TCX Impact at a Glance

In 2021, TCX de-risked a total of USD 1.4 billion of sustainable finance flows into emerging and frontier countries.

1,367 million USD development finance loans de-risked

84% towards micro and SME finance

237 million USD for least developed countries

53 million USD de-risking of energy projects

market development transactions in 20 countries
Message from the CEO

Defining the development impact of local currency financing is not straightforward. Yet, it is ever so clear that the harm done by extending hard currency loans to local currency earners in frontier and emerging markets too often nullifies the impact that the loan intends to generate. The people, enterprises and governments that are supposed to be supported, carry the currency risk. And there often is no buffer to withstand the consequences when this risk materializes. Jobs are lost, profits diminish and taxes are diverted away from supporting local communities.

Local currency financing increases the financial resilience of the borrower and projects financed by development investors. TCX aims to create a global market for local currency, where all finance flows to developing countries are provided in the right currency. TCX contributes to the United Nations Sustainable Development Goals directly through crucial partnerships with impact investors and development finance institutions, and indirectly through the development impact from projects that are protected from currency fluctuations. In this report, we present the development impact of de-risking development finance, developing local currency markets and our thought leadership activities.

2021 was the year of local currency financing for Sub-Saharan Africa, achieving a record volume of new investments through derisking activities as well as on the market development side. Expanding the local currency footprint on the African continent not only adds value to those transactions themselves, but also demonstrates that it is possible in even the most difficult markets.

The Fund continued its efforts to develop the local currency market for climate finance, where the use of hard currency lending is deeply engrained. It is a crucial segment to achieve the Sustainable Development Goals and investment flows continue to grow. It is striking that the growth in local currency solutions towards climate finance is lagging behind. We will therefore continue our efforts to understand and change this market.

2021 was the year of local currency milestones for Africa

TCX’s primary portfolio as of 31-Dec-2021
TCX primary portfolio and local currency bond issuances
Development Impact Framework

TCX generates development impact by protecting the most vulnerable from financial volatility emanating from currency risk. TCX promotes and offers currency hedging solutions that convert hard currency development financing into investments in local currency in frontier and illiquid emerging markets. TCX does not compete with commercial banks: we are a hedge provider in those currencies and tenors where no commercial alternatives are offered yet. By carrying the currency risk for borrowers and shifting it to private markets, TCX enhances the sustainability, transparency and efficiency of development finance.

With funding from international investors, individuals, enterprises and governments in developing countries undertake activities that generate impact, such as creating jobs or producing electricity, and contribute to the realization of the UN Sustainable Development Goals. Today, almost all loans provided to these borrowers are in hard currency, which exposes them to risk that stems from fluctuations in the exchange rate. By providing cross-currency swaps, TCX improves the financial resilience of the borrowers and ensures that development impact will be achieved, even in periods of currency volatility.

TCX aims to create a global market for local currency, where all finance flows to developing countries are provided in the right currency. The activities in support of this objective encompass three pillars. The first pillar reflects our delivery of local currency solutions through cross-currency swaps. Pillars 2 and 3 centre around increasing the overall usage of local currency finance, either provided by TCX or by other market participants.
De-risking development finance through local currency solutions
TCX absorbs the currency risk of loans provided by development finance investors globally. This increases the risk-resilience of the impact generated by these investments and their corresponding contribution to the SDGs.

Developing markets through risk reallocation
TCX redirects part of the currency risk it takes on its balance sheet to participants in international financial markets, contributing to market efficiency and transparency. These partnerships with development finance and commercial investors build lasting markets for local currency risk solutions.

Increasing awareness through advocacy and thought-leadership
TCX plays a crucial role in advocating for local currency finance by increasing awareness and understanding of currency risks. The local currency ecosystem expands through partnerships with international institutions and local parties in developing countries.

Impact measurement
TCX measures its expected development impact through a set of defined indicators, which are set out for each pillar in the chart below.
As the core of TCX’s business is to hedge local currency loans and redirect this risk in the market, key impact indicators are the volume of new hedges across regions and sectors, as well as their additionality. We measure the latter through the “difficulty of hedge” indicator. These two indicators are measured for the Pillar 1 and Pillar 2 activities, and represent the direct impact from TCX’s activities. The third Pillar aims to increase the overall usage of local currency financing, which indirectly feeds back into volumes hedged. The direct impact of Pillar 3 is also measured through the coverage of currency solutions.

