# LOCAL CURRENCY FINANCING

***TCX's role in the Kyrgyz Republic during the 2014 Russian ruble crisis and beyond***

TCX

the currency exchange fund

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# FOREWORD

LOCAL CURRENCY FINANCING is about supporting entrepreneurs in frontier economies to manage their business and grow. To create jobs. Currently, entrepreneurs do not have access to long term funding in their own currency. The only option left is to finance their growth in dollars. As they earn local currency, their business is unprotected against devaluations. Devaluations that now will force him to cut costs, postpone investments or even put him out of business. By taking away this risk the entrepreneur can focus on his core business, he becomes a better risk for his bank and sleeps better. Jyrgal, the hero of the case study in front of you, luckily banked with an institution that was funded in local currency.

If many entrepreneurs or individuals in an economy finance their investments with hard currency, the financial system, and ultimately the entire economy becomes vulnerable to external shocks. More local currency finance makes an economy more resilient to international economic crises. It creates financial stability, leading to growth and development.

The financial system as a driver for sustainable growth is an essential part of the development process of a country. Developing economies with higher levels of financial development grow faster and experience faster reductions in poverty levels.[1] TCX operates in markets where these framework conditions are absent, or not working effectively. TCX takes away limitations by providing currency and interest rate hedges and actively supports the development of local capital markets. It is the goal of this country case study to provide an example of TCX's role in strengthening companies and financial systems. The impact of TCX is most visible during times of high volatility and uncertainty, as was experienced in the Kyrgyz Republic during the 2014 Russian ruble crisis. The products and services offered by TCX contribute to reducing uncertainty and limiting the impact of currency crises on the real economy.

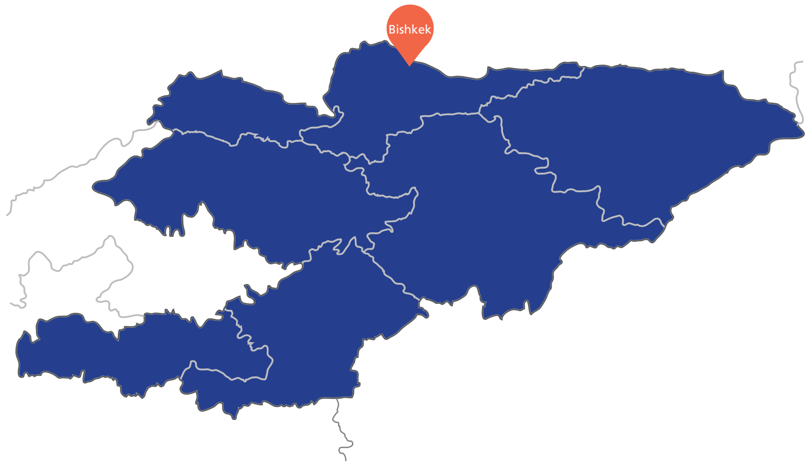
This case study is based on an analysis of the interventions of TCX in the Kyrgyz Republic. The case is organized as follows: the first section describes the nature of the financial challenges the Kyrgyz Republic faces. The second section looks at how the Kyrgyz Republic addresses these challenges, and TCX's contribution to that process. The third section concludes on TCX's mandate to stimulate commitments to local currency financing.

The ultimate aim of this case study is to provide insight in the importance for local entrepreneurs to be protected against macro-economic risks. Risks they cannot influence and that aggravate the unstable nature of frontier economies, when not adequately managed. Enterprises financed in local currency benefit the financial system as they represent a better risk. Vice versa, a stronger financial system benefits local entrepreneurs, enabling them to pursue their life's ambitions in a more stable environment.

Ruurd Brouwer

CEO, TCX

1) Cihak, M., Demirguc-Kunt, A., Feyen, E., Levine, R. (2012). Benchmarking financial systems around the world. Policy Research working paper; no. WPS 6175. Washington, DC: World Bank.




# HOW A SMALL CONSTRUCTION COMPANY DEALS WITH CURRENCY RISKS

## The Story.[2]

BISHKEK, 2015. Following an appointment at the Demir Bank, Jyrgal is on his way to his company office in the outskirts of Bishkek, the capital of the Kyrgyz Republic. It has been three years since Jyrgal inherited his father's construction company. After a difficult first year, the business picked up in 2013. Jyrgal began to reap the fruits of his own labor while benefiting at the same time from public infrastructure investments, as well as favorable economic conditions and growth in general (2013 +10.5%). In 2013, Jyrgal was approached by an investor to participate in the construction of a small shopping center – a compelling business opportunity.

