Regulating on the Frontier:

Mobile Money and Financial Inclusion in Ghana

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"Why has mobile money uptake been so slow compared to Kenya?" asked Elly Ohene-Adu, Head of the Banking Department at the Bank of Ghana. With this simple question, Ms. Ohene-Adu frames the policy puzzle that has perplexed policymakers, bankers, mobile network operators (MNOs), and international actors who had predicted that Ghana would experience rapid growth in mobile money services over the past six years, spurred on by the passage of the Bank of Ghana's 2008 Branchless Banking regulation.

The 2008 regulation sought to make clear the jurisdictions with the Payment Systems Act of 2003 and to make Ghana the first in the world to mandate interoperability via a bank-based system and a "many-to-many model -- a model which requires both banks and MNOs to enter into multiple partnerships. Per the 2008 regulation, all e-money had to be issued by a regulated bank (usually in partnership with an MNO), and exclusive partnerships were prohibited. This structure was motivated by a desire to ensure competitive markets and broad access to the millions of Ghanaians that mobile money had the power to fiscally enfranchise. Yet, six years after the issuance of the new guidelines, and the collective investment of tens of millions of dollars into developing Ghana's mobile money ecosystem, the results were disappointing. Ms. Ohene-Adu was charged with finding a way to diagnose the issue and make it work. She needed to incentivize greater investment on the part of private actors, and increase uptake on the part of consumers, and hoped to propose a comprehensive plan of regulatory change to present to her governor. As she passed before meeting with her team, she reflected on the months of meetings, negotiations, and analysis that she had led following her attendance at FLPFI.

ABOUT GHANA

Ghana is a small, lower-middle income country on West Africa's coast of the Gulf of Guinea. Long a political and cultural leader in sub-Saharan Africa, the history of financial inclusion in Ghana is closely tied to its long history of relative stability, political fortitude and consistent growth. Total GDP is just over $90 billion, 23.2% of which is recovered as tax revenue by the government. Ghana's main exports include agricultural products such as cocoa, cotton and gold. Additionally, in the last decade generous reserves of oil had been discovered in Ghana. With over 35% of its population under the age of 15, Ghana is a young nation with a relatively large middle class, but a number of clear challenges ahead. These include, an increasingly strained national transportation system, outdated energy infrastructure, and a declining middle class population.

A former British colony, Ghana is a parliamentary democracy, with the president elected to four year terms. Of its many institutions, the Bank of Ghana (BoG) is a strong source of legislative enactment. The broad mandate of the 2003 Branchless Banking Legislation enabled equally broad powers for the Bank of Ghana to create, clarify, and change regulation as it pertains to payment systems without requiring parliamentary or presidential approval. While the governor of the Bank of Ghana is a political appointee, meritocracy is broadly observed for management and general employees.

At the time, a key political milestone was the upcoming presidential elections in December 2016. The administration faced a number of political challengers who were critical of its relatively loose fiscal policy, high deficit, and increasingly depreciating currency. Perceptions of low living standards relative to the high natural endowments of the country had created a political ecosystem of tension and combativeness. The country's four main political parties were each positioning for that election. The recent World Bank bailout and imposed austerity plan, as well as a sizable current account and budget deficit, were be key issues in the lead up to the election.

REGULATING INCLUSION: FINANCIAL INCLUSION IN GHANA

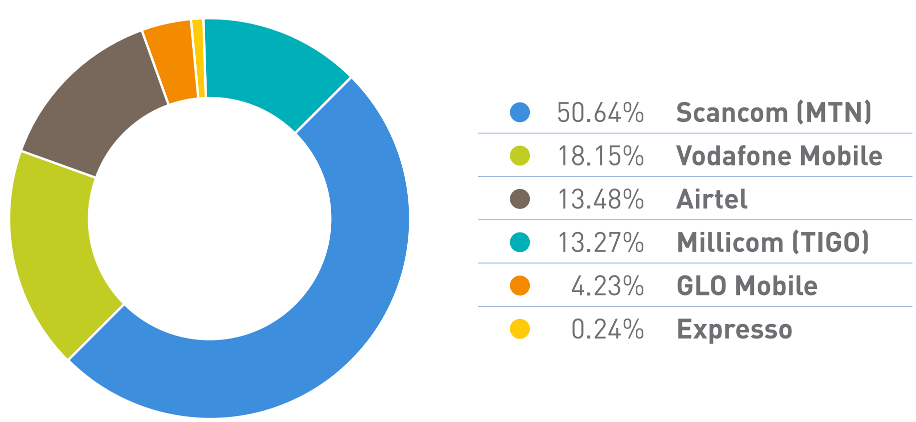
From a robust informal financial sector, to a relatively widespread system of rural banks, Ghana's financial infrastructure was relatively developed before the mobile telephony boom of the late '90s and early 2000s. Ghana's commitment to financial inclusion and the use of digital financial services was underlined with a commitment to mobile financial services in the The BoG's 2014 strategic plan.

