

Appendix A – Integrated Exchanges

Integrated exchanges

- The integrated exchange model exists in several market places

	ASX	DB	BM&F Bovespa	TMX (CURRENT)	TMX (Alpha+CDS)
Trading					
Equities Exchange	✓	✓	✓	✓	✓
Fixed Income Exchange	✓	✓	✓	✓	✓
Derivatives Exchange	✓	✓	✓	✓	✓
ATS				✓	✓
Clearing & Settlement					
Equities	✓	✓	✓		✓
Fixed Income	✓	✓	✓		✓
Derivatives	✓	✓	✓	✓	✓
Depository					
Equities	✓	✓	✓		✓
Fixed Income		✓	✓		✓
Derivatives	✓	✓	✓	✓	✓

ASX is fully integrated, offering multi-asset trading and post-trade operations

	Equities	Fixed Income	Listed Derivatives/ Energy		OTC Derivatives	
Trading	ASX	ASX	ASX Futures & Options		Bilateral	
	National Stock Exchange	ASX				
	SIM Venture Security Exchange	Yieldbroker			ATS/ Multiple expected	
	Asia Pacific Exchange	FIIG Securities				
	IMB					
	Liquidnet Australia	Bloomberg BondTrader				
	Chi-X Australia					
	Chi-East	BGC Partners				
Clearing	ASX Clear		ASX Clear (Futures)		LCH	
	ASX Settlement / Clearing House Electronic Settlement System (CHESS) ¹	SFE Austraclear			CME	
Reserve Bank Information and Transfer System (RITS)			RITS	NYPC		
	RITS	CLS		ICE		
				RITS	CLS	Australian OTCD CCP
Depository	ASX Settlement / Clearing House Electronic Settlement System (CHESS) ¹	SFE Austraclear	ASX Clear (Futures)	Others		
				RITS	CLS	
Payment	Reserve Bank Information and Transfer System (RITS)	RITS	RITS	CLS	RITS	CLS
					RITS	CLS



Ownership

- ASX Group
- Australia Financial Institutions
- Independent
- Proposed build

1. CHESS operated by ASX Settlement

Note: ASX Clear, ASX Clear (Futures), ASX Settlement and Austraclear are all part of ASX Group

Overview of Australian Securities Exchange

- The Australian Securities Exchange functions as a market operator, clearing house and payments system facilitator

Business Overview

- **Listing** - Offers both national and international companies the opportunity to access growth capital through IPOs or debt offerings
- **Cash & Derivatives Trading** - Operates two trading platforms, ASX Trade and ASX Trade24, and executes more than 10 million equity trades per month
- **Clearing** - Offers ASX Clear and ASX Clear (Futures) that provide central counterparty facilities as well as risk management systems
- **Settlement** - Operates ASX Settlement and ASX Austraclear which offer a variety of settlement services
- **Market Data & Access** - Provides the market with a reliable and timely information service

Competitive Advantages

- Relatively fixed cost base provides positive leverage to improved markets
- Despite ASX's equity trading fees already being the third lowest globally (behind NDAQ and NYSE), its aggressive 35% reduction heading into FY11 sees it even better positioned to compete with other exchanges