The new middle class in Kyrgyzstan is growing, which has a positive effect on the consumer market. The shopping center will house a supermarket, a clothing store and a pharmacy. This is a big opportunity for Jyrgal and his company, which employs three people on full-time contracts. Normally, during busy times, Jyrgal works with a flexible workforce, but he might be able to employ someone else full-time due to this big assignment. In order to carry out the work, Jyrgal would need an extra truck to transport materials to the construction site. However, the purchase of the truck would be impossible without a loan. Therefore he made an appointment with the Demir Bank.

His first conversation with the loan officer was encouraging. The bank evidently appreciated the improvements that Jyrgal made since inheriting the company. He had applied for a formal business license and implemented a proper accounting system. And he had reinvested part of the profits into the company which meant an increase of equity as a risk buffer. Consequently, the bank was willing to provide the loan, even though Jyrgal could not provide sufficient collateral to the bank. The bank offered Jyrgal two options: a loan in US dollars (USD), and a loan in local Kyrgyz som (KGS).

## The Risk.

Jyrgal appreciated the opportunity he had been offered: banks are generally reluctant to provide small and medium enterprises (SMEs) with loans. But he also was aware of the risk that came along with this loan. Due to tensions in the region, economic growth in 2014 was expected to slow down and the estimated economic growth for 2015 (+2%) was significantly lower compared to the years before. Inflation had made the exchange rate against the USD unpredictable and volatile in recent years. Jyrgal's invoices were paid in KGS. If Jyrgal would take a loan in USD, his liabilities would not match his income, creating a currency mismatch.

2) TCX aims to clarify its results beyond simple numbers. This story is an example to show how TCX affects end clients. Given TCX cannot identify its end clients, the illustration is hypothetical. The exchange rates and interest rates are real.

## The Strategy.

Together with the loan officer, Jyrgal discussed both loan offers. The Demir Bank works together with the European Bank for Reconstruction and Development (EBRD). The EBRD offers to its client Demir Bank long term loans in local currency. That is possible thanks to TCX, a fund that hedges exchange rate risks. The Demir Bank, having received funding in local currency, could offer Jyrgal a KGS loan now, without taking extra currency risk on its own balance sheet. Jyrgal would have to pay a higher interest rate on a loan in KGS compared to the level on a USD loan, in line with the local market rates. Of course, Jyrgal was not sure whether the KGS would continue to decline in value. However, he preferred not to speculate and continue to feel at ease, knowing in advance what his exact repayment obligations would be in local currency.

## Effects on repayment of loan balance.

In 2013, Jyrgal was offered a 2-year loan of either KGS 500,000 (at a fixed rate of 16.7% p.a.) or USD 10,406 (at a fixed rate of 5% p.a.), to pay for the truck. Since then the KGS has depreciated by approximately 24.8% against the USD. If Jyrgal had accepted the USD loan in 2013, in 2015, by the time the loan matured, he would have required a total of KGS 664,957 to pay back the USD 10,406 loan (including the interest). Taking the depreciation into account, the original USD fixed loan rate of 5% p.a. had in effect nearly quadrupled to 18.3%.

## The Value.

In the car back to his office, Jyrgal reflects on his decision. He is very content he decided to accept the local currency loan offer: the risk of a loan in dollars is just too high to carry. Jyrgal's business income will not only be more protected against som depreciation, but the balance sheet of his company will also be more solid. The risk of bankruptcy will decrease and his creditworthiness will increase. Besides the monetary value, he very much appreciates the psychological effect of his decision: knowing that he is covered against significant losses gives him more time and energy to focus on making his business a success. A wise decision, especially during this time of high regional volatility and uncertainty.

