## The Impact of bank competition on credit risk in africa

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The intensification of competition in Sub-Saharan African (SSA) countries has had an ambivalent impact on credit risk. The resulting improvement in management and bank intermediation may, beyond a certain threshold, be offset by greater risk-taking. Strengthening prudential frameworks would make it possible to harness the opportunities offered by bank competition.

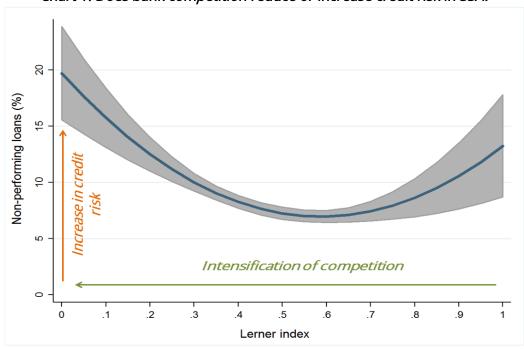


Chart 1: Does bank competition reduce or increase credit risk in SSA?

Source: <u>Brei et al., 2018</u>. Relationship between the degree of bank competition (the Lerner index, between 0 and 1, measures banks' market power) and credit risk (NPL, non-performing loans / gross loans)

Note: An increase in bank competition (reduction in the index starting from 1) leads to a decrease in credit risk. However, the latter tends to rise when competition becomes very strong (index close to zero).

## Lower credit risk brought about by greater competition in SSA?

In SSA countries where credit growth remains limited (on average 30% of GDP), access to credit is key for private sector development and poverty reduction. Unlike developed countries, where the hypertrophy of financial systems is sometimes the subject of debate ("Too much finance?"), credit development and financial inclusion (in particular through microfinance) can be considered as levers for development in SSA countries. Improved access to credit is a significant factor in private sector growth in developing countries (see Chauvet and Jacolin, 2017).

The banking sectors in SSA countries have undergone major transformations over the past two decades in connection with the super-cycle of economic growth brought about in particular by the rise in commodity prices (Jacolin and Noah, 2017). These changes have led to a rise in the number of banks (from 445 in 2005 to 560 in 2015) and the emergence of pan-African groups (Ecobank, UBA, Bank of Africa and Attijariwafa Bank, for example).

This movement has, among other things, contributed to financial development through an increase in outstanding loans and a significant improvement in financial inclusion, amplified by financial innovation, such as <u>mobile money</u> (leapfrogging).

Even though credit risk in SSA countries remains higher than that of emerging and advanced countries, whose average non-performing loan rates stood at respectively 3.5% and 4.9% in 2015 (source: FSI base, IMF), it has posted a sustained decline (see Chart 2). Non-performing loans thus averaged less than 7% in 2012, compared with 16% in 2000. This decrease in credit risk may be affected by banking crises, such as that of Nigeria in 2009-2010 (peak at 8.7% in 2010) or cyclical shocks, such as the fall in oil prices after 2014, which lead to a rise in credit risk (9.3% in 2015).

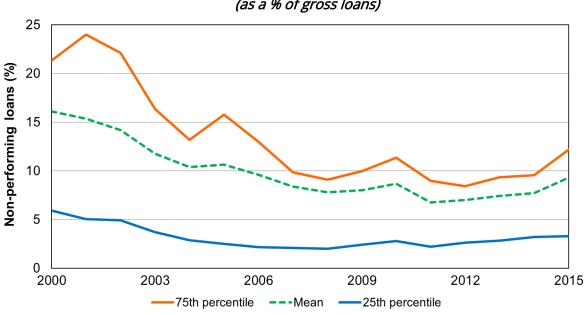


Chart 2: Significant decline in the share of non-performing loans in SSA (as a % of gross loans)

Source: FitchConnect, authors' calculations from a sample of 33 SSA countries, including 12 franc zone countries.

