IMPACT REPORT 2017

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We are pleased to present Frontclear's 2017 Impact Report. Frontclear is a financial markets development company established in 2015 and is entirely focused on the development of money markets in emerging and frontier economies.

Money Market matters

Up until the global financial crisis of 2008/2009, money markets were largely taken for granted, seen as dull and plain-vanilla, their critical role in the wider financial system largely forgotten. Money markets encompass a number of short term instruments and markets such as treasury bills, commercial paper, deposits, repurchase agreements and swaps. Money markets allocate liquidity in the financial system, finance trade, support secondary bond market activity, improve intermediaries' ability to lend long term and transmit monetary policy.

Indeed, whilst the origin of the global crisis lay in the US sub-prime mortgage market, it was the 'run on the repo'¹ market that transformed the crisis into a global financial crisis, triggering a recession that contracted global GDP by 2% and pushed an estimated 100 million people into poverty.²

The DFI³ community maintains a strategic focus on the development of local financial markets at large, understanding that a healthy financial system is a key pre-condition for poverty reducing economic growth. The core strategy has been to enable the provision of long term finance to support capital investment and growth, primarily by means of:

- I. enabling local financial intermediaries to extend long term finance through the provision of long term liabilities;
- II. promoting the development of the local bond market through the provision of TA and in more recent years by means of benchmark issuances in local currency; and
- III. establishing niche focused funds and companies to address specific constraints to long term lending in local currency, such as the African Local Currency Bond Fund (ALCB Fund), The Currency Exchange Fund and Guarantco, to name but a few.

Frontclear is one such niche focused company uniquely focused on addressing barriers to the development of money markets in frontier and emerging economies specifically.

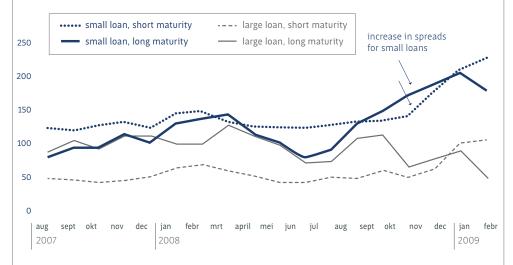
¹⁻ Gorton, G.B., Metrick, A. (2009). Securitized Banking and the Run on Repo. National Bureau of Economic Research Working Paper No. 15223.

²⁻ Goodwin, N., Harris, J., Nelson, J., Roach, B and Torras, M. (2015). Principles of Economics in Context, Chapter 15

³⁻ Development Finance Institution

Box 1: How does the money market interact with the real economy?

The financial crisis highlighted that conditions in the interbank market can have a direct and immediate impact on the financing conditions of firms, especially SMEs. The diagram below highlights how spreads to SMEs immediately increased in the aftermath of the crisis.



The study, conducted by the OECD in 2009,4 concludes that SME funding in Europe was impacted by stagnation in interbank lending. The resulting balance sheet constraints and increase in cost of capital led banks to reduce higher risk unsecured lending to SMEs in favour of lower risk secured lending operations. Combined with a drop in demand for their goods and services triggered by the economic slowdown, SMEs were disproportionality impacted by the interbank constraints during the crisis.

The core role of money markets is to provide a stable bridge between those who have excess short term cash and those who need short term liquidity. Stable access to liquidity means banks and other intermediaries can allocate capital for longer periods. In advanced markets, money markets are a large and significant part of the wider financial system. In April 2017 there was USD 12 trillion in repo transactions outstanding globally. In the euro area the notional outstanding of repo transactions was equal to 32% of outstanding government debt. In the UK, it was 33%, in Sweden, 44%.5

In an emerging and frontier market context, money markets should help mobilize domestic local currency savings from corporates, pension funds and insurance companies and make them available to banks and capital markets. They should facilitate the flow of liquidity between banks, and they should support international flows by providing hedging instruments such as swaps to lenders and borrowers alike.6 Yet, money markets in emerging and frontier markets are plagued by barriers preventing stability and inclusiveness, and have remained significantly under developed and illiquid (see figure 1).

⁴⁻ OECD. (2009). The impact of the global crisis on SME and entrepreneurship financing and policy responses. Available on www.oecd.org. 5- Bank of International Settlements. (2017). Repo market functioning. CFFS Papers No. 59.

⁶⁻ Within an emerging and frontier market context, liquid swaps markets which allow foreign investors to hedge risk are key to facilitating foreign direct investment and mobilizing foreign savings for domestic growth. In 2014, the Milken Institute, a non-profit think-tank, shows the benefits to the wider economy from the use of financial derivatives. The study assessed the role of derivatives in the US market, and found that use of derivatives by banks and non-financial firms expanded GDP by USD 3.7 billion per quarter from 2003 to 2012 and boosted employment by 530 000.

