

BANKING RESEARCH CONFERENCE 2023



28th - 29th September



8:00am to 4:30pm (EAT) Upperhill Nairobi



Radisson Blu Hotel,









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THEME: Monetary-Fiscal Policy Trade-Offs Amidst Multiple Macroeconomic Shocks and **Banking Sector Responsiveness**



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 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.

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THEME: Monetary-Fiscal
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BANKING RESEARCH CONFERENCE 2023

Welcome Remarks

From the CEO, Kenya Bankers Association

t is my singular honour to welcome you all to *The 12th KBA Annual* **Banking Research Conference**, and thank you for taking time to join us. The fact that we have consistently hosted the Kenya Bankers Association Banking Research Conference over the past eleven years confirms our commitment to deeply engage with our stakeholders and anchor our development on research and analytics in areas we consider essential for enhancing the industry's contribution to economic growth.

As we hold our 12th Annual Conference, I take this opportunity to specifically thank our researchers, reviewers, and discussants, who have kept the engagements alive by making insightful contributions to the various thematic areas. At KBA, we believe that it is out of a candid engagement underpinned by rigorous analysis that we can mine ideas that will widen the extent to which the economy's financial system can support the realization of its growth and development aspirations.

We take note that some of the issues that we addressed in our previous sessions have either given rise to practical solutions or have motivated further investigations by other researchers. All through the past eleven conferences, we have picked on themes that resonate with topical issues and the desire to be at the frontier of knowledge and practice.

Our theme this year is "Monetary-Fiscal Policy Trade-Offs Amidst Multiple" Macroeconomic Shocks and Banking Sector Responsiveness." Our motivation of the theme is quite a practical one, especially evident during the COVID-19 pandemic period and the evolving global and domestic macroeconomic developments as well as the policy interventions. While recognizing that both monetary and fiscal policy are very different, how they interact with each other matters for the economy. Relatedly, while each is independent from the other, new challenges and the operating macroeconomic environment call for them to work together to anchor macroeconomic activity.

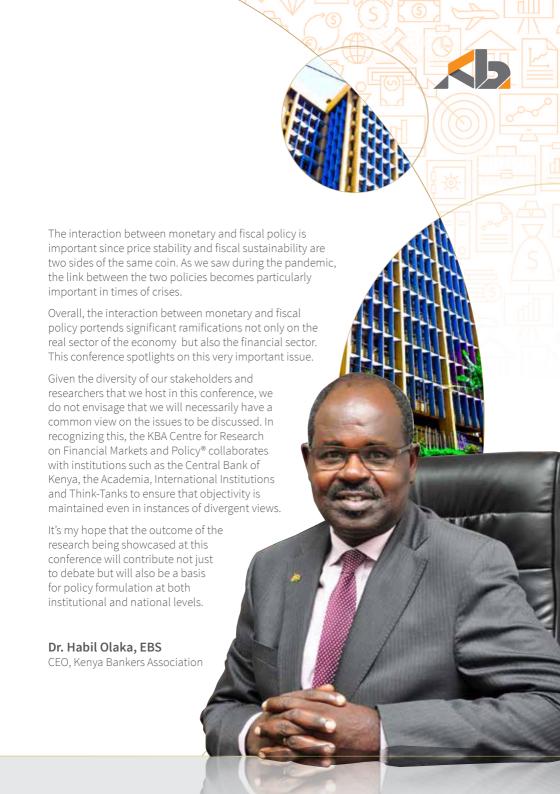








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BANKING RESEARCH CONFERENCE 2023

Welcome Remarks

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

he 12th Kenya Bankers Association Banking Research Conference presents an opportunity to reflect on the current banking environment, especially of the lingering and interrelated concerns. With the elevated credit risks, focus is on risk measurement and management. Furthermore, the business environment is dynamic and fast evolving driven by adoption of innovations with attendant implications on financial inclusion and the execution of banking services, going forward. Topical also, is the emergence of green finance and sustainable finance as well as impact finance considerations presenting opportunities for risk-mitigation and sharing.

The conference, therefore, aims to provide insights and further stimulate a discussion on the three areas that are critical in the finance-growth nexus and the eleven papers lined up for presentation over the next two days will speak to three important questions:

• First, with the ongoing monetary policy tightening across the globe and financial markets remaining volatile, the credit landscape is becoming more complex. New risks continue to emerge sustaining high private sector credit risk and increasing competition for loanable funds between the public and private sectors. Therefore, there is need to analytically interrogate further the credit risk assessment, spotlighting on both the supply - and demand-side developments, including the role of technological innovations.

