Monetary policy and bank performance: is it a stability dilemma?

Tutor: Prof. Giuseppe Torluzzo

Research motivations

Policy makers acknowledge that banks are an important conduit of monetary policy that can be used to influence real economic activity and financial stability.

The project aims to examine the nexus between monetary policy, bank profitability and financial system stability. Nowadays, the connections between these three relevant dimensions of the regulator and banking industry are crucial: the profession is still attempting to understand how conventional/unconventional monetary policies affect economic activity and what are the channels through which monetary policy impinges on financial stability.

Central banks around the world have implemented both conventional and unconventional monetary policy (UMP) measures to address financial crises (Eser and Schwaab (2016); Rodnyansky and Darmouni (2017)). Conventional monetary measures influence economic activity primarily via changes in interest rates, while unconventional monetary policy influence directly banks' balance sheets (Paternoster and Dessimirova (2016)).

Studying the impact of monetary policy on banks is important because there is a feedback effect between sovereign and bank risk (Acharya, Drechsler and Schnabl (2014); Fratzscher and Rieth (2018)), and therefore the impact of monetary policy on banks is crucial to understand the overall impact on the real economy.

Recent theoretical work find that expansive monetary policy may cause an increase in credit risk (Allen and Gale (2000, 2004), Allen and Rogoff (2011), Diamond and Rajan (2012)). Jimenez et al. (2012) confirms this hypothesis by providing empirical evidence that lower interest rate induces low capitalized banks to increase loan portfolio risk.

In addition, expansionary policy interventions should elicit a positive stock market response because they improve the future dividend streams, reduce the discount rate, and increase the equity market premium (Bernanke and Gertler (1989); Bernanke and Gertler (1995)).

Literature and Research questions

Two strands of literature emphasize the relationship between bank performance and monetary policy. The first one focuses on the relationship between monetary policy shocks and bank profitability through the income and balance sheet channel (Albertazzi and Gambacorta (2009); Alessandri and Nelson (2014); Borio, Gambacorta and Hofmann (2017)).
The second strand examines the relationship between bank stock prices and monetary policy (Bae (1990), Kwan (1991), Akella and Greenbaum (1992), and Lumpkin and O’Brien (1997); Fiordelisi and Molyneux (2010); Yin et al. (2010); Yin and Yang (2013)). The financial market drives relevant impact on the stability of the whole economic system.

The financial literature supports the existence of an interest income channel, whereby an increase in the interest rate target has a positive impact on banks’ profitability. However, a recent paper by English, Van den Heuvel and Zakrajsek (2018) finds that unanticipated increases in the level of interest rates decreases bank stock prices in the US. This finding is consistent with those provided by Bernanke and Kuttner (2005).

Before the starting point of the financial crisis 2007–2009, market makers and market commentators argued that during long periods of low interest rates, banks are willing to alleviate their lending standards and take excessive risk. At the Annual Meeting of the American Economic Association, Bernanke (2010) argued that low long-term interest rates were an important factor in driving risk-taking.

Recent literature has shown that banks can relax their lending policies during periods of low interest rates, leading to higher credit risk (Jimenez et al. (2014, 2012)). It is, therefore, important to analyze the impact of both short- and long-term interest rates on bank risk-taking and bank profitability, because monetary policy can influence bank profitability through the “bank risk-channel” by increasing losses from the loan portfolio.

Another essential factor that may play a role is banking geographic diversification. Goetz, Laeven and Levine (2013) provide evidence that geographic diversification reduces bank valuations, increases insider lending and reduces loan quality. This evidence is consistent with previous literature which finds that geographical diversification does not reduce bank risk (Demsetz and Strahan (1997)). However, there is no specific study about the impact of monetary policy on bank profitability through the geographic diversification channel.

Third, monetary policy could also influence the extent to which bank executives are prone to smooth earnings and to shift risk to debt holders. Recent empirical work show that subordinating non-depositor claims reduces bank risk-taking, consistent with market discipline (Danisewicz et al. (2017)).

Fourth, the project plan to investigate the effect of earnings management. This could happen because bank managers can temporarily disguise poor banking performance by smoothing earnings. Moreover, delaying loan losses can exacerbate recessions.

The finance and accounting literature focus to the determinants and the consequence of earnings quality (for a review see Dechow, Ge and Schrand (2010)). For example, Cohen, Cornett, Marcus and Tehranian (2013) investigate if earnings management may be used to obscure the real performance, especially during the financial crisis. However, the literature about the interaction between monetary policy and earnings quality is still under-investigated.