# 1. DEVELOPMENT IMPACT:

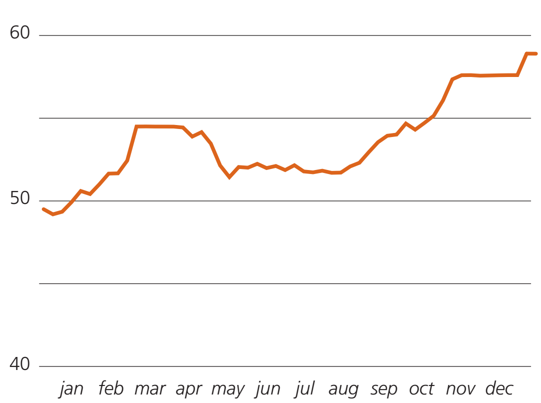
## CURRENCY RISK MANAGEMENT CONTRIBUTES TO A MORE RESILIENT FINANCIAL SYSTEM

- **One of the risks in a financial system is exchange rate volatility. This is an issue in small developing economies with limited domestic funding sources, and high levels of external debt, like the Kyrgyz Republic.**
- **The 2014 Russian ruble crisis had a negative effect on the Kyrgyz exchange rate. The crisis demonstrated yet again that currency risks should be adequately managed, in order to increase the resilience and financial viability of a country.**
- **In countries like the Kyrgyz Republic, with relatively low levels of financial system development, TCX's role as a shock absorber contributes to removing exchange rate risks from the domestic financial system.**

ON 15 DECEMBER 2014, the Russian ruble plummeted. In one day, it lost 10% of its value against the USD, the worst drop since the ruble crash in 1998. The USD 2 billion worth of rubles that were bought by the Russian central bank did not generate a positive effect, nor did the interest rate increase by 6.5 percentage points. A day later, on 16 December, the currency lost another 11% of its value. The Russian ruble crisis was now a reality.

The economy of the Kyrgyz Republic is strongly dependent on Russia. In parallel with the slowdown of the Russian economy, the Kyrgyz economy experienced a broad-based slowdown in 2014. Besides declining exports and a decrease of the real net inflow of remittances, the KGS strongly depreciated against the USD (figure 1). Early in the year, pressures from a weakening Russian ruble and Kazakh tenge – the currencies of Kyrgyz's key trading partners – weighed on the KGS, forcing it to depreciate over the first quarter of 2014. The KGS was stabilised with the help of currency trades (FX or forex sales) by the National Bank of the Kyrgyz Republic (NBKR).

***Figure 1: Nominal exchange rate 2014** (KGS per USD)*




*Source: Bloomberg, 2015*

The Kyrgyz Republic is a small developing economy. It has limited domestic funding sources and high levels of external debt, typically provided in USD. Sharp depreciations of the KGS have a direct effect on the country's financial system and on the real economy. Exchange rate risk associated with international debt is allocated through the terms agreed between the borrowers and lenders. In the absence of international hedging markets, this typically means that the risk is placed onto the domestic borrowers. As a result, any depreciation in the KGS against the funding currencies results in an increase in KGS value of outstanding hard currency obligations. This volatility must be fully absorbed by the Kyrgyz system.

TCX, as absorber of FX shocks, has contributed with its balance sheet to complementing the reserves of the central bank. TCX does this by covering either the lenders (typically the development finance institutions providing medium or long-term loans to local financial institutions) or their borrowers (typically the local financial institutions themselves) against the exchange rate volatility of this external funding. This contributes to a stronger and healthier domestic financial sector balance sheet. Foreign exchange rate risks are removed from the domestic system.

**Concretely, TCX's role as FX shock absorber for the Kyrgyz financial system meant that it incurred a cumulative KGS-related loss of USD 10.8 million from 1 September 2014 to 31 December 2014. The actual loss due to the depreciation of the KGS amounted to USD 16.4 million. This was partly offset by interest income of USD 3.0 million, as well as a profit of USD 2.7 million related to expected future interest rates. In the same period, the currencies related to the ruble in TCX's portfolio of exposures[3], triggered an aggregate loss for TCX of USD 32.7 million (including expected future interest effects).**

**Throughout the ruble crisis in December 2014, TCX continued to hedge new loans provided to the MFIs, even as the risks were sharply climbing. High price volatility required a temporary freeze to floating rate basis swaps and other short-term products as the market stopped functioning. Due to high local interest rate levels, TCX recommended postponing the disbursements of new local currency deals until the markets stabilized. In January 2015, TCX could show indicative quotes again and trading resumed.**

"By stimulating the use of local currency financing, we aim to build confidence in the local Kyrgyz economy and strengthen the Kyrgyz som."

*Wieger Fokke, Investment Officer – Dutch Entrepreneurial Development Bank (FMO)*

3) Currencies related to the ruble in TCX's portfolio are Armenian dram, Azerbaijan manat, Belarusian ruble, Georgian lari, Kazakh tenge, Moldovan leu.

