Strategic Uncertainty in Asset Markets

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Abstract

We develop a noisy rational expectations equilibrium (REE) model of asset prices in an economy with strategic complementarity in investment. The model has informed investors who receive heterogeneous private signals about asset payoff and uninformed investors who only observe prices. Asset prices in our model are not only informative of fundamental uncertainty but also of strategic uncertainty, that is, uncertainty concerning the actions and beliefs (and beliefs about the beliefs) of others. Through asset prices, uninformed investors become less asymmetrically informed and informed investors coordinate their investment. Asset prices, hence, have a coordination role in addition to the substitution and information roles as in the existing REE literature. Even though equilibrium prices may not be unique, we find unique equilibrium strategies and beliefs for both types of investors for a given equilibrium price regardless of whether uninformed investors learn from prices or not. Asset prices, as endogenous public signals, have a limited role in coordinating informed investors’ actions and therefore may not be destabilizing, especially when the asset market is liquid. The existence of strategic uncertainty leads to non-monotonic relationships between asset prices and external shocks to fundamentals or to noise trading.

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