

Accepted Manuscript

Asset price volatility and banks

Yu Zhang

PII: S0304-4068(16)30241-5

DOI: <http://dx.doi.org/10.1016/j.jmateco.2017.05.001>

Reference: MATECO 2155

To appear in: *Journal of Mathematical Economics*

Received date: 6 November 2016

Revised date: 14 March 2017

Accepted date: 2 May 2017



Please cite this article as: Zhang, Y., Asset price volatility and banks. *Journal of Mathematical Economics* (2017), <http://dx.doi.org/10.1016/j.jmateco.2017.05.001>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Asset Price Volatility and Banks

By YU ZHANG*

Draft: March 14, 2017

This paper examines the operation of Diamond-Dybvig banks when depositors have access to the asset market. Previous studies have shown that banks are redundant in this environment since it is impossible to prevent the strategic withdrawals. This paper shows that the strategic withdrawals can be prevented if the market risk, due to asset price volatility, is considered. Banks provide deterministic returns to the depositors since the aggregate withdrawals are predictable, and therefore, banks can choose the portfolio such that no asset liquidation is involved. However, an individual consumer with stochastic liquidity need is vulnerable to the price volatility if he holds the asset directly. Therefore, banks improve the consumers' welfare by providing the insurance against not only the liquidity shock but also the market risk. Banks are not redundant.

JEL: D53; G10; G21

Keywords: banks; asset markets; liquidity; asset price volatility

Consumers are subject to liquidity shocks, and therefore, they need to get access to their assets and obtain liquidity on short notice. Both banks and asset markets provide such liquidity. Asset markets provide the investors with the opportunities to sell their long-term assets before maturity (e.g., Allen and Gale (1994)). Banks provide the depositors with liquidity by issuing the demand deposits (e.g., Bryant (1980), and Diamond

* Xiamen University. Address: D314, Economics Building, Xiamen University, Xiamen, China 361005. Email: yuzhang2012@xmu.edu.cn. I thank Assaf Razin, Victor Tsyrennikov and seminar participants at the Cornell Macro Workshop and Cornell-Penn State Macro Conference for insightful comments. I am especially grateful to Karl Shell for numerous conversations and helpful guidance. I also thank two anonymous referees for their suggestions. All remaining errors are my own.

Download English Version:

<https://daneshyari.com/en/article/5101412>

Download Persian Version:

<https://daneshyari.com/article/5101412>

[Daneshyari.com](https://daneshyari.com)