Fed’s Stock Valuation Model
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Figure 1.

S&P 500 FORWARD EARNINGS YIELD & NOMINAL 10-YEAR TREASURY BOND YIELD

- S&P 500 Forward Earnings Yield* (4.51)
- 10-Year US Treasury Bond Yield** (0.95)

* Year-ahead forward consensus expected earnings divided by S&P 500 stock price index. Monthly through March 1994, then weekly.
** Monthly through March 1994, then weekly.
Source: I/B/E/S data by Refinitiv and Federal Reserve Board.

Figure 2.

STOCKS vs. BONDS VALUATION MODEL (using 10-year Treasury bond yield)*
(percent overvalued or undervalued)

Source: I/B/E/S data by Refinitiv and Federal Reserve Board.
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Figure 3.

**S&P 500 FORWARD P/E & RECIPROCAL OF BOND YIELD**

- Bond’s P/E* (106.4)
- S&P 500 Forward P/E** (22.2)

** 52-week forward consensus expected S&P 500 operating earnings per share. Monthly through March 1994, weekly thereafter.

Source: Standard & Poor’s and I/B/E/S data by Refinitiv.

Figure 4.

**STOCK VALUATION MODEL (using 10-year Treasury bond yield)**

- S&P 500 Stock Price Index*
- S&P 500 Fair-Value Price**

* Monthly through April 1994, weekly after.

Source: I/B/E/S data by Refinitiv, Standard & Poor’s, and Federal Reserve Board.
Figure 5.

CORPORATE BOND YIELDS*
(percent)

- Aaa Corporate Bond Yield (2.3)
- Baa Corporate Bond Yield (3.0)
- Average of Aaa and Baa (2.6)

* Moody’s Aaa and Baa yields through 2005, then BoA Merrill Lynch data for AAA and A-BBB yields.
Source: Bank of America Merrill Lynch and Haver Analytics.

Figure 6.

S&P 500 FORWARD EARNINGS YIELD & CORPORATE BOND YIELD

- S&P 500 Forward Earnings Yield* (4.5)
- Corporate Bond Yield less LTEG weighted by 0.0, 0.1, and 0.2**

* Year-ahead forward consensus expected earnings divided by S&P 500 stock price index. Monthly through 2005, then weekly.
** Corporate bond yield (average of Moody’s Aaa-rated and Baa-rated corporate bond yields) less analysts’ consensus of long-term earnings growth. Monthly through April 1994, weekly after.
Source: I/B/E/S data by Refinitiv, Standard & Poor’s, and Federal Reserve Board.
**Figure 7.**

STOCK VALUATION MODEL (using average of Aaa and Baa corporate bond yield)  
(ratio scale)

- S&P 500 Stock Price Index
- S&P 500 Fair-Value Price*

* Year-ahead forward consensus expected earnings divided by average of Moody’s Aaa and Baa yields through 2005, then weekly BoA Merrill Lynch data for AAA and A-BBB yields.  
Source: I/B/E/S data by Refinitiv, Standard & Poor’s, Bank of America Merrill Lynch, and Federal Reserve Board.

**Figure 8.**

STOCKS vs. BONDS VALUATION MODEL (using average of Aaa and Baa corporate bond yield)*  
(percent overvalued or undervalued)

* S&P 500 stock price index divided by S&P 500 fair-value price defined as S&P 500 52-week forward consensus expected earnings divided by average of Moody’s Aaa and Baa yields through 1996, then weekly BoA Merrill Lynch data for AAA and A-BBB yields, converted to percentage.  
Source: I/B/E/S data by Refinitiv, Standard & Poor’s, Bank of America Merrill Lynch, and Federal Reserve Board.
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Figure 9.

STOCKS vs. BONDS VALUATION MODEL
(percent overvalued or undervalued)


** S&P 500 52-week forward consensus expected earnings divided by average of Moody’s Aaa and Baa yields through 2005, then BoA Merrill Lynch data for AAA and A-BBB yields, converted to percentage.

Source: I/B/E/S data by Refinitiv, Bank of America Merrill Lynch, and Federal Reserve Board.