



## LCY financing and hedging

# Agenda

- Overview
- About TCX
- Creating a local currency ecosystem
- How the public sector & financial institutions can benefit
- Risks and advantages of hedging
- Conclusion: The role of Central Banks

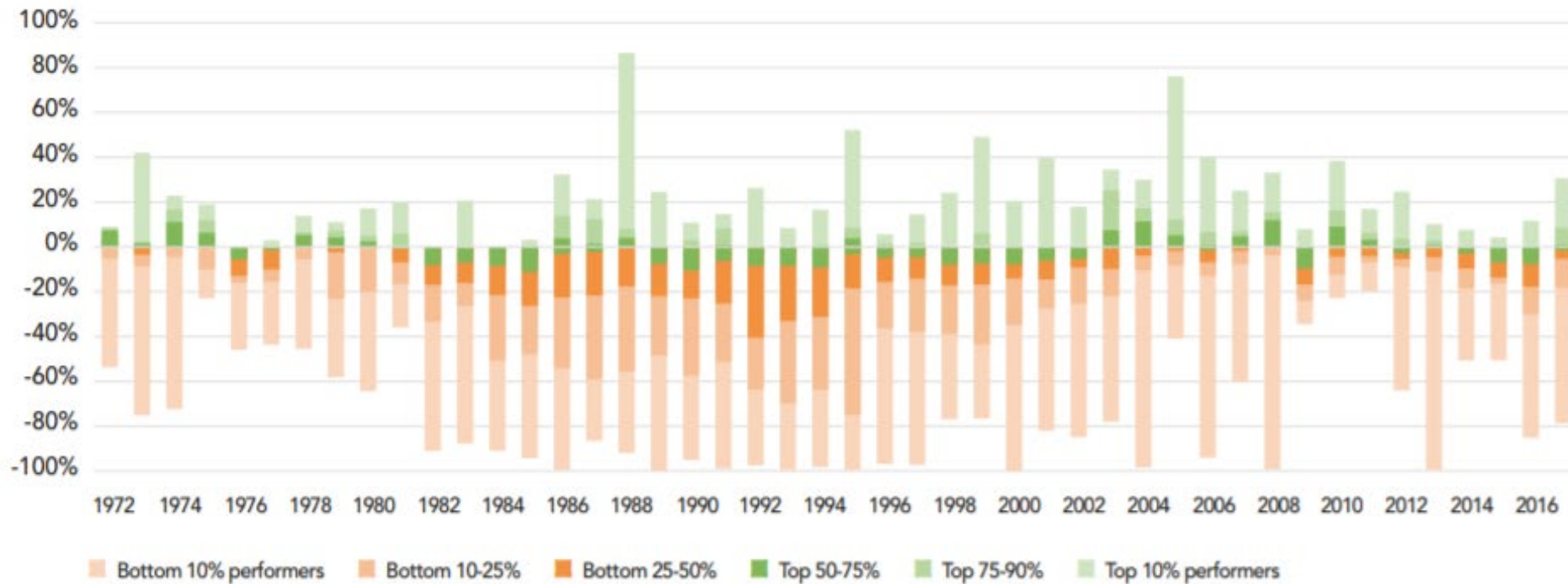


## Why Local Currency and Hedging?

# Learning from the past...

**No surprise:** globally, significant depreciations occur frequently

Annual depreciation of 97 developing country currencies



## ...looking at the present

2021-2022 FX news (sources: BBC, FT, Bloomberg)

### Colombian Peso Has Record Low in Sight as Election Risks Weigh

- Currency fell to a post-pandemic low on the first day of 2022
- Election risks set to outweigh oil price gains, big rate hikes

TAJIKISTAN, CENTRAL ASIA

### Tajikistan: Somoni slides by 10 percent overnight

### Turkish lira steadies after tumbling 44% in tumultuous 2021

### 'Ghana Cedi be worst performing currency among top Africa currencies'

### Plunging Currency, Dollar Drought Worsen Myanmar Economic Crisis

- Kyat has plunged almost 50% since the military takeover
- Country near economic collapse from pandemic, coup sanctions

### Kenyan Shilling Seen Stretching 24-Week Losing Streak on Oil

### Egypt devalues currency 14% after Ukraine war prompts dollar flight

### Sri Lanka's Debt Crisis Lingers as Foreign-Currency Reserves Slip

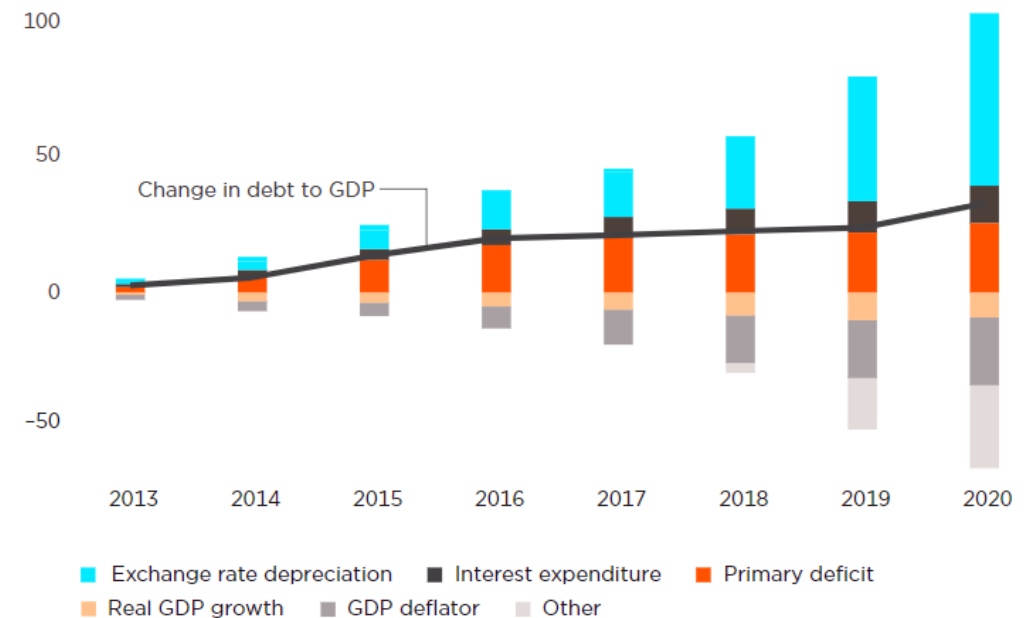
- FX reserves drop to \$2.3 billion, lowest since November 2021
- Central bank defending FX level about 12% below current value

# Currency Risk: A Threat to the Financial Stability of Developing Nations and Effectiveness of Sustainable Finance Flows

- **Rising fragility of emerging market countries due to high debt levels** will be at the top of high public finance agendas in the multilateral community for the next few years, especially in the context of the UN SDGs and Paris Agreement.
- Emerging markets— which are loaded with foreign currency debt—struggle to cope with **surging inflation and increased borrowing costs** in Europe and the US.
- When a local currency depreciates, a hard currency loan will be more expensive to repay, endangering the **financial stability** of the EM borrower.
- Still, over 90% of development finance loans are provided in hard currency even though **EM borrowers have less risk resilience, are exposed to more risks, and have insufficient risk management capacities.**

*Depreciation in exchange rates has been the major driver of Africa's debt increase of more than 50% between 2013-2020*

**Decomposition of drivers of Africa's debt**  
Cumulative change (percentage points)



Source: African Development Bank - African Economic Outlook 2021



## About TCX

# TCX investors



# TCX

TCX is a development finance initiative established to protect borrowers in emerging markets from exchange rate fluctuation



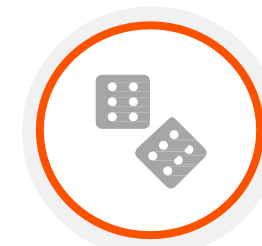
1

Reliability



2

Market/Risk  
reflective  
pricing



3

No  
speculation



4

Additionality

**Our purpose is to de-risk development finance** by removing currency risk associated with hard currency lending and supporting (synthetic) local currency lending.

