



Monetary policy and bank risk-taking: Evidence from emerging economies



Minghua Chen^a, Ji Wu^{b,*}, Bang Nam Jeon^c, Rui Wang^a

^a Research Institute of Economics and Management, Southwestern University of Finance and Economics, Chengdu, China

^b Research Institute of Economics and Management, Collaborative Innovation Center of Financial Security, Southwestern University of Finance and Economics, Chengdu, China

^c School of Economics, LeBow College of Business, Drexel University, Philadelphia, PA, USA

ARTICLE INFO

Article history:

Received 4 May 2016

Received in revised form 20 March 2017

Accepted 4 April 2017

Available online 7 April 2017

JEL classifications:

E52

G21

E44

Keywords:

Monetary policy

Bank risk-taking

Emerging economies

ABSTRACT

This paper addresses the impact of monetary policy on banks' risk-taking by using bank-level panel data from more than 1000 banks in 29 emerging economies during 2000–2012. We find that, consistent with the proposition of the “bank risk-taking channel” of monetary policy transmission, banks' riskiness increases when monetary policy is eased. This result is robust when we adopt alternative measures of monetary policy and bank risk, and use different econometric methodologies. In addition, we find that bank risk-taking amid expansionary monetary policy is less conspicuous in a more consolidated banking sector and when monetary policy is more transparent.

© 2017 Published by Elsevier B.V.

1. Introduction

The linkage between monetary policy and banks' risk-taking has attracted increasing attention from both academia and policy makers in recent years. Traditionally, the priority of monetary policy is to stabilize the price level and tame business cycles. The potential trade-off of financial stability is presumed as a less relevant issue (Woodford, 2012). However, a flourishing line of research suggests that the stance of monetary policy can exert impacts on the perception or tolerance of banks toward risk, cause excessive risk-taking, and in consequence, undermine the stability of the financial sector. The accommodative monetary policy during 2002–2005, which held interest rates too low for too long, is viewed as one of the significant contributing factors to excessive risk-taking by financial institutions prior to the collapse of the American housing market (Taylor, 2007, 2014; Mishkin, 2011). The widely employed and prolonged low interest rate policy around the world in the aftermath of the global financial crisis of 2007–2009 has also raised the concern that central banks should “lean against the wind” by tightening money supply when there is over-abundant liquidity in the financial sector in order to curb banks' risk-taking incentives (Acharya and Naqvi, 2012; Agur and Demertzis, 2012; Diamond and Rajan, 2012).

In this paper, we assess whether monetary policy affects banks' risk-taking levels in emerging economies, after having controlled for many other potential risk determinants. Additionally, we investigate the modifying factors on the nexus between monetary policy and bank risk, in particular, varying market structure and policy transparency. In contrast to research on traditional monetary transmission channels, such as the credit channel that addresses how the *quantity* (volume) of credit changes with

* Corresponding author.

E-mail addresses: chenminghua@swufe.edu.cn (M. Chen), wuji@swufe.edu.cn (J. Wu), jeonbana@drexel.edu (B.N. Jeon).

monetary policy shocks, the growing literature on the so-called “bank risk-taking channel” focuses on how monetary policy affects the *quality* (risk) of loans.¹ Although still far from conclusive, the extant literature suggests that a policy-induced interest rate innovation can affect bank risk, on both the asset and liability sides through mechanisms such as banks' risk perception, incentives to “search for yield,” demand for leverage due to modified valuations of incomes and cash flows, and the adverse selection problem (Dell’Ariccia and Marquez, 2009; Adrian and Shin, 2010; Borio and Zhu, 2012). In line with the proposition of the above theoretical works and the result of other empirical studies (Delis and Kouretas, 2011; Buch et al., 2014; Ioannidou et al., 2014; Jiménez et al., 2014), we find consistent evidence that banks' riskiness is significantly associated with central banks' monetary policy stance; in particular, lower interest rates amid expansionary monetary policy increases the risk-taking of banks. However, we also find that the impact of monetary policy on banks' risk-taking is dampened in more concentrated banking markets and when monetary policy is conducted in a more transparent way.

