



# **Annual Report 2021**

A black and white photograph of a grand, multi-level staircase. The staircase features wide, light-colored stone steps and is bordered by ornate, dark-colored wrought-iron railings with intricate scrollwork. A large, square stone column with a decorative capital stands prominently in the foreground on the left. The background shows arched doorways and a high, vaulted ceiling with brickwork. The text "WELCOME TO TCX" is overlaid in the upper right quadrant, with "TCX" in orange.

WELCOME TO **TCX**

## Table of Contents

<b>TCX in 2021</b>	<b>4</b>
<b>Letter from the Supervisory Board</b>	<b>5</b>
<b>Letter from the Managing Board</b>	<b>9</b>
<b>Business Overview</b>	<b>24</b>
<b>Governance and Ownership</b>	<b>30</b>
<b>Financial Statements</b>	<b>40</b>
<b>Statement of financial position</b>	<b>41</b>
<b>Statement of comprehensive income</b>	<b>41</b>
<b>Statement of cash flows</b>	<b>42</b>
<b>Statement of changes in Net Asset Value</b>	<b>42</b>
<b>Notes to the financial statements</b>	<b>43</b>
<b>Significant accounting policies, estimates and judgments</b>	<b>68</b>
<b>In Control Statement</b>	<b>77</b>
<b>Depository Report</b>	<b>79</b>
<b>Independent Auditor's report</b>	<b>81</b>
<b>Members of the Supervisory Board</b>	<b>85</b>
<b>Members of the Managing Board</b>	<b>87</b>
<b>Members of the Pricing Committee</b>	<b>88</b>





# 1. TCX in 2021



# Letter from the Supervisory Board

## Dear Reader,

**Looking back at 2021**, the year can best be described as the Covid recovery year – at least from TCX’s point of view. And it seems strange to write about recovery whilst, at the time of writing, Europe is on fire following the invasion of Ukraine by Russia, but we will come back to that topic later in this letter. So, 2021 saw a stable start of the year, during which TCX continued to earn a healthy positive interest carry. Face masks, working from home, and self-testing had already become standard practice. However, the Supervisory Board and the Managing Board of TIM, the Fund Manager, still preferred physical to virtual meetings, and whenever possible in view the Covid restrictions, the Supervisory Board members travelled to Amsterdam to have on-site or hybrid meetings with the management team.

The Covid recovery translated into a record production of USD 1,367 million in 2021, that was partially offset by USD 351 million in capital market development transactions. We were satisfied to see that this offsetting activity was effective in preventing concentration risk, as the Fund Manager kept the top-10 currency exposures below 50% of the portfolio by focusing on the sale of currency risk where most risk had been onboarded. The Fund’s gross outstandings were just over USD 5 billion at year end.

An important milestone in the Fund’s ambition to stimulate markets was the launch of the TCX Frontier Currency Index (“TCX FI”), an index whose purpose is to increase the flow and transparency of information on frontier currency bonds as an asset class. This informational index tracks the performance of frontier currency bonds issued by TCX’s shareholders, where TCX acts as the hedge counterparty. At year end, the index reflected the value of 72 bonds in 20 currencies. The index is a passive recipient of exposure, as it mainly consists of currencies where TCX identifies opportunities to offset exposures in its books and stimulates the bond issuances. So, although maximizing return is not the main purpose, it was good to see that the TCX FI outperformed JP Morgan’s ELMI+ index by 4% on an annualized basis. This underlines the case that local currency bonds are an investable asset class.

In August, TCX received a long term foreign currency issuer rating of A1 with a stable outlook from Moody’s, in accordance with the rating agency’s supranational rating methodology. This initial rating of the Fund by Moody’s reflects “the solid support from its diverse group of mainly highly rated shareholders, which are also the main users of its services”. We believe that this assessment gives a good reflection of TCX’s function as a currency risk pooling vehicle for the world of development finance.

The Fund unfortunately saw two relatively large shareholders leave us in 2021. Both the Japan Bank for International Cooperation (JBIC) and the African Development Bank (AfDB) redeemed their shares, leading to an outflow of circa USD 94 million in capital. The AfDB’s exit resulted from changes in the regulatory and legal environment of Mauritius, which was the pass-through route chosen in 2008 for the AfDB to invest in TCX, due to their limitations on investing outside Africa. Also the final tranche of IADB’s subordinated loan was repaid in full during the year.

On the other hand, the Fund strengthened its capital base by drawing-down USD 20 million on the committed IDA private sector window investment from the IFC and EUR 50 million on the unfunded convertible subordinated loan that KfW manages as implementing partner for the European Commission’s European Fund for Sustainable Development. At the end of the year, we also welcomed a second investment of USD 10 million from SECO. Adding to these amounts the year’s profits of USD 107 million, the Fund’s total capital thus grew to USD 1.19 billion in 2021, an 8% increase over 2020.

In February 2022, the world witnessed with great dismay the invasion of Ukraine by Russia. The exposures of the Fund in Eastern Europe, the Caucasus, and Central Asia were hit hard and the Fund suffered significant losses. This is, however, the purpose of TCX: to take losses in times of crisis so the clients of our shareholders are protected. From this perspective, we are grateful to have played our role in limiting the destabilizing effects of the war on individuals and entrepreneurs in the region.

With regards to the targets approved by the 2021 Annual General Meeting of Shareholders, we are happy to report several highlights. Following the General Meeting's approval of the new risk framework and associated governance, adequate progress was made on all fronts. The internalization of the operational controls started. The IT security was strengthened. The setup of the Pricing Committee was improved, with the PC now clearly focusing on approving the currency benchmarks and NDF spreads, and the Fund Manager now clearly in charge of pricing individual transactions.

Following the presentation of the Africa strategy, the Supervisory Board was very satisfied with the results realized in the poorer regions of the world. Not only did the Fund's production in Sub-Saharan Africa increase by over 100% - well above the 20% target - but the production in IDA countries was USD 462 million, almost double the target of USD 240 million.

Less success was achieved on the innovation side, where only one transaction was closed with a crowd funding platform and, despite considerable efforts, no inflation indexed swap was executed. Also, putting the EC Pricing Facility at work took significantly more time than expected. Ultimately, only EUR 15 million out of the targeted EUR 50 million in transactions were closed by year-end.

From the oversight perspective, we refer you to the governance section of this Annual Report (page 34), which describes the Supervisory Board's organization and activities. In all, the Supervisory Board met 7 times during 2021, not counting the separate meetings of the Risk Oversight Committee, the Audit & Compliance Committee, and the Remuneration & Appointments Committee. Additionally, there were 11 meetings of the Pricing Committee appointed by the Supervisory Board, and 25 meetings of the Risk Management Committees appointed by TIM, the Fund Manager.

We agree with TIM's assessment (page 22) that there are no material uncertainties concerning TCX's ability to continue as a going-concern entity.

In the Netherlands, large corporates are requested to have at least 30 % women participation at managing and supervisory board levels. This is the translation of a diversity and gender balance policy that TCX fully supports. During 2021, two out of five Supervisory Board members were women. Also, four continents were represented on the Supervisory Board, reflecting the crucial importance of geographical diversity for TCX.

As stated above, the Fund realized a healthy positive result of USD 107 million in 2021. This brought the long term return to TCX's shareholders to Libor + 2,6% since the Fund's launch on 2007, against a long term target of Libor + 1,4%. At TCX, we prefer to speak about positive returns as reserves for future crises and available capital for new business. At the time of writing this report, we see that the invasion of Ukraine by Russia and the ensuing economic and financial sanctions have triggered a global crisis whose outcome is still unclear. What is clear, however, is that TCX is well positioned to protect the clients of its shareholders against the otherwise unmanageable volatility of their currencies.

On this note, we wish to thank the Fund Manager, the Pricing Committee and TCX's partners including DLM Finance, Cardano Risk Management, and OG Research for their outstanding work and support in 2021.

Amsterdam, 13 April 2022

### **The Supervisory Board of The Currency Exchange Fund N.V.**

Mr. Bernd Loewen, Chair

Mrs. Lakshmi Shyam-Sunder, Vice-chair

Mr. Aigboje Aig-Imoukhuede

Mr. Marcus Fedder

Ms. Sarah Russell

# A personal note from Mr. Bernd Loewen, departing Chair

**This is my last year as Chair of the TCX Supervisory Board**, after 8 years of Board membership. During this time, TCX managed to increase its primary portfolio from USD 1.3 billion in 2014 to USD 3.3 billion in 2022, an increase of over 250%. Over the same period, the hedge ratio improved from 9% to 40% of the primary portfolio, a development that conserved much capital and could expand even further in the future.

Another milestone was the introduction of the TCX Frontier Currency Index just last year. This increases transparency for all market participants and makes great use of the data available to TCX. Looking forward, I see increased attention being placed on SE4All transactions, exploring business opportunities with sovereign borrowers, and identifying demand for and implementing further innovative products. That said, the core product must stay the course with nearly unlimited room to grow further. Given the overall market size of local currency mismatches caused by development finance, TCX does still classify as a start-up.

I would like to thank my colleagues on the TCX Supervisory Board, the management team and employees of TIM as well as all TCX stakeholders and partners for working together and so far succeeding in realizing the common vision of TCX. And I would especially like to thank our shareholders and investors for the trust they have placed in us. Also, I am very pleased that my successor as a Supervisory Board Member will be Tim Armbruster, the Treasurer of KfW, and that Lakshmi Shyam-Sunder will take over as Chair. Together with colleagues Sarah Russell, Aigboje Aig-Imoukhuede, and Marcus Fedder, the Supervisory Board will continue to be in very safe, professional, and seasoned hands.

I believe that the coming years will continue to be ground-breaking for TCX and I am convinced that together we have laid a strong foundation for its future.

I thank you all and wish you the best.

**Bernd Loewen**



Brice Ropion, Dina Yaminova, Santiago Tavani, Irina Rogojan





# Letter from the Managing Board

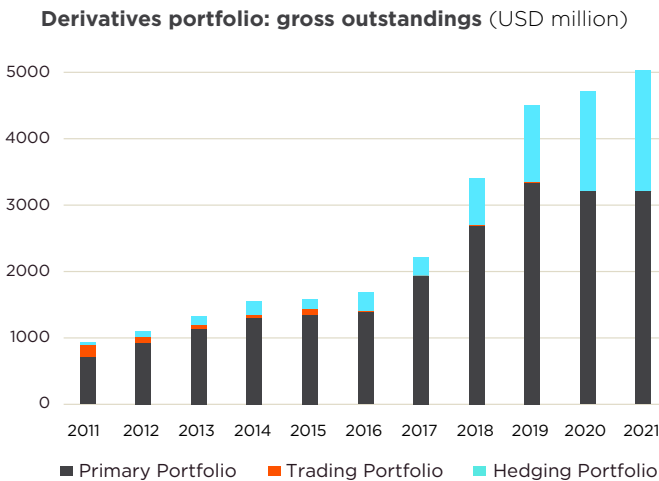
## Results 2021

### Portfolio size: gross outstandings

TCX's gross derivatives outstandings (total of its long and short positions) grew 7% in 2021, from USD 4.75 billion at year-end 2020 to USD 5.07 billion at year-end 2021, as shown below:

Investment type (USD millions)	Long positions		Short positions		Gross outstandings (Long+Short)		Net Exposure (Long-Short)	
	2021	2020	2021	2020	2021	2020	2021	2020
Primary book	3,180	3,076	47	153	3,227	3,229	3,133	2,923
Trading book	0	0	0	0	0	0	0	0
Hedging (LCY:USD)	36	12	1,257	1,117	1,293	1,129	-1,221	-1,105
<b>Total LCY portfolio</b>	<b>3,216</b>	<b>3,088</b>	<b>1,304</b>	<b>1,270</b>	<b>4,520</b>	<b>4,358</b>	<b>1,912</b>	<b>1,818</b>
Hedging book (EUR:USD)	515	355	30	36	545	391	484	320
<b>Total TCX portfolio</b>	<b>3,730</b>	<b>3,443</b>	<b>1,334</b>	<b>1,305</b>	<b>5,065</b>	<b>4,749</b>	<b>2,396</b>	<b>2,138</b>

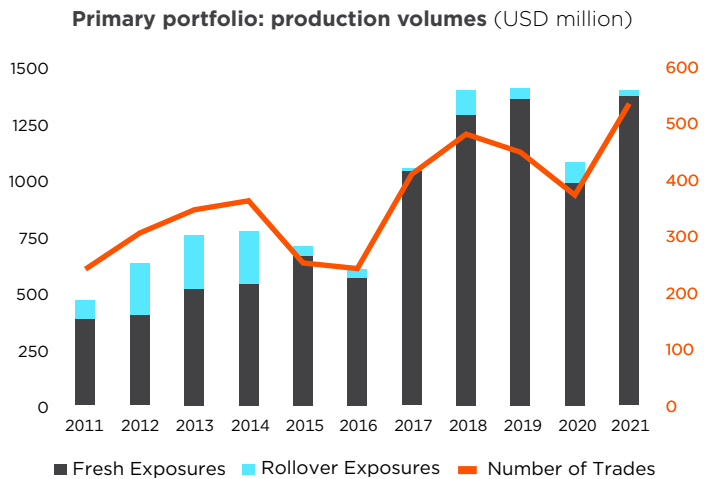
Excluding the EUR:USD Hedging book whose purpose is to manage part of the EUR risks that arise on around a third of the Primary book, the portfolio outstandings grew 4% to USD 4.52 billion. This local currency portfolio was spread across 1,356 trades in 55 local currencies (2020: 1,323 trades and 55 currencies), including USD 3.23 billion in Primary Investments and USD 1.29 billion in Hedging Investments.<sup>1</sup> The graph below shows the historical trend:



<sup>1</sup> | Primary Investments are medium- to long-term local currency swaps and forwards transacted with TCX investors and select third-parties in relation to real underlying economic activities (speculative positions are not allowed). These investments consist, for the most part, of long local currency positions that hedge local currency loans to local borrowers, though short positions are possible as well (to hedge the FX risks, for example, of offshore entities that earn hard currencies but enter into long-dated contracts to pay for local goods and services in local currency). For diversification and concentration/risk management purposes, TCX also invests in derivatives with investment banks and professional counterparties. Where the purpose is portfolio diversification, the trades are classified as Trading Investments. Where the purpose is managing concentrations and mismatches in the Primary Investments portfolio, the trades are classified as Hedging Investments. The latter include the short local currency trades that TCX closes in relation to local currency bonds issued by TCX's investors to institutional and other investors, which serve to stimulate the development of local capital markets.

### Primary book

The Primary production jumped 39% from USD 985 million in 2020 to USD 1.37 billion in 2021, the most ever in TCX’s history. This increase reflects the strong recovery in loan supply and demand following the sharp downturn caused by the Covid crisis.



The record-breaking Primary production was spread across 51 currencies in 534 transactions. Especially noticeable was the production in Sub-Saharan Africa, which more than doubled compared to 2020:

**Primary portfolio: production volumes by region (USD mln)**

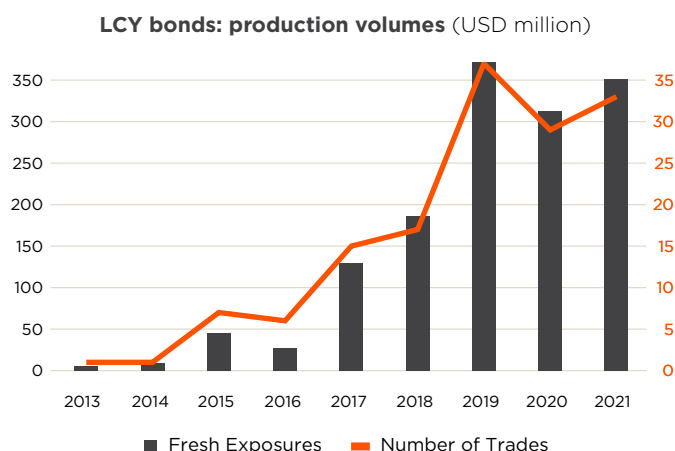
Region	2021	2020	Change in %
Europe / Central Asia	584	409	43%
Sub-Saharan Africa	386	187	106%
Asia	173	169	3%
Latin America	158	89	78%
Middle East North Africa	65	130	-50%

Despite the increase in Primary production, the Primary portfolio outstandings did not grow during 2021 and ended the year flat at USD 3.23 billion. Apart from the usual level of scheduled redemptions, this reflects the large number of trades that were partially or fully unwound during the year in response to the Covid crisis.

### Hedging book

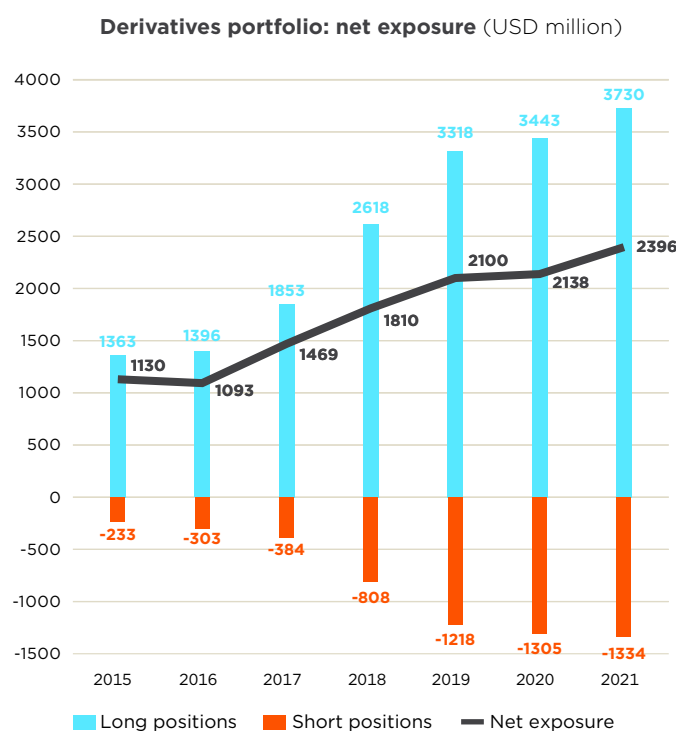
The local currency Hedging book outstandings grew 15% in 2021, reaching USD 1.29 billion or 40% of the Primary book outstandings (2020: 35%). This achievement reflects the team’s continuing success in offsetting the Fund’s long Primary positions, and thus reduce concentrations, release capital, and increase the capacity for closing fresh Primary transaction.

In total, USD 704 million in local currency Hedges were closed during the year, amounting to 51% of the Primary production. This includes USD 351 million related to bond issuances by TCX’s investors, a 12% increase relative to 2020. These capital market development transactions - which TCX actively stimulates and helps structure through direct interaction with the bonds’ issuers and buyers - were spread across 14 currencies in 33 transactions:



## Portfolio size: net exposures

TCX's net derivatives exposure (its long positions minus its short positions) grew 12% year-on-year, reaching USD 2.4 billion at year-end 2021. This increase was driven by an 8% increase in the notional size of the long book, and a 2% increase in the notional size of the short book:

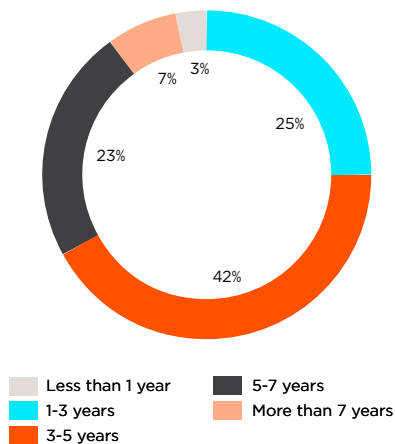


Included in the short book are the derivatives related to the bond issuances by TCX's investors. This portfolio grew from USD 833 million in 77 transactions and 21 currencies in 2020, to USD 843 million in 80 transactions and 27 currencies in 2021 (+4% by amount and +1% by volume).

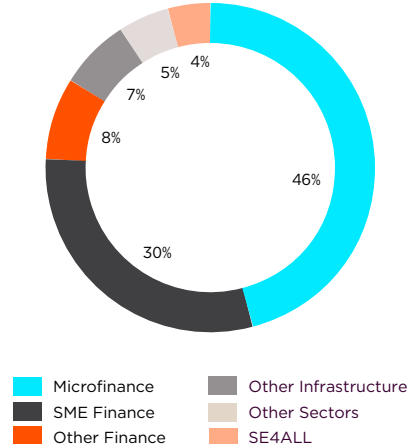
## Portfolio profile

In 2021, as shown below, the maturity profile of the Primary portfolio remained relatively stable, with 72% of the gross outstandings having an original maturity of 3 or more years (2020: 75%). At the same time, the sector diversification shifted towards the SME sector (30% in 2021 vs. 22% in 2020) at the expense of the microfinance sector (46% in 2021 vs. 49% in 2020) and the other sectors (24% in 2021 vs. 29% in 2020).

Primary portfolio: original maturity profile  
(% gross outstandings)



Primary portfolio: sector diversification  
(% gross outstandings)

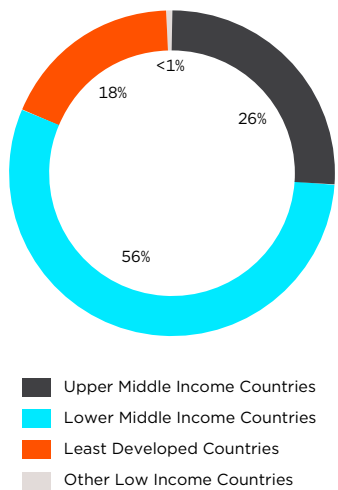


Within the ‘other’ category, the share of the non-financial segments (SE4ALL, infrastructure, etc.)<sup>2</sup> remained flat at 16% of the portfolio, with a small decrease in the number of deals outstanding:

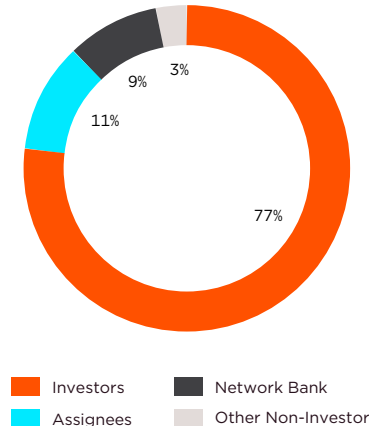
	Primary portfolio					
	SE4ALL		Other infrastructure		Other sectors	
	2021	2020	2021	2020	2021	2020
Gross outstandings (USD mln)	132	155	236	179	145	178
% of portfolio	4%	5%	7%	6%	5%	5%
Number of deals outstanding	46	46	22	18	38	55

In terms of Development Assistance Committee (DAC) country classification, the proportion of the Primary Investments portfolio allocated to the least developed and lower income countries increased from 70% of the portfolio in 2020, to 74% in 2021:

Primary portfolio: country classification  
(% gross outstandings)



Primary portfolio: counterparty types  
(% gross outstandings)

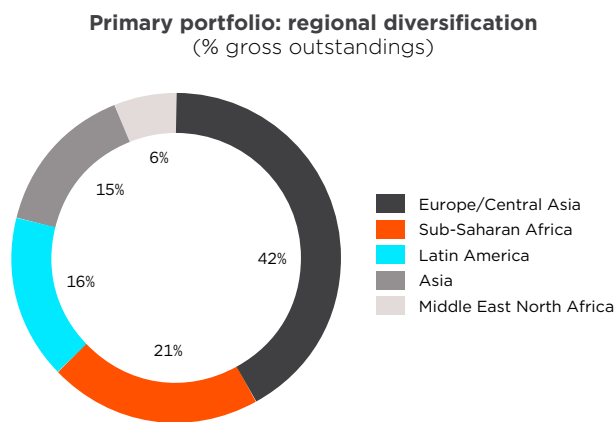


2 | SE4ALL = Sustainable Energy For All

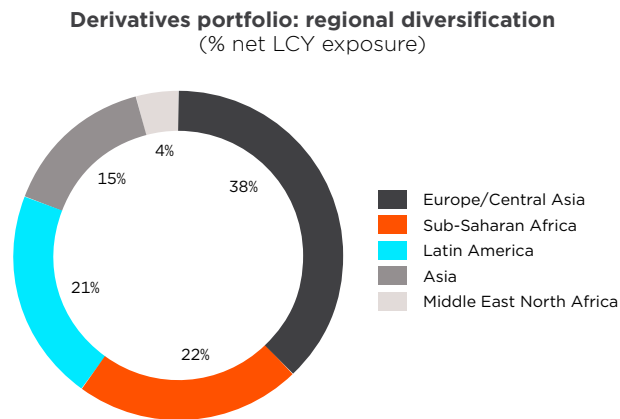


Per type of counterparty, 88% of the Primary portfolio is investor-related. The balance is sourced from international banks and other parties. This deal-flow diversifies the currency mix of the portfolio and enhances TCX’s development impact, notably by contributing to achieving specific development objectives targeted by the Subordinated Convertible Debt investors (e.g., Sub-Saharan Africa, SE4ALL, etc.).

In 2021, the regional mix of the Primary portfolio outstandings saw Sub-Saharan Africa’s share increase to 21% (2020: 18%) and Asia’s share to 15% (2020: 14%). This result came at the expense of Latin America’s share, which decreased to 16% (2020: 19%) and the Middle East North Africa region, which decreased to 6% (2020: 7%). Europe/Central Asia remained the same at 42% as the portfolio’s largest region.



