Research in International Business and Finance 41 (2017) 412–422

Contents lists available at ScienceDirect

Research in International Business and Finance

journal homepage: www.elsevier.com/locate/ribaf

Full length article

Empirical assessment of the competitive conduct of Nigerian banks in a post-consolidation era

Eze Simpson Osuagwu[a,*], Ndubisi Nwokoma[b]

[a] Department of Economics and Development Studies, Covenant University, Ota, Nigeria
[b] Department of Economics, University of Lagos, Nigeria

ARTICLE INFO

JEL classification Code:
D43
G21
L13

Keywords:
Bank competition
Bank consolidation
Banking reform
Panzar-Rosse *H-statistic*

ABSTRACT

This paper is an empirical assessment of the level of competition in the Nigerian banking industry following the consolidation exercise, using a bank-level panel data, for the period 2005–2014. Empirical evidence from the Panzar and Rosse (1987) *H-statistic* reveals that market power in the Nigerian banking industry is consistent with monopolistic competition, which implies that firms are independent in their decision-making and conduct. This study innovates by incorporating non-interest income accounts in the assessment of revenue, and findings suggest that bank competitiveness decreases as revenue tends toward an inclusion of non-interest income or fee-based services.

1. Introduction

The recapitalization policy and subsequent bank consolidation exercise was a major reform to improve banking sector performance for rapid economic growth and development in Nigeria. The problem is whether the banking sector that emerged after the consolidation exercise shows evidence of a contestable market.[1] Although the bank consolidation exercise in Nigeria affected competitiveness for financial services, the result is bereft of the structural consequences that are associated with a big-push in banking reform (Beck and Cull, 2013). This paper investigates the level of competition in the Nigerian banking sector following the bank consolidation exercise, which took effect in 2005, using a reduced form revenue equation proposed by Panzar and Rosse (1987).[2] This approach estimates a reduced-form equation relating gross revenue to a vector of input prices and other control variables. Although, the P-R model has been heavily criticized (Bikker et al., 2012; Shaffer and Spierdijk, 2015), there are still consensus that it provides the empirical underpinning for understanding long-run competitive equilibrium in banking markets, unlike the Lerner index and Boone indicator, which assumes that banks pass on efficiency gains to their clients (Leuvensteijn et al., 2007).

Before the Structural Adjustment Program (SAP) of 1986 there was evidence of an oligopolistic market structure,[3] regulatory authorities fixed deposit and lending rates, as a result bank competitiveness was hampered. There was little incentive to engage in banking; only five major banks existed in Nigeria serving a population of over 80 million.[4] However, following the implementation of

* Corresponding author.
E-mail addresses: eze.osuagwu@covenantuniversity.edu.ng (E.S. Osuagwu), nnwokoma@unilag.edu.ng (N. Nwokoma).

[1] The theory of contestability implies that firms can leave or enter the market without fear of losing their capital and that every firm in the industry possess similar cost function.

[2] Rosse and Panzar first applied the H-statistic model for competitive conditions in 1977 in a study of the US newspaper industry and since then the model has been applied in studies for several industries.

[3] Lewis and Stein (1997)

[4] World Bank population estimate based on 1960 population census

http://dx.doi.org/10.1016/j.ribaf.2017.04.051
Received 2 September 2016; Accepted 28 April 2017
Available online 06 May 2017
0275-5319/

SAP, the Nigerian economy opened its doors for private participation in the banking sector and many new banks were licensed to operate under the deregulated regime.

The initial experience of deregulation was an influx of banks and financial service providers, many of whom were ill prepared for the challenges of banking and institutional lending. Hence in the mid-1990s over fifty percent of all the newly licensed banks failed.

In 2001, the concept of universal banking was introduced, which increased the scope of banking operations in Nigeria by the fusion of both merchant and commercial banking. Despite the initial attempts by monetary authorities to increase the capacity of banks in doing business, many banks still resorted to foreign exchange round tripping as an avenue to break-even. In the main, increasing competition for financial products and services further weakened the existing banks. Few Nigerian banks could withstand the pressure of engaging in traditional banking, and financing the real sector to ginger the much needed economic growth and development.