Key Milestones

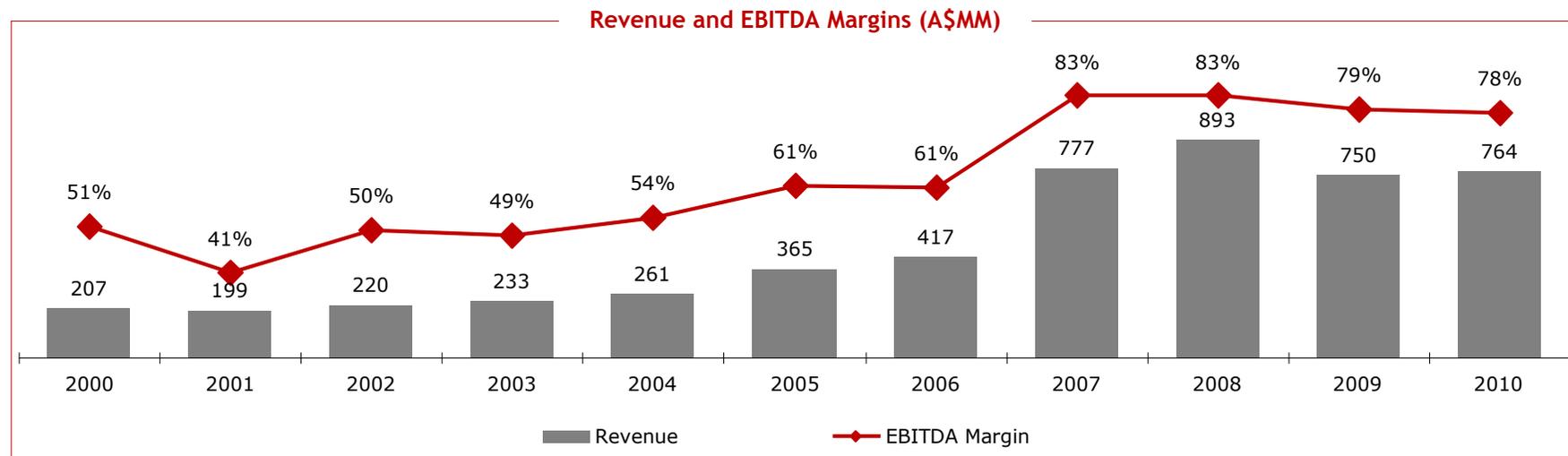
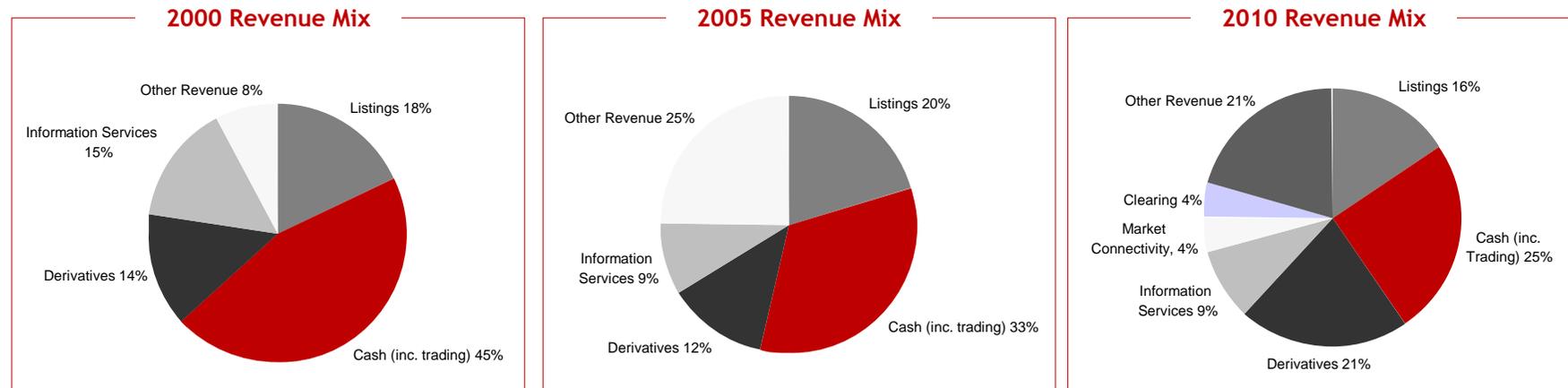
- **2002** - Sydney Futures Exchange demutualised in 2000 and listed on the ASX
- **2006** - Australian Stock Exchange and SFE merged to create the ASX
- **2007** - ASX began trading ASX Contracts for Differences
- **2010** - SGX approached ASX for a potential takeover
- **2011** - Australian Government blocked the proposed takeover by SGX
- **2011** - Chi-X has been granted approval to operate an alternate exchange and is expected to commence operations late in 2011

Financial Highlights

- Cash equity trading accounts for only 6.5% of the FY11F revenues, reflecting ASX's diversified and vertically integrated business and the impact of recent fee reductions
- Revenue grew from A\$207MM in 2000 to A\$764MM in 2010 (CAGR of 13.9%)
- The previous takeover offer by the SGX included improved operating efficiency (US\$30MM cost synergies, 10% of combined cost base) and enhanced revenue opportunities over the medium-term (not quantified)

