

**ΑΛΕΞΑΝΔΡΕΙΟ ΤΕΧΝΟΛΟΓΙΚΟ  
ΕΚΠΑΙΔΕΥΤΙΚΟ ΙΔΡΥΜΑ ΘΕΣΣΑΛΟΝΙΚΗΣ**

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ΤΜΗΜΑ ΛΟΓΙΣΤΙΚΗΣ

**INTERNATIONAL STOCK  
EXCHANGES**

**-ΠΤΥΧΙΑΚΗ ΕΡΓΑΣΙΑ-**

ΟΙ ΦΟΙΤΗΤΡΙΕΣ

ΣΚΟΥΤΑΡΙΔΟΥ ΕΛΕΝΗ

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ΧΑΒΟΥΖΗ ΕΥΑΓΓΕΛΙΑ

Ο ΕΠΙΒΛΕΠΩΝ ΚΑΘΗΓΗΤΗΣ

ΓΚΙΟΥΡΗΣ ΘΕΟΔΩΡΟΣ

**-ΘΕΣΣΑΛΟΝΙΚΗ 2008-**

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# INTRODUCTION

## THE HISTORY OF STOCK EXCHANGES

The history of stock exchanges can be traced to 12th century in France, when the first brokers are believed to have developed, trading in debt and government securities. Unofficial stock markets existed across Europe through the 1600s, where brokers would meet outside or in coffee houses to make trades). The Amsterdam Stock Exchange, created in 1602, became the first official stock exchange when it began trading shares of the Dutch East India Company. These were the first company shares ever issued.

By the early 1700s there were fully operational stock exchanges in France and England and America followed in the later part of the century. Stock exchanges became an important way for companies to raise capital for investment, while also offering investors the opportunity to share in company profits. The early days of the stock exchange experienced many scandals and stock crashes, as there was little to no regulation and almost anyone was allowed to participate in the exchange.

Today, stock exchanges operate around the world, and they have become highly regulated institutions. Investors wanting to buy and sell stocks must do so through a stock broker, who pays to own a seat on the exchange. Companies with stocks traded on an exchange are said to be 'listed' and they must meet specific criteria, which varies across exchanges. Most stock exchanges began as floor exchanges, where traders made deals face-to-face. The largest stock exchange in the world, the New York Stock Exchange, continues to operate this way, but most of the world's exchanges have now become fully electronic.

In our diplomacy project we will try to compare elements about twelve of the major Stock Exchanges in the world by Market Capitalization & Year-to-date Turnover at the end of October 2007 as they were published on wikipedia's web side such as New York's, London's, Hong Kong's, Australia's, Shanghai's etc.

# LONDON STOCK EXCHANGE

The London Stock Exchange (LSE) is a stock exchange located in London, England. Founded in 1801 and it is one of the largest stock exchanges in the world, with many overseas listings as well as UK companies. The London Stock Exchange is also one of the world's oldest stock exchanges and can trace its history back more than 300 years. Starting life in the coffee houses of 17th century London, the Exchange quickly grew to become the City's most important financial institution. Over the centuries following, the Exchange has consistently led the way in developing a strong, well-regulated stock market and today lies at the heart of the global financial community.

The trade in shares in London began with the need to finance two voyages: The Muscovy Company's attempt to reach China via the White Sea north of Russia, and the East India Company voyage to India and the east. Unable to finance these costly journeys privately, the companies raised the money by selling shares to merchants, giving them a right to a portion of any profits eventually made.

The idea soon caught on (one of the earliest was the Earl of Bedford's scheme to drain the fens). It is estimated that by 1695 there were 140 joint-stock companies. The trade in shares was cantered round the City's Change Alley in two coffee shops: Garraway's and Jonathan's. The broker John Castaing published the prices of stocks and commodities called The Course of the Exchange and other things in these coffee-shops. In 1697 a law was passed to "restrain the number and ill-practice of brokers and stockjobbers" following a number of insider trading and market-rigging incidents. It required all brokers to be licensed and to take an oath promising to act lawfully.

In 1697 John Castaing begins to issue "at this Office in Jonathan's Coffee-house" a list of stock and commodity prices called "The Course of the Exchange and other things". It is the earliest evidence of organised trading in marketable securities in London.

In 1698 Stock dealers are expelled from the Royal Exchange for rowdiness and start to operate in the streets and coffee houses nearby, in particular in Jonathan's Coffee House in Change Alley.

The Change Alley exchange thrived. However, it was to suffer a set-back in 1720. The wave of speculative fever known as the "South Sea Bubble" bursts and much excitement was caused by the South Sea Company, stoked by brokers, the company's owner John Blunt and the government. Having set up the unprofitable company nine years previously the government hoped to wipe out the large debts accumulated by offering shares to the public. Shares in the company, which had started at £128 each at the start of

the year, were soon fetching as much as £1,050 by June. The bubble inevitably burst, with share prices plunging to £175, then £124. The incident caused outcry, forcing the government to pass legislation to prevent another bubble, and it took a long time for the stock exchange to recover.

Jonathan's burnt down in 1748, and this, plus dissatisfaction with the overcrowding in the Alley, made the brokers build a New Jonathan's on Thread needle Street, as well as charging an entrance fee.

In 1761 a group of 150 stock brokers and jobbers form a club at Jonathan's to buy and sell shares. And in 1773 the brokers erect their own building in Sweeting's Alley, with a dealing room on the ground floor and a coffee room above. Briefly known as "New Jonathan's", members soon change the name to "The Stock Exchange".

On 3 March, 1801 the business reopens under a formal membership subscription basis. On this date, the first regulated exchange comes into existence in London, and the modern Stock Exchange is born. The building was soon renamed the Stock Exchange, only to renamed again as the Stock Subscription Room, with new membership regulations. However, this too proved unsatisfactory, and the exchange moved to the newly built Capel Court in the same year.

In 1802 the Exchange moves into a new building in Capel Court. And in 1812 the first codified rule book is created.

The exchange had recovered by the 1820s, bolstered by the growth of the railways, canals, mining and insurance industries (there were, however, problems with stags and dividend payments). Regional stock exchanges were formed across the UK. Bonds (or gilt-edged securities) also began to be traded.

In 1836 the first regional exchanges open in Manchester and Liverpool. After a period of 9 years in 1845 a more speculative fever – this time "Railway mania" – sweeps the country and in 1854 the Stock Exchange was rebuilt.

In 1876 a new Deed of Settlement for the Stock Exchange comes into force. The Great War in 1914 means the Exchange market is closed from the end of July until the New Year. The Stock Exchange Battalion of Royal Fusiliers is formed – 1,600 volunteered, 400 never returned

In 1923 the Exchange receives its own Coat of Arms with the motto "Dictum Meum Pactum" (My Word is My Bond). People only know the English "My word is my bond"; and, due to the difficulty of locating the original Latin motto (from which the English version is taken), produce a fake coat of arms for their business embellished with the Latin motto *verbum meum pactum*. At first sight, this seems that is right. - for this Latin motto also means "My word is my bond" - but whilst *dictum meum pactum* very definitely means "The

words that come out of my mouth are my bond", the contrasting motto *verbum meum pactum*, in this context, means "The words that I write on a page are my bond"; and, as a consequence, they are warning their customers that "Nothing that I say can be trusted".

The start of World War Two: The Exchange is closed for 6 days and reopens on 7 September of 1939. The floor of the House closes for only one more day, in 1945 due to damage from a V2 rocket – trading then continues in the basement.

The former Stock Exchange Tower, based in Thread needle Street/Old Broad Street was opened by Queen Elizabeth II in 1972 and housed the Trading Floor where traders would traditionally meet to conduct business. In 1973 the first female members admitted to the market. The 11 British and Irish regional exchanges amalgamate with the London exchange.

With the advent of the *Big Bang* on 27 October 1986, which deregulated many of the Stock Exchange's activities it eliminated fixed commissions on security trades and allowed securities firms to act as brokers and dealers.

It also enabled an increased use of computerised systems that allowed dealing rooms to take precedence over face to face trading. Also is allowed the ownership of member firms by an outside corporation, all firms become broker/dealers able to operate in a dual capacity and the minimum scales of commission are abolished.

Also due to the Big Bang individual members cease to have voting rights and trading moves from being conducted face-to-face on a market floor to being performed via computer and telephone from separate dealing rooms.

The Exchange becomes a private limited company under the Companies Act 1985.

On July 20, 1990 a bomb planted by the IRA exploded in the men's toilets behind the visitors' gallery. The area had already been evacuated and nobody was injured.

In 1991 the governing Council of the Exchange is replaced with a Board of Directors drawn from the Exchange's executive, customer and user base. The trading name becomes "The London Stock Exchange".

The long term trend towards electronic trading had been reducing the Exchange's status as a visitor attraction and although the gallery reopened it was closed permanently in 1992.

In 1995 the London Stock Exchange launches AIM – the England's international market for growing companies.

In 1997 SETS (Stock Exchange Electronic Trading Service) is launched to bring greater speed and efficiency to the market. The CREST settlement service is launched.