Additionally, TCX reports on the expected development impact from the loans that are de-risked through TCX’s hedging products. We classify this as indirectly derived impact. The corresponding impact indicators, measured by development finance institutions, support nearly all SDGs. TCX has selected those SDGs that are the common denominator for the portfolio of loans that TCX hedges. TCX uses the ‘Joint Impact Model’ (JIM) to estimate the contribution of the underlying loans to the SDGs.

**SDG Goal 1** is to end poverty in all its forms everywhere, and access to reliable finance for households and small businesses can contribute to this. By de-risking funding for micro- and SME finance institutions, TCX contributes to the financial strength of these institutions and their clients.

**SDG Goal 7** is access to affordable and clean energy for all. TCX has a strategic focus on developing the local currency climate finance market, and specifically targets to support transactions in the (renewable) energy space.

**SDG Goal 8** is to promote decent work and economic growth for all. The loans hedged by TCX support employment creation and the economy’s gross domestic product through salaries, profits and taxes.

**SDG Goal 10** is to reduce inequality within and among countries. TCX delivers currency risk mitigating solutions for frontier markets only, including the Least Developed Countries.

**SDG Goal 17** is to strengthen global partnerships for sustainable development. TCX itself is the result of a global partnership among development finance institutions, impact investors and donors to promote and enable local currency financing. Through its market development activities, TCX aims to extend that partnership by involving commercial banks and investors in the creation of a true global market for local currency.
Pillar 1 | impact through de-risking development finance

Indicator 1 | hedging volumes of local currency loans

In 2021, TCX hedged USD 1.4 billion of new development finance investments—a 39% increase compared to 2020.

Indicator 1 measures the volume of development finance flows for which TCX absorbed the currency risk, referred to as “primary transactions”. The remainder of this section provides insight into the regions, country income groups and sectors that benefited from the de-risking activities.

Europe and Central Asia remains the largest region, whilst Sub-Saharan Africa shows the highest growth.

Investment flows to Sub-Saharan Africa, de-risked by TCX, more than doubled in 2021, reaching USD 386 million. TCX completed new transactions for 21 different countries across the continent, the highest number in the Fund’s history. This included the first transaction in Congolese franc, enabling one of TCX’s shareholders to provide a loan to the Democratic Republic of the Congo in local currency.

Europe and Central Asia remain the largest region for new investments in local currency, hedged through TCX. Uzbekistan, Georgia, Ukraine and Tajikistan were the largest countries in 2021, representing 74% of new hedges for the region.

New investments in the Least Developed Countries remained stable, as new hedges for Sub-Saharan Africa compensated for subdued activities for Myanmar.

TCX enabled local currency financing to 16 Least Developed Countries in 2021. This was almost fully comprised of activities for Sub-Saharan African countries, where volumes more than doubled. This compensated for the lack of hedged Myanmar investments, which accounted for 53% of new hedging volume into Least Developed Countries last year. Following turbulent country developments and the ending of the LIFT blending program, which enabled local currency transactions in Myanmar in previous years, new local currency loans are practically non-existent.

The largest share of new hedges went to lower middle income countries, which presented an 85% increase versus 2020.


1 Facilitating investment flows into microfinance in Myanmar - TCX (tcxfund.com)
Financial institutions receive the majority of loans hedged through TCX, though local currency finance to other sectors continues to gain traction.

The financial sector continues to remain the sector where local currency financing has been adopted the most, representing 86% of new hedging volume. Within the financial sector, TCX realized high growth in local currency lending towards small and medium-sized enterprises (SMEs), bringing SME finance at par with the historically dominant microfinance sector.