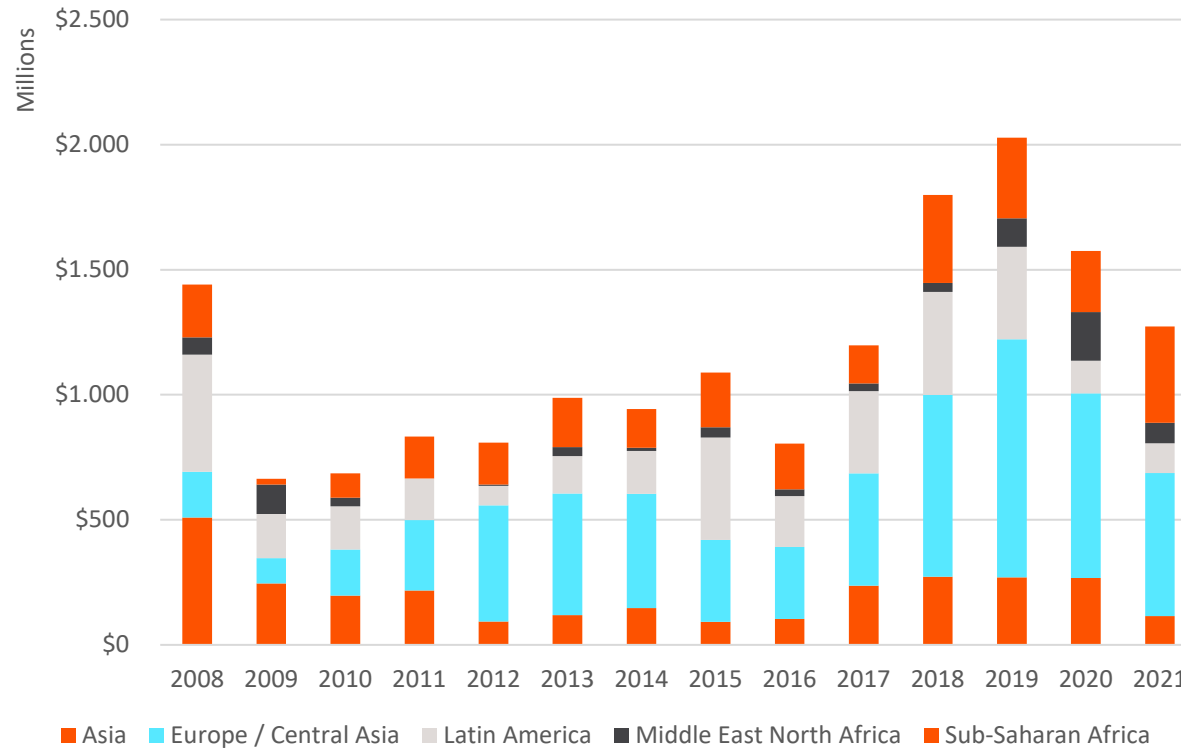


## Creating a local currency ecosystem

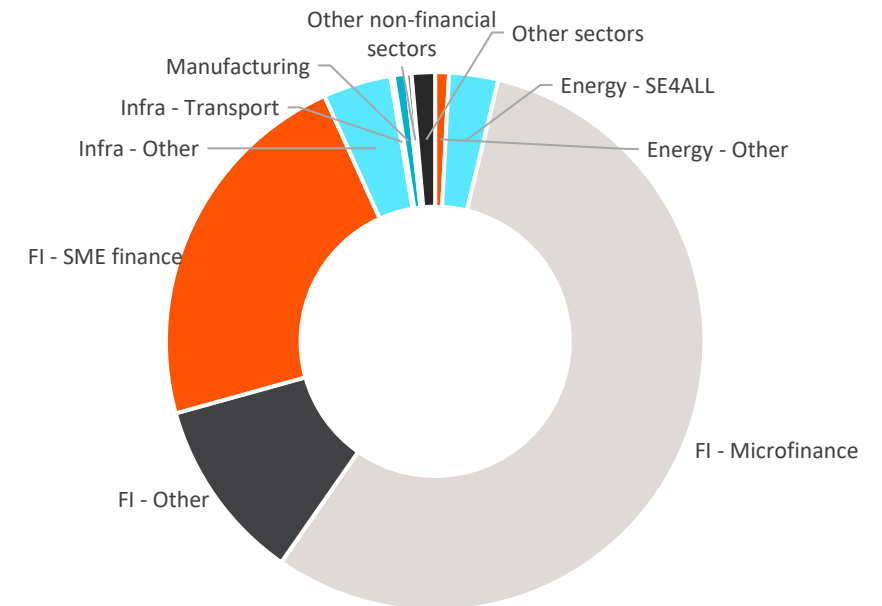
## TCX has de-risked over USD 11 billion in development finance loans since inception

Supporting lending to sectors such as climate finance, agribusiness, and micro and SME finance

