

## **TurkDEX: An appraisal**

*By Ann Berg*

*In the following article, Ann Berg, an experienced industry consultant, reviews the progress made by the Turkish Derivatives Exchange (TurkDEX) in its early phase of development.*

Responding to global growth and rising financial markets integration, the Turkish Derivatives Exchange (TurkDEX) launched a derivative product complex in February 2005. Marking the start of a risk management center in Turkey, it offers a product mix of financial instruments and commodities. In the first 18 months of operation, TurkDEX has succeeded in steadily increasing its volume in core products and expanding its membership and customer base. The Exchange's launch was timely, given the tremendous interest in Turkey as an emerging market and a potential new entrant to the European Union. More than ten years of developmental effort went into Turdex's formation.

### **Background**

TurkDEX, headquartered in Izmir, Turkey, is organized as a for-profit corporation and currently has 59 members and 11 shareholders. Takasbank, the Clearing House for the Istanbul Stock Exchange, performs the clearing operations for the Exchange and complies with the U.S. Securities Exchange Commission definition of "Eligible Foreign Custodian" under Rule 17f-5(c). The governing Rules and Regulations contain standard safeguards against default, fraud, market manipulation, material non-public information disclosure and include provisions for potential emergency situations such as geopolitical events, government intervention and natural disasters. The Rules and Regulations are available in English on the Exchange's website. The Capital Markets Board (CMB) is the regulatory oversight body for the Exchange and approved the trading of derivative instruments in Turkey in March 2004.

The trading platform is electronic and currently members must lease an Exchange monitor to trade. Orders are matched on a price and time priority algorithm. The system is sophisticated allowing for multiple order types (market, limit, settlement and stop loss) and incorporates order entry safeguards such as automatic trade cancellation for accounts with insufficient margin.

The launch of the exchange follows a 3-year period of robust economic growth and declining inflation due to disciplined fiscal monetary policy. In 2004, Turkey's GDP growth was over 9% and its inflation rate approximately 9%. In 2005, GDP declined somewhat to 5.4 %. Equity trading, which began at the Istanbul Stock Exchange (ISE) in 1985, has seen significant expansion and globalization particularly since 2002, with foreign ownership now comprising over 60%. The ISE is also the center for bond, bill, and real estate certificate trading. It recently listed two Exchange Traded Funds.

The exceptional rate of return on Turkish equities (in 2004, it was around 30%), and the stabilization of the currency have been the primary reasons for foreign capital inflows. In January of 2005, Turkey dropped 6 zeroes from its currency, making the Turkish Lira close to par (1.6 TL approximates one US Dollar) with other reserve currencies. Potential integration with the European Union has also boosted foreign investment. The rapid development of the capital markets sector has been the principal driver in the creation of a derivatives trading center in Turkey.

TurkDEX devoted considerable attention and effort to the development of its products, trading functionality, and

clearing/surveillance capabilities prior to launch, contributing to its initial success. Although volumes may appear modest compared to more established exchanges, TurkDEX's start is solid and comparable to many new exchanges that begin cautiously and gain traction a year or more after launch. As of June 2006, the Exchange has experienced a notional trade volume of TLY 8.5bn (U.S. \$5.3bn); its monthly trade has increased 100 fold since inception.

## Products

Financial products listed at the Exchange include equity indices (ISE30 and ISE 100), treasury notes (91 days, 365 days and two-years), currencies (Euro/Turkish Lira, U.S. Dollar/Turkish Lira). Commodity products include wheat, cotton and gold. All financial and commodity contracts are cash settled. The most successful of these are the ISE 30 and the Dollar/TLY. The recent volatility in emerging countries' equity, debt and currency markets has coincided with volume spikes in these two products.

