KENYA BANKERS ASSOCIATION 9TH ANNUAL

BANKING RESEARCH CONFERENCE 2020

WED 23RD TO **FRI 25TH** SEPTEMBER
FROM **8:30 am - 12:30 pm** (EAT)

THEME:

Banking and Socio-Economic Development: Market Structure, Behavioural Evolution and Policy Dynamics

Join the conversation on social media:
@kenyabankers #KBAResearchConference

CENTRE FOR RESEARCH ON

FINANCIAL MARKETS AND POLICY®

ABOUT KENYA BANKERS ASSOCIATION

Kenya Bankers Association is the umbrella body of the Banks licensed by the Central Bank of Kenya with a current membership of 47. The Association promotes and develops sound and progressive banking principles, practices and conventions and contributes to the developments of the sector. It influences the policy landscape by proactively engaging the policy development stakeholders for the development of a conducive business environment on behalf of its members. It also manages the public relations aspects of banking as a service industry. Kenya Bankers Association plays a major role in maintaining industrial relations through employee representatives; negotiating terms and conditions of employment; and arriving at settlements, provision assistance and guidance to the industry in interpretation and implementation of cost of living awards. KBA works to maintain close co-ordination and liaison with the Central Bank of Kenya, financial institutions, the Chamber of Commerce, management and educational institutions, Federation of Kenya Employers, and other such organizations for realizing the objects and purposes of the Association.

Moreover, KBA owns and operates the Automated Clearing House and in partnership with the Central Bank of Kenya has developed initiatives such as such as the Modernisation of Payment Systems (including the Cheque Truncation Project), the establishment of Currency Centres across the country, and the Kenya Credit Information Sharing Initiative.

ABOUT THE CENTRE FOR RESEARCH ON FINANCIAL MARKETS AND POLICY®

The Centre for Research on Financial Markets and Policy® was established by the Kenya Bankers Association in 2012 to offer an array of research, commentary, and dialogue regarding critical policy matters that impact on financial markets in Kenya. The Centre sponsors original research, provides thoughtful commentary, and hosts dialogues involving scholars and practitioners and conferences on key financial market issues. Through these activities, the Centre acts as a platform for intellectual engagement between financial market experts, the banking sector and the policy makers in Kenya. It therefore contributes to an informed discussion that influences critical financial market debates and policies.

Visit www.kba.co.ke/research-center to access the suite of research publications.

KENYA BANKERS ASSOCIATION 9TH ANNUAL

BANKING RESEARCH CONFERENCE 2020

WED 23RD TO **FRI 25TH** SEPTEMBER
FROM **8:30am - 12:30pm** (EAT)

THEME:

Banking and Socio-Economic Development: Market Structure, Behavioural Evolution and Policy Dynamics

Join the conversation on social media:
@kenyabankers #KBAResearchConference

Table of Contents

Welcome Remarks

From the Chief Executive Officer, Kenya Bankers Association

I would like to take this opportunity to welcome you all to this year's conference and thank you for taking the time to join us. We have consistently hosted the *Kenya Bankers Association Banking Research Conference* over the last eight years, and this is testimony to our commitment to having deep engagement with our stakeholders in areas that we consider to be important for the economy's progress.