Here, we analyze heterogeneity across lenders in their risk analysis, financial inclusion strategies and customer centricities in credit supply.

Second, is a focus on the banking sector responsiveness to global and domestic market developments, in terms of deposit mobilization, credit portfolio allocations, risk management, and sources of profitability. Stemming from this, is the need to explore critical anchors to economic recoveries as the economy reels from the adverse effects of the pandemic and the existing multiple shocks that have hit economies – from disruptions in global value chains, escalated effects of climate change and





• Third, with the uncertain economic outlook; narrowing fiscal space; elevated inflationary pressures and volatilities in financial markets, achieving an optimal monetary-fiscal policy mix is faced with sizeable trade-offs that must be navigated. Towards this end, we host papers documenting the implications of these macroeconomic policy developments on the economy and by extension the banking sector, particularly with heightened uncertainty.

Over the two (2) days, the conference attempts to provide answers to these questions, besides will undoubtedly the opportunity for a comprehensive reflection. The diversity of authors- from academia, policy institutions and banking sector practitioners is unique and allows for the interrogation of issues from different perspectives. The ensuing rigour of the presentations that does not come at the expense of policy and business relevance is a desirable output for all players in the financial system.

Even beyond the conference, we keep alive the debate on the subject matters. To this end, all the conference papers will be reviewed and published under the KBA Working Paper Series (<u>www.kba.co.ke/research-centre</u>) and KBA Policy Briefs extracted there from for a wider readership.

Dr. Samuel Tiriongo

Director, KBA Centre for Research on Financial Markets and Policy®



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DAY 1 PROGRAMME: THURSDAY 28th SEPTEMBER, 2023

8:30 – 8:40 am	Welcome Remarks – Dr. Samuel Tiriongo, KBA	
8:40 – 9:00 am	Remarks by the CEO, KBA - Dr. Habil Olaka, EBS	
9:00 – 9:25 am	Remarks - Chairman of the KBA Governing Council Mr. John Gachora, NCBA Group MD & CEO	
9:25 – 10:00 am	Health Break and Photo Session	
10:00 – 11:00 am	Analysis of Drivers of Customer Satisfaction to Inform Customer Centricity: Banking Sector Perspectives Presenters: Hillary Mulindi, Hesborn N. Nyagaka, Kiplangat Josea, Christine Onyango & Samuel Tiriongo, KBA Discussant: Jared Osoro, FSD- Africa	
11:00 – 12:00 pm	Fiscal and Monetary Policy Interaction During Economic Shock: A Wedge or Bridge for Bank Profitability? Presenters: Jared Osoro, FSD-Africa & Kiplangat Josea, KBA Discussant: Dr. Samuel Tiriongo, KBA	
12:00 – 2:00 pm	Lunch Break	
2:00 – 3:00 pm	Bank Performance and Real Sector Productivity in East Africa Presenter: Prof. Odongo Kodongo, Wits Business School, South Africa Discussant: Dr. Eliud Moyi, KIPPRA	
3:00 – 4:00 pm	Monetary Policy Risk-Taking Transmission Channel: A Case of Banking Industry in Kenya Presenter: David M. Ndwiga, KEPSA Discussant: Dr. Peter Wamalwa, CBK	
4:00 – 5:00 pm	Board Gender Diversity, Economic Uncertainty, and Bank Risk- taking: Evidence from the Kenyan Commercial Banks. Presenter: Dr. Rogers Ochenge, Kenyatta University & Strathmore University Discussant: Dr. Radha Upadhyaya, University of Nairobi	

Monetary-Fiscal Policy **Trade-Offs**Amidst Multiple Macroeconomic **Shocks**and Banking Sector **Responsiveness**