Figure 1 - Barriers to money market development

Causes of Instability	Causes of Fragmentation	Consequences of Illiquidity
Volatile macro-economic performance	EMDC FIs with local currency collateral have reduced access to global & local markets	Ineffective distribution of liquidity and risk leading to irresponsible lending
Dependence on posting hard currency high quality collateral to access international markets	Limited understanding of instruments – money market and other – to mitigate risks	Limited price discovery and sub-optimal pricing of liquidity and risk
Public sector borrowing crowds out private sector	Unclear role/policies among money market supervisors (central banks, CMAs, SEC, CSDs, etc)	Poor transmission of monetary policy signals
Legal and regulatory system inconducive to money and capital market development	High perceptions of FI counterparty risk	FIs and system sensitive to shocks

The issues are pervasive, consistently found across regions. In 2017 Frontclear published its first global research study, focused on the structure of repo markets.7 The study reviewed 127 frontier markets, finding that only 24 had established repo markets. Many of these markets remain under-developed, undermining the impressive rise of domestic capital markets in many emerging and frontier markets in response to the crisis ridden 1990s.

Frontclear's Impact Strategy

Frontclear is strategically focused on the development of the secured interbank segment of the money market. With stable and inclusive interbank markets, banks are better equipped with the tools they need to provide liquidity in the wider money markets and capital markets, and to lend responsibly. Responsible lending means offering clients the financing in the currency, tenor and rate structure they need.

Since the 2009 G20 Pittsburgh statement calling for global financial reforms, the exchange of high quality collateral has become mandatory in interbank transactions. In emerging and frontier markets the lack of liquid high quality assets is a significant barrier to interbank trading both locally and internationally. Frontclear seeks to address this access constraint by facilitating the use of local currency assets as collateral in both cross-border and local interbank transactions.

To inform its country strategies, Frontclear has developed a comprehensive money market diagnostic framework (MMDF) which identifies 10 building blocks which are required for the development of a healthy money market eco system.8 The framework facilitates a detailed assessment of a given country's money market structure and identifies the barriers to development. Together with local regulators and market participants, Frontclear subsequently designs interventions structured to remove the barriers to development. Figure 2 provides a summary of the key building blocks.

⁷⁻ The study is available on the Frontclear website.

⁸⁻The money market diagnostic framework is a public good and can be accessed at www.frontclear.com/product-services/money-market-development-framework.

Figure 2: MMDF - Building blocks for a healthy money markets eco system



Frontclear uses two self-reinforcing tools to address the identified barriers to money market development.

- 1. Financial guarantees: Frontclear issues irrevocable Basel III compliant guarantees to enhance interbank transactions in frontier and emerging markets. The guarantees cover the early termination amount of various instruments, and absorb the operational, country and legal risks that comes with trading in frontier and emerging markets. A core focus of Frontclear is to establish a cross-border interbank market. This facilitates the introduction of best practice structuring and documentation, thus building capacity, and identifies the particular market constraints unique to the country. Frontclear supports local interbank market development primarily through the provision of guarantees to local financial infrastructure providers⁹ and by guaranteeing bilateral transactions in the local interbank market;
- Technical assistance: Frontclear provides technical assistance to local market participants and
 regulators to address soft barriers to market development with a strong focus on capacity building
 and training, improving the enabling environment and supporting the development of local market
 infrastructure.

The combination of financial guarantees and technical assistance provides a flexible and integrated approach to holistically addressing barriers to market development. This leads to Frontclear operating under a concise Theory of Change (see figure 3).

