Securitization and Heterogeneous-Belief Bubbles with Collateral Constraints

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Harrison and Kreps(1978) consider a dynamic asset pricing model with the heterogeneous beliefs. Investor whose belief are most optimistic in the period buy or hold the asset. Because they knows that the asset will be able to be sold to other agent in future, their estimation of holding the asset today is higher than their own value. Then the price of the asset can be higher than any investor's value.
However, Harrison and Kreps suppose no budget constraint. All investor have enough cash or they can lent cash from other without constraint. If security market is not advanced, the investor who have little cash may not participate in the trade. Their beliefs does not affect asset pricing. Suppose optimistic investor have less cash than others, the asset price gets lower.
Simsek(2012) assume asset pricing with collateral markets. Investor can rent cash from other inveestors, but they needs some collateral. If asser return is very low, investor cannot pay back their cash. So, they can give the asset used by the collateral instead of cash.
Optimistic investor want to buy the asset and pessimistic investor lend cash to them. If the asset return is high, the optimistic investor can return cash. However, If asset return is low, the asset will be hold by pessimist because the asset is used as collateral. This collateral contract make the asset price the medium level. Good state is evaluated by optimistic belief and Bad state is evaluated by pessimistic belief. Then incompletness of incomplete market allow the asset price to be lower than Harrison and Kreps.
This paper also assume the incomplete security market. There are heterogeneous beliefs, optimist and pessimist. Optimists have a little cash, so they must lend some cash from other investors. Investor must lend cash with collateral contract. But I asssume some securitization technology to the loan contract. Investor who hold the loan contract can make new security, that is, loan backed security. Investor can receive loan payment at future date, so they can sell the right to receive the payment to others.
This security introduce some risk to the asset price, bubble. This system allow the optimistic belief to evaluate the asset. This paper insist that the asset price may be as high as Harrison and Kreps(1978).