Macro Risk Premium and Intermediary Balance Sheet Quantities

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Abstract

The macro risk premium measures the threshold return for real activity that receives funding from savers. The balance sheet conditions of financial intermediaries provide a window on the macro risk premium. The tightness of intermediaries' balance sheet constraints determines their "risk appetite," which in turn, determines the set of real projects that receive funding, and hence determines the supply of credit. Monetary policy affects risk appetite by changing intermediaries' ability to leverage their capital. This paper estimates the time-varying risk appetite of financial intermediaries for the United States, Germany, United Kingdom, and Japan, and studies the joint dynamics of risk appetite with

macroeconomic aggregates for the United States. The paper argues that risk appetite is an important indicator for monetary conditions.

Notes

1. The model in Adrian and Shin (2009a) outlined in this section does derive equilibrium in capital markets, but it is not a fully developed general equilibrium model. However, the mechanisms outlined in this section are inherently equilibrium effects.

2. Cúrdia and Woodford (2009) present a model that is giving rise to a reduced form very similar to equations 2a–2d. However, as mentioned already, the type of financial intermediary frictions they introduce differs from the model that we described earlier.

3. Besides the model by Cúrdia and Woodford (2009), recent papers that derive general equilibrium models which give rise to reduced form models analogues to equation 2a–2d can be found in Gertler and Kiyotaki (2010), Brunnermeier and Sannikov (2010), and Gârleanu and Pedersen (2010).

4. Adrian, Estrella, and Shin (2010) investigate the relationship between the level of short-term interest rates, the slope of the yield curve, financial intermediary profitability, and real activity in more detail.

5. See Adrian and Shin (2007) for an overview of the investment banking sector, Adrian and Shin (2009c) for an introduction to shadow banking, and Adrian, Ashcraft, and Pozsar (2010) for a comprehensive overview of shadow banking.

6. The standard errors from our VAR estimates do not take into account the sampling uncertainty in the macro risk premium and the risk appetite measures.

7. Adrian and Shin (2008a and 2008b) separately examine the interaction between balance sheet growth and the federal funds target separately for "normal" and for crisis periods, and show that the countercyclical monetary policy response is because of cuts in the target following episodes of financial crisis.

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