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Monetary transmission through the debt financing channel of Islamic banks: Does PSIA play a role?

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ABSTRACT

This paper examines the monetary transmission mechanism through Islamic banks' debt financing channel. Its purpose is to test if this channel effectively works and to verify whether the reaction of Islamic banks to interest rates depends on their specific characteristics. The research main focus is on the possible mitigating effect that profit sharing investment accounts (PSIA) could exert on the debt financing channel, since that this source of funding, specific to Islamic banks, is expected to be more stable than deposit accounts for conventional banks. The study uses a quite representative sample composed of 50 Islamic banks and the estimation of a dynamic panel model observed between 2005 and 2014 using the system GMM estimator. Empirical findings confirm the presence of a debt financing channel of monetary policy since that interest rates variation affects Islamic bank financing. PSIA growth, capitalization, assets liquidity and size are among major determinants of Islamic banks' debt assets supply. Besides, using several robustness tests, we show that, in addition to asset liquidity and bank size, growth rate of PSIA significantly mitigate the negative effect of interest rates on debt financing growth, which highlights the importance of this specific category of deposits in monetary transmission especially for countries where Islamic and conventional banking systems coexist.

1. Introduction

The relationship between monetary policy and the real economy is identified through the influence of monetary transmission channels on macroeconomic variables especially economic growth, inflation and investment. The rule is simple, the more monetary policy affects the economy, the more effective it is. In other words, the effectiveness of monetary authorities' decisions supposes the existence of a relationship between a set of monetary policy instruments, especially the policy rate, and macroeconomic performances through different transmission channels. Main channels through which monetary policy could impact economic activities are interest rate; money supply; bank credit; exchange rate; asset price and expectation channel (Bernanke and Gertler, 1995; Taylor, 1995, Mishkin, 1996Taylor, 1995, Mishkin, 1996). Recent studies have focused on some topics related to transmission channels like the effect of the financial crisis, unconventional monetary policy and capital inflows in emerging economies (Mishkin, 2009; Borio and Zhu, 2012; Cevik and Teksoz, 2012; Chandra and Unsal, 2012; Kohlscheen and Miyajima, 2015). Besides, after the development of Islamic finance in the 2000th, largely through the rapid expansion of Islamic banks, the effectiveness of monetary transmission mechanism (MTM) was challenged for the countries where Islamic banks are present. In these countries, in which a dual monetary system is emerging, a growing number of empirical studies examined the monetary transmission through Islamic bank channels

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(Zaheer et al., 2013; Ergeç and Arslan, 2013, Majid and Hasin, 2014; Akhatova et al., 2016; Zulkhibri and Sukmana, 2017).

In reference to *Sharia* rules, Islamic banks institutions are free interest rate and fundamentally different from conventional banks. The differences mostly well-known through the principles of *Sharia* are based mainly on profit and loss sharing (PLS) principle and asset backing principle. Applying both principles on banking intermediation make assets financing and their pricing close to real economy. Nonetheless, given that debt financing contract, being the main Islamic banking asset, is quite similar to conventional credit, the conduct of monetary policy through interest rate instrument is also expected to influence Islamic banks financing. In fact, in most countries where Islamic banks operate, monetary policy uses interest rate instrument of monetary market regulation as a benchmark of credit financing rate. Besides, in dual financial system, the presence of strongly competitive conventional banks, the inexistence of benchmark pricing of Islamic bank products and the underdevelopment of Islamic money markets,[1] make Islamic banks behaviour, in term of debt financing, heavily influenced by monetary policy shocks and conventional bank activity.

