

05 November 2021

Nigerian Banks- Financial Inclusion Update

e-Naira: A Game Changer?

Sector Insight

Equity Research | Banks

- **Action/Event:** The Central Bank of Nigeria (CBN) recently launched e-Naira to improve monetary policy, enhance government capacity to deploy targeted social intervention, and boost remittances through formal channels. This trend is similar to the model adopted by other central banks such as the Bahamas (Sand Dollar), China (e-Yuan), Sweden (e-Krona), and Cambodia (Bakong), which have all introduced their digital currencies as legal tender. There are five types of e-Naira Wallets: Stock Wallet, Treasury Wallet, Branch Wallet, Merchant Wallet and Consumer wallet. The e-Naira speed wallet and e-Naira merchant wallet were launched on Google Play and Apple Stores for consumers and merchants, respectively. The current version of the e-Naira can only be accessed by people with a bank account. However, it was recently announced that a phone application for those who do not have a bank account would be available soon. Depending on the tier group the user belongs to, the daily transaction ranges between N20,000 and N1 million. The account cumulative balance limit at any given moment ranges from N120,000 to N5,000,000. Regarding the pricing structure, peer-to-peer transfers on e-Naira is free. While other transaction costs will be in line with the 2019 regulation on charges by banks, other financial institutions, and non-financial entities.
- **Reaction/Impact:** From our perspective, we think that e-Naira would help in lowering the cost of printing paper currency, replace cash for low-value payments and also power the government's transfer payments initiative. On its impact on banks, there is a potential for banks to become merchants' primary collection bank, banks may also use the CBN FX API to enhance seamless cross-border payments and remittances with the e-Naira, and Asset management and insurance companies may now be able to accept online payments in e-Naira without incurring the usual merchant service charge. In the interim, we do not see the e-naira as a game changer, however, as the CBN expands its use beyond the current retail framework, it could be, depending on implementation.
- **Concern on financial inclusion:** According to the EfinA 2020 survey, 64% of Nigeria's adult population of 105.5 million has access to some form of financial services, which is low when compared to South Africa, Rwanda and Kenya. According to Data Portal, over 50% of Nigerians have access to the internet, and around 90% have access to mobile phones. The percentage of people who own smartphones ranges between 23-25%, according to Statista. Given low smartphone penetration, high data charges, and limited internet access, we hope the e-Naira does not end up being a "white elephant" initiative. The CBN also indicated that e-Naira transaction fees will be in line with the current fees template on e-banking transactions. This also raises questions about what the primary driver of financial inclusion would be.
- **Financial Intermediation Risk:** According to the CBN, "the conversion of bank deposits to e-Naira could have an impact on banks in terms of deposit liabilities and availability of funds for bank lending, fall in liquidity and challenges in liquidity management, and fall in credit assets and shrinking balance sheet. It further stated that banks can effectively respond by shifting from retail funding to more wholesale funding sources; Nevertheless, this could have an impact on their overall cost of funds, high interest rates on credit assets, a negative impact on profitability, and disruption of existing retail-focused strategies. CBN noted that it is aware of the risk and has limited the use of the e-Naira payment system to micro transactions. Depending on the level of adoption and the CBN's eventual position on charges on the e-Naira, it could impact banks revenue streams, including float income, transaction revenue, and disrupt the agency banking strategy of the banks. While this may not materialise now, it remains a key concern in the mid to long term.
- **Cyber security risks:** According to NIBSS, Web channels accounts for 47% of total fraudulent activities. In terms of fraud techniques, Social engineering accounts for 56%, while two factor authentication system is also another challenge. **The increase in fraudulent activities hinders the growth of digital banking products. The CBN would need to invest in infrastructure to protect the firewalls of fraudsters from accessing customers' financial information. Also, a high level of sensitisation and digital literacy is required to prevent social engineering.**

Research Analyst(s)

Babatunde Ogunleye

Babatunde.Ogunleye@stanbicibt.com

+234 1 422 8667

Muyiwa Oni

Muyiwa.Oni@stanbicibt.com

+234 1 422 8667

www.standardbank.com/research

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StandardBankResearch-Nigeria@stanbic.com

