IFC MOBILE MONEY SCOPING
COUNTRY REPORT: GHANA

John Ngahu,
Charles Niehaus, Joseck Mudiri
Scoping Mission Dates:
July 22 to 26, 2013
PARTNERSHIP for FINANCIAL INCLUSION

The Partnership for Financial Inclusion aims to scale up commercial microfinance institutions and develop mobile financial services to bring affordable financial services to 5.3 million previously unbanked people in Sub-Saharan Africa by 2017.

It is a $37.4 million initiative by The MasterCard Foundation and IFC that brings together the intellectual and financial capital of the Foundation with IFC’s market knowledge, expertise and client base. The partnership is also joined by The Development Bank of Austria, OeEB, and The Bill & Melinda gates Foundation, and collaborates with knowledge partners such as the World Bank and CGAP.

An important objective of the partnership is to contribute to the global community of practice on financial inclusion, and to share research and lessons learned. This publication is part of a series of reports published by the program.

www.ifc.org/financialinclusionafrica
Ghana Executive Summary

Overall Mobile Money Readiness: 3 (medium)
Current Mobile Money Solutions: 3
Population: 25.37 million (July 2012 est)
Mobile Penetration: Approx 17.4m unique subscribers, or 69% of adult population
Banked Population: Less than 30% has access to formal financial services
Remittance % of GDP: Inbound $151.6 million, 0.83% of GDP
Percent under poverty line: 28.5% (2007 est.)
Economically Active population: 69.4% in labour force (2011 est.)
Adult Literacy: 67.3% (2010 est.)
Banks with largest branch networks: Ghana Commercial Bank, Barclays, Agricultural Development Bank, Ecobank

Mobile Network Operators: MTN, Vodafone, TIGO, Airtel, Expresso, Glo

IFC Opportunities

- **Market level**: Assist market in understanding payments convergence
- **MNOs**: Work with Tigo and MTN to help them reach scale
- **Financial Institutions**: Work with Fidelity bank to help them develop their mobile channel, agency banking and explore merchant services.
• Macro-economic Overview
• Regulations
• Financial Sector
• Telecom Sector
• Distribution Channel
• Mobile Financial Services Landscape
• Potential Risks
• Appendixes: Interviews Conducted
**Key Country Statistics**

- Population: 25,366,462 (July 2012 est.)
- Age distribution: 38.6% (0-14 years), 57.9% (15-64 years), 3.5% (over 65 years)
- Urban/rural split: 52.5% urban
- GDP (PPP): 51.9 billion, 80th globally
- GDP per capita (PPP): $2,048
- Population below national poverty line: 28.5%
- Economically active: 15.6 m (66.7%) in labor force (2011 est.)
- Literacy rate: 67.3%
- Banking penetration: less than 30% of population have access to formal financial services
- Mobile phone penetration: Approx 17.4 m unique subscribers, 69% penetration, 100% adult
- Remittance (% of GDP): 0.39%, $151.6 million

**Insights**

- Ghana's economy has strengthened over the past quarter century due to sound management, strong commodity sector reinforced by recent oil discoveries, a competitive business environment, and sustained reductions in poverty levels
- There exists a sound financial system that is anchored by a legal and regulatory framework
- There's strong distribution infrastructure that's private sector driven
- Banking infrastructure is evenly distributed with the exception of the northern region which has relatively few bank branches
- Scoping results show high market demand for more efficient financial services indicating growth opportunity for mobile financial services.
- The outlook in 2012/13 remains positive with projected GDP growth of 8.3% (7.6% non-oil) and 7.7% (6.3% non-oil) in 2012 and 2013 respectively

Sources: CIA Factbook Website August 2013 and conversations with industry players during scoping visit held between 22 – 26 July 2013
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### Regulatory Bodies

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<tr>
<th>Central Bank of Ghana (BoG)</th>
<th>National Communications Authority (NCA)</th>
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#### Roles & Responsibilities