The share of local currency financing to the non-financial sector continues to gain ground, particularly in terms of y-o-y growth versus the financial sector. Hedged flows to the non-financial sector stood at 14% of new hedging volume in 2021. TCX proactively seeks for transactions in these sectors, also with counterparties beyond its shareholder network. Especially for the energy and infrastructure sectors, we completed nearly 80% of new transactions by hedging loans from non-shareholders. These sectors—in particular climate finance—are of strategic importance to TCX. We only hedged USD 12 million of investments into renewable energy in 2021, and while this is a significant drop in volume versus previous year, the number of renewable energy deals remained the same. We will proactively work to increase this number and advocate for local currency financing in this sector.

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Classification as per the OECD DAC List of ODA Recipients, which is based on the United Nations definition of Least Developed Countries and on gross national income per capita as published by the World Bank.
Indicator 2 | difficulty of hedge

TCX operates on the principle of additionality, meaning that we provide local currency solutions for those currencies, tenors or counterparties with no commercial alternative. The second impact indicator measures TCX’s additionality through the “difficulty of hedge” score. Each transaction is assigned a score - ranging from 2 to 10 - based on the lack of hedging opportunities in the market for that specific currency and tenor combination at the start of the transaction. The higher the score, the more difficult to hedge that transaction in the market, for a highly creditworthy institution.

The score does not take into account the counterparty additionality. Even if certain currency-tenor combinations are available in the market, these may only be accessible for larger institutions with a high credit rating. For these currencies, TCX’s additionality is derived from offering derivatives to institutions with no access to commercial banks.

The average difficulty of hedge for new transactions remained stable, at 7 out of 10. The score reflects the underlying mixture of transactions with high additionality for currencies/tenors, and with high counterparty additionality.

Although the overall weighted average score of 7.1 was equal to last year, large shifts took place at a regional level, as can be seen below.

<table>
<thead>
<tr>
<th>Region</th>
<th>Difficulty of Hedge</th>
<th>New hedging volume 2021, $M</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Regions Average</td>
<td>7.1</td>
<td>1,367</td>
</tr>
<tr>
<td>Asia</td>
<td>4.7</td>
<td>173</td>
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<tr>
<td>Europe / Central Asia</td>
<td>8.1</td>
<td>584</td>
</tr>
<tr>
<td>Latin America</td>
<td>5.7</td>
<td>158</td>
</tr>
<tr>
<td>Middle East North Africa</td>
<td>6.7</td>
<td>65</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>7.2</td>
<td>386</td>
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</tbody>
</table>
In Asia, the average difficulty of hedge was heavily impacted by the halt in new investment flows into Myanmar. The Myanmar kyat accounted for 74% of the total hedging volume in Asia last year. The majority of new transactions in 2021 benefited micro and SME finance in Indonesia, the Philippines and India. These currencies are relatively more accessible in the market, as reflected by the relatively low score for difficulty of hedge. The additionality in this region stems mostly from the counterparties involved, as TCX provided these hedges to impact investment funds with no direct access to the market.

Hedging transactions to Europe and Central Asia have scored a consistently high average difficulty of hedge. The region has a fairly large number of countries with a challenging currency to hedge, and generally transaction volumes in these currencies are high and with longer tenors. This is clearly visible in Uzbekistan and Georgia, accounting for 43% of new deals in the region, with an average score of 9.4.

The average score for Sub-Saharan Africa increased, but remains relatively below what might be expected for this region. The reasons are twofold. First, a higher share of transactions was completed for countries with (relatively) developed currency hedging markets: Kenya, Ghana, Uganda and Zambia account for 40% of new transactions with an average score of 6.1. Secondly, the average tenor of new transactions in Sub-Saharan Africa is substantially shorter compared to, for example, Europe and Central Asia. In the 15 countries in this region with the most difficult hedging markets, the average score was 9 for transactions with a tenor of longer than 1 year. Given that there was a strong bias towards 1-year hedges in Tanzania, Mozambique and Rwanda, the average score for these 15 countries was brought down to 8 overall.

**Indicator 3 | Joint Impact Model estimates of underlying transactions**

TCX estimates the anticipated development impact of the development finance loans for which it hedges the currency risk. This impact is attributable to the lender who will measure, report and steer on it in line with its own policies. TCX increases the financial resilience of the activities financed by those loans, as it reduces the vulnerability of the project and its anticipated impact to currency depreciation.

