

THE UNIVERSITY OF KANSAS Working Papers Series in Theoretical and Applied Economics

## REGIME-SWITCHING RISK IN THE TERM STRUCTURE OF INTEREST RATES

Shu Wu and Yong Zeng

September 2003

## ABSTRACT

This paper incorporates the systematic risk of regime shifts into a general equilibrium model of the term structure of interest rates. The regime-switching risk introduces a new source of time-variation in bond term premiums. A closedform solution for the term structure of interest rates is obtained for an affine-type model under log-linear approximation. The model is estimated by Efficient Method of Moments. We find that the market price of the regime-switching risk is not only statistically significant, but also economically important, accounting for a significant portion of the term premiums for long-term bonds. Ignoring the regime-switching risk leads to underestimation of long-term interest rates and therefore flatter yield curves.

**KEYWORD:** The Term Structure, General Equilibrium, Markov Regime Shifts **JEL CLASSIFICATION NUMBER:** G12, E43

THE UNIVERSITY OF KANSAS WORKING PAPERS SERIES IN THEORETICAL AND APPLIED ECONOMICS WORKING PAPER NUMBER 200304