

Discussion of:

”Macroeconomic Uncertainty, Differences in Beliefs, and Bond Risk Premia”

by

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Summary

- ▶ Provide a simple theoretical model to suggest that heterogeneity in beliefs may affect interest rates premia.
- ▶ Perform empirical exercise using a measure of dispersion on forecasts of macro data as proxy for disagreement in beliefs.
- ▶ Find that this measure has ability to forecasts excess returns (high R^2 's)
 - ▶ And then: Provide some robustness tests, and relate the proxy to the Cochrane and Piazzesi (2005) forecasting factor.

Predictability of Bond Returns

- ▶ There are three main groups of papers studying time varying risk premia in interest rate markets:
 - ▶ 1) Regression based approach:
 - ▶ Fama and Bliss (AER, 1987), Campbell and Shiller (RES, 1991), Cochrane and Piazzesi (AER, 2005), Ludvigson and Ng (RFS, 2009)...
 - ▶ 2) Dynamic Term Structure Models:
 - ▶ Dai and Singleton (JFE, 2002), Duffee (JF, 2002), Almeida, Joslin, and Graveline (2006), Duffee (2008), Joslin, Singleton and Zhu (RFS, 2010).
 - ▶ With Macro variables: Ang and Piazzesi (JME, 2003), Joslin, Priesbch, Singleton (2009)...
 - ▶ 3) Equilibrium based models:
 - ▶ Xiong and Yan (RFS, 2009), and others.

Two points

- ▶ 1. Convince us that your empirical measure of disagreement risk is not macroeconomic risk in bond premia.
- ▶ 2. Decide if want to sell disagreement as an **extra source of risk** or **variable that explains latent risks** embedded in interest rates?
 - ▶ a) If it is an extra source of risk, should perform robustness checks “much more robust” than the ones in the current paper.
 - ▶ b) If it explains latent risks only have to control for macroeconomic risks, what is not done in the current paper.

1. Priced Disagreements in Beliefs or Priced Macroeconomic Risks?

- ▶ Disagreement in Beliefs is a measure of dispersion: For each macro variable (short-rate, inflation,...)
 - ▶ Calculate the mean absolute deviation of cross-sectional data of analysts' forecasts.
- ▶ What about cross-sectional mean of forecasts: Shouldn't it be related to macroeconomic risk priced in bond markets? Homogeneous beliefs with macro in bond premia...
- ▶ Basic robustness check: Verify if the cross-sectional mean of macro forecasts decreases the forecasting power of your disagreement dispersion measure.
- ▶ Main robustness check: Control for the macro factors from the DFMs of Ludvigson and Ng (2009).
 - ▶ If disagreement's significance does not survive then your measure is not capturing disagreement risk but macro risk in bond premia!

2. a) Disagreement as an extra source of risk

- ▶ “effects of introducing disagreement in multivariate regressions after controlling for risk factors that have been studied...”
- ▶ In regressions: After controlling for macroeconomic risk (Ludvigson and Ng, 2009) should get the orthogonal part of DiB to CP and verify if it forecasts...
- ▶ In DTSMs: More than three factors are necessary to capture bond premia (Duffee (2008), Joslin, Singleton, Zhou (2010))
 - ▶ One factor DTSMs will definitely miss risk factors. Should compare to at least a three factor Gaussian DTSM.
 - ▶ Ideally could use the Unspanned Macro DTSMs of Joslin, Priebsch, Singleton (2009) to test disagreement as an extra source of risk over and above latent and macroeconomic risk.

2. b) Disagreement explaining latent risks

- ▶ Here you shouldn't use all those regressions where DiB enters time-varying risks of other factors (like CP): There is not structural model only regressions!
- ▶ Instead: After controlling for macroeconomic risk (Ludvigson and Ng, 2009) should regress excess returns directly on DiB.