In 2000 the London Stock Exchange transfers their role as UK Listing Authority with HM Treasury to the Financial Services Authority (FSA). Shareholders vote to become a public limited company: London Stock Exchange plc.

In 2001 they list on their own Main Market in July and begin the 200th anniversary celebrations of London's Stock Exchange and in 2003 EDX London was created, a new international equity derivatives business, in partnership with OM Group. Acquire Proquote Limited, a new generation supplier of real-time market data and trading systems.

In July 2004 the London Stock Exchange moved from Thread needle Street to Paternoster Square (EC4) close to St Paul's Cathedral, still within the "Square Mile" (the City of London). It was officially opened by Queen Elizabeth II once again, accompanied by The Duke of Edinburgh, on 27 July 2004. The new building contains a specially commissioned dynamic sculpture called "The Source", by artists Greyworld.

In December of 2005, the London Stock Exchange rejected a £1.6 billion takeover offer from Macquarie Bank. The LSE described the offer as "derisory". It then received a bid in March 2006 for £2.4 billion from NASDAQ, which was also rejected by the LSE. NASDAQ later pulled its bid, and less than two weeks later on April 11, 2006, struck a deal with LSE's largest shareholder, Financials Thread needle Asset Management unit, to acquire all of that firm's stake, consisting of 35.4 million shares, at £11.75 per share. NASDAQ also purchased 2.69 million additional shares, resulting in a total stake of 15%. While the seller of those shares was undisclosed, it occurred simultaneously with a sale by Scottish Widows of 2.69 million shares. The move was seen as an effort to force LSE to negotiate either a partnership or eventual merger, as well as to block other suitors such as NYSE Group, owner of the New York Stock Exchange.

Subsequent purchases increased NASDAQ's stake to 25.1%, holding off competing bids for several months. United Kingdom financial rules required that NASDAQ wait for a period of time before renewing its effort. On November 20, 2006, within a month or two of the expiration of this period, NASDAQ increased its stake to 28.75% and relaunched a formal tender offer at the minimum permitted bid of £12.43 per share, which was the highest NASDAQ had paid on the open market for its existing shares.<sup>[9]</sup> On prior occasions, NASDAQ had been spurned by LSE's chief Clara Furse, and this time elected to go directly to the board of the London exchange. LSE's options had diminished by this time as two of the three most likely competing bidders, NYSE Group and Euronext, were close to finalizing their own merger, while Deutsche Börse, the third, had dropped out of the contest. The LSE immediately rejected this bid, stating that it "substantially undervalues" the company.

NASDAQ revised its offer (characterized as an "unsolicited" bid, rather than a "hostile takeover attempt") on December 12, 2006, indicating that it would be able to complete the deal with 50% (plus one share) of LSE's stock, rather than the 90% it had been seeking. The U.S. exchange did not, however, raise its bid. Many hedge funds had accumulated large positions within the LSE, and many managers of those funds, as well as Furse, indicated that the bid was still not satisfactory. One fund manager, echoing the sentiments of many of the rest of LSE's stockholders, stated "It's not a bad price, but the LSE's board tells us it is worth more and I am inclined to agree with them at the moment. NASDAQ's bid was made more difficult due to British bidding rules, which restricted their ability to raise its offer except under certain circumstances, though currency hedging had partially protected NASDAQ against the British pound's 3% value increase (relative to the dollar) during the bidding process.

NASDAQ's was unable to increase its stake beyond 30% by the deadline on 10 February 2007 and therefore the offer was rejected. However a 30% stake in LSE will make a rival takeover bid unlikely to succeed.

On the 23rd June 2007 the LSE agreed to take over the Milan-based Borsa Italiana for 1.6bn euros (£1.1bn; \$2bn), but remains subject to approval by LSE's shareholders

If approved, the all-share deal will dilute the stakes of existing LSE shareholders, but will also make a takeover of the combined group more difficult. In particular, the U.S. group NASDAQ has a stake of nearly 30 percent in the LSE, which NASDAQ built up during a failed takeover attempt in 2006-7. As a result of the takeover, NASDAQ's stake in the LSE would fall to around 22 percent following the deal with Borsa Italiana

## **ABOUT THE EXCHANGE**

### **MANAGEMENT**

#### **CHIEF EXECUTIVE: CLARA FURSE**

Clara Furse was appointed Chief Executive in January 2001, Group Chief Executive of Credit Lyonnais Rouse from 1998 to 2000.

At Phillips & Drew (now UBS) from 1983 to 1988 she also became a Director in 1988, an Executive Director in 1992, Managing Director in 1995 and Global Head of Futures in



1996. She was director of LIFFE from 1991 to 1999 and Deputy Chairman from 1997 to 1999.

She is a Non-Executive Director of Euroclear plc and LCH.Clearnet and was appointed to the Board of Fortis in May 2006. She was a formerly Non-Executive Director of RICS Foundation 2002 to 2005.

#### **DIRECTOR OF FINANCE, EXECUTIVE DIRECTOR: JONATHAN HOWELL**

He is Director of Finance since December 1999 and he is responsible for Finance and Business Operations. He was previously Head of Market Regulation from 1998 and Director of Regulation from March 1999. Jonathan Howell is a Non-Executive director of FTSE International Ltd. He joined the Exchange in 1996 from PricewaterhouseCoopers.

#### **DIRECTOR OF MARKETS: MARTIN GRAHAM**

Martin joined the London Stock Exchange in 2003 as Director of Markets. Martin is in charge of all market facing functions within the Exchange and the development of its domestic and international markets business. He is responsible for the Exchange's primary and secondary markets, all client relationships, market operations and market regulation.

His division comprises over 200 staff and accounts for over two thirds of the Exchange's turnover. In March 2006 Martin assumed additional responsibility for EDX, the Exchange's derivatives business. Martin is a Board member of the UK India Business Council (formerly IBPN), EDX and Borsa Italiana.

#### **CHIEF INFORMATION OFFICER: DAVID LESTER**

David Lester is responsible for the Information and Technology Services division at the London Stock Exchange. David Lester led the implementation of the Exchange's 4-year Technology Roadmap, TradElect, and a complete refresh of the Exchange's technology to next generation systems.

He is also implementing the Exchange's Information Services diversification strategy, which is designed to broaden the range of information products and services available to the Exchange's customers and increase its revenues. David Lester is an Executive Director of Borsa Italiana Spa, Executive Chairman of Proquote Ltd. and a Non-Executive director of FTSE International Ltd. Before joining the Exchange in 2001, David worked for Thomson Financial and Accenture.

## **DIRECTOR OF CORPORATE DEVELOPMENT: NIC STUCHFIELD**

Nic Stuchfield is Director of Corporate Development, an area that includes Research and Development and Strategy.

Between 2003 and 2006, he was also Managing Director of EDX London, which is a joint venture derivatives exchange between the London Stock Exchange and OMX. Recently, he was appointed to the Supervisory Boards of MTS S.p.A. (the pan-European Government bond trading platform), Cassa di Compensazione e Garanzia S.p.A. (the Italian Central Counter-Party) and Monte Titoli S.p.A (the Italian Central Securities Depository). Nic Stuchfield joined the Exchange in August 2003 from The Stuchfield Consultancy.

Prior to that, his roles included spells as CEO of Tradepoint (now Virt-x), COO of Barclays Global Investors and COO & CFO of BZW's global equities business.

## **BOARD OF DIRECTORS**

### **CHAIRMAN: CHRIS GIBSON - SMITH**

Chris Gibson - Smith is also Chairman of the British Land Company PLC. He is a Non-Executive Director of the Qatar Financial Centre Authority, and a governor of the London Business School. He was previously Chairman of National Air Traffic Services Ltd from 2001 – 2005, Director of Lloyds TSB plc from 1999 – 2005, Group Managing Director of BP plc from 1997 – 2001, and a past Trustee of the Institute of Public Policy Research, and Arts and Business.

### **DEPUTY CHAIRMAN: ANGELO TANTAZZI**

Current directorships are as follows: Banca Popolare dell'Emilia Romagna, Coesia S.p.A. and Advanced Capital Since July 2000 Angelo Tantazzi has held the position of Chairman at: Borsa Italiana, Monte Titoli, since November 2001, CC&G since April 2003

and Prometeia S.p.A. He is also Vice-Chairman of the publishing house “Mulino”.

#### **CHIEF EXECUTIVE: CLARA FURSE**

Clara Furse was appointed Chief Executive in January 2001, she was Group Chief Executive of Credit Lyonnais Rouse from 1998 to 2000 and Phillips & Drew (now UBS) from 1983 to 1998; she became a Director in 1988 and an Executive Director in 1992 she also became a Managing Director in 1995 and Global Head of Futures in 1996.

She was Director of LIFFE from 1991 to 1999 and a Deputy Chairman from 1997 to 1999. She is a Non-Executive Director of Euroclear plc and LCH.Clearnet and was appointed to the Board of Fortis in May 2006.

She was formerly a Non-Executive Director of RICS Foundation from 2002 to 2005.

