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Banking market conditions and deposit interest rates

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Abstract

This paper shows that the impact of market structure on bank deposit interest rates is complex. Both market size structure and multimarket bank presence have independent effects on rates. There is evidence that mid-size banks were more aggressive competitors than other banks, but that the effect of market structure on deposit rates has evolved over time, with mega-banks recently becoming more aggressive competitors. This may be related to the growth of mega-banks in many markets. These findings have implications for existing theories of deposit pricing and, by extension, antitrust policy in banking.

JEL classification: G21; G28; L11; K21

Keywords: Banks; Size structure; Deposits; Interest rates; Antitrust policy; Market concentration

1. Introduction

This paper addresses the relationship between conditions in local banking markets and the interest rates offered by banks on deposits. This is a timely question because banking has been in a period of rapid change in recent years. The last two decades saw the most mergers in the history of banking. In large part because of the merger activity, the average size of a bank tripled during that period. At the same time that banks were getting larger, local banking market concentration stayed roughly constant.[1] This suggests that a main

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[1] We assume markets are metropolitan statistical areas (MSAs) or, outside MSAs, counties. After dropping markets with fewer than five banks, the average Herfindahl was 0.223 in 1988 and 0.225 in 2004.

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effect of the merger wave on local markets was to replace smaller banks with larger banks. We explore how the growing presence of larger banks affects deposit rates and competitive conditions within markets.

Most depositors look for a bank in their local market (Amel and Starr-McCluer, 2002). Thus, the distribution of banks in a local market may affect deposit pricing. We focus on four aspects of the structure of a local banking market. The first, market concentration, is the traditional backbone of antitrust analysis. An analysis based on this would predict little impact on deposit rates from a rapid increase in average bank size that left local market concentration essentially unchanged. Alternatively, the increase in bank size might affect deposit rates if regional or large nationwide organizations compete in different ways than small, local institutions, even when the different organizations have similar local market shares. As one test of this, we examine whether deposit interest rates are affected by the *market size structure* of a local market, defined as the distribution of market shares of banks of different sizes whether or not the bank size is achieved entirely in that local market (Berger et al., 2007). Third, although banking markets are generally local in nature (Amel and Starr-McCluer, 2002), there is evidence that multimarket banks compete differently than banks that operate primarily in a single market (e.g., Cohen and Mazzeo, 2004; Hannan and Prager, 2004; Park and Pennacchi, 2005). One contribution of this paper is to show that market size structure and the presence of multimarket banks have distinct effects on bank deposit rates. Finally, there are differences in the services provided by banks as a function of their size. We provide preliminary evidence on whether banks compete more intensively against rivals of a similar size.

We examine interest rates on interest-bearing checking (NOW) accounts at banks in the United States over the period 1988–2004. NOWs are among the most widely held deposit products, with over 70% of depositors having a checking account at their primary financial institution (Amel and Starr-McCluer, 2002). They are often the main factor depositors consider when selecting a bank, and thus are likely to be a prime focus of competition among banks.

Our goal is to determine how deposit interest rates offered by a bank in a local market are affected by changes in the structure of the market and bank-specific factors. This offers a potential contribution both to our understanding of how prices are set and to antitrust regulation of banks. Antitrust regulators are concerned with how changes in market conditions affect depositors. Traditionally, one focus of antitrust analysis is the effect on deposit rates from changes in market concentration, often measured by changes in the Herfindahl–Hirschmann index (HHI). As an application, bank mergers are subject to different levels of scrutiny depending on the pre-merger HHI in each local market the banks operate in and how much the merger would affect each HHI.[2] The results in this paper suggest that antitrust analysis should also consider how other aspects of market structure affect competitive conditions.

We show that both the size structure of a market and the share of multimarket banks in that market have an impact on deposit rates. Looking at 1988–2004 as a whole, moving market share from a small bank (less than \$1 billion in total assets) to a mid-size bank (between \$1 billion and \$20 billion in total assets) generally *increases* rates at *other* banks in the market. When deposit share moves from a mid-size bank to a mega-bank (greater than \$20 billion in total assets) deposit rates generally *decrease* at *other* banks in the

[2] Regulators consider more than just the HHI in regulatory analysis (see, e.g., Gilbert and Zaretsky, 2003).