



FUTURES JUGGERNAUGHT

By John J. Rapa, President and Chief Executive Officer

Background

The past five years have been a remarkable time to be in the global futures and derivatives markets. Exchange and OTC trading volumes have boomed, and the adoption and use of futures and derivatives in portfolio hedging and risk management strategies has grown, commensurate with the maturity of the product and the sophistication of market participants. Despite the sell off in energy, metals and soft commodities earlier this year, money flows into retirement and pension funds, mutual funds and exchange-traded funds has had a direct impact on these markets. The "Aging of America" has resulted in increased transaction volume levels from the direct and indirect investment of funds of aging Baby Boomers.

In addition the growth of production, consumption and trading with countries with the largest population and economies such as Brazil, Russia, India and China (BRIC) have fed the need for price discovery and risk management of their underlying commodity and financial derivative products, both domestically and internationally.

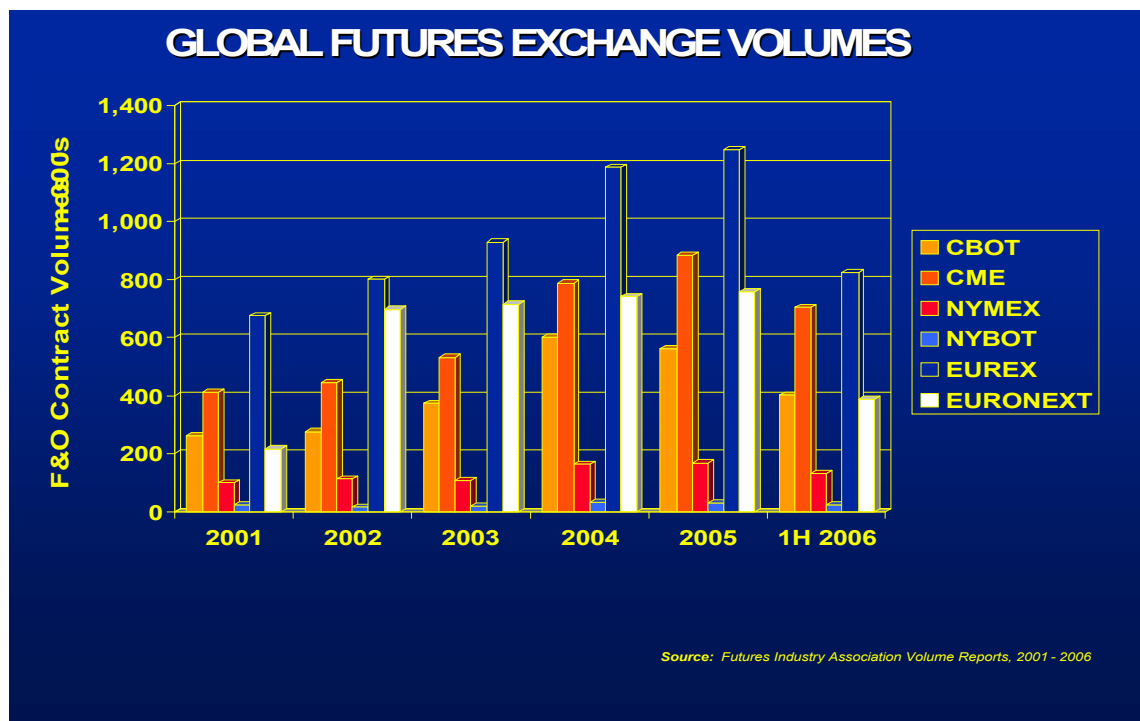
This dynamic growth of the business can in part be attributable to product innovation, the rate of adoption of futures and derivatives in trading strategies and the evolution of global electronic trading. Helping to fuel this growth are the availability of cost-effective hardware, software and networking technologies and their application to electronic and open outcry trading and pre-trade and post-trade processing areas. This paper will touch on several of these trends.