#### **DEPUTY CHIEF EXECUTIVE: MASSIMO CAPUANO**

Massimo Capuan is a Chief Executive Borsa Italiana S.p.A., Servizio Titoli (Chairman), MBE Holding (Chairman) and Promac S.p.A. (Vice-Chairman).

In addition, Massimo Capuano currently holds the position of Chairman of the World Federation of Exchanges for the year 2007-2008 and is Chairman of Blt Systems and a member of the Supervisory Board at MTS. He is Vice-Chairman of CC&G and Monte Titoli.

He is a Member of the Board of the Federation of European Securities Exchanges (for the year 2007-2008) and was President of this organisation for the years 2004-2006. He is also a member of the International Advisory Committee of Cairo Alessandria Stock Exchange from September 2006.

#### **DIRECTOR OF FINANCE: JONATHAN HOWELL**

Jonathan Howell is Director of Finance since December 1999, responsible for Finance and Business Operations. He was previously Head of Market Regulation from 1998 and Director of Regulation from March 1999. He is Non-Executive Chairman of FTSE International Ltd. He joined the Exchange in 1996 from PricewaterhouseCoopers.

#### **NON – EXECUTIVE DIRECTOR: BARONESS COHEN**

Baroness Cohen is a Life Peer, Non-Executive Chairman of BPP Holdings plc and non-executive Director of MCG plc. Previously she had been Advisory Director of HSBC

Investment Bank, a Non-Executive Director of Charterhouse Management Services Ltd from 1988 to 1999 and Charterhouse Financial Services Ltd from 1989 to 1993.

#### **NON – EXECUTIVE DIRECTOR: SERGIO ERMOTTI**

Sergio Ermotti is Group Deputy CEO at UniCredit Group. From January 2006 to July 2007 Sergio Ermotti was Deputy General Manager and Head of Markets and Investment Banking at UniCredit Group.

In addition, from March 1997 to November 2003 Sergio Ermotti was a director at Merrill Lynch International and from July 2002 to April 2003 he was a director of Virt-X Limited and of Virt-X Exchange Limited.

#### **NON – EXECUTIVE DIRECTOR: OSCAR FANJUL**

Oscar Fanjul is vice-Chairman and Chief Executive of Omega Capital, honorary Chairman of REPSOL-YPF and Non-Executive Director of Acerinox, Marsh & McLennan Companies, Lafarge Group, Areva and Inmobiliaria Colonial.

Oscar Fanjul is also Trustee of the International Accounting Standards Committee Foundation and the Amigos del Museo Del Prado Foundation.

#### **NON – EXECUTIVE DIRECTOR: ANDREA MURANI**

Andrea Murari is CEO Banca Caboto, Director Banca IMI. In addition, he has had the following former directorships: MTS S.p.A (from 2003 to 2005) and director of TLX S.p.A. from January 2007 to September 2007.

#### **NON – EXECUTIVE DIRECTOR: PAOLO SCARONI**

Paolo Scaroni is CEO of ENI S.p.A., Director of Il Sole 24 Ore S.p.A., Assicurazioni Generali S.p.A., Fondazione Teatro alla Scala and Veolia Environnement SA.

He is also a member of the Supervisory Board of ABN AMRO N.V. and member of the Board of Overseers of Columbia Business School. In the past, Paolo Scaroni had the following former directorships: from 1997 to 2002 he was CEO of Pilkington plc, he was director at BAE Systems plc from 2000 to 2004 and at Invensys plc from 2001 to 2002.

From June 2002 to June 2005 Paolo Scaroni was CEO of Enel S.p.A. and he was a director (2002-2005) and Chairman (2005-2006) of Alliance Unichem plc. He was also a

member of the Board of other listed companies within the past 5 years: Marzotto S.p.A., DEA Capital S.p.A., Valentino Fashion Group.

#### **NON – EXECUTIVE DIRECTOR: NIGEL STAPLETON**

Nigel Stapleton is the Chairman of Postal Services Commission. Previously Chairman of Uniq plc from 2001 to 2006, Chairman of Reed International plc from 1997 to 1999, Co-Chairman of Reed Elsevier plc from 1996 to 1998, Chief Financial Officer of Reed Elsevier plc from 1993 to 1996.

#### **NON – EXECUTIVE DIRECTOR: ROBERT WEBB Q.C.**

He is the General Counsel of British Airways plc since September 1998, responsible for government and industry affairs, safety, security, risk management and the environment. Robert Webb is also a board member of London First and Air Mauritius.

## **WHAT THE LSE DOES**

### **EQUITY MARKETS**

Companies across the world come to the London Stock Exchange (LSE) looking to raise money to develop and grow their businesses. Listing on London's markets gives companies the opportunity to tap into one of the world's deepest and most liquid pools of capital.

There are more than 2,800 companies listed on London's markets, worth over £3,500bn. In 2004 there were 293 IPOs on London's markets raising £7,100m new capital. LSE's markets cater for companies large and small, from start-ups to global brands. The London's markets being supervised rigorously to ensure their integrity and fairness for all market participants.

## **THE MAIN MARKET**

The Main Market is Europe's most prestigious and effective listings venue for established companies, a proven way to raise capital and gain profile. The Main Market has around 1,800 companies with a total market capitalisation of more than £3,500bn.

### **AIM**

AIM is the world's leading small-cap growth market - in 2004 AIM alone accounted for 65% of all IPOs in Western Europe. Currently there are more than 1,060 issuers listed on AIM with a combined market capitalisation of £37bn.

## **INTERNATIONAL COMPANIES**

The London Stock Exchange is a global marketplace. Around 350 companies in 54 different countries use a London listing to gain the profile and access to capital they need to grow into truly global companies. They are drawn by the quality of our markets, their depth of liquidity and the sophistication and long-term approach of the institutional investor community in London.

## **TRADING SERVICES**

### **MARKETS**

The Exchange enables companies from global giants to smaller enterprises around the world to raise the capital they need to grow, with a choice of four primary markets:

Main Market – regarded by investors and companies as the world's most prestigious listing and trading environment.

AIM – equities market for smaller growing companies

Professional Securities Market - for listed debt and depository receipt securities Specialist

Fund Market - which is dedicated to specialised investment entities

Once companies have been admitted to trading, the LSE helps companies maximise the value of their listing.

## **TRADING SERVICES**

The Exchange provides a highly active and efficient market for trading in a wide range of securities, including UK and international equities, debt, covered warrants, exchange traded funds (ETFs), reits, fixed interest, contracts for difference (CFDs) and depositary receipts.

In June 2007 the Exchange launched TradElect, a new trading system giving the exchange greater ability to develop and enhance their range of services. Both capacity and speed of trading have increased with over 600,000 trades executed daily and each trade completing in 6 milliseconds.

## **MARKET DATA INFORMATION**

Direct from the source, they supply high quality, real-time and historical prices, news, and other financial data information to the global financial community. The exchange also has strong relationships with other leading data vendors, helping to ensure the markets receive the information they depend upon.

The LSE invests heavily in the best technology to create new applications for their data. The exchange works closely with world-class partners to constantly upgrade their products and services.

Information is the lifeblood of the stock markets. The fast provision of reliable information helps create the transparency and liquidity that is the hallmark of the London Stock Exchange. Today they provide high-quality, real-time prices, news and other information to 90,000 installed terminals in over 100 countries worldwide.

## **REAL – TIME DATA**

The London's exchange supplies real-time data generated by the trading activity on London's markets, to investors and market participants, both directly and through market data distributors. Private investors can also receive real-time prices from any one of the LSE's licensed vendors. Share prices are available for free, delayed by 15 minutes, through our online prices service.

## **INFORMATION PRODUCTS**

The LSE provides historical and reference data services that help investors and financial professionals check the official trading record and analyse the activity on London's markets. The information products offer corporate event information, historical price data plus statistical and trading reports.

## **PROQUOTE**

Proquote is the Exchange's new generation supplier of real-time market data and trading systems, it provides financial data and trading functionality direct over the internet, and so offers substantial cost reductions to market participants.

## **RNS**

RNS is the Exchange's company news service, and is a market leader in providing effective corporate and investor communications and solutions. The Exchange handles regulatory announcements for 90 companies in the FTSE 100 and delivers to a global audience of dealer terminals, key financial websites and databases.

## **FTSE indices**

The Exchange is the joint owner of FTSE, the company that calculates stock market indices for markets around the world. FTSE compiles the official indices that track the Exchange's equity and bond markets. If investors or brokers need a benchmark, tradable or custom index in any currency, market, region or sector they can be sure there is a FTSE index to cover it.

## **Derivatives**

Derivatives business is a pioneering diversification beyond the Exchange's core equity markets. EDX London is their international equity derivatives exchange and their aim is to become the world's most efficient and liquid market for equity derivatives.

The UK covered warrants market is one of the world's fastest growing investment markets. We host five blue-chip issuers offering over 800 warrants and certificates on single stocks and indices in the UK and around the world.

A major contributor to the LSE's derivatives business is EDX London, created in 2003 to bring the cash equity and derivatives markets closer together.