# 2. DIRECT DEVELOPMENT RESULTS:

## THE ROLE OF TCX IN REDUCING CURRENCY RISKS FOR THE LOCAL ECONOMY

- STRENGTHENING THE FINANCIAL MARKET: **TCX operates on the principle of additionality. TCX offers hedging at fixed rates in maturities ranging from 2-5 years. The market is following TCX's benchmark and increasingly offers swaps with longer tenors (> 1 year).**
- STRENGTHENING FINANCIAL INSTITUTIONS: **TCX has the capacity to absorb a net exposure in KGS of about USD 120 million in aggregate, reducing the dependence on foreign currency. TCX's deal volume in 2013 equaled 22.9% of all external debt to private lenders in the Kyrgyz Republic.**
- STRENGTHENING END BENEFICIARIES: **The end borrower is typically the least able to access risk management products to hedge currency risk. TCX hedged 11.0% (2011), 21.6% (2012), 25.7% (2013) of the disbursements of MFIs to their clients in local currency.[4] Based on this information, it can be estimated that TCX protected approximately 100,000 Kyrgyz borrowers from currency risks in 2013.**

### 2.1. STRENGTHENING THE FINANCIAL MARKET

Reducing dollarization and promoting the use of local currency have been important strategic aims of both the NBKR and the Finance Ministry of the Kyrgyz Republic. Foreign currency risk and dependence on external financing emerged as key vulnerabilities following independence in 1991.

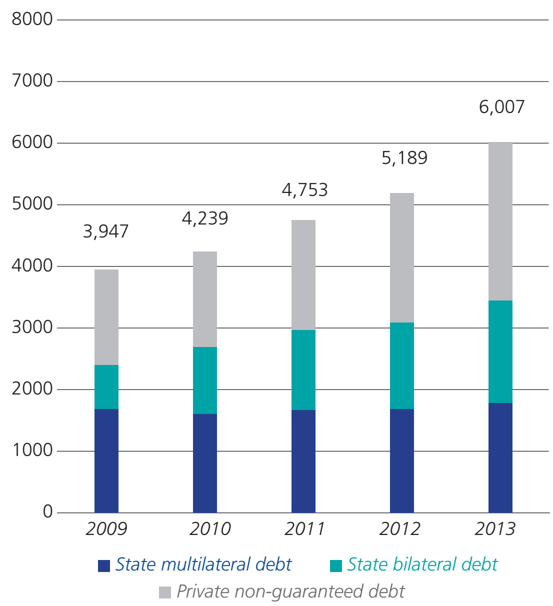
When the Kyrgyz Republic was established, it was fast in carrying out market reforms. As the country moved to a demand economy and implemented an investment program to generate economic growth, financial resources were needed to stimulate the development of the economy. However, financial institutions in Kyrgyzstan had limited access to funding sources in their domestic market (long-term deposits, wholesale funding or debt). Until today, according to the IMF (2014), the main factors constraining the growth of domestic borrowings include the hardly developed and narrow stock market in the Kyrgyz Republic.

External financial flows to Kyrgyzstan have thus been an important source of funding over the years. External debt and international lenders still dominate in the Kyrgyz Republic's national debt structure. According to the NBKR, the total nominal external debt (received and unpaid) amounted to USD 6,007 million at the end of 2013. The debt comprises the combined liabilities of the public and private sectors (figure 2).

Loans from international funders (financial institutions, multilateral and bilateral creditors) to both public and private sector borrowers in the Kyrgyz Republic are usually provided in hard, foreign currencies, such as EUR or USD.

4) In these sections, where data are not available for 2014, the latest available values are used.

***Figure 2: Composition of total external debt of the Kyrgyz Republic 2009-2013*** *(in USD million)*




*Source: NBKR, 2014*

Typically, however, the borrowers depend on KGS revenue. This introduces a source of risk, as volatile currencies such as the KGS depreciate at an erratic and unpredictable rate against these hard currencies. Between 2008 and end-2014, the KGS lost more than 67% of its value against the dollar, highlighting the vulnerability and risk.

Besides the cost of actual losses incurred, this situation introduces material uncertainty and unpredictability in the financial performance of local borrowers as the exchange rate fluctuations feed through to the borrowers' profit and loss accounts. Even more fundamentally, the presence of systemic borrowing in hard currency has a material effect on the monetary policy of a country. With a large stock of foreign currency debt, any devaluation feeds through to worsening trade balances. This undermines the beneficial impact of devaluation on the local economy's international competitiveness and thereby removes an important tool for economic policy (this problem is usually termed the "original sin").[5]

**TCX operates on the principle of additionality, meaning that it provides its hedging products only for currencies and maturities not effectively covered by the market. In the Kyrgyz Republic, this additionality is immediately apparent from the limited availability of hedging products offered by the market (which is generally up to 1 year only). In the absence of a functioning domestic floating rate benchmark, TCX offers hedging at fixed rates in maturities ranging from 2 to 5 years.**

**In 2014, TCX hedges in the Kyrgyz Republic had the following maturity profile: Less than 1 year (USD 20 million); 1-3 years (USD 72 million); 3-7 years (USD 14.9 million). The maturity profile of hedges offered by the market was generally up to 1 year only.**

5) Eichengreen, B., and Hausmann, R. (1999). Exchange rates and financial fragility. Proceedings Economic Policy Symposium – Jackson Hole, Federal Reserve Bank of Kansas City, pages 329-336.

