



Bank Competition in Africa: Do Institutional Quality and Cross-Border Banking Matter?

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August 2020 / No. 686

Abstract

This study analyses the implications of cross-border banking (CBB) and institutional quality (IQ) for bank competition in Africa. We apply a two-step estimation procedure using bank-level panel data for 29 African countries. In step one, the Boone indicator and the Lerner index are used to gauge bank competition in a given country in Africa. In the second step, we analyse the sources of bank competition, placing emphasis on the impact of CBB and IQ. The results suggest that competition increased in the period 2002-2005, before decreasing somewhat between 2006 and 2007 and increasing again thereafter. The results also show that cross-border banking enhances bank competition

in African countries with stronger governance structures and institutional quality. Our results are robust to an array of controls, including an alternative methodology, variable specifications, and the regulatory environments that banks operate in.

Introduction

A sound banking sector competition is of great economic importance because it provides for the efficient production of financial services, improves the quality of financial products and the degree of financial innovation (Claessens & Laeven 2004). In addition, literature has identified six reasons why competition in the financial sector is important: firstly, for firms and households to access financial services (Beck et al., 2004); secondly, for proper functioning of the financial sector (Claessens & Laeven, 2005); thirdly, for stability of the financial system (Boyd et al., 2009); fourthly, for efficient management of financial intermediaries (Berger & Hannan, 1989); fifthly, for improvement of monetary policy transmission through the interbank market rates (van Leuvensteijn et al., 2010); and finally, for overall industrial and economic growth (Allen & Gale, 2004). Competition can stimulate innovation, lower prices and increase the quality of products and services produced, which in turn enhance choice and welfare. Furthermore, Zarutskie (2011) contends that competition enables banks to either specialize in certain types of lending, or improve their screening abilities for borrowers in particular segments of credit market, and this enables banks to become more cost efficient relative to their competitors. Dick and Lehnert (2010) provide evidence to suggest that competition increases banks' lending and lowers loan default.

In Africa, the issue of competition in the financial services sector has important implications, especially for enhancing productive efficiency, financial stability, and effective regulation and supervision. These implications, according to Kasekende et al. (2009), have possible positive spillover effects to the rest of the economy, or indeed from one African country to the rest of the continent. Thus efficient lending strategies of some banks in response to competition increases banks' profitability level relative to their competitors. Consequently, the development of reliable and easily understandable indicators of competition is a highly relevant endeavour (Carbó et al., 2009). In Africa, however, an understanding of the underlying mechanisms that drive the evolution of competition is important to government agencies tasked with ensuring that competitive outcomes prevail.

In the banking industry, assessment of competition has a long empirical tradition (Casu & Girardone, 2006; Degryse et al., 2009). However, evidence related to bank competition in Africa is scarce. The international evidence on competition presented in previous studies includes a small number of large African countries (Claessens & Laeven, 2004; Clarke et al., 2003; Turk-Ariss, 2010). Given the importance of bank competition to Africa economic development, (African Competitiveness Report, 2009),

a reliable, appropriate, and easily understandable measure of competition is needed. Kodongo et al. (2015) show that the institutional quality is important to a bank at the planning phase of banks' foreign expansion decisions and that banks consider going abroad due to competitive pressures currently exerted by their stronger, more efficient competitors as well as by their domestic competitors having expanded abroad. More so, most previous studies do not account for the political and institutional factors that are likely to shape competition in countries characterized by a variety of imperfections, which is caused by a lack of development, weak institutions, poor governance and barriers to entry.

The existence of cross-border banks can increase competition, which is beneficial to bank stability (Boyd & De Nicolo, 2005). Carlson (2004) is of the view that cross-border banks are less likely to survive and the duration of survival is also relatively much shorter. The entry of cross-border banks or foreign banks has several implications for the host countries, especially sub-Saharan African (SSA) countries: toughen inter-bank competition as well as ensure greater use of advanced technologies to improve business skills and services, increase financial service access, may bring about great stability, improve the development of the local banking supervision and legal regulations, increase transparency and the availability of international capital, and boost financial and economic performance of borrowers (Clarke et al., 2003; Claessens, 2009; Mishkin, 2007; Cull & Peria, 2013; Chopra, 2014). However, the effects of cross-border banking on competition in Africa appear to be varying and also dependent on some conditions including efficient accounting standards; collection of collateral; improved information; strong institutions; privatization of state-owned banks; and the removal of entry barriers (Sacerdoti, 2005; Demetriades & Fielding, 2012). This is the gap which this study addresses. We measure competition and analyse the cross-border banking and institutional quality effects on bank competition in Africa.