Understanding e-Naira

Figure 1: Understanding e-Naira




Source: CBN, SBG Securities

The recent unveiling of e-Naira by the Central Bank could be viewed as a response to decentralised blockchain systems which it had once thought, posed systemic risks to monetary policy and financial stability. Its plan is to use this mechanism to improve monetary policy, enhance government capacity to deploy targeted social intervention, and boost remittances through formal channels. There are five types of e-Naira Wallets:

- **Stock Wallet-** Owned and managed by the CBN
- **Treasury Wallet-** managed by the financial institution.
- **Branch Wallet-** financial institutions are permitted to create a branch wallet across their bank branches.
- **Merchant Wallet-** meant to facilitate the payment for goods and services.
- **Consumer wallet-** created for the end-users to transact on the e-Naira platform.

While the fundamental mechanism responsible for the cryptocurrency's growth and fall may be confounding, the regulatory approach is aimed at mitigating the possibility of users losing money and likely disruption in the financial system. Central banks across the globe are developing their digital currencies to keep control over digital transactions while reducing the volume of cash in circulation. So far, the central banks of the Bahamas (Sand Dollar), China (e-Yuan), Sweden (e-Krona), and Cambodia (Bakong) have all introduced their digital currencies as legal tender.

Figure 2: e-Naira participants and roles

Product Components						Stakeholders	Features
Monetary Authority Suite	 Digital Monetary Infrastructure	 Digital currency Operations manager	 Mining Solution	 Monitoring & AML Compliance	 eNaira Vault	Central Bank	<ul style="list-style-type: none"> Issue, distribute, redeem and destroy digital currency. Maintain controls and security in minting function Store data on a secure cloud server Monitor and analyse currency transaction
Financial Institution Suite	 Digital currency operations Manager	 Core Banking integration	 Reporting/Monitoring	 AML Compliance Module	 eNaira Vault	Licensed financial institution	<ul style="list-style-type: none"> Request currency or issue stable coins Manage digital currency across branches KYC, identity & AML compliance capability
eGovernment Suite	 E-Government Digital Currency Manager	 Digital currency integrations	 Reporting/Monitoring	 Merchant Suite	 eNaira Vault	Government	<ul style="list-style-type: none"> Efficiently process digital payments sent to and received from citizens and businesses. Analyze transactions and reconcile accounts
Businesses And Merchant Suite	 Digital Currency Manager for enterprise	 Merchant POS App	 Reporting/Monitoring	 E-commerce Plugin	 eNaira Vault	Merchants	<ul style="list-style-type: none"> Low-cost solution to manage payments POS, remote pay, and online payments capability Analyze transactions and reconcile accounts
Retail Customer Suite	 Mobile SDK	 Custodial Mobile Wallet	 Non-custodial Mobile Wallet	 Custodial Web Wallet	 eNaira Vault	Customer	<ul style="list-style-type: none"> Customer centric design for good user experiences Expandable architecture to facilitate innovation Advanced privacy and security features

Source: CBN, SBG Securities analysis

A financial institution can only maintain one treasury e-Naira to warehouse e-Naira received from the CBN e-Naira stock wallet. They may create e-Naira sub-treasury wallets for branches tied to it and fund from its single e-Naira treasury wallet. The financial institutions are also responsible for facilitating e-Naira onboarding for bank customers (merchants & customers), Integrating the e-Naira wallet feature into their digital banking channels, requesting e-Naira from CBN on behalf of its customers, managing e-naira across their branches, developing KYC and AML framework and handling customers complaint.

The e-Naira speed wallet and e-Naira merchant wallet were launched on Google Play and Apple Stores for consumers and merchants, respectively. The current version of the e-Naira can only be accessed by people with bank account. However, it was recently announced that a phone application for those who do not have a bank account would be available soon.

Tiered Structure

The e-Naira account has some distinct tiered structures. Depending on the tier group the user belongs to, the daily transaction ranges between N20,000 and N1 million. Subject to the tier category, the account's cumulative balance limit at any given moment ranges from N120,000 to N5,000,000. The daily transaction limit for merchants is N1 million, and there is no restriction on the total balance that must be in the account.