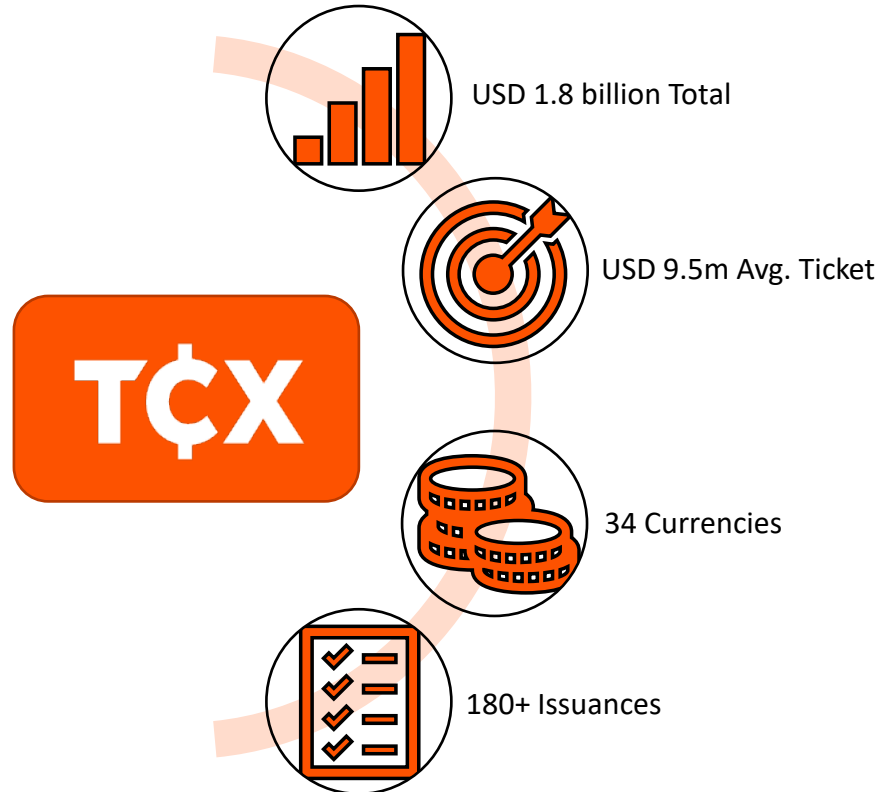
Production per Region



Sum of Production USD



# Frontier Local Currency Bonds: Supporting Sustainable Capital Market Creation



## - CURRENT ISSUERS -



## - CURRENCIES ISSUED -

UZS	KGS	LBP	HNL	GEL	XOF	AMD
TND	XOF	BOB	LKR	MMK	TJS	UAH
HTG	GTQ	CRC	RWF	PKR	PGK	AZN
TZS	CDF	DZD	KES	RSD	VND	

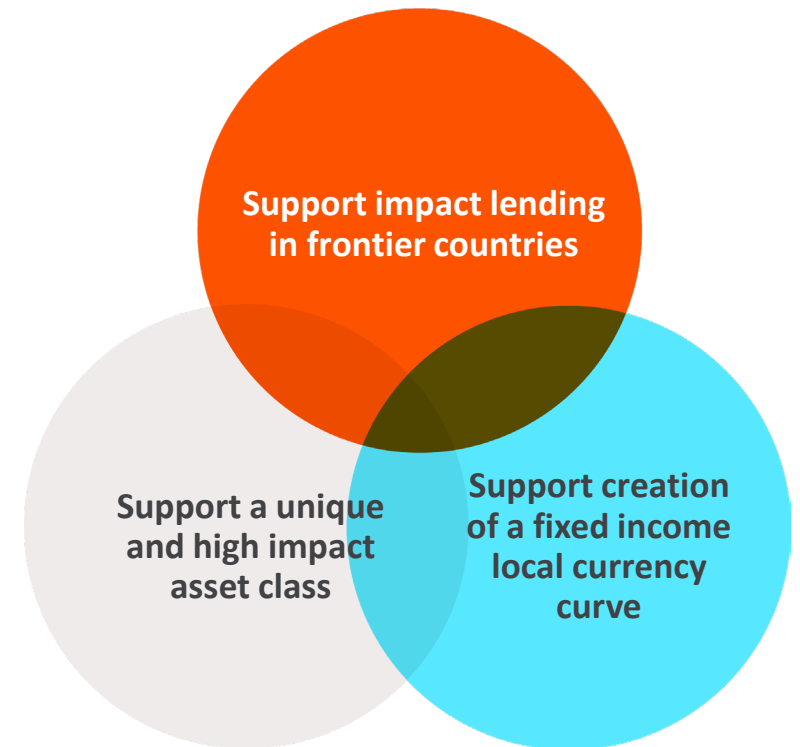
## Pillar 2: Market Making

# Frontier local currency bonds

Supporting Sustainable Capital Market Creation



- TCX supports sustainable capital markets creation in frontier markets by co-structuring **offshore synthetic local currency bonds** issued by development finance institutions.
- We play a crucial role in the issuance of the bond, as **we fully hedge the issuer's LCY payment obligations** by providing a cross-currency swap to the issuer. TCX effectively converts these LCY payments back to dollar payments.
- They are unique because they **combine the superior credit rating of the issuer with frontier market currency risk and corresponding high yields**.

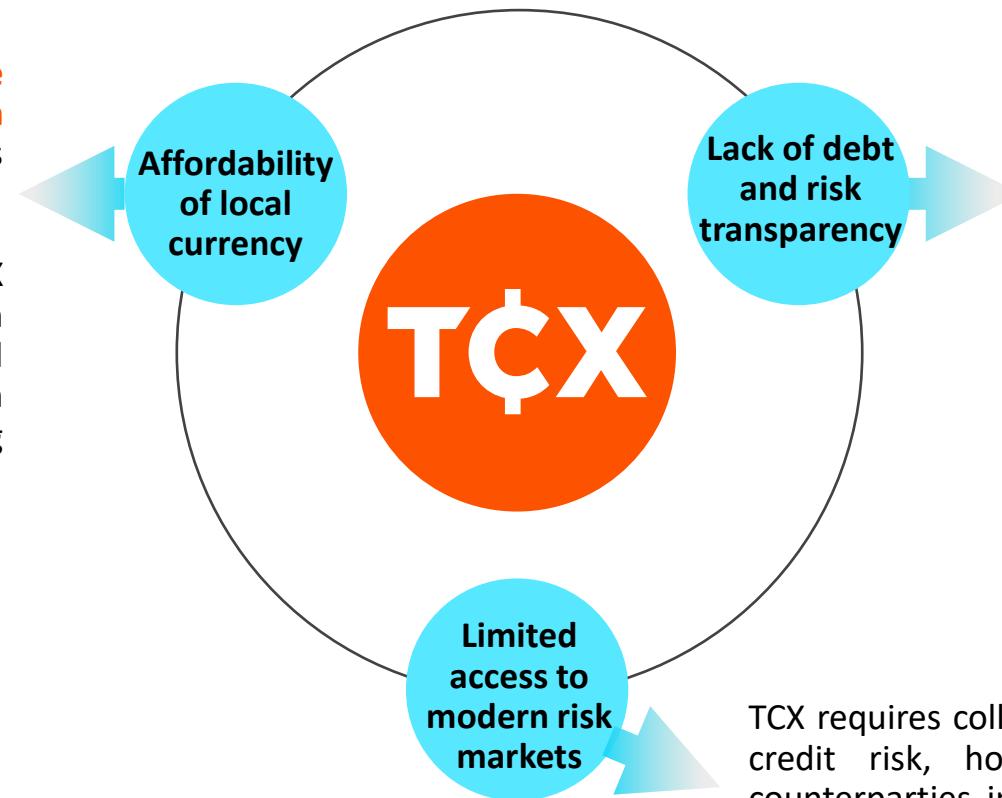


## Pillar 3: Thought leadership

### Other Challenges to Currency Risk: What more solutions does TCX offer?

TCX operates **several blended finance programs with innovative allocation mechanisms** to minimize distortions and maximize impact.

With the support of such programs, TCX is able to offer discounted pricing in several target currencies, which will help increase debt investments in emerging markets while not exposing borrowers to currency risk.

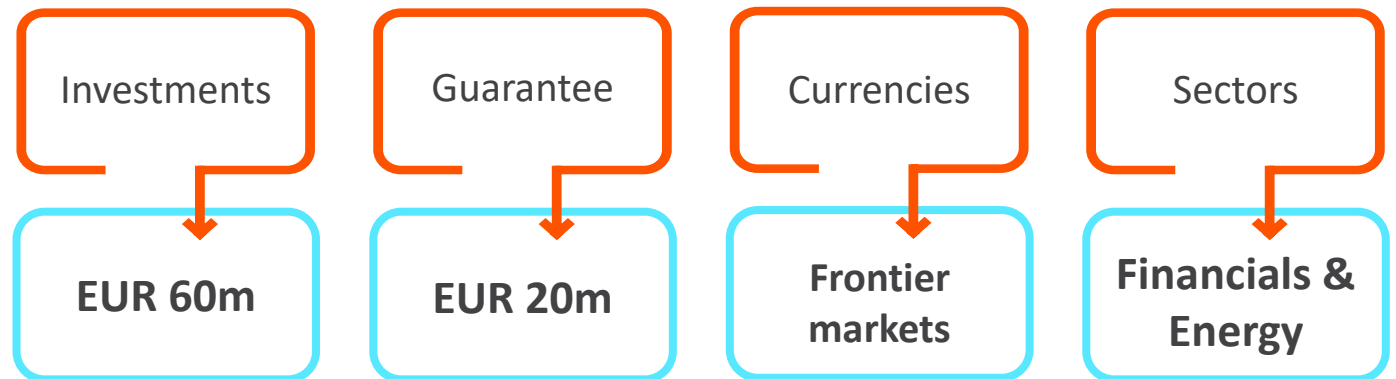


Lack of debt and risk transparency impacts perception of risk. **TCX sponsors empirical research, promotes risk awareness and capacity building.**

TCX requires collateral posting from its counterparts to cover credit risk, however, this is not always feasible for counterparties in low-income countries. **We are developing alternative solutions with our donors.**

# European Commission Pricing Facility

- Increase access to synthetic local-currency borrowing for institutions based in Sub-Saharan Africa and the European Neighborhood countries
- TCX is able to offer discounted pricing in several target currencies to (development finance) investors thanks to a dedicated EC guarantee (risk-sharing mechanism)