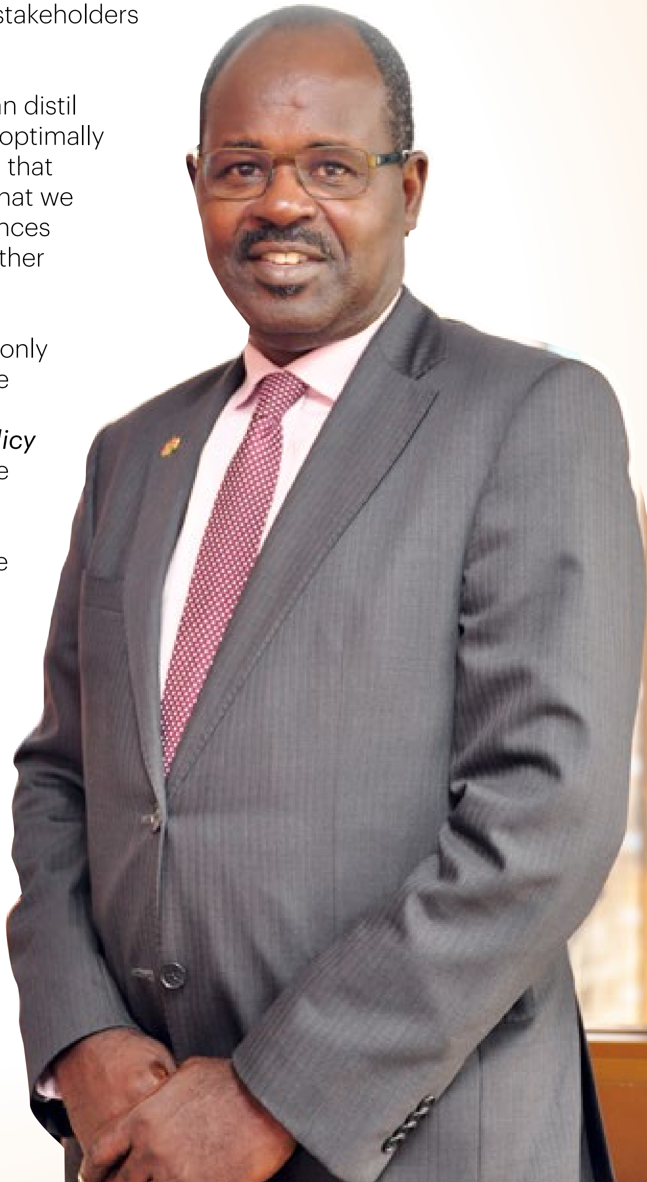
It is out of candid engagement underpinned by rigorous analysis that we can distil ideas that will optimise the extent to which our economy's financial system optimally supports the economy's developmental aspirations. It is through such ideas that our progress and leadership as an industry can be anchored. Some issues that we addressed in our first research conference in 2012 and subsequent conferences thereafter have either given rise to practical solutions or have motivated further investigations by researchers.

All through the past eight conferences, we have picked on themes that not only resonate with the desire to be at the frontier of knowledge and practice. The Ninth conference is not any different. Our theme of *Banking and Socio-Economic Development: Market Structure, Behavioural Evolution and Policy Dynamics* represents an appreciation on how stakeholder expectations – be they regulators, market players and customers – are fast changing.

Given the diversity of our stakeholders, we do not envisage that we will have a common view of these issues. That is why the KBA Centre for Research on Financial Markets and Policy® collaborates with such institutions as the Central Bank, and other Regulatory Agencies, the Academia, International Institutions and other Think Tanks in order to ensure there is objectivity even in instances of divergent views.

It is my hope that the outcome of our research, some of which are being showcased in this conference will be a basis for policy formulation at both institutional and national levels.

Dr. Habil Olaka, CEO
Kenya Bankers Association



Welcome Remarks

From the, KBA Centre for Research on Financial Markets and Policy®

The *9th Kenya Bankers Association Banking Research Conference* presents an opportunity to steer the conversation on the collective role of banks in socio-economic development beyond the conventional assumption that more finance is always a prerequisite for strong economic performance.

In addressing itself to such understanding, the conference will put a spotlight on how the interaction between the structure of the banking industry, the behavioural evolution of economic agents seeking financing, and the underlying regulatory environment influences the finance – economic nexus.

The papers will speak to three aspects;

- One, interrogating the influence of the structure of the banking industry on funds allocation and pricing behaviour. The focus here will be on the appropriateness of the structure of the banking industry and how contributes to the current debate on the subject of market consolidation that so far has been devoid of determining how it will influence pricing behaviour and resources allocation.

- Two, analysing the evolving expectations of the non-financial sector economic agents on the value proportion of the banking industry players. Papers in this area seek to test the assumption of rationality of the banking industry players as well as on the consumers of banking services. Because the provision of bank-like services by non-bank financial market players is an evident addition to the choices available to bank customers even when in that regard convenience supersedes competitiveness and appropriateness, the counterintuitive market expectations are worth to understand.

- Third, examining the policy and regulatory environment underpinning the banking industry operations with a specific focus on how it relates to market stability, credit allocation, market structure, and the strategic regulatory intention of steering the market in the direction of optimising its role in socio-economic development.

