Comments on “Regulator Use of Market Data to Improve the Identification of Bank Financial Health”

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Summary of the Findings (1)

- Univariate analysis confirms that relatively simple measures of stock prices and returns exhibit downward trends as much as two years prior to banks and thrifts experiencing ratings downgrades to CAMEL ratings of 3, 4, or 5.
- The longer-term nature of these trends suggests that univariate trends are not commonly found in stock returns of healthy institutions.

Summary of the Findings (2)

- Adding relatively simple measures of excess returns, stock prices, and an institution's dividend record to regression equations offers an improvement on the CAMEL ratings' predictive content of Call Report data.
- The predictive content of the models is robust for institutions experiencing the greatest financial distress, i.e. those that have been downgraded to levels 4 and 5.

Discussion (1)

- The paper tries to use both stock return variables and Call Report data in a regression equation .

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It is likely that stock return variables are relatively highly correlated with Call Report data. If so, there is a problem, so-called multicolinearity.

Discussion (2)

- The paper affirms that market-related variables, such as the natural logarithm of the stock price(LN_PR) or the standard deviation of the return variable(SDRET), add marginal predictive value.

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The probability of default (PD) calculated by using market variables could be a candidate for one of the other explanatory variables.

Discussion (2)

The probability of default can be calculated by Merton's option model using stock market information such as stock price and its volatility.

So the probability of default contains information about two variables, LN_PR and SDRET.

Besides these two variables, you can measure how likely it is that a company will default as the numerical probability of default.

Discussion (2)

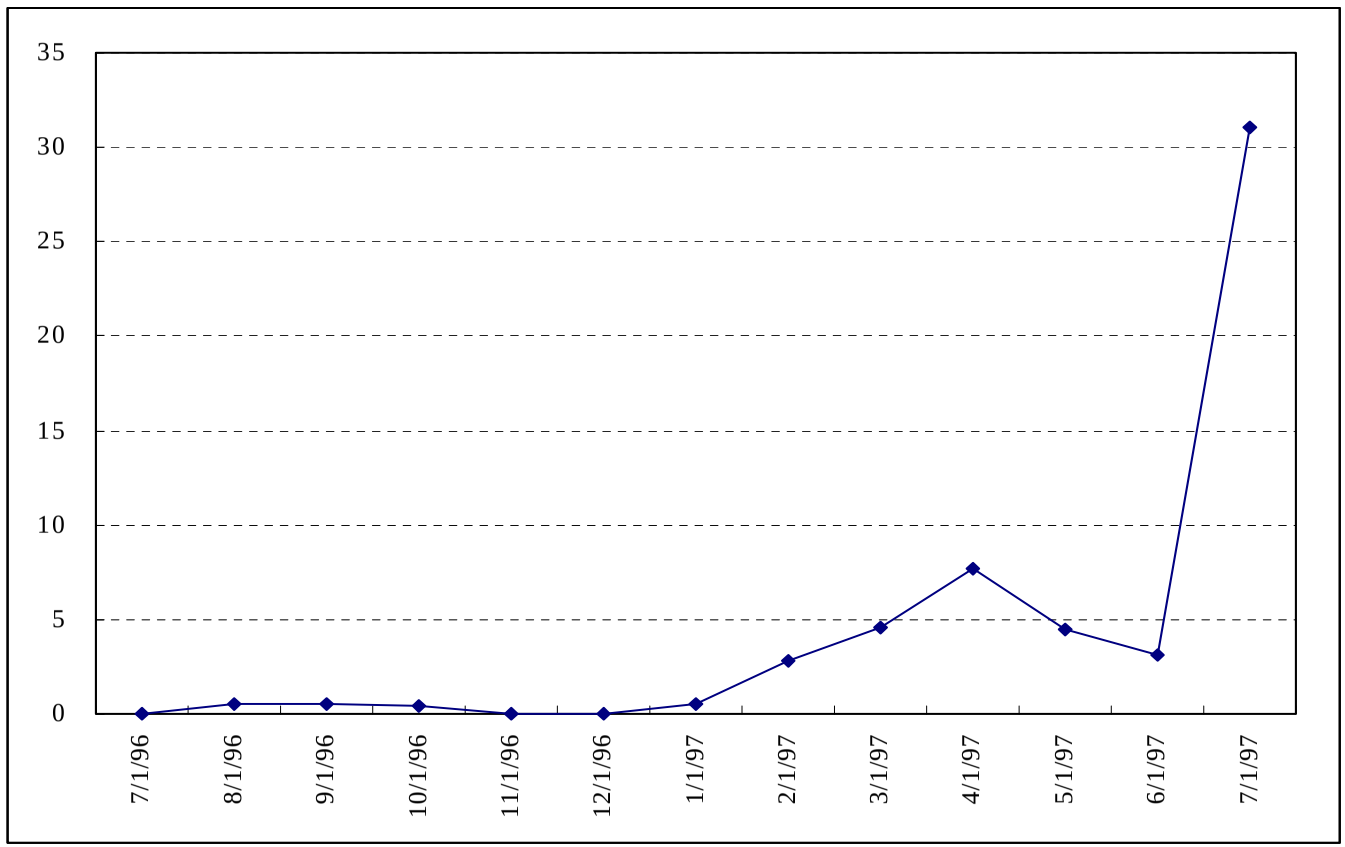
If you look at stock price and its volatility separately, it is difficult to interpret the healthiness of a company whose stock price and its volatility are simultaneously high or low.