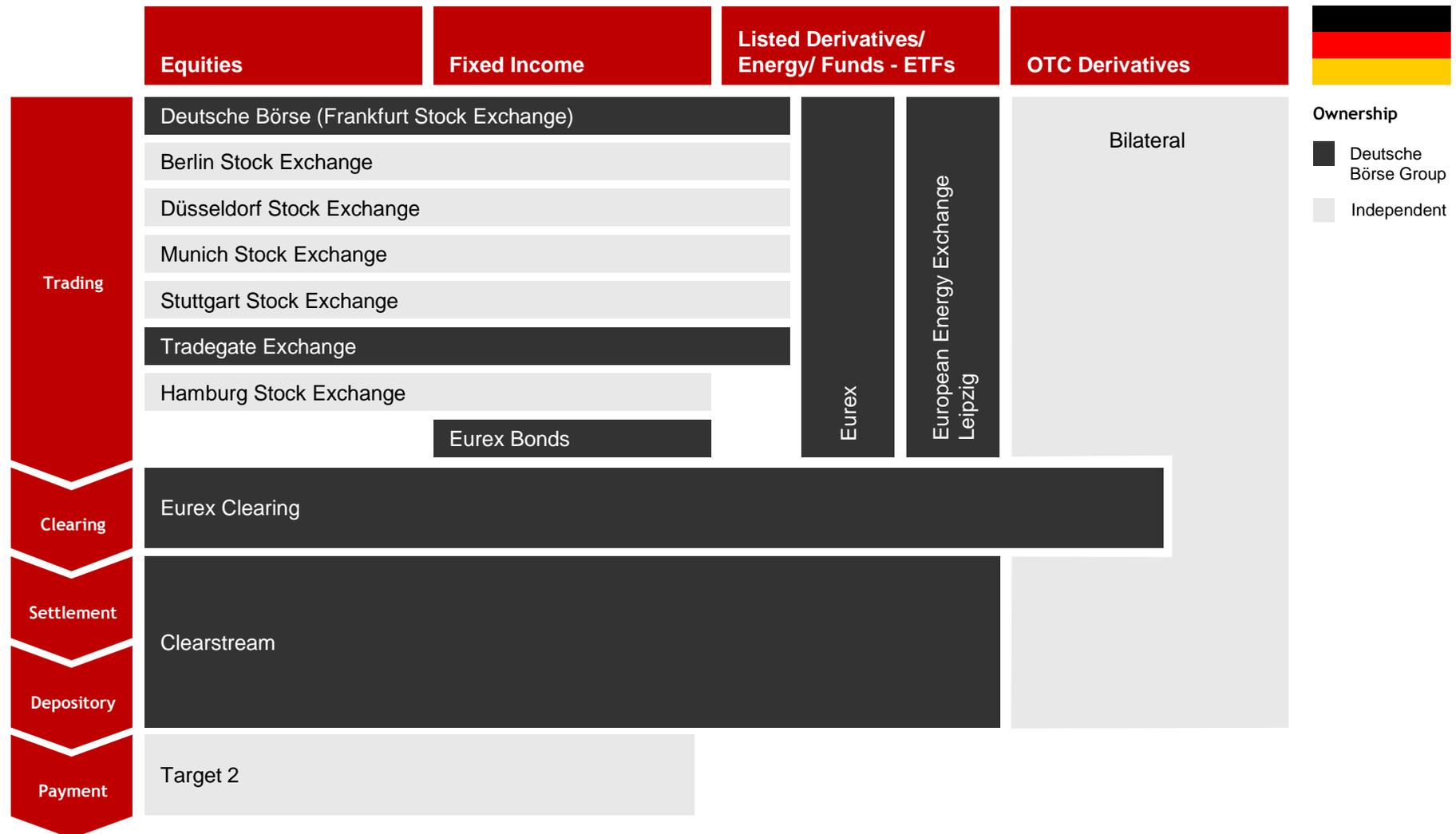
Overview of Australian Securities Exchange (cont'd)

- The ASX has diversified its product offering, and increased its EBITDA margin to 78%



Source: Public filings, CapitalIQ.