Over the three days, we promise rigour in the presentations, but not at the expense of the business and policy relevance of the research output. We hope to keep alive the debate on this subject; thus, the conference papers presented will further be reviewed and initially be published under the KBA Working Paper Series [(http://www.kba.co.ke/working_paper.php)](http://www.kba.co.ke/working_paper.php).

Centre for Research on Financial Markets and Policy®

E-Conference Programme

THEME: Banking and Socio-Economic Development: Market Structure, Behavioural Evolution and Policy Dynamics

DAY ONE Programme

SEPT 23rd

Time	Event
8.30 - 8.40 am	Welcome Remarks – **Jared Osoro**
8.40 - 9.00 am	Remarks by the CEO, KBA - **Dr. Habil Olaka**
9.00 - 9.30 am	Key Note Speech by **Amb. Ukur Yatani, EGH - CS National Treasury and Planning**
9.30 - 10.30 am	*Price and Non-Price Competition Interactions: Implicit Pricing of Network Convenience and Differentiation Effects* **Presenters: Jared Osoro and Kiplang'at Josea - KBA Centre for Research on Financial Markets and Policy®**
10.30 - 11.30 am	*What Really Ails Bank Deposit Mobilization and Credit Creation in Kenya?* **Presenter: Benjamin Maturu**
	Discussant: **Jared Osoro**
11.30 - 12.30 pm	*Market Expectations versus Outcomes: Sectoral Credit Market Analysis in Kenya* **Presenters: Caroline Kariuki (Strathmore University) and Samuel Tiriongo**
	Discussant: **Radha Upadhyaya - IDS, University of Nairobi**
12.30 pm	Closing Remarks

Join the conversation on social media:
@kenyabankers #KBAResearchConference

LIVE
e-CONFERENCE

E-Conference Programme

THEME: Banking and Socio-Economic Development: Market Structure, Behavioural Evolution and Policy Dynamics

DAY TWO Programme

SEPT 24th

Time	Event
8.30 - 8.40 am	Welcome Remarks – **Jared Osoro**
8.40 - 9.00 am	Remarks by the CEO, KBA - **Dr. Habil Olaka**
9.00 - 10.00 am	*Does Financial Innovation and Digital Economy Enhance Financial Deeping in Kenya?* **Presenters: Jared Osoro, Roseline Misati and Maureen Odongo**
	Discussant: **Dunstone Ulwodi - National Treasury & Planning**
10.00 - 11.00 am	*Cost-Benefit Analysis of Bank Regulation. Does Size Matter?* **Presenter: Hillary Mulindi - Capital Markets Authority**
	Discussant: **Kiplang'at Josea - Kenya Bankers Association**
11.00 - 12.00 pm	*Market Structure and Banks Pricing Behaviour – The Case of Kenya.* **Presenter: David Muriithi**
	Discussant: **Gillian Kimundi - Strathmore University**
12.00 pm	Closing Remarks

DAY THREE Programme

SEPT 25th

Time	Event
8.30 - 8.40 am	Welcome Remarks – **Jared Osoro**
8.40 - 9.00 am	Remarks by the Vice-chairman of the KBA Governing Council - **Mr. John Gachora, Group CEO, NCBA Bank**
9.00 - 10.00 am	*Macroprudential Regulation and Stability: The Credit Market Signal* **Presenters: Camilla C. Talam, Samuel Kiemo, Anne Kamau and Irene W. Rugiri**
	Discussant: **Lucas Njoroge - Comesa Monetary Institute**
10.00 - 11.00 am	*Competition and Access to Credit in the Kenyan Banking Industry* **Presenters: Faith Atiti and Stephanie Kimani and Raphael Agung - NCBA Bank**
	Discussant: **Jared Osoro**
11.00 am	Closing Remarks

Overview of the Conference Papers

Jared Osoro

Josea Kiplangat
Kenya Bankers Association

Benjamin Maturu

1. Price and Non-Price Competition: Implicit Pricing of Network Size and Differentiation Effects

Contrary to predictions that brick-and-mortar banking declines with increased financial innovations and technological adoptions, bank branch network between 2006 and 2018 has tripled and ATM networks four-fold. In this paper, we examine network convenience matter for price competition. Using use a panel data framework over the 2006 to 2019 period, for 38 commercial banks, we find that non-price competition indicators matter for bank's pricing behaviour. In particular, our findings shows that a higher branch network is associated with a lower deposit rate and higher loan rates. However, controlling for branch network productivity – deposit-to-branch ratio, and branch labour productivity, the net effects shows that deposit rates rise, and lending rates decline. This implies that that benefits from higher productivity – deposits per bank branch and labour-to-branch staffing - are passed on both to borrowers and depositors in the form of lower rates and higher rates respectively.