The Bank of Ghana has been committed to the notion of financial inclusion since long before such a phrase existed. With policies ranging from efforts to establish rural banking networks in the 1970s to the 2008 Branchless Banking regulations, the BoG has pushed policies that create an enabling environment for financial services to be provided to the poor in Ghana. To that end, great hope existed that mobile money would quickly advance financial inclusion. However, by 2011, levels of mobile money adoption and utilization remained persistently low, and Ms. Ohene-Adu began to conduct initial analysis to understand the nature of the issues underlying the slow growth.

In 2008, with a population of 23 million, relative stability, and a long history of fiscal innovation, Ghana seemed poised to ride the new wave of mobile-related growth enjoyed by several of its African peers. However, the e-money market in Ghana did not develop according to plan. By 2013, only 9% of Ghanaians had a mobile money account (Ericsson Consumerlab, 2013), and active usage was only 1.5% (infoDev, World Bank, 2014). By the end of December 2014, only 59% of the population had a mobile phone data subscription (NCA, 2014). (See Figure 1 for all MNOs by market share of mobile data accounts.)

By 2011, it was clear that e-money results were not meeting initial expectations: three MNOs (MTN, Airtel, and Tigo) had strongly entered the market, partnering with a total of 12 banks and registering nearly 3 million customers. But very few registered customers actively used branchless banking services. By 2013, MTN reported 3 million e-money subscribers in Ghana but only 1.5 million transactions per month; Airtel reported 900,000

Figure 1: **MNOs by Market Share of Mobile Data Accounts, 2014**



subscribers; and Tigo reported 3.75 million subscribers but only 13% (or 487,000 subscribers) actively using mobile money services (Dzokoto, 2014). Neither MNOs nor banks had experienced a healthy return on their investments in e-money in Ghana (CGAP, 2011).

In August 2014, the Bank of Ghana laid out its overarching strategic plan for financial inclusion, and payment systems. This plan called for, among other things, the rollout of a robust mobile money and financial services ecosystem. This plan gave further legitimacy to the efforts of Ms. Ohene-Adu and her team, as well as greater urgency to refine the details of their proposed regulatory changes.

THE 2008 GUIDELINES

The 2008 Guidelines for mobile banking revised key aspects of Ghanaian banking regulation, clarifying the roles of banks and MNOs, and affirming a bank-led model for the roll out of mobile money in Ghana. The guidelines ambitiously attempted to create the world's first interoperable mobile money ecosystem, by compelling banks to partner with multiple MNOs, with the hope that the private sector would 1) understand and desire to invest in developing the mobile money landscape in Ghana; 2) would partner effectively to enable an interoperable system; and 3) spread access to financial services beyond the capital of Accra to the rural areas in the north of the country.

However, by 2011, this bank-led "many-to-many" model was seen as a key hindrance to the expansion of the mobile money market in Ghana, as neither banks nor MNOs faced positive incentives to invest in infrastructure, marketing, or agent networks. As the Consultative Group to Assist the Poorest (CGAP),a part of the World Bank, described the problem: "The partnerships seem to lack clarity around roles, responsibilities, and remuneration. Most banks are unwilling to invest substantially in any one implementation, perhaps since their direct competitors are also involved and would benefit from their efforts" (CGAP, 2011). By 2014, the Bank of Ghana fully recognized the perverse incentive structure that was in place. As Franklin Belnye, Head of Banking Supervision at the BoG stated, "Growth has been slow because banks should be at the forefront of promoting mobile money, but they're not. They hold the power but they're not very interested. Telcos do all the investment, but they can't really promote product."