- Payments Systems Act (663 of 2003) designates BoG responsibility of overseeing the National Payment System and all relevant regulations
- BoG also the owners of GhIPPS (Ghana Interbank Payment and Settlement System/ACH and Switch) which process eZwich and GH-Link cards
- Branchless Banking Regulations released in 2008 – limited to deposit taking institutions (bank and non-bank)
- Responsible for granting of MNO licences and ensuring quality standards
- Limited direct role in Branchless Banking/Mobile Money. Aligned with BoG to drive industry wide issues such as awareness and interoperability

#### Implications

- BoG performs dual roles of payment system oversight and commercial operator. It is a Payment System Operator through GhIPSS and has a commercial interest through eZwitch
- No evidence of a Payment System Management Body (PSMB) made up of participants in the Ghana National Payment System
- BoG mandated industry to use eZwich to solve bank card/ATM interoperability issues but there has been a general lack of support from industry
- GhIPSS is in the process of launching GH-link which will connect all proprietary cards. This is potentially a more efficient solution than eZwich
- eZwich potentially faces competitive challenges as Mobile Money offerings develop in rural areas which eZwich is targeting
Regulatory Framework & Requirements

Current Regulations

- MNO managed MFS deployments fall under Branchless Banking Regulations
- Banks must lead, MNOs and 3rd party providers can only operate with a licensed bank partner
- MNO’s do not have a direct relationship with BoG
- Permissible model is many-to-many and MNO’s must have a minimum of 3 licenced bank partners
- KYC is not tiered
- Each MFS wallet should be backed by a unique bank account on the banking system
- MFS platforms allocate BIN’s (Bank Identity Numbers) for each bank partner, the trust account at that bank must reconcile back to the balance on the BIN on the MFS platform

Retail Agents

- Retail agents fall under branchless banking regulations
- Essentially operate as bank agents under the regulations (and assigned BIN) but from a branding perspective represent the MNO MFS business

Branchless Banking Regulations

- Although BoG has implemented a bank-led model, in practice, 3rd party and/or MNOs are actually driving the business
- MNO’s would like a closer relationship with BoG to articulate their interests.
- Standardised, non tiered and overly burdensome KYC requirements limiting business growth.
- Many to Many MFS model has led to individual MNO’s partnering with as many as 10 banks, reducing incentives to both MNOs and Banks.
- Under current regulations all the accounts that MNO’s are building belong to the partner Banks.
- In practice banks do not have individual accounts but are pooled in the MNO’s name
- Banks and MNOs working out acceptable incentives for all partners to grow business.
- MNO’s are in independent discussions with the Regulator to change the current model. Draft new regulations are imminent.

Implications

- No mention of agent exclusivity in regulations. Agents have direct relationships with individual MNO’s and their affiliated banks.
- Around 1/3rd of agents are serving multiple deployments
### Regulatory Framework & Requirements

#### Current Regulations

- **Customer Acquisition**
  - Acquisition being performed by agents
  - Customer falls into BIN (Bank Identity Number) of the merchant where they are registered (i.e., if it is a MTN agent who falls on the Barclays BIN, then the consumer falls under the Barclays BIN)

- **KYC/AML Requirements**
  - KYC policy in place, issues of non-adherence in the past have led to BoG releasing a standard Due Diligence form
  - KYC not tier based and all new accounts require full KYC

- **Role of MNOs**
  - MNO’s run and operate the MFS businesses but dependant on banks licences due to regulations
  - Do not have a direct relationship with BoG
  - Fall under Agency Banking guideline

- **Customer Protection**
  - Currently no consumer protection law in place, but is in draft
  - Consumer Protection Agency (CPA) is a lobby group for consumers

#### Implications

- **MNO’s are acquiring customers that due to regulation belong to the banks**
- **Customers are unaware they essentially have an underlying bank account, MNO service point staff are also unclear on this.**

- **MNO’s believe un-tiered KYC regulations is slowing down uptake and usage.**
- **The operators are lobbying BoG to introduce tiered KYC**

- **Regulation means that the banks essentially own the customer and/or agent**
- **Due to unique BIN allocations, banks can move their MFS customers between MNO’s if they wish or bring them in house, but due to the way the accounts are pooled and not individual as per regulation they cannot practically do this**
- **MNO’s are starting to create lobby groups to be closer to the legislation and aim at driving certain changes such as KYC and Bank-led model**

