Int. Fin. Markets, Inst. and Money 35 (2015) 132–146

Contents lists available at ScienceDirect

Journal of International Financial Markets, Institutions & Money

journal homepage: www.elsevier.com/locate/intfin

Liquidity shocks and stock bubbles☆

Ogonna Nneji*

ICMA Centre, University of Reading, UK

ARTICLE INFO

Article history:
Received 31 March 2014
Accepted 28 December 2014
Available online 5 January 2015

JEL classification:
C13
C51
C58
G12

Keywords:
Funding liquidity
Market liquidity
Liquidity shocks
Speculative bubble
Trading

ABSTRACT

This study presents and empirically tests a simple framework that examines the effects of market liquidity (the ease with which stocks are traded) and funding liquidity (the ease with which market participants can obtain funding) on stock market bubbles. Three key findings emerge from this research. First, negative market and funding liquidity shocks increase the probability of stock market bubbles collapsing. Second, market liquidity has a more prevalent effect on stock bubbles than funding liquidity. Third, liquidity shocks provide warning signals of impending bubble collapses. A trading rule based on recursive forecasts from the aforementioned framework is used to illustrate the economic significance of the liquidity–bubble relationship.

© 2015 Published by Elsevier B.V.

1. Introduction

The importance of liquidity risk on stock returns has been highlighted in numerous asset pricing studies. Interest in this topic has risen recently following the subprime mortgage market meltdown of 2008, which saw a significant reduction in market activity. Market liquidity, defined by Brunnermeier and Pedersen (2009) as the ease with which stocks are traded, significantly decreased during this crisis. Also, the crisis in the mortgage market caused large financial institutions such as Lehman Brothers and Merrill Lynch to face financial difficulties, as they were heavily invested in mortgage-related financial products. This led to a credit crunch and it became more difficult for traders to obtain funds. Therefore, funding liquidity, defined as the ease with which traders obtain funds, also worsened in that period. Brunnermeier (2009) documents that as the prices of assets collapsed during the recent crisis, the capital of financial institutions diminished, making banks more cautious in their lending practices, which in turn constrained funds. The decline of market and funding liquidity adversely affected stock returns.

Several empirical and theoretical studies in the asset pricing literature prior to the recent crisis have widely acknowledged the role of liquidity risk on price dynamics of financial assets. The extant literature is vast. Most of the existing works on the relationship between liquidity and the stock market have focused primarily on establishing the effect of liquidity risk

☆ I am indebted to Chardin Wese Simen, Charles Ward, Chris Brooks, Christian Westheide, Davide Avino and Kath Pilgrem for their constructive comments on earlier versions of the paper. I would also like to thank an anonymous referee for his/her very helpful suggestions.

* Correspondence to: ICMA Centre, Henley Business School, University of Reading, RG6 6BA, UK. Tel.: +44 0118 378 8239.
E-mail address: o.nneji@icmacentre.ac.uk

http://dx.doi.org/10.1016/j.intfin.2014.12.010
1042-4431/© 2015 Published by Elsevier B.V.

on stock market returns.[1] This paper, however, contributes to the extant literature on asset liquidity as it follows a different direction to the vast number of previous studies that have focused on exploring the return-liquidity relationship. Rather than examining the effect of liquidity risk on asset returns only, this paper is the first to empirically explore the role of market and funding liquidity risk on speculative bubbles in the stock market. This paper seeks to answer the question on whether liquidity risk fuels or discourages speculative bubbles in the stock market.

Given the findings in previous studies that liquidity risk is a significant factor that determines asset returns, it is expected that liquidity risk should also influence stock market bubbles (which are defined as the deviation of prices from their fundamental values as a result of self-fulfilling belief by market participants that prices will continue to increase over time). A number of studies have sought out to establish the link between asset bubbles and liquidity risk.[2] The extant literature

[1] One of the earlier studies on this topic is the work by Amihud and Mendelson (1986). In their seminal paper, Amihud and Mendelson use NYSE/AMEX stock data for the period 1961–1980 to provide evidence that stock return is an increasing and concave function of illiquidity costs, measured by bid–ask spreads. Brennan and Subrahmanyam (1996) document that there is a return premium associated with transaction costs. Using a measure of illiquidity estimated from intraday quote and trade data, they find that illiquidity has a positive and significant effect on the required rates of return after adjusting for the Fama and French factors. The study by Amihud (2002) also examines the effect of illiquidity on the cross-section of stock returns, and like previous studies, the results show that illiquidity raises the required rate of return in stocks and contemporarily lowers prices. More recent works on the link between expected returns and liquidity risk include studies by Pastor and Stambaugh (2003), Acharya and Pedersen (2005), Sadka (2006) and Watanabe and Watanabe (2008), among others. These studies cohesively conclude that there is a significant relationship between liquidity and expected return.

[2] The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: The question of whether liquidity fuels or discourages speculative bubbles in the stock market is one that has also been frequently discussed by practitioners. For example, in a recent article in Bloomberg, the central bank Governor of Denmark Lars Rohde made the following statement: "*Policy makers steering the global economy have pumped the financial system with so much liquidity that any exit risks popping potential asset bubbles or stunting a recovery*". The full article can be accessed on: http://www.bloomberg.com/news/2013-04-07/liquidity-carpet-bombs-fueling-asset-bubbles-rohde-says.html.

Download English Version:

https://daneshyari.com/en/article/963982

Download Persian Version:

https://daneshyari.com/article/963982

Daneshyari.com