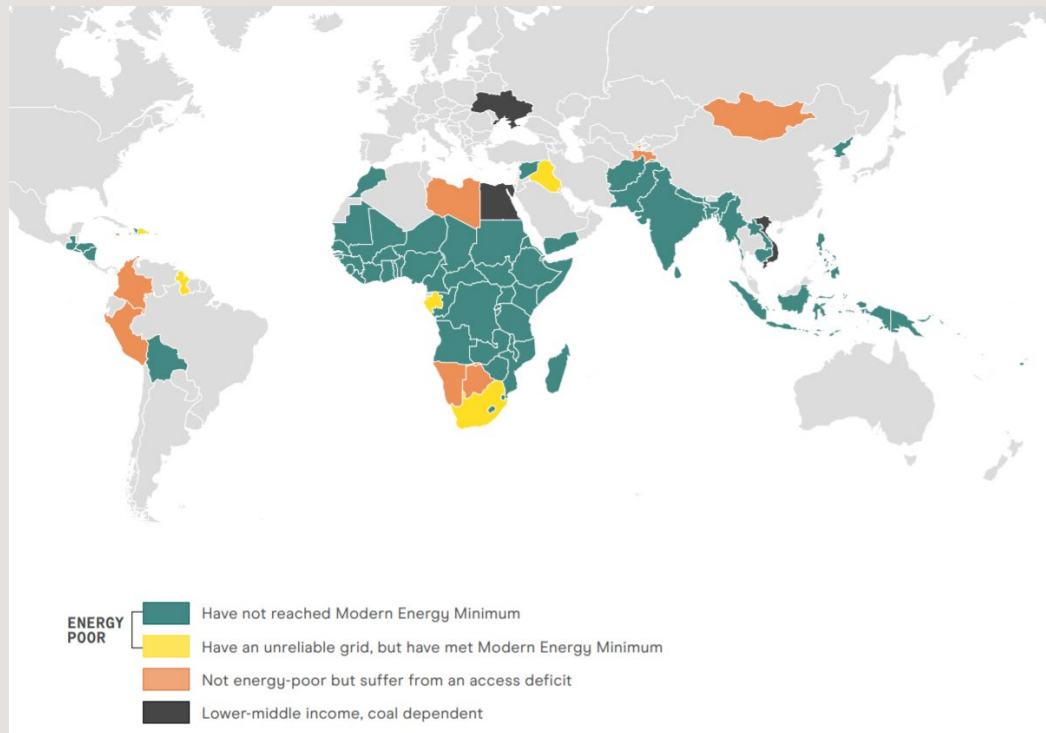


## Strategic Initiatives at TCX

### Advocating for Local Currency Financing in Specific Sectors

#### Climate Finance: Addressing Energy Transition

TCX builds on its experience with micro, small and medium enterprises to **expand local currency financing in the off-shore renewable energy sector**. Donor-supported blending programs facilitate these activities.



#### Public Sector Hedging Program

A recent IMF survey among 70+ Central Bank Debt Management Offices (DMOs) has revealed significant capacity gaps in terms of properly quantifying the currency risk of debt portfolios.

Additionally, public sector debt management frameworks do not sufficiently address the issue of currency risk management and hedging in particular. If a public sector borrower gets into financial distress this may also impact the health of the country's banking system.

**TCX is currently working on facilitating hedges for DMOs and providing technical capacity building upon request. We are liaising with the European Commission on a donor support proposal.**



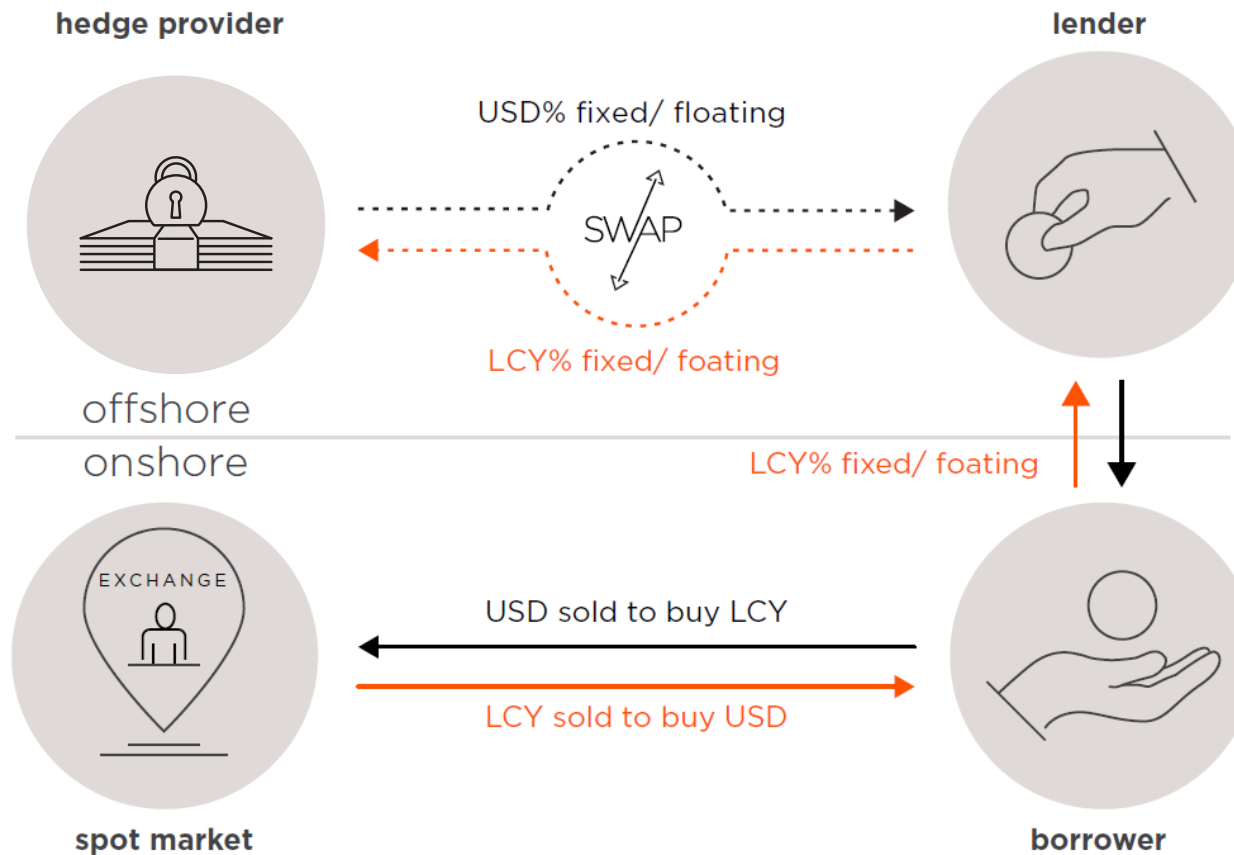
# Sustainable growth through hedging

Benefits for the public sector and financial institutions



## Receiving synthetic LCY financing

# Synthetic hedge structure



# Synthetic LCY financing from offshore lenders in TZS

An example

A Tanzanian FI is looking for a long-term funding and enters into negotiations with a DFI.

- Lender : Multilateral Development Bank
- Borrower : Tanzanian Financial Institution
- Sector : Banking
- Use of Funds : Social infrastructure financing
- Maturity : Medium to long Term
- Interest Rate : Fixed TZS

Please note that in this example, borrower could also be a commercial bank, microfinance institution, mortgage refinancing company, national/regional development bank but also a private corporate or a Sovereign/State Owned Company.

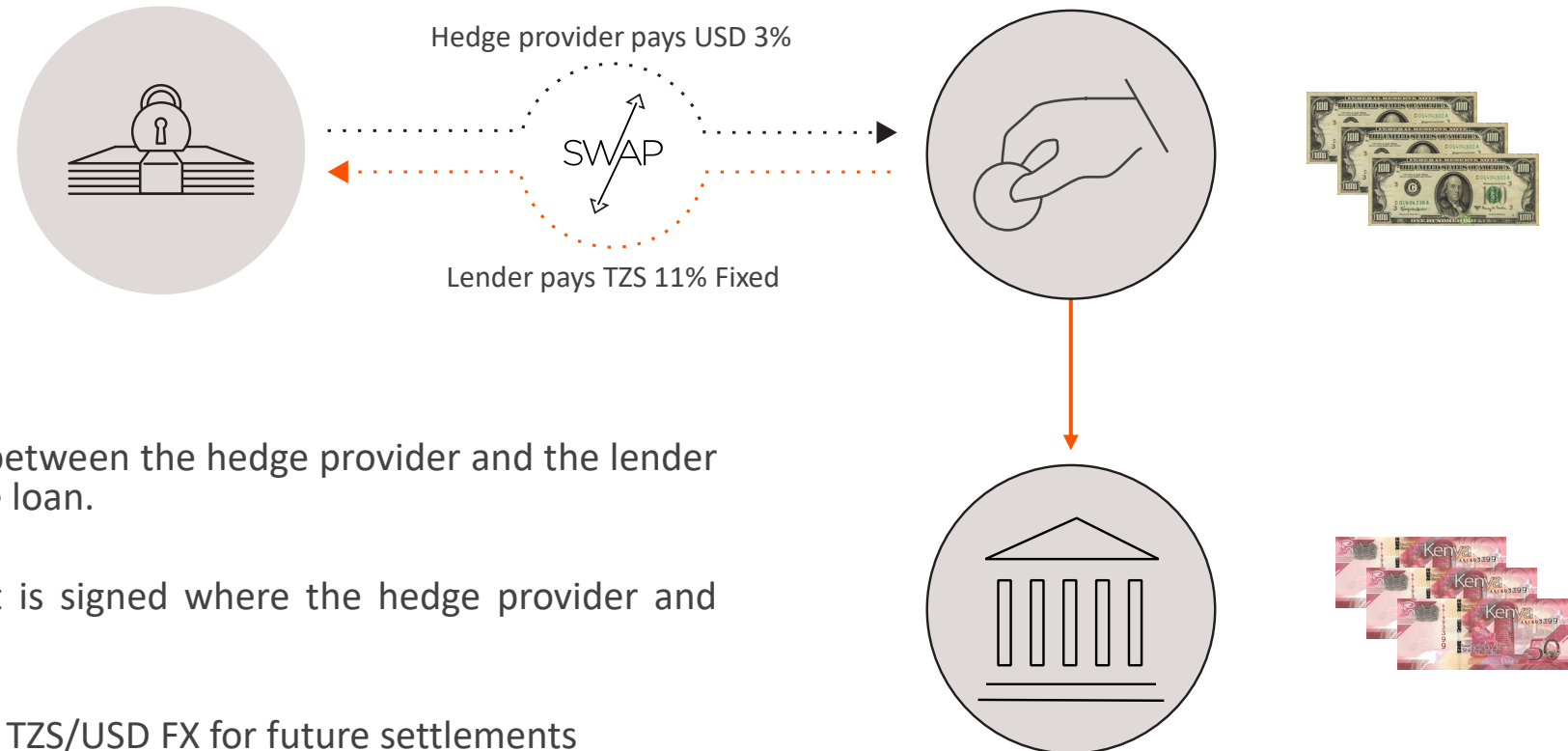
# Receiving synthetic LCY from offshore lenders in TZS