Members of EDX London trade futures and options on international exchanges through a common order book, making business easier and more cost effective. The LSE is also committed to creating London's first over-the-counter (OTC) equity derivatives trade confirmation and clearing service, and listing new equity derivatives contracts where their members demand them. It is their aim to become the most efficient and liquid derivatives exchange in the world.

Covered Warrants market is one of the world's fastest growing investment markets. There are five blue-chip issuers offering over 650 warrants and certificates on single stocks and indices in the UK and around the world.

There are also warrants offered on baskets of stocks, commodities such as oil, gold, silver and currency - even on the UK housing market.

## **THE SOURCE**

Diamond Bank Plc ("Diamond"), which joined the PSM on 18 December 2007, is the first Nigerian bank to be listed on the PSM.

Established in 1991, Diamond offers financial services across the entire client spectrum, through over 139 business locations in Nigeria and 7 branches in Benin Republic. The Bank has a unique SME business model and a solid brand associated with integrity, professionalism and good corporate governance.

The offer enabled Diamond to raise US\$500million through 37.6million newly issued GDRs, each GDR representing 100 ordinary Diamond shares. The settlement price per GDR has been set at \$13.30 and will be traded on PSM.

The offer proceeds will enable Diamond expand its footprint through traditional and electronic channels in order to take advantage of the growing Nigerian retail market, enter new business segments like mortgages, insurance, investment banking and also strengthen its Francophone West Africa expansion.

Diamond market capitalization post offering is now 263.2billion (US\$2.3billion as at January 02, 2008).

Commenting on the admission, Mr. Emeka Onwuka, the MD/CEO stated that "the listing is an important step in the evolution of the Bank's strategy and is aimed at raising stronger capital base, attracting new shareholders, raising its international profile,

enhancing the leadership position of Diamond Bank in the middle market and develop the Bank into a reputable financial conglomerate”.

Morgan Stanley was the Global Coordinator and Sole Book runner for the offering. Vetiva was domestic coordinator and joint domestic underwriter.

## **CORPORATE AND SOCIAL RESPONSIBILITY**

As a publicly-listed company at the heart of the most international market in the world, integrity is central to the Exchange’s success and they are proud of the way in which they do business.

The Exchange knows that the trust of their stakeholders is critical to the achievement of their long-term growth ambitions. As such, they always strive for openness and honesty in all their business dealings and treat their customers, shareholders and employees as valued partners in their business.

The LSE has reviewed their approach to their wider responsibilities to ensure what they do is of real relevance to their stakeholders and they have considered those activities where they have most impact.

This has established two key priorities:

Governance: The Exchange seeks to deliver the highest standards in boardroom practice and financial transparency by:

- facilitating open and transparent dialogue with the investor audience
- maintaining accurate financial records which transparently and honestly reflect the financial position of their business
- striving to meet the expectations of the Exchange shareholders by maximising shareholder value and providing competitive returns
- fostering an open, co-operative relationship with their regulators.

Investor relations activity includes regular presentations and meetings with key audiences, including institutional and private shareholders and analysts. These are conducted in a manner that ensures the protection of price-sensitive information which has not already been made available to all shareholders.

Over the past 12 months the Exchange met with over 80 major UK and overseas investors. As well as London-based meetings, investor contact involved visits to various

financial centres, including New York, Boston, Paris, Frankfurt, Amsterdam, Milan, Edinburgh and the Nordic region. The effectiveness of the communication programme is monitored directly through feedback to the company and indirectly through periodic third party perception audits.

The financial reporting has always sought to comply with each of the requirements they are set. Additionally, transparency in the detail of what they report continues to be an overriding objective.

Employees: the Exchange recognises that their competitiveness is dependent on employing and developing the best people. To do this they must create the right environment for people to do their best work by:

- creating a working environment which enables employees to develop their skills and knowledge
- maintaining healthy and safe working conditions and to operate in an environmentally-responsible manner
- encouraging a working environment in which employees feel comfortable about highlighting wrong-doing
- enabling employees to make informed decisions about the effect of a wide range of benefits on their lifestyle, wealth and financial security
- promoting an environment of equality of opportunity which is intolerant of discrimination, harassment or victimisation

The LSE continues to create an environment which further develops the skills and knowledge of the employees. To achieve this, they operate an appraisal system for all staff that reinforces the links between training and development; reward and performance.

Their reward package for staff is designed to provide incentives for the delivery of both short-term goals and the achievement of long-term objectives. This is performed through cash bonus eligibility for all staff and equity schemes for individuals with the clearest 'line of sight' to corporate performance.

The Exchange share schemes continue to encourage employees to take an active stake in the success of their company, with a participation level of over 70 per cent.

In addition, they give all staff access to a comprehensive range of benefits and funding to purchase those of most relevance through their flexible benefits scheme, which includes a number of health and welfare schemes.

New for 2004 is an on-line charitable giving scheme, making it easier for staff to make donations to their favourite charities.

As well as a stimulating environment, the Exchange maintains healthy and safe working conditions. The Health and Safety Policy includes procedures for the safe

handling of toxic and environmentally damaging materials. Compliance is monitored by an internal Health and Safety Group. This Group, with representation from each business area, meets on a regular basis and considers changes in legislation and related matters.

There were no reportable illnesses, dangerous occurrences, or liabilities, nor were any health and safety enforcement notices or convictions received. No accidents to staff were reported under the health and safety reporting regulations during the year.

In addition the LSE has identified further important areas relating to their wider responsibility.

## **ENVIRONMENT**

They recognise that their activities inevitably have an impact on the environment. Consequently the Exchange embraces the principles of sustainable development and committed to a process of continual environmental improvement and pollution prevention.

The Exchange treats all relevant environmental legislation and regulations as the minimum standard and seeks to exceed them wherever possible.

They identify opportunities to reduce and recycle the resources they consume including energy, water and other natural resources, thereby also minimising the amount of waste the Exchange produces.

Their relocation project to Paternoster Square has been a unique opportunity for them to consider their environmental impact and make significant changes through the design and fit-out stages.

## **MEDIA AND BUSINESS COMPLEX**

The Media & Business Complex is the Exchange's purpose-built, broadcast and event venue. It is situated on the first floor of their new premises in Paternoster Square. The Media Complex offers both companies and the media a dynamic environment for conducting effective business communications.

With the studios as a backdrop, blue-chip companies and other professional organisations can hire the facilities to host meetings, conferences and receptions in their variety of contemporary event spaces.

In their four specially-designed studios, a variety of global broadcasters report on the day's business and market news. Companies can also benefit from the Exchange's media services and utilise the studios for filming corporate videos, media training or interviews.

## **INVESTOR CENTRE**

### **RSS**

RSS (Really Simple Syndication) is a format used to syndicate news and other web content. It's an XML file that can be read by special feed reading software (an RSS reader) or a web service you can use from your web browser. An RSS service consists of a list of items, each of which contains a headline, description.

The advantage of RSS is that the investors can stay up to date with different sources of news and information from a variety of sources. The investors can feed reader will scan for updates and display the very latest information for them.

### **WEB BROWSERS**

Some browsers, including Firefox, Opera and Safari, have functionality which automatically picks up RSS feeds for the members of the Exchange and allows them to view RSS feeds inside the browser.

## **PRODUCTS AND SERVICES**

### **MEMBERSHIP AND TRADING**

The LSE provides a secondary market for trading in a wide range of securities including, UK and international equities, AIM securities and depositary receipts.

### **MEMBERSHIP**

Located at the centre of the financial industry, the London Stock Exchange is universally recognised as the world's foremost international exchange. Their dedication to excellence is demonstrated through their world class technical and trading offering combined with their superior client service and partnership. This section is a source of information for all those interested in the Exchange's trading services and products.

It offers advice on how to become a member firm and provides a list of existing members. Located at the heart of Europe's global financial services industry, the London Stock Exchange is universally recognised as the world's foremost international exchange.

Membership of the London Stock Exchange will offer these key benefits:

- **Liquidity** – Member firms gain direct trading access to the world's deepest pool of liquidity in UK equity in addition to International Depositary Receipts and other trading instruments. These include Exchange Traded Funds and Commodities, Covered Warrants and Investment Trusts.

- **Technology** – Membership allows utilising one of the fastest and most efficient centralised trading venues in the world. Powered by the Exchange's new trading system TradElect, and information system Infolect, may trade in absolute confidence, with the LSE's unrivalled track record in reliability, neutrality and independence.

- **Community** – Membership helps to establish valuable new relationships in their world-renowned global community of brokers and listed companies, giving the opportunity to grow the business and company profile in parallel.

Working in partnership with the companies the LSE will help them to build a business case and, where necessary, discuss how the companies can evolve their business model to operate as a member.

The London Stock Exchange will focus on helping the potential members to understand the benefits, costs and considerations for Membership, specifically:

- The regulatory requirements for becoming a member
- The Exchange's trading services and MiFID
- Connectivity to the Exchange's trading and information services
- Options for clearing and settling their transactions.