Figure 3: Tiered Structure

Tier	Type	Characteristics	Minimum requirement	Existing as per MMO
Tier 0	No Existing Bank account	Daily Transaction limit: Send: N20,000 Receive : N20,000 Cumulative Balance Daily: N120,000	Telephone number (without verified NIN)	
Tier 1	No Existing Bank account	Daily Transaction limit: Send: N50,000 Receive : N50,000 Cumulative Balance Daily: N300,000	Telephone Number (to be validated as NIN attached)	<ul style="list-style-type: none"> Passport photograph Name, place & date of birth; gender; address; telephone no.
Tier 2	Has an existing Bank account	Daily Transaction limit: Send: N200,000 Receive : N200,000 Cumulative Balance Daily: N500,000	BVN	Must provide BVN T1 requirements plus evidence of ID
Tier 3	Has an existing Bank account	Daily Transaction limit: Send: N1,000,000 Receive : N1,000,000 Cumulative Balance Daily: N5,000,000	BVN	T1 requirements plus physical verification. Full KYC stipulated in CBN AML/CFT
	Merchant	Daily Transaction limit: Send: N1,000,000 Receive : N1,000,000 Cumulative Balance Daily: No limit. No limit to the amount they can sweep to their bank accounts.	TIN/ BVN, Full KYC as stipulated in CBN AML/CFT	

Source: CBN, SBG Securities analysis

Regarding the pricing structure, the previous guideline specified that e-Naira peer-to-peer transfers would be free. According to the CBN's most recent guidance, the costs for e-Naira transactions will be in line with the 2019 regulation on charges by banks, other financial institutions, and non-financial entities.