- **Regulatory traction required to move towards consumer protection. Absence of protection opens up payment systems to lack of trust**
- **CPA legitimacy often questioned in the industry**
**Additional Regulatory Considerations**

**Current Regulations**

**Card:**
- GhIPSS is the National ACH/Switch and is a subsidiary of BoG. GhIPSS facilitates switching for eZwitch, GH-Link, ACH functions for Direct Debit and Credit and Cheque Truncation.
- BoG mandated eZwich (a card payment scheme) to all the banks in 2006/7 facilitated by GhIPSS.
- GhIPSS implemented GH-link to link all proprietary cards (non eZwich and non Visa/MCW).
- GH-link cards, eZwich cards and Visa/MCW cards are not interoperable across schemes.
- Technical interoperability is limited to ATM’s for GH-Link and Visa/MCW (eZwich have their own ATM’s).
- Visa/MCW PoS devices not technically interoperable with eZwich PoS.

**Mobile:**
- Bilateral agreements and connections in place between MMO platforms and their sponsor banks for limited transactions.
- No interoperability between different MMO offerings.

**Implications**

- eZwich original intent was to solve card interoperability for proprietary ATM cards but required issuance of a new proprietary card scheme based on new technology (UEPS).
- eZwich has evolved into an efficient way to capture KYC details, but not to drive payment transactions.
- Market forces shaped the limited success of eZwich, some still believe there is merit in the system (the majority however question the value).
- New GH-link may solve proprietary card interoperability in a more elegant way by integrating existing proprietary ATM cards.
- GH-Link have ambitions of being a POS brand—but may lack the capacity to understand potential challenges and competition from the large international payment schemes.

- Market level Mobile Money interoperability not currently in place.
- Nature of mobile money accounts (as bank accounts) opens window of interoperability through the banking system.
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Payment Systems Overview

• Payments:
  • GIS (Ghana Interbank Settlement System) is the RTGS system for Ghana and was set up in 2002
  • 11 clearing houses owned by BoG and commercial banks facilitate cheque and paper credit vouchers
  • Ghana Interbank Payment Settlement Systems (GhIPSS) (a division of Bank of Ghana) was set up in 2007 to function as the Ghana Automated Clearing House (GHAC) and currently facilitates the following:
    • Retail Debit clearing system:
      • Cheques and other paper-based debit instruments are the most widely used non-cash payment media. Instruments include personal and corporate cheques, payment orders/banker's drafts, debit notes, dividend and interest warrants, travellers cheques and commission vouchers.
    • Retail Credit Clearing System
      • The inter-bank credit clearing system was introduced in July 2004 to complement the "debit pull" instruments. It is based on the "credit push" principle.
  • Card clearing and settlement
    • Domestic switching currently takes place via the individual scheme switches and settled via GIS
      • Visa and MasterCard transact through their respective international switches with domestic settlement files sent to GIS for PoS and ATM
      • eZwich (domestic proprietary scheme) is managed by GhIPSS and switched through GhIPSS for PoS and ATM
      • GH-Link introduced by GhIPSS which is a proprietary ATM switch for all non Visa, MCW and eZwitch cards
  • Credit Bureau
    • Credit Bureau is in place, BoG are encouraging banks and other parties to supply data to the Bureau but uptake is still limited at this stage
## Banks with MFS ambitions

### Fidelity
- **400k Savings, Current, Corporate accounts**
- **44 branches**
- **65 ATM’s**
- Partnered with MTN
- **2500 agents on BIN**

**Services include (on MTN platform)**
- bill pay (DSTV, Electricity, Schools)
- Online shops
- Life insurance (my-life)
- m-susu - a savings collection account
- International remittances

- Have set up a new financial inclusion department headed by senior executive head hunted from Barclays Bank
- Launched new service “smart account” targeting 1m new customers using agency banking

### UT Bank
- **Focus on SME and micro businesses (70% of clientele in informal sector)**
- **190k customers and 26 branches**
- Partnering with Airtel on unique savings account.

