

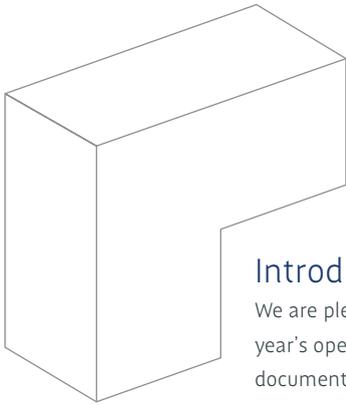
IMPACT REPORT 2016

confidential



frontclear

A financial markets development company



Introduction

We are pleased to present Frontclear's second annual Impact Report, and the first report to cover a full year's operations. In accordance with the Terms and Conditions of the Frontier Clearing Funds, this document seeks to assess Frontclear's impact rationale and its progress towards implementation of its long-term development impact strategy during the financial year ending 31 December 2016.

Why stable and inclusive financial markets matter

Frontclear is a financial markets development company focused on catalyzing more stable and inclusive financial markets in emerging and developing countries. The key focus is on supporting the development of secured money markets, generally understood to encompass all short dated funding and risk management markets and instruments. Whilst banks are not the only participants in these markets, they tend to dominate and are fundamentally dependent on them. Frontclear is primarily focused on swap, securities lending and repo markets.

The stability and inclusiveness of these markets matter for economic growth and poverty alleviation. Markets should continue to function in times of crisis and volatility and all market participants should have continuous access to much needed liquidity. In recent years, the instability of money markets have come to forefront of international banking policy. Indeed, whilst the origin of the 2008 financial crisis was in the sub-prime mortgage market of the US, it very quickly became a global crisis as fear spread through money markets. This "run on the repo"¹ crisis triggered a global recession that saw an estimated USD 50-100 million people drop below the poverty line across the world.²

During the year under review, there were notable emerging market examples of the havoc that unstable and segmented money markets create on the real economy. In Kenya, following the collapse of two medium sized banks, money markets came to a complete standstill after larger banks cut credit limits on smaller banks and depositors rushed funds to large institutions deemed more creditworthy. The result was extreme excess liquidity among large institutions, whilst even strong medium sized institutions became critically dependent on the central bank for liquidity support.

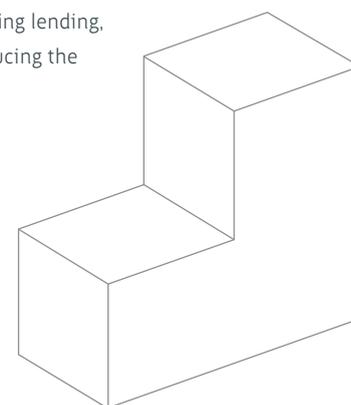
1- This term was coined by Gary Gorton and Andrew Metrick in 2010 to highlight that the financial panic of 2007-2008 stemmed from a run on the repo market rather than a run on monetary deposits as in earlier banking panics and that it was ultimately a loss of liquidity that led to the financial crisis. See Gorton, G. and Metrick, A. (2009). [Securitized banking and the run on the repo. NBER Working Paper No 15223.](#)

2- For further reading on the impact of the crisis on the real economy and SME lending, see Goodwin, N., Harris, J., Nelson, J., Roach, B and Torras, M. (2015). [Principles of Economics in Context](#), Chapter 15; and OECD. (2009). [The impact of the global crisis on SME and entrepreneurship financing and policy responses.](#)

In Nigeria, following the sharp drop in oil prices and the maintenance of an unsustainable currency peg, US dollar liquidity to the Nigerian money market all but disappeared as international banks cut credit lines to all but the largest local financial institutions. For an economy which is circa 50% dollarized, this dealt a crippling blow to the real economy, triggering Nigeria's first recession in 29 years. Whilst the global financial crisis was the first money market crisis on a global scale, similar type crises occur in emerging markets with frequency.