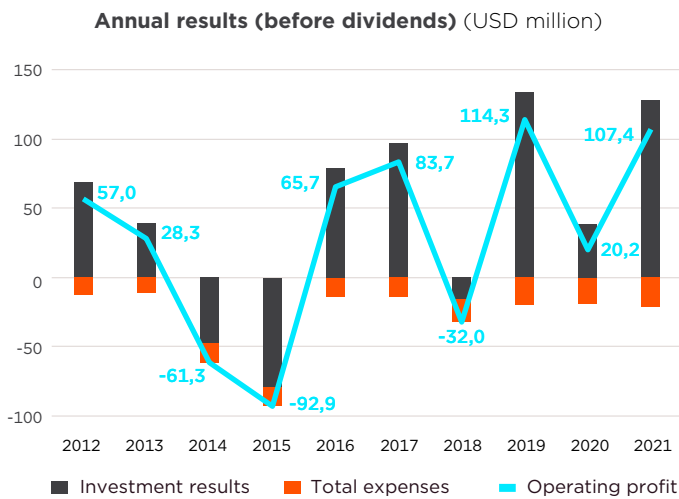
Looking at the regional mix of the net exposures in the total local currency derivatives portfolio (which is the basis for setting the regional currency limits), Latin America’s share decreased to 21% (2020: 22%), Middle East North Africa to 4% (2020: 6%) and Sub-Saharan Africa to 22% (2020: 24%), whereas Asia and Europe/Central Asia increased to 15% and 38%, respectively (2020: 14% and 34%).



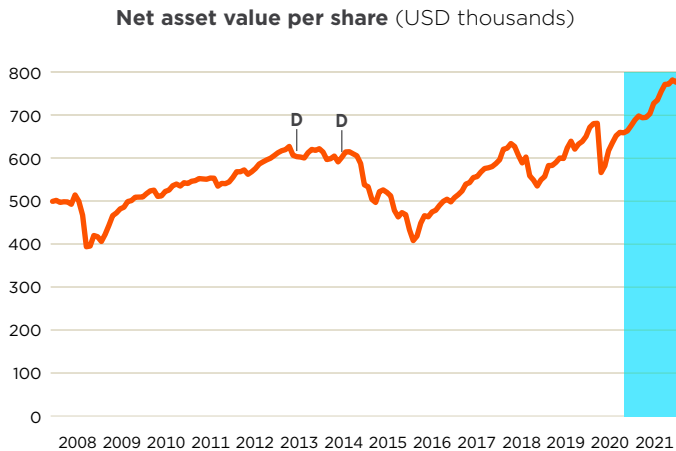
## Financial results

The net result for 2021 was a profit of USD 107.4 million, including an investment gain of USD 128 million (after FX translation effects) and USD 21 million in operational expenses and financial charges.

- The primary driver of the investment gain of USD 128 million was the positive interest carry in TCX's derivatives book. This was partially offset by losses due to FX movements and local interest rate (curve) movements.
- The operational expenses<sup>3</sup> increased from USD 12.6 million (0.21% of Assets Under Management) in 2020, to USD 14.7 million in 2021 (0.23% of AUMs<sup>4</sup>).
- The financial charges consisted primarily of USD 5.6 million in amounts due on the Subordinated Convertible Debt (2020: USD 5.4 million).



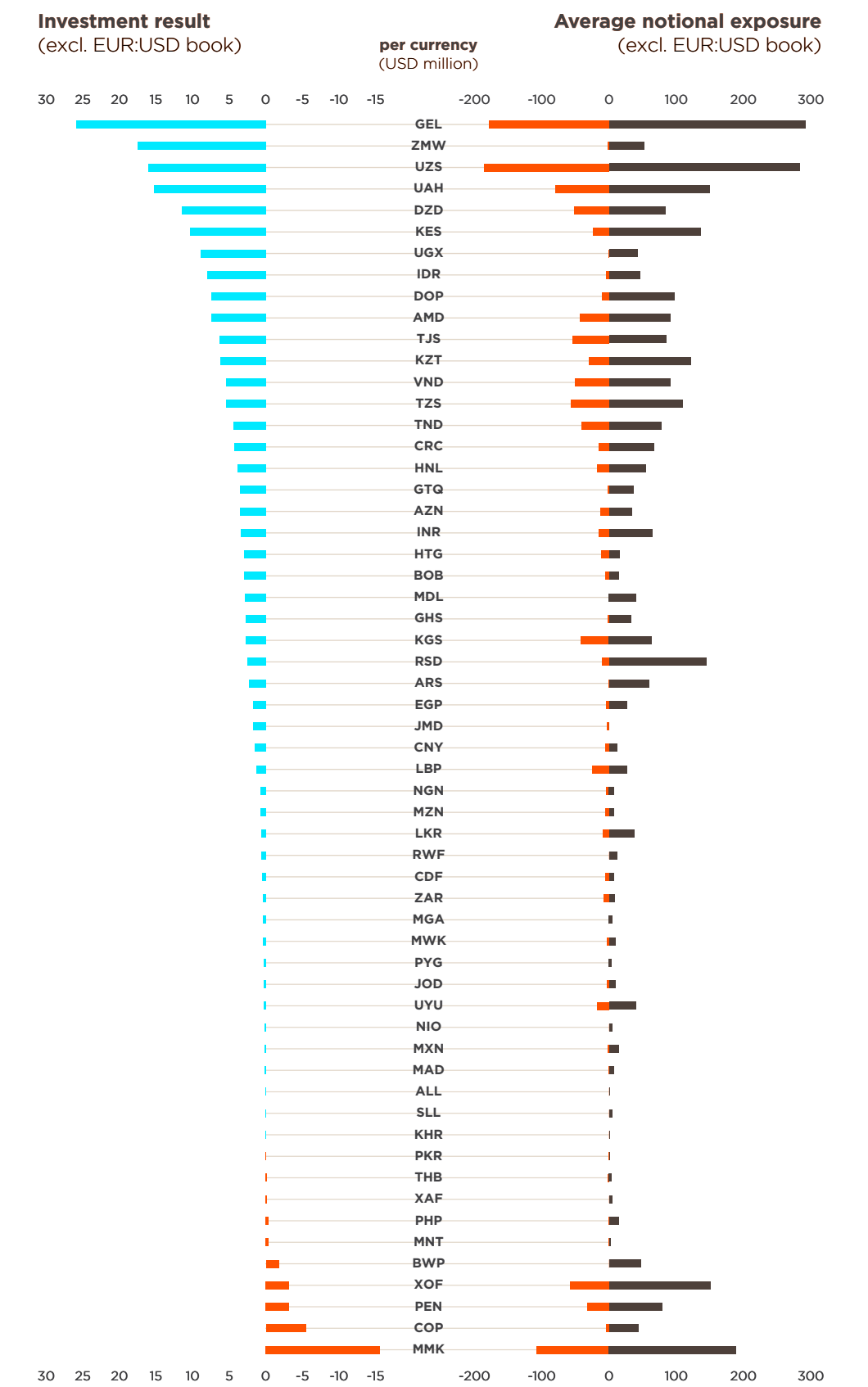
Reflecting the year's strong results, the Net Asset Value per share grew by 15% year-on-year, from USD 687,586 per share at year-end 2020 to USD 787,503 per share at year-end 2021:



<sup>3</sup> | Includes the management and performance fees paid to the Fund Manager, plus TCX's internal costs.

<sup>4</sup> | The AUMs are as defined under the Alternative Investment Fund Management Directive and are essentially equal to the fair market value of TCX's non-derivative assets plus the gross notional size of the derivatives portfolio. The AUMs at 31 December 2021 totaled USD 6.3 billion (2020: USD 6 billion).

○ In 2021 the net gains and average long and short outstandings per currency were as follows:<sup>5</sup>



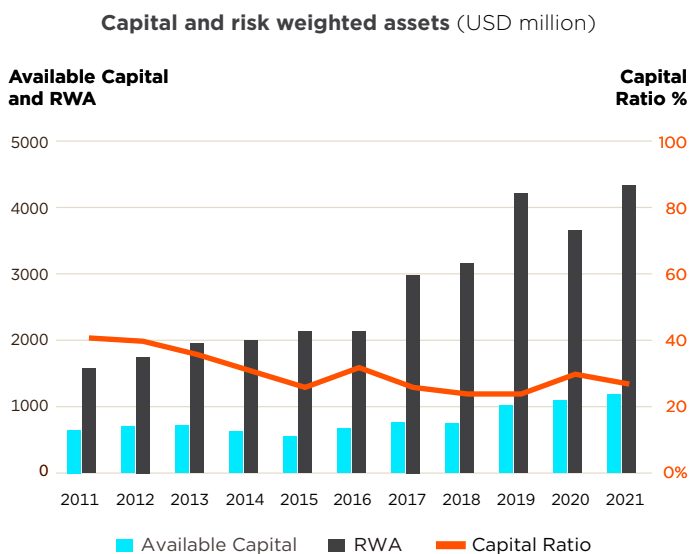
5 | See Note 22 for details on the realized and unrealized results on the derivatives portfolio

## Capital management

The available capital grew 8%, from USD 1.10 billion at year-end 2020 to USD 1.19 billion at year-end 2021. The increase was primarily driven by:

- the year's retained earnings (USD 107.4 million), plus
- USD 20.1 million for 29 A-shares issued to the IFC for its own account and on behalf of the International Development Association (IDA)<sup>6</sup>, plus
- USD 10 million in funded Subordinated Convertible Debt issued to the State Secretariat for Economic Affairs of Switzerland (SECO), plus
- EUR 50 million in unfunded Subordinated Convertible Debt issued to KfW on behalf of the European Commission,<sup>7</sup> less
- USD 93.8 million to redeem the entire shareholdings of JBIC (USD 57.8 million for 84 A-shares originally purchased in 2010) and AfDB (USD 36 million for 49 A-shares originally purchased in 2008).

The capital ratio (available capital to risk weighted assets) decreased to 27.4% at year-end 2021, compared to 29.9% in 2020. This reduction was caused by the faster growth in the risk weighted assets (+19% to USD 4.4 billion) than in available capital (+8% to USD 1.19 billion).



Market risks (FX and interest rate risks) accounted for 92.9% of risk weighted assets at year-end 2021 (2020: 90.9%), operational risks 5% (2020: 5.7%), and credit risks 2.1% (2020: 3%).

<sup>6</sup> | Second tranche of a USD 50 million facility that TCX may draw over time (no fixed period), subject to achieving certain volume targets in countries targeted by the IDA's Private Sector Window Blended Facility. The total drawn at year-end 2021 was USD 34.6 million.

<sup>7</sup> | Second tranche of a 15-year EUR 145 million Capacity Facility that TCX may draw upon till November 2024, subject to achieving certain volume targets in Sub-Saharan Africa. The total drawn at year-end 2021 was EUR 80 million. For additional information, see Note 20 to the Financial Statements ("EC Capacity Facility")





## Recent Developments

### EC Market Creation Facility: Pricing Component

In February 2021, TCX closed the Pricing Component of the Market Creation Facility it negotiated with the European Fund for Sustainable Development of the European Commission (“EFSD”) in parallel with the EC Capacity Facility. The implementing partner for this second EC facility (the “EC Pricing Facility”) is KfW as well (see Notes 20 and 21).

The purpose of the EC Pricing Facility is to provide financial institutions based in Sub-Saharan Africa and the European Neighborhood with enhanced access to synthetic local-currency borrowings, and to address short- and medium-term funding requirements triggered by the ongoing pandemic in these regions (whilst not exposing the borrowers to currency risk). With the support of this program, TCX can offer price discounts in currencies where TCX’s risk-based pricing does not work due to structural impediments (e.g., caps on lending rates). By doing so, the program aims to contribute to the stabilization of institutions and to create local-currency lending capacity when and where most needed.

In total, EUR 20 million is available for TCX to claim from the EFSD (through KfW) under the program, in case the actual return on the portfolio of discounted deals does not meet a threshold return of at least 2.5% per annum (the claims will be made annually in arrears, in relation to the deals that mature each year, so the actual return is known).

During 2021, TCX closed 12 deals under this program. The earliest maturity date is 2024, meaning that the earliest possible time for filing a claim will be in early 2025.

### TCX Frontier Index

In April 2021, with the support of KfW on behalf of the German Federal Ministry of Economic Cooperation and Development (BMZ, an investor in TCX), TCX launched the TCX Frontier Index (“TCX FI”), an index that tracks the performance of Eurobonds linked to frontier currencies and issued by development finance institutions with the support of TCX.

The objective of this informational index (the index is not tradable) is to increase transparency around frontier currency fixed income instruments and support the growth of local capital markets.

At year-end 2021, the index included 72 bonds in 20 frontier currencies where TCX acted as hedging counterparty to the issuer. The proceeds from these bond issuances fund institutions whose mission is to create impact in developing countries whilst applying the highest environmental, social, and governance (“ESG”) standards in the industry. Settled in Euros or US Dollars, the bonds provide an accessible route to frontier currency exposure with minimal credit risk and no transfer and convertibility risks. TCX calculates the bond’s prices from the valuation of the related hedges in its books.

The TCX FI has a dedicated dashboard on TCX’s website. This may be viewed at the following address: <https://www.tcxfund.com/tcxfi>

### Internalization of the risk management functions outsourced to Cardano Risk Management B.V.

At the May 2021 Annual General Meeting of TCX, the Fund’s shareholders approved a proposal to internalize the functions delegated to Cardano Risk Management B.V. since the Fund’s launch in 2007. These outsourced functions include quantifying, monitoring, and reporting the Fund’s risk exposures and capital ratios, and providing pricing, trading, valuation, and operational control services to the Fund. The proposal to internalize these functions was rooted in the view that TCX is a risk management business that has become complex and sizeable enough to justify taking this step in the interest of TCX’s investors.

This risk internalization and optimization project will last through 2022 and 2023. It will be led by the new CRO hired in November 2020 and will gradually involve the following changes to the existing set-up:

- Expanding the risk management team to include enterprise, market, counterparty, and operational risk management experts;

- Institutionalizing an Enterprise-Wide Risk Management (ERM) approach to managing the risks faced by TCX and refining the mandates and composition of the RISKCO committees to align with this framework;
- Acquiring and implementing a new risk system that interfaces with the back-office and front-office systems;
- Internalizing within the Fund Manager the risk measurement, reporting, monitoring, and control activities performed by Cardano Risk Management B.V.; and
- Internalizing within the Fund Manager and the Fund's Administrator and Valuer (DLM Finance B.V.) the operational and valuation controls performed by Cardano Risk Management.

During 2021, the Fund's day-to-day risk management and control was largely unchanged relative to the previous period and effectively performed by the Fund Manager's COO (who was the previous CRO) and Cardano Risk Management B.V., given that the new CRO and the nascent internal risk organization were entirely focused on recruiting staff, selecting a risk system, and elaborating the future risk management framework.

Inevitably, an outcome of the project will be that changes will be made to the Fund's processes, which will require adjusting the control framework and the tests of the controls' adequacy and effectiveness by the 2nd and 3rd lines of defense. However, the changes to the processes will primarily involve changing who does the work (rather than the work to be performed), and will always respect the existing risk management principles, notably the separation of (i) the business, risk, and oversight functions; (ii) the system and model



Allie Yu

development, testing, and ‘promotion to production’ functions; and (iii) the user access and data entry, verification, approval, and reconciliation functions. Consequently, we do not expect that the forthcoming changes will lead to any increase in TCX’s risk profile, and rather expect that TCX will benefit significantly from internalizing and optimizing the risk management function as proposed.

### **Dissolution of TCX Investment Company Mauritius Limited**

In June 2021, following changes to the laws of the Republic of Mauritius, AfDB, FMO, and Oikocredit as co-owners of TCX Investment Company Mauritius Limited (TCXM) decided to dissolve TCXM as a vehicle for their indirect holding of 108 TCX shares (49 in the name of AfDB, 49 in the name of FMO, and 10 in the name of Oikocredit). As a consequence of this decision, TCX repurchased from TCXM all the shares that it held on behalf of AfDB, and transferred from TCXM to FMO and Oikocredit all the shares that it held on their behalf. These transactions severed all connections between TCX and TCXM (effective 1 July 2021), with TCX (and the Fund Manager) having nil residual obligations or liabilities towards this firm.

### **Credit ratings**

In August 2021, Moody’s assigned an “A1, stable outlook” credit rating to the Fund. This was the first time Moody’s issued a credit rating for TCX.

In April 2022, Standard & Poor’s re-confirmed TCX’s credit rating as “single-A with a stable outlook”.

### **Development impact and SFDR disclosure**

In November 2021, TCX introduced a new section to its website to showcase the Fund’s development impact. The content includes TCX’s “Theory of Change” and an interactive dashboard that provides monthly updates on TCX’s efforts to de-risk and stimulate the growth of the emerging and frontier markets it serves. The updates include, inter-alia, data on TCX’s research activities, the size of the portfolio, its breakdown per currency and sector, and whether the trades relate to loans or bond issuances.

Also included is TCX’s Impact Report, an annual publication that supplements the data in the dashboard with estimates of the Fund’s environmental and social (“E&S”) impact on (i) male and female jobs created, (ii) value added in the form of incremental salaries, profits and taxes, and (iii) gigawatts of energy generated and kilotons of green-house gas emissions avoided. These estimates are produced using a Joint Impact Model developed by Steward Redqueen, a specialised consultancy that works across the globe advising organisations on impact and sustainability. This model was developed in close collaboration with several development finance institutions, including several TCX investors.

Notwithstanding the above, it is important to note in the context of Regulation (EU) 2019/2088 of the European Parliament and the Council (the Sustainable Finance Disclosure Regulation or “SFDR”), that the returns on TCX’s portfolio are a function of global FX and interest rate movements, not E&S factors. In addition, as a financial services provider that is often several layers removed from the parties that ultimately benefit from the hedges it provides, TCX is not in position to compile auditable data on the E&S impact of the activities that underlie its business. Accordingly, we stress here that the E&S measures in the Impact Report do not enter into TCX’s investment decision-making processes as ex-ante inputs to try and achieve specific E&S targets. They are ex-post estimates provided for information purposes only.

TCX thus classifies as an Article 6 financial product under the SFDR, meaning that the investments underlying TCX as a financial product do not take into account the EU criteria for environmentally sustainable economic activities,

For additional information and a more detailed SFDR disclosure, please see <https://www.tcxfund.com/our-impact/>.





## Other Ongoing Challenges

### Impact of the Covid and Ukraine crises and going-concern representation

Although the Managing Board expects that the continuing Covid crisis and Ukraine war will have a significant impact on TCX during 2022 and uncertainties exist concerning our assessment of this impact, we have at this time no material uncertainties concerning TCX's ability to continue as a going-concern entity.

This conclusion is based on the Fund's strong capitalization and liquidity and the continuing absence of material operational issues. We appreciate that the pandemic is not over yet and economic, geo-political, and cyber-security pressures are still escalating that may cause extreme volatility and sustained losses for TCX. At the same time, we note the following:

- The Fund is capitalized to withstand tail-risk scenarios, with a Liquidation Trigger set at 14% of Risk Weighted Assets, a redemption gate set at 18%, and remedial management action starting at 20%. In contrast, the capital ratio at year-end 2021 was 27.4% of RWAs, with the Available Capital standing at USD 1.19 billion. At this level of capital, based on the portfolio at year-end 2021, TCX could sustain a loss of USD 583 million (13.4% of RWAs) before causing a Liquidation Trigger Event. This amount is 4.6 times the record-breaking monthly loss TCX experienced in March 2020 at the start of the Covid crisis (USD 128 million), 2.6 times the "12-month diversified risk" (or potential annual loss) estimate reported at year-end 2021 (USD 223 million), and 1.15 times the extreme loss TCX might experience in a "twice Lehman 2008" scenario (USD 507 million based on the 2021 ICAAP report). These multiples demonstrate that entering 2022, TCX's capital position was robust and capable of supporting substantial future volatility and growth at the same time.
- In addition, we note that TCX had ample liquidity at year-end 2021, with USD 1.14 billion (81% of the balance sheet) held in the form cash, cash-equivalents, and highly-rated marketable securities to cover future expenses, settlement payments, and collateral needs.

### Business development issues

As we have in previous years, we re-iterate here some of the key business development issues we face when trying to expand TCX's portfolio and development impact:

- The choice for local currency funding to match assets earning local currency is often based on short-term financial considerations ("how much will it cost me now?") rather than forward-looking risk management ("how much more could I lose later?"). As a result, many end-clients mistakenly perceive as attractive the low interest rates prevailing in hard currencies and continue to borrow in these currencies instead of local currencies. This often acts as a damper on TCX's growth.
- In many economic sectors, TCX faces long-standing structural impediments to realizing its development impact. An example is the energy sector where most of the underlying commercial contracts are denominated in US dollars and the risk is off-loaded to the end-clients. Another example is the infrastructure sector, due to the large amounts and long tenors required. Penetrating these sectors requires patient work to explain to the lenders, borrowers, regulators, and governments involved that local currency arrangements may be better suited.
- As a market risk vehicle, TCX is not in a position to absorb a significant amount of the credit and country risks that inevitably arise when investing in emerging and frontier markets. The Fund is dependent, therefore, on the ability and willingness of strong parties to face these risks, either as counterparties to TCX or as guarantors of its exposures.
- As the Fund increasingly operates as a warehouse of local currency risks (by on-selling to the market the exposures that it onboards when hedging the loan books of its counterparties), TCX becomes more dependent on the market's appetite for

frontier currency risk. In the past, we have seen that periods of risk adversity towards frontier markets can result in an inability to offset the Fund's long positions. In these circumstances, the Fund's capital usage intensifies and its growth buffer shrinks. This reinforces the need to retain capital instead of paying dividends and to attract fresh capital to fuel the Fund's growth, in a context where the demand for TCX's product grows daily and capital raising transactions have long lead-times.

- TCX's Primary portfolio occasionally achieves peaks in individual and regional currency concentrations due to high demand in specific currencies. Notwithstanding the Fund Manager's efforts to place some exposures with market participants, the opportunities to offset these positions can be limited at times, due to market circumstances and TCX's mandate to be "additional" to the market. Under these circumstances, rationing the available capacity could be required.

As demonstrated since 2007, we believe that TCX has in place the strategies, policies, processes, resources and relationships necessary to overcome these challenges, and look forward to building on the momentum and successes of the past.

Amsterdam, 13 April 2022

### **The Managing Board of TCX Investment Management Company B.V.**

Ruurd Brouwer, Chief Executive Officer

Othman Boukrami, Head of Trading

Bert van Lier, Chief Investment Officer

Brice Ropion, Chief Operating Officer

Hanane Saih, Chief Risk Officer



Bert van Lier, Othman Boukrami, Ruurd Brouwer, Brice Ropion



2.

## Business Overview

## Business Rationale

Long-term finance in emerging markets is often provided by development banks and other international investors who naturally lend in hard currency. The local borrower, earning local currency, has limited scope to absorb a currency mismatch between income and liabilities, and thus should borrow in local currency. The international investor, however, can usually only provide local currency if it can itself be hedged.

In established markets hedging solutions are readily available, but this is rarely the case in frontier markets. Hedging products are typically provided by banks acting as intermediaries, ultimately placing the risk back into the local capital markets. In frontier markets, however, the ability to absorb these risks is limited. Thus, the intermediary model breaks down.

TCX's unique value proposition is its ability to retain, on its own balance sheet, the currency risks that arise from the hedges it provides to market participants. To operate successfully, TCX does not need a functioning local market. Its risk model is based on the portfolio diversification effect of spreading and absorbing currency risks across all regions. On average, the higher interest rates prevailing in frontier markets more than compensate for the devaluing trend of these currencies, which allows TCX to be modestly profitable over the longer-term.

## Business Principles

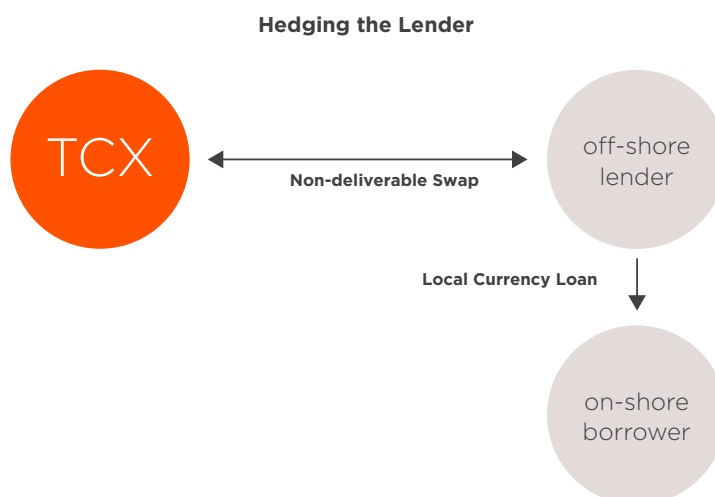
- **Focused products:** TCX only invests in market risk management products such as currency swaps and forwards. It does not provide funding.
- **Unique risk management structure:** TCX assumes outright currency risks in highly illiquid markets, managing risk through portfolio diversification across all regions and DAC countries in the emerging and frontier markets.
- **Alignment with shareholders:** By working with its shareholders, TCX has origination access to their combined client networks and deal-flow. TCX tailors its investments for these institutions.
- **Risk-reflective pricing:** TCX invests in products that are priced in accordance with prevailing market rates and established methodologies.
- **Additionality:** TCX only invests where its counterparties have no adequately priced commercial alternatives.
- **Non-speculation:** TCX only onboards currency exposures that arise from actual underlying obligations.

## Products

TCX uses a limited set of derivative products and delivery channels to achieve its mission. This allows it to remain focused on its primary objective, which is the facilitation of long-term local currency finance in frontier markets in close alignment with its shareholders.

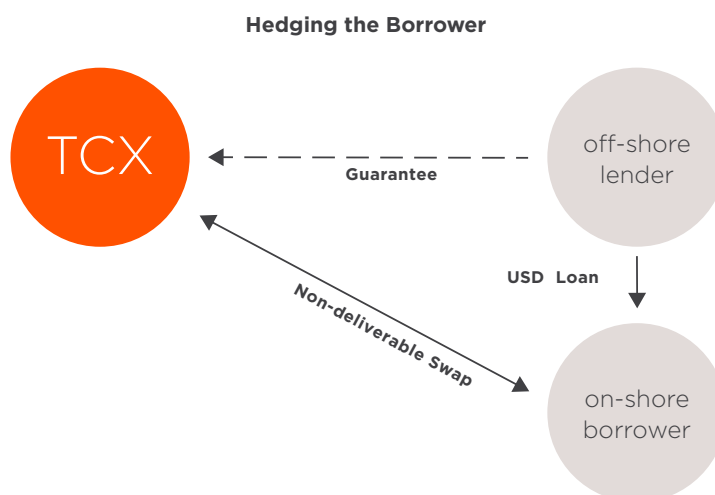
TCX's main investment product is a non-deliverable cross-currency swap, usually matched to the cash-flow of a local currency loan provided by one of its shareholders. The swap ensures that the lender's income is guaranteed in USD or EUR whilst the borrower's obligations are in local currency. A simpler investment product that can achieve similar results is the FX forward, also one of TCX's products.