- 25k proprietary (GH-Link) cards
- 60k eZwitch cards (largest eZwitch issuer)
- Currently launching Visa issuing
- Applying for Visa PoS licence
- Have “2 “mobile branches” – bank on wheels driving around Accra

- Aim to have account and wallet integrated product with Airtel
- Focusing on m-susu collections with Vodafone
- Aim to use technology wisely to reach more people through innovative products

### EcoBank
- **600k banking accounts (Savings and Current)**
- **205 ATM’s, 52 branches**
- First MTN trust account partner bank.
- Also partnering with Vodafone.

- All airtime bulk accounts held by Ecobank
- Services include current MTN/Fundamo platform offering (bill pay, life insurance, remittances)

- Looking to deploy own mobile banking savings account linked to MTN Fundamo wallet (wallet to wallet)
Banks with MFS ambitions

Zenith Bank

- Part of a group with a presence in 8 African markets, China, UK and USA
- 50k customers in Ghana (mixed savings, current, corporate) 26 branches, 32 ATMs, 167 POS and 18k visa cards
- They have their own wallet (Z-Mobile) powered by e-Tranzact.
- Z-mobile a mobile banking service has about 30k subscribers
- MNO’s dictate channel pricing for mobile money which they feel is high and therefore affecting uptake
- To link a Zenith account with the MTN wallet, users have to visit a bank branch or agent. To link to the Airtel wallet, the process is finalized entirely on the phone
- Zenith has 2,500 mobile money agent wallets linked to it’s BIN.

GT Bank

- 120k customers, 24 branches, 36 ATMs, 60 POS, 723 active agents /customers
- GT bank is working with 2 MNOs (MTN and Airtel) and a third one is underway
- Has introduced “GT mobile saving account” powered by Airtel. They have roving agents with POS devices who go to remote locations to sign up new customers, performing cash in/cash out and bill payments among others.
- They have a mix of corporate, commercial and retail customers. They believe growth will come from the retail side
- They have worked with IFC previously around SME training
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Mobile Network Overview

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<td>Mobile Coverage</td>
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<td>Mobile Subscribers</td>
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Mobile Market share

- MTN 45.60%
- Vodafone 23.93%
- Tigo 12.50%
- Airtel 13.48%
- Glo 5.32%
- Expresso 0.41%
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Distribution Channel Overview

- Infrastructure across Ghana is fairly well developed and distribution partners can be found in most parts of the country as retail and wholesale outlets. Data on total available distribution points in Ghana was not readily available but they are estimated to be more than 100,000 countrywide.

- The country has a strong presence of FMCG structures including beverage companies such as Coca cola and Cigarette manufacturers such as BAT.

- Most of the MNOs interviewed confirmed the availability of suitable distribution partners for mobile money all over the country except in the northern part where poverty levels are above the national average.

- Mobile money operators are currently focussing on airtime distribution channels and are yet to exhaustively utilise non-airtime distributors to drive mobile money.

- Bank outlets and MNO retail shops are also other distribution points utilised by MMOs.