This paper has three contributions to the existing literature on the monetary policy and bank risk-taking nexus. First, we focus our research on the emerging economies, a bloc of countries that received only limited attention in related research thus far.² As a group, emerging countries have experienced rapidly increased economic might and significant financial liberalization, but meanwhile frequently witnessed banking system crises in recent decades (Daniel and Jones, 2007; Laeven and Valencia, 2013). Perceived as an essential tool in emerging economies, monetary policy is often employed with multiple aims, such as curbing inflation, stabilizing exchange rates and promoting economic growth, but the potential trade-off between price stability and financial stability has been overlooked until recently. Moreover, banks still constitute the dominant part of the financial system and serve as the major financing source in most emerging economies (Cihák et al., 2013), implying that an excessive bank risk-taking in these countries may have more detrimental effects than in those that are less bank dependent (Kroszner et al., 2007).³ Therefore, whether there exists a monetary policy-bank risk nexus has critically important implications for not only an optimal policy design, but also for the long-term financial stability and economic growth in these countries.

Second, in contrast to the empirical frameworks in prior literature that examine policy responses of banks in advanced economies, we make our analysis more relevant to emerging markets by taking into account the policy mix that emerging economies commonly adopt for the purpose of macroeconomic stability. In more advanced economies, central banks conventionally use interest rates as the main policy instrument,⁴ whereas in emerging markets some non-interest rate instruments are often employed to serve as a complement, or even substitute, of interest rate-based monetary policy. For example, reserve requirements are often changed to affect credit conditions when central bankers are hesitant to adjust interest rates to avoid either capital inflow or capital flight. Due to the “fear of floating”, many emerging countries also pursue the stability of exchange rates through direct foreign exchange market interventions. As these policies can be closely associated with the stance of monetary policy, the estimate of the impact of monetary policy on bank risk might be biased without having controlled for these supplementary policy factors. We contribute to the literature by measuring some supplementary policies and including their indicators in our econometric model, which is thus believed to better distinguish the effect of monetary policy on bank risk.

Third, we extend the literature by investigating the conditionality on the association between interest rates and bank risk. In contrast to the rich literature which reports the heterogeneity of the credit channel, the heterogeneity of the bank risk-taking channel still needs to be explored further. We examine the impact of market structure and the transparency of monetary policy on the monetary policy-bank risk relationship. Prior literature mostly investigates banks' individual characteristics, such as capitalization, liquidity, and size with respect to their impact on the strength of the bank risk-taking channel, whereas how market structure and policy transparency affect this channel is still left to be examined. Identification of these modifying conditions for the monetary policy and bank risk-taking nexus will be very useful to derive policy implications for monetary authorities in emerging economies. For instance, a higher market concentration is found to dampen the monetary policy-bank risk nexus, calling for careful contemplation by policy makers to allow for a proper level of concentration in their banking sector and to avoid unfavorable effects from excessive banking market competition. Additionally, a movement toward higher policy transparency is also recommended to serve as a complementary tool to attenuate banks' risk proneness when monetary policy is eased.

The remainder of the paper is organized as follows: [Section 2](#) provides a brief review of related literature. [Section 3](#) introduces our data and main variables, followed by the model described in [Section 4](#). [Section 5](#) reports the empirical results on the impact of monetary policy on bank risk-taking and the results of various robustness tests. [Section 6](#) examines the effect of banking market concentration, and [Section 7](#) discusses the effect of monetary policy transparency on the monetary policy-bank risk linkage. [Section 8](#) concludes.

¹ An excellent review on the role played by financial intermediaries in monetary policy transmission, including the balance sheet channel and the bank lending channel, can be found in Beck et al. (2014).

² The majority of extant literature examines monetary policy and banks' riskiness in the U.S. or some other industrial countries (for example, Buch et al. (2014) and Jiménez et al. (2014) use the bank data from the U.S. and Spain, respectively).

³ During 2006–2010, the annual growth rate of banking assets in emerging economies was more than 20%, compared to only 6% in advanced economies. This high speed of growth was translated into nearly 40% of the global growth of banking assets in the above period (Economic Intelligence Unit, Financial Service Indicator database).

⁴ Interest rates are the instrument of conventional monetary policy at least before the unconventional monetary policies, such as quantitative easing, are introduced. In most of early works, interest rates are used as the sole indicator of monetary policy without any supplementary policy indicators being used meanwhile. For example, Jiménez et al. (2014) use only the level and the first difference of interest rates to proxy the innovation of monetary conditions in Spain. Delis and Kouretas (2011) examine only the impact of various types of interest rates on bank risk in euro area. Buch et al. (2014) measure monetary policy in the U.S. by using the federal funds rate. This commonality in extant literature reveals an important difference between advanced and emerging economies, i.e., supplementary policies such as reserve requirements and foreign exchange intervention are rarely used along with monetary policy in advanced economies.

Download English Version:

<https://daneshyari.com/en/article/5063018>

Download Persian Version:

<https://daneshyari.com/article/5063018>

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