DAY 2 PROGRAMME: FRIDAY 29th SEPTEMBER, 2023

8:45 – 9:00 am	Welcome Remarks – Dr. Samuel Tiriongo, KBA
9:00 – 10:00 am	Interest Rate Risk in Kenya: The Financial Stability - Fiscal Trade-off Presenter: Camilla Talam, UNHCR and Samuel Kiemo, CBK Discussant: Andrew Njeru, KCB
10:00 – 11:00 am	Bank Responsiveness to Monetary Policy: A Tale of Excess Capital and Deposit Mobilization Presenter: Gillian Kimundi, Deakin Business School in Melbourne Discussant: Raphael Agung, NCBA
11:00 – 11:30 am	Health Break
11:30 – 12:30 pm	Implications of Macroeconomic Stability Policies on Financial Intermediation through the Credit Channel Presenter: Stephanie Kimani, I&M Bank Discussant: Dr. Caroline Kariuki, Strathmore University
12:30 - 1:30 pm	Monetary-Fiscal Policy Interdependence and Pricing Dynamics: Empirical Estimation of Fiscal Dominance in Kenya Presenter: Caspah Lidiema, JKUAT Discussant: Prof. Kodongo Odongo, Wits Business School, South Africa
1:30 – 2:30 pm	Lunch Break
2:30 – 3:30 pm	Monetary Policy, Bank Lending, and Inflation in the Post- Pandemic Recovery Era: A Case of the East African Community. Presenter: Ronald Ochen, Civil Society Budget Advocacy Group, Uganda Discussant: Anthony Muli, NCBA
3:30 – 4:30 pm	The Influence of Climate Risk on Interest Rate Spread in the Banking Sector in Kenya. Presenter: Lucy Maru, KCB & Steve Makambi, Kenyatta University Discussant: Angeline Mwangi, Family Bank
4:30 pm	Closing remarks by the CEO, KBA - Dr. Habil Olaka







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OVERVIEW OF THE CONFERENCE PAPERS

1. Analysis of Drivers of Customer Satisfaction to Inform Customer Centricity: Banking Sector Perspectives

Hillary Mulindi, Hesborn N. Nyagaka, Kiplangat Josea, Christine Onyango & Samuel Tiriongo, KBA

Intense competition from alternative financial service providers and evolving customer expectations have presented formidable challenges to the banking sector's quest for customer retention and profitability. On this account, this paper delves into the dynamics of customer satisfaction in the banking sector with a view to inform customer centricity. Using the banking sector customer satisfaction survey data and multinomial logit, the study shows that bank customers with multiple bank accounts with other banks have a low likelihood of being dissatisfied while the human interaction is still valued by bank customers, even though banks are quickly automating their processes. Moreover, prompt customer complaint resolution leads to higher satisfaction. The key policy issues arising from the study is the need for banks to develop a robust complain handling strategies and to tailor their products to the customers needs.

2. Fiscal and monetary policy interaction during economic shock: A wedge or bridge for bank profitability

Jared Osoro, FSD-Africa and Kiplangat Josea, KBA

Persistence of profitability in the Kenyan banking industry masks the limited understanding of the adjustment process of the profit seeking behavior during economic shocks. Whether the adjustment is in response to the adverse outcomes of the shocks, or the inevitable macroeconomic policy response is an open question. This paper seeks to assess the implication fiscal-monetary interactions on banks' profitability. We deploy both static and dynamic panel models to estimate the influence of the macro policies using bank-level as well as macroeconomic data in Kenya for the period 2003 – 2022. We establish that both monetary policy and fiscal policy matter for bank profitability, their influence revealing the attribute of interconnectivity between the two policies. The banks' profitability is positively influenced by an expansionary fiscal policy, with a similar influence associated with a tightening monetary policy. We contend that for a given set of banks-specific attributes, if monetary and fiscal policies are prominent influencers of profitability, it signals that the banks' reaction function as profit seekers is more a response to policy adjustment to shocks than the underlying economic outcomes. The key inference based on the assessment is that banks' profit seeking attribute while riding on an expansionary fiscal policy and a tightening monetary policy entails risk taking behavior that can potentially push the economy to the boundary of the "region of stability". That puts the spotlight on the attitude of bank regulator and that of banks towards profitability and risk-taking and calls two policy considerations. One is the need for a robust stress-testing framework that takes into account capita

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adequacy and asset quality optimal thresholds whose breaching we determine to be a possible triggers of market jitters. Two is the necessity of a stable market-based funding mechanism supported by the regulator's liquidity window and complemented by a conservative dividend policy even as profitability may persists. The two policy considerations will potentially obviate a situation where there is a realization that elusive boundaries of "the region of stability" have been breached ex post and the banking system is stable until suddenly it is not.

3. Bank performance and real sector productivity in East Africa

Odongo Kodongo, Wits Business School, South Africa

This paper sought to establish the linkages between bank performance and real sector productivity. We use data for five East African countries (Ethiopia, Kenya, Rwanda, Tanzania, and Uganda) for the period 2014–2022. We initially deploy the traditional panel fixed effects regression and subsequently the instrument variable fixed effects estimation for robustness checks. Our results show a robust negative nexus between banking sector performance and real sector productivity. Second, we find that non-interest charges is the major channel of transmission of adverse effects from the banking sector to real sectors such as manufacturing, while the interest channel tends to transmit positive effects especially to the services sector. Based on these findings, we make several policy recommendations.