- The MFI sector is fairly well established with over 50 years of existence. There’s no dominant institution so MFS partnerships can leverage the range of institutions for distribution.
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<table>
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<th>MNO Mobile Financial Services Providers*</th>
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<tbody>
<tr>
<td><strong>MTN</strong></td>
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<tr>
<td>- Operates in 17 markets in Africa</td>
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<td>- MFS launched in 14 of MTNs 17 markets</td>
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<td>- Has launched MTNMOMO.COM, an international money transfer service</td>
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<td>- Runs on Fundamo platform but migrating to Ericsson</td>
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<tr>
<td>- Estimated 45.60% of market share</td>
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<tr>
<td>- 13.9M GSM subscribers</td>
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<tr>
<td>- In 2009, first MNO to launch mobile money in Ghana</td>
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<tr>
<td>- In partnership with 10 commercial banks who hold the MFS Trust accounts</td>
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<tr>
<td>- Offering top-up, money transfer, bill payments and balance enquiry</td>
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<tr>
<td>- Aspire to increase active customers more rapidly</td>
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<tr>
<td>- Growth focusing on more rural customers who need improved access to financial services</td>
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<thead>
<tr>
<th><strong>Tigo</strong></th>
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<tr>
<td>- Operates in 8 African markets, 6 in Sub-Saharan Africa</td>
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<tr>
<td>- Mobile Financial Services launched in 5 of the 7 markets in Africa</td>
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<tr>
<td>- Runs on Utiba platform</td>
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<tr>
<td>- Estimated 12.5% market share</td>
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<td>- 3.80M GSM Subscribers</td>
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<td>- In 2010, received a grant from GSMA to roll-out a greenfield MFS deployment</td>
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<td>- Reduced agent network to focus on quality and have more active agents</td>
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<tr>
<td>- In partnership with 3 banks</td>
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<tr>
<td>- Plan to grow to more rapidly and in line with their GSM growth</td>
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<tr>
<td>- Offering top-up, money transfer, bill payments and balance enquiry</td>
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<thead>
<tr>
<th><strong>Airtel</strong></th>
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<tr>
<td>- Part of Bharti Airtel Limited</td>
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<tr>
<td>- Operates in 16 Sub-Saharan African markets</td>
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<tr>
<td>- MFS launched in 8 of the 17 markets</td>
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<tr>
<td>- Running on Comviva platform</td>
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<tr>
<td>- 3.1M GSM Subscribers</td>
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<tr>
<td>- 13.48% of market share</td>
</tr>
<tr>
<td>- Over 1k MFS agents</td>
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<tr>
<td>- 1M registered customers, 100k active</td>
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<tr>
<td>- In partnership with 7 commercial banks</td>
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<tr>
<td>- Launched mobile money in December 2011</td>
</tr>
<tr>
<td>- Offering top-up, money transfer, (other) bill payments, merchant payments</td>
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<tr>
<td>- Aspiring to have their entire GSM base using MFS</td>
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<tr>
<th><strong>Vodacom</strong></th>
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<tr>
<td>- Planning to launch late 2013</td>
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*information obtained from meetings, no readily published BoG data available*
Apex Organizations

Ghana Bankers Association

Formed on May 29, 1980 and is the National Organization of Banks in Ghana, focuses on:
• Lobbying on behalf of members on issues pertaining to economic, fiscal, monetary and other matters such as new regulations as they affect the effective performance of the financial system
• Carries out research, analysis and dissemination of information on issues affecting the banking industry's performance and growth
• Enhances industry performance, e.g. pursuing establishment of credit reference bureau and general training for banking personnel
• Participates in and contributes to the programs and activities of the West African Bankers' Association and the proposed West African Monetary Agency.

GHAMFIN- Ghana Microfinance Institutions Network

• Informal network of institutions/individuals operating in Ghana's Microfinance Industry.
• Evolved from concern of some Ghanaian Microfinance Institutions (MFIs) for the development of best practices in delivery of microfinance services.
• Regularly collaborates with government and donor organizations in Ghana, particularly in the area of policy change activities and implementation of capacity building and institutional strengthening programs.
• Funding comes mainly from grants, fees for services and membership fees. Major contractors include Government of Ghana, World Bank, USAID, IFAD, GTZ and Care International. Has received funding from the WWB/UNDP Regional Program to build Microfinance Networks in Africa.
Aims are to:
- serve as a platform for effective communication and collaboration among members
- serve as a mouthpiece and a consultation body for discussions with key stakeholders in the sector
- improve information sharing and promote transparency in the sector
- sensitize the general public about the specificities of S&Ls and promote a better knowledge of the sub-sector

Ghana Association of Savings and Loans companies
- meets with stakeholders in the formulation of rules and regulations of the credit unions in the country.
- umbrella body of all Co-operative Credit Unions in Ghana
- regulates and supervises all the Credit Unions in the country on behalf of the Bank of Ghana
- member of the Ghana Microfinance Institutions Network (GHAMFIN) and co-operates with the Department of Co-operatives of the Ministry of Employment and Social Welfare and the Ghana Co-operative Council

Ghana Co-operative Credit Unions Association

The Association of Rural Banks (ARB) was formed in 1981 to, among other things:
- Provide and exchange information on rural banking services in Ghana
- Promote and strengthen cordial relationship among the RCBs (Rural and Community banks)
- Help contribute to the development of agriculture, commerce, industry and the general well being of rural areas in Ghana
- Undertake the education of rural communities on the work of the RCBs
- Ensure that RCBs are generally seen as instruments of national development in the rural areas

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Risks

- Ghana’s MFS model is many to many. The operationalization of this model has not been done efficiently. Banks and MNOs are not playing complementary roles in the existing deployments. This has resulted in poor relationships between the players which has affected the ‘face’ and performance of the product in the market. This scenario and the negative perception in the market will be difficult to undo.

