



Bank Competition and Financial Inclusion: Evidence from Ghana

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Abstract

This paper investigates how banking sector competition, measured from the consumer's perspective as well as from financial intermediary pricing behaviour, affects financial inclusion in a developing country like Ghana. Financial inclusion in Ghana has remained low, leading us to examine if competition within banks (who happen to be the largest financial institutions) promotes financial inclusion. This paper measures competition using two indicators: the consumer-level measure of competition relating to the proliferation of bank branches, and a measure for banking sector competition using the funding-adjusted Lerner index

at the financial intermediary level. Using data from the 2013 Ghana Living Standards Survey, district-level data on bank branches and bank-level financials from 23 banks spanning the period 2008–2015, we found in almost all cases that competition, whether measured by bank branch proliferation or at the financial intermediary level, improves financial inclusion. These findings suggest that policies aimed at improving competition in the banking sector can yield larger societal benefits by increasing the proportion of the population included in the financial sector. We recommend that the Bank of Ghana, in consultation with the Ghana Association of Bankers, should draft a competition policy for banks in Ghana. Key areas to examine include the trend towards “open banking”, and the integration of mobile money and technology into the financial sector.

Introduction

Financial inclusion, which captures access to, and usage and affordability of financial services, has become a topical issue and receives significant attention from both policy makers and researchers. Globally, financial inclusion is on the ascendancy. This notwithstanding, Demirgüç-Kunt, Klapper, Singer and Van Oudheusden (2015) have noted in the global financial inclusion (findex) reports that more than 50 per cent of the world’s poorest households remain unbanked. In sub-Saharan Africa (SSA) for instance, while the ascendancy is visible in account holding for example, the inclusion rate still lags global figures (see Demirgüç-Kunt et al., 2018).

Across the world, financial inclusion continues to be a major policy concern for many governments. This concern has increased, and attention is predicated on the notion that financial inclusion can and does play a crucial role in achieving the quest for sustainable development goals, such as tackling income inequality and poverty reduction (see Galor and Zeira, 1993; Park and Mercado, 2015) and, ultimately, economic growth (Ganti and Acharya, 2017). In fact, the early theoretical literature identified that access to financial services by individuals has the potential to alter production and employment choices and thereby reduce poverty (see Banerjee and Newman, 1993; Aghion and Bolton, 1997; Mohammed et al. 2017). Mohammed et al. (2017) specifically found that financial inclusion improves the welfare of the poor in SSA. According to Neaime and Gaysset (2018), there is a general realization that lack of access to financial services and finance adversely affects economic growth and poverty alleviation as the poor find it difficult to accumulate savings, build asset bases for risk protection or invest in income-generating activities.

In view of the foregoing arguments, the search for the drivers of financial inclusion has received significant research attention. Studies on the determinants of financial inclusion have transcended both the micro- and macro levels (see Arora, 2010; Sarma and Pais, 2011; Sarma, 2012; Gupte et al., 2012; Allen et al., 2016; Sharma,

2016; Sethy, 2016; Asuming et al., 2019). On the macro level, several studies have suggested banking-sector indicators such as branch penetration, credit penetration and deposit penetration, along with macroeconomic variables such as economic volatility, weak rule of law, higher income inequality, social underdevelopment, and regulatory constraints as key determinants of financial inclusion. On the household and individual levels (micro level), factors such as relative income, education and gender are some of the factors that have been documented as influencing financial inclusion (see Cámara and Tuesta, 2015; Chikalipah, 2017; Asuming et al., 2019).

In a developing context like Ghana, financial inclusion has evolved significantly over the last three decades, mostly in response to targeted policies that have been implemented over the years. Overall, Ghana seems to have more favourable financial inclusion variables when compared to SSA as a region. For example, on the issue of account ownership, Ghana is almost on a par with the overall lower middle-income country level, recording 57.7% in comparison to the developing economy average of 57.8%, quite significantly different from the 42.6% for SSA (Demirgüç-Kunt et al., 2018). From the establishment of the first bank in 1896 to the financial sector adjustment programme in the late 1980s, which saw bank numbers increasing and financial deepening (financial inclusion), the Ghanaian banking landscape has experienced very significant levels of liberalization and deregulation. Between the years 2012 and 2016, the banking sector deposit concentration ratio of the five largest banks declined from 52.8% to 44.4%, thus making for a less concentrated banking landscape as far as market power over deposits is concerned (PWC, 2016). However, what is less clear is whether the level of financial inclusion is related to the changing structure of the Ghanaian banking sector because of bank competition. That is the crux of this study.

