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Deregulation, liberalization and consolidation of the Mexican banking system: Effects on competition

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A B S T R A C T

This paper analyzes the evolution of competition in the Mexican banking system in the period 1993–2005, a period of deregulation, liberalization and consolidation of the sector. For this purpose we use two indicators of competition from the theory of industrial organization (the Lerner index and the Panzar and Rosse's *H*-statistic). The empirical evidence does not permit us to reject the existence of monopolistic competition. The Lerner index shows a decrease in competitive rivalry in the deposit market and an increase in the loan market, a cross subsidization strategy being observed. The results obtained call into question the effectiveness of the measures implemented hitherto, aimed at increasing the competition of the Mexican banking system.

1. Introduction

In recent years the Mexican banking system has undergone major changes, such as its nationalization in 1982, privatization in 1991, the financial crisis of December 1994 and its gradual opening-up to foreign investment, beginning in 1994. It was not until December 1998 that the restrictions on banking activity were completely lifted.

In this context, several studies have analyzed the effect on the Mexican banking system of the events occurring during this period. Thus, in the case of privatization, Unal and Navarro (1999) show

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that the Mexican government was very careful to ensure due process and transparency through the entire bank privatization process. However, the lack of a legal and regulatory framework and lax oversight shadowed the success of the technical process. Haber (2005) analyzes the privatization of the banking system and argues that the government's objective was to privatize an oligopolistic banking industry and maximize its revenue.

In relation to the opening-up of the Mexican banking market to foreign capital, and with the sole exception of Haber (2005) [1], the literature on emerging countries does not show any conclusive results. On the one hand, authors such as Levine (1996), Demirgüç-Kunt et al. (1998) and Claessens et al. (2000) offer arguments and evidence favorable to opening-up, while other authors (such as Kaminsky and Reinhart, 1999) show arguments against.

The events described above can affect the degree of competition in the Mexican banking markets, and consequently the country's economic development. In this respect, the analysis of competition in the banking sector is important, since the exercise of market power brings with it a social inefficiency that translates into a loss of social welfare (the so-called Harberger triangle), an increase in financial intermediation costs, and consequently slower growth of investment and production.

Conscious of the importance of the analysis of banking competition, other studies have focused on the analysis of the effect of the events described on the evolution of competition in the specific case of the Mexican banking system. Thus, Gruben and McComb (2003) estimate an index of market power with aggregate data and identify a change in competitive behavior due to privatization. The results obtained by the authors suggest bank behavior that is consistent with competition before the privatization but with "super-competition" after privatization in which banks run at levels of output where marginal costs exceed marginal revenues. Dueñas (2003) measures competition and banking profitability in Mexico following the entry of foreign capital (Jan97–Sept02), using the Panzar and Rosse *H*-statistic. Their results indicate deterioration in competition in the banking system and a corresponding increase in the profitability of financial institutions as a result of the opening-up to foreign banks. Finally, Solís and Maudos (2008) estimate the social costs of market power (Harberger's triangle) in the Mexican banking system over the period 1993–2005. It also tests the so-called "quiet life" hypothesis which postulates a negative effect of market power on bank management efficiency. Their results show that the social cost attributable to market power in 2005 is 0.15% of GDP, while that deriving from the cost (profit) inefficiency of banking management is 0.021% (0.075%) of GDP. The results allow the authors to reject the quiet life hypothesis in the deposits market, whereas market power in the setting of the interest rate on loans has a negative effect on cost efficiency.

In the field of measurement of banking competition, other studies referring to emerging countries include Mexico in their samples. Thus, Gelos and Roldós (2004) find that their results are compatible with the existence of monopolistic competition in the period from 1994 to 1999, and that there was no change in the competition following the process of consolidation.[2]

In this context, the objective of the paper is to measure the degree of competition in the Mexican banking system in the period between 1993 and 2005, a longer period than that analyzed in previous studies and one that covers the processes of deregulation, liberalization and consolidation of the sector. For this we use two indicators taken from the so-called new empirical industrial organization: the Lerner index and the *H*-statistic.

In relation to other studies referring to the Mexican banking system, the novelties of this study are as follows. Firstly, the Lerner index is used to measure the evolution of market power. The advantage of using it is that it permits the evolution of competition to be analyzed annually, and allows market power to be measured separately for the loans and deposits markets. Secondly, the analysis covers a period long enough to be able to observe whether the measures adopted (both privatization and opening-up to foreign investment) increased competition in the Mexican banking system. It has to be taken into account that studies carried out before now have analyzed only the consequences of privatization (Gruben and McComb, 2003) or the opening-up to foreign investment (Dueñas, 2003).

[1] Haber (2005) analyzes the effects of foreign banks entering the Mexican market.

[2] However, this result is not robust as it uses 1997 as the start of the second sub-period and considers an unscaled revenue equation, since for these cases a decline in competition is found.