The cross-currency swap may be provided either to the lender or to the borrower. Hedging the lender results in the investment structure presented in the figure below. The lender provides a local currency loan to the domestic borrower and hedges the associated currency exposure with TCX, so that the combined deal is an asset in the lender's functional currency e.g. the USD.



This structure is relatively straightforward from several perspectives. The client interface (and counterparty credit risk management) remains concentrated with the lender and the hedge is not exposed to domestic legal, regulatory or tax constraints.

The hedge may also be provided to the borrower, resulting in the structure presented below. The lender provides a USD loan to the local borrower, who hedges the resulting obligation with TCX. The hedge transforms its hard currency obligation into a local currency liability.



The direct swap to the local entity allows a greater flexibility in the application of the hedge, since it is decoupled from the loan. The timing, size and tenor of the transaction may be specified to suit the client's needs, as may the details of the hedge terms (the client could decide, for instance, not to include the loan margin in the hedge). The direct swap structure does however require TCX to onboard the local client, address the resulting counterparty risks (via guarantees or other means), and satisfy itself that the local legal, regulatory and tax environment support the required transaction terms. For these reasons, TCX generally prefers dealing directly with lenders.

Please refer to TCX's website, [www.tcxfund.com](http://www.tcxfund.com), for more details on TCX's investment products and the requirements to trade.







## • Latin America

Antigua and Barbuda Dollar **XCD**  
Argentina Peso **ARS**  
Bolivia Boliviano **BOB**  
Brazil Real **BRL**  
Colombia Peso **COP**  
Costa Rica Colon **CRC**  
Dominica Dollar **XCD**  
Dominican Republic Peso **DOP**  
Grenada Dollar **XCD**  
Guatemala Quetzal **GTQ**  
Guyana Dollar **GYD**  
Haiti Gourde **HTG**  
Honduras Lempira **HNL**  
Jamaica Dollar **JMD**  
Mexico Peso **MXN**  
Montserrat Dolla **XCD**  
Nicaragua Cordoba **NIO**  
Paraguay Guarani **PYG**  
Peru Sol **PEN**  
Saint Lucia Dollar **XCD**  
St. Vincent and Grenadines Dollar **XCD**  
Suriname Dollar **SRD**

## • Sub-Saharan Africa

Angola Kwanza **AOA**  
Benin Franc CFA **XOF**  
Botswana Pula **BWP**  
Burkina Faso Franc CFA **XOF**  
Burundi Franc **BIF**  
Cameroon Franc CFA **XAF**  
Cape Verdean Escudo **CVE**  
Central African Rep. Franc CFA **XAF**  
Chad Franc CFA **XAF**  
Comoros Franc **KMF**  
Côte d'Ivoire Franc CFA **XOF**  
Dem. Rep. of the Congo Franc **CDF**  
Equatorial Guinea Franc CFA **XAF**  
Ethiopia Birr **ETB**  
Gabon Franc CFA **XAF**  
Gambia Dalasi **GMD**  
Ghana Cedi **GHS**  
Guinea Franc **GNF**  
Guinea-Bissau Franc CFA **XOF**  
Kenya Shilling **KES**  
Lesotho Loti **LSL**  
Liberia Dollar **LRD**  
Madagascar Ariary **MGA**  
Malawi Kwacha **MWK**  
Mali Franc CFA **XOF**  
Mauritania Ouguiya **MRO**  
Mauritian Rupee **MUR**  
Mozambique Metical **MZN**  
Namibia Dollar **NAD**  
Niger Franc CFA **XOF**  
Nigeria Naira **NGN**  
Rep. of the Congo Franc CFA **XAF**  
Rwanda Franc **RWF**  
Senegal Franc CFA **XOF**  
Sierra Leone Leone **SLL**  
Somalia Shilling **SOS**  
South Africa Rand **ZAR**  
Swaziland Lilangeni **SZL**  
São Tomé and Príncipe Dobra **STD**  
Tanzania Shilling **TZS**  
Togo Franc CFA **XOF**  
Uganda Shilling **UGX**  
Zambia Kwacha **ZMW**

114  
countries

## • Europe + Central Asia

Albania Lek **ALL**  
Armenia Dram **AMD**  
Azerbaijan Manat **AZN**  
Belarus Ruble **BYN**  
Bosnia and Herzegovina Mark **BAM**  
Georgia Lari **GEL**  
Kazakhstan Tenge **KZT**  
Kyrgyz Republic Som **KGS**  
North Macedonia Denar **MKD**  
Moldova Leu **MDL**  
Mongolia Tugrik **MNT**  
Serbia Dinar **RSD**  
Tajikistan Somoni **TJS**  
Turkey Lira **TRY**  
Turkmenistan Manat **TMT**  
Ukraine Hryvnia **UAH**  
Uzbekistan Som **UZS**

## • Asia

Afghanistan Afghani **AFN**  
Bangladesh Taka **BDT**  
Cambodia Riel **KHR**  
China Renminbi **CNY**  
Fiji Dollar **FJD**  
India Rupee **INR**  
Indonesia Rupiah **IDR**  
Laos Kip **LAK**  
Malaysia Ringgit **MYR**  
Maldives Rufiyaa **MVR**  
Myanmar Kyat **MMK**  
Nepal Rupee **NPR**  
Pakistan Rupee **PKR**  
Papua New Guinea Kina **PGK**  
Philippines Peso **PHP**  
Samoa Tala **WST**  
Solomon Islands Dollar **SBD**  
Sri Lanka Rupee **LKR**  
Thailand Baht **THB**  
Tonga Pa'anga **TOP**  
Vanuatu Vatu **VUV**  
Vietnam Dong **VND**  
Wallis and Futuna CFP Franc **XPF**

## • Middle East + North Africa

Algeria Dinar **DZD**  
Djibouti Franc **DJF**  
Egypt Pound **EGP**  
Iraq Dinar **IQD**  
Jordan Dinar **JOD**  
Lebanon Pound **LBP**  
Libya Dinar **LYD**  
Morocco Dirham **MAD**  
Tunisia Dinar **TND**

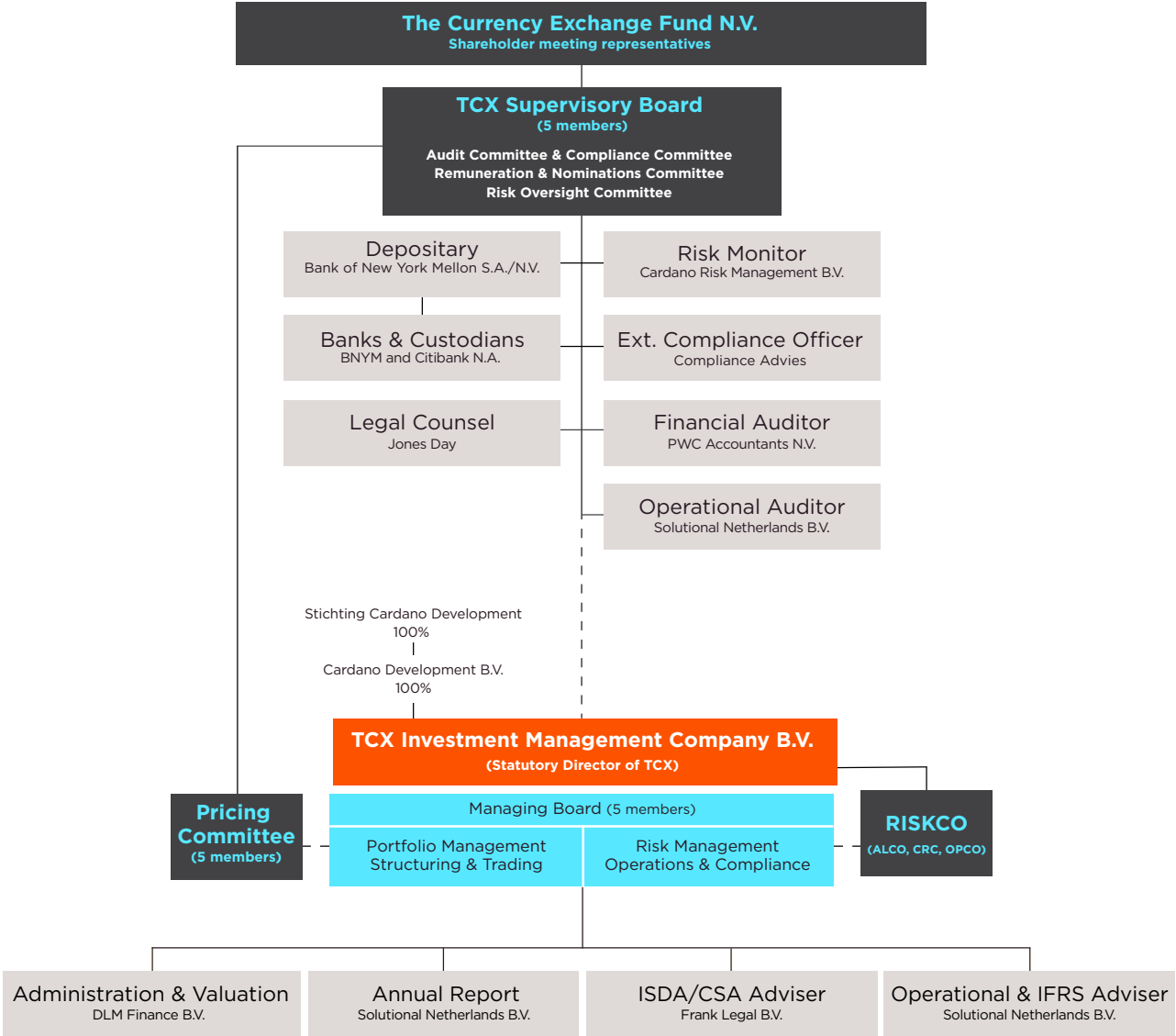
97  
currencies



2.

# Governance + Ownership

# Organizational Chart



# Fund Management

**TCX** Investment Management Company B.V. (TIM) is TCX's exclusive Fund Manager and the sole member of the Fund's statutory Managing Board. As such, it is responsible for the commercial, operational, compliance and risk management of the Fund, with Mr. Ruurd Brouwer as its Chief Executive Officer, Mr. Bert van Lier as its Chief Investment Officer, Mr. Othman Boukrami as its Head of Trading, Mrs Hanane Saih as its Chief Risk Officer, and Mr. Brice Ropion as its Chief Operating Officer and head of its finance and compliance functions. These five individuals comprise TIM's Managing Board.

TIM is 100% owned by Cardano Development B.V., which itself is 100% owned by Stichting Cardano Development, a stand-alone tax-exempt not-for-profit foundation that has no ultimate beneficial owner under the relevant laws of The Netherlands.

TIM employed 31 staff members at year-end 2021. Details on the team's remuneration may be found in Note 9 of the Financial Statements.

TIM is supported by several delegates and other parties in the management of the Fund. These parties include:

- **The Fund's Risk Monitor, Cardano Risk Management B.V.**, Cardano Risk Management B.V., a 100% subsidiary of Cardano Holding Ltd.,<sup>8</sup> responsible for quantifying, monitoring, and reporting the Fund's risk exposures and capital ratios, and providing pricing, valuation and risk advisory and operational control services to the Fund;
- **The Fund's Administrator and Valuer, DLM Finance B.V.**, a company established and owned by former TIM employees, responsible for booking, settling, valuing, and reporting the Fund's positions, and preparing the Fund's accounts and NAV statements;
- **Bank of New York Mellon N.V., the Fund's Global Custodian and Depositary.** As Depositary, BNYM is responsible for monitoring the Fund's share transactions, safekeeping its assets, reconciling its cash flows, and confirming that its valuation policies and processes are being properly adhered to; and
- **Compliance Advies, the Fund's External Compliance Officer**, responsible for supporting TIM's Internal Compliance Officer on regulatory matters, and for performing an independent whistle-blowing role on code of conduct and conflict of interest incidents.

TIM is a licensed Alternative Investment Fund Manager ("AIFM") that is subject to Directive 2011/61/EU (the Alternative Investment Fund Managers Directive or "AIFMD") as implemented in the Dutch Financial Markets Supervision Act (Wet op het financieel toezicht or "Wft"). The license has no time limits and is restricted to managing TCX only, for the benefit of professional investors only. The supervisory authorities are the Financial Markets Authority of The Netherlands with respect to conduct of business, and the Central Bank of The Netherlands with respect to the prudential rules that apply to AIFMs.

---

<sup>8</sup> | Cardano Holding Ltd. and Cardano Risk Management B.V. are unrelated in terms of ownership to Stichting Cardano Development and Cardano Development B.V. (TIM's owner). The common use of the name "Cardano" relates to the fact that Cardano Development B.V. was owned by Cardano Holdings B.V. until 2013, at which time the company was acquired by Stichting Cardano Development, a stand-alone foundation created for that purpose. As a consequence of the acquisition, there remains a financial relationship between Cardano Holding Ltd. (as lender) and Stichting Cardano Development (as borrower).

# Risk Management

**F**or integrated risk management purposes, TIM's Managing Board appoints each year the members of three committees that together constitute the **Risk Management Committee** of the Fund (a.k.a **RISKCO**). These committees are the Asset & Liability Management Committee (ALCO), the Counterparty Risk Management Committee (CRC), and the Operations Committee (OPCO).

RISKCO manages, monitors and reports on all risk issues impacting TCX, and either sets or proposes (to the TCX Supervisory Board) policies and guidelines in the areas of balance-sheet management, capital allocation, financial performance, and operational risk and control. It also decides on all counterparty risk matters, including KYC/AMLTF and credit decisions.

Apart from members of the Managing Board and TIM staff members, RISKCO's voting members include representatives of the Risk Monitor and the Administrator, plus an independent member. During 2021, the independent risk management professional received an annual remuneration of EUR 22,000 (excluding VAT). Other members were not separately remunerated for their services on RISKCO.

## **Internalization of the functions outsourced to Cardano Risk Management B.V.**

At the May 2021 Annual General Meeting of TCX, the Fund's shareholders approved a proposal to internalize within TIM the functions delegated to Cardano Risk Management B.V. since the Fund's launch in 2007. The proposal was rooted in the view that TCX is a risk management business that has become complex and sizeable enough to justify taking this step in the interest of TCX's investors. The project will last through 2022 and 2023 to ensure a smooth transition.

During 2021, the Fund's day-to-day risk management and control was largely unchanged relative to the previous period and effectively performed by the Fund Manager's COO (who was the previous CRO) and Cardano Risk Management B.V., given that the new CRO and the nascent internal risk organization were entirely focused on recruiting staff, selecting a risk system, and elaborating the future risk management framework.

For additional information, please see page 20 of this Annual Report.





# Supervisory Board

**T**he Fund's management is supervised by the TCX Supervisory Board, which is responsible for oversight and governance of the Fund's policies and strategy.<sup>9</sup>

Supervisory Board members are appointed by the General Meeting by simple majority vote for a renewable period of 4 years and receive an annual remuneration of EUR 30,000 (excluding VAT), except for the Chairman who receives EUR 40,000 (excluding VAT).

Of the five current members, two are related to substantial investors in the Fund, including the Chair: one as a management board member and one as a senior executive of a sister company of the investor. The other members are independent.

Supervisory Board meetings are attended by the members in person or by phone, and by the Managing Board and the Risk Monitor. Each meeting covers, inter-alia, a business and risk performance update regarding the Fund's portfolio. The Supervisory Board also debates and provides management guidance on all material issues regarding the Fund's business strategy, policies, product and market development, compliance, and governance. All matters presented to the Fund's investors are pre-discussed and approved by the Supervisory Board.

The Supervisory Board has appointed three sub-committees to help it discharge its oversight functions: a Risk Oversight Committee, an Audit & Compliance Committee, and a Remuneration & Nominations Committee. These committees operate pursuant to terms of reference determined by the Supervisory Board and the Fund's code of conduct, in line with the rules and regulations of the Dutch corporate governance code. The Supervisory Board meets regularly with these committees and uses a standardized agenda that allows the committee members to bring matters within their remit to the immediate attention of the Supervisory Board, without holding separate meetings.

---

<sup>9</sup> | Given the powers of the TCX Supervisory Board as desired by TCX's investors, the Financial Markets Authority of The Netherlands holds the TCX Supervisory Board jointly and severally responsible with the TIM Managing Board for regulatory compliance by the Fund Manager.



Jos Kramer



- The **Risk Oversight Committee** assists the Supervisory Board in fulfilling its oversight responsibility towards TCX's investors and other stakeholders in relation to (a) the management of the market and counterparty risks that TCX is or may be exposed to, (b) the adequacy of TCX's capital and liquidity, and (c) the related agreements and policy frameworks. Members of the Risk Oversight Committee are not separately remunerated for their work on the committee. The Supervisory Board also appoints and oversees a Pricing Committee:

- The **Audit & Compliance Committee** assists the Supervisory Board in fulfilling its oversight responsibility towards TCX's investor and other stakeholders in relation to (a) audit matters, including (i) the design and effectiveness of the Fund's internal control framework, (ii) the Fund's valuation policy, (iii) the relevance, completeness, accuracy and integrity of the Fund's financial statements, (iv) the management of the operational risks that the Fund is or may be exposed to, (v) the Fund's annual cost budgets, (vi) the selection, evaluation and continuation of the Fund's operational and financial auditors, and (b) compliance matters, including (i) the Fund and the Fund Manager's compliance with the laws and regulations that apply to them, (ii) the design and effectiveness of the Fund's compliance organization, policies, processes and controls; and (iii) the management of compliance incidents (except for people-related compliance incidents, since these fall within the remit of the Remuneration & Nominations Committee). Members of the Audit & Compliance Committee are not separately remunerated for their work on the committee.<sup>10</sup>

- The **Remuneration & Nominations Committee** assists the Supervisory Board in fulfilling its oversight responsibility towards TCX's investors and other stakeholders in relation to (a) the selection of candidate Supervisory Board members to be proposed to the General Meeting, (b) the Fund's veto right concerning the selection of the Fund Manager's directors, (c) the selection, evaluation, and continuation of the External Compliance Officer, (d) the management of people-related whistle-blowing events, conflicts of interests, and breaches of the code of conduct, (e) the annual process of setting targets for the Fund Manager and appraising the Fund Manager's performance against these targets, and (f) the remuneration policy of the Fund Manager. Members of the Remuneration Committee are not separately remunerated for their work on the committee.<sup>11</sup>

The Supervisory Board also appoints and oversees a Pricing Committee:

- The **Pricing Committee** is a unique feature of the TCX governance model, consisting of 5 independent professionals chosen for their expertise in emerging and frontier markets. The committee's purpose is to (a) decide on the 'benchmark' curves to be used by the Fund Manager for pricing and valuing TCX's derivative transactions (by approving (i) the source of the curves to be used as a basis and (ii) the NDF spreads for currencies where TCX is a 'price-maker'), (b) advise the Fund Manager on global macro-economic trends and risk issues, including the stress scenarios for the annual ICAAP review, and (c) advise the Supervisory Board on relevant topics on an ad-hoc basis (at the discretion of either party). All members are remunerated by way of an annual lump sum of EUR 30,000 (excluding VAT), except for the Chairman who receives EUR 45,000 (excluding VAT).<sup>12</sup>

Membership of the various committees is provided at the end of this Annual Report.

<sup>10</sup> | The Audit & Compliance Committee was established in July 2021 via the merger of the previously separate audit and compliance committees.

<sup>11</sup> | The variable Performance Fee payable to the Fund Manager depends on scores given by the Supervisory Board for Corporate Management Quality (40%), Developmental Impact and Market Creation (40%) and Long Term Return (20%), with the Supervisory Board reserving the right to disregard any pre-agreed criteria when deciding the final score. For 2021, the resulting Performance Factor was 1.44 on a scale of 0 to 1.6 (2020: 1.28). This variable Performance Factor affects both the bonus pool payable to TIM's employees (which is tied to the salary mass), and the profits accruing to TIM (which are tied to a fixed USD amount that is indexed to US inflation).

<sup>12</sup> | To be clear, this means that the PC does not engage in the following activities: (i) setting the actual pricing on individual trades (since the Fund Manager has discretion to vary the pricing in response to portfolio, market, and risk conditions and to add credit, capital, and other charges or discounts, subject to other approvals), and (ii) imposing conditions or restrictions on e.g., the notional amounts or tenors that may be traded in specific currencies (since these are portfolio/risk management matters where the Fund Manager has end-responsibility).

# TCX Investors



## IMPORTANT NOTICE UNDER THE LAWS OF THE EU

Interests in TCX can only be acquired by entities who qualify as Professional Investors within the meaning of article 4:1 of Directive 2011/61/EU (the Alternative Investment Fund Managers Directive), as implemented in the Financial Markets Supervision Act (Wet of het financieel toezicht) of The Netherlands.

## IMPORTANT NOTICE UNDER THE LAWS OF THE USA

Interests in TCX have not been and will not be registered under the U.S. Securities Act of 1933, as amended, and can only be acquired by persons outside of the United States and may not be offered or sold in the United States or to or for the benefit of U.S. persons.

As of 31 December 2021

Name of Shareholder	A-Shares held	As % of Shares held	Issuance Value (USD)	As % of Investors
European Bank for Reconstruction and Development (EBRD)	188	17.85%	100,759,918	10.7%
Kreditanstalt für Wiederaufbau (KfW)	188	17.85%	101,586,820	10.8%
Nederlandse Financieringsmaatschappij voor Ontwikkelingslanden N.V. (FMO)	188	17.85%	99,757,432	10.6%
The European Investment Bank (EIB)	120	11.40%	61,956,722	6.6%
International Finance Corporation (IFC)	101	9.59%	64,305,828	6.8%
Agence Francaise de Developpement (AFD)	80	7.60%	40,592,702	4.3%
Development Bank of Southern Africa Ltd. (DBSA)	40	3.80%	20,000,000	2.1%
OIKOCREDIT (Ecumenical Development Cooperative Society U.A.)	27	2.56%	15,539,091	1.7%
Belgian Investment Company for Developing Countries SA/NV (BIO)	20	1.90%	10,000,000	1.1%
Promotion et Participation pour la Cooperation Economique (PROPARCO)	17	1.61%	9,679,382	1.0%
ASN Microkredietpool	15	1.42%	9,567,691	1.0%
MXF Solutions LLC	14	1.33%	7,596,148	0.8%
European Fund for Southeast Europe (EFSE)	10	0.95%	5,048,299	0.5%
Compania Espanola de Financiacion del Desarrollo S.A. (COFIDES)	10	0.95%	5,000,000	0.5%
OPEC Fund for International Development (OFID)	10	0.95%	4,945,084	0.5%
EMF Microfinance Fund AGmVK	8	0.76%	4,931,815	0.5%
Blue Orchard Microfinance Fund (BOMF)	8	0.76%	4,914,799	0.5%
Stichting Oxfam Novib	5	0.47%	2,524,149	0.3%
Grameen Credit Agricole Microfinance Foundation (GCAMF)	4	0.38%	2,395,146	0.3%
<b>Total Shareholders Equity Paid in</b>	<b>1,053</b>	<b>100.0%</b>	<b>571,101,025</b>	<b>60.7%</b>

**Subordinated Convertible Loans Disbursed (tier 1 capital)**

Netherlands Minister for Development Cooperation	70,617,623	7.5%
KfW on behalf of the German Government (BMZ)	58,155,830	6.2%
KfW on behalf of the German Government (BMZ)	26,728,875	2.8%
KfW on behalf of the German Government (BMZ)	5,662,200	0.6%
KfW on behalf of the German Government (BMU)	32,765,460	3.5%
KfW on behalf of the German Government (BMU)	22,648,000	2.4%
UK Foreign, Commonwealth & Development Office (FCDO)	40,285,900	4.3%
Swiss State Secretariat for Economic Affairs	11,000,000	1.2%
<b>Total Subordinated Convertible Debt</b>	<b>267,863,888</b>	<b>28.5%</b>

**First Loss Loan Disbursed (tier 1 capital)**

Netherlands Minister for Development Cooperation	10,900,830	1.2%
--	------------	------

<b>Total Disbursed Capital</b>	<b>849,865,743</b>	<b>90.3%</b>
--------------------------------	--------------------	--------------

KfW o.b.o. the EU (committed, undisbursed)	91,085,051	9.7%
--	------------	------

<b>Total Disbursed &amp; Undisbursed/Committed Capital</b>	<b>940,950,793</b>	<b>100.0%</b>
--	--------------------	---------------







## **THE TCX TEAM**

**The team managing TCX consists of 31 dedicated professionals. We are very proud of their contributions to the world of development finance.**



4.

