Client Case Study



businesses and private customers.

consist of financial institutions, large corporations, small-to-medium-sized numerix

Turkish Economy Bank (TEB): Using FINCAD for Optimizing Pricing and Asset Liability Management (ALM)

The Challenge

TEB set forth on an asset-liability management (ALM) initiative. As part of this project, the bank required the ability to calculate options prices and Greeks, and cash flows on inflation index bonds.

At the onset of the project, TEB had planned to calculate pricing for their products using their existing risk management solution. However, the bank targeted several new types of instruments that they wanted to add to their portfolio, including options caps/ floors, digital caps/floors, cross currency swaps and bond options. These instrument types could not be priced or risk managed with the existing system. Therefore, TEB sought a best-ofbreed valuation and risk solution that provided coverage for these complex instruments. The bank also required that the new solution be based on flexible architecture, so it could be easily integrated with their existing risk management technology stack.

"Using FINCAD, we can easily calculate expected inflation rates and cash flows of inflation indexed bonds, the fair value, Greeks, and probabilities of FX and IR options for differentiated and exotic products."

Arzu Aksu, Project Manager at TEB, IT side

The Solution

Consultants working with TEB on their current risk management system recommended FINCAD for help pricing complex instruments. TEB selected FINCAD's software development kit (SDK) and FINCAD's industry-leading analytics to generate prices and risk sensitiveness of all FX and interest rate (IR) options in their portfolio. "Using FINCAD, we can easily calculate expected inflation rates and cash flows of inflation indexed bonds, the fair value, Greeks, and probabilities of FX and IR options for differentiated and exotic products," said Arzu Aksu, Project Manager at TEB, IT side. TEB's Asset Liability Management, Market Risk and Business Analytics departments all rely on FINCAD results to aid in decision-making.





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The Results

TEB utilizes FINCAD daily for pricing approximately 3,000 FX and IR instruments. Their results include:

Quick Start-Up: The FINCAD solution was operational in a rapid timeframe. Using the developer toolkit, the bank was able to set up more than 25% of their products in just three months. "FINCAD is one of the best solutions for pricing all aspects of derivative products traded in major financial markets around the world," commented Aksu.

Extensive Pricing Coverage: The bank can now price a wide range of derivatives products and do so accurately. "FINCAD offers several differentiated functions and models for pricing FX and IR options. This valuable functionality has enabled us to customize as we need according to TEB's portfolio," stated Aksu.

Regulatory Reporting: TEB relies on FINCAD to meet the regulatory reporting requirements of both Basel III and the Banking Regulation and Supervision Agency of Turkey (BRSA). Prices and Greeks generated in FINCAD are used as inputs that feed regulatory reports.

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Looking Forward

TEB anticipates the flexibility of FINCAD technology will enable them to easily adapt to inevitable market and regulatory change. Mustafa Ulak, Manager of Risk Management at TEB commented, "FINCAD has given us access to timely, accurate risk data, and the freedom to price a multitude of different instruments. Having these key abilities will be an important part of complying with current regulatory demands and will help us adapt to future changes in regulation and the overall marketplace."

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