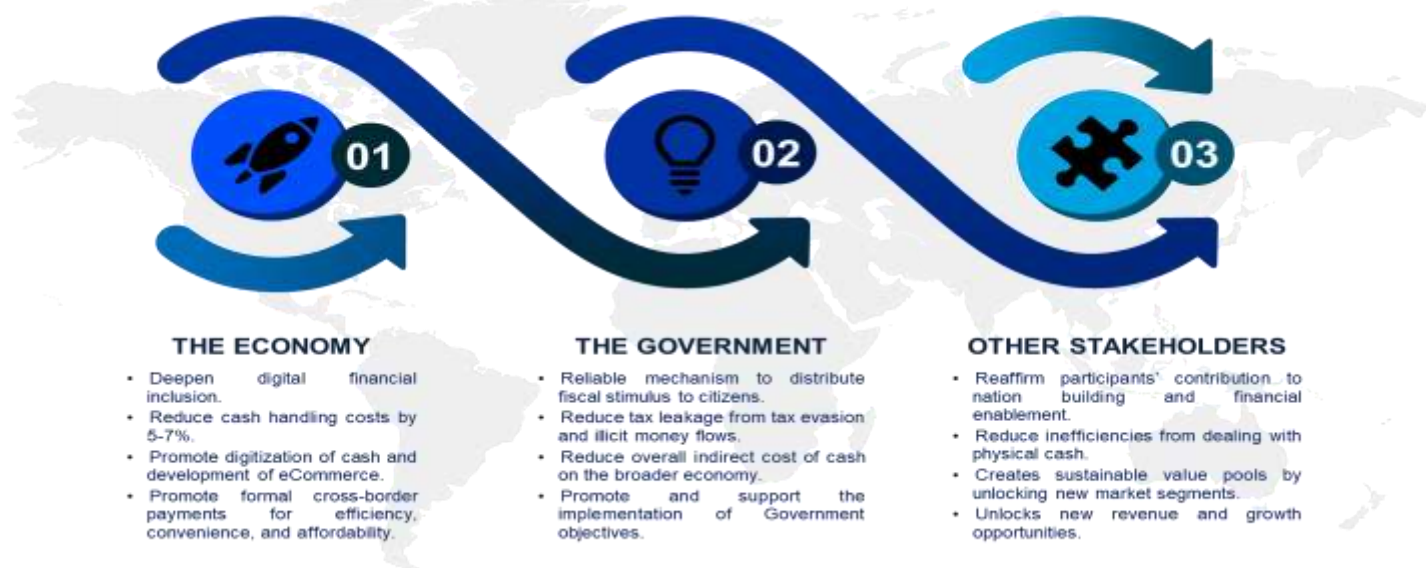
Figure 4: Guideline on Bank Charges

Description	New Guidelines
Electronic Fund Transfer	<ul style="list-style-type: none"> Below N5,000 - N10; N5001 -N50,000-N25; Above N50,000- N50.
Card Maintenance	<ul style="list-style-type: none"> FCY denominated cards- reduced to \$10 Naira Debit/ Credit Cards: Current accounts- No charge. Savings accounts -N50 per quarter as against N50 per month.
ATM Transactions	Remote-On-Us (from other bank's ATM) charges - N35 after third withdrawal within a month.
Internet Banking	<ul style="list-style-type: none"> Hardware token- on cost recovery basis, maximum of N2,500. Bill payment- maximum charge of N500
SMS alert	Cost recovery basis

Source: CBN

Benefits of the e-Naira

Figure 5: Proposed Benefit of the e-Naira by CBN



Source: CBN, SBG Securities analysis

From our perspective, the e-Naira would help in lowering the cost of printing paper currency. Between 2014 and 2019, the regulator spent a total of N307 billion on printing banknotes, according to reports. Other advantages include the ability to replace cash for low-value payments and to power the government's transfer payments initiative.

We think the e-Naira could benefit financial institutions in the following ways:

Collections – Merchants are required to accept e-Naira as one of the payment options available. There is a potential for banks to become merchants' primary collection bank. This would also help them increase their float income.

Facilitation of Cross-Border Payments and Remittances – Banks might also use the CBN FX API to enhance seamless cross-border payments and remittances with the e-Naira. It could be used for cross-border remittance and we can generate revenue via charges. With the implementation of African Continental Free Trade Area (AfCFTA), we anticipate an increase in float income for banks.

Removal of a merchant service charge – Asset management and insurance companies may now be able to accept online payments in e-Naira without incurring the usual merchant service charge.

Key Concerns

Low smartphone penetration rate

The part we are not clear about is how this will drive financial inclusion. The CBN intends to achieve a target of 95% financial inclusion by 2024. According to the EfinA 2020 survey, 64% of Nigeria's adult population of 105.5 million has access to some form of financial services, which is low when compared to South Africa, Rwanda and Kenya. Those with bank accounts can currently use the e-Naira app, and bank accounts are usually linked to BVN. According to NIISS, only about 50.7 million persons had been onboarded on the BVN platform as of October 31, 2021.

Although, it was further stated that the application for the unbanked segment would be released soon. We hope that unbanked app users would not need to download an app similar to what is now available to transact on the e-Naira platform because the USSD

version is currently unavailable. We anticipate that the next version for the unbanked will include USSD functionality, allowing for seamless access.

Figure 6: Low Financial Inclusion Rate (%)



Source: EfinA, World Bank, SBG Securities analysis

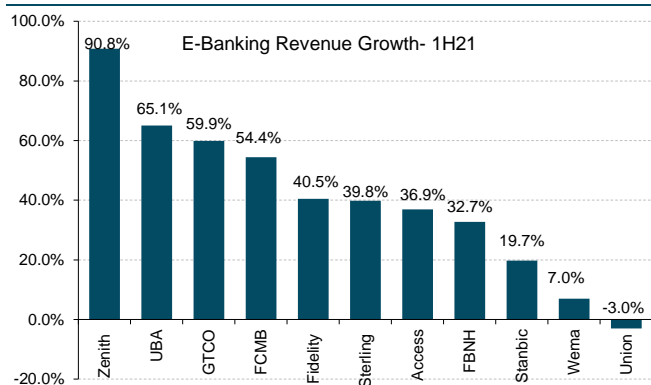
According to Data Portal, over 50% of Nigerians have access to the internet, and around 90% have access to mobile phones. The percentage of people who own smartphones ranges between 23-25%, according to Statista.

Given low smartphone penetration, high data charges, and limited internet access, we hope the e-Naira does not end up being a "white elephant" initiative. The CBN also indicated that e-Naira transaction fees will be in line with the current fees template on e-banking transactions. This also raises questions about what the primary driver of financial inclusion would be.