## Funding structure and hedging

The operation was structured as a **synthetic local currency loan** with the following terms:

- TZS 23.2 billion in notional amount equivalent to USD 10 million
- 6-year maturity and 1-year grace on the notional amount
- Semi-annual interest payments (and of notional after the grace period)
- The Tanzanian FI pays a fixed interest rate in TZS 11%
- The lender requires an USD Fixed 3%
- Non-deliverable: all flows (interest + capital) denominated in TZS and payable in USD

# Disbursement mechanism with the swap



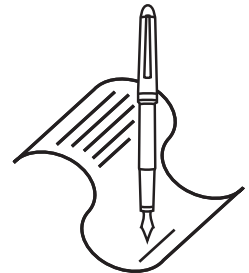
- No exchange of amounts between the hedge provider and the lender at the disbursement of the loan.
- Simply a swap agreement is signed where the hedge provider and the lender agrees on:
  - the definition of the TZS/USD FX for future settlements
  - that future settlement will be in USD. Physically there will be no flows in TZS.

# Swap agreement

- The swap is contracted between the hedge provider and the Lender on a separate contract.
- There is **no legal obligations between the hedge provider and the borrower.**

USD Leg

Date	Notional End Period	Amortizations	Interest	Total repayment
1-Jun-22	10,000,000			
1-Dec-22	10,000,000	-	152,500	152,500
1-Jun-23	9,090,909	909,091	151,667	1,060,758
1-Dec-23	8,181,818	909,091	138,636	1,047,727
1-Jun-24	7,272,727	909,091	124,773	1,033,864
1-Dec-24	6,363,636	909,091	110,909	1,020,000
1-Jun-25	5,454,545	909,091	96,515	1,005,606
1-Dec-25	4,545,455	909,091	83,182	992,273
1-Jun-26	3,636,364	909,091	68,939	978,030
1-Dec-26	2,727,273	909,091	55,455	964,545
1-Jun-27	1,818,182	909,091	41,364	950,455
1-Dec-27	909,091	909,091	27,727	936,818
1-Jun-28	0	909,091	13,864	922,955

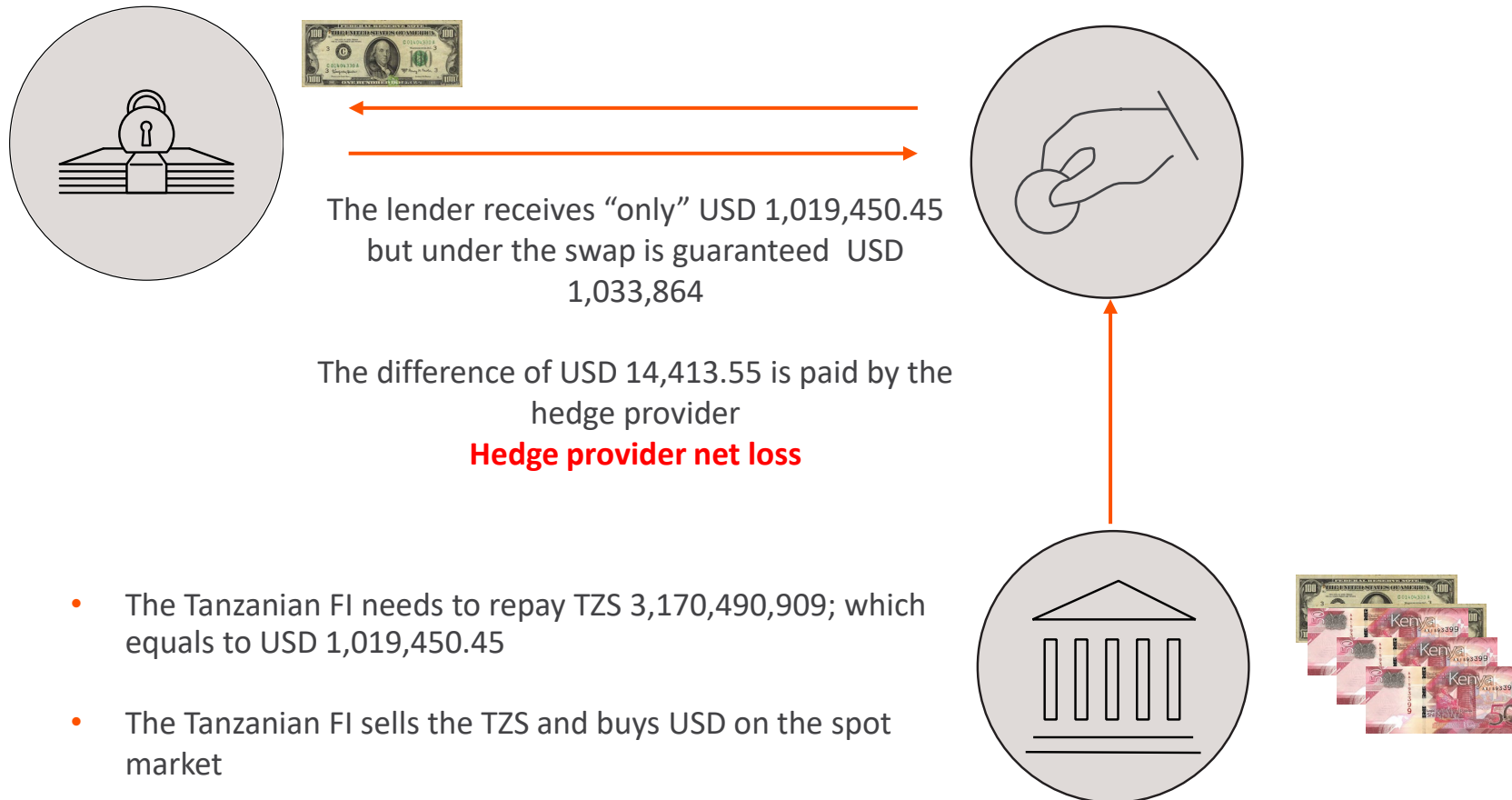


Difference between the TZS and USD legs are settled

TZS Leg

Date	Notional End Period	Amortizations	Interest	Total repayment
1-Jun-22	23,200,000,000			
1-Dec-22	23,200,000,000	-	1,297,266,667	1,297,266,667
1-Jun-23	21,090,909,091	2,109,090,909	1,290,177,778	3,399,268,687
1-Dec-23	18,981,818,182	2,109,090,909	1,179,333,333	3,288,474,242
1-Jun-24	16,872,727,273	2,109,090,909	1,061,400,000	3,170,490,909
1-Dec-24	14,763,636,364	2,109,090,909	943,466,667	3,052,557,576
1-Jun-25	12,654,545,455	2,109,090,909	821,022,222	2,930,113,131
1-Dec-25	10,545,454,545	2,109,090,909	707,600,000	2,816,690,909
1-Jun-26	8,436,363,636	2,109,090,909	586,444,444	2,695,535,354
1-Dec-26	6,327,272,727	2,109,090,909	471,733,333	2,580,824,242
1-Jun-27	4,218,181,818	2,109,090,909	351,866,667	2,460,957,576
1-Dec-27	2,109,090,909	2,109,090,909	235,866,667	2,344,957,576
1-Jun-28	0	2,109,090,909	117,933,333	2,227,024,242