TCX uses the Joint Impact Model (JIM) to estimate the anticipated impact of the hedged loans in a uniform way across all the institutions that TCX works with. The JIM is a web-based tool for impact-oriented investors in developing markets, developed by Steward Redqueen in coordination with CDC, FMO, BIO, Proparco, AfDB, and FinDev Canada. The results are calculated using economic modelling and do not represent actual figures, rather, they are estimates and should be interpreted as such. The JIM enables TCX to estimate the indirect impacts of a portfolio of investments in developing markets in a single year, using input data such as the sector, country and investment amount. This feeds into TCX’s estimate of its contribution to the UN SDGs.

TCX applies the JIM to estimate, on an ex-ante basis, the anticipated impact of all new financing flows for which TCX provided hedging solutions in a calendar year. Applying the JIM to the newly hedged development finance investments in 2021 generates the following estimated impact:

**Joint Impact Model**

Impact supported by new development finance loans hedged by TCX in 2021

- **Employment Creation**
  - Total jobs: 132 thousand
  - Female jobs: 56 thousand
  - Male jobs: 75 thousand

- **Value Added**
  - Total Value Added: 938 million USD
  - Salaries: 345 million USD
  - Profits: 431 million USD
  - Taxes: 162 million USD

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3 Based on the JIM v.1.6 update per July 2021. It is noted by JIM that the changes to the model engine in the new release will affect impact results compared to the previous version.

4 Employment creation for Tanzania is based on the average for Least Developed Countries in Africa.
Case study | crowdfunding for local currency loans in Africa’s renewable energy sector

A market’s first: retail investor funding in local currency for Ghanian solar farms

Crowdfunding from retail investors has become an important alternative to traditional development finance. Typically, loans provided by crowdfunding platforms are denominated in hard currency which leaves the borrower in frontier countries exposed to currency exchange (FX) risk. The solution—lending in local currency and hedging the FX risk—was not available to these platforms. Until now.

In July 2021, for the first time ever, TCX, the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and the Dutch crowdfunding platform Lendahand completed a crowdfunding campaign to fund a local currency loan to solar developer REDAVIA in Ghana. The proceeds are used to fund the development of solar farms for corporate customers in the country. TCX developed an innovative hedging structure that allowed Lendahand to offer the borrower a EUR 200,000 loan denominated in Ghanian cedis while guaranteeing retail investors a Euro return on the loan repayments made. Achieving this required close collaboration with partner organizations but also within TCX.

TCX teams across the chain—from capital raising to trading—reflect on the work behind the scenes to roll out this innovative transaction.
Per van Swaay  Senior VP, Structuring & Sales

“Crowdfunding platforms can raise funds quickly from retail investors who want to support small businesses and projects in frontier markets. This is typical local currency business. We knew the Lendahand team well from the Dutch impact sector. They often stressed that their clients preferred local currency but that they simply had no way to offer it. That is why we decided to develop a tailor-made solution for such platforms. This involved deviations from operational standards and detailed structuring. One aspect is that crowdfunding platforms cannot post collateral—which is a prerequisite to work with us. We have been fortunate to receive KfW and BMU’s support in the form of a EUR 2mn funded guarantee to cover counterparty risk. When we signed up with Lendahand, they quickly found REDAVIA interested to participate in the pilot. It marked a really nice transaction for all partners, and hopefully the first of many more to come.”

Elif Erkul  Analyst, Structuring & Sales

“We entered new territory with this product offering. I came in to research the crowdfunding space and presented a sector overview. What kind of platforms are out there focused specifically on debt and impact? What is the industry outlook and local currency financing in this sector? The results of my analysis confirmed that a platform like Lendahand would be the right counterparty for such a transaction. Next, I zoomed in on crowsource financing for energy access specifically and looked into how many deals were financed through such platforms in the off-grid energy space. We shared a presentation with lenders, potential donors and crowdfunding platforms, and explained how TCX can play a fundamental role in de-risking crowdfunding loans.”