# Financial Statements



# Statement of financial position (as at 31 December)

(all amounts in thousand USD)		Notes	2021	2020
<b>Assets</b>				
Cash and cash equivalents	5		128,053	92,722
Financial assets at fair value through profit or loss	6		1,167,951	1,225,439
Cash collateral given	7		116,012	139,578
Other receivables	8		1,826	579
<b>Total assets</b>			<b>1,413,842</b>	<b>1,458,318</b>
<b>Liabilities</b>				
Cash collateral received	7		34,721	41,696
Financial liabilities at fair value through profit or loss	11		248,587	323,902
Accrued expenses and other payables	12		9,886	6,870
Subsidies granted by third-parties	14		5,333	5,934
Deferred subsidy income	15		5,642	8,247
Subordinated loan	16		-	5,325
Subordinated convertible debt	17		186,238	173,081
Grants linked to the subordinated convertible debt	17		83,294	86,824
First Loss Loan	18		8,546	7,958
Grants linked to the First Loss Loan	18		2,355	2,943
<b>Total liabilities (excluding Class A shares)</b>			<b>584,602</b>	<b>662,780</b>
<b>Net assets attributable to holders of redeemable shares Class A</b>	<b>19</b>		<b>829,240</b>	<b>795,538</b>
<b>Total liabilities</b>			<b>1,413,842</b>	<b>1,458,318</b>

# Statement of comprehensive income (for the year ended 31 December)

(all amounts in thousand USD)		Notes	2021	2020
<b>Investment result</b>				
Net result on financial instruments at fair value through profit or loss	22		125,603	25,444
Interest income	24		4,218	9,977
Realised grant interest income and EC facility income	15		3,352	2,374
			<b>133,173</b>	<b>37,795</b>
<b>Other results</b>				
Distributions to the Donors	13		(5,587)	(5,372)
Foreign currency translation	23		(4,802)	1,020
Interest expense			(228)	(259)
			<b>(10,617)</b>	<b>(4,611)</b>
<b>Operational expenses</b>				
Management fee	9		(8,788)	(7,348)
Performance fee	9		(2,200)	(1,613)
Governance expenses	9		(465)	(373)
Risk monitoring fee	10		(1,403)	(1,325)
Audit fees	10		(481)	(468)
Depository fees	10		(209)	(187)
Other general expenses	25		(1,657)	(1,628)
			<b>(15,203)</b>	<b>(12,942)</b>
<b>Operating income</b>			<b>107,353</b>	<b>20,242</b>
Distribution to holders of redeemable shares Class A	19		-	-
<b>Change in net assets resulting from operations attributable to holders of redeemable shares Class A</b>			<b>107,353</b>	<b>20,242</b>

The accompanying notes are an integral part of these financial statements



# Statement of cash flows (for the year ended 31 December)

(all amounts in thousand USD)		Notes	2021	2020
<b>Cash flow from operating activities</b>				
Net receipts from Primary, Trading and Hedging financial instruments at FVtPL			85,532	68,490
Net payment for Debt instruments at FVtPL			22,244	(84,093)
Interest received			4,498	9,952
Risk monitoring fee paid			(1,403)	(1,325)
Management fee paid			(8,707)	(6,881)
Performance fee paid			(1,758)	(1,653)
Audit fees paid			(448)	(517)
Governance expenses paid			(465)	(373)
Depository fees paid			(209)	(187)
Cash collateral (paid)/received			16,591	6,733
Transfers of Donor Assets			(4,495)	(4,334)
Other general expenses paid			(1,670)	(1,691)
<b>Net cash flow generated from (used in) operating activities</b>			<b>109,710</b>	<b>(15,879)</b>
<b>Cash flow from financing activities</b>				
Proceeds from issued redeemable shares Class A			20,119	24,011
Payments for redemption of redeemable shares Class A			(93,770)	-
Proceeds from Subordinated Convertible Debt)	17		10,000	1,000
Proceeds from subsidies granted			-	9,025
Repayments of subordinated loan	16		(5,553)	(6,667)
<b>Net cash flow generated from (used in) financing activities*)</b>			<b>(69,204)</b>	<b>27,369</b>
<b>Net cash flow generated during the year*)</b>			<b>40,506</b>	<b>11,490</b>
Cash and cash equivalents at the beginning of the year			92,722	79,010
Foreign currency translation of cash positions*)			(5,175)	2,222
<b>Cash and cash equivalents at end of period</b>	<b>5</b>		<b>128,053</b>	<b>92,722</b>
<b>Analysis of cash and cash equivalents</b>				
Cash at Citibank			49,614	60,444
Cash at BNY Mellon			12,447	32,278
Money Market funds			65,992	-
<b>Cash and cash equivalents at end of period</b>	<b>5</b>		<b>128,053</b>	<b>92,722</b>

# Statement of changes in net assets attributable to holders of redeemable shares Class A

The movements in shares Class A are as follows:  
(for the year ended 31 December)

(all amounts in thousand USD)		Amounts		Number of shares	
	Notes	2021	2020	2021	2020
Net assets at beginning of year		795,538	751,285	1,157	1,120
Issuance of shares		20,119	24,011	29	37
Repurchase of shares		(93,770)	-	(133)	-
Net change from transactions with shareholders		(73,651)	24,011	(104)	37
Change in net assets from operations		107,353	20,242		
<b>Net assets at end of the year Class A</b>	<b>19</b>	<b>829,240</b>	<b>795,538</b>	<b>1,053</b>	<b>1,157</b>

The accompanying notes are an integral part of these financial statements

# Notes to the financial statements

## 1. General information

The Currency Exchange Fund N.V. (“TCX” or “the Fund”) is a public limited liability company incorporated and existing under the laws of The Netherlands, Chamber of Commerce number 34277912. The Fund was established in September 2007 and started commercial operations in January 2008.

The Fund’s objective is to invest, along commercially sound principles, in long-term emerging-market currency and interest rate derivatives, with the purpose of developing local currency funding options, predominantly for its investors and their clients. TCX’s counterparties utilize the products offered in the mitigation of currency and interest rate mismatches.

## 2. Events after the reporting period

Although the Managing Board expects that the Ukraine war will have a significant impact on TCX during 2022 and uncertainties exist concerning its assessment of this impact, the Managing Board has at this time no material uncertainties concerning TCX’s ability to continue as a going-concern entity. For additional information see page 22 of this Annual Report.

In 11 April 2022, Standard & Poor’s reconfirmed TCX’s credit rating as “single-A with a stable outlook”.

## 3. Statement of compliance

The financial statements of the Fund have been prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU), Part 9 of Book 2 of The Netherlands Civil Code and the Dutch Act on Financial Supervision. Refer to Note 32 and 33 for a further explanation of significant accounting policies, estimates and judgments.

The financial statements were authorized for issue by the Managing Board on 13 April 2022.

## 4. Financial risk management

### Investment objective

The Fund is an innovative and unique capital markets development initiative, focusing entirely on long-term local currency and interest rate derivatives in frontier and emerging market currencies. It presents a compelling investment opportunity for parties with a keen interest in the sustainable development of capital markets in developing countries. By investing in currency and interest rate derivatives, the Fund facilitates the provision of local currency funding to borrowers in developing countries.

Classical providers of currency and interest rate hedging in international financial markets typically operate on a matched book principle, which generally limits them to offering products for which there is a matched and liquid demand and supply. This model breaks down in most developing countries, where demand for long-term local currency exposure is illiquid or even inexistent. As a result, these products are not offered or are offered at pre-emptively high rates.

TCX is based on a fundamentally different concept, which is to assume unmatched exposures mitigated through portfolio diversification on a global scale, rather than by matching supply and demand on a currency by currency basis. This allows TCX to absorb currency and interest rate risks in highly illiquid currencies and maturities regardless of external demand.

Given that the key to this strategy is a wide diversification of risks, there are compelling mutual benefits for investors to pool their local currency activities and exposures, thereby achieving a more complete risk spreading and efficiencies of scale and scope.

### Investment policy

TCX exclusively focuses on cross-currency interest rate swaps and forwards, risk-managed through internal portfolio diversification and hedging. The maximum tenor for individual currencies is set by the Pricing Committee.

The Fund’s transactions are mostly invested through or with its investors, which have established local networks in emerging markets. TCX has agreed a preferential access to its transaction capacity with its investors, but it may also trade with non-investor counterparties, notably the clients and assignees of the investors or unrelated parties.

## Investment process

Sound capital and risk management is essential to TCX, for it is the rationale behind its business model and critical to maintaining its credit rating. TCX has a S&P credit rating of A that is underpinned by a sizeable capital pool and strict limits on the type and amount of risks that the Fund is allowed to take on. Together with the Cardano Risk Management B.V., Fund's external Risk Monitor, TCX Investment Management Company B.V. ("TIM") monitors the portfolio on a daily basis, and produces weekly reports to confirm the Fund's compliance with agreed risk limits and capital ratios.

To calculate the capital requirements, TCX uses models inspired by the Basel regulatory capital framework for banks, adjusted for the activities and business of TCX (no specific regulatory capital regime applies to TCX). This customized framework is detailed in the Fund's Risk Charter. The calculation methods generally follow the Basel internal model approach, unless lack of market data prevents this or unless specific reasons exist to depart from this model due to the nature of TCX's business. Where market data is not available, required capital is calculated based on stress scenarios, in conformity with market practice when dealing with statistical uncertainties.

TCX's primary risk mitigating instrument is exposure diversification, whereby the portfolio is spread over a large number of currencies and interest rates, and strict limits are in place to ensure that the portfolio does not become overly concentrated per counterparty, currency, and region. Other active risk mitigating measures include the (partial) hedging of exposures through the derivative markets.

TCX has two stop-loss triggers: one requiring the Fund Manager to operate more prudently in its assumption of risk and to redress its capital ratios in a going-concern manner, the other triggering cessation of investment activities and ultimately, if desired by the investors, a managed liquidation of the portfolio (the "Liquidation Trigger Event" – see Note 19).

TCX's risk management is based on the Risk Charter approved by the Investors. The Risk Charter contains, amongst others:

- a description of the risks TCX assumes in its business;
- the policies and procedures concerning risk management;
- the applicable limit structure and investment restrictions.

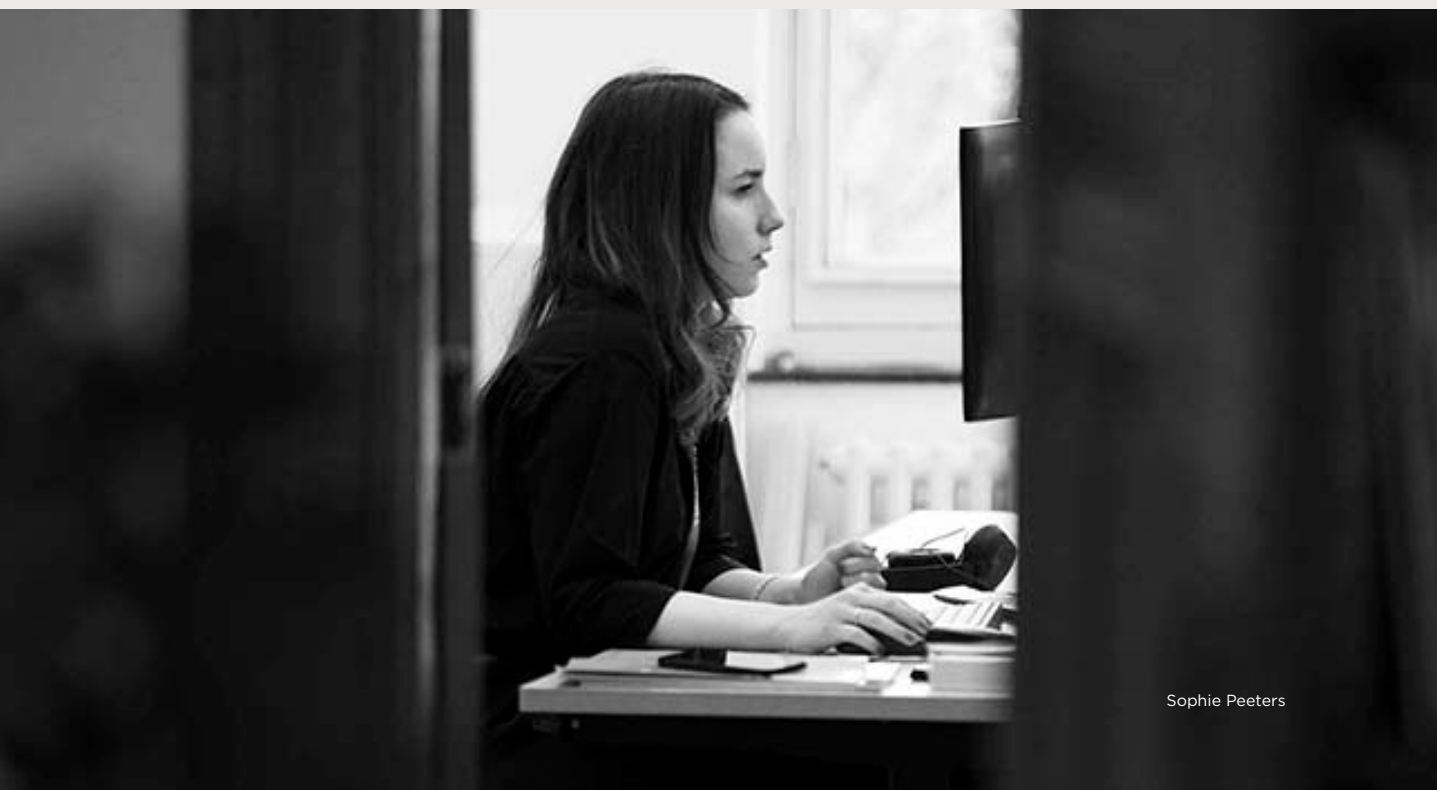
## Risk analysis

The Fund's activities expose it to a variety of financial risks: market risk, credit risk and liquidity risk. These are discussed below.

### Market risk

The most important risk that TCX is exposed to is market risk, constituting 93% (2020: 91%) of the Fund's Risk Weighted Assets. TCX defines market risk as the risk of fluctuation in the valuation of its financial instruments caused by adverse market movements and market illiquidity.

The Fund's financial instruments consisted of the following groups at year end:



(all amounts in thousand USD)

	2021		2020	
	Fair Value in USD	% of NAV	Fair Value in USD	% of NAV
Cross currency swaps	(121,409)	(14.6)	(164,646)	(20.7)
Forwards	16,217	2.0	3,754	0.5
Commercial papers	578,203	69.7	349,211	43.9
Floating rate notes	194,970	23.5	513,410	64.5
Fixed rate bonds	241,686	29.1	189,978	23.9
Frontier Clearing Fund Junior	9,697	1.2	9,830	1.2
<b>Financial instruments at fair value through profit or loss</b>	<b>919,364</b>	<b>110.9</b>	<b>901,537</b>	<b>113.3</b>
Cash collateral given	116,012	14.0	139,578	17.5
Cash collateral received	(34,721)	(4.2)	(41,696)	(5.2)
Cash and cash equivalents	128,053	15.4	92,722	11.7
Subsidies granted by third-parties	(5,333)	(0.6)	(5,934)	(0.7)
Deferred subsidy income	(5,642)	(0.7)	(8,247)	(1.0)
Other	(8,060)	(1.0)	(6,291)	(0.8)
Subordinated loan	-	-	(5,325)	(0.7)
Subordinated convertible debt	(186,238)	(22.6)	(173,081)	(21.8)
Grants linked to the subordinated convertible debt	(83,294)	(10.0)	(86,824)	(10.9)
First Loss Loan	(10,901)	(1.3)	(10,901)	(1.4)
<b>Net assets attributable to holders of redeemable shares Class A</b>	<b>829,240</b>	<b>100.0</b>	<b>795,538</b>	<b>100.0</b>

TCX is subject to market risk on these financial instruments by taking on interest rate and currency risks in its transactions. This market risk is managed in separated risk books. This methodology allows segregating risk measurement techniques depending on the depth and quality of available market data. The more extensive the available data, the more sophisticated the measurement technique available.

TCX’s market risks are managed in four books:

1. currency exchange rate risks;
2. interest rate risk in mature markets;
3. interest rate risks in frontier and emerging markets;
4. spread risk between local benchmark and non-deliverable forward (“NDF”) rates.<sup>1</sup>

The book structure is built using well-established transfer pricing techniques. Any TCX transaction can give rise to different entries in each of the four risk books. The different risk books are aggregated into a combined risk model. Whereas sufficient market data is available for currency risks (Book 1) and interest rate risk in mature markets (Book 2) to support statistical methods, historical data for local emerging market interest rates (Book 3) and spread risk between local benchmark and NDF rates (Book 4) are insufficiently available for these methods and therefore these risks are assessed using stress testing.

The risk measurement horizon for all books is one month, and results are annualized using the usual calibration multiples in accordance with the Basel guidelines.

The market risk of TCX is measured and monitored using four major methods:

- Expected Tail Loss (“ETL”);
- Value at Risk (“VaR”);
- Stress testing;
- Monitoring of exposures against strict concentration limits.

**Expected Tail Loss and Value at Risk:** The ETL and VaR methods are useful when sufficient observable data is available to estimate extreme events. Both are internationally accepted risk measures that are recognized for reporting market risk to national supervisory authorities and are used for performance measurement and asset-liability management, among other purposes. ETL and VaR measures incorporate three parameters:

- Confidence level;
- Holding or unwinding period;
- Information period.

<sup>1</sup> | The NDF spread that TCX applies refers to the spread risk between domestic and international interest rates over the life of the swap. The spread applies because TCX prices its non-deliverable swaps off local onshore benchmarks (e.g. a Treasury bill rate), which do not incorporate the country risk, liquidity risk, and other risk premiums required by offshore investors.

The ETL method is applied to TCX’s FX risk book (Book 1). For this book, the ETL is based on the average of the 1% worst (tail) events observed over all one-month periods since January 1996. This approach is used because the 99% confidence level lies somewhere between the third and fourth worst months, and the intervals between the points in the tail are large enough that intervening points could lead to substantial jumps in the measure. Thus, the averaging method is recommended to stabilize the risk measure while doing justice to the full size of the tail.

The VaR method is applied to TCX’s established market interest rate book (Book 2) where historical data is abundant enough to estimate the impact of extreme events through historical simulation using monthly historical price changes since January 1996. This approach yields a distribution of changes in values, with the VaR determined at the 99% confidence level.

For the purpose of these financial statement disclosures, it is important to note that there are well known limitations to using history based VaR or ETL:

- The data provided reflects positions as at year-end that do not necessarily reflect the risk positions held at other moments in time. As disclosed in the chapter “Investment Processes”, the Risk Monitor quantifies and monitors the exposures of the Fund on a daily basis;
- The VaR and ETL are statistical methods based on a distribution from historical observations. Therefore, it is possible that there could be, in any future period, an observation of a higher loss.

**Stress testing:** There is no objective justification to assume that historic returns are exemplary for worst case scenarios in the future, especially in the case of emerging markets where unprecedented events are even more likely. Therefore, stress tests are performed on most relevant variables for the TCX portfolio, notably currency and interest rates. Stress testing involves the modeling of unprecedented events and therefore market movements beyond historically observed shocks. The purpose of stress testing is to create awareness of the consolidated event sensitivity of TCX’s position, and to set limits at portfolio level (stress testing is not meant for limit setting purposes on a book-by-book basis). In the risk management of TCX, three types of stress tests are used:

- Combination of historical stress tests;
- Macroeconomic scenarios (commodity prices, global melt down);
- Sensitivity analyses.

Stress testing is in particular applied to calculating the value at risk in TCX’s local currency interest rate book (Book 3) and TCX’s use of NDF spreads (Book 4), since historical data is insufficiently available to estimate the value at risk in these books.

At 31 December 2021, taking the foregoing methodologies into account, the Fund had an aggregate value at risk for market related factors (by convention, its market VaR) of USD 92.7 million (2020: USD 76.4 million), consisting of the following:

(all amounts in USD millions)		2021	2020
Foreign currency exchange risk (Book 1)		61.9	52.7
Interest rate risk mature market (Book 2)		5.7	4.9
Interest rate risk emerging markets (Book 3)		24.7	16.9
NDF (Non-Deliverable Forward) spread (Book 4)		3.1	3.0
Adjustment for cross-effects		(2.7)	(1.1)
<b>Total</b>		<b>92.7</b>	<b>76.4</b>

**Currency concentration limits:** a fundamental premise of TCX is that geographic diversification reduces currency and interest rate risks at portfolio level. This diversification effect can only be achieved when TCX avoids over-exposure in any one currency or region. To prevent this, concentration limits are set on the notional of the contracts for each currency, set relative to (a) TCX’s Tier 1 + Tier 2 capital levels, (b) its total portfolio size, and (c) an absolute number as defined by the size and liquidity of the currency market. The maximum net amount invested in a country or currency is the lesser of:

- 25% of total capital (including share capital, retained earnings and Tier 2 capital); and
- 10% of the aggregate FX exposures in DAC currencies of the (fictitious) portfolio where TCX would have zero growth buffer (i.e., 10% of “potential maximum net portfolio”)

All limits are subject to periodic review.

Deductions from the gross exposure amount (netting)<sup>2</sup> is equal to 100% of the nominal amount of a related hedge<sup>3</sup> if the following conditions are met:

- there are no cross-border risks between the hedged exposure and the hedge;
- the counterparty to the hedge has a minimum rating of BBB and the transaction is appropriately collateralized, taking into account wrong-way risks if any in the determination of key counterparty credit terms such as frequency of valuation, independent amount and minimum transfer amount.

In case a hedging investment does not meet these criteria, no deductions to the exposure amounts are allowed unless approved by RISKCO on a case by case basis. Moreover, TCX’s gross currency exposure (before netting deductions) may not exceed 40% of total capital.

Separately, a capital buffer is added to cover the mismatch and replacement risks of hedged portfolios that would otherwise benefit from 100% capital relief.

The application of the currency concentration limit as provided above means that on 31 December 2021 each individual currency has a notional limit of USD 290.9 million (2020: USD 275.4 million ). The Fund’s largest exposures per currency compared to this limit (net of offsetting hedging transactions) were as follows:

	% of limit 31 December 2021	% of limit 31 December 2020
Serbian Dinar	43.0	51.7
Uzbek Sum	40.0	34.6
Georgian Lari	39.3	37.7
Kazakhstan Tenge	37.5	28.4
Kenyan Shilling	32.1	28.2

**Regional concentration limits:** the diversification over the regions is enforced through limits for maximum regional exposures. Regional limits are determined depending on the possibilities to diversify within the region. The table below shows the concentration limits per region calculated based on notional amounts per region divided by the total portfolio notional amount (net of hedging transactions):

	Maximum regional concentrations	Actual concentrations 31 December 2021	Actual concentrations 31 December 2020
Emerging Europe / Central Asia	40%	38%	34%
Sub-Sahara Africa	50%	22%	24%
Latin America	40%	21%	22%
Asia	40%	15%	14%
Middle East / North Africa	30%	4%	6%

**Hedging:** Hedging is defined as short or long cross-currency derivatives entered into for concentration and balance sheet management purposes. The Fund has the following hedging transactions as at 31 December:

<sup>2</sup> | The nominal exposure relief of a hedge is applied for the term of the hedged exposure only.  
<sup>3</sup> | Transactions qualify as a hedge only if they are in the same local currency as the hedged exposure. The use of proxy hedging for concentration or market risk capital relief is explicitly ruled out.

(all amounts in thousand USD)	Fair value 2021	Notional value 2021	Fair value 2020	Notional value 2020
<b>Short USD</b>				
Algerian Dinars	(2,069)	31,000	(1,490)	31,000
Armenian Dram	181	37,053	3,523	42,096
Argentine Peso	(60)	1,074	2	500
Azerbaijani Manat	(392)	10,000	(543)	15,000
Bolivian Bolíviano	63	10,000	(83)	5,000
Chinese Yuan Renminbi	(632)	5,207	(356)	5,207
Colombian Peso	427	3,701	178	4,750
Congolese Franc	(356)	22,000	-	-
Costa Rican Colon	-	-	131	10,000
Dominican Peso	-	-	1,962	14,926
Egyptian Pound	(187)	5,000	-	-
Georgian Lari	(6,446)	178,273	12,247	155,718
Guatemalan Quetzales	-	-	(235)	8,500
Honduran Lempira	(324)	6,000	(2,254)	41,000
Haitian Gourde	1,397	15,000	1,731	11,000
Indonesian Rupiah	(9)	17,180	-	-
Indian Rupee	-	-	(438)	5,089
Jamaican Dollar	-	-	1,013	10,039
Jordanian Dinar	(48)	927	(160)	5,980
Kenyan Shilling	201	38,746	(65)	2,000
Kazakhstani Tenge	(1,159)	22,000	(1,739)	31,280
Kyrgyzstani Som	2,330	26,500	6,930	46,500
Lebanese Pound	-	-	12,877	30,000
Sri Lankan Rupee	889	5,000	268	5,000
Burmese Kyat	15,962	102,890	(9,523)	96,890
Malawian Kwacha	5	471	(241)	4,000
Mexican Peso	(266)	2,000	(223)	1,000
Moldovan Leu	17	603	-	-
Mongolian Tughrig	-	-	(10)	482
Moroccan Dirham	13	5,072	-	-
Mozambican Metical	277	4,871	13	200
Nigerian Naira	(48)	2,500	-	-
Pakistani Rupee	54	3,006	-	-
Peruvian Nuevo So	4,649	33,383	1,133	27,277
Philippine Peso	(92)	750	(272)	1,500
Thai Baht	-	-	(106)	1,000
Tajikistan Somoni	1,222	63,389	2,940	28,000
Tanzanian Shilling	(3,054)	57,300	(1,616)	22,300
Tunesische Dinar	29	1,719	(97)	1,702
Ukrainian Hryvnia	(708)	66,305	(4,936)	87,053
Ugandan Shilling	-	-	(420)	3,000
Uruguayan Peso	369	17,656	91	17,656
Uzbekistani Som	2,398	201,433	8,372	162,587
Vietnamese Dong	(4,614)	58,295	(1,628)	48,295
South African Rand	347	5,219	(52)	630
Zambian Kwacha	(199)	1,509	33	323
<b>Long USD</b>				
Euro	(419)	30,219	(2,921)	35,568



(all amounts in thousands USD)	Fair value 2021	Notional value 2021	Fair value 2020	Notional value 2020
<b>Short EUR</b>				
Argentine Peso	-	-	886	1,359
Colombian Peso	75	1,609	14	428
Indian Rupee	(477)	4,170	(1,625)	19,816
Kazakhstani Tenge	-	-	(349)	4,451
Serbian Dinar	499	24,571	-	-
South African Rand	-	-	(673)	3,480
Thai Baht	(38)	788	(102)	1,713
Tunesische Dinar	396	46,681	782	37,907
Tanzanian Shilling	-	-	(99)	653
Ukrainian Hryvnia	(1,458)	4,099	(3,928)	17,608
US Dollar	(2)	5,693	-	-
West Africa Franc	(1,308)	76,113	(1,487)	44,802
<b>Long EUR</b>				
Euro	(15,449)	550,649	18,053	367,208
<b>Total hedging transactions</b>	<b>(8,014)</b>	<b>1,807,624</b>	<b>35,508</b>	<b>1,519,473</b>

The Euro hedge book above has the specific purpose of offsetting one part of the short Euro positions that TCX builds on a portion of its Primary Investments portfolio. The other part of these short Euro positions is covered through the purchase of Euro-denominated Liquidity Investments, which the Fund must report separately. Depending on the movements in the EUR:USD exchange rate, this can lead to recording translation gains or losses on the liquidity portfolio (see Note 23), whereas, economically, TCX's net overall Euro position is deliberately neutral.