4. Bank Responsiveness to Monetary Policy: A Tale of Excess Capital and Deposit Mobilization

Gillian Kimundi, Deakin Business School in Melbourne

Capital and deposits are central to efficient bank intermediation. Recent shifts in monetary policy call for a revisit of monetary policy channels in the banking sector by examining the financial response/adjustment to policy through the lens of these funding structures: excess capital (above regulatory minimum) and deposit mobilization. Using firm-level data from 27 banks between 2001 and 2021, this study first reveals important stylized facts on balance sheet activity for all banks, with specific nuances for small banks. Secondly, response to monetary policy is lower for banks with higher capitalization and deposit mobilization. The policy response of less and better capitalized banks is asymmetric, with evidence of a bank lending for the former, working through deposit growth and a bank capital channel for the latter, through excess capitalization. The study concludes with policy implications on this tension between prudential (funding) stability and monetary policy.







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5. Board Gender Diversity, Economic Uncertainty, and Bank Risk-taking: Evidence from the Kenyan Commercial Banks

Rogers Ochenge, Kenyatta University & Strathmore University

This paper examines the effect of board gender diversity and economic uncertainty on bank risk. The empirical analysis is conducted using 21 sample Kenyan commercial banks during the period 2010-2022 in a panel regression framework. Two key results are documented: first, increasing women directors in banks' boards, curtails excessive bank risk-taking and promotes bank stability. Thus, regulators may consider imposing gender quotas in bank boards. Second, bank risk increases when politically induced uncertainty surges. Thus, macro prudential policies as well as efficient management of political risk can help in mitigating bank risk.

6. Interest Rate Risk in Kenya: The Financial Stability - Fiscal Trade off

Camilla Talam, UNHCR & Samuel Kiemo, CBK

The study sought to examine the effect interest rate risks on financial stability through disentangling the effect of monetary policy on both fiscal and financial stability conditions in Kenya. We applied annual macroeconomic and bank-level data for the period 2001 - 2022. across 37 banks. The study developed a financial stability index to examine financial stability evolution, undertook sensitivity analysis on interest rate sensitive assets using various scenarios and applied panel fixed effects model to examine the effect of interest rate risks and macroeconomic factors on financial stability. The study found that overall, the banking sector has remained resilient over the study periods, despite experiencing periods of financial instability. The study also found monetary policy stance has implications on fiscal and financial stability where contractionary monetary policy raises fiscal and financial stability risks when public debt is elevated due to a tight sovereign-bank nexus. Increases in interest rate and credit risks were found to lower financial stability while bank capital accumulation strengthened financial stability. A high sovereign-bank nexus increases financial stability through repricing risks reflected via interest rate and liquidity risks, banks' portfolio diversification and trading strategies help to mitigate and lower repricing risks from market and interest rate changes. The paper proposes tracking of sovereign-bank nexus overtime to cover multiple business cycles to enhance understanding of sovereign-bank nexus dynamics towards coordinating monetary, fiscal and macro-prudential policies.

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7. Monetary Policy, Bank Lending, and Inflation in the Post-Pandemic Recovery Era: A Case of the East African Community

Ronald Ochen, Civil Society Budget Advocacy Group, Uganda

This paper investigates the underlying dynamic relationships between monetary policy, bank lending, and inflation during the post-pandemic recovery era in the East African Community. To achieve this, I analysed monthly macroeconomic data on central bank rates, consumer price index, lending interest rates, commercial bank foreign assets, net foreign assets, bank loans, and the US Fed funds rates from January 2021 to June 2023 using a panel Vector Autoregressive model. The empirical results show that when the central bank rate increases by one standard deviation, there is a decrease in the bank loans available for lending. Additionally, there is a decline in the consumer price index, although it remains positive. Conversely, commercial bank lending interest rates increase when the central bank rate increases by one standard deviation. Moreover, when the US Fed funds rate increases by one standard deviation, there is a decrease in commercial bank foreign assets (loans and deposits), but an increase in the central bank rate and lending interest rates. These findings are in line with previous studies and expand on the effects of monetary policy on bank lending and inflation. They also provide new evidence on the effects of the US Fed funds rate on the financial sector of developing countries, specifically the East African Community bloc.

