Do Prices Reveal Information about Dividends in Asymmetric Sequential Asset Markets? An Experimental Study

Jess Benhabib (NYU), Rosemarie Nagel (ICREA, UPF, BGSE), Luba Petersen (SFU)

15 Oct 2016

Abstract

This paper tests experimentally, whether prices reveal information about dividends in a repeated two-period asset market with asymmetric information, based on Grossman and Stiglitz (GW,1980) and Benhabib and Wang (BW, 2015). Short-term traders, endowed with assets, are fully informed about the value of the randomly determined dividend. However, they only value the asset for its sale value. Long-term traders, who hold no assets, only know the distribution from which dividends are drawn and value the asset for its dividend. In the first period, short-term traders trade among themselves within a call market mechanism. In the second period, all traders observe the market clearing price and then short-term traders sell their assets to long-term traders also within a call market mechanism. We thus separate informational efficiency in the first period from allocational efficiency issues in the second period. The market has two REE equilibria and a continuum of sentiment-driven (sunspot) equilibria. In our baseline treatment, we provide all traders with complete information about the dividend paid on all assets. Here short-term traders consistently trade at prices equal to dividends in both periods as predicted by GS. This also holds in the second period in our asymmetric treatment while in the first period we observe three different trading patterns: 1. prices are fully revealing the dividend. 2. prices are significantly above (below) the dividend when dividends are lower (higher) than the mean expected dividend. 3. prices are anchored near the expected median dividend, independent of the actual dividend. We conclude that prices do not consistently reveal information to uninformed traders. We explain this trading pattern through heterogeneity of sentiments, buyer and seller optimism and pessimism. Incomplete information significantly increases the frequency of optimistic trading among informed short-term agents and the frequency of pessimistic trading among uninformed long-term agents.