## Credit risk

TCX's credit risk exposure originates from its liquidity and derivatives investments. TCX limits the credit risks it incurs by concentrating liquidity investments with the best-rated counterparties, and by using either guarantees from highly-rated institutions or Credit Support Annexes to ISDA Master Agreements (i.e., ISDA CSA agreements). The purpose of ISDA CSA agreements is to trigger periodic collateral transfers based on the fluctuating fair market value of TCX's portfolio with each counterparty.

In general, under the ISDA CSA master netting agreements, the amounts owed by each counterparty on a single day in respect of all transactions outstanding in the same currency are aggregated into a single net amount that is payable by one party to the other. In certain circumstances (for instance, when a credit event such as a default occurs), all outstanding transactions under the agreement are terminated, the termination value is assessed, and only a single net amount is payable in settlement of all transactions.

TCX's credit risk measures make use of internal credit ratings with associated Probabilities of Default (PD). For Loss Given Default (LGD), the decision is based on the country of incorporation of the counterparty and the type of counterparty. The Exposure at Default (EAD) is equal to the current mark-to-market of the trades with the counterparty (net of any collateral held), plus the potential future exposure on the trades, calculated as the 99% VaR for the applicable period of exposure (i.e., the period between collateral calls in the case of collateralized exposures).

An internal rating and associated PD is assigned by RISKCO to each counterparty prior to execution the first transaction. If and when an external rating of one of the three large global rating agencies is available, this rating is the primary basis for the rating assessment. The PD attached to each rating class is generally based on the empirical default rate of this rating class over the last five years, as published by Standard & Poor's. The ratings-based EAD of the portfolio is shown in the following table:

(all amounts in thousands USD)		Internal Credit rating	EAD 2021	EAD 2020
		AAA	763,853	943,880
		AA	385,100	185,474
		A	94,613	87,710
		BBB	28,836	23,380
		BB	30,980	31,857
		B	1,116	646
	<b>Total</b>		<b>1,304,498</b>	<b>1,272,947</b>

The Risk Weighted Assets for the credit risk exposures shown above totals USD 91.8 million (2020: USD 128.6 million), after taking into account the applicable PDs and LGDs.

Under IFRS, TCX’s ISDA agreements do not meet the criteria for offsetting in the statement of financial position. This is because the right to offset is not current but enforceable only on the occurrence of future events such as a default or other credit events. The following table sets out the fair value of recognized financial instruments that are subject to these agreements:

2021 (all amounts in thousands USD)	Gross Amount	Amounts offset included in fair value	Fair value included in statement of financial position	Related financial instruments not offset <sup>4</sup>	Net Amount
<b>Financial assets</b>					
Cross currency swaps	104,907	-	104,907	-	-
Forwards	38,488	-	38,488	-	-
Total financial assets	143,395	-	143,395	(34,721)	108,674
<b>Financial liabilities</b>					
Cross currency swaps	(226,316)	-	(226,316)	-	-
Forwards	(22,271)	-	(22,271)	-	-
Total financial liabilities	(248,587)	-	(248,587)	116,012	(132,575)
<b>Total</b>	<b>(105,192)</b>	<b>-</b>	<b>(105,192)</b>	<b>81,291</b>	<b>(23,901)</b>

2020 (all amounts in thousands USD)	Gross Amount	Amounts offset included in fair value	Fair value included in statement of financial position	Related financial instruments not offset <sup>5</sup>	Net Amount
<b>Financial assets</b>					
Cross currency swaps	127,740	-	127,740	-	-
Forwards	35,270	-	35,270	-	-
Total financial assets	163,010	-	163,010	(41,696)	121,314
<b>Financial liabilities</b>					
Cross currency swaps	(292,386)	-	(292,386)	-	-
Forwards	(31,516)	-	(31,516)	-	-
Total financial liabilities	(323,902)	-	(323,902)	139,578	184,324
<b>Total</b>	<b>(160,982)</b>	<b>-</b>	<b>(160,982)</b>	<b>97,882</b>	<b>(63,010)</b>

<sup>4</sup> | Consists of collateral received or paid

<sup>5</sup> | Consists of collateral received or paid

## Liquidity risk

**Investments:** Liquidity risks include the risk that TCX cannot fulfil its obligations in a timely fashion due to cross-border transfer timing constraints. To minimize the risk of underfunding in any single currency, TCX maintains minimum liquidity levels to cover future payment obligations in any currency that is not classified as freely convertible. These limits are determined by RISKCO, depending on the currency's convertibility risks. As per 31 December 2021, no traded currency other than the Euro is approved as freely convertible.

To protect TCX from liquidity risk, the single day liquidity gap for each currency may not be larger than half the average spot FX daily trading volume (determined by the Risk Monitor using the average over the past year). To monitor the liquidity risk, a gap analysis is performed monthly that provides an overview of all expected cash flows of all transactions. This includes coupon receipts on bonds, periodic interest exchange on swaps, principal (re)payments on cross-currency swaps and settlements on currency swaps.

Liquidity limits for non-freely convertible currencies are set for a business-as-usual scenario and for a stress scenario. In the business-as-usual scenario, no negative gap is allowed for the first week and the first month (i.e. TCX must have full local currency liquidity to cover foreseeable cash outflows for the next week and the next month). Under a stress scenario, TCX may need more local funds. In this respect the following maximum negative gaps are allowed:

- For the first week: equal to 100% the average turnover of one trading day;
- For the first month: equal to 300% the average turnover of one trading day.

For freely convertible currencies, negative liquidity gaps are allowed up to 10% of the liquidity investment portfolio for the first month. The total gap of all convertible currencies should be lower than 50% of the liquidity investments portfolio. To prevent unnecessary risk taking in the liquidity portfolio, a rise in interest rates of 1% may not cause a loss higher than 1% of the liquidity portfolio.

The gap analysis for the year ended 31 December 2021 is as follows: (all amounts in thousands USD)

Currency EUR	One week	One month	Over one month
Cash In	86,174	14,467	465,873
Cash Out	(1,393)	(1,537)	(87,261)
Net Position	84,781	12,931	378,612
Cum Net Position	84,781	97,712	476,324
Limit	(596,985)	(596,985)	

Currency USD	One week	One month	Over one month
Cash In	58,241	51,103	1,039,001
Cash Out	(14,434)	(7,632)	(675,988)
Net Position	43,807	43,471	363,013
Cum Net Position	43,807	87,278	450,291
Limit	(596,985)	(596,985)	

The gap analysis for the year ended 31 December 2020 is as follows: (all amounts in thousands USD)

Currency EUR	One week	One month	Over one month
Cash In	26,196	14,144	341,027
Cash Out	(1,309)	(1,818)	(110,567)
Net Position	24,887	12,326	230,460
Cum Net Position	24,887	37,213	267,673
Limit	(550,747)	(550,747)	

Currency USD	One week	One month	Over one month
Cash In	50,777	47,355	1,157,558
Cash Out	(794)	(4,338)	(640,808)
Net Position	49,983	43,017	516,750
Cum Net Position	49,983	93,000	609,749
Limit	(550,747)	(550,747)	

TCX invests its liquid assets in cash deposits, money market funds, commercial papers, fixed rate bonds and floating rate notes. About 72% (2020: 72%) of these assets have a remaining term shorter than 1 year. Though longer-dated, the other 28% (2020: 28%) are considered highly liquid investments as well (i.e., top-rated paper issued by government, government-backed, and banking institutions). The Fund invests in commercial paper for an amount of USD 578,203 representing 69.7% of the NAV (2020: USD 349,211 representing 43.9% of the NAV) which are readily convertible into cash.

TCX provides clients with conditional deliverable products. Under normal circumstances, these products are deliverable (i.e., TCX receives domestic currency locally against payment of USD or EUR obligations offshore), and thus lead to the need for TCX to repatriate inflowing funds into the Netherlands, but in case of inconvertibility or non-transferability, the products automatically become non-deliverable (i.e., all cash flows occur in USD or EUR offshore). Thus, TCX has no local currency transfer obligations or risks after the occurrence of such an event.

The currency in which TCX had conditional deliverable products outstanding at 31 December 2021 is the Dominican Republic Peso for a total notional of USD 3.3 million (2020: Kenyan Shilling for a total notional of USD 6.8 million).

**Subsidies granted and deferred subsidy:** The Fund’s financial liabilities include subsidies granted and deferred subsidy for an undiscounted cash flow amount of USD 10,975 (2020: USD 14,181), representing 0.8% (2020: 1.0%) of the total financial liabilities (see Note 14 and 15 for further details). The subsidy has no fixed maturity date and depends on the development of the subsidized project.

**Subordinated Loan:** The Fund’s financial liabilities include a Subordinated Loan for an undiscounted cash flow amount of USD 0 (2020: USD 5,325), representing 0.0% (2020: 0.4%) of the total financial liabilities (see Note 16 for further details). The Subordinated Loan matured and was fully repaid on 15 February 2021.

**Subordinated Convertible Debt:** The Fund’s financial liabilities include Subordinated Convertible Debt for a nominal amount of USD 269,532 (2020: USD 259,905), consisting of an undiscounted cash flow amount of USD 186,238 (2020: USD 173,081), representing 13.2% (2020: 11.9%) of the total financial liabilities, and “Grants linked to the Subordinated Convertible Debt”, for an amount of USD 83,294 representing 5.9% of the total financial liabilities (2020: USD 86,824 and 6.0% respectively) (see Note 17 for further details). The maturity date of the Subordinated Convertible Debt and the Grants linked thereto is 31 December 2045 with the exception of USD 70.6 million linked to DGIS which have a maturity date of 31 December 2025 (subject to certain provisions). Each Subordinated Convertible Lender has the option to convert, in whole or in part, its outstanding commitment into Class B Shares of the Fund.

**First Loss Loan:** The Fund’s financial liabilities include a First loss loan for an undiscounted cash flow amount of USD 10,901 (2020: USD 10,901), representing 0.8% (2020: 0.7%) of the total financial liabilities (see Note 18 for further details). The First loss loan has a final maturity date and repayment date of 31 December 2025.

**Redeemable shares Class A:** TCX’s Shares Class A are “puttable instruments”. Repurchase is at each investor’s option up to an annual maximum of 20% of the Fund’s issued Shares A outstanding at the start of each calendar year. Assuming that investors make maximum use of this put option, the undiscounted repurchase profile of the Fund’s Shares A would be as provided in the table below (see Note 19 for further details regarding repurchase rights):

(all amounts in thousands USD)			
Year of maturity		2021	2020
2021		-	127,286
2022		132,678	101,829
2023		106,144	81,463
2024		84,914	65,170
2025		67,931	52,136
2026		54,345	41,709
2027		43,476	-
2028 and further till 2045		339,752	281,692
Total		829,240	751,285

**Other liabilities:** The Fund holds other liabilities for an undiscounted cash flow amount of USD 10,174 (2020: USD 6,870) with a maturity date of less than 3 months, representing 0.7% of the total financial liabilities (2020: 0.5%).

Fair value of other financial assets and financial liabilities

There is no material difference between the value of the other financial assets and liabilities, as shown in the balance sheet, and their fair value due to the short term nature, except for the Subordinated Convertible Debt (see Note 17 for further details), Subordinated Loan (Note 16) and First loss loan (Note 18).

5. Cash and cash equivalents

At 31 December 2021 and 2020, no restrictions on the use of cash and cash equivalents exist.

6. Financial assets at fair value through profit or loss

The financial assets at fair value through profit or loss consist of the following instruments at 31 December of each year:

(all amounts in thousands USD)	2021		2020	
	Fair value in USD	% of NAV	Fair value in USD	% of NAV
Level 2 financial instruments				
Commercial paper	578,203	69.7	349,211	43.9
Debt instruments	436,656	52.7	703,388	88.4
Cross currency interest rate swaps – Hedging	6,426	0.8	14,268	1.8
Cross currency interest rate swaps – Primary	13,843	1.7	5,682	0.7
FX Forward contracts – Hedging	2,978	0.4	8,326	1.0
FX Forward contracts – Primary	7,890	1.0	9,505	1.2
Level 3 financial instruments				
Cross currency interest rate swaps – Hedging	33,125	4.0	50,490	6.3
Cross currency interest rate swaps – Primary	51,513	6.2	57,300	7.2
FX Forward contracts – Hedging	1,883	0.2	6,098	0.8
FX Forward contracts – Primary	25,737	3.1	11,341	1.4
Frontier Clearing Fund Junior (TCX)	9,697	1.2	9,830	1.2
Total	1,167,951	141.0	1,225,439	153.9

The level in the fair value hierarchy within which the fair value measurement is categorised in its entirety, is determined based on the lowest level input that is significant to the fair value measurement in its entirety. For this purpose, the significance of an input is assessed against the fair value measurement in its entirety. If a fair value measurement uses observable inputs that require significant adjustment based on unobservable inputs, that measurement is a level 3 measurement.

Assessing the significance of a particular input to the fair value measurement in its entirety requires judgement, considering factors specific to the asset or liability. The determination of what constitutes ‘observable’ requires significant judgement by the Fund. The Fund considers observable data to be market data that is readily available, regularly distributed or updated, reliable and verifiable, not proprietary, and provided by independent sources that are actively involved in the relevant market.

The policy of classification and the process of fair value measurement of level 3 investments is explained in Note 32. The Level 3 investments are detailed as follows (for liabilities see Note 11):

(all amounts in thousands USD)	2021	2020
Assets	121,955	135,059
Liabilities	(193,144)	(264,252)
Total	(71,189)	(129,193)

The following table shows the movements in Level 3 financial instruments (both assets and liabilities) during the year (all amounts in thousands USD):

For the year 2021	Assets	Liabilities
<b>Balance at 1 January 2021</b>	<b>135,059</b>	<b>(264,252)</b>
Transfers into or out of the Level investment category 3	-	-
<b>Adjusted Opening balance</b>	<b>135,059</b>	<b>(264,252)</b>
Early termination swap contract	(989)	12,309
Matured deals	(18,204)	15,238
Unrealized gains and (losses)	6,089	43,561
<b>Balance at 31 December 2021</b>	<b>121,955</b>	<b>(193,144)</b>

For the year 2020	Assets	Liabilities
<b>Balance at 1 January 2020</b>	<b>140,473</b>	<b>(183,984)</b>
Transfers into or out of the Level investment category 3	(29,496)	18,509
<b>Adjusted Opening balance</b>	<b>110,977</b>	<b>(165,475)</b>
Early termination swap contract	(3,017)	8,485
Matured deals	(29,574)	31,294
Unrealized gains and (losses)	56,673	(138,556)
<b>Balance at 31 December 2020</b>	<b>135,059</b>	<b>(264,252)</b>

All results on financial instruments classified as Level 3 are presented in the statement of comprehensive income under results on financial instruments at fair value through profit or loss.

There are no results on financial instruments at fair value through profit or loss as a result of changes in calculation assumptions (2020: no results).

The results on financial instruments at fair value through profit or loss include an amount of USD 11,320 (2020: USD 5,468) resulting from early termination of swap contracts.

A parallel shift in interest rates of 1 basis point results in a change in fair value through profit or loss of USD 241 (2020: USD 147).

The Fund periodically estimates the non-performance risk on its derivative liabilities (DVA, or own credit risk) and the counterparty risk on its derivative assets (CVA). These CVA/DVA estimates take into account the Fund's collateral positions and are made in a manner consistent the Fund's risk management policies and market practice, in order to maximize the use of observable market parameters when deemed relevant. In 2021, no CVA adjustment was made (2020: no adjustment).

As per 31 December 2021, the Fund uses USD LIBOR as basis for the reference rate in its contracts except for 3 transactions, for which SOFR is applicable.

## 7. Cash collateral

As at 31 December 2021, the Fund transferred cash to margin accounts as collateral against open derivatives contracts for a total net amount of USD 81,291 (2020: USD 97,882). The margin accounts were created based on the Credit Support Annex to the ISDA Master Agreements as agreed with various counterparties. The margin accounts are interest bearing (refer to the credit risk disclosure in Note 4).

## 8. Other receivables

At 31 December the other receivables consist of the following:

(all amounts in thousands USD)	2021	2020
Interest receivable	-	298
Prepaid management fee	-	68
EC Pricing Facility receivable	1,459	-
Other	367	213
<b>Total other receivables</b>	<b>1,826</b>	<b>579</b>

The EC Pricing Facility is further disclosed in Note 21.



## 9. Related party transactions

Related party transactions are transfers of resources, services or obligations between related parties and the Fund, regardless of whether a price has been charged. Parties are considered to be related if one party has the ability to control the other party or exercise significant influence over the other party in making financial or operational decisions or is part of key management (Senior management of TCX Investment Management B.V.) of the Fund. The following parties are considered related parties.

### Managing board

TCX Investment Management Company B.V. received remuneration for services provided as the Fund's statutory director which is included in the overall agreement with both parties. See below under Fund Manager for further details.

### Supervisory Board

The Supervisory Board members are entitled to receive fixed annual fees, excluding any applicable VAT, of EUR 40 for the Chair (2020: EUR 40), EUR 30 for each other member (2020: EUR 30 for each other members). These fees are presented as part of the governance expenses. In relation to 2021, a total of EUR 130 (2020: EUR 151) has been expensed, including the applicable VAT. The amount expensed each year depends on the EUR:USD exchange rate, the VAT treatment of each member's fees, the timing of actual payments, Supervisory Board appointments, and AGM decisions on fee levels. In addition, each member has the option to decline receiving their fees. In 2021, one regular member did so (2020: one).

### Fund Manager

The main responsibilities of the Fund Manager are to manage the Fund's investments according to the Fund's strategy and risk management and investment and operational guidelines, to represent the Fund in communication with its stakeholders, counterparties and services providers and to ensure the Fund's optimal access to international and local markets to promote the Fund's investment products.

**Management and performance fee:** According to the Fund Management Agreement, the Fund Manager is remunerated for its activities as follows:

- Cost recovery component: the Supervisory Board agrees to an annual budget payable monthly in advance, with reconciliation to actual costs at year end. For the current period, the Fund Manager received EUR 7,225 equal to USD 8,788 (2020: EUR 6,000 equaling USD 7,348);
- Annual performance fee: the Fund Manager receives an annual performance fee driven by parameters agreed with the Supervisory Board of the Fund and approved by shareholders. The total performance fee taken into account (accrued) for the year 2021 amounts to USD 2,200<sup>6</sup>. Together with the approved surplus over the performance fee estimate accrued for the year 2020 of USD 150, the total performance fee recognized in the 2021 statement of comprehensive income amounts to USD 2,350. In 2020 the total recognized performance fee amounted to USD 1,613, representing the accrued performance fee for the performance over the year 2020 of USD 1,597, plus the approved surplus over the performance fee estimate accrued for the year 2019 of USD 16.

**Remuneration of directors and staff of the Fund Manager:** At the end of 2021, the Fund Manager had 31 employees (2020: 26). The entire team is classified as "identified staff" for regulatory purposes. In conformity with the AIFMD, this means that all staff are subject to malus and claw-back arrangements with respect to their variable compensation, and the variable compensation of senior management, "risk-takers", and control staff is subject to pre-defined deferral arrangements. Historically, the team's fixed and variable remuneration awards have been as follows:

Historically, the team's fixed and variable remuneration awards have been as follows:

2021 (all amounts in thousands)	Fixed EUR	Variable EUR	Total EUR	Total USD <sup>7</sup>
Senior Management (5 staff)	1,222	345	1,567	1,775
Other personnel	2,295	573	2,869	3,249
<b>Total remuneration in 2021</b>	<b>3,518</b>	<b>918</b>	<b>4,436</b>	<b>5,024</b>
2020 (all amounts in thousands)	Fixed EUR	Variable EUR	Total EUR	Total USD <sup>8</sup>
Senior Management (4 staff)	1,001	413	1,414	1,729
Other personnel	1,929	442	2,371	2,899
<b>Total remuneration in 2019</b>	<b>2,930</b>	<b>855</b>	<b>3,785</b>	<b>4,628</b>

6 | In February 2022, the Supervisory Board approved a performance fee of USD 2,167 for 2021. The shortage of USD 33 compared to the amount accrued in 2021 will be recognized in 2022

7 | Translated at the year-end USD/EUR exchange rate of EUR 0.883

8 | Translated at the year-end USD/EUR exchange rate of EUR 0.818

The variable remuneration awarded in any given year relates to individual performance over the previous year. For the staff subject to deferral, 60% is payable in cash in the year of award; the remainder (40%) is payable in equal cash installments over the following 3 years (subject to malus and claw-back).

## 10. Relevant contracts for the Fund's operations

### Fund Manager

The Fund has entered into a Fund Management Agreement with the Fund Manager to provide portfolio management, risk management, and fund administration and valuation services to the Fund. See Note 9 for details of the contractual arrangements.

### Fund Administrator and Valuer

The Fund Manager has delegated the Fund's administration and valuation functions to a third-party service provider, DLM Finance B.V. ("the Administrator"), under a bilateral agreement with the Fund Manager. The main responsibilities of the Administrator are administering, settling and valuing the Fund's investments, collateral management, and maintaining and preparing portfolio reports.

Additionally, the Administrator keeps the books of the Fund and prepares periodic financial reports for the benefit of the Pricing Committee, the Supervisory Board and its committees, the investors, and regulators. The expenses for these services are included in the Management Fee discussed in Note 9 above.

### Risk Monitor

Historically, the Fund's risk monitoring has been provided by Cardano Risk Management B.V. ("CRM") under the terms of a trilateral agreement with the Fund Manager and the Fund. Amongst other functions, CRM is responsible for executing the daily risk, asset, and cash flow monitoring functions, the provision of an independent opinion on pricing and valuation, providing expert input on the modeling and execution of derivatives transactions, and supporting the Fund Manager in research and risk management.

For 2021, Cardano Risk Management B.V. received a fixed fee equal to EUR 1,190 or USD 1,403 (2020: EUR 1,155 equaling USD 1,325).

### Depository and Custodian

The Fund has appointed Bank of New York Mellon N.V. ("BNYM") to act as its independent Depository. In this capacity, BNYM is responsible for general oversight of the Fund Manager, monitoring transactions in TCX shares, safe-keeping the Fund's assets, reconciling its cash flows, and ensuring that its valuation policies and procedures are implemented properly and consistently. BNYM also acts as the Fund's custodian.

For 2021, BNYM received depository fees of USD 209 (2020: USD 187). These fees fluctuate monthly as a function of the value of TCX's investments.

### Assurance providers

The Fund has appointed PricewaterhouseCoopers Accountants N.V. as its Independent Auditor. The Independent Auditor's remuneration in 2021 consisted EUR 296 in audit fees, equal to USD 341 (2020: EUR 285 equaling USD 340). The Independent Auditor is engaged to perform the audit of the financial statements, NAV audits, review procedures and other non-audit services.

The remaining part USD 140 (2020: USD 128) of the total audit fees of USD 481 (2020: USD 468) is related to the operational audit of the Fund by Solutional Netherlands B.V., which resulted in the issuance of an unqualified ISAE 3402 Type II report and assurance on the IT system migration during the year 2021.

## 11. Financial liabilities at fair value through profit or loss

The financial liabilities at fair value through profit or loss consist of the following instruments at 31 December of each year (see Note 6 for further information).

(all amounts in thousands USD)

**Level 2 financial instruments**

Cross currency interest rate swaps – Hedging
Cross currency interest rate swaps – Primary
FX Forward contracts – Hedging
FX Forward contracts – Primary

2021		2020	
Fair value in USD	% of NAV	Fair value in USD	% of NAV
15,143	1.8	7,457	0.9
29,873	3.6	39,834	5.0
9,691	1.2	12,170	1.5
736	0.1	189	0.0
16,444	2.0	12,736	1.6
164,856	19.9	232,359	29.2
11,342	1.4	11,313	1.4
502	0.1	7,844	1.0
248,587	30.1	323,902	40.6

**12. Accrued expenses and other payables**

As at 31 December the accrued expenses and other payables consist of the following:

(all amounts in thousands USD)

Donor Commitments
Audit fee payable
Other general fees payable
Accrued interest on FCDO/SECO subordinated loan
Deferred EC Pricing Facility Income
Management fee and performance fee payable
<b>Total accrued expenses and other payables</b>

2021	2020
5,359	4,267
106	73
538	398
420	438
1,314	-
2,149	1,694
<b>9,886</b>	<b>6,870</b>



### Donor Commitments

The Fund has agreed with BMU as a holder of the Subordinated Convertible Debt (see Note 16) that it will distribute to BMU certain amounts each year in the form of either cash or additional Donor Commitments supported by retained cash (“Donor Assets”) to be used to finance special projects, grants or investments approved by BMU (see Note 13). In 2021 and 2020, BMU elected to receive this distribution in the form of additional Donor Commitments.

When using cash Donor Assets for making an investment that may be redeemed at a later date, any redemption proceeds received by the Fund will be transferred back to the Donor Assets. The Fund is entitled to any interest, dividend or other income received from these investments.

The obligation of the Fund to use the Donor Assets to honor the Donor Commitments ranks junior to the Fund's senior unsecured obligations and pari passu with any other subordinated obligations of the Fund.