While a couple of large banks, such as Fidelity Bank, had taken the charge of financial inclusion seriously, many banks remained lethargic players in the market. Key executives even noted that their commercial strategy depended primarily on wealthy rather than poor clients, and as such mobile money would only become attractive if demanded by large accounts such as Coca-Cola and other distributors. "If big players would demand we pay salaries via mobile money, it would be very compelling," noted one such manager. Indeed, rather than nurture a strategy which directly marketed to the millions of unbanked individuals, Ghanaian banks were primarily uninterested in unbanked customers. Despite this reticence, all trust account balances could remain with banks as custodians of the funds, and banks had no mandate to pass through any interest to consumers or to the MNOs which employed them to hold the underlying mobile money stores.

THE PROCESS OF CHANGE-MAKING

The low market participation of Ghanaians in this key element of Ghana's financial inclusion strategy forced both business and government to reconsider the efficacy of the 2008 guidelines. Ms. Ohene-Adu and her team had several important decisions to make. She needed to either incentivize banks to participate more fully in the program, or allow new players into the market that would be more willing to serve unbanked segments of the population. In addition, key issues of interoperability, agent network exclusivity, Know-Your-Customer (KYC) requirements and implementation would need to be considered. Whereas the Bank of Ghana had historically decided unilaterally on key policy issues, the multi-disciplinary nature of this policy problem, as well as the lack of reliable international precedents, called not only for innovation in policy creation, but also in the process of arriving at key decisions and encouraging buy-in.

Interestingly, the impetus for reviewing the Bank of Ghana's mobile money regulations did not come from within the BoG. Rather, it was CGAP which approached the Bank of Ghana in 2011 to suggest revisiting the Branchless Banking

regulations. Over the next three years, CGAP would play a crucial facilitating role to help BoG lead a highly participatory review process that engaged all relevant actors, including regulators from BoG and the National Communications Authority (NCA), MNOs, banks, and other payment actors.

CGAP served a key intermediating role, approaching crucial stakeholders to gauge their interest

in engaging in the revision process, and then established individual meetings between those stakeholders and Bank of Ghana personnel. As Yaw Antwi of Airtel said, "The Bank of Ghana met with us individually and then all together, and asked us how the new regulation could look. And CGAP was indispensable to the process." Owreku of EcoBank echoed the sentiment, noting that "the process had been refreshing and highly productive."

One key forum which BoG and CGAP utilized repeatedly over the next few years was matchmaking workshops. At these workshops, representatives from important stakeholders including Ecobank, First Atlantic Bank, Airtel, and MTN were invited to share their concerns with the current regulations and their ideas for improving the regulatory environment. These workshops were viewed favorably by stakeholders. As Sebastian Yali of First Atlantic Bank said "The workshops were great and they were something we'd been asking for."

The Bank of Ghana used the workshops to develop and refine key pieces of new regulation, running ideas by the other actors and soliciting feedback. In addition, as the process progressed, BoG asked the same stakeholders to review and comment upon draft sections of the new regulation. While BoG maintained the final word on all aspects of the regulation, changes were made in reaction to comments received during the workshop and review stages.

