Stock Returns and Volatility in Emerging Stock Markets

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Abstract
Both parametric and semiparametric GARCH in mean estimations find a positive but insignificant relationship between expected stock returns and volatility in emerging stock markets. The 1997–1998 global emerging market crisis seems to induce changes in GARCH parameters.

Key words: emerging markets; stock returns; volatility; semiparametric GARCH

JEL classification: G12; G15; C14

1. Introduction
Understanding the risk-return trade-off is fundamental to equilibrium asset pricing and has been extensively explored in the finance literature. It is perhaps surprising to note, therefore, that there is still much controversy around this important issue. Many traditional asset-pricing models (e.g., Sharpe, 1964; Merton, 1980) postulate a positive relationship between a stock portfolio’s expected return and the conditional variance as a proxy for risk. However, as demonstrated in Campbell (1993), such a positive relationship is contingent on strong assumptions of earlier models. Under more general assumptions, a positive relationship between a stock portfolio’s expected return and the conditional variance may not necessarily apply. More recent theoretical works (Whitelaw, 2000; Bekaert and Wu, 2000; Wu, 2001) consistently assert that stock market volatility should be negatively correlated with stock returns. Obviously, there is no theoretical agreement over the issue.

Empirical studies on the relationship between expected returns and conditional volatility also yield mixed findings. Most of these studies focus on developed markets, particularly the U.S. stock market, and typically employ the parametric (G)ARCH in mean (GARCH-M) model of Engle et al. (1987) to allow for time-varying behavior of volatility. Although some earlier studies (e.g., French et al., 1987) find a positive and significant relationship, more studies (e.g., Baillie and DeGennaro, 1990; Theodossiou and Lee, 1995) report a positive but insignificant

Received December 27, 2004, revised March 15, 2005, accepted March 30, 2005.
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