2. What Ails Bank Deposit Mobilization and Credit Creation in Kenya?

The banking industry has experienced some of the worst episodes of deposit mobilization and credit creation in the last decade. Using an extended quantity theory of demand for money, this paper answers the question: What ails bank deposit mobilization and credit creation in Kenya? Estimation results reveal that bank lending is constrained by a lack of effective demand and supply of bank credit. While many borrowers are willing to borrow very few of them are creditworthy and therefore able to repay loans; and while banks can create credit, they are not willing to lend for fear of losing their money. Banks are risk-averse considering the large gross non-performing loans for which they must make provisioning. Otherwise, banks can create credit considering their large excess liquid assets. Private sector borrowers' inability to borrow is demonstrated, considering the large stock of gross non-performing loans. They are, however, more willing to borrow than they can repay as evidenced in the low approval rate of loan applications. This is not only because real economic growth has been slow but also because of increased taxation to meet the financial needs of a large public sector. To promote bank lending, therefore, banks' willingness to lend and borrowers' ability to borrow should be restored. There is need for reducing the size of the public sector relative to the private sector to pave the way to a reduction in taxation thereby increasing disposable incomes which form the basis of private-sector borrowers' creditworthiness and ability to repay bank loans.

Overview of the Conference Papers

3. Market Expectations versus Outcomes: Sectoral Credit Market Analysis in Kenya

This study examined the responsiveness of commercial banks' sectoral credit supply to changes in credit demand expectations, as captured in the Central Bank of Kenya's Quarterly Credit Officers Survey. The study developed an index to measure changes in credit demand expectations and subjected the index, as a regressor, to a sectoral credit supply model. Employing panel data spanning nine sectors - agriculture, manufacturing, real estate, trade, mining & quarrying, building and construction, transport & communication, finance and insurance and households, for the period between March 2012 and March 2020, the study estimated a random-effects model of sectoral credit supply. Estimation results showed that sectoral credit supply in Kenya increases with an increase in credit demand expectations, other factors remaining constant, while expectations of a decrease in credit demand decelerate the growth in private sector credit. The effect of expectations on actual credit outcomes is significant after a delay of two quarters. Based on these results, developing a clear understanding of what shapes economic agents' expectations would be very instrumental in influencing commercial banks' private sector credit growth.

Caroline Kariuki
Strathmore University

Samuel Tiriongo

4. Does Financial Innovation and Digital Economy Enhance Financial Deeping in Kenya?

This study examined the implication of financial innovation on financial depth and economic growth in Kenya using quarterly data covering the period 2009 to 2020. Based on autoregressive distributive lag models, we find evidence a positive relationship between financial innovation indicators and financial depth with the strongest impact emanating from the number of internet usage and mobile financial services and the lowest impact from the number of bank branches and automated teller machines. The results also further reveal a significant positive impact of financial depth on economic growth consistent with the supply-leading finance theory. Six policy implications emerge from this study. First, with rising internet and mobile financial services associated with increasing financial depth, policy interventions that seek to enhance access is critical as a strategy for financial deepening and enhancement of economic growth. Second, it is essential to invest in technology-enabling infrastructure. Third, to safeguard and continue increasing the gains in the financial depth of the traditionally excluded segments, it is pertinent to cushion the low-income earners. Fourth, stakeholders engaged in financial innovation would accelerate research and development of cheaper mobile devices with smartphone features. Fifth, given the dynamism of

Roseline Misati

Jared Osoro

Maureen Odongo

financial innovation and associated technological advancements, to bridge the gap between people and technology, policymakers need to prioritize financial literacy and development of new appropriate human capacity tools that lean towards enabling ease customer adaptation and service provision. Sixth, commercial banks that embrace investment in technology, enabling infrastructure and minimization on branches and ATMs are likely to thrive in future.