Developments in money markets can thus have profound implications for financial stability and the functioning of the entire economy as they have an immediate effect on the financing conditions faced by non-financial corporations and households. Being an essential source of bank funding, liquidity and risk management, money markets have a significant impact on the size of the balance sheet of financial institutions and the amount of credit they can extend.³

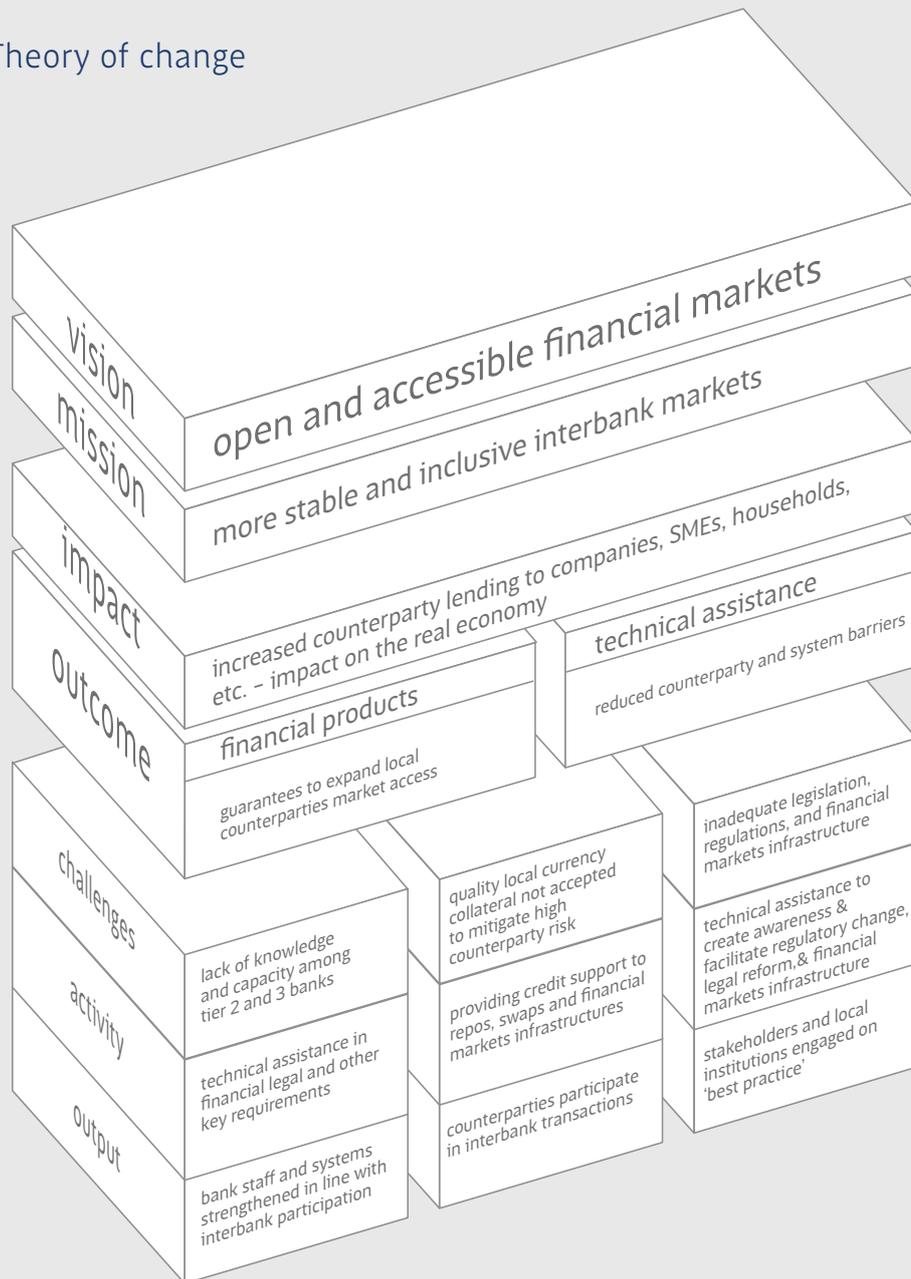
Furthermore, limited liquidity in these markets restricts the ability to anchor the short end of the yield curve and impedes development of bond market liquidity. Without a liquid repo market for instance, primary bond market dealers cannot repo existing inventory to fund the purchase of new issuances, whilst secondary market makers have no ability to hedge price risk and must maintain high inventory levels to ensure adequate supply.⁴ In this respect, a volatile level of liquidity in the financial system can reduce the incentives for a functioning interbank market as banks maintain high levels of precautionary liquidity. The result is that the funding available for lending in the real economy remains in the vaults, slowing lending, reducing liquidity of bond markets, keeping cost of capital artificially high and ultimately, reducing the pace of economic growth and poverty alleviation.