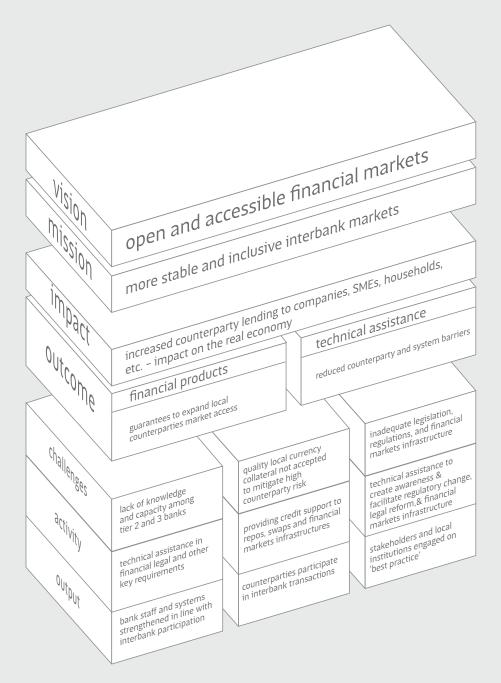


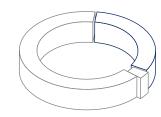
Figure 3: Frontclear's Theory of Change

2017 - Guarantee portfolio

Frontclear closed USD 97.5 million in guarantees in 2017, supporting USD 185 million in private capital interbank transactions in 5 countries. Year-on-year, the guarantee portfolio increased 143% from the USD 40 million executed in 2 countries in 2016. Key statistics and impact metrics are shown below.



impact metrics



financial inclusion

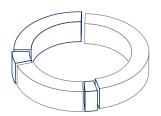
tiering of obligors tier 1 | 67% tier 2 | 31% tier 3 | 3%

by country Kenya | 26% Nigeria | 46% Tanzania | 3% Turkey | 21% Zambia | 5%

by region

SSA | 79%

CIS | 21%

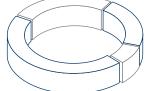




Kenyan Government Bonds | 25% Turkish Government Bonds | 20% Nigerian Treasury Bills | 52% Tanzanian Shilling Cash | 2%



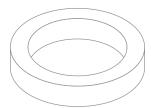




connectivity

onshore-onshore | 3% offshore-onshore | 97%



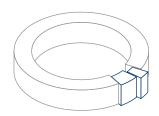


by risk sharing

Frontclear | 32% Partner beneficiary | 54% Private insurance | 14%



Repo | 92% Swap | 3% NDF | 5%



Box 2: Supporting onshore interbank trading and money market development in Tanzania

In 2017, Frontclear guaranteed its first onshore-onshore swap transaction in Tanzania to support market access for a third tier local bank. The transaction, financed by NBC Bank, was collateralized entirely in Tanzanian Shilling, a first for the market. It set the standard for a derivative transaction against local currency collateral. The guarantee helped unlock USD 5 million in liquidity through a 1-year cross-currency swap, improving local market access to USD funding and diversifying sources of funding in a challenging economic environment.

The transaction is a strong example of how Frontclear catalyzes local bank access to risk management products that mitigate currency risks, and improve overall ability and capacity to serve clients. It introduces international best practice and paves the way for further transactions through its demonstration effect. The transaction is complemented by a Frontclear technical assistance program developed in partnership with the ACI Tanzania. The program includes a targeted market-wide training program which commenced early in 2018 as well as legal reform initiatives. The transaction capacity and technical assistance combined will bring meaningful development towards a robust, stable and inclusive interbank market in Tanzania.

Technical Assistance

Frontclear's Technical Assistance program (FTAP) is actively engaged in 17 countries. The provision of technical assistance is very focused and closely linked to Frontclear guarantee activities. Technical assistance is focused on (I) training and capacity building, (II) legal reforms, (III) development of financial infrastructure and (IV) research.

With regards to training and capacity building, over 710 delegates stemming from 9 countries, Kenya, Georgia, Ivory Coast, Zambia, Ghana, Uganda, Rwanda, Vietnam and Honduras, have attended FTAP trainings. The majority of participants were those responsible for bank treasury, risk management, legal and trading operations. Regulators such as central bank representatives and capital markets associations, actively partook in dedicated workshops and sessions (near 15% of total participation). A 2017 selfevaluation analysed the training experience to-date and furnished useful learning and results. 67% of respondents cited that the training resulted in immediate application which improved their bank's core functionalities.

During 2017, Frontclear undertook several high value advisory projects focused on legal reforms and financial infrastructure. These include, inter alia:

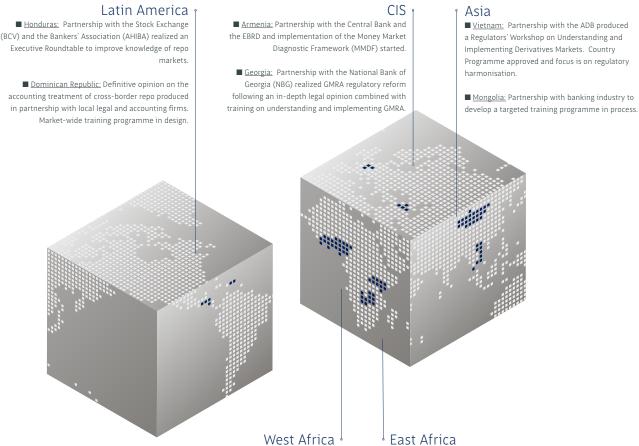
- A study analyzing the feasibility and suitable design of clearing infrastructure in Nigeria;
- A study analyzing the Kenyan legal system to identify and propose enhancements for netting and collateral enforceability; and
- The establishing of an umbrella guarantee facility (financial, legal, risk and operational parameters) for up-take in multiple markets including Kenya.