For various reasons, the treasury note contracts have not attracted significant volume. Although the current government has taken remarkable steps in taming inflation following several decades of double and triple-digit price increases and soaring overnight interest rates, the underlying debt market remains illiquid and ill defined for any period beyond one to two years. Also, the notes are a retail product with a notional value of TLY 10,000 making them too small to attract international interest or cross-country arbitrage. In an attempt to promote its debt complex, the Exchange launched a second interest rate product (a discount note) called the "benchmark" treasury in April 2006 which has garnered light volume trading.

Regarding commodity contracts, although the recently launched gold contract has been successful, the wheat and cotton contracts are dormant.

The cotton market in Turkey is well developed and poised for further growth

as the Anatolian Dam project increases the amount of irrigated land available for cotton production. Cotton grading is sophisticated and modern providing a reliable underlying physical asset to the futures contract. The reported amounts traded on the Izmir Mercantile Exchange are sufficiently high to create confidence in the price discovery process for most of the year. The forward market, however, is not well developed and most trades are spot or occasionally 10 days forward. One major drawback to this market is the dominance of *Tariş* (the Turkish cooperative). Because it is such a large intermediary, *Tariş*'s potential desire to hedge may be hindered by a lack of counterparties. The uneven playing field also provides a deterrent to speculators, an issue the Exchange could address with a market maker program.

The wheat contract faces a number of obstacles. The underlying cash market lacks a strong farm credit system and a solid warehouse receipt system, impeding long term storage and forward contracting. The Turkish wheat market is further hobbled by asymmetrical pricing (it's a buyers' market at the various commodity exchanges), and a culture of spot rather than forward trading. The long tradition of government intervention also hampers this market.

The futures contract itself is too complicated. Too many pricing points are used in its settlement and some of those points are either too illiquid or the exchange staff is too indifferent to report transactions. Also the contract is vague about the quality of wheat it is pricing since only *Polatyi* classifies prices by grade or degrees. Finally the number of final settlement pricing mechanisms (theoretical, previous settlement, arithmetic mean) is confusing and thus a deterrent to trade.

## Guaranty Fund

The Guaranty Fund administered by *Takasbank* consists of the deposits of the 59 Members and stands at approximately TLY 20,000,000 (U.S. \$13,000,000). Each Member must make

initial contributions of TLY 200,000. Additional deposits are determined by a formula based on the notional value of open positions of individual Members. The Exchange also applies standard margining against open positions. No universal standard exists for the structure and amount of Guaranty Funds. In general, it could be argued that new and unproven exchanges need a far larger sum in proportion to open interest than long established exchanges to project confidence to potential participants. An exchange such as the Chicago Mercantile Exchange, the world's largest derivatives exchange, has a relatively small sum to call upon (about \$1.6 billion, plus an assessment power of \$2.4 billion) compared to notional open interest (over \$20 trillion), relying primarily on margins to safeguard against default. TurkDEX's Guaranty Fund is ample by any comparison.

## Outlook

Because TurkDEX established itself on a solid working foundation prior to launch, it has gained steady acceptance as a risk management center for Turkey and is poised for continued growth. Successful in its initial objective to attract a retail customer base, it has the potential to reach the international market by developing commercially sized financial contracts (based on \$100,000 or \$1,000,000 notional amounts). A breakthrough in agricultural trading, however, looks doubtful in the near term given the structural impediments in the underlying cotton and wheat markets. Because Turkey has recently begun shipping crude oil through the Baku, Tbilisi, Ceyhan pipeline (the terminus is a Mediterranean port), it has the potential of developing energy products. Turkey's geopolitical position as a bridge country between East and West and the attendant volatility will only enhance the Exchange's status as a risk management center.

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## Author note:

Ann Berg has spent thirty years in commodities and capital markets as a trader, consultant and writer. While a commodity futures trader and Director of the Chicago Board of Trade, she advised foreign governments, the United Nations, Catalyst Institute, and multinational and foreign corporations on a variety of market related issues. Most recently (Jan - Mar 2005), the Turkish Derivatives Exchange (Izmir, Turkey) retained her to analyze its exchange operation and products.

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