3- For further reading on the role of interbank markets in an emerging market context, see Cœuré, B. (2012). [The importance of money markets](#). Speech by ECB Board Member; Financial Stability Review 19. (2015): Inges, S. [Supporting sustainable growth: the role of safe and stable banking systems](#); Carstens, A. [Global banks and the adoption of the new regulatory framework: effects on the financing of emerging markets and developing countries](#); and Vuillemeys, G. [The Opportunity cost of pledged collateral: derivatives market reform and bank lending](#).

4- At the 2011 G20 Cannes Summit, an initiative was launched to develop local currency bond markets (LCBMs). The IMF and World Bank released a paper in December 2016 assessing progress on the program. The paper calls for the development of money markets, given their key role in the development of a liquid domestic bond market (see section II.D). The paper notes that a liquid domestic bond provides several benefits that are particularly relevant in the current macroeconomic and financial context: (1) it increases a country's ability to withstand volatile capital flows, (2) it reduces the reliance on foreign borrowing and the risks linked to currency mismatch, (3) it contributes to the reduction of current account imbalances, (4) it mitigates the need for large precautionary reserve holdings, and (5) it allows balance sheets to adjust more smoothly, therefore improving the capacity of macroeconomic policies to respond to shocks. See IMF, World Bank. (2016). [Development of Local Currency Bond Markets](#).

Theory of change



Frontclear's theory of change

Frontclear promotes the development of financial markets through the implementation of a concise Theory of Change, illustrated in the diagram on the previous page. Frontclear issues guarantees to cover the counterparty credit risk of market participants in interbank markets – thereby making markets more inclusive; and promotes the use of local currency collateral in transactions – thereby making markets more stable.⁵

It is important to stress that Frontclear's impact strategy is a long-term strategy, which seeks to achieve large scale solutions in a limited number of emerging markets. The issuance of individual guarantees on bilateral structured term transactions is thus a means towards an end. They aim to (I) trigger the execution of demonstrative, best practice transactions, (II) achieve micro-impact at the level of individual institutions (for instance by funding small SME focused banks) and (III) support Frontclear's financial sustainability in order to implement the longer-term impact strategy whilst providing a reasonable return to our Investors for the risk they assume.

The long term strategy is focused on supporting the establishment of financial market infrastructure. Only by establishing market infrastructure can Frontclear trigger the development of stable and inclusive markets that are not dependent on Frontclear's ongoing credit support. Frontclear's Theory of Change thus combines transaction risk bearing capacity through guarantee issuance together with targeted technical assistance to address market development barriers. The unique ability to absorb risk to make transactions happen and to then follow through with technical assistance to address the identified market development barriers, is what brings lasting capital markets development and is the fundamental pillar on which Frontclear's Theory of Change is based. The technical assistance efforts of Frontclear is focused on three areas:

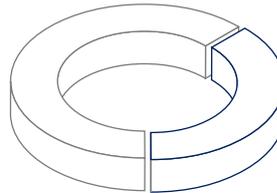
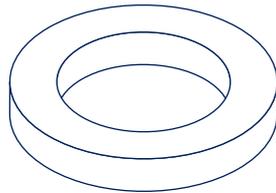
- Building knowledge and capacity among market participants and regulators;
- Promoting legislative certainty through analysis and advisory relative to ISDA and GMRA enforceability among the legal and judicial community; and
- Establishing and guaranteeing financial market infrastructure such as Central Security Depositories, Exchanges and Central Clearing Houses and Counterparties.