2017 also saw Frontclear publish it first flagship research study "Repo: OTC or exchange-traded?" and concluded the development of the Money Market Diagnostic Framework.

Frontclear launched the FTAP Partnership Facility in 2017 which aims to pool resources from regional and global banks plus industry experts to strengthen the stability and resilience of money markets in emerging economies. In 2017 Frontclear received contributions from Barclays Africa Group Limited and the International Capital Market Association (ICMA).

Cumulatively, Frontclear has committed USD 1.6 million in technical assistance in 9 advisory trajectories and 29 educational workshops and trainings in 17 countries by year end 2017. Figure 4 below provides a global overview.

Figure 4: A global overview of Frontclear's technical assistance projects



- Cote d'Ivoire: Partnership with Standard Chartered to engage 2nd and 3rd tier banks to understand and implement ISDA (French language documentation) completed.
- Ghana: Partnership with the Ghana Fixed Income Market (GFIM), the Central Bank and Ghana Stock Exchange realized an extensive market training programme. Market-wide reform and development of the repo market is on-going with the Central
 - $\blacksquare \ \underline{\text{Nigeria:}} \ \ \text{FMDQ partnership produced cost/benefit analysis}$ of an OTC Exchange and has expanded into discussion on a settlement guarantee and the development of the required operational and risk guidelines behind a guarantee facility.

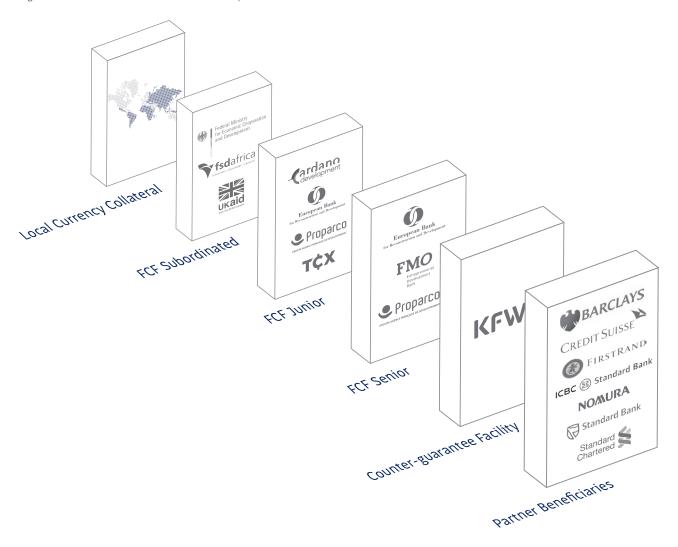
East Africa

- Kenya: Partnership with the ACI Kenya produced an extended training programme, capturing regulatory audiences and bank staff alike. Regulatory reform with the CMA on GMRA/ISDA enforceability, settlement and reporting guidelines completed. Regulator and industry partnership to establish an umbrella guarantee facility on-going.
- Rwanda: Training realised with the National Bank of Rwanda.
- <u>Tanzania</u>: Approved Country Programme and developing partnership with the ACI Tanzania to realize regulatory and market training and development.
- Uganda: Bank of Uganda and ACI Uganda partnership behind a fully realized training programme, continuing into repo reform and wider market development.
- Zambia: ACI Zambia partnership behind a fully realized training programme. Legal opinion developed on GMRA and ISDA enforceability and presented in workshop with Bank of Zambia and treasurers. Continuing collaboration to support wider market development.

Blending finance for money market development

Frontclear cannot bring about meaningful impact on the development of money markets without achieving scale and thus relies on building partnerships to effect change. Blended finance, defined as the strategic use of donor and development finance to mobilize private capital flows to emerging and frontier markets resulting in positive results, is central to Frontclear. Figure 5 below provides an overview of Frontclear's blended capital structure, leveraging donor and development finance capital to support investments by our partner beneficiaries.

Figure 5: An overview of Frontclear's blended capital structure



Frontclear is funded through the capital contributions of the Frontier Clearing Funds (FCF) Subordinated, Junior and Senior. Each fund represents a different risk/return profile, with the Subordinated fund acting as first loss risk capital provided in the form of repayable grants by Financial Sector Deepening Africa (FSDA), the United Kingdom's Department for International Development (DFID), and the German Ministry of Development Cooperation (BMZ). The subordinated tranche is a fundamental underpinning of the structure as it de-risks the position of the junior and senior participants. The use of repayable grants as risk capital provides donor governments with a powerful ability to leverage official development aid (ODA) through blended finance to achieve a much larger and leveraged development impact outcome.

