

Financial Intermediation and the Market Price of Risk: Theory and Evidence

Abstract: We theoretically and empirically show financial intermediaries affect the price of risk of the broader market. We first study a continuous-time joint dynamic contracting and asset pricing model, whereby households must contract with and incentivize a financial intermediary to access the financial markets. In general equilibrium, the continuation utility of the financial intermediary can be uniquely identified as his portfolio wealth. The market price of risk in the intermediated economy is proportional to the households' absolute risk and downside-risk aversions over the intermediary's wealth. To test our model's predictions, we use monthly volatilities and credit spreads of the financial sector to empirically proxy for these risk aversions. The Sharpe ratios of the Fama-French market factor and all major US market indices are negatively (positively) affected by the financial sector volatility (credit spreads) in time series regressions. Financial sector volatilities only affect market excess returns, but financial credit spreads do not, confirming our results are driven by both market risks and returns. The Sharpe ratios and those two variables are cointegrated, suggesting a long-run equilibrium between the market risks and financial sector risks. The empirical results remain robust even controlling for intermediary capital ratio and intermediary leverage ratio. Our theory model bridges asset pricing theory and contracting theory, and our empirical results document volatility and downside risks of the financial sector affect the broader market.