Apart from an extension in the scope of the current literature, this study makes the following two important contributions regarding developing and emerging economies. First of all, we estimate competition among banks in Africa by applying a new measure of competition, the Boone indicator. This approach to measure competition is innovative in the sense that competition can be measured for various products such as the loan markets and for several types of banks, such commercial, savings, merchant, development and co-operative banks. Another merit of the use of Boone indicator is that it requires relatively little data and also allows the estimation of competition on an annual basis where the development of competitive environment can be examined and analyzed over the period (van Leuvensteijn et al., 2010). In addition, we employ Lerner index as alternative measure of bank competition. The Lerner index represents the price mark-up over marginal cost, and to avoid any bias emanating from a bank exercising market power in the deposits market, and given that there is no consensus in the literature regarding how best to assess the degree of bank market power (Carbó et al., 2009), this study employs three different specifications of Lerner: a conventional

Lerner (Berger et al., 2009), a funding-adjusted Lerner (Maudos & De Guevara, 2007), and efficiency-adjusted Lerner (Koetter et al., 2012). Secondly, we use the results in the first objective to analyse factors that explain the differences in bank competition. Here, we evaluate how cross-border banking and the various countries' institutional strength shape bank competition in Africa.

Our results suggest that competition increased in the period 2002-2005, before decreasing somewhat between 2006 and 2007 and increasing again thereafter. Differences across regional groups are observed. In central Africa and part of southern African countries, competition on the average was high between 2003 and 2005, but started decreasing thereafter to 2008. In northern countries, the trend is rather different. The bank competition is at its lowest in 2005, but gradually increases after 2007. Finally, in the southern African countries, bank competition is relatively stable even though the observed estimates are lower than that of northern African countries in 2006 and 2007. On the determinants of bank competition, the results suggest that cross-border banking enhances bank competition in African countries with stronger governance structures and institutional quality. These results are robust to an array of controls, including an alternative methodology, variable specifications, and the regulatory environments that banks operate in.

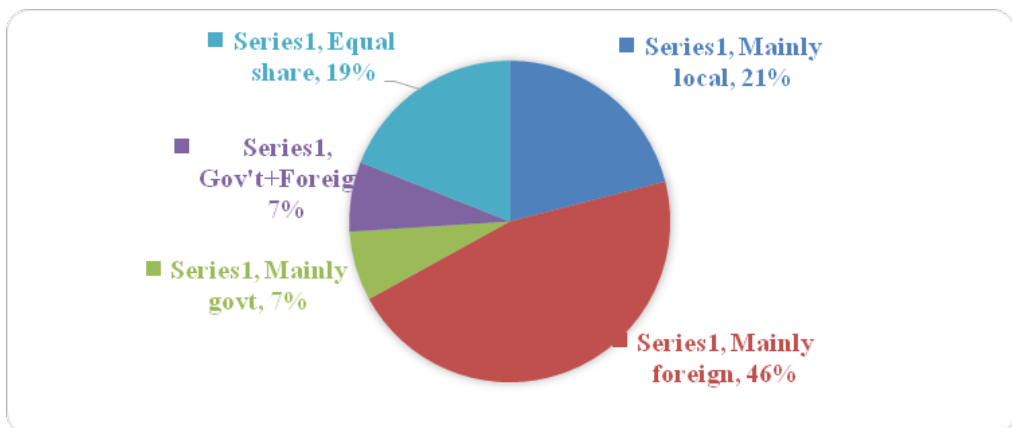
Banking in Africa: Some stylized facts

African banking sector has undergone changes over the past two decades. During the 1980s, banking in Africa have been dominated by government-owned banks. Subject to restrictive regulation, financial liberalization, institutional and regulatory upgrades and globalization have changed the face of financial systems across the region. Recently, most countries have deeper and more stable financial systems, though challenges of concentration and limited competition and high cost persist (Beck & Cull, 2014). One common characteristic of African banking sector is that, a large number of banks invest in government securities instead of lending to the private sector. For example, in 2011, credit to the private sector averaged 78% of gross domestic product (GDP) (compared to 132.5% for other emerging markets in East Asia and the Pacific). Prior to the 2008 financial crisis, the ratio of liquid to total liabilities of sub-Saharan African (SSA) banks averaged around 30%, while that of other developing countries was around 4% (Allen et al., 2014). There is also evidence to suggest that non-competitive market structure in some of the economies has hampered financial intermediation (Biekpe, 2011).

