



MEMORANDUM

To: Thomas Fay, VP for Liabilities, Derivatives & LIP
From: Pratima Maheshwari, Senior Financial Engineer
Lori Molaroni-Alvin, Senior Financial Engineer
cc: Alan Goldblatt, Director, Corporate Finance
Greg Cross, Director, Accounting Policy
Date: 10/31/2008
Re: Valuation of \$1 billion Senior Preferred Stock Issued to the U.S. Treasury

Executive Summary

We recommend using the liquidation preference of the Senior Preferred Stock as the basis for calculating the fair value. Our independent third party valuation analysis agrees with the recommended approach.

- Based on the liquidation preference of \$1,000 per share as of September 7th, 2008 (at inception), and 1,000,000 shares outstanding, we estimate the fair value at inception to be **\$1 billion**.
- As of September 30, 2008, the liquidation preference remains at \$1,000 per share, and therefore we estimate the current fair value to be unchanged at **\$1 billion**.

Senior Preferred Stock Characteristics

The Senior Preferred Stock has the following unique characteristics:

- It was issued to Treasury in consideration of the commitment from Treasury to provide funds to us of up to \$100 billion under certain circumstances. As such, the Senior Preferred Stock transaction was a non-cash transaction.
- It ranks prior to common stock and all other outstanding preferred stock, as to both dividends and rights upon liquidation;
- It has no par value but has a liquidation preference equal to \$1,000 per share;
- It has no credit ratings;
- It has an annual dividend rate of 10%, which could increase to 12% if not paid in cash.

Fannie Mae Valuation Analysis

We consider the liquidation preference to be appropriate and reasonable for estimating the fair value of Senior Preferred Stock for the following reasons:

- ***Redemption Value:*** In the event of redemption, Fannie Mae would have to pay the then-current liquidation preference in order to redeem the Senior Preferred Stock. As such, the current fair value estimate of \$1 billion is appropriate based on the current liquidation preference of \$1,000 per share.
- ***Lack of Market Data:*** An observable market price for similar transactions with similar characteristics (other than Freddie Mac) does not exist, therefore making it difficult to utilize market data, if any, for estimating fair value with reasonable accuracy.

Valuation Approach – Alternatives Considered

- We considered the alternative approach of estimating the value of the Senior Preferred Stock by adjusting it for the estimated value of the Warrants. However, this approach was considered inappropriate since the two instruments are not linked. The Warrants can be exercised independent of the Senior Preferred Stock.
- We also considered if there were comparable market benchmarks for the 10% dividend rate to estimate a fair value of the Senior Preferred Stock. However, as stated earlier, the Senior Preferred Stock has unique characteristics and as such an observable and comparable market dividend rate is not available (except for the US Treasury's Senior Preferred Stock Agreement with Freddie Mac dated September 7, 2008).
- We concluded that given the lack of reasonable assumptions, a modeling of the cash flows would be inappropriate for valuing the Senior Preferred Stock.

Conclusion

Based on our analysis, Fannie Mae estimates that at inception, the fair value of the Senior Preferred Stock was \$1 billion as of September 7, 2008. Since the liquidation preference as of September 30, 2008 remains at \$1,000 per share, the current fair value on that date remains unchanged at \$1 billion.