## **MEMBERSHIP PROCESS**

If someone wants to become a member of the London Stock Exchange will need to complete the Membership application form. Before submitting an application to the Exchange the Exchange highly recommends that the potential member contacts the Membership Team to discuss the process and requirements of becoming a member.

Once the Exchange's Client Implementation Team has granted the access to the e-Contracts service, the potential member will be able to begin the Membership application process.

## **ACCESS AND NETWORK SERVICES**

Member firms connect to the Exchange to receive real-time trading, information and other services. This section tells them more about connecting to the Exchange and about other network services available to member firms.

### **TRADING ACCESS**

Connecting to the Exchange, either directly or through a licensed data distributor this section is intended as an introduction to the different options available for access to the London Stock Exchange's systems.

Each firm will have different requirements in terms of access to the London Stock Exchange's markets. Some may require more sophisticated trading systems, or may make use of in-house technical capabilities.

The Exchange has awarded 'Accredited' status to those Independent Software Vendors (ISVs) who have developed systems and conformed to the minimum requirements specified by the Exchange. These ISVs contribute to a competitive market place among suppliers offering their own solutions, with some market participants choosing to develop access solutions themselves.

## **CONNECTING WITH THE LONDON STOCK EXCHANGE**

The Exchange currently allows three methods of connection, depending on the ISV selected and the degree of direct connectivity required by the Member Firm. These range from full host to host down to a Vendor Access Network connection where all connectivity is provided by a third party, these are described below.

-Host to Host: This is where customers with their own trading and information systems connect directly to the Exchange via Extranet.

The London Stock Exchange Extranex connection provides a single point of access to support a wide number of financial services. Extranex lines can be sized to suit the information and trading service requirements of the firm. The scalability of Extranex allows information services to be added as required, as well as allowing connectivity to Crest or connecting to Retail Service Providers.

## **TRADING ONLY**

Customers wishing to maintain a direct connection with the Exchange may choose to take information from a third party vendor, with Extranex being used to access the London Stock Exchange for trading purposes only. This has a lower bandwidth requirement over Extranex, although the connection can still be used to access other Exchange services such as connectivity to Crest and the RSP Gateway.

Recognised Information providers can be found in the Market Data section of our website. Accredited ISVs offering solutions with trading functionality are listed in the ISV section of the website.

## **VENDOR ACCESS NETWORK**

In order to extend the geographical reach of the Exchange's services, the London Stock Exchange has developed agreements with existing information vendors to allow the transmission of secured trading data across their networks.

This allows customers who are unable to access Extranex or who wish to connect via their existing vendor to use the solution shown below:

-CREST network service is a secure and cost effective way to connect to the CREST settlement system.

-STX : STX is the fast and secure private telephone network used by member firms and other industry professionals across the UK, Republic of Ireland and the Channel Islands. The service is open to all member firms and non-members, who are sponsored by a member firm. STX enables the members to reach anybody on the network through five-digit dialling.

Regulated by the Exchange, STX is designed to deliver the financial community's need for privacy and confidentiality. A cost-effective disaster recovery solution is also available.



STX lines are integrated into any type or size of network and configured to meet the member's needs. Available in digital or analogue formats, STX can be connected to a telephone handset.

STX users pay a one-off connection charge and a flat annual fee – regardless of how many calls they make. The STX Directory contains the complete list of all STX users.

## **EXCHANGE REPORTING SERVICES (ERS)**

The Exchange Reporting Service enables member firms to fulfil their regulatory requirements for transaction reporting. MiFID requires that a competent authority receives transaction reports for all transactions undertaken by an authorised investment firm. The ERS is available to member and non-member firms wishing to have a straightforward and cost-effective way of submitting transaction reports in any asset class to the FSA.

## **TRADING SERVICES**

In the UK alone, over 600,000 trades a day are executed on the London Stock Exchange's markets and total an average of £16 billion by value. The Exchange's range of trading services makes this possible, meeting the needs of all of the Exchange's customers.

The trading platforms are designed to maximise liquidity in the stocks traded on them. From their premium fully electronic order-driven trading platforms for liquid UK and international securities, through to the Exchange's quote driven market maker platforms for less liquid securities. Each one is designed to provide the most efficient, transparent and cost-effective way to trade the various kinds of securities on the London's markets.

Parameters document provides a business breakdown for each trading service. Technology Details on how TradElect, the Exchange's new trading system, delivers more capacity and less latency for member firms.

November 2006 saw the London Stock Exchange introduce a scheme for Market Makers to advertise larger sizes in tighter spreads in less liquid stocks.

## **THE DOMESTIC TRADING SYSTEMS**

### **SETS**

SETS is the London Stock Exchange's premier electronic trading service that combines electronic order-driven trading with integrated market maker liquidity provision, delivering guaranteed 2-way prices.

- SETSqx (Stock Exchange Electronic Trading Service – quotes and crosses) supports 4 electronic auctions a day along with continuous stand alone quote driven Market Making.

-SEAQ: Quote driven platform for Fixed Interest market and AIM securities not traded on either SETS or SETSqx.

-SETSm: In response to MiFID, from 29 October 2007 SETSm was combined with SETS. Going forward the service is called SETS.

## **THE EXCHANGE'S INTERNATIONAL TRADING SERVICES**

-International Order Book is an electronic order book for trading depository receipts.

-International Bulletin Board is an electronic order book for trading international securities with a secondary listing on the London Stock Exchange.

-International Retail Service from 29 October market maker support for many of the securities traded on the International Retail Service (IRS) will be found on the LSE's new MiFID offering EQS. As a consequence it is expected there will not be any prices available for constituent shares on this service from that date.

## **RULES AND REGULATIONS**

The attractiveness of the Exchange's markets is maintained by providing an efficient and well regulated market place. As a Recognised Investment Exchange (RIE), the Exchange also has to satisfy the requirements detailed in the Financial Services Authority's RIE and RCH Sourcebook. Orderly markets are maintained via rules, guidance and through the monitoring of trading and market activity. Stock Exchange Notices disseminate amendments to market rules and guidance.

The Exchange's primary aim is to provide issuers, intermediaries and investors with attractive, efficient and well-regulated markets in which to raise capital and fulfil investment and trading requirements.

This section provides details about the regulatory role of the London Stock Exchange as well as Stock Exchange Notices, Regulatory Guides and Making a complaint.

### **MiFID**

The Markets in Financial Instruments Directive (MiFID) will affect all market participants, from buy and sell side firms to vendors and exchanges. The entire industry needs to understand MiFID's implications. MiFID Service & Technical Description - leading solutions for a pan-European market.

Working in partnership with the market since 2005 and following the completion of an extensive consultation in Q1 2007, the Exchange has published the MiFID Service and Technical Description confirming the product solutions we will make available prior to MiFID implementation on 1 November 2007.

The Exchange's product solutions are summarised below:

- Pre trade transparency: Market making in all Liquid securities as an on Exchange alternative to systematic internalisation. All Liquid securities will be in distinct sectors for ease of identification. The mandatory quote period for European Liquid securities will be aligned with the Home Market (as well as an optional standardised period across all sectors). Limit order display in UK Main Market and leading Dutch securities including more trading on SETSqx the new periodic auction model for less liquid UK securities
- Post trade transparency: Pan-European trade reporting for off book executions on UK's market (on Exchange) or OTC (unregulated)

-Market data: Existing market data feeds will continue to provide off book reports as today enabling the members to receive all current data and new European data at no extra cost

## **EUROPEAN CODE OF CONDUCT FOR CLEARING AND SETTLEMENT**

The London Stock Exchange signed the European Code of Conduct for Clearing and Settlement in November 2006. The Code is designed to improve investors' ability to trade securities in a consistent, coherent and cost-efficient framework across Europe and requires signatories to meet certain standards in the areas of price transparency, access and interoperability and service unbundling and accounting separation.

The Code itself can be found on the European Commission's website, the Exchange announced that it had signed the code on 7 November 2006. There are three main elements to the code:

- Price transparency: the Code requires that the signatories provide full transparency of their relevant tariffs and discounts from 1 January 2007. For the London Stock Exchange this covers its trading tariffs. The relevant tariffs are for Trading, Membership and Connectivity (Extranex). The London Stock Exchange has a rebate scheme for market makers meeting certain conditions for securities outside the FTSE 350. The London Stock Exchange has provided some examples to show how these tariffs would be applied in typical situations.

- Access and interoperability: the Code requires that the signatories allow for access and interoperability as defined in the Code from 1 July 2007.

- Unbundling and accounting separation: the Code also requires that the signatories make certain services available on an unbundled basis and to implement accounting separation from 1 January 2008. The London Stock Exchange already provides segmental accounting in its Report and Accounts.

## **EUROPEAN QUOTING SERVICE (EQS)**

The European Quoting Service is a new service that enables clients to meet their pre-trade pan-European transparency obligations.

EQS is a quote driven market making and trade reporting platform that supports all EU Liquid securities (excluding those traded on the SETS, SETSqx, EUROSETS and ITBB services).