Deutsche Börse is vertically integrated, but operates separate entities between trading, clearing and CSD



Overview of Deutsche Börse

- Deutsche Börse AG operates electronic trading systems that provide securities and derivatives trading, clearing, settlement, custody, and market data services

Business Overview

- **Xetra:** Provides listing, trading and clearing services for issuers, intermediaries and investors in the cash market via its Xetra business
- **Eurex:** Leading global provider of trading and clearing services in the derivatives market
- **Clearstream:** Provides custody services to financial institutions across the globe
- **Market Data:** Offer market data and analyses
- **Information Technology:** Leading international full-service provider for the development and operation of trading and settlement systems

Competitive Advantages

- Currently pursuing operating efficiencies across the group, with the aim of saving €150MM in run-rate costs:

	<u>% of savings</u>
Headcount reduction (~370 staff)	50%
Moving operational functions to Prague	20%
Harmonisation of IT infrastructure	10%
Reduction in management headcount	10%
Focus on core activities	10%

Key Milestones

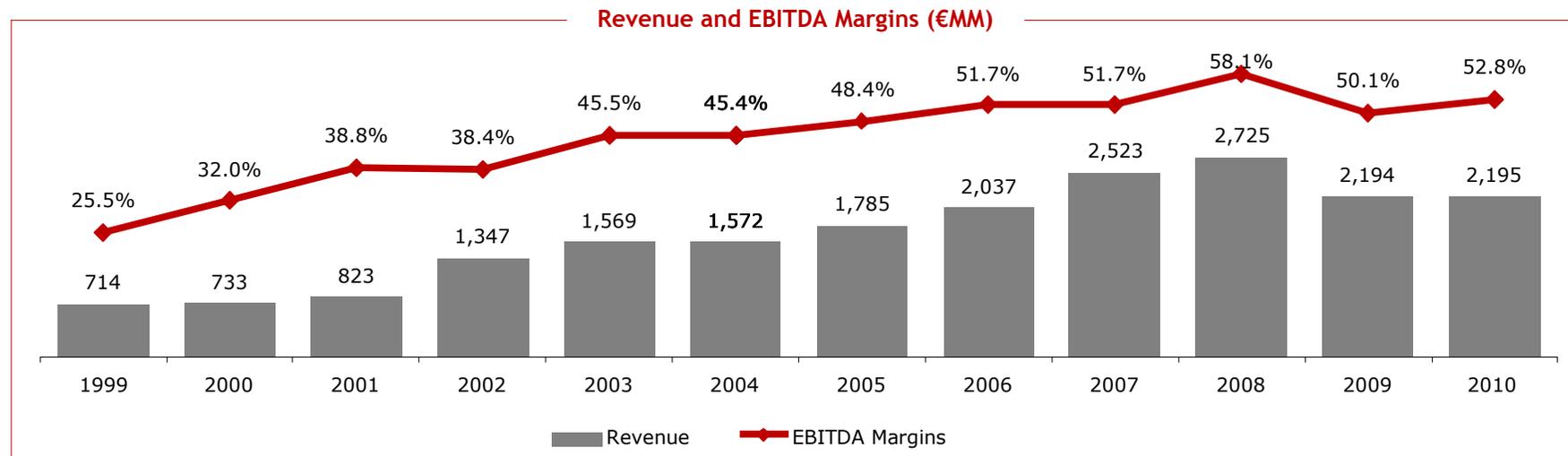
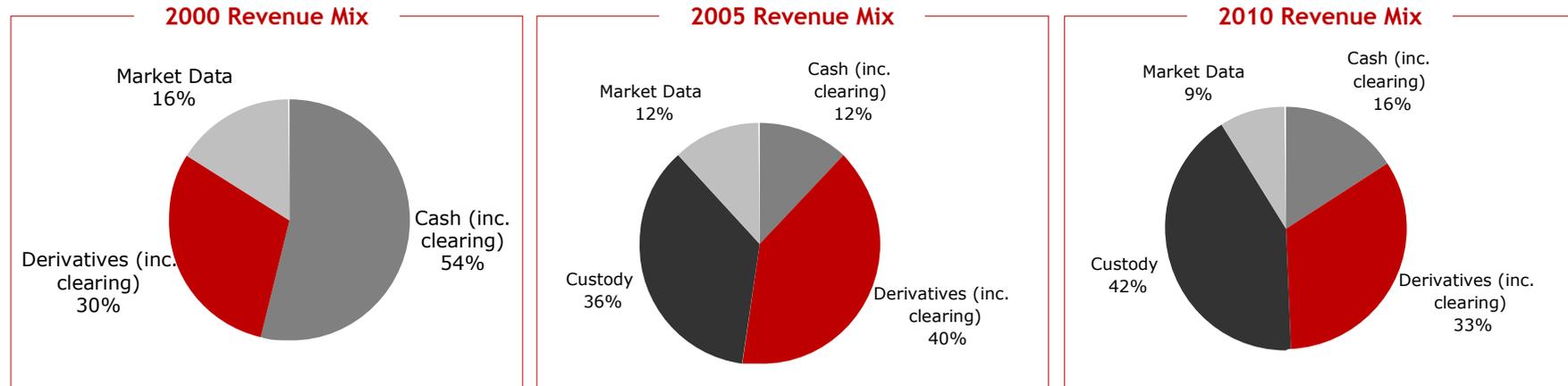
- **June 1998:** Deutsche Börse and the Swiss exchange Schweizer Börse merged futures exchanges to form Eurex
- **January 2000:** Deutsche Börse Clearing AG merges with Cedel International S.A. to form Clearstream
- **May 2001:** Deutsche Börse introduces the centralized high-performance CEF data feed for market and price data
- **December 2007:** Eurex completes the acquisition of the US options exchange International Securities Exchange Holdings (ISE), creating the largest transatlantic marketplace for derivatives
- **February 2011:** Announced all-stock merger offer to purchase the NYSE Euronext. NYSE Euronext shareholders will vote on the offer on July 7, 2011

