

Econ 512: Financial Econometrics

HW 3

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Due: Friday 4/27/2009

1 Reading

1. Zivot, E. and Wang, J. (2005). *Modeling Financial Time Series, Second Edition*. Chapters 7 and 9.
2. Tsay, R. (2005) *Analysis of Financial Time Series, Second Edition*. Chapters 3 and 7.
3. Taylor, S. (2005). *Asset Price Dynamics, Volatility, and Prediction*. Chapters 9 and 10.

2 Problems

1. Tsay, R. (2005). *Analysis of Financial Time Series, Second Edition*. Chapter 3, Exercises 3.6, 3.8 and 3.9. In 3.9, in addition to the TGARCH model, also fit an EGARCH model allowing for leverage effects. Compare the forecasts of these models. Plot the news impact curves for these fitted models (see the example in Chapter 7 of MFTS). Which model has a more pronounced leverage effect?
2. Tsay, R. (2005). *Analysis of Financial Time Series, Second Edition*. Chapter 7, Exercises 7.1 (parts a - c)