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Abstract

This dissertation contributes to the literature on financial intermediation by examining the importance of banks as liquidity providers for corporate borrowers and the role of liquidity on banks’ financial performance, as well as its role in the context of joint determination with bank capital and risk.

It has been accepted in the banking literature that lending relationships are special and bank loans are the important source of external financing for corporate borrowers. Although tight lending relationships have benefits for borrowers it also can pose threads when relationship banks experience liquidity problems. First chapter provides evidence about the transmission of banking sector problems to corporate borrowers, and examines the impact of bank credit supply frictions on firm performance. I exploit differences in the composition of banks' liabilities structure during the financial crisis of 2007-2009 as a source of exogenous variation in the availability of bank credit to nonfinancial firms, in order to identify the causal relationship between bank credit supply and firm performance. My results indicate that banking relationships are important for firms. Firms whose banks relied more on core deposit financing had a lower decline in bank credit during the crisis than those whose banks were mainly financed by noncore sources of funding. I find that decline in bank credit supply is associated with stock valuation losses and sales cuts for nonfinancial firms. However, firms that had lending relationships with healthier banks had a lower decline in bank credit and thereby lower reductions in their stock returns and sales during the crisis.

Financial crisis of 2007-2009, also known as the Great Recession, revealed problems in banks’ funding and liquidity management and highlighted the importance of bank liquidity buffers. The severity of Great Recession revitalized a need for the revision of banking regulations, especially in the context of bank liquidity. The Basel Committee on Banking Supervision (BCBS) introduced a new Basel III international framework that in addition to enhanced capital requirements also includes two standards for liquidity risk management: the liquidity coverage ratio and the net stable funding ratio (BCBS, 2010). These new liquidity standards are aimed at addressing maturity mismatches of bank assets and liabilities more comprehensively both short and long-term. But whether this new regulation will strengthen the banking sector and restore the stability is uncertain. Therefore, it is essential to better understand how the new regulations will impact banks. In particular, it is important to examine the relationship between new liquidity standards, bank profitability, bank capital and risk.

Second chapter examines whether and how new liquidity risk measures introduced in the Basel III accords affect bank profitability. In contrast to previous empirical studies, I analyze how the combination of capital and liquidity ratios affects bank profitability. I conduct a comprehensive analysis to calculate the Basel III liquidity risk measures: the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR) using historical data for U.S. bank holding companies over the period 2001-2013. This is the first study to examine the impact of Basel III liquidity risk measures on bank profitability in the U.S. employing the GMM estimator technique. The

estimates show that increased Basel III liquidity ratios decrease profitability of small banks. LCR adversely impacts profitability at large banks, while NSFR has significant positive impact on large banks' ROA and ROE. My findings also show that banks maintaining low liquidity ratios are more profitable, and departures of liquidity ratios from regulatory level of 1 adversely impact bank profitability. In these cases, LCR affects profitability of large banks only, while NSFR affects only small banks. Both liquidity risk measures and capital ratios are important determinants of bank profitability at large and small banks. Results of this study show that in general there is a tradeoff between bank profitability and stability of the banking system. My findings have important implications for bank regulators.

Third chapter co-authored with Dorota Kowalczyk investigates capital, risk and liquidity decisions of U.S. bank holding companies during the period from 2001 till 2007. We extend the simultaneous equation model with partial adjustment introduced by Shrieves and Dahl (1992) to model liquidity adjustments and examine the relationship between new Basel III liquidity measures, bank capital and risk adjustments. Our findings show that banks targeted capital, risk and new liquidity measures in the pre-Basel III sample period. Moreover, we document that banks simultaneously coordinated short-term adjustments in capital and risk. Incorporation of bank liquidity enables us to establish the presence of the coordination of risk and liquidity decisions. Short-term adjustments in new liquidity rules inversely impact changes in bank capital, while capital adjustments only have a significant adverse effect on changes in the liquidity coverage ratio. Our results emphasize that it is critical to incorporate liquidity ratios, in addition to capital requirements, into the banking regulations. Finally, our research partially verifies the theoretical predictions of Repullo (2005).