In total, the combined capital from the subordinated, junior and senior FCF totals USD 112.3 million. In addition to the funding from donors in the subordinated tranche, Frontclear enjoys the support of The European Bank for Reconstruction and Development (EBRD), the Dutch development bank FMO, Proparco and Agence Française de Développement (AFD), The Currency Exchange Fund (TCX) and Cardano Development. To further enhance Frontclear's credit standing and the protection afforded to partner beneficiaries, Frontclear's guarantees are counter-guaranteed by the German development bank KfW. Frontclear has partnered with a number of global banks active in emerging markets, including Barclays, Credit Suisse, FirstRand Bank, ICBC Standard Bank, Standard Bank, Standard Chartered and Nomura. On the back of USD 97.5 million in guarantees issued in 2017, these banks deployed USD 185 million in funding. Frontclear regularly distributes risk on its guarantees in the private insurance market, having partnered with a number of global insurance companies. In 2017, private insurance participated to the value of USD 30 million. Finally, the FTAP Partnership Facility received funding commitments in 2017 from the FSDA, BMZ, Barclays Africa Group and ICMA. The last participants in Frontclear's capital structure are the local banks themselves. Since Frontclear only guarantees secured interbank transactions, the collateral in the form of local currency government bonds and cash provides an important layer of risk capital overall.

"Our partnership with Frontclear and this investment in the FTAP Partnership Facility is a further demonstration of Barclays Africa Group's commitment to expanding and deepening financial markets across Africa."

George Asante, Head of Global Markets, Barclays Africa Group

Conclusion

Frontclear's 2017 results has cemented its position as thought leader and global partner in money market development in frontier and emerging market countries. Frontclear's guarantees make it possible for our partner beneficiaries to structure and execute interbank transactions in new markets, with local currency collateral, and with local banks that may otherwise be locked out of the market due to perceived counterparty credit risk. Combined with the smart deployment of technical assistance, Frontclear brings about meaningful development of money markets in target countries of operations.

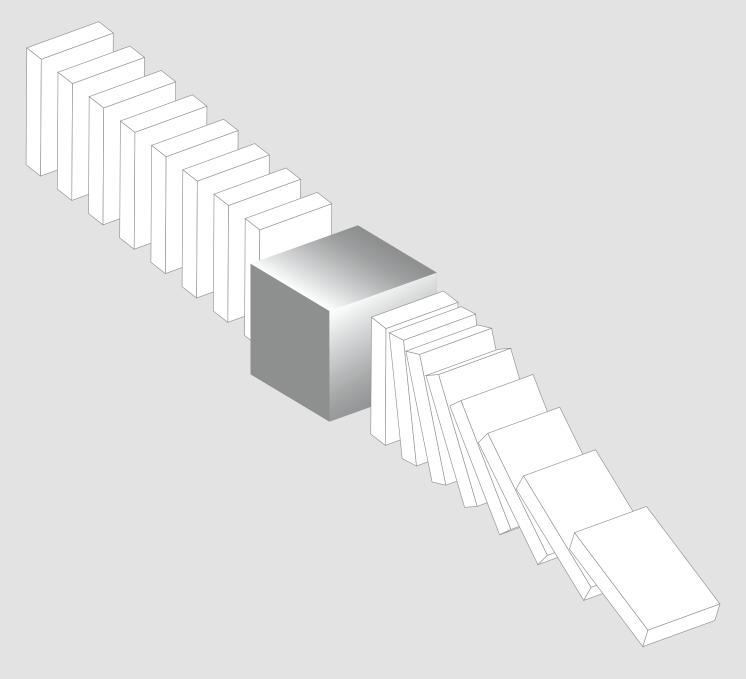
As this report has highlighted, the stability and inclusiveness of money markets have a fundamental impact on the functioning of the financial system, and thus on economic growth and poverty alleviation. Frontclear's mandate directly addresses the Sustainable Development Goals 1, 8 and 17.

In 2018, Frontclear expects to expand its footprint into new markets and deepen the impact in existing ones. A key focus is to increase our onshore money market development activity through the provision of guarantees to financial infrastructure providers, whilst growing our cross-border bilateral guarantee portfolio. To do so, Frontclear will continue to build on its convening power as a trusted and committed thought leader and actor.











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