Bert van Lier  Chief Investment Officer

“An important component was to inform the retail investors of the product and risks of participating, which was done through disclosures on the platform website. They invest in a EUR loan and earn a EUR loan return but are exposed to TCX’s single A credit risk. Lendahand also had to get approval from the Dutch Authority for Financial Markets and they were supportive of an innovative structure like this. I particularly like the fact that we are reaching a different end-borrower than through development finance institutions and that it presents a new distribution opportunity to extend local currency loans. At the same time, it aligns with what TCX’s donors support: connecting individuals and households in the developed world to borrowers in emerging countries. It makes development impact more tangible.”
Sharmishtha Ghosh AVP, Structuring & Sales

“The structure of the transaction was unique. Where normally exchange of collateral is our main security, a crowdfunding platform is not able to post collateral. BMU’s support was crucial here. Their counterparty guarantee would come into play to compensate TCX for the single specific risk of a borrower defaulting when the derivative is positive to TCX, which can happen if the local currency does not depreciate that much or even appreciates versus the US dollar. I onboarded Lendahand as a counterparty, performed due diligence and managed the credit approval process. This transaction reflects our foundation to explore new partners and sectors, and continue to innovate.”

Kevin Laryea Associate, Trading

“It took a village to get this trade done and dusted. I showed pricing indications to Lendahand very early on, before we had the guarantee commitment, and had a few calls with them to go over our trading process. I explained what the trade means from a practical point of view to best prepare them and made sure that there are no unforeseen circumstances. Despite the volatility that comes with Ghanian cedi, we agreed to facilitate capping the pricing if necessary. On the trading day, we went live once Lendahand agreed to our rates and it all went smoothly! Being Ghanian myself, I was very happy to be part of facilitating this transaction to support sustainable development in the country.”

Harm Raaijmakers VP, Risk

“This pilot transaction supports our growth ambition through innovation by providing our product through a new distribution channel. We performed a holistic risk analysis in which we went through all possible scenarios before seeking internal approvals. For example, do all parties understand the cash flows? Who determines the underlying project to be financed? How do we make sure that the guarantee structure works as intended for all parties involved? While this was a pilot transaction, we want to encourage capital market development and pave the way for more crowdfunding platforms to follow.”

Diederik de Leur CEO, DLM Finance

“DLM Finance provides back office services to TCX and we were heavily involved in all operational aspects of the trade. We wanted the structure to be transparent and efficient to keep the transaction costs as low as possible. I made sure that proper legal and IT frameworks were in place and helped document different risk scenarios. While the interest rate differential between a Ghanian cedi loan and EUR loan was significant, the Ghanian cedi has since depreciated strongly. This means that we have shielded the borrower from higher debt service payments for a EUR loan. I hope that this pilot transaction opens the door to establish a well-functioning platform for offering hedged loans by the crowd.”
Pillar 2 | impact through developing markets

This pillar follows similar indicators to those under pillar 1. The data presented here relate to TCX’s activities to transfer currency risk from its balance sheet to investors looking for such exposure. This has become an important channel for TCX to target development impact. The primary method of transferring risk is to hedge local currency bonds issued by development finance institutions, but also through direct risk transfers to commercial parties. This activity contributes to market efficiency and transparency, builds lasting partnerships, and frees up TCX’s risk capacity in specific currencies at the same time.

Indicator 1 | hedging volumes of risk-reallocation transactions

In 2021, the total volume of new risk re-allocation transactions in support of market development was USD 511 mln equivalent

This indicator measures the volume of local currency transactions in TCX’s portfolio that was reallocated to commercial investors. The following charts present breakdowns by geography and country income groups.

In line with pillar 1, TCX achieved high growth in terms of volume for risk re-allocation transactions in Sub-Saharan Africa, whilst Europe and Central Asia remains the largest region.

Europe and Central Asia provide most opportunities for TCX to support market creation, largely due to the fact that this region is the largest in TCX’s primary portfolio. This is also where local currency bond issuances have been most successful historically, accounting for almost 80% of the total volume.

In 2021, TCX was able to generate significant transactions in Sub-Saharan Africa, up from USD 21 mln in 2020 to a record high of USD 132 mln in 2021. More specifically, we facilitated both local currency bond issuances and direct risk transfers in the currencies of Benin, Congo DRC, Kenya, Malawi, Mozambique and Tanzania.