In promoting competition in African banking systems, cross-border banks play an important role during the period. For example, South Africa's Standard Bank currently operates in 15 sub-Saharan African countries. Togo-based Ecobank tripled its affiliate network in Africa between 2000 and 2013 from 11 to 32 countries, while

Nigeria's United Bank for Africa (UBA) increased its footprint from one to 19 countries. Morocco's Attijariwafa Bank has a presence in 12 African countries, and Morocco's Banque Marocaine du Commerce Extérieur (BMCE), went from two to 18 countries over the same period. In addition, several commercial banks domiciled in Kenya have recently extended their portfolio across Kenyan borders, with more than 11 banks having foreign operations by the end of 2012 (see Figure 1). While cross-border bank penetration has increased from already high levels over the past decade, the composition of the foreign bank population has changed substantially. Banks from emerging markets, and critically from inside Africa, have gained importance over the past years. The influx of foreign banks seem to have several advantages that are specific to Africa: international banks can help foster governance; they can bring in much-needed technology and experience that should translate into increased efficiency in financial intermediation; and they can help exploit scale economies in small host countries.

Figure 1: Ownership structure of banks in Africa



Source: Beck et al. (2014)

On how quality of institution influences competition, Claessens and Van Horen (2014) suggest that banks which are used to working in countries with strong (weak) institutions, a relative high (low) institutional quality in the host country positively impact the cross-border bank entry. Economic expansion, legal, cultural and geographical proximity to the host country play a key role in attracting foreign banks to emerging markets and for that matter, increase bank competition in the host country in Africa (Hryckiewicz & Kowalewski, (2010). Nonetheless, especially in Africa, with many small, risky, and opaque enterprises, the dark side of foreign bank entry can become obvious, even more so in countries in which foreign banks have captured almost 100% of the banking market. The absence of a sound contractual and institutional, informational framework reduces the feasibility of small business lending further and thus the positive effect of foreign bank entry (Claessens & Van Horen, 2014).

Conclusion and policy implications

Over the last two decades, governments in African countries have embarked on a variety of financial sector reforms involving deregulation and relaxation of entry barriers to foreign banks. In this regard, this study measures the level and determinants of bank competition in Africa banking, focusing on cross-border banking and institutional quality. A two-stage approach is employed. In stage one, the Boone indicator as well as the various Lerner index are used to measure the extent of competition in a given country. On the whole, the estimates show that bank competition in Africa steadily increases in the period 2002-2005 but declines between 2006 and 2007 and then marginally increases thereafter. There is also observed differences across the regional groups. In central Africa and part of southern African countries, competition is high, on average, between 2003 and 2005, but starts decreasing thereafter to 2008. In the northern region, competition is at its lowest in 2005. Competition in southern African countries is stable though the observed estimates are lower than that of northern African countries in 2006 and 2007. These results are robust across different measures of competition.

In the second stage, the Boone indicator and different measures of Lerner index are used as the dependent variables to explain the factors that influence bank competition in Africa. Cross-border banking and institutional quality enhance competition in countries with stronger governance structures. The findings highlight the importance of institutional quality in ensuring competition in emerging and African countries. Transparency and the rule of law increase bank competition in African countries. Our results on the relationship between cross-border banking and competition reveal that, competition tend to flourish in a country where funding-adjusted and efficiency-adjusted cross-border bank operate. On the regulatory influence, the result reveal that, regulatory initiative which restricts banking activities imposes severe entry requirements and requires high regulatory capital and influences competitive level of banks in Africa. On a whole, the study concludes that cross-border banking enhances bank competition in African countries with stronger governance structures and institutional quality. These results are robust to an array of controls including alternative methodology, variable specifications and the regulatory environments that banks operate in.

Our results have implications for policy makers and government agencies charged with maintaining competition in the banking sector. In introducing any competitive code of conduct in the banking sector, policy makers should bear in mind the capacity of bureaucrats and the quality of the judiciary to supervise and adjudicate rules and regulations.

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Mission

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