Initially, no electronic execution will be supported and market makers will enter non-electronically executable quotes during the Mandatory Quote Period (MQP). There will be no minimum number of market makers required per security.

## **EUROSETS**

EUROSETS is an order-driven trading service offering secondary market trading in liquid, large and mid-cap Dutch equities in the AEX and AMX indices. All Liquid Dutch securities are traded on this service.

From 29 October 2007 EUROSETS was enhanced to allow firms to be able to register as market makers in any EUROSETS security.

Whilst the Exchange is not planning to make EUROSETS available for all EU Regulated Market (EURL) securities at present, the Exchange is assessing opportunities to extend their offering to provide a pan European execution service as the market develops.

## **SECURITY TYPES**

### **BONDS**

The London Stock Exchange is one of the world's major centres for the issuing and listing of bonds. London is also one of the global centres for the listing of Eurobonds – debt instruments offered exclusively to institutional investors.

Issuers choose London because of the speed and reliability of the listing process. Today the Exchange works hand-in-hand with our regulator, the UK Listing Authority (UKLA), to offer clear and consistent guidance for issuers and their advisers and to help ensure the tight turnarounds that are so important in this market.

Issuers also value the centrality of the London market. Listing debt instruments in London puts them in front of one of the world's largest audience of bond investors: more than 75% of all eurobond deals are originated and executed here. This section looks at what it takes to list debt instruments on our market:

-Types of bonds: The UK Listing Authority (UKLA) and the London Stock Exchange can admit to listing and to trading a comprehensive range of bonds, from the simplest vanilla bonds to the most complicated instruments. Bonds can be classified in many ways: below it is provided a break down of the bonds on London's market by origination, maturity, form and structure.

-Origination:

Domestic bonds are denominated in the issuer's local currency and offered to local investors. Foreign bonds are those offered to investors outside the issuer's own country of registration and are denominated in the currency of the market where they are listed. Eurobonds, marketed internationally, are issued outside the issuer's country of registration in a currency other than that of the market where they are listed.

**-Maturity:**

The maturity of bonds listed on London's market ranges from money markets debt (i.e. commercial paper, maturing within a year) through to long-term bonds (with maturities of 15 years or more).The Exchange can also list undated bonds, which pay interest in perpetuity.

**-Form and legal characteristics:**

Both registered and bearer bonds can be listed in London, on the condition that the rights associated with such instruments remain at all times transferable and negotiable.

**-Structure:**

Simple bonds listed in London include fixed rate, floating rate and zero coupon bonds. More structured instruments include asset-backed and index-linked bonds.

## **THE LISTING PROCESS**

Bonds are issued to raise money by companies seeking capital to develop a business; by public bodies looking to finance infrastructure or other projects; by either to restructure debt.

Not every bond needs to be listed but a listing is the best way to maximise the marketability of the bond. Many institutions will only invest in bonds that are listed on a Recognised Investment Exchange (RIE). Under UK law the London Stock Exchange is such an RIE. A London listing puts bonds before the widest possible audience of potential investors.

The listing process:

More about the UK's regulator whose role it is to approve and monitor all bonds listed on the London Stock Exchange.

The Exchange provides and maintains the admission to trading which is an essential feature of listed bond issues and timelines for a typical bond issue.

Unlike some other exchanges, there are no annual fees for listing bonds on London's market.

## **ORDINARY SHARES**

Ordinary shares are also known as equity shares and they are the most common form of share in the UK. An ordinary share gives the right to its owner to share in the profits of the company (dividends) and to vote at general meetings of the company.

Ordinary shares of UK companies can be listed on the Main Market or admitted to AIM. They are traded on either SETS or SEAQ.

Companies which are domiciled in the UK may opt for a primary listing. Those companies incorporated outside the UK may opt for a primary listing in London or a secondary listing (usually if they are already listed on their own domestic market). A dual primary listing is also possible.

## **STRUCTURED PRODUCTS**

Structured products, utilising the securitised derivative wrapper, listed and traded on the London Stock Exchange represent the latest innovation in this rapidly growing asset class. They carry a number of features that make them an attractive proposition:

### **Flexibility**

This is both a standardised and a bespoke market where issuers will liaise with clients in producing tailored products as well as issuing more standardised products

available to all investors. The way in which the securitised derivatives issuance process takes place means that there can be as little as 48 hours between conception and issuance of some products.

### **Access & liquidity**

All those who currently access UK equity markets automatically have access to the London Stock Exchange Structured Products Platform. It is a single access point offering electronic and telephone execution, no central counterparty and T+3 CREST settlement. All issuers are obliged to maintain continuous prices throughout the lifetime of the products and adhere to standard market maker obligations (minimum size, maximum spread).

### **Diversity & competitiveness**

The platform already has five providers with more in the pipeline. All issuers are major investment banks with a global reach allowing them to access a huge variety of assets and price products competitively. All have significant pan European experience in issuing such product despite the relative youth of the UK securitised derivative market. The single platform means that those looking for bespoke product can easily put out to tender and compare products.

## **INFORMATION FOR ISSUERS**

Launched in 2002 there are now more than 70 brokers trading over 700 products.

That makes the UK one of the fastest growing markets ever - faster even than the market in Germany, which was launched in 1989 and is now worth £30bn a year. This growth represents a real business opportunity for LSE's member firms.

Companies applying to issue structured products on the London Stock Exchange are encouraged to approach us at the earliest possible stage.

## **COMPANY SERVICES**

### **THE LSE'S MARKETS**



The markets of the London Stock Exchange put UK and international companies from all sectors in touch with one of the world's deepest pools of investment capital. The markets contain every kind of company – from start-ups to some of the world's largest and most successful businesses.

There are four markets to choose from:

-The Main Market: is the premier market for larger companies when they need capital to fund their growth. A listing on the Exchange's Main Market enables companies to access Europe's deepest pool of capital and gain the key benefits of higher profile and liquidity.

The Main Market is the destination of choice for the world's leading companies when seeking a flotation or raising further capital - a listing on the Main Market represents an aspiration for many companies. These benefits are underpinned by the Main Market's balanced and respected framework of regulation and corporate governance.

In general, the Main Market suits ambitious and more mature companies those are confident that they can exploit the benefits the Main Market offers, and meet its high standards of disclosure, governance and regulation.

The market is truly global, with companies traded on it attracting keen attention from internationally focused investors in the UK and around the world.

-AIM: is the London's global market for growing companies. Growing companies on AIM will find a wide range of businesses ranging from young, venture capital-backed start-ups to well-established, mature organisations looking to expand.

Since its launch in 1995, over 2,500 companies have joined AIM – raising more than £34bn in the process, both through initial public offerings (IPOs) and further capital raisings. This capital has helped AIM-quoted companies of all kinds to fund their development and pursue their ambitions. Many companies have made the transition to the Exchange's Main Market following their success and positive experience on AIM.

When the LSE created AIM, the objective was to offer smaller companies – from any country and any industry sector – the chance to raise capital on a market with a pragmatic and appropriate approach to regulation. With this in mind, AIM was designed to be a highly flexible public market offering many unique attributes both for companies and investors.

To join AIM, companies do not need a particular financial track record or trading history. There is also no minimum requirement in terms of size or number of shareholders. This more flexible approach reflects the fact that AIM was designed specifically for smaller growing companies, and has helped AIM to become the leading global growth market. With this in mind, AIM was designed to provide a balanced regulatory regime offering many unique attributes both for companies and investors.

AIM has a large, diverse and committed community of stakeholders, made up of various market participants. Specialist advisers are crucial to the market's success, and range from dedicated Nominated Advisers (Nomads) who play a central role in the life of an AIM company, through to lawyers, accountants and brokers. Other important participants and stakeholders include investors, public relations (PR) and investor relations (IR) agencies who help companies join the market and make the most of their AIM quotation, and market committees and publishers focused on AIM and its companies.

- Professional Securities Market : the Exchange regulated market for listed debt and DR securities capital through the issue of specialist securities, such as debts, convertibles and depositary receipts, to professional or institutional investors.

In 2005, the introduction of the European Prospectus and Transparency Directives changed the regulatory landscape of securities admitted to regulated markets in the European Union. This legislative change provided the catalyst for the development of the PSM, with market participants and the Financial Services Authority (FSA).

The PSM is a listed, exchange-regulated market, which means issuers benefit from a flexible and pragmatic approach to regulatory requirements, whilst institutional investors gain the assurance of investing in listed securities. Since the market opened in July 2005, issuers have been attracted by the PSM's proportionate regulation and the opportunity to use domestic accounting standards. The benefits for issuers listing in London are the creation of the Professional Securities Market provides an important choice for issuers. Companies wishing to raise capital, without being restricted in the type or value of securities they issue, may do so without the additional cost of following a retail or equity regime. Issuers of debt and DRs are not required to report historical financial information to IFRS or an EU approved equivalent standard either in listing documents or as a continuing obligation requirement, as the FSA allow these issuers to use their domestic accounting standards following the implementation of the Transparency Directive in January 2007.