5- Local financial institutions are funded in local currency and thus have greater capacity to post local assets as collateral during volatile periods. The availability of hard currency assets in volatile and crisis periods can quickly be constrained, potentially triggering a default that can be avoided if local assets can be utilized.

portfolio metrics
portfolio totals to USD 40 million

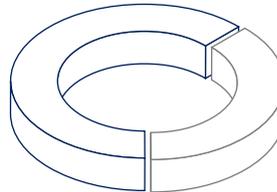
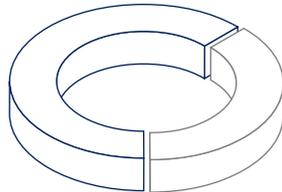
impact metrics

by region
sub saharan africa | 100%



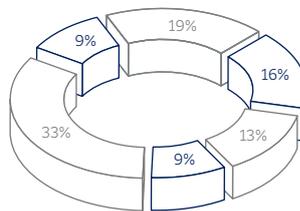
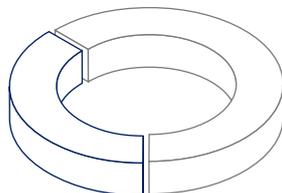
financial inclusion
tiering of obligors
tier 1 | 37.5%
tier 2 | 62.5%

by country
Kenya | 62.5%
Nigeria | 37.5%



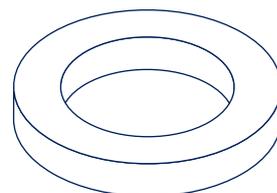
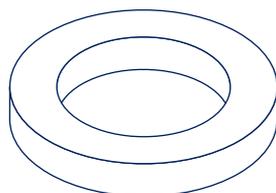
stability
collateral type supported
NGN cash | 37.5%
KES government bonds | 62.5%

country income level
lower middle income | 37.5%
other low income | 62.5%



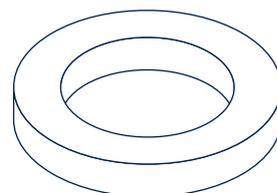
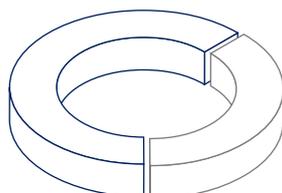
use of proceeds
manufacturing | 16%
households | 13%
government / parastatals | 9%
commercial & industry | 33%
transport & communications | 9%
other | 19%

obligor type
financial institutions | 100%



connectivity
onshore-offshore | 100%

financial instruments
repo | 62.5%
swap | 37.5%



currency
USD | 100%

Assessing results in the first full year of operations

Frontclear executed its first 2 guarantees in 2016, in Kenya and Nigeria. The charts on the previous page provide an overview and key summary of the resulting portfolio. Both transactions were highly demonstrative and have resulted in technical assistance projects aimed at establishing a more stable and inclusive money market.

In Kenya, Frontclear guaranteed the first ever cross border repurchase transaction based on title transfer of the securities and global best practice structuring and documentation, executed between Standard Bank of South Africa and the Commercial Bank of Africa Kenya. The transaction is a landmark achievement and was nominated for the African Banker Debt Deal of the Year Award for 2016 on the basis of its replicability and potential to bring significant market wide impact. As follow up, Frontclear is supporting the Kenyan market and its regulators in various development projects including (I) funding a full review of the relevant Kenyan regulation in cooperation with the Capital Markets Authority, ISDA and ICMA and (II) assisting the Bond Market Association in its efforts to develop OTC fixed income trading rules and ultimately establish an OTC self-regulated exchange to regulate the market. Combined, these projects will have the effect of title transfer based repo becoming an everyday trading instrument in Kenya. Frontclear is supporting these efforts through a targeted capacity building program, bringing training to banks and regulators on topics such as ISDA, GMRA and Basel III.

“With this transaction, Standard Bank, Commercial Bank of Africa and Frontclear worked together as partners to develop Kenya’s domestic financial markets. The market development initiative and focus of Frontclear assisted with lobbying the various regulating bodies in Kenya as a collective. We were able to transact under global industry-standard documentation. We see this type of transaction as key to developing deep and liquid financial markets in Kenya and across Africa as a whole.”