### 13. Distributions to the Donors

The Fund has agreed with the providers of the Subordinated Convertible Debt (the Donors listed in Note 16) that it will distribute to them the following amounts:

- In the case of DGIS, on January 1 of each year, on their share of the Subordinated Debt Outstanding on December 31 of the previous year, an amount equal to 2.5% per annum flat up to 2025, such to be distributed in cash or additions to the First Loss Loan, at the discretion of DGIS;
- In the case of BMZ, on January 1 of each year, on their share of the Subordinated Debt Outstanding on December 31 of the previous year, an amount equal to 2.0% up to 2025 and 1.5% up to 2045, such to be distributed in cash;
- In the case of BMU, on January 1 of each year, on their share of the Subordinated Debt Outstanding on December 31 of the previous year, an amount equal to 2.0% up to 2025 and 1.5% up to 2045, such to be distributed in cash or additional Donor Commitments, at the discretion of BMU (see Note 12);
- In the case of FCDO, on January 1 of each year, on their share of the Subordinated Debt Outstanding on December 31 of the previous year, an amount equal to 1% up to 2025 and 0.5% up to 2045, such to be distributed in cash.
- In the case of SECO, on January 1 of each year, on their share of the Subordinated Debt Outstanding on December 31 of the previous year, an amount equal to 2.0% per annum flat up to 2025 and 1.5% up to 2045, such to be distributed in cash.

These distributions to the Donors are presented on a net basis in the statement of comprehensive income and are detailed as follows:

(all amounts in thousands USD)		Note	2020	2020
Interest calculated based on market interest rates			(9,536)	(9,349)
Amortization of government grants	17, 18		3,949	3,977
<b>Distributions to the Donors</b>			<b>(5,587)</b>	<b>(5,372)</b>

### 14. Subsidies granted by third-parties

#### Objective

The Fund may make arrangements with government donors, multi-lateral organizations, and other parties to subsidize the rates it quotes in certain currencies or sectors in case of structural impediments to local currency financings. In 2016, the first such facility was launched by the Fund in cooperation with the Livelihoods and Food Securities Trust Fund (LIFT) – a UN-administered fund operating in Myanmar. The purpose of the facility is to enable foreign development financiers to offer Kyat denominated loans to micro-finance institutions in compliance with the maximum interest rate set by the Central Bank of Myanmar on foreign lending. In May 2019, the second LIFT program was launched. In June and August 2020, the third and fourth LIFT program was launched. During 2021, there were no new LIFT programs launched.

#### Status

As per 31 December 2021 the Fund had received all tranches of the LIFT facility for a total amount of USD 24,975 (2020: USD 24,975), and has been steadily executing the related in subsidized transactions.

### Movement during the period

(all amounts in thousands USD)	2021	2020
Opening balance	5,934	5,386
Received subsidies from LIFT	-	9,025
Subsidies on transactions executed during the year	(601)	(8,477)
<b>Total end of year</b>	<b>5,333</b>	<b>5,934</b>

### 15. Deferred subsidy income

The subsidies on transactions executed during each year are deferred over the lifetime of the executed transactions and recognized on each interest settlement date in the Statement of Comprehensive Income.

(all amounts in thousands USD)	2021	2020
Opening balance	8,247	2,144
Deferred subsidy assigned to executed transactions during the year	601	8,477
Recognised interest grant through Statement of Comprehensive Income	(3,206)	(2,374)
<b>Total end of year</b>	<b>5,642</b>	<b>8,247</b>

During the year 2021, the EC Pricing Facility income amounts to USD 145 (2020 USD nil).

### 16. Subordinated loan

#### Objective

The Subordinated Loan has been provided by the Inter-American Development Bank (“IDB”) with the objective to provide TCX with financing to support its investment activities directed towards the currencies of Latin American and Caribbean countries.

#### Status

The Fund drew USD 20 million (100% of IDB’s the commitment) on 18 December 2012. The loan was fully repaid as scheduled on 15 February 2021.

#### Subordination

Repayment obligations of the Subordinated Loan are subordinated and rank junior to all the other liabilities of the Fund excluding the Subordinated Convertible Debt and the First Loss Loan (see Notes 17 and 18).

#### Repayment and interest

The Fund shall repay the full amount outstanding of the Subordinated Loan in six equal semi-annual installments of principal as follows:

- the first installment shall be due on 15 August 2018 and each half year period thereafter, subject to the rights attached to the put option (see below);
- the final installment shall be due on 15 February 2021.

The Subordinated Loan does not pay any regular interest but includes a compounded return (the Intrinsic Value Compensation Amount) which is paid out with the final installment. The return is calculated as i) the minimum of the compounded 3-month LIBOR rate, as applicable on the 15th day of each quarter and the internal return on TCX’s equity, or zero if the internal return on TCX’s equity is negative plus ii) the adjusted compound IRR.

### Movement of the Subordinated Loan during the reporting period

(all amounts in thousands USD)	2021	2020
Opening balance	5,325	11,733
Compounded return	228	259
Repayment	(5,553)	(6,667)
<b>Total end of year</b>	<b>-</b>	<b>5,325</b>

Fair value information

The estimation of the fair value of the Subordinated Loan at 31 December 2021 was calculated based on an internally developed valuation model (Level 3) and amounted to USD 0 million (2020: USD 5.5 million). The following major assumptions were used in the internally developed valuation model which is based on an income approach:

- The facility is senior to equity and the subordinated convertible debt but junior to other senior liabilities;
- No own credit risk is taken into account;
- The exercise frequency for the put option is fixed beforehand as well as the intervals between the decision to exercise and prepayment (until maturity of the option in 2018);
- The instantaneous volatility shocks to the TCX equity return are assumed to be 20% on an annual basis. Interest rates are assumed to be uncorrelated with TCX equity and are modeled by using a Hull-White extended Vasicek model.

A change in the credit spread of +50bps results in a change in fair value of USD 0 (2020: USD 0). A change in the volatility of the TCX NAV of plus or minus 1% will change the fair value of USD: +/- USD 0 (2020:+/-USD 74).

17. Subordinated Convertible Debt and Grants linked to the Subordinated Convertible Debt

Objective

The Subordinated Convertible Debt has been provided by Donors with the objective to:

- provide to the Fund a financing that provides a first loss protection to its Shareholders, in order to enhance the risk-return profile of their investment;
- enhance the Fund’s capability and incentive to transact in Least Developed Countries and Other Low Income Countries, which are the two lowest categories of countries in the OECD Development Assistance Committee’s list of Official Development Assistance recipients. The Donors specifically wish to target such countries situated in Sub Sahara Africa with their investment; and
- enhance the Fund’s capability and incentive to transact in SE4ALL (Universal Energy Access, Renewable Energy and Energy Efficiency) projects carried out in countries mentioned in the OECD Development Assistance Committee list.

Status

The Donors are:

- I. The Netherlands Minister of Foreign Affairs, Directorate General for International Cooperation (DGIS with a EUR 50 million commitment),
- II. KfW acting on behalf of the German Federal Ministry for Economic Cooperation & Development (BMZ, with a EUR 62.5 million and USD 5,7 million commitment).
- III. KfW acting in its own name but for the account of the German Federal Ministry for the Environment, Nature Conservation, and Building & Nuclear Safety (BMU, with a EUR 30 million and USD 22.7 million commitment respectively),
- IV. The Office of Her Britannic Majesty’s Secretary of State for Foreign, Commonwealth & Development Affairs (FCDO with a GBP 31 million commitment since March 2019).
- V. The Swiss State Secretariat for Economic Affairs (SECO with a USD 11 million).

All commitments are 100% disbursed.

The obligations towards DGIS, BMU, BMZ and SECO were converted into USD on disbursement at the then applicable exchange rate.

The obligation towards DFID is outstanding in GBP in TCX’s books.

In summary the status of the Subordinated Convertible Debt is as follows:

Donor	Maturity Year end	Interest % as per 01/01/2021	Interest % as per 01/01/2025	Outstanding USD
DGIS	2025	2.5	2.5	70,618
BMZ	2045	2.0	1.5	90,547
BMU	2045	2.0	1.5	55,413
FCDO	2045	1.0	0.5	41,954
SECO	2045	2.0	1.5	11,000
Total per 31 December 2021				269,532



Donor	Maturity Year end	Interest % as per 01/01/2020	Interest % as per 01/01/2025	Outstanding USD
DGIS	2025	2.5	2.5	70,618
BMZ	2045	2.0	1.5	90,547
BMU	2045	2.0	1.5	55,413
FCDO	2045	1.0	0.5	42,327
SECO	2045	2.0	1.5	1,000
<b>Total per 31 December 2020</b>				<b>259,905</b>

## Subordination

The Subordinated Convertible Debt is subordinated to all senior and subordinated obligations of the Fund and is furthermore repayable upon liquidation only to the extent that each and every holder of Class A shares has achieved a compounded 3-month USD Libor flat return on its investment (the Threshold Shareholder IRR). It is not freely transferable.

## Conversion

The Donors have the option at all times to convert the outstanding commitments in the Subordinated Convertible Debt in whole or in part into shares Class B. The number of shares Class B shall be calculated in respect to the portion of the outstanding commitment and the number of shares Class B to be issued to a lender. The conversion price payable by a converting lender on the conversion date shall be the equal to the per-share net asset value of the Fund's Shares A applicable immediately after conversion (including the first loss effect of the Subordinated Convertible Debt and/or Shares B outstanding). The lenders' conversion rights are not transferable. During the period, no conversion options were exercised.

## Restriction to redeem Shares B

The Shares B shall have the same rights as any other class of Shares in the Fund, except that the shares Class B will not participate in any dividend and will not be redeemable until the Fund's shareholders have achieved the Threshold.

## Repayment and interest

Unless previously converted to Shares B, the USD amount outstanding under the Subordinated Convertible Debt becomes redeemable in full on their maturity date. As outlined in Note 12, the Fund has agreed to make certain distributions to the Donors in lieu of the usual interest payments.

## Fair value information

The estimation of the fair value of the Subordinated Convertible Debt at 31 December 2021 was calculated based on an internally developed valuation model (Level 3) and amounted to USD 165.7 million (2020: USD 157.5 million). The following material assumptions were used in the internally developed valuation model which is based on an income approach:

- The facility is junior to the net assets attributable to holders of redeemable shares Class A;
- No early exercise of the conversion is taken into account;
- The conditional annual payment of the interest on the facility has comparable value with an end of period payment of compounded LIBOR;
- The volatility of the TCX NAV used in the Black & Scholes option valuation is based on the results of a TCX financial business model with an implied volatility of 20%.

A change in the credit spread of +50bps results in a change in fair value of USD 5,619 (2020: USD 5,820). A change in the volatility of the TCX NAV of plus or minus 1% will change the fair value of: USD +/- 2,725 (2020: USD +/- 2,255).

## Movements during the period and cumulative positions at the end of reporting period

(all amounts in thousands USD)			
	Subordinated Convertible Debt at market interest	Government grants	Total
<b>Total position at 31 December 2019</b>	<b>168,491</b>	<b>89,212</b>	<b>257,703</b>
<b>Amortization</b>			
Amortization during the year	3,388	(3,388)	-
<b>The 2020 Commitment</b>			
Drawdown SECO March 2020	607	393	1,000
FX result FCDO (GBP:USD)	595	607	1,202
<b>Total position at 31 December 2020</b>	<b>173,081</b>	<b>86,824</b>	<b>259,905</b>
<b>Amortization</b>			
Amortization during the year	3,361	(3,361)	-
<b>The 2021 Commitment</b>			
Drawdown SECO December 2021	10,000	-	10,000
FX result FCDO (GBP:USD)	(204)	(169)	(373)
<b>Total position at 31 December 2021</b>	<b>186,238</b>	<b>83,294</b>	<b>269,532</b>

## 18. First Loss Loan

### Objective

The First loss loan has been provided by the Netherlands Minister for International Trade & Development Cooperation (“DGIS”) with the objective to enhance TCX’s capability and incentive to transact in the lowest two categories of countries as defined by the OECD Development Assistance Committee List of Official Development Assistance Recipients. DGIS specifically wishes to target women and countries situated in Sub Sahara Africa.

### Status

The First loss loan agreement was executed on 21 December 2016 for a total amount of USD 10,901. The execution of the agreement was based on a transfer of Donor Commitments as disclosed in Note 12.

### Subordination

Repayment obligations of the First loss loan ranks pari passu with the obligations of the Fund under Subordinated Convertible Debt (see Note 17) in a going-concern scenario. In case the Fund decides to liquidate pursuant to a Liquidation Trigger Event (see Note 18), there is no repayment obligation (the principal resets to zero).

### Repayment and interest

The Fund shall repay the full amount outstanding of the First loan loss including outstanding interest on 31 December 2025. The First loss loan is subject to an annual interest of 2.5% flat on the amount outstanding at December 31 each year.

### Fair value information

The estimation of the fair value of the First loss loan at 31 December 2021 was calculated based on an internally developed valuation model (Level 3) and amounted to USD 2.8 million (2020: USD 4.6 million). The following material assumptions were used in the internally developed valuation model which is based on an income approach:

- The facility is junior to the net assets attributable to holders of redeemable shares Class A and ranks pari passu with the Subordinated Convertible Debt;
- No early exercise of the conversion is taken into account;
- Inclusion of a 2.5% fixed versus floating USD interest rate swap with a maturity date of 31 December 2025;
- The volatility of the TCX NAV used in the Black & Scholes option valuation is based on the results of a TCX financial business model with an implied volatility of 20%.

A change in the credit spread of +50bps results in a change in fair value of USD 57 (2020: USD -114). A change in the volatility of the TCX NAV of plus or minus 1% will change the fair value of: USD +/- 168 (2020: USD +/- 126).

Movements during the period and cumulative positions at the end of reporting period

(all amounts in thousands USD)	First loss loan at market interest	Government grants	Total
<b>Total position at 31 December 2019</b>	<b>7,369</b>	<b>3,532</b>	<b>10,901</b>
Amortization during the year	589	(589)	-
<b>Total position at 31 December 2020</b>	<b>7,958</b>	<b>2,943</b>	<b>10,901</b>
Amortization during the year	588	(588)	-
<b>Total position at 31 December 2021</b>	<b>8,546</b>	<b>2,355</b>	<b>10,901</b>

19. Share capital

Structure of the Fund’s capital

The authorized share capital amounts to sixty thousand euro (EUR 60,000) and is divided into:

- 1,000 classes of Class A shares, numbered from A1 to and including A1,000, each class containing ten (10) shares with a par value of one euro (EUR 1) each; and
- five hundred (500) classes of Class B shares, numbered from B1 up to and including B500, each class containing ten (10) shares with a par value of one euro (EUR 1) each; and
- One (1) C Ordinary Share, numbered C1, with a par value of forty-five thousand euro (EUR 45,000), which share shall be regarded as one (1) class of shares).

At 31 December 2021, 1,053 Shares Class A are in issue (31 December 2020: 1,157 shares) and are fully paid. No Shares Class B are in issue. The single C Ordinary Share is held in treasury by TCX itself.

Subscriptions

The Fund accepts from time to time offers to subscribe to newly issued Shares Class A from "professional investors" only (within the meaning of Article 1:1 of The Netherlands Financial Markets Supervision Act), upon approval by the Fund’s General Meeting of the terms of the issuance and the identity of the new investor.

Repurchases

Each investor has the option to exit the Fund by offering its shares for repurchase on a quarterly basis, at Net Asset Value.

Repurchases are subject to an annual cap of 20% of Shares Class A and Shares Class B outstanding at the start of each calendar year. Separately, the shareholders have the ability to request on 31 December 2040 for full repurchase of their shares. The repurchase can be postponed by the Fund Manager until 31 December 2045 without the cap applying.

Repurchase of shares can only occur if the Primary Investments volume existing between TCX and the exiting Investor after redemption does not breach the limits defined in the Investors Agreement.

On 18 September 2019 the Extraordinary General Meeting approved a proposal to adjust Clause 25.12 of the Investor Agreement by changing the dates of repurchase to align with the tenor of the Convertible Subordinated Loan Agreement. As a result, the Investor Agreement provides a repurchase request may be submitted ultimately by 31 December 2040, and the Fund Manager shall be entitled to postpone the repurchase to any time between 1 January 2041 and 31 December 2045.

Rights and obligations

Each shareholder has the number of votes at a General Meeting equal to the number of Shares it holds. Each Subordinated Convertible Lender may vote on certain matters defined in the Investors Agreement, and in these cases has the number of votes equal to the number of shares Class B that it would have held if the Convertible Subordinated Debt would have been converted into shares Class B on the last business day of the previous financial year. The shareholders and Subordinated Convertible Debt investors shall exercise their voting rights in accordance with and pursuant to the terms, conditions and spirit of the Investors Agreement.

## Capital management

The Fund’s capital management objectives are included in Note 4. The Fund’s internal capital requirements to meet its objective are satisfied through a diversified financial structure. The breakdown is as follows at 31 December:

(all amounts in thousands USD)	2021	2020
Net assets attributable to holders of Shares Class A	829,240	795,538
Subordinated Convertible Debt	186,238	173,081
Grants linked to the Subordinated Convertible Debt	83,294	86,824
EC Capacity Facility (see Note 20)	91,085	36,705
First Loss Loan	10,901	10,901
Frontier Clearing investment capital usage	(6,788)	(6,881)
<b>Total Tier 1 capital</b>	<b>1,193,970</b>	<b>1,096,168</b>

The Fund has one Subordinated Loan classified as Tier 2 capital (see Note 16 for further details).

(all amounts in thousand USD)	2021	2020
Subordinated Loan	-	5,325
<b>Total Tier 2 capital</b>	<b>-</b>	<b>5,325</b>

The definitions of Tier 1 and Tier 2 capital are internal to TCX and are presently driven chiefly by the relative ranking of the instruments in case of a forced or voluntary liquidation of the Fund. Both tiers are junior to the senior creditors of the Fund (TCX’s counterparties), and qualify in this sense as ‘capital’ available to support the obligations towards them. Next comes the non-convertible subordinated debt (Tier 2), and the Shares Class A, which top Tier 1. These are held by development finance institutions and funds, whereas the Subordinated Convertible Debt and the First-Loss Loan are held by government Donors.

The activated Cover Amount of the EC Capacity Facility is qualified as Available Tier 1 Capital due to its irrevocable and unconditional nature. See Note 20 for further disclosure.

The Fund’s capital requirements are based on two ratios:

- Minimum Total Capital ratio<sup>9</sup> of 14% (Tier 1 plus Tier 2 capital over Risk Weighted Assets); (at 31 December 2021: 27%; 2020: 30%)
- Minimum Tier 1 ratio of 10% (Tier 1 capital over Risk Weighted Assets); (at 31 December 2021: 27%; 2020: 30%);

If either ratio falls below the agreed threshold, a Liquidation Trigger Event will have occurred, requiring the Fund Manager to liquidate the Fund within a period of one year following an unremediated stand-still period, subject to investor approval. The capital ratios are tested at the end of each business day.

The Fund maintains an internal capital adequacy assessment process (“ICAAP”) to periodically review and assess the Fund’s capital position, notably the amounts available to support the portfolio’s growth while reserving sufficient amounts to cover stress scenarios.

During the reporting period, the Fund complied with these minimum internal capital requirements.

## Dividend and dividend policy

In accordance with the Investors’ Agreement, dividends may be paid out to shareholders if the Fund generates a profit that outpaces the Fund’s growth potential, leading to inefficient capitalization for the foreseeable future.

## 20. EC Capacity Facility

The EC Capacity Facility is an unfunded guarantee from the European Fund for Sustainable Development of the European Commission (EFSD) -- with KfW as implementing partner -- to pay on demand to TCX (irrevocably and unconditionally) up to EUR 145 million (2020: EUR 130 million) in case of a TCX Liquidation Event, as defined in the Investors Agreement. In exchange for receiving the cash from the EFSD, TCX will issue B-shares to the European Commission directly (or, if requested, to a nominee of the European Commission), on exactly the same basis as the Convertible Subordinated Debt will convert into B-shares in case of a Liquidation Trigger Event. The expiry date of the EC Capacity Facility is 12 November 2035.

<sup>9</sup> | Capital ratio: The Capital ratio is a solvency indicator, explaining the relationship between risk capital and risk weighted assets. The Fund’s (minimum) capital ratio implicitly acts as the Fund’s (maximum) leverage ratio within the meaning of the AIFMD.

The facility closed on 12 November 2020 and restated on 26 February 2021. As per 31 December 2021, the activated Cover Amount of the facility amounts to EUR 80 million (USD 91,085) (2020: EUR 30 million and USD 36,705). This amount may be increased at the Fund's discretion over the next few years (flexible arrangements), subject to achieving certain volume targets in Sub-Saharan Africa.

The guarantee fees payable on the facility amounted to 20 basis points per annum (bppa) of the average daily Cover Amount from 12 November 2020 to 22 December 2020 (20 bppa to KfW and 0 bppa to the EC), 18 bppa of the average daily Cover Amount from 23 December 2020 to 30 June 2021 (18 bppa to KfW and 0 bppa to the EC), and 43 bppa of the average daily Cover Amount from 1 July 2021 (18 bppa to KfW and 25 bppa to the EC).

## 21. EC Pricing Facility

The EC Pricing Facility is an unfunded guarantee from the European Fund for Sustainable Development of the European Commission (EFSD) – with KfW as implementing partner – to pay on demand to TCX (irrevocably and unconditionally) up to EUR 20 million (2020: n/a) to provide financial institutions based in Sub-Saharan Africa and the European Neighborhood with enhanced access to synthetic local-currency borrowings, and to address short- and medium-term funding requirements triggered by the Covid pandemic in these regions (whilst not exposing the borrowers to currency risk). With the support of this Facility, TCX offers price discounts in currencies where TCX's risk-based pricing does not work due to structural impediments (e.g., caps on lending rates). By doing so, the Facility aims to contribute to the stabilization of institutions and to create local-currency lending capacity when and where most needed.

A summary of the Facility's characteristics are as follows:

- TCX is assured of achieving a minimum return of 2.5% on a portfolio of eligible trades;
- The Guaranteed Return Amount is calculated by using 2.5% of the notional outstanding hedged amount;
- The difference between the Forecasted Return Amount and the Guaranteed Return Amount (the Individual Claim Amount) is calculated for all covered transactions;
- The Individual Claims Amounts are summed up for all deals that mature within a financial year. If the aggregate is positive, there is no claim on the EC (the minimum return has been exceeded);
- The Cover Amount (or maximum possible payout to TCX) is EUR 20 million;
- The Effective Date of the Facility is 26 February 2021;
- The payout period (the Cover Period) is 7 years from the Effective Date (i.e., 26 February 2028);
- The deal origination period (the Investment Period) is 2 years from the Effective Date (i.e., 26 February 2023);
- There is no claw back on paid out claim amounts (no netting arrangement over the years).

As of the effective date of the Facility TCX has paid a one-off guarantee facility fee of EUR 200 (EUR 100 for KfW and EUR 100 for the EC).

## 22. Net result on financial instruments at fair value through profit or loss

The net results on financial instruments at fair value through profit or loss are detailed follows:

2021 (all amounts in thousand USD)	Profits		Losses		Net result
	unrealised	realised	unrealised	realised	
Cross Currency Swaps- Primary	193,774	312,573	(113,936)	(181,979)	210,432
Cross Currency Swaps- Hedging	36,599	24,353	(73,200)	(72,914)	(85,162)
FX forward- Primary	37,431	25,110	(17,855)	(2,679)	42,007
FX forward- Hedging	22,472	2,602	(29,586)	(22,403)	(26,915)
FX Swap - Hedging	-	84,697	-	(84,216)	481
FX Spots	-	539	-	(150)	389
Debt instruments	775	3,129	(12,559)	(6,974)	(15,629)
<b>Total</b>	<b>291,051</b>	<b>453,003</b>	<b>(247,136)</b>	<b>(371,315)</b>	<b>125,603</b>

2020 (all amounts in thousand USD)	Profits		Losses		Net result
	unrealised	realised	unrealised	realised	
Cross Currency Swaps- Primary	110,212	341,367	(247,552)	(227,502)	(23,475)
Cross Currency Swaps- Hedging	88,629	11,820	(13,137)	(56,475)	30,837
FX forward- Primary	11,146	8,540	(17,252)	(4,999)	(2,565)
FX forward- Trading	3,088	3,960	(2,009)	(5,000)	39
FX forward- Hedging	29,579	10,248	(18,647)	(14,044)	7,136
FX Swap - Hedging	-	39,550	-	(39,094)	456
FX Spots	-	453	-	(334)	119
Debt instruments	9,943	9,260	(4,791)	(1,515)	12,897
<b>Total</b>	<b>252,597</b>	<b>425,198</b>	<b>(303,388)</b>	<b>(348,963)</b>	<b>25,444</b>

The interest component included in the Cross Currency Swaps amounts to USD 138,286 (2020: USD 142,480).

### 23. Foreign currency translation

Realized and unrealized exchange rate differences consist of realized and unrealized translation gains and losses on assets and liabilities denominated in currencies other than the US Dollar. The total foreign currency translation result amounts to a loss of USD 4,802 (2020: gain of USD 1,020). For the translation of the non-USD positions at balance sheet date, a closing rate of EUR 0.883 (2020: EUR 0.818) per USD has been applied in preparation of these financial statements.

### 24. Interest income

The following table details the interest income during the reporting period.

(all amounts in thousands USD)	2021	2020
<b>Financial instruments at fair value through profit or loss</b>		
Commercial paper	63	3,224
Floated rate notes	1,095	5,662
Fixed rate bonds	3,455	941
Subtotal debt instruments	4,613	9,827
<b>Cash and cash equivalents</b>		
Cash collateral	(395)	150
Subtotal cash and cash equivalents	(395)	150
<b>Total interest income</b>	<b>4,218</b>	<b>9,977</b>

### 25. Other general expenses

The following table details the other general expenses during the period.

(all amounts in thousands USD)	2021	2020
Legal fees	237	536
Rating agency fees	147	85
Guarantee fee	296	352
Pricing Facility fee*	237	-
Compliance fees	55	35
Tax advisory fees	13	-
Research fees	397	366
Other expenses	275	254
<b>Total other general expenses</b>	<b>1,657</b>	<b>1,628</b>

\* According to the agreement, there are two one-off guarantee fee payments totalling EUR 200 (EUR 100 to KfW and EUR 100 to EC). The fee was paid in May 2021.