Worldwide Growth of Listed/OTC Commodities and Futures

Global futures and options market volume levels exceeded 9.9 billion contracts in 2005, up from 776 million contracts in 1995, a CAGR of 22%*. In addition, certain international markets have experienced volume growth rates in excess of their U.S. counterparts.

This boom can be attributable to a number of factors

- A Bull Market in commodities, futures and derivatives that shows no signs of giving up.
- Significant levels of direct and indirect investment in the markets, that is invested, leveraged or hedged with commodity, futures or derivative products.
- A healthy domestic economic environment.
- A relatively high rate of economic growth in the BRIC countries and their need for risk management and hedging tools.
- High volume/transaction rates and resultant volatility, fueled by professional traders, hedge funds and a new generation of day traders (e-locals).
- Direct access by U.S. market participants to foreign futures exchanges via trading terminals in the U.S.
- Widespread availability of cost effective, high performance hardware/software/networking technologies and trading tools (pre-trade analytics, order routing, order, risk and portfolio management, multi-media tools, real time market data, news, position keeping etc.).



Commensurate with the growth in trading volumes, futures and options market data has also exploded, fueled by the rapid rise of order messaging traffic on electronic trading systems (ETS). The introduction by exchanges of electronic market makers and their use of automated trading and quoting engines on exchange ETS has caused unprecedented message rates and volumes on trading systems and trading networks (a direct by-product of exchange rules that require market makers to provide continuous two-sided quoting on all products they make markets in). The average quote rates on the major futures exchange's ETS have recently seen rates in excess of 250 million quotes/day, up from 10 million/day in Q1, 2005*.

Major markets like the Chicago Mercantile Exchange and Eurex have seen their messaging exceed 4,000 messages/second on key benchmark products and over 20,000 messages/second across their entire system load. This rapid rate of change has brought a thorny challenge for exchange technologists – the need to keep up with this rapid rise and concurrently manage system throughput, responsiveness, capacity and scalability.

Interest in futures markets and electronic trading has pushed exchange volumes to new highs and resulted in increased FCM business. Customer funds held in segregation at FCMs on behalf of customers trading on U.S. exchanges have grown by 72% as of year-end 2005, from year-end 2000*.

Introduction of New Products and Trading Strategies

In the global race between exchanges, product innovation means liquidity, revenue and market share growth. New risk management and hedging vehicles are being introduced at a rapid rate, both listed and OTC. The Commodity Futures Modernization Act of 2000 (CFMA) liberalized the process and time required by exchanges to bring new products to market. Product launches that previously took months (or years) of legal and economic planning work with regulators and market participants now happen as quickly as the next business day.

This has also spawned the "Attack of the Clones". Prior to the introduction of the CFMA, there had been a "gentlemen's agreement" between the existing exchanges not to list each other's products (a type of non-aggression pact). The dawn of the CFMA and market competition fostered the creation of new commodity, futures and derivatives products by exchanges and electronic markets with the same product specifications, attributes and behavioral characteristics as existing ones on other markets (clones). New energy, metals and interest rate cloned products have been successfully introduced in the last year and several have garnered considerable market share against the status quo.

In line with this, new products such as event futures are at a cross road and are finding their way into investors portfolios and strategies. These products, sometimes known as binary futures, are growing in popularity and all have a common trait – the occurrence that is being traded has a discrete outcome – either it happens or it does not.

Coupled with the introduction of new products is the capabilities by exchange ETS to support new trading strategies. Complex product spreads, inter and intra-product spreads, multi-legged spread, strip and combination orders have been introduced as exchange ETS features and functions have evolved, fueled by user demands for these types of strategies.

Impact of Industry Consolidation:

A global trend that has impacted the worldwide financial services and derivatives industries is the consolidation of market participants. Traditionally this has been via the acquisition of business units or whole firms by financial services players wishing to grow their market share of the business or the divestiture of a business unit that has not been deemed "strategic" by management.