# Notional + Interest payment

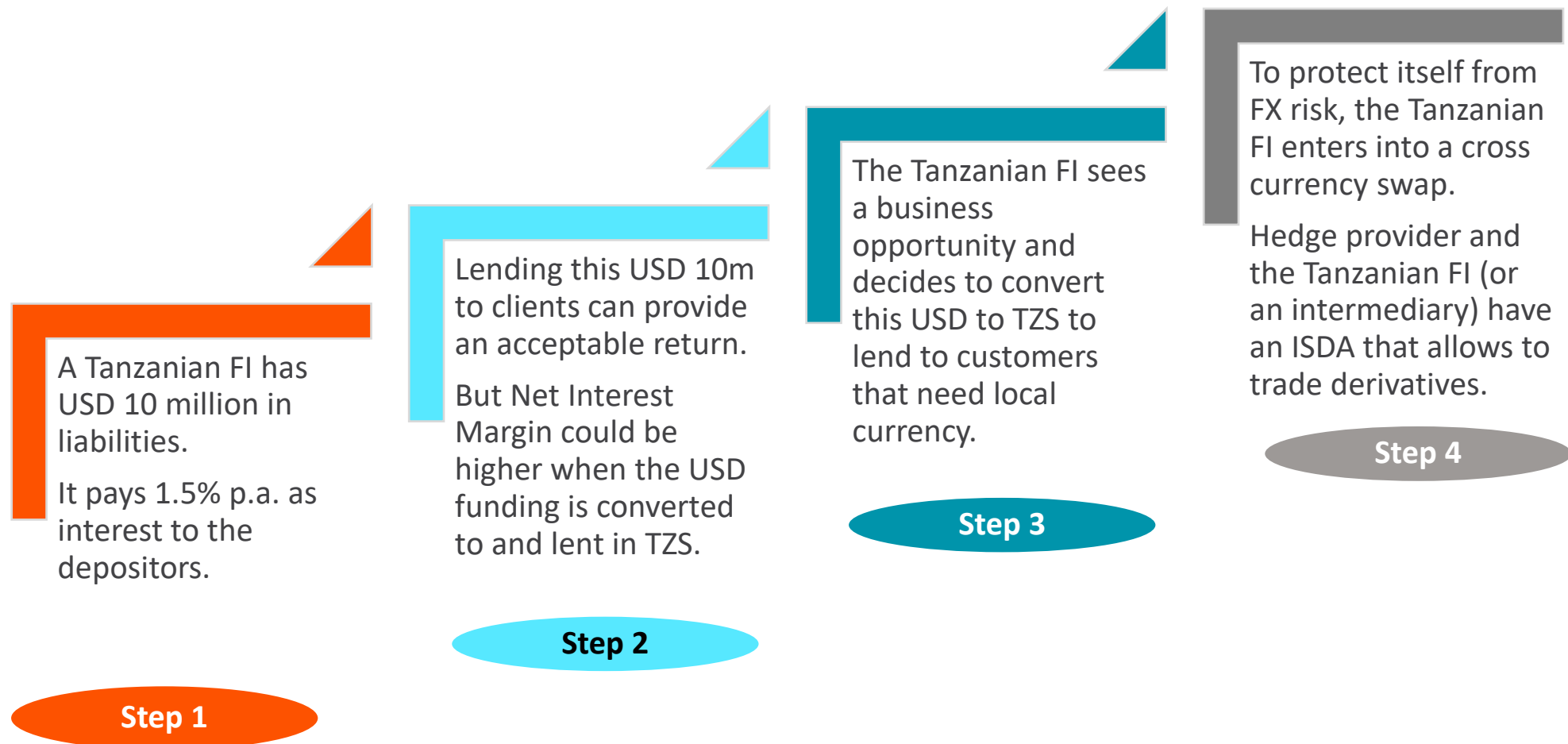




# Asset & Liability Management

# Hedging USD Liabilities (1/3)

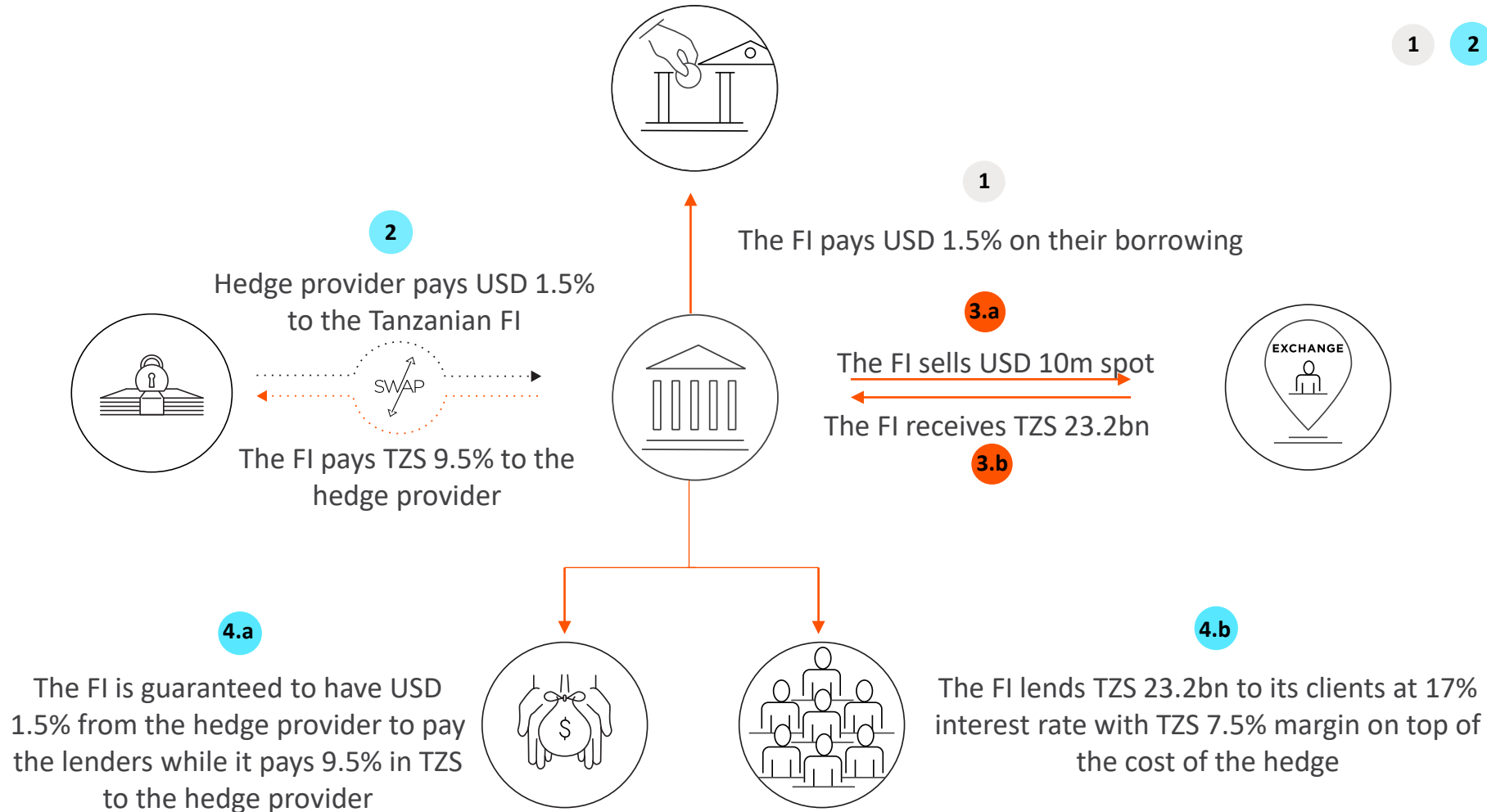
The rationale



# Hedging USD Liabilities (2/3)

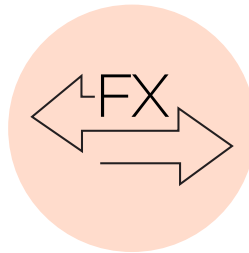
The rationale

- 1
- 2
- 3
- 4

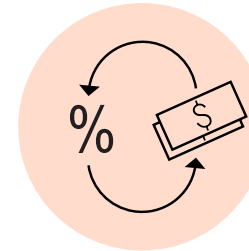


# Hedging USD Liabilities (3/3)

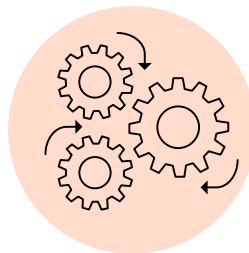
Converting USD deposits to TZS has advantages