## 26. Legal proceedings

In the course of its normal activities, the Fund could face claims in civil lawsuits and disputes. Presently, there is no dispute considered to be with merit, and/or if found to be so, likely to have an adverse impact on the Fund.

## 27. Personnel

The Fund did not employ any personnel during the reporting period ending 31 December 2021 (2020: none).

## 28. Assets Under Management

As defined under the AIFMD, the Assets Under Management ('AUM') of the Fund at 31 December 2021 totaled USD 6,335 million (2020: USD 6,044 million), including the derivatives portfolio at notional value.

## 29. Leverage

As defined under the AIFMD, the Leverage of the Fund at 31 December 2021 was 7.0 times its NAV using the Gross Method, and 4.6 times its NAV using the Commitment Method (2020: 7.2 times and 5.0 times, respectively). The Fund calculates these leverage measures solely for reporting purposes to the Dutch Central Bank. For risk and capital management purposes, the Fund relies instead on monitoring its available capital to risk weighted assets ratio, as detailed in Note 19.

## 30. Fund documentation

The totality of the documents concerning TCX's corporate status and its objectives, funding arrangements, policies, management, operations, and financial results are available to existing investors in the secure area of the Fund's website ([www.tcxfund.com](http://www.tcxfund.com)). For permission to access this secure area of the website, prospective investors are invited to contact the Fund Manager at [info@tcxfund.com](mailto:info@tcxfund.com). For non-investors, the website only provides publicly released information.



## 31. Proposal for profit appropriation

Appropriation of profit will be determined in accordance with articles 29 and 31 of the Articles of Association of the Fund.

### Article 29

1. The Fund shall ensure that the annual accounts, the annual report, the report of the supervisory board, insofar instituted pursuant to article 20, and the information to be added by virtue of the law are held at its office as from the day on which the annual meeting is convened. Shareholders, and beneficiaries of a life interest in shares to whom the right to vote the shares accrue, may inspect the documents at that place and shall obtain a copy thereof, free of charge.
2. The general meeting shall adopt the annual accounts. The annual accounts may not be adopted in the event that the general meeting has been unable to inspect the auditor's statement referred to in article 27, paragraph 4, unless a legal ground is given in the information required to be added by law for the lack of the auditor's statement referred to in article 27, paragraph 4.
3. Unconditional adoption of the annual accounts shall not automatically serve to constitute a discharge of the members of the statutory managing board for the management, and of the members of the supervisory board, insofar instituted pursuant to article 20, for their supervision, insofar as such management of supervision is apparent from the annual accounts. The general meeting shall resolve such a discharge separately.
4. The provisions of these articles of association regarding the annual report and the information to be added by virtue of the law need not be applied if the Fund is a member of a group and all other relevant requirements of the law have been met.

### Article 31

1. The statutory managing board shall determine which part of the profits shall be reserved by allocating that part to each relevant dividend reserve that corresponded with the relevant class of shares.
2. The profits that are not reserved in accordance with paragraph 1 shall be at the disposal of the general meeting.
3. Dividends may be paid only up to an amount, which does not exceed the amount of the distributable part of the net assets.
4. Dividends shall be paid after adoption of the annual accounts from which it appears that payment of dividends is permissible.
5. The general meeting may resolve to pay an interim dividend provided the requirement of the second paragraph has been complied with as shown by interim accounts drawn up in accordance with the provision of the law.
6. The general meeting may be subject to due observance of the provision of paragraph 2 resolve to make distributions to the charge of any reserve which need not be maintained by virtue of the law.

### Profit appropriation

The statutory managing board proposes to the general meeting to allocate the operating income of USD 107,353 for the period ended 31 December 2021 as follows: for an amount of USD 107,353 to the other reserves corresponding with each relevant class of shares. As per 31 December 2021, 1,053 shares are in issue. No dividends shall be distributed to shareholders with respect to the period ended 31 December 2021.

## Significant accounting policies, estimates and judgments

### 32. Summary of significant accounting policies

#### Basis of preparation

The financial statements are prepared on a fair value basis for financial assets and financial liabilities at fair value through profit or loss. Certain financial assets and financial liabilities are stated at amortized cost.

The Statement of financial position presents the assets and liabilities in decreasing order of liquidity and does not distinguish between current and non-current items. The Fund's assets and liabilities are generally held for the purpose of being traded or are generally expected to be realised within one year with the exception of the Primary Investments, the long-term Subordinated Loan, the Subordinate Convertible Debt, Subsidies and the associated Grant and subsidy elements linked thereto.



The accounting policies have been consistently applied by the Fund and are consistent with those used in the previous year. All amounts have been rounded to the nearest thousand unless otherwise indicated.

**Adoption of new standards and amendments to existing standards:** *Interest Rate Benchmark Reform—Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16)* The Phase 2 amendments do not have significant impact on accounting policies relating to measurement of the Fund's assets, liabilities, income and expense. See Note 6 for the current status at TCX.

**New standards, amendments and interpretations to existing standards which are relevant to the Fund and not yet effective:** A number of new standards, amendments to standards and interpretations are effective for annual periods beginning after 1 January 2021, and have not been early adopted in preparing these financial statements. None of these are expected to have a material effect on the financial statements of the Fund.

## Functional currency translation

**Functional currency and presentation currency:** The functional currency of the Fund is the United States Dollar (USD), reflecting the fact that the majority of the transactions are settled in USD. The Fund has adopted the USD as its presentation currency as all of the contributions made by the investors of the Fund are denominated in USD.

**Transactions and balances:** All recognized assets and liabilities denominated in non-USD currencies are translated into USD equivalents using year-end spot rates. Transactions in foreign currencies are translated at the rates of exchange prevailing at the date of the transaction. Resulting exchange differences on the financial instruments at fair value through profit or loss in foreign currencies are recorded in the income statement as part of the investment result. Realized and unrealized exchange differences on other assets and liabilities are also recorded in the income statement and disclosed as foreign currency translation.

## Financial instruments

**Classification:** *Financial instruments at fair value through profit or loss* - the Fund classifies all derivative financial instruments (which may include foreign exchange contracts, interest rate futures, forward rate agreements, currency and interest rate options, both written and purchased as well as other derivative financial instruments) as financial instruments at fair value through profit or loss. The Fund classifies investments in debt securities as financial instruments at fair value through profit or loss.

*Subordinated (convertible) debt, grants linked to the subordinated convertible debt, First loss loan and grants linked to the First loss loan* - the Fund classifies these instruments as financial liabilities in accordance with the substance of the contractual arrangements, given that the total expected cash flows attributable to the instrument over its life are not based substantially on the profit, the change in the recognized net assets, or the change in the fair value of the recognized and unrecognized net assets of the Fund during the life of the instrument.

The following financial instruments are classified as financial instruments at amortized cost:

Other receivables, accrued expenses and other payables, cash collateral (paid and given) and cash and cash equivalents.

The Fund's accounting policy regarding the redeemable shares Class A is described below.

**Recognition:** The Fund recognizes all financial instruments on its balance sheet when it becomes a party to the contractual provisions of the instrument. Financial instruments at fair value through profit or loss are initially recognized using trade date accounting. Gains and losses are recognized from this date on.

Drawdowns under the Subordinated Convertible Debt and First Loss Loan facility are treated as loans that include a grant element (further referred to as Grants linked to the Subordinated Convertible Debt and Grants linked to the First Loss Loan, together "the Grants"). The Grants are calculated as the difference between the initial carrying value of the loans (its fair value) and the proceeds received (its book value).

**Measurement:** All financial instruments are initially measured at fair value (transaction price). Furthermore, the following measurement principles are applied:

*Financial instruments at fair value through profit or loss* - Transaction costs on financial instruments at fair value through profit or loss are expensed immediately. After initial recognition, financial instruments at fair value through profit or loss are measured at fair value, with changes in their fair value recognized as gains or losses in the statement of comprehensive income.

*Subordinated (convertible) debt, grants linked to the subordinated convertible debt, First loss loan and grants linked to the First loss loan* - the Subordinated Convertible Debt, First Loss Loan and the Subordinated Loan are recorded as liabilities on an amortized cost basis using the effective interest rate method until

extinguished upon conversion, restructuring or at the instrument's maturity date. The Grants are amortized over the lifetime of the Subordinated Convertible Debt and First Loan Loss respectively.

*Other receivables, accrued expenses and other payables, cash collateral (paid and given) and cash and cash equivalent*- these financial instruments are recognized at fair value and subsequently stated at amortized cost using the effective interest method.

**Fair value measurement principles:** *Commercial paper and Debt Instruments* - For all financial instruments at fair value through profit or loss which are highly rated and liquid such as commercial paper, floating rate notes, certificates of deposit, T-bills, T-bonds for which quoted prices in an active market are available as reference, the fair value is determined based on market standard cash flow methodologies and are further referred to as Level 2 financial instruments.

*Cross currency interest rate swaps (CCIRS) and FX Forward contracts* - the Fund employs these instruments in its portfolio for three reasons:

- Primary Investments: long-term investment transactions in developing country currencies directly in line with the primary purpose of the Fund;
- Trading Investments: transactions with investment banks, usually short-term, with the purpose of diversifying the Fund's overall currency exposure; and
- Hedging Investments: transactions with the purpose of concentration and balance sheet management.

Primary Investment are transacted to realize TCX's mission to provide hedges that are additional to markets, i.e. not transacted by market parties. This typically arises when the investment has a maturity longer than the market offers or TCX offers a product for which there is no market at all. To manage price discovery in such an environment, TCX has instituted a Pricing Committee, which approves the pricing methodology of the Fund based on a proposal of the Fund Manager. The Risk Monitor is responsible for monitoring that the various pricing methodologies approved by the Pricing Committee, are implemented correctly. By definition, the additionality principle means that there is little, if any, directly observable and/or comparable market data. Therefore, the techniques used to value TCX's Primary Investments qualify as Level 3 valuation techniques (valuation technique using inputs that are not market observable) using the income approach based on future cash flows.

TCX's Trading and Hedging Investments are typically closed within the available market offering for the currencies in which they occur. TCX should be able to move into and out of the positions relatively quickly to enhance the diversification benefits, manage portfolio concentrations, or protect its capital. They are valued based on a valuation technique using inputs based on observable market data. In particular, the Fund uses market rates obtained from public sources, such as Bloomberg and Reuters, in the pricing of its derivative over-the-counter products. Therefore, the techniques used to value TCX's Trading and Hedging Investments qualify in principle as Level 2 valuation techniques "valuation techniques using inputs based on observable market data".





*Frontier Clearing Fund Junior (TCX)* - the fair value of the Frontier Clearing Fund Junior Units are determined using valuation models for which not all inputs are market observable prices or rates. The fair valuation of these units is based on discounted future cash flows and is published monthly by the custodian of the Frontier Clearing Funds.

**Impairment of financial instruments at amortized cost:** The Fund assesses at each reporting date whether there is objective evidence that a financial asset or a group of financial assets is impaired and recognizes a provision for impairment when such evidence exists. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy and default or significant delay in payments are objective evidence that these financial assets are impaired. The carrying amount of these assets is reduced through the use of an impairment account which is calculated as the difference between the carrying amount and the present value of estimated future cash flows, net of any collateral held.

**Derecognition:** The Fund de-recognizes a financial asset when the contractual rights to the cash flows from the financial asset expire or it transfers the financial asset and the transfer qualifies for de-recognition. A transfer will qualify for de-recognition when the Fund transfers substantially all the risks and rewards of ownership. A financial liability is derecognized when the obligation specified in the contract is discharged, cancelled or expired.

**Offsetting financial instruments:** Financial assets and liabilities are offset and the net amount is reported in the balance sheet when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the assets and settle the liability simultaneously.

### **Subsidies granted by third parties and deferred subsidy income**

The Fund recognizes subsidies granted on the Statement of financial position once the Fund complies to all conditions and the Fund has received the cash upfront when agreed. The subsidies granted are reclassified as deferred subsidies income when transactions are executed. Deferred subsidy income is recognized in Statement of Comprehensive Income on a systematic basis over the period of the allocated financial instruments and presented as an adjustment to the (change in) fair value of a transaction or a portfolio of transactions for each relevant maturity year.

### **Statement of cash flows**

The statement of cash flows is prepared according to the direct method. The statement of cash flows shows the Fund's cash flows for the period divided into cash flows from operations and financing activities and how the cash flows have affected cash funds.





For the purposes of the statement of cash flows, financial instruments at fair value through profit or loss are included under operating activities. Cash flows from financing activities include proceeds from subscriptions and payments for repurchase of shares of the Fund. As the nature of the Fund is to invest in financial instruments, all cash flows related to investments are classified as cash flows from operating activities.

## Shares Class A

The Fund's Class A shares are redeemable at the shareholder's option and are classified as financial liabilities. These shares are recognized and measured at their net asset value, being the net present value of the assets minus the net present value of the liabilities. Any distributions to holders of these shares are recognized in the income statement as distribution to holders of redeemable shares Class A.

## Income and expense recognition

Income is recognized to the extent that it is probable that the economic benefits will flow to the Fund and the income can be reliably measured. For debt instruments, commercial papers, cash collateral and interest received from Donor Assets, the change in fair value will be classified as a result on financial instruments at fair value through profit or loss. The interest revenue and expense on these instruments are presented as interest income as a separate line item. The benefits of government grants are amortized and presented in the statement of comprehensive income over the lifetime of the Subordinated Convertible Debt and are deducted from the line item Contributions to Donor Assets.

The Management Fee is based on invoices as long as they do not exceed the budget approved by the Supervisory Board. The Performance Fee is determined based on a separate performance assessment by the Supervisory Board against the performance targets agreed with the Fund Manager and approved by the Investors.

## Taxation

The Fund has received a ruling from the Dutch tax authorities that it is eligible for an exemption from corporate income tax (The Fund is a "vrijgestelde beleggingsinstelling" or "VBI"), under the terms of legislation passed through The Netherlands' Parliament on 1 August 2007. Related to this the Fund is also exempt from withholding any taxes due on any dividends paid to its shareholders.

## Cash and cash equivalents

Cash and cash equivalents in the statement of financial position comprise cash on hand, short-term deposits in banks and brokers, money market funds, and cash collateral provided in respect of derivatives, securities sold short and securities borrowing transactions that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value, with original maturities of three months or less.

## Contingent asset

A contingent asset is a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of TCX.

In November 2020, TCX entered into a contract with KfW (the EC Capacity Facility) to increase access to local currency borrowing to institutions based in Sub-Saharan Africa and to address short- and medium-term funding requirements triggered by the ongoing global health crisis. The EC Capacity Facility is an irrevocable and unconditional unfunded guarantee that contains the right for KfW to receive B-shares of TCX after it pays the covered amount to TCX (the contingent asset), at any moment or when the 14% capital ratio is reached and TCX's investors take the decision to liquidate.

The EC Capacity Facility is classified as a contingent asset and further disclosed in Note 20 (current status) and Note 19 (capital impact).

## Events after the reporting period

The financial statements are adjusted to reflect material events that occurred between the end of the reporting period and the date when the financial statements are authorized for issue, provided they give evidence of conditions that existed at the reporting date. Material events that are indicative of conditions that arose after the balance sheet date are disclosed, but do not result in an adjustment of the financial statements themselves.

### 33. Significant accounting estimates and judgment in applying accounting policies

Application of the accounting policies in the preparation of the financial statements requires the Fund Manager to apply judgment involving assumptions and estimates concerning future results and other developments, including the likelihood, timing or amount of future transactions or events. There can be no assurance that actual results will not materially differ from those estimates. Accounting policies that are critical to the financial statement presentation and that require complex estimates or significant judgment are described below.

**Valuation of financial instruments:** The fair value measurement of financial instruments may include valuation based on non-market observable inputs, for instance where the Fund invests with maturities longer than those available on the market or when there are no markets at all. The valuation process of such investments is organized as follows.

**Governance of the valuation process:** Within TCX, there is a clear functional and hierarchical separation of functions between the pricing, valuation and risk monitoring and control teams, that is presently reinforced by having these functions performed by separate companies (TIM, the back-office service provider, and the Risk Monitor, respectively). Each is a member of RISKCO, which is the established venue for addressing operational issues and incidents, including those related to the use of estimates. In case the parties cannot agree, each has a right of appeal to the TCX Supervisory Board, which generally ensures a good adherence to TCX's rules and procedures and a satisfactory resolution of issues and incidents before their escalation.

The parties involved are required to follow TCX's Operational Guidelines precisely. These prescribe each step in the process of pricing, valuing and reporting TCX's positions, and include mandatory procedures for approving new instruments for investment or capital raising purposes (and any changes thereto). Among these procedures is the requirement to submit to RISKCO a Product Approval document that details the accounting, valuation, reporting and disclosure requirements of the new or amended financial instruments.

TCX's uses its Valuation Policy as the central reference point for detailing the models and core assumptions and variables used to value its positions. The Valuation Policy- and the related models and core assumptions and variables - is subject to annual review by RISKCO and sign-off by the TCX Audit Committee.

An independent Pricing Committee meets monthly to discuss the data sources and trends in each market and approve the benchmarks and NDF data that are fed into the pricing and valuation models. This committee is appointed by the TCX Supervisory Board and consists of FX market experts (both practitioners and academics) that are remunerated by TCX on a fixed fee basis. Where there are no markets, the PC approves macro-economic forecasting (FPAS) models developed by another independent company (OGRResearch), that is also remunerated by TCX on a fixed fee basis. A key part of calibrating these econometric models is retrospective testing of their key outputs (being forward-looking FX and interest rates).

The preparation of the monthly valuation and reporting process concludes with the back-office service provider preparing TCX's NAV and both TIM and the Risk Monitor approving its release. As TCX's independent Risk Monitor, Cardono Risk Management is itself appointed by the TCX Supervisory Board and remunerated by TCX on a fixed fee basis.

Assessing the adequacy and effectiveness of the controls of the product approval, model validation, plausibility, and NAV processes is a core aspect of the annual ISAE 3402 Operational Audit.

**Valuation principles:** The Fund Manager applies the commonly used Discounted Cash Flow (DCF) methodology for calculating the net present value of the Cross Currency Interest Rate Swaps (CCIRS) and foreign currency forward contracts. The procedure is as follows:

- Market data is gathered and processed in accordance with approved sources by the Fund's back office.
- From the curve-building algorithm, discount factors are derived for each leg of the CCIRS or forward contract.
- For each leg, if the future cash flows are known (in the case of fixed-rate products) these future cash flows are discounted using the discount factors referred to above to arrive at the net present value of the leg.
- For each leg, if the future cash flows are unknown (in the case of floating-rate products) the back office calculates forward rates from the discount factors; then, using the forward rates, the back office calculates the expected cash flows. Expected cash flows are discounted using the discount factors to arrive at the net present value of the leg.
- The net present value of the non-USD leg (or non-EUR leg when applicable) is converted to USD (EUR, respectively) at the market observable spot rate.
- The fair value of the CCIRS and foreign currency forward contracts to the Fund is obtained by subtracting the net present value of the paying leg from the receivable leg.

The resulting valuation is compared with the independently derived valuation of the Risk Monitor using a similar approach. The Risk Monitor circulates a plausibility report to the Fund Manager on a monthly basis. All differences greater than 1% at individual transaction level are cross-checked and ironed-out where justified.

Estimates used

Item		Measurement principle	Use of models and estimates
Cash and cash equivalents		Fair value	It is assumed that money market funds will be able to retain their par value.
Liquidity investments		Fair value	Market prices are available for most of these listed high-quality securities. If market prices are not available, TCX uses market standard DCF methodologies to value the instruments. The curves used are the Bloomberg swap curves for the relevant currency. In case the investment falls below AA, a credit spread adjustment may be made using the CDS curve for the instrument (or a close comparable).
Derivative (linear)	Investments	Fair value	TCX uses market standard curve construction and DCF methodologies to price and value this book. As Level 2 ("observable inputs"), TCX uses interest and foreign exchanges rates, curves, and other variables obtained from Reuters, Bloomberg, central bank websites, and other publicly available (online) sources. As Level 3 ("non-observable") inputs, TCX uses internally generated FPAS and NDF data.
Derivative (non-linear)	investments	Fair value	Black-Scholes for European style options (or similar for other products).
Frontclear investment		Fair value	<p>TCX uses the reported value of the units to value its position (Level 1 technique, in line with the fact that the position is puttable to Frontclear at its reported value in case of a TCX liquidation). That said, TCX classifies the position as Level 3, because we know its value depends on bespoke models and data sets.</p> <p>Due to timing delays, TCX reports the units' previous month value.</p> <p>70% of the position is deducted from Available Capital in view of the estimate uncertainty (ALCO decision).</p>
Subordinated Loan		Amortized cost	The final value payment that may be due to IDB is the excess of the IRR on TCX shares over LIBOR for the holding period. For reporting purposes, this is calculated based on historical and current data only. For disclosure purposes, a non-linear FMV model is used that assumes 20% TCX NAV volatility.
Subordinated Convertible Loan and First Loss Loan		Amortized cost, split into a loan component and a grant component that amortizes over time	The grant component is calculated at initial recognition or amendment of the loan as the difference between its fair market value on the issuance or amendment dates and its nominal value on those dates. It then amortizes over time. For disclosure purposes, a bespoke FMV model is used, that assumes 20% TCX NAV volatility.
Other Liabilities		Amortized cost	Performance fee accruals are based on estimates of the salaries payable each year and the performance score the TCX SB may give to TIM.



# In Control Statement

**The Managing Board of TCX Investment Management Company B.V.** (TIM or the Fund Manager) confirms that, as sole member of the Statutory Managing Board of The Currency Exchange Fund N.V. (TCX or the Fund), it is responsible for the risk management, internal control, integrity, and compliance systems of the Fund.

The Fund and TIM have entered into a long-term services agreement with each other and a number of operational partners to appropriately manage the Fund's systems and risks. These partners notably include Cardano Risk Management B.V. regarding risk monitoring; DLM Finance B.V., regarding back office, valuation and fund administration services; and Compliance Advies Financiële Ondernemingen regarding compliance services. Together with TIM, these unrelated parties form the TCX Operational Group.

All material processes relating to TCX's operational management, including responsibilities assigned within the TCX Operational Group in each step of TCX's management processes and the risk assessment thereof, are described in the TCX Operational Guidelines. All of the Fund's operational processes are designed for compliance with the AIFMD. These guidelines are reviewed annually at least, each review possibly resulting in amendments signed off by all members of the TCX Operational Group. All service agreements with members of the TCX Operational Group require compliance with these guidelines. Each member of the TCX Operational Group provides us with an annual statement of compliance and control concerning TCX's operations during the previous financial year.

TCX's operations are managed on the basis of strict segregation of duties, with the various members of the TCX Operational Group assuming specific responsibilities. As a result, TCX's processes have an elaborate system of built-in operational checks. All material data entry is subject to a minimum 4-eyes principle, either system-enforced or by means of written confirmations of required checks. The segregation of responsibilities is achieved, at its highest level, through independent reporting by the Fund Manager, Risk Monitor and External Compliance Officer to the TCX Supervisory Board.

All of TCX's processes include periodic controls on the effectiveness of their functioning and compliance with agreed procedures and recording. An important control function is reserved to the quarterly compliance reports of the Internal and External Compliance Officers. In 2021, no report identified the occurrence of an incident, control issue or concern of any material nature. Another important reference is the annual operational audit, completed on 24 December 2021 by Solutional Netherlands B.V., the Fund's operational auditor, in cooperation with the Fund's financial auditor, PriceWaterhouseCoopers Accountants N.V. The scope of the operational audit was to report on the design and effectiveness of all material controls identified in the Operational Guidelines, including those related to the preparation of the financial statements. The result was an unqualified audit opinion on the Fund's ISAE 3402 Type II report, which confirmed that the control framework of the Fund is designed appropriately and is operating effectively in all material aspects.

TCX performs regular risk assessments with input from all TCX Operational Group members. The main high-level risk issues affecting TCX are as follows:

**Market risk:** TCX's business model, based on continued enforcement of currency risk diversification, requires good market information, careful balancing of exposures and excellent administrative systems. Inappropriate market risk management leads, among other things, to mispricing of transactions and misjudgment of the Fund's NAV. TCX manages these issues through a system of separate evaluation of market data between the back-office and risk management (both pre-trade and post-trade), as well as frequent plausibility checks between the two (at least monthly). Risk management monitors exposures and quotes against agreed limits on a real-time basis, with weekly reporting by the Risk Monitor to the Fund Manager, monthly reporting to the Risk Management Committee, and periodic reporting to the Supervisory Board.

**Credit risk:** TCX's business model requires active management of the counterparty credit risks that inevitably arise from its investment activities. TCX manages these risks through suitable client selection criteria and by submitting regular credit reviews to the Risk Management Committee, imposing minimum credit rating standards, setting maximum credit limits, and using collateral, guarantees and/or hedges to minimize or reduce the exposure under these limits. Reporting frequency by the Risk Monitor is weekly to the Fund Manager, monthly to the Risk Management Committee, and periodically to the TCX Supervisory Board.

**Operational risk:** TCX is managed by a group of companies relying on each other's compliance with pre-agreed procedures that are drafted to cover all material operational processes. Material risk is that responsibilities may not be appropriately allocated and/or understood, or that agreed processes that have been designed to appropriately safeguard against human error, internal fraud and other operational risks are not followed. Compliance is enforced within the steps of these processes (minimum 4-eyes principle) as well as through periodic internal and external controls.

**Business continuity:** TCX is reliant on several IT systems run by the TCX Operational Group, notably its back-office management systems, its risk monitoring systems, and its intranet and website. Mismanagement of IT risks could lead to continuity issues, breaches of payment obligations, and to the loss of data integrity and cash flows. Each member of the TCX Operational Group therefore has in place business continuity and disaster recovery plans that ensure the continuity of business-critical processes. These plans are tested periodically.

