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Impact of off-balance sheet banking on the bank lending channel of monetary transmission: Evidence from South Asia

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ABSTRACT

Based on a panel data set for 114 South Asian commercial banks, we find that off-balance sheet banking reduces the effectiveness of the bank lending channel of monetary transmission. That is, banks with high exposure to off-balance sheet activities are able to insulate their loan supply against a monetary policy shock thus creating a buffering effect on monetary transmission. We also suggest that these effects are substantial for small, highly-liquid and well-capitalised banks. The buffering effect of off-balance sheet banking on monetary transmission raises important policy issues, particularly with regard to the effectiveness of monetary policy and the definitions of monetary aggregates.

1. Introduction

There is a broad consensus that changes in a financial system impact the ability of central banks to affect the real economy and hence monetary transmission (Romer and Romer, 1994;

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Boivin et al., 2010; Aysun and Hepp, 2011). In particular, it is argued that financial sector reforms and changes including financial deregulation, innovation, competition lead to transformations in the credit and banking markets and as a result, monetary transmission, mainly through the credit channel, may have altered to a greater extent (Altunbaş et al., 2009; Olivero et al., 2011a).

Amongst various changes in the credit and banking markets, decline in traditional banking activity (decline of banks' share of total financial intermediary assets), that is 'financial disintermediation', raises important policy issues with regard to macroeconomic management and central banking (Flannery, 1989; Edwards and Mishkin, 1995). Whilst financial disintermediation occurs in different forms of activity such as participating in capital markets and providing non-financial services by banks, off-balance sheet (OBS, hereafter) banking is considered one of the major forms of non-traditional banking activities.[3] These OBS banking facilities provide liquidity to bank customers and remain a substitute for on-balance sheet liquidity. As a result, the relationships between money, interest rates and other variables of concern to policy makers could be weakened (Glick and Plaut, 1989). In particular, such non-traditional activities could weaken the particular channels of monetary transmission (Altunbaş et al., 2009). Given this background, we attempt to empirically examine the impact of OBS banking on the effectiveness of monetary policy transmission, specifically focusing on the bank lending channel in the emerging country context. To our knowledge, this is the first study to examine whether OBS banking manifests in higher growth in bank lending activity and creates a buffering effect on the impact of monetary policy actions via the bank lending channel of monetary transmission. This empirical exposition is motivated by several reasons.

First, despite the consensus on the impact of financial disintermediation on monetary policy, so far, only a limited number of studies have been conducted in this area and they reported mixed evidence.[4] However, as these studies are generally limited to credit commitments and securitisation, our study intends to focus on the entire OBS portfolio including the impact of other OBS facilities such as guarantees, acceptances and other contingent liabilities.[5] Second, the bank lending channel is a much debated and discussed segment of the monetary transmission mechanism and hence receives considerable attention in policy deliberations (Brissimis and Delis, 2009; Disyatat, 2011). In particular, banks play a special role in transmitting monetary policy impulses through the bank lending channel (Disyatat, 2011; Olivero et al., 2011a), however the significance of their role has changed with financial developments over time (Brissimis and Delis, 2009). Hence, it is worthwhile to examine the role played by banks in transmitting monetary policy in the presence of OBS banking as these OBS banking practices allow banks to smooth the impact of monetary policy changes. Third, emerging country financial sectors have undergone substantial changes during recent decades (Brissimis and Magginas, 2005). It is believed that these developments may have important implications for monetary transmission process in emerging countries.[6] In particular, a substantial surge is observed in financial disintermediation and OBS banking in emerging countries in recent times (Oh, 1997; Nachane and Ghosh, 2007), and those developments may have had significant effects on macroeconomic management and monetary policy conduct in emerging countries.

Thus, motivated by the aforementioned arguments, our study intends to answer the central proposition, '*to what extent does off-balance sheet banking impact on the effectiveness of the monetary transmission mechanism?*' As such, we test whether OBS banking activity amplifies or reduces

[3] Off-balance sheet banking refers to banking products and practices, which are not reflected in traditional forms of portfolio activity (Calmès and Théoret, 2010). These transactions earn a fee income and are not recorded on the bank's balance sheet as on balance sheet items (Hassan, 1993; Hassan et al., 1994). OBS activities can be broadly classified into guarantees, commitments, market-related activities and advisory or management functions.

[4] For example, Roldos (2006) and Tan and Goh (2009) on the effectiveness of monetary policy amidst bank disintermediation; Duca and Vanhoose (1990) and Sofianos et al. (1990) on the impact of loan commitments; Estrella (2002), Altunbaş et al. (2009), Loutskina and Strahan (2009) and Loutskina (2011) on the impact of securitisation.

[5] Given the importance of securitisation as a dominant OBS activity in advanced countries [see, for example, Goddard et al. (2007), Loutskina (2011)] and also due to the rapid growth particularly in the US and European banks [see, for example, Altunbaş et al., 2009; Benmelech et al., 2012], existing studies may have inclined to focus mainly on securitisation.

[6] As emerging countries have unique and different economic and financial characteristics compared to those of advanced countries, appropriate and separate modelling is deemed essential to formulate effective monetary policies (Aleem, 2010; Frankel, 2010).