- GHIPSS are being positioned as the National Automated Clearing House for interbank payment transactions, the main risk is arguably the ownership structure as GHIPSS is owned by BoG and in most market the interbank utility is owned by participants (sometimes with a small shareholding from the Central Bank), this ownership structure may compromise BoG’s independence as a regulator as it also acts as an operator and a scheme owner through eZwich

- While distribution opportunities exist in most parts of the country, the northern region is not well covered by banks and MNOs so agent presence and liquidity management points in those areas could prove to be a challenge

- Ghana has attracted donor interest focused on MFS. There is a risk that too many players may get involved in supporting the MFS ecosystem without synergy this may lead to disruption of the industry’s natural progression
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# Interviews Conducted

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<th>Contact Name</th>
<th>Designation</th>
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<tr>
<td>ProCredit</td>
<td>Doris Bloniarz &amp; Team Frederick N. Amponsah</td>
<td>Head, e-business Unit</td>
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<tr>
<td>Advans Ghana</td>
<td>Franklin Benyi Brieuc Cardon</td>
<td>Managing Director CEO</td>
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<td>MTN Ghana</td>
<td>Ebenezer Asante A-Majeed Rufai</td>
<td>Executive, Sales and Distribution Mobile Money Merchant Manager</td>
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<tr>
<td>Access Bank Ghana</td>
<td>Juliet Ackah Nyamikeh</td>
<td>Head, E-Business Operations</td>
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<tr>
<td>EB-Accion</td>
<td>Mrs. Frances Adu Mante</td>
<td>Directeur Général</td>
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<tr>
<td>Standard Chartered</td>
<td>Zibilla Atchulo &amp; Emmanuel Darko-Kyei</td>
<td>Head Digital Banking Channel Analyst</td>
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<tr>
<td>UT Bank</td>
<td>Andy Collins &amp; Nelson Da Seglah</td>
<td>General Manager (Banking Technology)</td>
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<tr>
<td>Stanbic Bank</td>
<td>Patrick G. Quantson</td>
<td>Manager, Self Service Channels</td>
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<tr>
<td>Fidelity Bank</td>
<td>Ophelia Ama Oni</td>
<td>Product Support Manager</td>
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## Interviews Conducted (cont.)

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<th>Organization</th>
<th>Contact Name</th>
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<tbody>
<tr>
<td>GT Bank</td>
<td>Edinam Doh</td>
<td>Manager</td>
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<td></td>
<td>Kwabena Appiah-Gyimah</td>
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<td>Zenith Bank</td>
<td>Shiela Quartey</td>
<td>Head, e-Business</td>
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<td>Vincent Musah</td>
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<td>SECO</td>
<td>Agatha Quayson</td>
<td>Economic Counsellor &amp; Head of Cooperation</td>
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<td></td>
<td>Brigitte Cuendet</td>
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<tr>
<td>Airtel</td>
<td>Ms. Esther Amakye</td>
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<tr>
<td>Tigo</td>
<td>Michael Grantson</td>
<td>Agent Quality Manager</td>
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<td>Selorm Adadevoh</td>
<td>Head of Mobile Financial Services</td>
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<td>Kwasi Donkor</td>
<td>Channel Manager</td>
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<td>eTranzact</td>
<td>George Babafemi</td>
<td>CEO</td>
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<tr>
<td>Ministry of Communications</td>
<td>Mrs Patricia Dovi Sampson</td>
<td>Director: Research, Statistics &amp; Information Management</td>
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<tr>
<td>CGAP</td>
<td>Peter Zetterli</td>
<td>Technology and Business Model Innovation</td>
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