Market development activities are successful even in the Least Developed Countries.
Across all geographic regions, TCX is able to support market creation in the Least Developed Countries, where volumes increased by 80% in 2021 compared to the year before. This was driven by local currency bond issuances in Haiti and Myanmar, in addition to Sub-Saharan Africa.

**Indicator 2 | difficulty of hedge**

Similar to the Pillar 1 activities, TCX measures the additionality of its market development transactions through the “difficulty of hedge” score. The score is determined using the same methodology as for primary transactions. Market development transactions by definition only include transactions that are additional to the market in terms of currency or tenor.

For the purpose of balance sheet management or to free up capital for frontier currencies, TCX may enter into offsetting transactions in currencies or tenors that have better availability. Such transactions, however, do not qualify for inclusion towards any of the market development impact indicators.

The average difficulty of hedge for new market development transactions remained stable at 8 out of 10, highlighting the significant additionality in terms of currencies and tenors for these type of transactions.

Not surprisingly, almost all of TCX’s market creation activities take place in currencies that

<table>
<thead>
<tr>
<th>Additionality of new hedging volume by region</th>
<th>Difficulty of Hedge 2021</th>
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<th>New hedging volume 2021, $M</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Regions Average</td>
<td>7.8</td>
<td>7.7</td>
<td>511</td>
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<tr>
<td>Asia</td>
<td>8.0</td>
<td>8.4</td>
<td>33</td>
</tr>
<tr>
<td>Europe / Central Asia</td>
<td>8.1</td>
<td>7.3</td>
<td>288</td>
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<tr>
<td>Latin America</td>
<td>8.0</td>
<td>7.5</td>
<td>20</td>
</tr>
<tr>
<td>Middle East North Africa</td>
<td>7.4</td>
<td>7.8</td>
<td>37</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>7.1</td>
<td>8.4</td>
<td>132</td>
</tr>
</tbody>
</table>
are assigned the highest rate of difficulty, and there are zero transactions that fall in the lowest score category.

Zooming in on Europe and Central Asia, the currencies of Georgia and Uzbekistan were not only the largest in volume, but were also the currencies where TCX was able to stretch the tenors the most. In Sub-Saharan Africa, TCX completed landmark transactions for highly additional currencies such as the Mozambican metical and the West African CFA franc. The tenors there, however, are relatively short compared to other regions, which resulted in a lower score.

USD 351 million out of the total USD 511 million in market development transactions originated by enabling local currency bond issuances. These result, on average, in higher additionality compared to direct risk transfers, because of the typical longer tenors for bond issuances.

The development of Local Currency bond issues for TCX
Case study | pioneering local currency bond markets for Sub-Saharan Africa

If countries and corporates can borrow in their own currency abroad, they benefit from deeper and more liquid international capital markets while avoiding exposure to the currency risk that comes with typical USD or EUR-denominated issuances. However, issuing local currency bonds in offshore markets is challenging. To reduce this barrier, TCX, together with its shareholders, is increasingly active in issuing local currency denominated bonds in the international market. This increases risk transparency, which is crucial for the development of these markets.

While offshore and onshore are generally separate markets, spill-over effects through price and risk transparency could ultimately contribute further to the development of local markets. The end-goal for both countries and corporates should be to be able to finance themselves in their own currency, within and outside of their own country.

In 2021, TCX facilitated offshore local currency bond issuances in Kenya and the DRC, and has now enabled bond issuances for 9 African countries in total.

Financial markets in Africa are still in dire need of further development, before being able to truly fulfil their supporting role to the economies. The IMF’s Financial Markets Index[3] for Africa achieves an overall score of 0.06 on a scale of 0 – 1, based on depth, access and efficiency. For comparison, countries like Japan, the UK and the US all score above 0.8. Within Africa, Kenya and Congo DRC even score below the African average. TCX aims to contribute to this development need.

In January 2021, the African Development Bank (AfDB) and TCX contributed to further development of capital markets in Africa by issuing an offshore Kenyan shilling bond. The AfDB acted as the issuer, whilst TCX provided the currency exposure.