Recent high profile mergers and acquisitions include the acquisition of the FCM operations of Refco by Man Financial, ABN AMRO futures business by UBS, NYFIX Overseas and EMOS Systems by GL Trade, U.S. Futures Exchange (Eurex US) by Man Group, etc.

Compared to other asset classes, commodities and futures have had higher profit margins than equities, fixed income or options. As sophisticated clients have moved their business to those firms with strong balance sheets, the high costs of technology, shrinking profit margins and pressure on commissions from fierce competition have caused the number of FCMs to contract.

Today, there are fewer FCM firms today than there were 10 years ago. The number of firms holding seg funds has declined 22% from 120 in 2000 to 94 today, and a handful of the largest FCMs, backed by large global investment banking firms, hold the majority of customer business (the top 6 FCM customer seg funds is roughly equal to those held by the other 88 firms)+.

The cyclical nature of the business has also caused similar contractions and acquisitions with technology and service providers to the industry.

The recent phenomenon of exchanges going for-profit and ultimately becoming publicly traded has grown to the next stage - exchange mergers. Despite this, the number of global futures and derivatives exchanges tracked by the Futures Industry Association has not grown. There are 58 of these markets today, versus 59 in 1999+.

A wave of transatlantic exchange mergers started earlier this year and has caused regulatory bodies in London and Washington to take a pause and discuss the regulatory implications on the industry. The U.S. Securities and Exchange Commission (SEC) issued a statement this June 2006 on its views to which SEC rules and regulations would apply to an exchange operating both in the U.S. and Europe.

The Commission stated that joint ownership of a U.S. exchange and a non-U.S. exchange would not result in the automatic application of U.S. securities regulation to the listing or trading activities of the non-U.S. exchange. The U.K. Financial Services Authority (FSA) stated that it would always seek to be neutral concerning the nationality of the management or ownership of the entities it regulates.

The SEC and FSA are making efforts to work together to discuss how they would approach the topics of exchange mergers, hedge fund regulation and crisis management.

Given the fact that Euronext.Liffe is the fifth largest futures and derivatives market by volume, their pending merger with the New York Stock Exchange has market participants and regulators such as the Commodity Futures Trading Commission waiting with baited breath for what transpires. Additionally, several other exchange mergers are in the works potentially involving Deutsche Borse, OMX, Borsa di Italiana, the London Stock Exchange, NASDAQ, etc.

Growth of New Market Participants:

One of the key reasons futures products have been successfully embraced for hedging risk is that they are cheaper to trade and have superior credit qualities than their cash market or OTC equivalents. Futures and derivatives are attractive to market participants such as buy-side institutions and hedge funds, who have recently become more active users and traders of the product. In addition, the growth of trading arcades and proprietary trading firms has also fueled transaction volumes.

The growth and expansion of exchange electronic trading networks and their accessibility via global network communications via front-end trading system vendors (ISVs) has facilitated their cost-effective "reach" to these types of users. In line with this, the relatively new phenomenon of algorithmic trading (aka black box trading) by technologically sophisticated players leverages fast, cost-effective computer hardware, software and networking technologies to reduce market impact, reduce errors, foster liquidity and provide aspects of discipline and objectivity to trading.

Electronic Trading In-Roads Into U.S. Futures Markets:

The growth of electronic trading in the U.S. has only begun to take off in the last 3 years. U.S. futures exchange trading systems, first introduced in the early 1990's have evolved technologically and now have a truly global audience and global network connectivity. However, compared to their counterparts in Europe, Latin America and Asia/Pacific, U.S. markets' electronic trading volumes still have a way to go.

The capitulation by members to competitive forces broke the logjams of electronic trading versus open outcry trading. U.S. futures exchange ETS that were restricted by the members to hours of operation outside of Regular Trading Hours (RTS) experienced transaction volumes levels that were typically between 4% - 20% of their

overall exchange volumes. The evolution to side-by-side trading and migration of certain products to full electronic trading status has tipped the scales.