Hillary Mulindi
Capital Markets Authority

5. Cost-Benefit Analysis of Bank Regulation. Does Size Matter?

This study investigates the trade-off between costs and benefits of bank regulation in Kenya. Using the stochastic Frontier Analysis (SFA) and Annual data for the period 2003 – 2019, extracted from KBA Financial Database and KNBS macroeconomic data, the study models Industry-level and cluster level relationship between bank regulation and cost inefficiency of banks. The industry-level analysis indicates that stringent capital requirement has a positive and significant effect on the Cost efficiency of banks, while tighter liquidity requirements have a significant adverse effect on cost efficiency. Further, the bank tier-level analysis established that the double-layered regulatory framework creates Cost inefficiencies amongst middle-tier banks. The key policy implication would be to consider revewing, identifying, and amending the regulatory provisions that are creating inefficiencies among the listed middle-tier banks.

David Muriithi

6. Market Structure and Banks pricing behaviour – The Case of Kenya

The debate on banking industry consolidation remains unresolved. However, in the debate, the market structure – banks' pricing nexus remains largely muted. In linking market structure – banks' pricing, a dual problem is evident: -the monopoly view and the efficiency view of market structure. This study investigates the nexus between market structures on the banks' pricing behaviour in Kenya using the Panel vector autoregressive model for 2003 - 2018. Estimation results reveal that the Lerner index, Hirschman-Herfindahl Index and 5-bank concentration ratio all have a positive shock effect on net interest margin. Further, the Impulse Response Function indicates the positive shock of the Lerner index is short-lived, but HHI shock is long-lived. The 5-bank concentration ratio shock is first negative by immediately reversed, taking a sharp continual rise for the rest of the period. Therefore, policies on enhancing banking industry competitiveness would be appropriate in promoting market – based - pricing in the industry.

Overview of the Conference Papers

7. Macroprudential Regulation and Stability: The Credit Market Signal

This paper examines the effectiveness of macroprudential regulations in promoting bank stability and credit in the Kenyan financial system. The study uses bank-level and non-bank credit data for the period 2001-2019 and applies a panel estimation methodology to achieve its objectives. The study finds that bank stability has remained high, though downward trending. The study also reveals that capital-based and asset-side macroprudential regulations effectively promote bank stability, while liquidity-related macroprudential regulation is ineffective. Additionally, evidence of dampened bank credit market and domestic leakage associated with macroprudential regulations has been revealed. The paper cautions policymakers to implement macroprudential policies that balance the objectives of bank stability and credit conditions. Additionally, the policymakers should note that implementing the new macroprudential measures may cause intermediaries to adjust their behaviour and therefore, should be implemented systematically while observing their impact at each stage.

Camilla C. Talam

Samuel Kiemo

Anne Kamau

Irene W. Rugiri

8. Competition and Access to Credit in the Kenyan Banking Industry

The theory has divergent views on the relationship between market structure and the allocation of credit by banks. Using quarterly data from 23 banks operating in Kenya over the period 2006-2018, we assess the effect of competition on credit allocation in Kenya. Our results show that, while an increase in competition may improve access to credit in the short run, in the long run, increased competition may be detrimental to the amount of credit supplied by banks. This finding provides policymakers with more knowledge on how the structure of the banking industry affects credit allocation and reinforce the ongoing consolidation narrative given changes to the structure of the market may not materially alter banks' lending behaviour.

Faith Atiti
NCBA Bank

Stephanie Kimani
NCBA Bank

Raphael Agung
NCBA Bank

KENYA BANKERS ASSOCIATION

KENYA BANKERS ASSOCIATION 9TH ANNUAL

BANKING RESEARCH CONFERENCE 2020

Kenya Bankers Association

13th Floor, International House, Mama Ngina Street
P.O. Box 73100- 00200 NAIROBI
Telephone: 254 20 2221704/2217757/2224014/5
Cell: 0733 812770/0711 562910
Fax: 254 20 2221792
Email: research@kba.co.ke
Website: www.kba.co.ke

Join the conversation on social media:
@kenyabankers #KBAResearchConference