Financial Disintermediation Risk

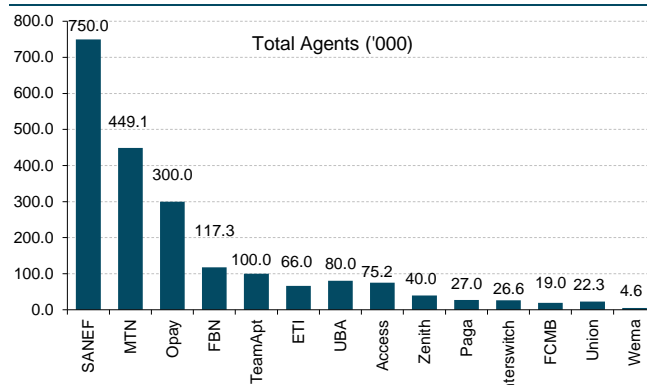
According to the CBN, "the conversion of bank deposits to e-Naira could have an impact on banks in terms of deposit liabilities and availability of funds for bank lending, fall in liquidity and challenges in liquidity management, and fall in credit assets and shrinking balance sheet. It further stated that banks can effectively respond by shifting from retail funding to more wholesale funding sources; Nevertheless, this could have an impact on their overall cost of funds, high interest rates on credit assets, a negative impact on profitability, and disruption of existing retail-focused strategies." CBN noted that it is aware of the risk and has limited the use of the e-Naira payment system to micro transactions.

Figure 7: E-banking Revenues Growth



Source: Company Data, SBG Securities

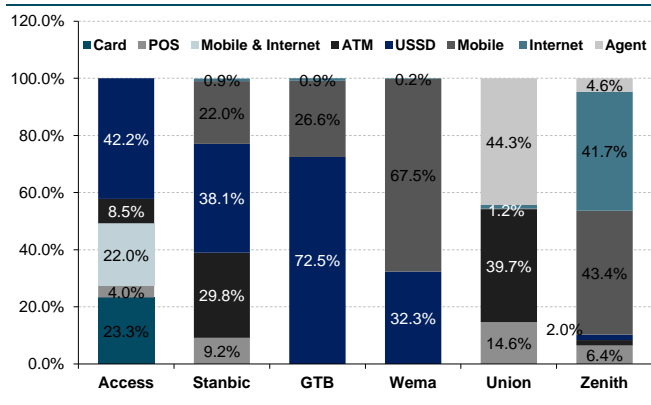
Figure 8: Number of Agents



Source: Company Data, SBG Securities

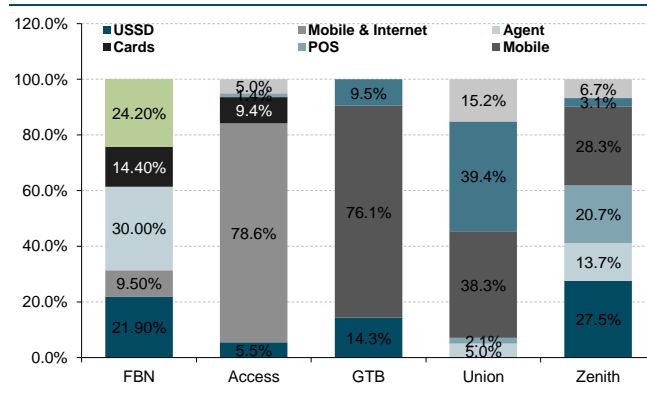
We think that perhaps in the future when transactions and liabilities move to the CBDC, it could impact banks revenue streams, including float income, transaction revenue, net interest income, depending on the level of adoption and the CBN's eventual position on charges on the e-Naira. It could further disrupt the agency banking strategy of the banks. While this may not materialise now, it remains a key concern in the mid to long term.