Probability of default vs. Stock price and its volatility

	Stock Price(High)	Stock Price(Low)
Volatility(High)	?	High
Volatility(Low)	Low	?

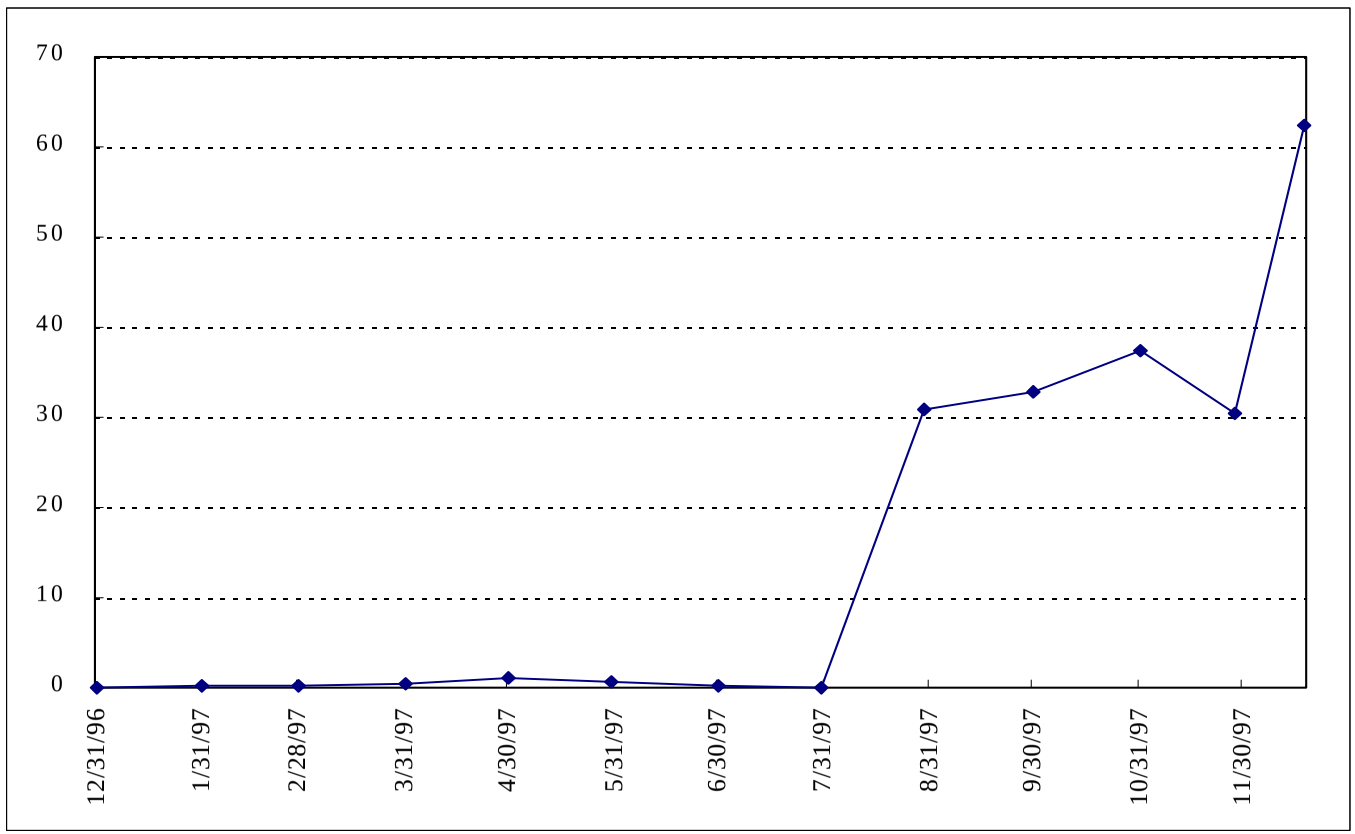
Discussion (2)

Development of PD (%): Tada Construction



Discussion (2)

Development of PD (%): Toshoku



Discussion (3)

- This paper uses SDRET (standard deviation of daily returns during the quarter) as a measure of volatility of stock price.

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If the price of an option on an individual stock is available as a measure of the volatility of the stock price, you can use implied volatility.