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A Post-Crisis Reduction in Competition Intensity

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The banking industry is experiencing a much smaller effect on profitability from competition than it did before the 2007-2009 financial crisis. The primary reason is the abundance of low-cost deposits resulting from the Federal Reserve's extraordinary expansion of the money supply.

The Bank Competition Intensity Index (BCI) estimates the effect that competition has on average bank net interest income (NII) in each rural county or MSA. The index is constructed so that the average index value between 1997 and 2015 equals zero. A value of 0.05 in a county in the year 2015, for example, implies that competition has reduced average NII in that county by 5bp relative to the average market between 1995 and 2015.

The index is composed of three factors: the ratio of maturity liabilities to total liabilities, the number of bank offices per 1000 households, and the complement to the deposit market share Herfindahl-Hirschman Index (1 – HHI of deposits). An increase in any of these factors indicates that competition in the market is more intense, which reflects a decline in average NII in that banking market. As Table 1 shows, a ten-unit increase in the ratio of maturity liabilities to total liabilities (e.g. from 55% to 65%) reduces NII by 23bp; ten additional bank offices per 1,000 people reduces NII by 7bp; and a ten-unit increase in (1 – HHI) reduces NII by 1bp.

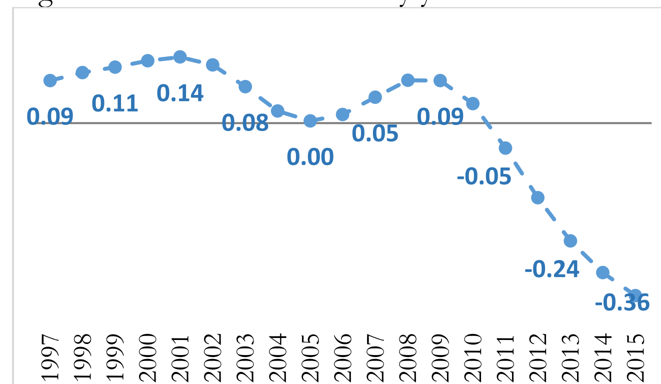
Table 1. Effect of competition intensity on NII

Ten unit increase in: →	Decline in NII of:
Maturity Liab. to Total Liab.	23bp
Offices per 1,000 people	7bp
1 – HHI of Deposits	1bp

After 2010, the ratio of maturity liabilities to total liabilities fell sharply due to a surge in liquidity from the Federal Reserve's Quantitative Easing programs. The average maturity liability ratio in banking markets fell from 50% in 2010 to 34% in 2015. Many banks that had relied heavily on maturity deposits through 2010 found it much easier to gather nonmaturity deposits thereafter.

Figure 1 plots the mean yearly value of the bank competition index from 1997 through 2015. The steep decline occurs after 2010. The index fell from 0.04 in 2010 to -0.36 in 2015, which indicates that competition reduced the NII of the average banking market in 2015 40bp less than it did in 2010.

Figure 1. Mean value of BCI by year



This reduced intensity from bank competition is likely to reverse as the Federal Reserve withdraws liquidity from the economy. Core deposits will become more scarce and interest rates will rise. Banks with heavy reliance on maturity deposits will experience a relative decline in NII because their funding costs will rise more than those at other banks. The reduced profitability, in turn, will increase the pressure for consolidation.

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