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Assessing competition in the banking industry: A multi-product approach ☆

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ABSTRACT

This paper investigates the competitive aspects of multi-product banking operations. Extending Panzar and Rosse's (1987) model to the case of a multi-product banking firm, we show that higher economies of scope in multi-product banking are associated with lower Panzar–Rosse measures of competition in the banking sector. To test this empirical implication and determine the impact of multi-production on market power, we use a new dataset on the Brazilian banking industry. Consistent with our theoretical prediction, we find that banks that offer classic banking products (i.e., loans and credit cards) and other banking products (i.e., brokerage services, insurance and capitalization bonds) have substantially higher market power than banks that offer only classic products. These results suggest a positive bias in the traditional estimates of competition in which multi-output actions are not considered.

1. Introduction

The global banking sector has experienced enormous changes in recent decades. Marked growth in technological and financial innovation and strong deregulation in the sector have led to increased banking concentration and to the creation of large financial conglomerates (Bikker and Haaf, 2002).

Curiously, the theoretical and applied literature has paid little attention to the competitive effects of multi-product operations in banking conglomerates. These institutions may be defined as entities that offer financial, banking and insurance services using the same corporative structure (Freixas et al., 2007). Possession of a multi-product structure allows these companies to benefit from economies of scale and scope and provides greater opportunities for risk diversification when supplying this range of services as a package.[1] Indeed, conglomerations and multi-product operations have become a characteristic feature of the banking sector in recent years and have even received special attention in the new banking regulations drafted in the aftermath of the recent international financial crisis (see for example Levine (2012)).

Some studies in the literature have analyzed the cost efficiency of financial conglomerates and universal banks vis-à-vis commercial banks. Allen and Rai (1996), for instance, estimate economies of scale and scope in financial conglomerates by investigating countries with and without universal banks. Vander Vennet (2002) empirically analyzes the cost and profit efficiency of European financial conglomerates and universal banks. However, the only research that has addressed the effects of multi-product operations on banking competition is that of Berg and Kim (1998). Berger and Kim analyze the behavior of banks operating simultaneously in the retail and corporate banking loan segments. The results revealed asymmetries in the degree of competition, which may be related to the characteristics of the consumers in each of these segments. Although important, Berger and Kim's article is essentially descriptive and does not investigate the possible relationship between multi-production operations and competition in the banking industry.

This article aims to theoretically and empirically fill the gap in the literature on the relationship between multi-production operations and competition by studying the effects of a multi-product structure on the patterns of competition in the banking sector. The operating costs of multi-product banks should be lower than

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[1] A more detailed discussion of the economic justification for the development of conglomerates may be found in studies by Milbourn et al. (1999) and Dierick (2004).

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