**Reputational risk:** TCX's business model gives rise to client, supplier, adviser, and employee acceptance issues that require careful attention to ensure that the Fund's reputation as a quality provider of financial services remains intact at all times. TCX manages these issues through strict adherence to the Fund's code of conduct, know-your-client, anti-money laundering, and environmental & sustainability policies and procedures. Compliance with these procedures is reported on a quarterly basis to the TCX Supervisory Board.

**Regulatory risk:** TCX operates in an environment that has become increasingly regulated since the 2008 financial crisis, in Europe, the United States, and elsewhere. These regulations have an impact at the market, entity, and product levels, and their breadth, depth, and evolving nature pose an ongoing challenge for TCX. TCX manages these regulatory compliance risks by acquiring the necessary subject-matter expertise from legal, financial, and other advisers in support of its Internal Compliance Officer, who is responsible for the periodic review of all key agreements, policies, and processes to ensure full compliance at all times, with monthly updates to the Risk Management Committee and quarterly updates to the Audit & Compliance Committee of the TCX Supervisory Board.

During 2021, TCX experienced no credit loss, no NAV valuation incidents, no compliance incidents, and no material operational incidents.

In conclusion, we therefore confirm:

- that TCX has designed an adequate set of documented management controls that are appropriate to its business;
- that, based on the periodic checks that have been performed and reported on by the TCX Operational Group, and based on our direct observations of processes on an on-going basis, it is our belief that these controls exist and have functioned effectively during the financial year ending 31 December 2021;
- that no material issues or incidents have occurred in the financial year ending 31 December 2021;
- that no activities have been reported to us that are in conflict with the TCX Code of Conduct (as adopted in the Operational guidelines); and
- that we do not expect to significantly adjust the basis of TCX's set-up in 2022, except in so far as it relates to strengthening of the risk management function through the gradual implementation of a best-practices three-lines-of-defense risk management framework under the leadership of the new CRO, as outlined on page 20 of this Annual Report.

## Impact of the COVID-19 crisis

At this time we do not see any need to adjust our policies, processes, systems, limits, and controls to cope with the ongoing Covid and Ukraine crises.

Amsterdam, 13 April 2022

## The Managing Board of TCX Investment Management Company B.V.

Ruurd Brouwer, Chief Executive Officer  
Othman Boukrami, Head of Trading  
Bert van Lier, Chief Investment Officer  
Brice Ropion, Chief Operating Officer  
Hanane Saïh, Chief Risk Officer



# Statement of the Depositary

Amsterdam, February 22, 2022

## Considering that

- The Bank of New York Mellon SA/NV, Amsterdam branch (“the depositary”) is appointed to act as depositary of The Currency Exchange Fund NV (“the fund”) in accordance with section 21(1) of the Alternative Investment Fund Managers Directive (2011/61/EU) (the “AIFM Directive”);
- Such appointment and the mutual rights and obligations of the fund manager and the depositary of the fund have been agreed upon in the depositary agreement dated the 21st of December 2015 between such parties, including the schedules to that agreement (the “depositary agreement”);
- The depositary issues this statement exclusively to the fund manager in relation to the activities of the fund manager and relates to the period 1st of January 2021 up to and including 31st of December 2021, (“the period”).

## Responsibilities of the Depositary

The depositary acts as a depositary within the meaning of the AIFM Directive and provide its services in accordance with the AIFM Directive, the EU implementing regulation, applicable Dutch laws and regulations and the policy rules issued by the European Securities and Markets Authority and the Dutch Financial Markets Authority (the “regulations”). The responsibilities of the depositary have been described in the agreement and include, in addition to the safekeeping, recordkeeping and ownership verification tasks (as defined in article 21(8) AIFM Directive), several monitoring and oversight tasks (as defined in article 21(7) and 21(9) AIFM Directive):

- Monitoring of the fund’s cash flows, including identification of significant and inconsistent cash flows and reconciliation of the cash flows with the fund’s administration;
- Ensuring that the sale, issue, re-purchase, redemption, cancellation and valuation of units or shares of the fund are carried out in accordance with the applicable national law and the fund documentation;
- Ensuring that in transactions involving the fund’s assets any consideration is remitted to the fund within the usual time limits;
- Validating if the fund is managed in compliance with the investment restrictions and leverage limits as defined in the fund documentation.

## Statement of the Depositary

The depositary has carried out such activities during the period as considered necessary to fulfil its responsibilities as depositary of the fund. The depositary is of the opinion that, based on the information made available and the explanations provided by the fund manager, in all material respects, the fund manager has carried out its activities which are in scope of the monitoring and oversight duties of the depositary, in accordance with the regulations and the fund documentation.

## Miscellaneous

This statement does not create, and is not intended to create, any right for a person or an entity that is not a party to the depositary agreement.

## Signed: Ton Tol

Head of Netherlands Trust and Depositary

The Bank of New York Mellon SA/NV, Amsterdam branch



# Independent auditor's report

Rotterdam, 14 April 2022

To the general meeting and supervisory board of the Currency Exchange Fund N.V from  
**PricewaterhouseCoopers Accountants N.V**

## Report on the financial statements 2021

**Our opinion** In our opinion, the financial statements of The Currency Exchange Fund N.V. ('the Company') give a true and fair view of the financial position of the Company as at 31 December 2021, and of its result and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union ('EU-IFRS') and with Part 9 of Book 2 of the Dutch Civil Code.

**What we have audited** We have audited the accompanying financial statements 2021 of The Currency Exchange Fund N.V., Amsterdam.

The financial statements comprise:

- the statement of financial position as at 31 December 2021;
- the following statements for 2021: the statements of comprehensive income, cash flow and changes in net assets attributable to holders of redeemable shares Class A; and
- the notes, comprising the significant accounting policies and other explanatory information.

The financial reporting framework applied in the preparation of the financial statements is EU-IFRS and the relevant provisions of Part 9 of Book 2 of the Dutch Civil Code.

**The basis for our opinion** We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. We have further described our responsibilities under those standards in the section. Our responsibilities for the audit of the financial statements' of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

**Independence** We are independent of The Currency Exchange Fund N.V. in accordance with the 'Wet toezicht accountantsorganisaties' (Wta, Audit firms supervision act), the 'Verordening inzake de onafhankelijkheid van accountants bij assuranceopdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

## Report on the other information included in the annual report

The annual report contains other information. This includes all information in the annual report in addition to the financial statements and our auditor's report thereon.

Based on the procedures performed as set out below, we conclude that the other information:

- is consistent with the financial statements and does not contain material misstatements; and
- contains all the information regarding the letter from the managing board and the other information that is required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information. Based on our knowledge and the understanding obtained in our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing our procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of such procedures was substantially less than the scope of those procedures performed in our audit of the financial statements.

The managing board is responsible for the preparation of the other information, including the letter from the managing board and the other information in accordance with Part 9 of Book 2 of the Dutch Civil Code.

## Responsibilities for the financial statements and the audit

### Responsibilities of the managing board and the supervisory board for the financial statements

The managing board is responsible for:

- the preparation and fair presentation of the financial statements in accordance with EU-IFRS and Part 9 of Book 2 of the Dutch Civil Code; and for
- such internal control as the managing board determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, the managing board is responsible for assessing the Company's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, the managing board should prepare the financial statements using the going-concern basis of accounting unless the managing board either intends to liquidate the Company or to cease operations or has no realistic alternative but to do so. The managing board should disclose in the financial statements any event and circumstances that may cast significant doubt on the Company's ability to continue as a going concern.

The supervisory board is responsible for overseeing the Company's financial reporting process.

**Our responsibilities for the audit of the financial statements** Our responsibility is to plan and perform an audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence to provide a basis for our opinion. Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error and to issue an auditor's report that includes our opinion. Reasonable assurance is a high but not absolute level of assurance, which makes it possible that we may not detect all material misstatements. Misstatements may arise due to fraud or error. They are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

A more detailed description of our responsibilities is set out in the appendix to our report.

Signed by: J. IJspeert RA

**PricewaterhouseCoopers Accountants N.V.**

## Appendix to auditor's report on the financial statements 2021

In addition to what is included in our auditor's report, we have further set out in this appendix our responsibilities for the audit of the financial statements and explained what an audit involves.

### The auditor's responsibilities for the audit of the financial statements

We have exercised professional judgement and have maintained professional scepticism throughout the audit in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our audit consisted, among other things of the following:

- Identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the intentional override of internal control.
- Obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the managing board.
- Concluding on the appropriateness of the managing board's use of the going-concern basis of accounting, and based on the audit evidence obtained, concluding whether a material uncertainty exists related to events and/or conditions that may cast significant doubt on the

Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report and are made in the context of our opinion on the financial statements as a whole. However, future events or conditions may cause the Company to cease to continue as a going concern.

- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures, and evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the supervisory board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.







# Members of the Supervisory Board

The appointment of Supervisory Board members is subject to the approval of the General Meeting and of the Financial Markets Authority of the Netherlands. The Supervisory Board presently consists of the following individuals:

## Mr. Bernd Loewen, Chair

Bernd Loewen currently oversees finance, the internal organization and consulting division, credit administration, and human resources within the Executive Board of KfW Group. He joined the Executive Board in July 2009 and initially was accountable for the risk and finance departments at KfW up to the separation of the CRO and CFO function as of January 1, 2016. Prior to joining KfW, he spent 5 years as Member of the Management Board for Investment Banking and Treasury of mBank S.A. in Poland, and nearly 10 years in increasingly senior commercial and non-commercial positions at Commerzbank in Germany and the USA. He holds the equivalent of an MBA from Westfälische Wilhelms Universität Münster, is an Advisory Member of the Steering Committee of the Federal Agency for Financial Market Stabilization, and is the Chair of the Advisory Council of the True Sale International GmbH, both based in Frankfurt, Germany. He joined the TCX Supervisory Board in May 2014.

## Mrs. Lakshmi Shyam-Sunder, Vice-chair

Lakshmi Shyam-Sunder is Vice President and Chief Risk Officer of the World Bank Group, a position she has held since 2014. She was previously Chief Financial Officer and Director, Finance and Risk, at the Multilateral Investment Guarantee Agency (MIGA), the political and credit enhancement arm of the World Bank Group. Prior to joining MIGA in 2011, she held a variety of positions at the International Finance Corporation, including Director for Corporate Risk. She was co-founder of the Multilateral Banks' Global Emerging Markets (GEMS) Risk Data consortium. Before joining the World Bank Group, she was a faculty member of the MIT Sloan School of Management, where she had previously obtained a Ph.D in Finance. She also served on the faculty of the Tuck School of Business Administration. She has consulted for a wide range of institutions in the USA and in emerging markets, and has been on the board and finance and risk committees of several institutions in these markets. She joined the TCX Supervisory Board in May 2015.

## Mr. Aigboje Aig-Imoukhuede

Aigboje Aig-Imoukhuede is Chairman of Coronation Capital Ltd., an Africa-focused equity and proprietary investment firm that he founded in 2014 and operates out of Nigeria and Mauritius. Between 2002 and 2013, he was Group Managing Director and CEO of Access Bank Plc., responsible for transforming the bank into a top-5 leadership position in Nigeria, with assets of USD 12 billion and 350 branches employing 20,000 staff in 9 countries. Prior to this he was an Executive Director at Guaranty Trust Bank Plc. (1991-2002). His achievements include chairing presidential and banking industry committees in Nigeria and co-founding FMDQ, an OTC exchange that specializes in fixed income securities and derivatives. His awards include Commander of the Order of the Niger, Ernst & Young Entrepreneur of the Year (West Africa), and African Banker Magazine's "African Banker of the Year". He is a past President of the Nigeria Stock Exchange and an impact philanthropist. He holds law degrees from the University of Benin and the Nigerian Law School, and an EMBA jointly awarded by the London School of Economics & NYU. He joined the TCX Supervisory Board in December 2015.

## Mr. Marcus Fedder

Marcus Fedder is a finance professional with more than 30 years of experience in development finance, capital markets and derivatives. He is the Chair of the Advisory Board of Channel Capital and served until last year as a non-executive Director and Chair of the Audit Committee of the International Finance Facility for Immunization. He has been involved with microfinance since 2009, including co-founding a MIV, and currently serves on the investment committee of Alterfin, an impact investor. Prior to this, he built a 20-year career in international banking and development finance, including appointments as Vice Chair of Toronto Dominion Securities with responsibility for all businesses in Europe and Asia-Pacific, and Treasurer of the European Bank for Reconstruction and Development (EBRD). He also worked at the World Bank advising governments and central banks on debt and asset and liability management, and at CIBC and Deutsche Bank in interest and currency derivatives. He holds a PhD in politics from the Freie Universität Berlin, and post graduate degrees in international relations from Cambridge and the London School of Economics. He joined the TCX Supervisory Board in January 2017.

## Ms. Sarah Russell

Sarah Russell joined the TCX Supervisory Board in November 2019. Prior to that Ms. Russell was CEO of Aegon Asset Management Holdings N.V. from 2010 until 2019, and a member of the Management Board of Aegon N.V. from 2016 to 2019. Before joining Aegon, she built a 14-year career at ABN AMRO Bank, culminating in her appointment as Senior Executive Vice President and CEO of ABN AMRO Asset Management Holdings N.V., a position that she held from 2006 to 2008. Among her other roles at ABN AMRO Bank she served as Managing Director and CFO of the Wholesale Clients Business Unit (2004-2005) and Global Head of

Financial Markets Research and Financial Markets Infrastructure Support (2002-2004). In her non-executive capacity, Ms Russell is a member of the Board of Directors of Nordea Bank Abp (since 2010), Member of the Audit Committee (member since 2011, Chair from 2017 to March 2021) and Member of the Board Remuneration and People Committee (since 2021); and a member of the Supervisory Board of Ostrum Asset Management S.A. (since 2019). Ms Russell is also a member of the Supervisory Board of APG Group N.V. (since 2021) and member of the Audit and Risk Committee, as well as Vice Chairman of the Supervisory Board of APG Asset Management N.V. (since 2021), chairman of the Remuneration and Nomination Committee and member of the Finance Committee. Previously, she has served as Vice Chairman of the Supervisory Board of La Banque Postale Asset Management S.A. (2015-2019) and as a member of the Supervisory Board of Nederlandse Investeringsinstelling N.V. (2015-2019). Ms Russell holds a Master of Applied Finance from Macquarie University in Sydney, Australia and is a Fellow of the Australian Institute of Company Directors.

**Expiry dates of the mandates of the members of the Supervisory Board**

Mr. Loewen	May 2022 (end of second term; not renewable)
Mrs. Shyam-Sunder	May 2023 (end of second term; not renewable)
Mr. Aig-Imoukhuede	May 2024 (end of second term; not renewable)
Ms. Russell	May 2024 (renewable for a second term)
Mr. Fedder	May 2025 (end of second term; not renewable)

**Membership of the sub-committees of the Supervisory Board**

**○ Audit and Compliance Committee**

Ms. Sarah Russell (Chair)  
Mr. Marcus Fedder

**○ Remuneration & Nominations Committee**

Mrs. Lakshmi Shyam-Sunder (Chair)  
Mr. Bernd Loewen

**○ Risk Oversight Committee**

Mr. Marcus Fedder (Chair)  
Mr. Aigboje Aig-Imoukhuede

# Members of the Managing Board

The Fund's sole director and managing board member is its Fund Manager, TCX Investment Management Company B.V. ("TIM"). TIM has its own Managing Board, consisting of five statutory directors. Their appointment is subject to the approval of the TCX Supervisory Board and the Financial Markets Authority of the Netherlands. The current directors are:

## **Mr. Ruurd Brouwer, Chief Executive Officer**

Ruurd Brouwer joined TIM in 2014 and has overall responsibility for the management of the Fund, including its growth strategy, capital structure, and investor relations. Prior to joining TIM, he worked for 16 years at FMO, the Dutch development bank, in various positions including Director of Investment & Mission Review (and Chair of FMO's Credit Committee), Director of Financial Institutions, and Director of Africa & Government Funds. Prior to FMO he was a Policy Official at the Dutch Ministry of Foreign Affairs. He has been active as a supervisory board member and investment committee member of financial institutions and investment funds focused on Africa, and as a guest lecturer at the Erasmus School of Economics and The Hague University of Applied Sciences, teaching on financial stability, banking, risk management, and developing economies. He holds a Master in International Finance from the University of Amsterdam.

## **Mr. Othman Boukrami, Head of Trading**

Othman Boukrami joined TIM in 2009 and was promoted to Head of Trading in 2015. His responsibilities include managing TCX's derivatives pricing and trading activities, and the Fund's portfolio and liquidity. Prior to joining TIM he worked for four years at the African Development Bank, first as a Senior Risk Officer and then as a Senior Investment Officer. He was previously a Senior Treasury Dealer at Citigroup. He holds a Bachelor in Economics & Finance from the École Supérieure de Commerce in Algiers, a Master in Banking & Finance from the University of Lyon, a Master in International Securities, Investment & Banking from the University of Reading, and a PhD in Finance from the University of Lyon.

## **Mr. Bert van Lier, Chief Investment Officer**

Bert van Lier joined TIM in 2008 and is responsible for TCX's commercial activities, including origination, structuring, and portfolio management and strategy. Prior to joining TIM, he built a varied 18-year career at ING Bank, including 5 years as Managing Director responsible for Structured Product Sales in The Netherlands, and Global Equity Derivative Sales. He holds a MBA from Tilburg University and an Executive Master of Finance and Control from VU University Amsterdam.

## **Mr. Brice Ropion, Chief Operating Officer**

Brice Ropion joined TIM in 2010 and is responsible for TCX's non-commercial activities, including regulatory compliance, fund operations and valuation, financial administration, accounting and reporting, and audit and control. Prior to joining TIM, he built a 20-year career at ABN AMRO Bank, including 8 years in portfolio and risk management functions with a focus on financial institutions, and 12 years in commercial and branch management functions in the bank's international division. He holds a Master in International Affairs from George Washington University, and a Bachelor in Economics and Political Science from Cornell University.

## **Mrs. Hanane Saïh, Chief Risk Officer**

Hanane Saïh was appointed as TIM Managing Board member and CRO on 1 November 2020. Hanane has 15+ years of experience in financial services and risk management with a strong focus on derivatives pricing and risk models, market risk management, liquidity risk as well as counterparty credit risk. She joins TCX from NatWest Markets N.V. where she was the Head of Market, Liquidity and Funding Risk. Previously, she held senior roles in investment banks in Europe, Asia and Australia. Hanane is from Morocco. She studied quantitative finance and computer engineering in one of the top engineering school in France.

# Members of the Pricing Committee

The members of the Pricing Committee are appointed by the TCX Supervisory Board. The current members are as follows:

## Mr. Nikolaus Siegfried, Chair

Nikolaus Siegfried has been a partner at SlowerCapital in Tübingen, Germany, since 2013. SlowerCapital specialises on economies of frontier markets, including country risk, banking sector and financial market development. Nikolaus also advises clients on private equity and loan deals in these markets. Before setting up SlowerCapital, Nikolaus was Associate Director at LandesBank Berlin (2010-2013), consultant at Artemis Investment Management (2009-2010), Assistant Portfolio Manager/Economist at Thames River Capital LLP (2005-2009), Economist at the European Central Bank (2002-2005), and Research Associate at Merrill Lynch (2001). Nikolaus holds a PhD in Economics from the University of Hamburg and a Masters in Middle-East Studies from the Free University, Berlin. He joined the TCX Pricing Committee in September 2010 and was appointed Chairman in December 2017..

## Mr. Sebastian Espinosa

Sebastian Espinosa is the Managing Director of White Oak Advisory Limited, a firm he co-founded in 2009. White Oak Advisory is one of the world's leading providers of financial advice on matters relating to sovereign debt and public finances, and its team has advised on many of the sovereign debt workouts to take place in the emerging markets over the last 20 years. Its clients include governments, central banks, state-owned enterprises, and financial institutions active in the sovereign debt markets. Prior to this, he was Managing Director of Houlihan Lokey in London, a firm specialized in providing financial advice on sovereign debt restructuring, liability management, and other debt and funding-related matters. From 2000 to 2005, he was a Director in the Sovereign Advisory unit of UBS Investment Bank in London. His earlier career was spent as an Associate Director in the Sovereign Ratings team of Fitch IBCA Ltd. and as an Economist in The Economist Intelligence Unit Ltd (EIU). He holds a M.Phil in Development Studies and a BA in Philosophy with Politics from the University of Sussex. He joined the TCX Pricing Committee in February 2018.

## Mr. Peter Redward

Peter Redward started Redward Associates Ltd. in September 2011. Based on Singapore, Redward Associates provides independent research on economic and financial market developments in the Asia-Pacific region. Their clients include a range of investment managers – both leveraged and unleveraged – sovereign wealth funds and banks, located in major global financial centers. Prior to this, he was managing director, head of EM Asia Research at Barclays Capital (2006-2011), portfolio manager at Citadel Investment Group (2005-2006), director, head of EM Currency Research at Deutsche Bank AG (1998-2005), and senior research officer at the Reserve Bank of New Zealand (1995-1998). He holds a Masters in Economics from the University of Auckland, and joined the Pricing Committee in September 2016. He joined the TCX Pricing Committee in September 2016.



**Mr. Louis Sabatino**

Louis Sabatino is a former Director and Head of Africa Debt Capital Markets for WestLB. Operating out of Johannesburg, he spent 14 years at WestLB, tasked with developing a non-South African trading and capital markets presence in Africa, including creating and managing active trading books in bonds, money market and derivatives in 12 currencies, and trading local treasury debt and hard currency trade debt, Eurobonds and distressed debt in 20 other African countries. Prior to this, he had been head the Africa desk and head of FX Treasury at Standard Merchant Bank. On leaving WestLB, he became a consultant to Exotix Partners LLP in Johannesburg, to help them implement a local currency fixed income trading capability across the Sub Saharan African domestic capital markets. Currently self-employed, he serves as a non-executive director and investment committee member of Africa GFI Fund Advisors in Mauritius, a fund focused on the African local markets, and on the investment committee of Frontier Clearing Management B.V., a fund that issues credit support guarantees in support of inter-bank trading activities in the emerging markets. He joined the Pricing Committee in October 2013.

**Mr. Vincenzo Zinni**

Vincenzo Zinni started his banking career in 1997 when he joined the Emerging Markets research team at Credit Suisse First Boston (CSFB) and helped build an econometric model able to predict emerging markets currency crises. He then moved into the Global Strategy team where he worked with Jonathan Wilmot and contributed to the development of the Risk Appetite Index and the World Wealth Index. Both indexes were widely used in CSFB and the industry for positioning and investment purposes. In 2000, he moved to CSFB's Emerging Markets Sales and Distribution team where he held various positions. In 2006, he was promoted to Head of EMEA Emerging Markets Sales, a position he held until 2009 when he was promoted to run the CEEMEA Sales and Coverage team, a position he held until 2014 when he left Credit Suisse. In March 2015, he joined the Noble Group, where he is the Head of Asia Treasury and Trade Finance and held positions in London and eventually moved to Singapore to run the group. In July 2017 Vincenzo left Noble Group and moved back to the UK and set up his own Advisory business focusing on the Commodity Markets. Vincenzo has been actively involved in Empower, an emerging markets charity. He holds a Master in Economics from CORIPE in Turin, and a Degree in Economics and Banking from the University of Siena. He joined the Pricing Committee in June 2014.

**Expiry dates of the mandates of the members of the Pricing Committee**

Mr. Siegfried	December 2022 (renewable in 3-year increments up to 2025)
Mr. Sabatino	December 2023 (renewable in 3-year increments up to 2028)
Mr. Zinni	December 2023 (renewable in 3-year increments up to 2029)
Mr. Redward	December 2024 (renewable in 3-year increments up to 2031)
Mr. Espinosa	December 2024 (renewable in 3-year increments up to 2033)





# General information

## Supervisory Board

Mr. Bernd Loewen (Chair)  
Mrs. Lakshmi Shyam-Sunder (Vice Chair)  
Mr. Aigboje Aig-Imoukhuede  
Mr. Marcus Fedder  
Ms. Sarah Russell

## Depository

Bank of New York Mellon N.V.  
WTC/B, Strawinskylaan 337  
1077 XX Amsterdam  
The Netherlands

## Risk Monitor

Cardano Risk Management B.V.  
Weena 690, 21st floor  
3012 CN Rotterdam  
The Netherlands

## Independent Financial Auditor

PricewaterhouseCoopers Accountants N.V.  
Fascinatio Boulevard 350  
3065 WB Rotterdam  
The Netherlands

## Legal & Netherlands tax advisor

Jones Day  
Concertgebouwplein 20  
1071 LN Amsterdam  
The Netherlands

## Managing Board and Fund Manager

TCX Investment Management Company B.V.  
Mauritskade 63  
1092 AD Amsterdam  
The Netherlands

## Custodians and Banks

Bank of New York Mellon N.V.  
Citibank NA

## Administrator & Valuer

DLM Finance B.V.  
Mauritskade 64  
1092 AD Amsterdam  
The Netherlands

## Independent Operational Auditor

Solutional Netherlands B.V.  
Arentsburghlaan 3  
2275 TT Voorburg  
The Netherlands

## Registered Office

Mauritskade 63  
1092 AD Amsterdam  
The Netherlands

## General information

Amsterdam Chamber of Commerce number 3427 7912  
[www.tcxfund.com](http://www.tcxfund.com)  
[info@tcxfund.com](mailto:info@tcxfund.com)

**design** | K Birnholz Creative | [www.kbirnholz.com](http://www.kbirnholz.com)  
**photography** | Arno Bosma | <https://arnobosma.myportfolio.com>  
cover: Eddo Hartmann | [www.eddohartmann.nl](http://www.eddohartmann.nl)  
**graphs** | Ruud Voegesang  
**print** | Response Network BV, Amsterdam (printed on FSC paper)







**TCX Investment Management Company**

Mauritskade 63 | 1092 AD Amsterdam | The Netherlands

**e** | [info@tcxfund.com](mailto:info@tcxfund.com) **t** | +31 20 531 4851 **w** | [www.tcxfund.com](http://www.tcxfund.com)