In terms of how competition affects financial inclusion, the structure-conduct-performance hypothesis on bank competition holds that a concentrated banking sector can extract monopoly rents. If that were to hold, it would mean that a concentrated banking sector imposes a wedge on access to, and usage and affordability of, financial services by being uncompetitive and thus providing costly finance, thereby hampering financial access and, ultimately, financial inclusion (Beck et al., 2003). Other studies, such as those by Claessens and Laeven (2005) corroborate Beck et al. (2003) suggest that a more competitive banking sector indeed enhances access to finance. By contrast, Cetorelli and Gambera (2001) suggest that a concentrated banking sector rather increases access to finance via the pathway where banks, in the short run, offer increased and affordable credit with the expectation of cashing in on successful firms in the future. This leaves open the empirical question of how access to finance and financial inclusion in general is affected by competition in the banking sector. This is particularly relevant in the African context because it has been shown in prior research that African banking systems are less inclusive compared to other financial systems (Beck and Cull, 2014).

Consequently, in this paper our focus is to examine the effect of banking sector competition on financial inclusion. Banking sector competition is conceptualized on two dimensions: the proliferation of banks (proxied by the number of bank branches in a district) and competition in the banking sector (proxied by the funding-adjusted Lerner index). A few studies have sought to document characteristics of the financial services sector that enhance or impinge on financial inclusion. Kumar (2013), for example, explored the role of financial intermediaries as influencers of financial inclusion and arrived at the finding that branch network of banks has a positive impact on financial inclusion. Owen and Pereira (2018) examined the effect of bank competition on financial inclusion. Like most other studies on financial inclusion, they examined this question at the macro level for 83 countries in the world.

A country case study like ours, using micro-level data (both at household and financial intermediary level) to examine the influence of banking competition on financial inclusion, is the first to our knowledge. The paper contributes to the financial inclusion discourse by incorporating all three dimensions of financial inclusion: access, usage, and affordability. The paper also contributes to the literature in its measure of competition from the perspective of consumers of financial services using branch proliferation and is augmented with competition proxied by bank pricing behaviour. The evidence from the household level also allows for an in-depth analysis on a single-country level for the purposes of delivering targeted policies to influence financial inclusion.

Data source

In assessing the effect of bank branch proliferation on financial inclusion, the study employs data from the Ghana Living Standards Survey 6 (GLSS6), which is a nationwide household survey targeted at understanding the living conditions of individuals in Ghana. The GLSS6 data are used because, unlike other data that were collected earlier, the GLSS6 data have the unique feature of including a Labour Force Survey module with additional sections on household financial services. The questionnaire from the GLSS6 provides detailed information on financial inclusion/exclusion and contains a large set of questions on the individual's personal characteristics (age, gender, education, marital status, and income) that are useful for this study. The GLSS6 data were collected between 2012 and 2013 and was designed to be nationally representative. The survey covered about 18,000 households in 1,200 enumerating areas (EAs) consisting of 655 rural EAs and 545 urban EAs. The data are supplemented by using hand-collected data from banks on bank branches to find the proxy for bank branch proliferation.

The study uses the financial statements of 23 commercial banks covering the period 2008 to 2015. The financial statements of banks provide their profit and loss information. These data are unbalanced and therefore takes away survivor bias and allow banks to transit in between years.

Conclusion and policy implications

This paper examined the impact of bank competition on financial inclusion at the household and bank level. To examine the impact of bank competition on financial inclusion at the household level, we made use of GLSS6 data, which were collected between 2012 and 2013. A cross-sectional regression was used to estimate the effect of bank competition on financial inclusion at the household level. Bank competition was measured using the number of bank branches in a district. The argument is that more branches in a district will lead to higher competition effects. The findings of the study provide evidence that suggests that higher bank competition leads to an increase in account usage and affordability of financial services. However, higher competition leads to a reduction in access to credit because competition leads to a reduction in the quality of borrowers due to an increase in adverse selection problems.

Next, the paper examined the effects of bank competition on financial inclusion at the bank level. Data on 23 banks from 2008 to 2015 was utilized. Here, competition was measured using the funding-adjusted Lerner index. The panel regressions revealed that bank competition leads to an increase in bank branching, ATM networks and deposit mobilization in the economy. It was also found that a less competitive banking environment leads to an increase in bank lending costs. Put differently, an increase in competition leads to a reduction in bank lending rates. The findings of the study suggest that policies geared towards improving bank competition can lead to improvements in the usage of bank services, affordability of bank services, and extension of bank services through bank branching and ATM outlays. It would be important to adopt measures that reduce adverse selection to mitigate the negative impact of bank competition on access to credit.

We recommend that the Bank of Ghana, in consultation with the Ghana Association of Bankers, should draft a competition policy for banks in Ghana. Key areas to examine include the trend towards “open banking”, and the integration of mobile money and fintech into the financial sector. These have the potential of making it easier to switch financial service providers and leveraging technology to enhance financial inclusion. The aims of the proposed policy should be balanced with financial stability. Finally, mobile money has greatly improved financial inclusion in Ghana and provided banks with some level of competition. Education targeted towards enhancing the usage of mobile money to cover various services such as investments, insurance and pensions can contribute greatly towards financial inclusion while promoting competition in the financial services sector.

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