In July 2004, a major reform of the banking system in Nigeria was introduced as part of a home grown economic development agenda.[5] In order to implement the reform agenda the Central Bank announced that all banks in Nigeria should be recapitalized to the tune of twenty-five billion Naira,[6] by December 31st 2005. The recapitalization policy sent shockwaves to the banking industry, which became an issue for public discourse, but eventually banks embraced the idea of mergers and consolidation as the only option to meet the minimum capital requirement.

In view of the importance of banking to the economy there is a need to know the extent of competition that emanates from the consolidation exercise, because competition has always been a very contentious issue in the industry, but it is evident that a healthy competi!tion among firms strengthens the free market enterprise. However, in order to improve the allocative and productive efficiency in the provision of financial services, banks are expected to compete, albeit competition is widely accepted as a positive phenomenon for the industry. Furthermore, a healthy rivalry among banks can serve as a driving force in improving the quality of banking business, improving pricing and availability of banking products and services offered to customers, and promote technological innovation (see Yildirim and Philippatos, 2007).

Although some studies have discussed the competitive position of commercial banking in Nigeria, with a view to understanding the changes in the market structure before and after the consolidation exercise, for instance Saibu (2015) estimates the degree of competition between two periods, 2001–04 and 2005-13, finds a monopolistic competition both before and after the consolidation exercise, this study goes further to assess the factors that drive competition in Nigerian banks with respect to interest and non-interest portfolio.[7] In the wake of the consolidation exercise the number of deposit banks dropped from 89 in 2004 to 25 as at January 2006 and further to 20 as at December 2014. Despite the early success of the consolidation exercise, there was still evidence of competitive pressures in the banking industry resulting in the weak performance of some banks sending negative signals to the banking public.[8] In order to strengthen the system, monetary authorities in December 2009 embarked on a major examination of all the 24 banks and found that 10 were in grave conditions with liquidity, capital adequacy and corporate governance issues. The Central Bank of Nigeria ordered the replacement of the executive management of 8 banks and injected over 620 billion Nigerian Naira into the ten ailing banks to stabilize their operations.

The findings of this study will enable policy makers to understand the relative success of the recapitalization policy and also know the variables that drive competition in the banking sector. This study adds to the findings in earlier studies,[9] and strongly furthers the literature on bank competition studies in Nigeria by incorporating variables that are most compatible with intermediation theory. A major gap that is filled by this study is the inclusion of non-interest accounts to determine the direction of competitiveness in the banking sector since fee-based services is becoming increasingly important in the revenue profile of banks. This study is presented in five sections, the next section presents a review of related literature and the theoretical perspectives on bank competition, the third is a presentation of the data and methodology, the fourth section discusses the results of the empirical analysis, and the fifth section concludes the study.

2. Literature review and theoretical framework

2.1. Literature review

Banks provide the financial backbone for the growth and development of any economy. Researchers are always interested in understanding the conduct of banking business in relation to macroeconomic stability. To understand competition there is a need to examine the conduct or behavior of individual banking firms in view of the structure of the banking industry. Several empirical studies have established a strong relationship between banking structure and economic growth (Jayaratne and Strahan, 1996; Levine et al., 2000; Collender and Shaffer, 2003). In the debate on whether banking competition improves or deters social and economic welfare in terms of systemic stability several studies have equally emerged in the literature (Smith, 1998; Allen and Gale, 2004; De Jonghe and Vander Vennet, 2008; Schaeck et al., 2009) and with respect to productive efficiency (Berger and Hannan, 1998; Maudos

[5] One of the secondary objectives of the National Economic Empowerment and Development Strategy (NEEDS) introduced in 2003 by the Obasanjo administration was to strengthen the banking sector.

[6] The Nigerian currency exchanged at an average of 157 naira to a US dollar as at December 2014.

[7] See also Ajisafe and Akinlo (2013) for the study on commercial bank competition in Nigeria.

[8] See Okonjo-Iweala (2012) for a discussion on bank consolidation exercise and the implication to the growth and development of the Nigerian economy.

[9] See Ajisafe and Akinlo (2013) and Bikker et. al. (2012) for analysis of competitive conduct in Nigerian banks and the role of scale, costs and equilibrium in the assessment of competitive conduct of banks for some countries.