"Thanks to the availability of hedging instruments provided by TCX, local Kyrgyz banks have become more flexible in providing swaps at increased tenors ( > 1 year) with a roll-over guarantee. If it would not have been for the regional tensions, this trend would definitely have continued."

*Rosanna Sarkayeva, Senior Investment Officer – Triodos Investment Management B.V.*

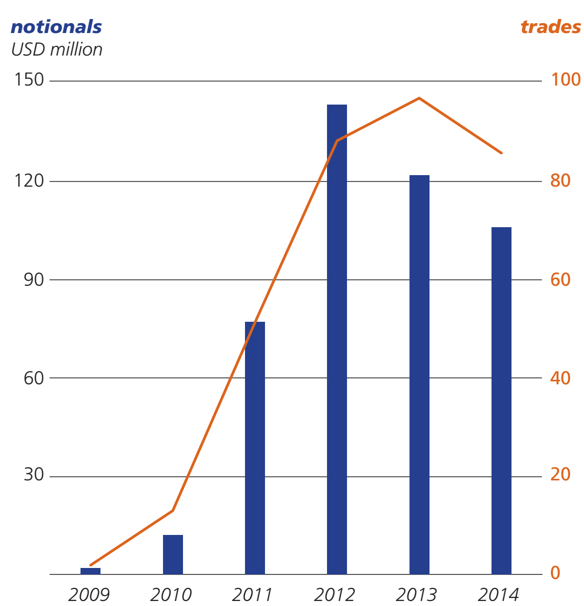
## 2.2. STRENGTHENING FINANCIAL INSTITUTIONS

Expanding the availability of currency risk management instruments means little in the absence of realizing transactions. TCX started to quote the KGS in 2009, as a result of demand originating from development finance growth funding.

**In total, since 2009, TCX has hedged 337 transactions in the Kyrgyz Republic, with a value of USD 463 million, including roll-overs (figure 3). In 2014, TCX hedged 86 transactions, with a value of USD 107 million. The transactions were mainly to support the microfinance sector (USD 85 million), SME finance (USD 18 million) and other finance (USD 4 million). TCX has the capacity to absorb a net exposure in KGS of about USD 120 million in aggregate.**

**TCX's deal volume as a percentage of long term loan disbursements to private lenders in the Kyrgyz Republic was 22.9% in 2013.[6] Without TCX, these loans would have been delivered in USD or EUR. TCX helped to shield the balance sheet of these financial institutions.**

***Figure 3: TCX production figures for the Kyrgyz som, 2009-2014*** *(in USD million)*




*Source: TCX, 2014*

6) Sum of TCX notional (including roll-overs) divided by non-guaranteed long-term loan disbursements as reported by World Bank, International Debt Statistics.

Complementary to setting new benchmarks and hedging transactions, TCX speeds up change processes in financial institutions, and shapes the attitudes of other actors. TCX actively promotes forward looking policy and risk assessments. The Kyrgyz central bank has been implementing a forward-looking monetary policy analysis and decision making system to achieve and maintain low inflation. TCX has been spearheading forward-looking analysis through a forecasting policy and analysis system (FPAS) for the country that it developed in 2013. This tool has been made accessible to TCX investors and local players. TCX thus aims to directly contribute to the efforts of the Kyrgyz central bank.

BAI TUSHUM BANK **Established in the year 2000, Bai Tushum Bank is among the three largest microfinance institutions in the Kyrgyz Republic, providing more than 16% of the nation's microcredit. Bai Tushum is a bank that is increasingly financing its operations through local currency loans. In 2011, for example, the EBRD issued a 3-year local currency loan of KGS 270 million (USD 6 million). Bai Tushum used this funding to expand its loan portfolio, with a specific focus on increasing its credit program for agricultural micro enterprises. More recently, IFC provided a KGS 220 million (USD 4 million) to Bai Tushum. In addition to the local currency loan, an agreement was signed to help the bank manage currency risk and facilitate local currency lending.**

"Our clients tell us that without access to TCX's hedging capacity, they couldn't maintain their loan pipeline to the Kyrgyz microfinance sector. There are simply no other options."