Financial Highlights

- The proposed purchase of the NYSE Euronext would generate cost savings of €300MM, principally from information technology, clearing and market operations, as well as from corporate administration and support functions; in addition, €100MM of revenue synergies are expected.
- The cost synergies are expected to be realized at an annual run rate of 25% by the end of the first year, 50% by the end of the second year, and 100% by the end of the 3rd year

Overview of Deutsche Börse (cont'd)

- Deutsche Börse's transformation has diversified its revenue mix during the last decade, and doubled its EBITDA margin



Source: Public filings, CapitalIQ.

Overview of BM&F BOVESPA

- BM&F BOVESPA is the only securities, commodities and futures exchange in Brazil; develops, implements and provides systems that allow for securities and derivatives trading, registration, clearing, settlement and central depository

Business Overview

- **BM&FBOVESPA S.A.:** Develops, implements and operates vertically integrated solutions for the trading, registration, clearing & settlement in markets for stocks, futures, FX, options, funds & ETFs, carbon credits, public and private auction and fixed-income
- **Bovespa Market Supervision:** Oversee and enforce compliance of applicable rules, standards of conduct and regulations
- **Brazilian Commodities Exchange:** Develops and provides operating system for trading in commodities, goods, services and securities, in the spot, term and full term mode
- **BM&F Settlement Bank:** Settlement and custody bank for trades in the markets managed by BM&F BOVESPA
- **Clearinghouses:** Renders clearing, settlement, risk management, central depository and securities lending services

Competitive Advantages

- Fully integrated business model comprising the entire chain of trading, including clearing and settlement activities under responsibility of equities and securities, derivatives and foreign exchange clearinghouses and a settlement bank, as well as a full service CSD (central securities depository)
- Upside potential due to current low penetration of Brazilian equity and derivatives in domestic & foreign investors' portfolios
- Larger exchange encouraging domestic companies to list locally rather than seek out international markets
- Product diversification initiatives strengthening competitive position

Key Milestones

- **2007:** Demutualization of Bovespa and BM&F; IPO of both entities
- **2008:** Merger of Bovespa and BM&F
- **2009:** End of open outcry derivatives transactions; Licensing agreement with NASDAQ regarding a variety of tools and platforms
- **2010:** Develops a “Global Preferred Strategic Partnership” with the CME Group aiming at the pursuit of strategic investments and commercial opportunities with other international exchanges, on a shared and equal basis; BM&F Bovespa increases its ownership interest in CME from 1.8% to 5%, receiving board representation

Financial Highlights

- Net operating revenue grew from BRL 1,602MM in 2008 to BRL 1,890MM in 2010 (CAGR of 8.6%)
- Cash equity trading accounts - 39% of the FY10A revenues reflecting a certain degree of diversification and vertical integration
- Announced growth initiatives regarding product diversification and expansion of investor base to help fuel future growth