Figure 9: e-channels split by volume of transactions



Source: Company Data, SBG Securities

Figure 10: e-channels split by value of transactions



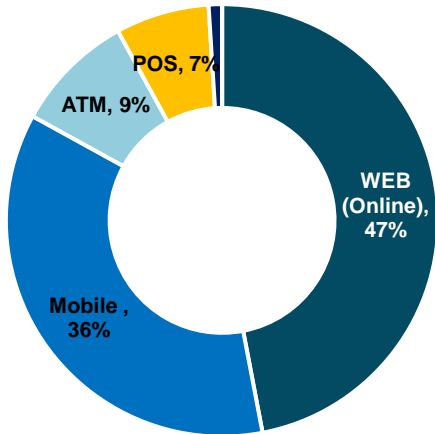
Source: Company Data, SBG Securities

Cyber risk remains a challenge

According to NIBSS, the number of fraudulent attempts in digital banking in 9M'20 y/y by 186% was driven by increased attempts via mobile (330% y/y), Online (173% y/y), and POS (215% y/y). Web channels accounts for 47% of total fraudulent activities. In terms of fraud techniques, Social engineering accounts for 56% while two factor authentication system is also another challenge.

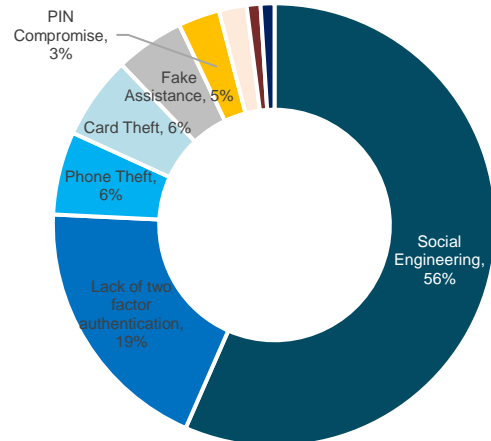
The increase in fraudulent activities hinders the growth of digital banking products. The CBN would need to invest in infrastructure to protect the firewalls of fraudsters from accessing customers' financial information. Also, a high level of sensitisation and digital literacy is required to prevent social engineering.

Figure 11: Fraud Analysis



Source: NIBSS, SBG Securities

Figure 12: Fraud Techniques



Source: NIBSS, SBG Securities

Future outlook

To make the e-Naira's potential more adaptable, we hope that the CBN would make its APIs available to telecoms, fintechs, banks, and other financial services providers, to allow for more relevant and innovative products to be built

Companies Mentioned (Price as of 2021/11/04)

Access Bank Plc (ACCESS.LG, N9.25, SBUY, TP N11.83)
Ecobank Transnational INC (ETI.LG, N8.30, Spec BUY, TP N7.70)
FBN Holdings Plc (FBNH.LG, N10.75, HOLD, TP N13.98)
Fidelity Bank Plc (FIDELIT.LG, N2.70, SBUY, TP N3.18)
First City Monument Bank Plc (FCMB.LG, N3.05, SELL, TP N2.45)
Guaranty Trust Holding Company (GUARANT.LG, N29.00, BUY, TP N39.00)
MTN Nigeria Plc (MTN.LG, N, Not Covered)
Stanbic Holdings Ltd (CFC.NR, KSh87.00, RESTRICTED)
United Bank for Africa Plc (UBA) (UBA.LG, N8.10, BUY, TP N12.00)
Zenith Bank Plc (ZENITHB.LG, N24.50, BUY, TP N32.00)

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Zenith Bank Plc	D

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SBG Securities Coverage and Contacts

Heads of Equity Research		Sector Heads		Macro	
Marc Ter Mors (Head of Equity Research)	(27 11) 415 4265	Tim Clark (Metals and Mining)	(27 11) 415 4295	Elna Moolman (SA Economics, Team Head)	(27 11) 415 4543
Muyiwa Oni (West Africa)	(234 1) 422 8667	Rey Wium (Consumer)	(27 11) 415 4250	Jibrán Qureishi (Africa ex-SA, Team Head)	(254 20) 363 8138
		Marc Ter Mors (Industrials)	(27 11) 415 4265	Kuria Kamau (East Africa)	(254 20) 363 8931
		Nadim Mohamed (TMT)	(27 11) 415 4253	Blessing Oladipo (West Africa)	(234 1) 422 7576

Strategy	
Deanne Gordon (Head SA Strategy)	(27 21) 712 0875
Adele Fermoye (SA Strategy)	(27 11) 415 4429

