

Title: SOME NOTES ON FIXED INCOME

Speaker: STEPHEN A. ROSS,
Massachusetts Institute of Technology

Importance: Why this matters:

This model is presented as an alternative to the Cox, Ingersol Ross (CIR) and Heath, Jarrow, Morton (JM) models. It provides testable implications, and has the potential to better describe the behavior of interest rates.

Investigation: "Speaker analyzed XXX data to address the questions yyy, zzz, etc."

The model is a simple stationary model of the fixed income market and uses it to provide simplified proofs of some old results and obtain some new ones. It uses Ross' Recovery Theorem to derive the unobserved probability distribution of fixed income returns. In the model, the stochastic discount factor (pricing kernel) is the return on a hypothetical "long bond" (30 – 50+ years). In addition, the model provides some new results on the character of yield curves.

At this point the model has not been tested using empirical data, but Ross thinks it has great potential for developing interesting and useful conclusions.

Innovation: Are there new techniques of interest in the data or approach to the problem?

Certainly original thinking but provides little empirical information in its current state.

Insights: 1-2-3, what are the three most important things the speaker offered?

1. Ross prefers this approach to the standard continuous time CIR model. The model provides testable implications for the fixed income markets. Importantly, their "long bond" is a useful construct. It simplifies many existing results, and points to some new ones.
2. The yield on 30-year Treasuries is not a good surrogate for the unobserved "long bond".
3. Ross points out that interest rates were around 5% in Babylonia and are close to that value 5000 years later. Suggesting there is some long-term stability in interest rates. That is consistent with his model, not necessarily in the others.

Audience rating: 3.91