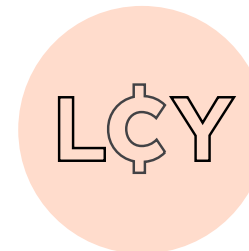
Avoid passing FX risk to end/retail clients



Increase financial return by arbitraging between currencies & optimizing the use of the USD liquidity



Increase the resilience of the entire chain



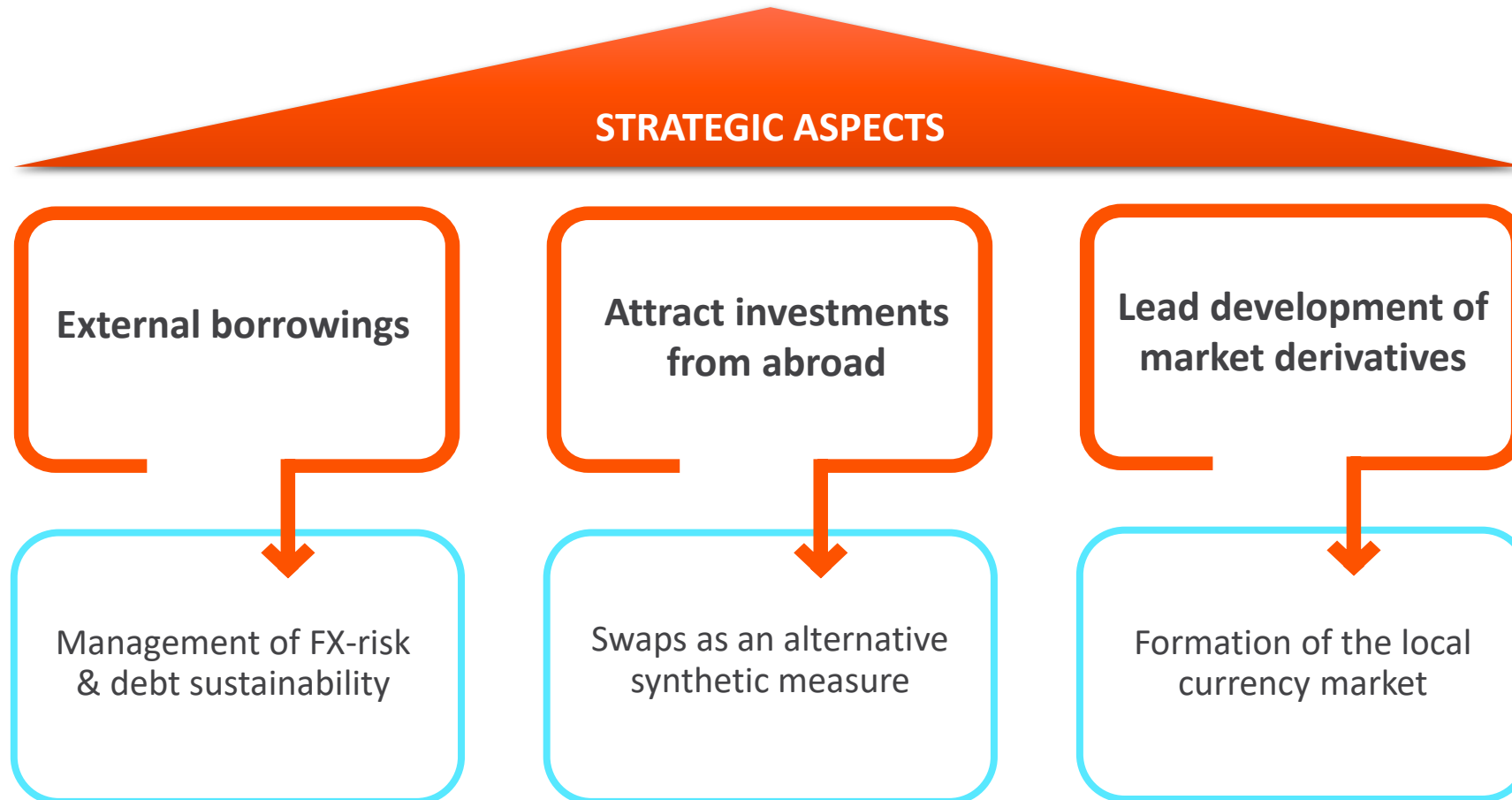
Reducing open FX exposure on the bank's balance sheet (regulatory)



## Public debt FX-risk management

# Public debt FX-risk management (1/2)

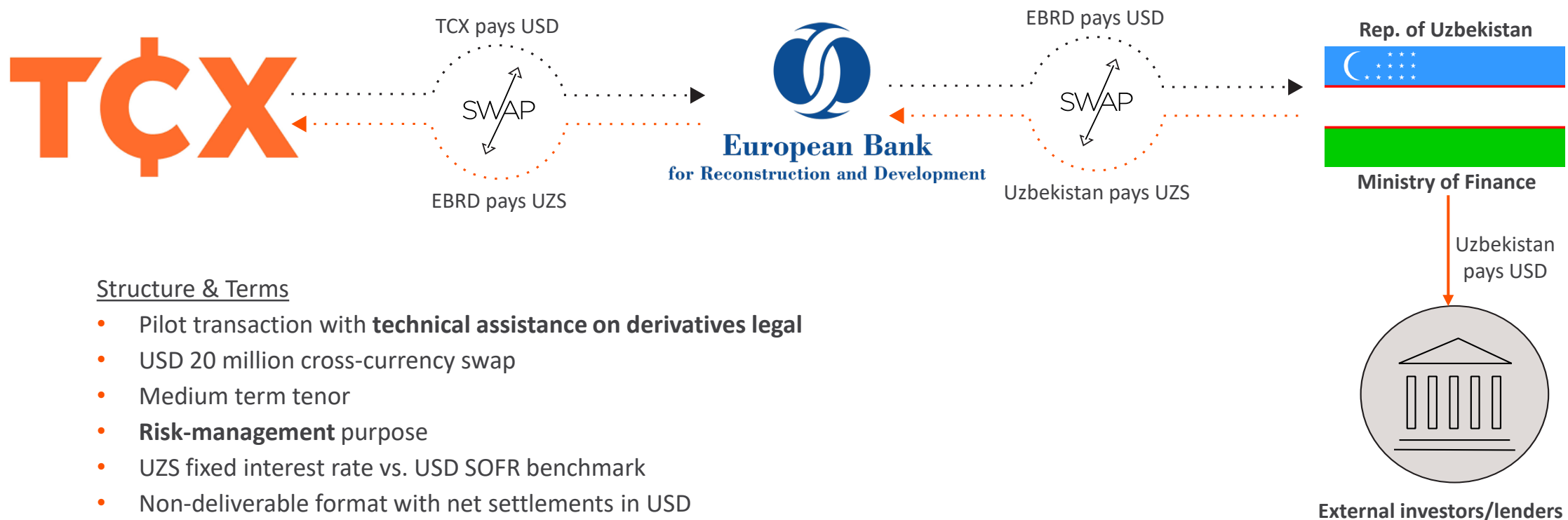
Converting USD debt into local currency



# Public debt FX-risk management (2/2)

Converting USD debt into local currency - Uzbekistan case-study

March 2022, TCX provided first pilot swap in Uzbekistan for the benefit of MoF and through EBRD (TCX's shareholder).