Reggie Mlangeni, Regional Head East Africa, Client Solutions at Standard Bank



In Nigeria, Frontclear issued a guarantee on a swap transaction between Standard Chartered and Access Bank, supporting the flow of USD liquidity in very stressed market conditions. A key innovation was that the Credit Support Annex, which details the margining terms, facilitated the posting of Naira cash collateral rather than the US dollar. Given the tight US liquidity, this reduced default risk and lowered the cost of trading for Access Bank. The transaction has resulted in a follow up project where Frontclear has partnered with the FMDQ to study the feasibility of establishing a Settlement Guarantee Fund and ultimately central clearing with the aim of increasing the resilience and inclusiveness of the market and thus bringing stability in future times of volatility.

“This landmark transaction is a great example of how Standard Chartered working together with the development community and our local clients, can support growth and liquidity in frontier capital markets... We look forward to delivering further value to other clients in partnership with Frontclear.”

Daniel Hanna, Global Head of Public Sector and Development Organisations at Standard Chartered Bank



Supporting local financial institution's ability to post local currency collateral in cross border global markets can significantly reduce the cost of market access. Since the 2008 financial crisis the posting of high quality collateral in interbank transactions has become mandatory. Whilst this is a prudent measure by any standard, it is having the effect of increasing global financial segmentation since institutions in emerging markets have limited access to high quality hard currency assets. Moreover, access to these assets are quickly reduced in times of crisis.⁶ This results in a systemic risk which would be alleviated if these institutions could post collateral in their own currency. The Frontclear guarantee provides comfort to global market makers that they are protected in the event that local currency collateral fails to cover any losses upon default.

Beyond supporting immediate transaction capacity, the technical assistance work of Frontclear seeks to lay the foundation for future market interventions. In this regard, Frontclear undertook a number of projects in key priority countries beyond Kenya and Nigeria, notably in Cote d'Ivoire, Ghana, Zambia, Uganda, Rwanda and Georgia as shown in the global map on page 10.

During 2016, Frontclear approved 21 technical assistance projects, of which 70% were in Africa. More than 350 local financial institutions and regulators were trained during the year on topics ranging from fixed income markets, derivatives, ISDA, GMRA, risk management and Basel III across 13 training events. Frontclear also started implementation of 6 advisory projects (including 2 regulatory reform) and 2 research projects.

What has Frontclear's training program done for your market?

"The CMA is in the process of implementing several bond market reforms to improve liquidity and being the bond market champion. The training on GMRA and ISDA were instrumental to my understanding of international best practice." Regulator, Kenya

"We've signed GMRA agreements with our counterparties and made several repo deals." Banker, Georgia

"We have started bond trading. Also we are bidding for primary dealer status in the market." Banker, Zambia

⁶- For further reading on the impact of global reforms in emerging markets, see Financial Stability Board, World Bank and IMF. (2012, 2013, 2014). Monitoring the effects of agreed regulatory reforms on emerging market and developing economies.

FTAP Global Programme

Global Research

- A multi-country review of exchange traded versus OTC repo markets, their costs and benefits to a more liquid interbank market.
- Development started on a money market handbook for interbank regulators and stakeholders, serving as a framework to determine the market's challenges and obstacles and enable learning and comparability across markets.