Hassatou N’Sele from AfDB says: “The beauty of this transaction is that FX risk is being transferred from the local borrowers to the swap counterparty, TCX, and then transferred back to international investors. With this 2-year KES note, the AfDB has launched its first KES offshore issuance since 2007 at a very competitive rate, fulfilling our role as a leader in supporting Kenya’s capital markets development.”

Othman Boukrami from TCX explains: “TCX provides the Kenyan shilling exposure, which it has accumulated by hedging the currency risk of various development projects in Kenya. AfDB’s strategic role in developing African capital market is further established with this transaction.”

In October 2021, FMO, supported by TCX, issued the first-ever offshore Congolese franc note, with a value of USD 20 million and a tenor of 14 months.

FMO issued the bond offshore to international investors who are exposed to FMO’s triple-A credit rating, but with a coupon that reflects the risk exposure of the Congolese market. This combination of AAA credit risk with frontier market returns to hedge currency risk creates an innovative asset class for which there is clear demand from global investors.

“This is an important and special transaction, because it is the first-ever bond issued in Congolese francs in the international market” said Isabelle Lessedjina at TCX. “It supports the financing efforts of the international and multilateral development banks, creates a new asset class for international investors and raises the profile of DRC and its local currency securities in the international financial market, while adding visibility to its local currency yield curve.”

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Pillar 3 | impact through thought leadership

TCX aims to achieve impact by raising awareness of currency risks and the importance of local currency finance. A dedicated TCX team focuses on advocacy work and partnering with international and local institutions on thought leadership activities. The highlights in each of the four focus areas are described below.

- **Contribute to the public policy dialogue through media publications**
  
  TCX contributed to the 2021 Financial Times publication “Why a global fund is needed to cut currency risk for developing nations” by Sony Kapoor, the Chief Executive of the Nordic Institute for Finance, Technology and Sustainability. The article sets out why “Currency risk is the Achilles heel of developing economies that borrow to make investments to increase productivity, reduce emissions and meet sustainable development goals” and what can be done about it.

  In 2021, a major milestone was achieved with the commitment by the International Development Association for a pilot project to do a first-ever local currency loan under IDA 20. This followed after years of crucial advocacy efforts by TCX, calling on multilateral development institutions to lend in local currency.

- **Engage with academia and research institutions on research that increases global knowledge on local currency risks and solutions**

  With the support of the German Federal Ministry of Economic Cooperation and Development (BMZ), TCX and Chatham House organized a virtual conference on The Role of Debt Management in Achieving Debt Sustainability in Frontier and Emerging Economies. The event brought together the perspectives from leading academics, experienced debt management practitioners from frontier/emerging economies, and policy makers from international institutions.

  TCX engaged with the IMF to conduct a survey among Debt Management Offices of developing countries to identify gaps in foreign currency and interest rate risk management practices for sovereign debt.

- **Knowledge sharing to support institutions in providing local currency finance**

  Throughout the year, TCX organized country webinars and training sessions for development finance institutions to share knowledge. In 2021, the Association of African Development Finance Institutions and TCX signed a joint declaration stating their commitment to support Public Development Banks in finding local currency financing. This was followed by a webinar on local currency finance for all members of the World Federation of Development Financing Institutions.

- **Enhance market transparency through the provision of information**

  TCX shares with the investor community updates on local currency markets and pricing, such as the Monthly Pricing Newsletter and daily frontier market news updates. In 2021, TCX launched the TCX Frontier Index. At year-end 2021, the index included 72 bonds in 20 frontier currencies. The objective of this informational index is to increase transparency around frontier currency fixed income instruments and support the growth of local capital markets.
Ultimately, these efforts aim to increase the overall use of local currency in the development finance market, especially in segments where this is hardly the case at the moment. In the long term, TCX’s impact from its advocacy and thought leadership work will be reflected in the impact indicators as measured under pillars 1 and 2. While it is difficult to quantify the true immediate effects of these efforts, TCX uses the following two indicators as a proxy:

**Indicator 1 | number of currencies in portfolio**

On December 31st, 2021, TCX’s outstanding primary hedging portfolio constituted 55 different currencies, from 61 different countries.

TCX offers currency solutions for 98 different currencies in 115 developing countries globally. Since inception in 2008, TCX has completed transactions in 64 different currencies in 72 countries, of which 55 currencies are currently outstanding. TCX reached a milestone in 2021 when new transactions in 51 different currencies were completed — the highest number in the Fund’s history.