-The Specialist Fund Market: is the dedicated market for issuers of specialist funds and it is a market for highly specialised investment entities that wish to target institutional, professional and highly knowledgeable investors only.

The Specialist Fund Market further enhances London's appeal to specialist investment managers seeking a flexible and adaptable route to accessing permanent capital from a highly sophisticated global investor base. The Specialist Fund Market appeals to variety of different types of investment managers, including those managing large hedge funds, private equity funds, and certain emerging market and specialist property funds, seeking admission to a public market in London.

-Real Estate Investment Trusts (REITs): A REIT is a company that owns and manages property on behalf of shareholders. A REIT can contain commercial and/or residential property. REITs provide a way for investors to access property assets without having to buy property directly. In the UK, REITs can apply for 'UK-REIT' status, which exempts the company from corporate tax.

Attaining UK-REIT status removes the potential for "double taxation" at both the corporate and the investor level and is intended to help align returns from property held within REIT structures with that held directly.

The introduction of a UK-REIT regime, combined with the traditional strengths of London's capital markets, has created opportunities for the growth of the property investment sector. A UK-REIT enjoys all the benefits of any other company listed on the Main Market, in addition to the advantages outlined below. The introduction of UK-REITs gives investors wider opportunities for accessing an important alternative class.

## **INVESTMENT ENTITIES**

The London Stock Exchange provides United Kingdom offshore and overseas registered / domiciled investment entities with a meaningful choice of markets as well as flexibility in how to join the London Stock Exchange. As each route represents a unique combination of entry criteria, ongoing obligations and corresponding benefits, issuers have the ability to choose the route which best meets their needs.

The Exchange's markets can accommodate many different types of investment entity, in terms of structure and security types, investor audience sought, and investment management remit whether registered/domiciled in the UK, offshore or overseas.

The Main Market is the Exchange's flagship international market offering for trading companies and investment entities. The listing of an investment entity on the Main Market provides issuers with access to the widest investor base including institutional and retail investors.

Investment entities listing on the Main Market benefit from potential inclusion in the FTSE UK Series of indices on which tracker and benchmarked funds are built, as well as qualification for general retail tax wrappers in the UK such as Individual Savings Accounts and Self-Invested Personal Pension plans. In addition, property funds listed on the Main Market are able to seek UK-REIT status which confers tax benefits in the UK.

The Specialist Fund Market is aimed at highly specialised investment entities seeking institutional, professional and highly knowledgeable investors. The Specialist Fund Market

is an EU-regulated market under MiFID, which qualifies issuers for most institutional investment mandates.

AIM is an international market for smaller growing companies and is suitable for the more straightforward funds seeking a broad investment audience including institutional and retail investors.

## **BEING ON MARKET**

### **JOINING AND BEING ON MARKET**

Companies need capital to fuel their growth, the London Stock Exchange supports customers in maximising shareholder value through supporting capital raising and generating liquidity whilst maximising opportunities from their increased profile.

The Exchange provides a range of services via the internet to help promote the companies on the UK markets and provide market data to investors and companies. Once the company is quoted on UK's markets the details will appear in the following services:

- RNS Internet Services which provide companies and their authorised agents with a straightforward way to submit their regulatory announcements to the Exchange. In addition to dissemination to all news vendors subscribing to the RNS service, all RNS announcements will be published on the Exchange's Publishing Website.

- The Share Price service has recently been enhanced. As well as providing 15 minute delayed prices, index movements, risers and fallers, the service now includes basic company fundamentals, historic share price charting and a link to the RNS news service. The portfolio facility allows the members to track the prices for 40 stocks of their choice and calculate the profit or loss of their portfolio.

- The New Issues List is a list of all new companies seeking admission to one of the Exchange's markets and recently listed companies. This list provides the basic information on the company in terms of the offer and its sponsor. The month after listing, a company will also appear in the companies section

- Landmark: companies have the ability to link their web site into their dedicated Investor Relations page through landMARK. LandMARK provides a wealth of

information for UK and Irish companies including company fundamentals, delayed share prices, historical performance data and RNS announcements. Companies can also display their logos at the top of their landMARK Investor Relations page.

## **ADDITIONAL SERVICES**

The London Stock Exchange helps companies achieve the most from being part of the London capital markets through the provision of a range of investor relations (IR) and training products and services.

IR Solutions is the Exchange's newly formed business service that offers tools for their quoted companies and the advisors to maximise the effectiveness of their financial communications.

Designed to enhance both individual and business performance, the LSE has developed a new business service that provides expert training across the whole spectrum of capital markets knowledge.

## **INFO PRODUCTS OF LSE**

### **PARTICIPANT SERVICES**

Participant Services provide the members with participant specific products to help them manage and analyse their business.

The Participant trading service provides intraday, tick-by-tick trading data filtered specifically for that participant. The data, which is delivered at the end of each business day, will detail all of the trades that have been executed (for all UK listed securities traded on the London Stock Exchange) by the market participant for that day.

The Execution Quality service provides retail brokers and RSPs with the ability to monitor, assess and compare execution performance for all of their trades in the UK equity market. It provides them with reports on how their execution performance compares with the rest of the market. Over the course of an hour, a day, a month or a year you can see how competitive they really are, as well as keep up to date on how each of your Retail Service Providers are performing.

The Market Share service provides Member Firms with detailed, flexible and timely market share statistics on trading volumes and associated market share rankings. In an increasingly competitive environment, understanding their market share is of key importance. By accessing these services it has never been so easy to find out how they are performing in the market. Market Share services provide Member Firms with detailed, flexible and timely market share statistics on trading volumes and associated market share rankings.

In an increasingly competitive environment, understanding the market share is of key importance. Market Share services provide the member Firms with access to their underlying market share data in addition to a range of powerful analytical tools. By accessing these services it has never been so easy to find out how they are performing in the market.

Firstly, it gives them a clear picture of their business performance, illustrating the precise areas and time periods during which they performed best. Equipped with this knowledge the member Firms can identify their firm's strengths and weaknesses, ultimately helping you improve the balance of their business.

Secondly, it can be used as a powerful sales tool. The data can be used to support customer meetings, providing them with hard market data to underline your credentials as the best firm for transacting certain types of business.

In addition to the Exchange's free monthly Market Share service a premium Daily Market Share service is also available, providing more up-to-date market share statistics and additional functionality.

The Daily Service also allows the members to view market share data at a number of levels. It allows them to view market share at an individual security level, for a user defined portfolio of securities, across different business classifications and at index or market segment level.

## **NAMED MARKET SHARE SERVICE**

In an increasingly competitive environment, access to accurate sell-side market share information is of key importance. The LSE's Named Market Share service provides you with access to sell-side market share data in addition to a range of analytical tools to help the members source liquidity, particularly in small to medium-cap securities. It has never been easier to analyse sell-side trading volumes.

#### - Accuracy

As the official source of information the Named Market Share service provides accurate data based on trade reported information. The data provided by the service results from trades reported directly to the London Stock Exchange and published to the market.

#### - Liquidity

Through Named Market Share buy-side firms can utilise data to determine trading volumes by individual sell-side firms to identify liquidity opportunities and increase the efficiency of their trading decisions.

#### - Depth

Named Market Share statistics include all securities that are traded on the London Stock Exchange's markets and classified as either equities or depository receipts.

#### - Timeliness

Data is updated on a daily basis, three days after publication date. A large amount of historical data is also available dating back to January 2004.

#### - Control

Developed by the London Stock Exchange in conjunction with market participants, the Named Market Share service offers sell-side firms the opportunity to choose whether to participate, and to control which buy-side firms view their market share. Whilst this product promotes increased transparency of the market and the Exchange understands the need for privacy and security.

#### - Reports and functionality

The Named Market Share service consists of six reports. Each of the following reports can be viewed by individual security, user-defined portfolio, FTSE index, FTSE business sector, market segment and total market and can be downloaded into a .CSV or .PDF file:

- The Named Ranking report ranks sell-side firms by value traded, number of trades and number of shares with the names of participating sell-side firms displayed.
- The Summary report displays market share volumes for participating sell-side firms by Customer Business and Total Business; an On-Book/Off-Book split is also available.
- The Group Detail report allows the user to drill down into the underlying segments and sectors within a defined group of securities per participating sell-side firm. i.e. AIM, FTSE250 or Pharmaceuticals.
- The Security Details report allows the user to drill down into the underlying securities within a user-defined group of securities per participating sell-side firm.

- The Trend & Graph report allows the user to plot trends in the performance of participating sell-side firms over the time period selected.
- The Detailed Security download allows the user to download market share volumes for all securities traded by a participating sell-side firm.

Market Share business categories are defined as follows:

- **Customer Business** is the summery of Agency and Direct Customer business.
- **Total Business** which is the sum of Customer business and Other Principal business.
- **Of which On-book** is the proportion of total business that was executed automatically.
- **Of which Off-book** is the proportion of total business that was executed manually.

## **BROKER RANKING SERVICE**

The Broker Ranking Service is a web-based tool which allows Main Market-listed or AIM companies to identify the brokers providing liquidity in their securities. The service is based upon trade reports made directly to the London Stock Exchange and published to the market.