Latin America

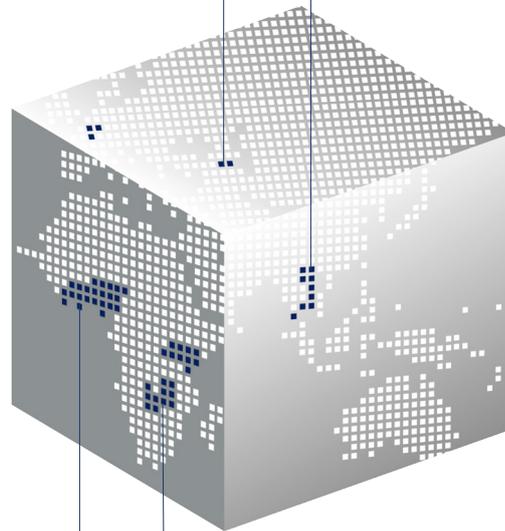
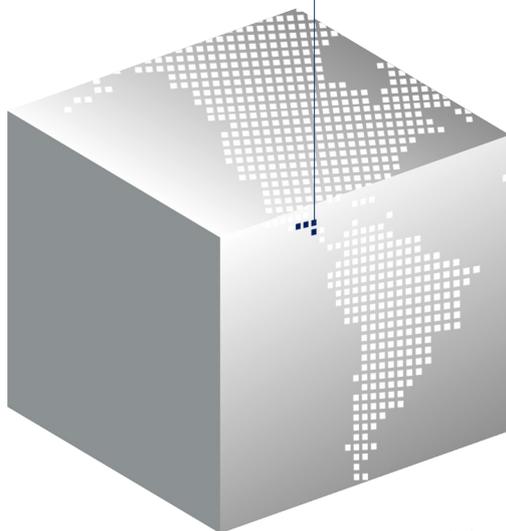
■ **Honduras:** Partnership with the Stock Exchange (BCV) and Bankers' Association (AHIBA), to improve knowledge on and review GMRA-related regulation and implementation.

■ **Georgia:** Partnership with the National Bank of Georgia (NBG), realizing GMRA regulatory reform following an in-depth legal opinion relative to best practice combined with training on understanding and implementing GMRA.

CIS

Asia

■ **Vietnam:** Country Programme approved, with a focus on regulatory harmonization.



West Africa

■ **Cote d'Ivoire:** Partnership with Stanard Chartered to engage 2nd and 3rd tier banks to understand and implement ISDA (French language documentation).

■ **Ghana:** Partnership with the Ghana Fixed Income Market (GFIM) represented by the Ghana Stock Exchange (GSE) to deliver a tailored 2-year interbank training programme, of which Fixed Income Boot Camp and Basel III completed at close 2016.

■ **Nigeria:** Partnership with FMDQ OTC Exchange to conduct feasibility study of establishing a settlement guarantee fund and central clearing infrastructure.

East Africa

■ **Kenya:** Partnership with ACI Kenya to deliver a tailored 2-year interbank training programme, including 8 interbank trainings and 2 advisory trajectories (regulatory reform) in Kenya. These have included understanding and implementing GMRA and ISDA documentation, derivatives accounting, Basel III/risk management, legal reform on ISDA/GMRA enforceability and settlement and guarantee structures; support to bond market steering committee to establish an OTC market regulator; support capital market authority (CMA) to conduct legislative review for enforceability of ISDA and GMRA documentation.

■ **Zambia:** Partnership with ACI Zambia to deliver a tailored 2-year interbank training programme, including 1 interbank training and 1 advisory trajectory (GMRA and ISDA legal opinion and consultation) by close-2016. The legal opinion continued to be shared and discussed in Bank of Zambia (BOZ) and treasury circles.

■ **Rwanda:** Partnership agreed with the National Bank of Rwanda (NBR) to deliver a tailored 2-year interbank training programme.

■ **Uganda:** Partnership agreed with the Uganda Central Bank and ACI Uganda, to deliver a tailored 2-year interbank training programme.