INTERNAL CONSIDERATIONS

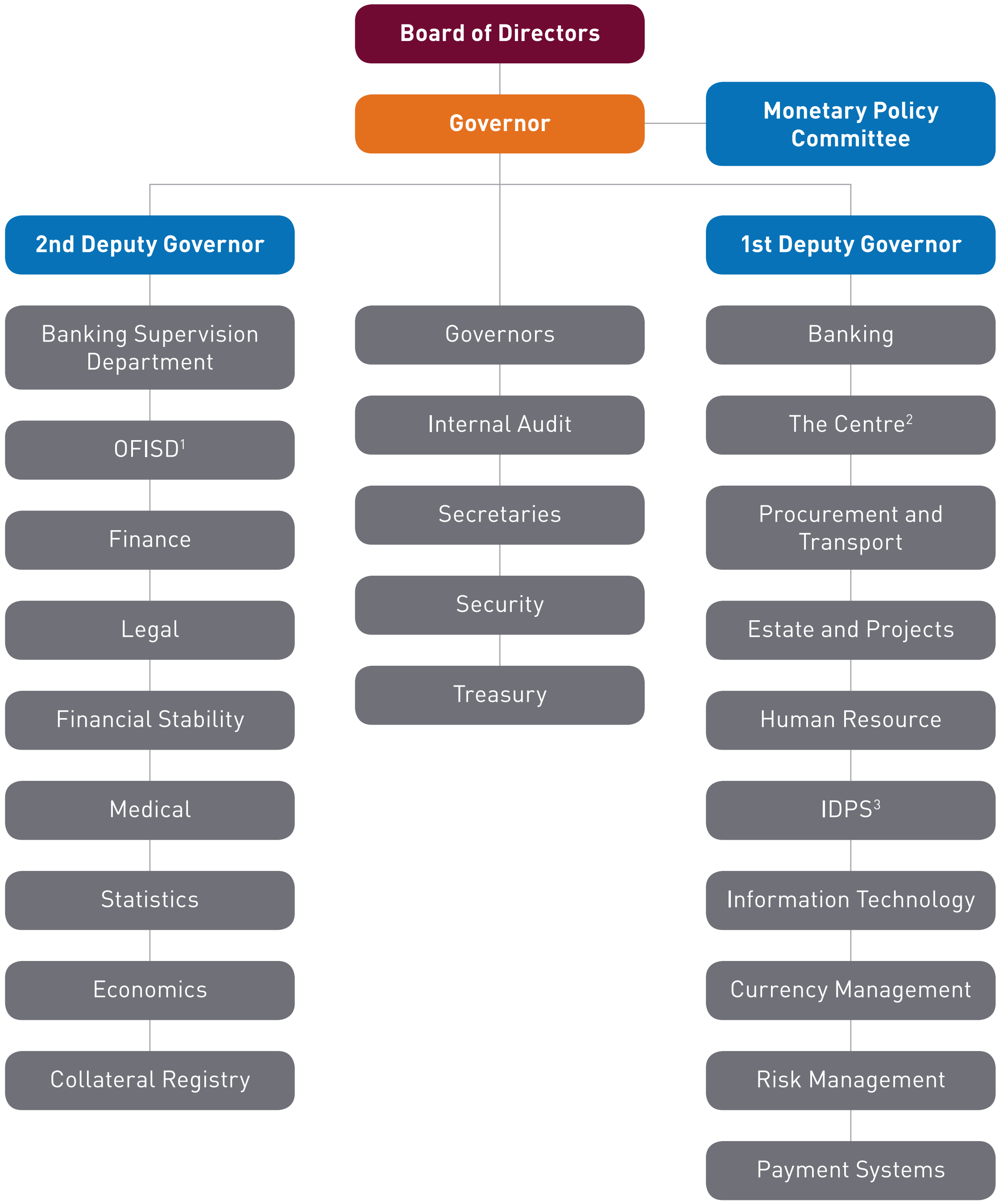
While the collaborative workshops were key to creating stress-tested policy recommendations, Within the Bank of Ghana, Ms. Ohene-Adu thought long and hard about the key decision-makers, influencers, and allies. Both the Fnancial Institution Supervision Department and the Financial

Services Department had been heavily involved with the revision of the mobile money regulations. The Banking Supervision Department is charged with regulating and supervising banks, nonbanks, and rural banks, and over time their mandate has expanded to include money laundering, credit reporting, and microfinance. However, the Banking Department is charged with regulating and supervising payment systems in Ghana. As alumni of the same executive education program, The Fletcher Leadership Program for Financial Inclusion, Ms. Ohene-Adu was certain to find a friendly force in Franklin Belnye, head of the Banking Supervision Department. Together, they represented two key areas within the bank, and collaboration would be critical if her plan for a new regulated entity was to be realized.

Originally, mobile money was considered to be payment system intensive and thus fell largely under the purview of the Banking Department. However, there was increasing recognition that perhaps the Banking Supervision Department had the expertise required to take the lead. The relationship between these departments and the division of roles and responsibilities regarding the supervision of mobile money services remained unresolved, and the proposition of creating a new institution to be regulated and supervised made internal buy-in, clarification of roles, and coordination essential. While the Banking Department was leading the coordination and regulatory efforts, supervision was not under their purview, nor was it clear that there was an institutional appetite to have more than one department duplicate supervision functions. An MOU to facilitate effective collaboration was in development.