**Indicator 2 | Number of currencies with no market data, for which a pricing model has been developed**

As of December 31st, 2021, TCX had developed 45 currency models in total, of which 25 are currently active for pricing purposes.

TCX uses a model-based approach to price hedging transactions when no market data is available. The Forecasting and Policy Analysis System (FPAS) is a forecasting model to price currency and macroeconomic risks in the most frontier markets. It was jointly developed with OGResearch, a Czech-based research consultancy specializing in yield curves for developing markets. TCX commissions OGResearch to develop an FPAS in a new currency if the Fund observes demand for that country. The number of currencies priced based on FPAS serves as an impact indicator for TCX’s hedging capabilities in the most frontier markets.
FINANCIAL TIMES 13 July 2021

Why a global fund is needed to cut currency risk for developing nations

Wild fluctuations in exchange rates increase economic fragility and often trigger a debt crisis

Currency risk is the Achilles heel of developing economies that borrow to make investments to increase productivity, reduce emissions and meet sustainable development goals. About 90 per cent of cross-border debt for low and lower-middle income countries, nearly $2tn, is denominated in hard currencies, mostly dollars, much of it from development banks and other official lenders.

Financial Times - Why a global fund is needed to cut currency risk for developing nations

Netherlands-African Business Council 15 March 2021

TCX Fund develops African local currency bond markets

Wild fluctuations in exchange rates increase economic fragility and often trigger a debt crisis

This January, a unique transaction was executed by the African Development Bank (AfDB), with the structuring, arranging and hedging support of TCX.

NABC - TCX Fund develops African local currency bond markets

Berne Union 16 December 2021

Africa's shift to funding sustainable power in local currencies: The opportunity for ECAs

Wild fluctuations in exchange rates increase economic fragility and often trigger a debt crisis

Is Africa's policy shift towards PPAs in local currencies an opportunity for ECAs to support the long term sustainability of the energy sector? By Harald Hirschhofer, Senior Advisor at TCX and Vivek Mittal, CEO of African Infrastructure Development Association.

Berne Union - Berne Union Yearbook 2021

Chatham House Research event - 7 July 2021

The role of debt management in achieving debt sustainability in frontier and emerging economies

What role can enhanced debt management strategies and capabilities, particularly in relation to foreign exchange risk, play in addressing this enormous challenge?

This webinar is organized in association with The Currency Exchange Fund (TCX).

Chatham House - The role of debt management

FINANCIAL TIMES 18 May 2021

Foreign investors tiptoe into frontier markets in search of returns

European Investment Bank issues its first frontier local currency note as demand rises

Investors have begun wading more deeply into frontier markets such as Uzbekistan and Tanzania as they chase higher returns and seek assets that do not move in tandem with those in larger developing nations.

Financial Times - Foreign investors tiptoe into frontier markets in search of returns

World Federation of Development Finance Institutions Webinar, 25 November 2021

Webinar on TCX, local currency financing and hedging

The webinar is aimed to: (1) introduce TCX to WFDFI (AADFI, ADFIAP, ALIDE, ADFIMI and ELTI), (2) initiate discussions around currency risk as well as available hedging solutions, (3) show how TCX works with DFIs/PDBs, covering relevant topics such as balance sheet management and local currency financing.

AADFI - Webinar on TCX, local currency financing and hedging

mtn-i 2 April 2021

TCX creates first frontier currency bond index

Wild fluctuations in exchange rates increase economic fragility and often trigger a debt crisis

The Currency Exchange Fund (TCX) has created the first frontier currency bond index, the TCX FI. The index, launched on March 25, tracks the performance of frontier currency-linked investment-grade Eurobonds issued by development finance institutions, a growing segment of the MTN market.

mtn-i - TCX creates first frontier currency bond index

TCX country webinars

Rwanda 15 December 2021
Tajikistan 17 November 2021
Uzbekistan 3 November 2021
Angola 6 October 2021
Tunisia 23 June 2021
Botswana & Namibia 9 June 2021
Myanmar 7 April 2021