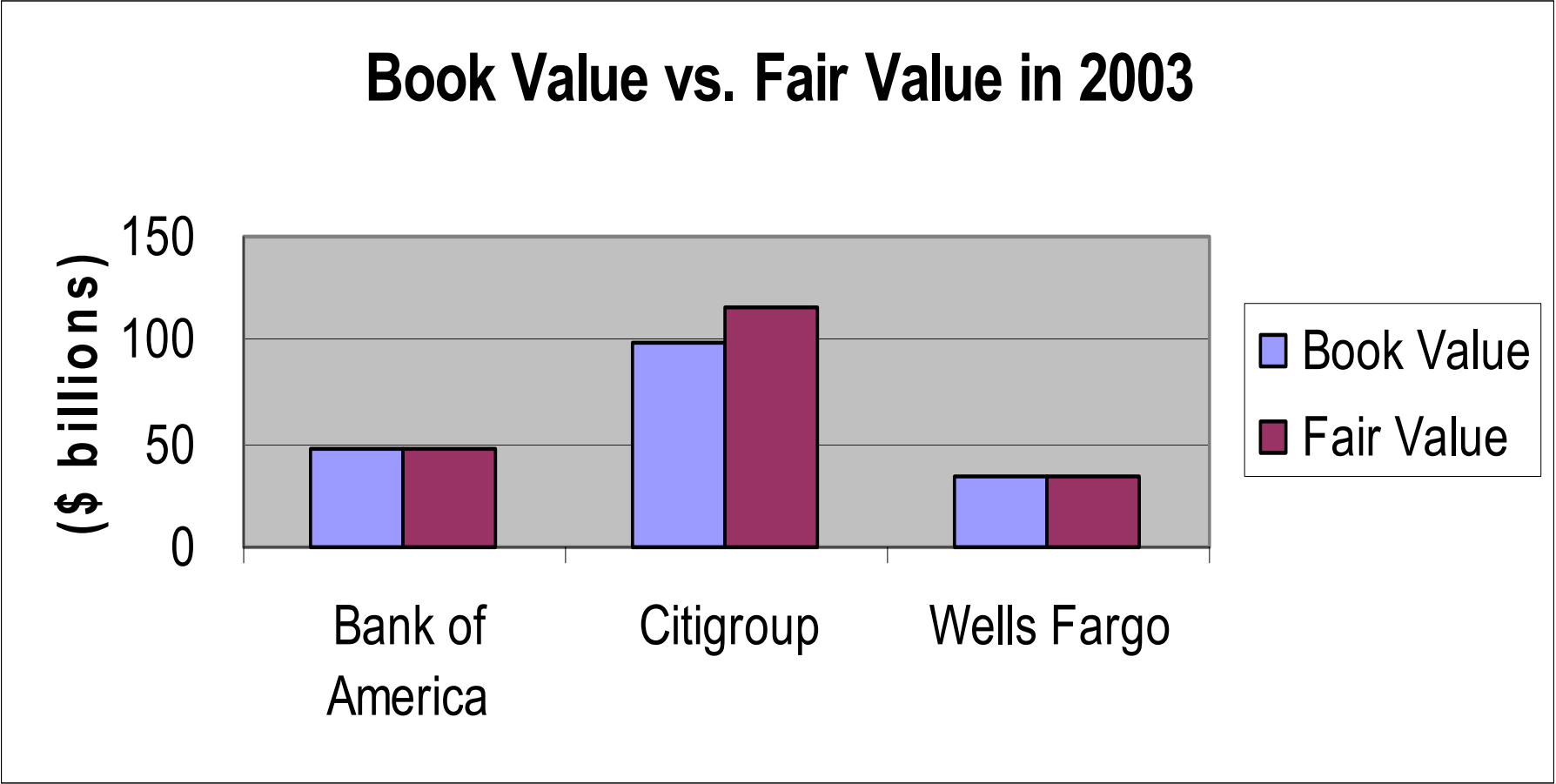


Why Fair Value Matters

- Generally recognized as the appropriate way to value portfolios of financial assets such as mutual funds.
- Measure of solvency.
- Removes distorting effects of hedge accounting.
- Only way to immediately see portfolio losses. Example: In our original duration mismatch example, if rates drop by 1%, the asset is now worth 105 and the liability is now worth 106. Even if Fannie Mae does not close the liability, it has suffered a loss that will negatively impact GAAP earnings over the liability's remaining life. The mortgage asset will prepay and be replaced by a lower-yielding asset, while the Company will be stuck with the higher interest rate liability.



Fair Value and Book Value of Net Assets at Other Large Financial Institutions Not an Issue



Flaws in Current Regulatory Core Capital Measure

- It is subject to manipulation by accounting choices made by Fannie Mae, such as to repurchase debt or close a derivative position.
- It does not measure solvency.
- It relies too heavily on GAAP net income while ignoring GAAP comprehensive income.
- It does not pick up on economic losses Fannie Mae suffers in its portfolio when they happen.

The other flaws in the current regulatory structure are detailed very eloquently in a letter the OFHEO Director sent to Sen. Richard Shelby endorsing his bill for a new regulator dated 3/31.



Manufactured Housing Issues

- Fannie Mae had an \$8 billion portfolio of manufactured housing backed securities at the end of 2003. Manufactured housing-related credits have performed very poorly in the last three years.
- All of Fannie Mae's securities were rated AAA when purchased, but now 24% are rated below investment grade. Fannie Mae has taken only \$206 million in impairment charges, or 2.5% of the portfolio. The FHLB-New York sold a portfolio of similar securities at an 18% loss in September.
- The OFHEO issued the following statement on 4/1: "OFHEO's investigation... involves Fannie Mae's accounting for impairments. Our review of this particular matter, while not concluded, has led to concerns that Fannie Mae may not have applied the proper accounting guidance in this area. This could affect not only the company's manufactured housing portfolio but other assets as well. The impact of this possible misapplication of GAAP on Fannie Mae's financial statements is under examination."