8. Monetary policy risk-taking transmission channel: A case of banking industry in Kenya

David M. Ndwiga, KEPSA

Using a Panel VAR model and annual bank level data for the period 2008–2022, this study investigated banks risk taking behaviour amid monetary policy tightening considering the role of banks' non-interest-bearing deposits and equity levels. Estimation results reveals that monetary policy tightening and equity levels reduces the bank risk taking behavior thus evidence of monetary policy risk-taking transmission channel. However, the contrary was reported with regard to bank liability: - non –interest bearing deposit "pseudo assets". However, interaction between policy rate, equity and "pseudo assets" was found to increase bank risk appetite significantly. This study is important since under the risk-taking channel view, a change in the policy rate is immediately transmitted to money-market instruments of different maturity and to other short-term rates, such as interbank deposits and this quickly affects the interest rates that banks charge their customers for variable-rate loans, including overdrafts.







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9. Monetary-Fiscal Policy Interdependence and Pricing Dynamics: Empirical Estimation of Fiscal Dominance in Kenya

Caspah Lidiema, JKUAT

The aim of this study was to examine the effectiveness of monetary and fiscal policies with a view to establishing the existence of fiscal dominance in Kenya. The study employed monthly data for the period Jan 2010 - Dec 2022. While employing the Structural Vector Autoregressive (SVAR) Model, the study used two fiscal variables and two monetary variables while price dynamins was captured through the three channels of foreign exchange, inflation and lending rates. All data was obtained from the central bank of Kenya repositories online. Results from the study indicate that monetary policy shocks are transmitted through foreign exchange while Fiscal policy shocks are transmitted inflation and lending rates. Evidence affirms the existence of a form of fiscal dominance even though it does not appear to be a very high form of high fiscal dominance (which this study calls the slow intrusion of fiscal policy into the monetary policy space). The study therefore concludes that while fiscal dominance may not be very pronounced, there is a need to review government spending and public debt because, if expansionary fiscal policy becomes dominant and monetary policy plays second fiddle to fiscal authority, then the multiplier effect may not be pleasant. The paper recommends reducing government borrowing especially domestic borrowing, cutting unnecessary spending, and directing spending towards development projects like infrastructure or productive social-economic projects and sectors that support or influence growth.

10. Implications of macroeconomic stability policies on financial intermediation through the credit channel

Stephanie Kimani, I&M Bank Kenya

For the sake of social and economic welfare, monetary and fiscal authorities have worked together to ensure that the economic environment remained stable and predictable – the efficacy and success notwithstanding. For monetary policy to work effectively, then there is need for a coordinated response from fiscal policy. This is because, fiscal policy can directly impact the economy through taxation and/or through spending which would have an immediate impact on money supply. This paper seeks to investigate the implications of macroeconomic stability policies on financial intermediation through the credit channel. The model results reveal that in the long-run, fiscal policy, credit risks, bank liquidity and inflation have a significant impact on credit activities to the private sector. Moreover, the cointegration coefficient term is negative at -0.5075585 as required and significant at the 5% level. This suggests that there is a long run relationship between all/some of the variable. The value of the error correction term implies that 50.76% of any movements into disequilibrium (shock to private sector credit growth) are corrected within one period which in this case is one quarter.

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11. The influence of climate risk on interest spread in the banking sector in Kenya. A closer look at the Agricultural sector and the Manufacturing Sector

Lucy Maru, KCB & Steve Makambi, Kenyatta University

One way that climate risks negatively influence the banking sector is through cash flows and collaterals held form the banks counter-parties. The study sought to establish the influence of climate risks on interest rate spread in commercial banks in Kenya. The objective of the study was to determine the influence of climate risk on interest spread through nonperforming loans(NPL) in commercial banks in Kenya. Secondary data was sourced from Kenya Meteorological department, EMDAT, CBK bank supervision annual reports, and Africa financials. The study adopted descriptive design and process macros. The study variables were weather disasters, maximum temperature, interest rate spread and NPL ratio from year 2012 to year 2022. The findings of the study were consistent with other studies. NPL ratio directly influences interest rate spread and the relationship is statistically significant. There exists interaction between weather disasters and interest rate spread though not statistically significant. The research therefore recommends that banks should continuously assess their exposure to climate risks and determine vulnerabilities in order to be on a sustainable carbon transition path.







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This survey is thoughtfully crafted to provide us with a deeper understanding of our customers' needs and preferences. Your input is incredibly valuable to us, and we anticipate that **it will require no more than 10 minutes** of your time to complete.

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