Outside of the Bank of Ghana, another key stakeholder was the National Communications Authority, the regulating body charged with the regulation, supervision, and taxation of the telecommunications sector. The NCA is funded from direct taxes of MNOs. Its overarching mandate is to ensure the dependable delivery of telecommunications services across the country, and, as such, it regulates not only voice and messaging but data, and other value added and over-the-top services. Their primary concerns are the

Figure 2: **Bank of Ghana Organization Chart and Key Responsibilities**



1. OFISD: Other Financial Institutions Supervision Department
2. The Centre: Centre for Training and Professional Development
3. IDPS: Information, Documentation and Publication Services

maintenance of consistent service. They enact fines for downtime, dropped calls, and other service quality issues.

POLICY CONSIDERATIONS

In August 2014, the Bank of Ghana laid out its strategic plan for financial inclusion, and payment systems in Ghana. This extensive, innovative, and sweeping plan called not only for the rollout of a robust mobile money and financial services ecosystem, but also called on all stakeholders, including the Bank of Ghana, to look more closely at the ways in which they engage. "Payment systems… [have] not been subject to collective consultation and decision-making by the same cross-section of government and stakeholders." This quote summarizes a key element for examination.

Yet the tools available to the Bank of Ghana are relatively limited when compared with the scope of the underlying drivers for enabling a strong mobile money ecosystem. They include issuing new regulation, clarifying existing rules, or multilateral coordination.

Some of the key policy options on the table included the following: Creating a new type of licensed institution to handle mobile money, which could open the door to MNO subsidiary institutions; the enabling of MNOs to issue e-money directly; or a bolstering of the bank-led model with significant incentives for banks to take an active role in the space. In addition, Ms. Ohene-Adu's team hoped to establish clear guidelines on the maintenance and passing of float, and the scope of requirements for KYC. In addition, stakeholders were keen to address issues of agent primacy. Many of the largest telcos, including MTN, had invested heavily to create functioning agent networks and wanted to see their investment protected through exclusivity agreements.

1. A NEW INSTITUTION?

When CGAP initially approached BoG, key Banking Supervision Department personnel were involved in discussions regarding revising the branchless banking regulations. The idea that MNOs be permitted to establish non-bank financial institutions to facilitate mobile money service was percolating within the BoG. Several BoG regulators had been to Kenya to observe M-Pesa and its regulation and returned with the recommendation to establish non-bank financial institutions that could issue e-money. However, the idea had yet to win over key decision-makers who remained convinced that regulated banks should be integral to mobile money. A long and patient conversation among all involved parties ensued.

BoG could allow for the creation of a new type of financial institution, the E-Money Issuer (EMI). Banks and non-banks, including MNOs, could establish E-Money Issuer institutions. The EMIs would be wholly owned by their founding institution, and would be required hold 100% of customer float in liquid regulated-bank assets. This change embodies the idea of proportional regulation. Several countries including Kenya, the Philippines, and Malaysia, had recently taken similar steps to create new institutional forms.

By creating a new class of institution, BoG would be addressing one of the biggest criticisms of the 2008 Branchless Banking regulation, namely that all mobile money services needed to be bank-led. Since 2008, all mobile money services were offered by BoG-regulated banks in partnership with MNOs. MNOs could not provide mobile money services independently. In addition, all banks and all MNOs were required to partner with multiple institutions, as exclusive partnerships or one-to-many partnerships were disallowed.

With the establishment of the E-Money Issuer institution, the Bank of Ghana would be permitting MNOs to take the lead in promoting mobile money.

However, the creation of a new institution would require significant oversight, supervision, and vigilance. As the lead team in preparing policy recommendations, the Banking Department was unclear on with whom supervisory responsibility would fall, and what types of new systems and processes would be required to ensure comprehensive oversight. In addition, banks and their executives represented a key constituency. It was unclear what the fallout of bypassing banks might be.

2. THE FLOAT

For many years, consumer advocates have argued that the interest earned on the pooled e-money float should be passed on to e-money customers. If customers could earn interest on their e-money balances, existing customers might be encouraged to save more in their e-money accounts, encouraging greater account use and even financial resilience. In addition, perhaps more people might choose to subscribe to e-money services, advancing financial inclusion. From the MNO side, higher average e-money balances could help with liquidity management by reducing the frequency and volume of cash-out transactions. Overall, more cash might enter the formal economy, something most central banks strive to achieve. And yet, until 2014, no country had mandated such a policy.