Sector and Company Research

South Africa		South Africa (continued)		Sub Saharan Africa (Ex-South Africa)	
Financials		Metals and Mining		Financials	
Mweisho Nene (Real Estate)	(27 11) 415 4655 Mweisho.Nene@sbgsecurities.com	Tim Clark (Metals & Mining, Team Head)	(27 11) 415 4295 Tim.Clark@sbgsecurities.com	Muyiwa Oni (West Africa)	(234 1) 422 8667 Muyiwa.Oni@stanbicbtc.com
Pranita Daya (Real Estate)	(27 11) 415 4622 Pranita.Daya@sbgsecurities.com	Adrian Hammond (Gold, Platinum)	(27 21) 670 6417 Adrian.Hammond@sbgsecurities.com	Tunde Ogunleye (West Africa)	(234 1) 422 8667 Babatunde.Ogunleye@stanbicbtc.com
Itumeleng Molefe (Life Insurance)	(27 11) 415 4260 Itumeleng.Molefe@sbgsecurities.com	Thabang Thlaku (Diversified Miners, Steel)	(27 11) 415 4015 Thabang.Thlaku@sbgsecurities.com	Patrick Mumu (East Africa)	(254 700) 296 454 MumuP@stanbic.com
Retail		Consumer		Consumer	
Kaeleen Brown	(27 83) 302 6269 Kaeleen.Brown@sbgsecurities.com	Rey Wium (Lux/Bev/Tob, Team Head)	(27 11) 415 4250 Rey.Wium@sbgsecurities.com	Fola Abimbola (West Africa)	(234 1) 422 8667 Fola.Abimbola@stanbicbtc.com
Ya'eesh Patel	(27 11) 415 4261 Yaesh.Patel@sbgsecurities.com	Sumil Seeraj (Food)	(27 11) 415 4256 Sumil.Seeraj@sbgsecurities.com	Olayinka Adesanya (West Africa)	(234 1) 422 7374 Olayinka.Adesanya@stanbicbtc.com
Construction and Materials		Chemicals		TMT	
Marc Ter Mors	(27 11) 415 4265 Marc.Termors@sbgsecurities.com	Adrian Hammond	(27 21) 670 6417 Adrian.Hammond@sbgsecurities.com	Tracy Kivunyu (East Africa)	(254 700) 385 540 KivunyuT@stanbic.com
Diversified Industrials		Forestry & Paper		Infrastructure and Materials	
Marc Ter Mors	(27 11) 415 4265 Marc.Termors@sbgsecurities.com	Tim Clark	(27 11) 415 4295 Tim.Clark@sbgsecurities.com	Ayodeji Dawodu (West Africa)	(234 1) 422 8667 Ayodeji.Dawodu@stanbicbtc.com
TMT		Corporate Commissioned Research			
Nadim Mohamed (Team Head)	(27 11) 415 4253 Nadim.Mohamed@sbgsecurities.com	Nic Dinham	(27 82) 374 0983 Nic.Dinham@sbgsecurities.com		
		Hugan Chetty	(27 83) 647 3347 Hugan.Chetty@sbgsecurities.com		

Equity Sales

South Africa		Sub Saharan Africa (Ex-South Africa)		North America	
Nick Higham	(27 11) 415 7018	Dele Akintola (West Africa)	(234 1) 422 8335	Luca Del Conte	(1 917) 946 5716
Graham York	(27 21) 670 6423	Gregory Waweru (East Africa)	(254 20) 363 8948		

United Kingdom, Europe	
Francis H Marcus	(44 744) 705 7250

Sales Trading

South Africa		West Africa		East Africa	
Selvan Kistnasamy (Head Equities)	(27 11) 415 7013	Titi Ogungbesan (CE)	(234 1) 422 8391	Gregory Waweru (Head Equities)	(254 20) 363 8948
Tom Gale	(27 11) 415 7023	Deji Aluko (Head Sales Trading)	(234 1) 422 8355	Eric Ogechi	(254 20) 363 8961
Kagiso Matlala	(27 11) 415 7021	Bunmi Olarinoye (Head Dealing)	(234 1) 422 8392	Augustine Misoka	(254 20) 363 8960
Tokelo Khambule	(27 11) 415 7814			Elie Mugabe (Rwanda)	(250 784) 108 841
Alexander Ferrer	(27 11) 415 7024			Nicholas Kimuli (Uganda)	(256 031) 222 4972