*Brian Cox, President – MFX Solutions, Inc.*

## 2.3. STRENGTHENING END BENEFICIARIES

In the Kyrgyz Republic, small and medium enterprises are at the heart of the economy. The microfinance sector supporting them is well developed, with more than 400 institutions, representing an outstanding loan stock of approximately USD 615 million to 436,025 borrowers.[7]

Microfinance accounts for more than 70% of the country's individual loans in numbers. To manage the potential negative effects of volatile monetary policies and illiquid currencies on loan portfolios, microfinance institutions (MFIs) in developing countries are increasingly choosing to deploy funds in local currencies.

**TCX plays an important role in reducing currency risks for the local Kyrgyz MFI industry. It does so both directly (i.e. by transacting with the three largest MFIs in the country) and indirectly (by hedging the international lenders to the industry). In total, TCX hedged 11% (2011), 21.6% (2012) and 25.7% (2013) of the aggregate loan disbursements of MFIs to their clients in KGS.[8] This means that TCX indirectly hedged approximately 100,000 borrowers in the Kyrgyz Republic in 2013.[9]**

The predominance of external debt, denominated in a foreign currency, made the Kyrgyz economy vulnerable in the face of the Russian ruble crisis. More specifically, the dollarized financial system entails that the FX risk is placed with SMEs through USD loans, introducing instability at the economy's base. In the absence of functioning markets, TCX provided the only available solution to redress this undesirable situation. By absorbing the FX shocks within the financial value chain, a part of the Kyrgyz real economy was spared the effects of the ruble crisis, as TCX absorbed the severe losses. This is due to TCX's ability to better manage portfolio diversification as a pool with contributions from multiple sources.

Now remember the story of Jyrgal, where the local currency loan had a higher interest rate than the hard currency loan. As can be seen in the Kyrgyz Republic, when the currency risks are not mitigated, the effects can have devastating financial consequences.

> "The success of local currency financing in the Kyrgyz Republic pressures us to consider issuing local currency bonds in the future."

*Wieger Fokke, Investment Officer – Dutch Entrepreneurial Development Bank (FMO)*

7) Mixmarket.org 2015

8) Total loans and disbursements from shareholders to top 3 MFIs in KGS divided by the net loan portfolio (KGS) of the top 3 MFIs.

9) Estimates are based on information available at www.mixmarket.org/country/kyrgyzstan.

# 3. TCX: A SHARED COMMITMENT TO LOCAL CURRENCY

TO ADDRESS THE PROBLEM OF EXCESSIVE DEPENDENCE ON FOREIGN CURRENCY, The Currency Exchange Fund N.V. was founded in 2007. The mission of TCX is to enable borrowers in emerging markets such as the Kyrgyz Republic, to minimize or eliminate currency mismatches. TCX pursues this objective by offering currency risk management products to international investors and/or their clients. TCX acts as a counterparty to investors or borrowers who want to hedge the foreign exchange risk of long-term finance. As of the beginning of 2015, TCX had 22 investors and managed a portfolio of USD 1.3 billion over some 620 transactions in 48 emerging market currencies.

It is an investment fund with both public and private shareholders:

## TCX OPERATES ALONG THE FOLLOWING KEY PRINCIPLES:

- **FOCUSED PRODUCTS:** TCX only invests in market risk management products such as currency swaps. It does not provide funding.
- **UNIQUE RISK MANAGEMENT:** TCX assumes outright currency risks in highly illiquid markets, managing risk through portfolio diversification across all regions and countries in the emerging and frontier markets.
- **ALIGNMENT WITH SHAREHOLDERS:** By working with the commercial officers of its shareholders, TCX has origination access to their combined client networks and deal-flow. TCX tailors its investments for these institutions.
- **MARKET-BASED PRICING:** TCX invests in products that are priced in accordance with prevailing market rates and methodologies.
- **ADDITIONALITY:** TCX only invests where its counterparties have no adequately priced commercial alternatives.
- **NON-SPECULATION:** TCX only hedges actual exposures.

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*This case study has been developed by:*
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*with the support of*
*Mantis B.V.*
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The third-party data used in this report is based on information that TCX believes is accurate, reliable, and consistent over time, but that TCX has not independently verified.

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