## Structure & Terms

- Pilot transaction with **technical assistance on derivatives legal**
- USD 20 million cross-currency swap
- Medium term tenor
- **Risk-management** purpose
- UZS fixed interest rate vs. USD SOFR benchmark
- Non-deliverable format with net settlements in USD



## Risks and advantages of hedging

# What are the risks of the synthetic loan?

## Fixing risk

- To convert LCY amounts in USD for settlements, hedging contracts use the central bank rate as reference.
- However, a local borrower sells LCY for USD using its bank's spot rate.
- There is always a difference between the central bank rate and a bank's spot rate that inevitably leads to a fixing risk for the local borrower.
- This is the so-called "fixing" or "slippage" risk, and it is generally borne by the local borrower.

## Convertibility risk

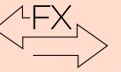
- Despite the cash flows being denominated in LCY, settlements occur in USD.
- The responsibility to sell/buy USD falls on the local borrower that needs to find liquidity in the local banking market.
- Should hard currency liquidity dry up, the local borrower might find it difficult to convert LCY in USD.
- This is the so-called "convertibility" risk, and it is borne by the local borrower.

# Advantages of hedging instruments

For a more sustainable system

## Financial system stability

Increase the financial sector resilience to FX shocks



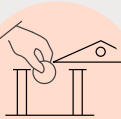
Promote sound business models and daunt speculation



Regulatory risk mitigation tool (Open FX exposure)



Non-deliverable swaps allow de-risking and FX reserves building-up concurrently

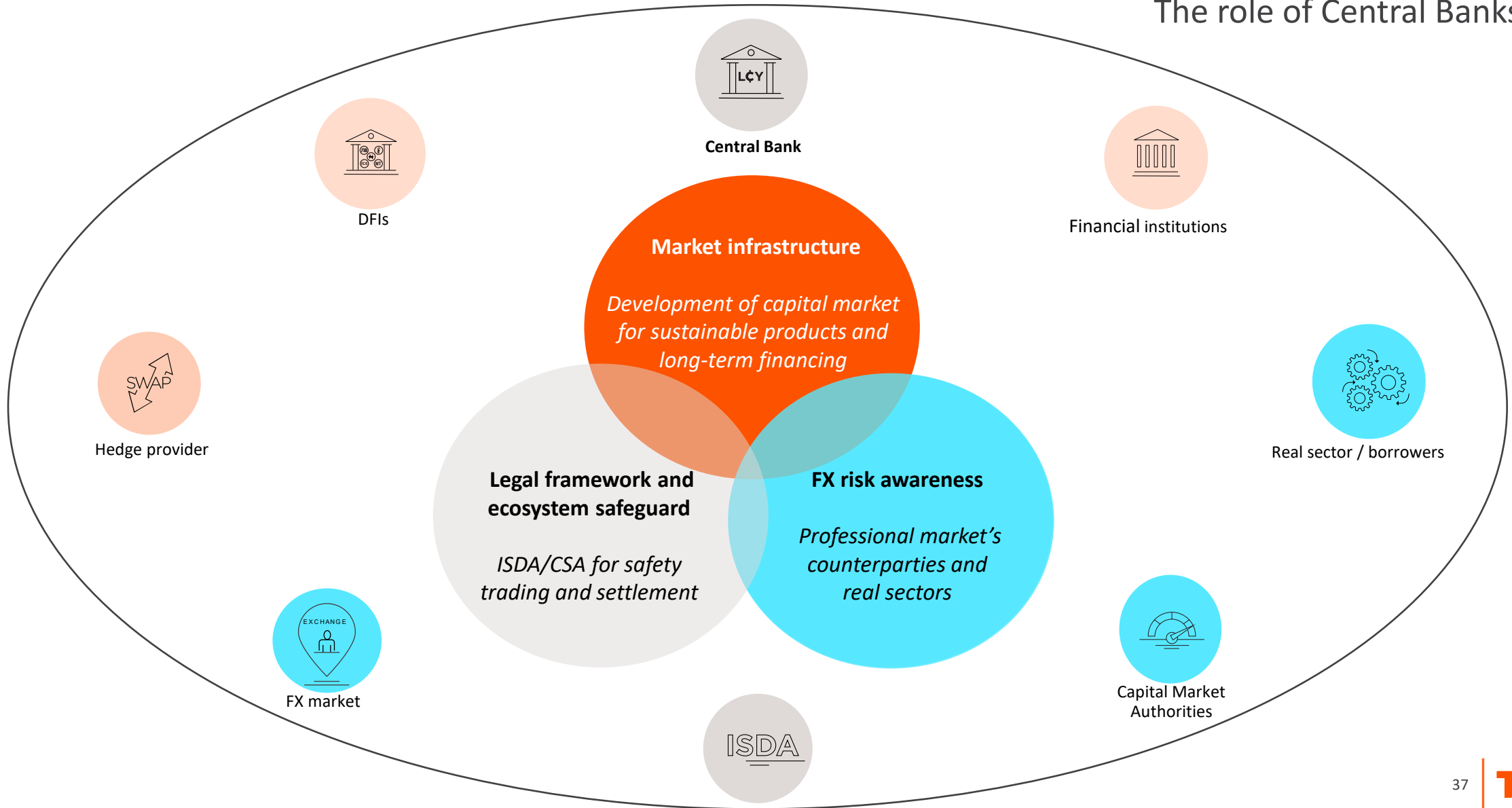




## Conclusion: The role of Central Banks

# Facilitate and enable the ecosystem

## The role of Central Banks



**TÇX**

**Q&A**



# Thank you

For questions and inquiries  
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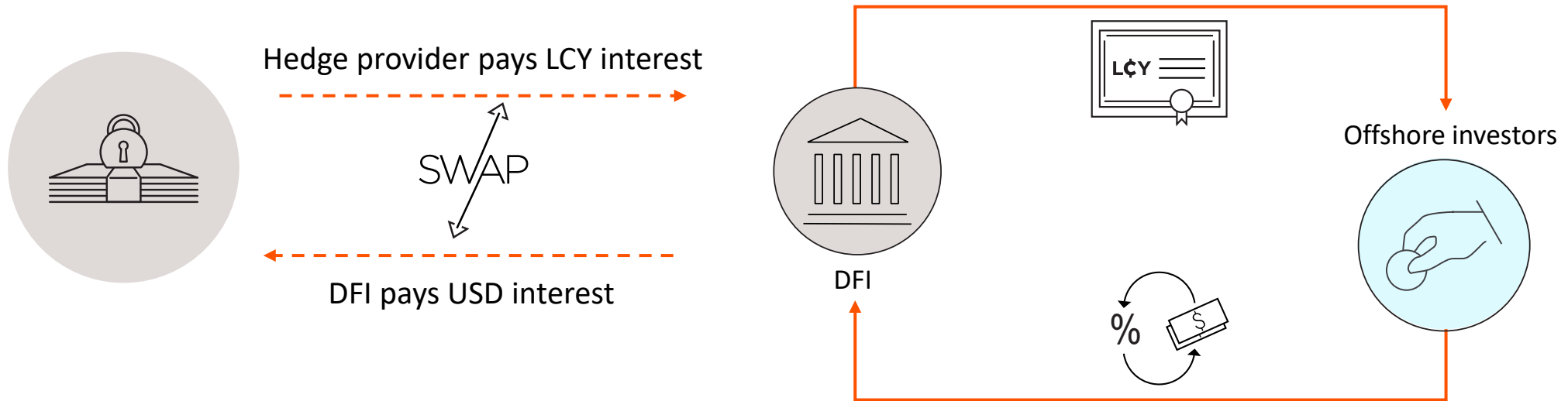
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# Annex

# Mechanism – Synthetic Note in LCY

- The DFI issues a **synthetic** note in LCY offshore
- Investors buy the note with a bank acting as arranger
- Principal amount & interest rate are denominated in LCY but all payments are and will be in USD



- The DFI receives the proceeds from the synthetic note in USD (*Principal Amount / Initial FX Reference Rate*)
- The DFI can use the USD proceeds of the notes for its operations for those sectors that requires USD