## The effect of competition on credit risk is ambivalent

Bank competition has conflicting effects on credit risk, the relative importance of which continues to be the subject of <u>debate</u>. On the one hand, the increase in bank competition leads to an improvement in the quality of credit portfolios. It contributes to improving operational efficiency and the allocation of capital, through the dissemination of best practices and risk analysis methods. These efficiency gains also result in improved data collection by banks and in a reduction of the uncertainty, surrounding borrowers' default risk, which is particularly high in SSA. Overall, bank competition can contribute, at constant risk-taking, to faster credit development, at a lower cost.

On the other hand, competition between banks may have negative effects on the quality of credit portfolios. It reduces profit margins (or monopoly/oligopoly rents) and encourages banks to take greater risks in order to maintain their ability to generate profits ("franchise value"). These incentives clearly encourage bank lending but may eventually raise the average credit risk of the credit portfolio.

The net effect of these different transmission channels on credit risk depends on the intensity of competition, as well as the macroeconomic, regulatory and prudential environments. According to <u>Brei et al. (2018)</u>, the positive effects of increased competition eventually become lower than its negative effects in SSA countries (see Chart 1). This result remains valid even if alternative measures of credit risk (provisions for non-performing loans and distance-to-default - Z-score) and of competition (using a market structure indicator for example) are used.

## Strengthening prudential frameworks is crucial to cope with rising risks

Given the potentially negative effect of competition on credit risk above a certain threshold, sustainable credit expansion must go hand in hand with a strengthening of micro-prudential frameworks in sub-Saharan Africa. These frameworks are in the process of being harmonised with international best practices. In 2014, respectively 43% and 40% of SSA countries implemented IFRS accounting standards and Basel II/Basel III prudential frameworks (Guérineau et al., 2016).

The specific risks linked to the financial systems of these countries should also be taken into account, especially given the large share of government securities in bank portfolios in sub-Saharan Africa (20% of the balance sheet in 2015, Fitchconnect). A weighting of sovereign risks is already effective in the franc zone, both in microprudential frameworks and in the bank refinancing mechanisms with the central bank.

Given that it can result in increased risk-taking and a rise in credit risk, the intensification of competition must also go hand in hand with a gradual strengthening of the macroprudential framework. The objective is to enhance the resilience of banking systems to exogenous

shocks and to reduce the pro-cyclicality of bank lending. Again, macroprudential policy instruments may differ from the instruments used in developed countries (see Table 1).

Developing countries, in particular in sub-Saharan Africa, prefer, especially for operational reasons, to use reserve requirements or, in some cases, credit rationing measures (see Table 1). However, assigning macroprudential objectives to such instruments could weaken the monetary policy transmission channels, at least in the countries where these channels are effective or in the process of becoming so. In addition, they may have negative effects in terms of depth and even financial inclusion. Conversely, having recourse to instruments that target debtors could limit these negative effects. This solution should therefore be looked at more closely.

Table 1: Dissemination of macroprudential instruments – MPI (2000-2013)

	OECD	EME	LIDC
MPI centered on financial institutions (%)			
Dynamic loan-loss provisioning	5	6	19
General countercyclical capita buffer	1	3	1
Levarage ratio	13	17	12
Capital surcharges on systemically important banks	1	1	1
Limits on interbank exposures	33	32	17
Concentration limits	69	76	77
Limits on foreign currency loans	9	16	13
Reserve requirements (dom. or FX)	0	24	33
Limits on domestic currency loans	0	11	26
Tax on financial institutions	14	14	11
MPI centered on borrowers (%)			
Debt-to-income ratio (households)	13	20	0
Loan-to-value ratio caps	40	20	6
MPI under the responsability of the central bank			
Indicators monitored by the CB (en %)	41	53	94

Source: <u>Cerutti et al., 2015</u>. In green, the category of countries that uses MPI the most. EME: Emerging Market Economies, LIDC: Low-Income and Developing Countries.