On the other side, given this incompatible environment with their ethical background, the presence of Islamic banks is likely to limit the ability of monetary policy to influence their financing debt volume making Islamic banking channel less effective despite its dependence on interest rate. In fact, Islamic banks, mainly through the use of profit sharing investment accounts (PSIA), seek to maintain debt financing level outside the influence of conventional monetary policy and to mitigate the undesirable effect of interest rate changes. The *Sharia* compliance of PSIA as loss absorbent product based on PLS principle with different maturities and currencies explains its importance to play multiples roles.[2] In fact, during the last years, the expansion and the stability of the PSIA reaching 40-45% of total assets, incited Islamic banks to optimally use this source of funding to enhance liquidity management, to satisfy debt financing demand and to improve their conformity to capital adequacy rules.[3] Nonetheless, according to the literature (Bacha, 2004; Chong and Liu, 2009; Zainol and Kassim, 2010; Cevik and Charap, 2011; Ergeç and Arslan, 2013, Anuar et al., 2014; Hamza, 2016) PSIA seem to be influenced by interest rate changes in the presence of a displaced commercial risk, especially during tightening periods, that could reduce the volume investment deposit and affect by consequence the volume of debt financing (Sukmana and Kassim, 2010).

Despite the interest free as the cornerstone of Islamic banks, it is interesting to explain the potential responses of Islamic banks to interest rate changes in dualism environment characterizing several banking systems around the world and where Islamic and conventional banks share some features. Following this view, our research examines the relationship between monetary policy shocks and debt financing volume. Thereby, our interrogations are the following: Does monetary policy influences Islamic banking financing? Do PSIA exert any impact on the Islamic banks' debt financing channel? Are Islamic bank own characteristics affect the optimal level of debt financing supply in response to interest rate changes? To our knowledge this is a pioneer empirical study that focus on a quite representative sample of Islamic banks based in different countries. This is likely to provide us with more acute results concerning the general tendency of Islamic banks reaction to conventional monetary policies which seems to be negative in most cases (Yungucu and Saiti, 2016). The present research differs from previous ones focusing on the monetary transmission using single-country case studies, mainly East-Asian countries. Furthermore, the originality of this research is to focus on the role of PSIA as a major specificity of Islamic bank in the MTM.

The remainder of the paper is organized as follows. Section 2 examine the MTM in the context of Islamic banks and the role of PSIA with a focus on main theoretical and empirical studies. Section 3 presents the empirical methodology based on the estimation of a dynamic panel model using system GMM estimators using a sample of 50 Islamic banks observed between 2005 and 2014. The interpretation and discussion of the empirical results are presented in Section 4. The final section concludes and suggests some recommendations.

2. Background and literature review

2.1. Interest rate versus debt financing

Monetary policy is designed to manage the supply of money with the aim to conduct the real economy to its objective in term of growth and price stability. Mostly, monetary authorities use interest rate as instrument for their monetary decisions to influence the supply of bank credits which in turn influences consumption and investment decisions. The transmission mechanisms of monetary policy are defined by the channels through which monetary policy decisions affect the real economy. This connexion of money supply to real economy which is illustrated by the MTM is largely examined in the conventional literature of monetary policy. Decisions taken by the central bank are transmitted on prices and activity through various channels such as the interest rate, bank credit (Bernanke and Gertler, 1995; Meltzer, 1995), asset prices and expectations. The credit channel which includes lending and balance sheet channels is examined in the literature through its role and efficiency compared to other channels.

Particularly, the lending channel explains that monetary policy decisions via interest rate changes influences credit supply which in turn impact economic activity under the hypothesis of imperfect substitutability of demand deposits with other sources of funding and the presence of credit multiplier mechanism (Mishkin, 1996). The process is based on the change of policy rates by central banks according to economic situation. During expansionary monetary policy, the policy rate is decreased when the monetary authorities

[1] Except in Malaysia and Sudan.

[2] These investment-deposits have been created as an alternative to interest earning term-deposits.

[3] In the Middle East and North Africa (MENA) region Islamic banking assets represent 14 percent of total banking assets. In the GCC the market share of Islamic banking has crossed the 25 percent threshold, which suggests that Islamic banks have become systemically important in these countries (Basu et al., 2015).