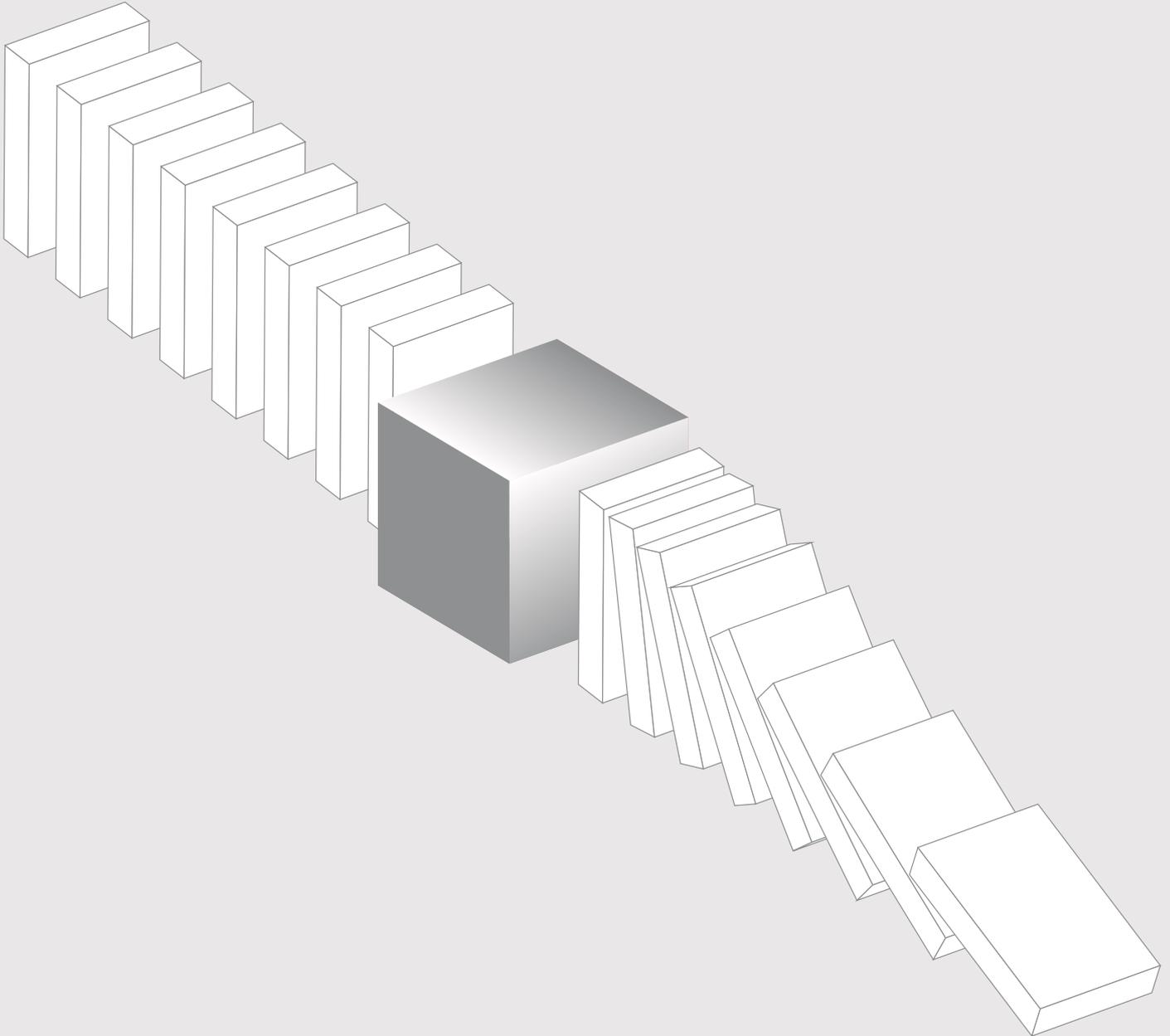
Building partnerships for financial markets development

Conclusion

Long-term systemic change can only be brought about in partnership. In 2016, Frontclear established new partnerships with global beneficiaries, concluded six memorandum's of understanding with local regulatory authorities in Africa and Latin America, and welcomed the German Ministry of Development Cooperation (BMZ) and the Dutch development bank, FMO, as new investors.

Frontclear's focus on money markets and swap markets is an important component of our Investors' wider development finance mandate. Indeed, the development finance community has long understood that finance matters for growth, and that it is the ability to allocate capital on a long term basis that defines a financial system's contribution to economic growth and poverty alleviation. In this regard, development finance policy has increasingly called for the development of local currency domestic bond markets and Frontclear's mandate is integral in this regard.

Frontclear is a financial market development company that aims to implement long-term scaled solutions to bring about more stable and inclusive interbank markets in emerging economies. The long-term focus is to establish financial infrastructure and enable the use of local currency collateral. Frontclear implements this long term development mandate by operating on the basis of a concise Theory of Change. The activities undertaken in the financial year 2016, Frontclear's first full year of operations, have demonstrated the effectiveness of this Theory of Change and the ability to bring scaled intervention to individual markets over time, thereby supporting the development of local financial markets and their ability to spur economic growth and poverty reduction.



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