Finally, firms can exploit the low interest rates to borrow money at low rates and use a portion of it to buyback stocks or pay dividends. This can lead to a risk-shifting problem if banks are close to default. The literature on risk shifting using dividends and share repurchases in banks is limited but it is quickly...
growing in importance (Acharya et al. (2017), Acharya et al. (2011), Kanas (2013), Onali (2014), and Hirtle (2014)). However, there is no investigation of the impact of monetary policy on risk-shifting via dividends or share repurchases and, in turn, bank profitability.

Following these considerations, the research plan to explore impact of monetary policy on bank profitability of US and EU banks, considering the following channels:

1. Loan portfolio risk
2. Earnings management
3. Geographical diversification
4. Risk-shifting behaviour.

Expected results

The aim of this project is threefold:

1. Understanding whether policy maker interventions can impact on risk appetite and improve financial stability;
2. Understanding whether geographical diversification, dividend policy and earnings management can influence the monetary policy channel and their effects on financial stability;
3. Analyse whether capital requirements can impact on risk shifting and increase the system risk.

The research project connects the previous goals into a couple of academic articles eligible to international research journal in the field of the economics of financial intermediation.

Research Plan

The first part of the research project consists of reviewing the prominent literature and the definition of research gaps and contributions.

The second part of the project is composed by the data collection, the data management, and the first explorative analysis. Merging activities are required to set up a novel dataset using accounting data, corporate governance information, and internal data provided by Union dataset.

The third part of the project is mainly oriented to develop the first draft of the research outputs. Particularly, it consists of the secondary data analysis, reporting of the results, and the development of the first draft.

The latter will be presented to ad-hoc seminars and leading and international conferences in order to stimulate the research debate and favour useful feedbacks for research improvements. Manuscripts will be submitted to conference and journals.

The last part of the project is aimed at correcting statistical and theoretical issues before the accomplishment of the final outputs.

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Funding and Training opportunities

The selected candidate will have the opportunity to debate with leading public and private research centres, AIFIRM and Central Bank Seminars. The leading partners are represented by:

- University of Nottingham (Prof. Onali)
- Bangor University (Prof. Altubas)
- University of Roma Tre (Prof. Fiordelisi)
• Università Cattolica (Prof. Boitani)
• University of California, Berkeley (Prof. Auerbach)
• Federal Reserve Bank of San Francisco (Vice President O. Jordà)

The strong connection with University of Nottingham gives the opportunity to use specific datasets, given the University access to

• CRSP,
• Compustat,
• BoardEx
• Bloomberg.

The candidate will show prominent econometric skills applied to structural model, panel data, score matching, and event study methodology. Additional training will be provided with a visiting period to University of Nottingham.
References


Selected tutor publications 2013-2017

Torluccio, Giuseppe; Tomaselli, Angelo; Andi, Duqi, Is relationship lending still a mixed blessing? A review of advantages and disadvantages for lenders and borrowers, «JOURNAL OF ECONOMIC SURVEYS», 2017,

Onali, Enrico; Galiakhmetova, Ramila; Molyneux, Philip; Torluccio, Giuseppe, CEO power, government monitoring, and bank dividends, «JOURNAL OF FINANCIAL INTERMEDIATION», 2016, 27, pp. 89 - 117


Andi Duqi; Aziz Jaafar; Giuseppe Torluccio, Mispricing and risk of R&D investment in European firms, «EUROPEAN JOURNAL OF FINANCE», 2015, 21, pp. 444 - 465


Marta Degl'Innocenti, Claudia Girardone, Giuseppe Torluccio, Diversification, multimarket contacts and profits in the leasing industry, «JOURNAL OF INTERNATIONAL FINANCIAL MARKETS, INSTITUTIONS & MONEY», 2014, 31, pp. 231 - 252
Previous Department Grant assigned to prof Giuseppe Torluccio

Angelo Tomaselli Department grant 14 / 24 mons

Publication before 30 month of the end of Grant - Class A – Anvur

Torluccio, Giuseppe; Tomaselli, Angelo; Andi, Duqi, Is relationship lending still a mixed blessing? A review of advantages and disadvantages for lenders and borrowers, «JOURNAL OF ECONOMIC SURVEYS», 2017

Angelo Tomaselli Assistant Professor of Entrepreneurship at University of Amsterdam Business School

Bologna, November 15th 2018

Giuseppe Torluccio