In addition to electronic trading by domestic markets, the Commodity Futures Trading Commission (CFTC) has granted 16 no-action letters in the last seven years to global markets, opening their products to domestic market participants, adding further fuel to the futures juggernaut.

High Rate of IT Spend:

The financial services and derivatives industry should be viewed as true high-technology industries, based on their early adoption of technology, higher than normal IT spend, technology usage and turnover. The industry has a constant demand for more connectivity, speed and data crunching capabilities, as firms, service providers and exchanges globalize and expand their operations.

Current trends in straight through processing (STP) have heightened interest in middleware such as FIX, FIXML and Enterprise Application Integration (EAI). New message-oriented middleware such as reliable client-server computing tools, streaming video/news integration, publish and subscribe technologies, etc., are in demand as firms pursue the holy grail in IT computing.

These place greater demands on technologists to build "bullet proof" technology environments, which encompass high/continuously available systems, hardware and software based fault tolerance, robust middleware, redundant network paths and components, procedures, testing regimens etc.

While the Internet is being used as a tool to speed the flow of orders and reports to and from trading destinations, exchanges today are being threatened by lower cost competitors – alternative electronic trading networks.

At the same time, providers of front-end trading system and exchange gateways such as Ffastfill, GL Trade, Orc Software, Pats Systems, Rolfe & Nolan and Trading Technologies are in demand. This heightened interest is leading to a recent renewed regulatory view on "foreign trading terminals" by the CFTC.

Technology, product innovation and the use of new trading strategies will change the way markets and market participants function around the world and cause these trends to continue.

A Look into Our Crystal Ball:

What will the near-term future hold? Does the recent sell off in energy, metals and soft commodities mean that the futures bubble is about to burst? Is this a market correction or is the Juggernaut dead? Will U.S. trading floors disappear soon? We think that ...

- Transaction volume growth will continue. Direct and indirect investors will keep fueling the volume and transaction levels.
- Derivative product volumes, both listed and OTC, will continue to grow as investors, hedgers and speculators become more savvy and comfortable with these products and strategies.
- The growth of electronic trading in the U.S. and migration of market participants off the floor and "upstairs" will foster the growth of trading arcades and the evolution of "e-locals".
- There will be a growth in algorithmic trading by a small, sophisticated number of players who have the technological and financial wherewithal to be true black box traders.
- Consolidation of market forces (FCMs, banks, securities broker-dealers, exchanges, technology and service providers) will continue.
- The dominant positions of the major exchanges will continue to be challenged by the emergence of cheaper and more nimble electronic trading systems.
- The technology budgets of market makers and market takers will continue to increase.
- The explosive growth in futures and derivatives market data in the U.S. will cause market data networks to be severely taxed and market data infrastructure costs to rise.
- As part of being publicly-traded, exchanges will be challenged by their investors and analysts to "make the numbers" and continue to be the lowest cost producers of products and services – or face the wrath of the markets.
- Large, sophisticated customers, hedge funds and the buy-side will demand lower trading costs - and get them.
- There will be more industry alliances.

..... stay tuned.

* **Source:** "Volume of Futures & Options Traded on U.S. Futures Exchange", Futures Industry Association, 2006.

+ **Source:** Futures Industry Association Magazine, April, 2006.

About Tellefsen and Company, L.L.C.

John Rapa is the President and Chief Executive Officer of Tellefsen and Company, L.L.C. TCL provides professional outside management consulting to major market segments of the capital markets, derivatives and financial services industries and specializes in such areas as:

- Strategic Planning
- Systems Applications Analysis (Build Versus Buy)
- IT Forensic Reviews and Evaluation
- Trading Floor/Trading Room Technology and Operational Reviews
- Operational Procedure Development and Reviews
- Market Research
- Business Continuity Strategy and Planning
- Competitive Analysis
- Organization and Personnel Planning
- Executive Search.

TCL clients have included major U.S. and international investment banks, securities broker-dealers, hedge funds, private equity firms, information technology providers (hardware, software, networking and services), equity, options and futures exchanges and electronic markets.

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