In February 2014, Tanzania became the first country to require that interest earned on the e-money float be used to benefit customers. With Circular n. NPF/MFS/01/2014 "on utilization of interest from the trust accounts," the Bank of Tanzania required that interest be paid out directly to customers; used to educate consumers; for customer service; or, to subsidize delivery of services in rural areas. The Tanzania announcement was quickly followed by several other countries publicly exploring or drafting regulations that would require interest to benefit the customer in some way; these countries include Liberia, India, Malawi, and the draft regulations issued by the Bank of Ghana in 2014 (GSMA, 2014).

The Bank of Ghana considered going even further than the Tanzania mandate by requiring that 80% of all interest earned on the e-money float be paid out to customers. E-Money Issuers would be permitted to retain up to 20% of the interest. In advance of its finalization, this proposed regulation has even been hailed as a strongly positive step for consumers by international actors like the Bill and Melinda Gates Foundation, GSMA, and CGAP.

The domestic impacts to current players, however, had been less public. Could including this stipulation have made Ghana a less desirable market for the several major MNOs still considering whether or not to enter Ghana?

3. KNOW-YOUR-CUSTOMER

The role of KYC requirements in deterring financial inclusion has been well documented in poor and rural contexts. For example, the 2010 FinScope Ghana survey found that 90 percent of unbanked adult Ghanaians were not able to meet the KYC requirements to open a bank account: a national voter identification card and proof of residential address (FinScope Ghana, 2010). By requiring official identification that poorer or more rural clients are less likely to have, stringent KYC requirements can limit financial access and diminish demand for formal financial services. In recognition of this fact, and in an effort to encourage demand for e-money services, the BoG's draft E-Money Guidelines proposed a tiered risk-based KYC system.

The proposed KYC requirements were stratified across three risk profiles, designated a minimum KYC account, medium KYC account, and enhanced KYC account. The minimum KYC accounts are "intended as a first step towards financial inclusion for the unbanked, [and] are subject to very low transaction limits and correspondingly low documentation requirements" (BoG, 2014). These accounts would be limited to a maximum balance of GH¢1,000, a daily transaction limit of GH¢300, and a monthly transaction limit of GHS¢3,000. Medium KYC accounts would require additional documentation, but allow for higher balances (GH¢ 10,000) and transaction limits (GH¢ 2,000 daily and GH¢20,000 monthly). Finally, enhanced KYC accounts would require the same official identification as bank accounts and permit the highest balance (GH¢ 20,000) and transaction limits (GH¢5,000 daily and GH¢ 50,000 monthly) (BoG, 2014).

In workshops, many stakeholders greeted the risk-based system as a welcome change. As key implementing partner EcoBank stated, "We were novices [when the 2008 regulations were developed]. Now we want certain things to be very clear and to have some flexibility. For example, Ghana doesn't have a single national ID, so the regulator did a good thing to relax the ID verification for mobile money."

However, the draft E-Money Guidelines propose that if an e-money user opens multiple accounts,

their combined balance and transactions across the accounts may not exceed the limits stipulated for that KYC level, and the E-Money Issuer is held responsible for ensuring that these limits are observed. Should the limits be violated, the EMI would be subject to penalty. Several stakeholders – banks, in particular - expressed concern that it would not be possible to guarantee that the limits are observed given the lighter identification requirements. For this reason, several banks have expressed their intent not to offer minimum or medium KYC accounts.

A WAY FORWARD?

Ms. Ohene-Adu continued to think through the multitude of internal and external considerations in advance of her meeting with the Governor. How would she frame the problem in a compelling and urgent manner, who would she go to for support internally and externally, and what key policies would be most critical in ensuring the success of a robust mobile money ecosystem in Ghana?

QUESTIONS FOR DISCUSSION

1. Do you think that the creation of the EMI institutional form would help address some of the barriers to mobile money service development in Ghana? If so, how?
2. Does the EMI institutional form get "proportional regulation" right? Or do you think the regulations are too burdensome or too light?
3. What process does your institution usually use to review policies and regulations?
4. What aspects of the participatory process used in Ghana could be useful in your country?
5. If you were the Governor of the Bank of Ghana, how would you clarify the roles and responsibilities of the departments within the BoG?
6. What should be the role of the NCA in regulating mobile money services?
7. How is your country dealing with overlapping regulatory responsibilities for mobile money?