Customers who subscribe to the service will receive a username and password allowing them to log on to the service. Having logged in, several reports are available, including choices of:

- Broker rankings by volume traded over the past week, month, or three months
- Broker rankings by Customer Business and Total Business



# NEW YORK STOCK EXCHANGE (NYSE)

## THE HISTORY OF NEW YORK STOCK MARKET

In 1685 surveyors lay out Wall Street along the line of a stockade that was erected in 1653 across lower Manhattan to protect Dutch settlers from attacks by the British and Indians. In 1790 the federal government refinanced all federal and state Revolutionary War debt by issuing \$80 million in bonds and in 1792 twenty-four brokers and merchants gathered on Wall Street and signed the Buttonwood Agreement, agreeing to trade securities on a commission basis. This is the beginning of the New York Stock Exchange.

In 1817 a formal organization was established, the New York Stock & Exchange Board (NYS&EB) and they rented rooms at 40 Wall Street. A constitution with rules for the conduct of business was adopted and in 1836 the NYS&EB prohibits its members from trading in the street.

In 1861 at the outbreak of the Civil War, the NYS&EB suspends trading in securities of seceding states.

In 1863 the New York Stock & Exchange Board becomes the New York Stock Exchange (NYSE). Also in 1865 the Exchange closes for more than a week following the assassination of Abraham Lincoln and in 1867 Edward A. Calahan invented the first stock ticker. This revolutionizes the stock market by giving investors anywhere access to current prices.

In 1869 the New York Stock Exchange requires that shares of listed companies be registered at a bank to stop the practice of issuing shares in secret. This is known as watering stock. The Erie Railroad refuses to comply. Its shares are delisted until it complies. On 24 September 1869, gold speculation resulted in "Black Friday" and in 1886 the Exchange has its first million-share day on December 15. In 1906 the Dow Jones Industrial Average for the first time tops 100.

In 1907 financial problems at Knickerbockers Trust, a NY bank triggers a run on banks throughout New York. This begins the Panic of 1907. J.P. Morgan, Sr., comes to the market's aid and oversees a massive operation to infuse cash into banks and shore up the stock market. The panic ends because of his actions.

In 1913 the Federal Reserve System is established to control credit and bring greater stability to the nation's banking structure. But in 1914 World War I causes the NYSE to close and closes its doors on July 31 and it does not reopen for 135 days. This is the longest shutdown in Exchange history.

1923 is the year of the start of an historic bull market. Stock prices go up for the next six years and in 1929 stock prices fall on October 24 a day which is known as the Black Tuesday. There was a record volume of 13 million shares sold. The market crashed five days later on volume of over 16 million shares. The crash marks the beginning of the Great Depression. In 1933 Franklin Roosevelt the 32nd President of the United States signs into law the Securities Act of 1933 which mandates registering new issues and establishes federal disclosure requirements.

In 1934 the Securities Exchange Act of 1934 establishes the Securities and Exchange Commission (SEC). It has two purposes: to provide disclosure to investors and prohibit fraud in the sale of securities. Also in 1938 William McChesney Martin, Jr., becomes the first full-time salaried president of the exchange and in 1943 women work on the Stock Exchange trading floor for the first time ending the tradition of men only. In 1949 the longest Bull Run market on record begins. Stock prices will rise, without significant interruption, for the next eight years.

In 1952 the NYSE, in its first shareowner census, finds that 6,490,000 Americans own common stock and in 1961 International Federation of Stock Exchanges is organized. Average daily volume on the NYSE exceeds 4 million shares, nearly triple the level immediately following the war.

Also in 1963 the assassination of President Kennedy on November 22 forces an emergency early closing of the Exchange to avoid panic selling. In 1966 the NYSE begins a composite index of all listed common stocks this is referred to as the Common Stock Index and is transmitted daily. The starting point of the index is 50. It is later renamed the NYSE Composite Index.

In 1967 Muriel Siebert becomes the first woman member of the Exchange and in 1970 Joseph L. Searles III becomes the first black member of the Exchange.

In 1971 the NYSE is incorporated as a not-for-profit corporation and in 1972 Dow Jones Industrial Average closes over 1,000 for the first time.

In 1982 the NYSE experiences its first 100 million share day. Also in 1987 on October 19, the Dow Jones Industrial Average experiences its largest one-day percentage drop in history, 508 points or 22.61 percent. This drop causes volume to surge to an unprecedented 604 million shares. The next day, volume reaches 608 million shares.

More than 51 million Americans own stocks, according to the latest NYSE census in 1990 and in 1992 the average daily volume surpasses 200 million shares. Also in 1996

NYSE launches real-time stock tickers on CNBC and CNN-FN. Previously, market data had been delayed 20 minutes. On October 27, in 1997 the Dow Jones Industrial Average plummets 554 points, triggering the NYSE's "circuit breaker" rule for the first time. Trading halts at 3:30 p.m. On October 28, volume tops 1 billion shares for the first time. More than 1.2 billion shares are traded as the Dow Jones Industrial Average soars 337.17 points, rebounding from the previous day's loss.

On April 15 of the year 1998 new "circuit breaker" rules went into effect to halt trading when the Dow Jones Industrial Average drops 10, 20, and 30 percent, and on January 14 in 2000 the Dow Jones Industrial Averages closes at its all-time high – 11,722.98.

On January 4 in 2001 the volume of trading on the NYSE exceeded 2 billion shares for the first time, when 2.129 billion shares changed hands. This record-volume day followed the previous day's ½ percentage-point interest rate cut by the Fed Reserve, which lowered the fed funds rate to 6 percent. On September 11, terrorist attacks destroy the World Trade Centre. The NYSE closes for four days – its longest closure since 1933 -- and reopens on Sept. 17, setting a record volume of 2.37 billion shares.

In 2002 the Sarbanes-Oxley Act, which aims to protect investors by improving the accuracy and reliability of corporate disclosures, goes into effect.

In 2003 NYSE Composite Index is relaunched using revised methodology and a new base value of 5,000. The revised index provides investors with a better tool to measure NYSE market performance.

On June 24, 2005 the NYSE handles its largest single volume day – 2,115,805,723 shares. On December 1, the highest price paid for NYSE membership was -- \$4,000,000.

## NYSE TODAY

The **New York Stock Exchange (NYSE)** nicknamed the "**Big Board**", is a New York City-based stock exchange. It is the largest stock exchange in the world by dollar volume and the second largest by number of companies listed. Its share volume was exceeded by that of NASDAQ during the 1990s. The New York Stock Exchange has a global capitalization of \$25.0 trillion as of December 31, 2006.

The NYSE is operated by NYSE Euronext, which was formed by its merger with the fully electronic stock exchange Archipelago Holdings and Euronext. The New York Stock

Exchange trading floor is located at 11 Wall Street, and is composed of four rooms used for the facilitation of trading. A fifth trading room, located at 30 Broad Street, was closed in February 2007.

The main building, located at 18 Broad Street between the corners of Wall Street and Exchange Place, was designated a National Historic Landmark in 1978. NYSE Group merged with **Euronext**, and many of its operations (particularly IT and the trading platform) will be combined with that of the New York Stock Exchange and NYSE Arca.

## **CORPORATE ACCOUNTABILITY**

The NYSE has been a leader in setting standards of corporate accountability aimed at restoring investor confidence in the securities markets.

The NYSE's Corporate Accountability and Listing Standards Committee made recommendations focusing on giving board's greater independence and investor's greater say in the governance of their companies. The NYSE submitted the recommendations to the Securities and Exchange Commission for its review and approval.

The SEC published the proposals for public comment before taking final action. On November 4, 2003 the Commission approved the NYSE's recommendations. The new governance rules require NYSE-listed companies to comply with significantly higher standards, particularly with regard to board independence.

For example, the standards require that corporate boards have a majority of independent directors and that audit, compensation and nominating committees be fully independent. In addition, the standards tighten the definition of "independent director"; strengthen the authority and responsibility of audit committees; and require listed companies to adopt and disclose governance guidelines, codes of business conduct, and charters for their audit, compensation and nominating committees, among other requirements.

The new standards become effective by the company's first annual meeting after Jan. 15, 2004, or by Oct. 31, 2004, whichever is earliest. As to the NYSE, the new structure will involve specific governance disclosure by the Exchange. The NYSE Board of Directors will publicly disclose information regarding the means by which members and investors may communicate with individual board members. It will also publish a proxy statement prior to each annual meeting disclosing everything from board membership and compensation to the NYSE's charitable and political activities. Specific disclosures will be

made regarding matters overseen by board committees such as the Human Resources and Compensation Committee and the Nominating and Governance Committee. With these measures, the NYSE will restore trust and integrity in the more than 85 million individual investors in the United States.

## **THE NYSE AT THE HEART OF THE GLOBAL FINANCIAL MARKETS**

The financial markets are an important part of our daily lives. Making sure that we are financially secure is a vital part of how the economy grows. And investing in securities is often a significant component of an investor's portfolio.

Owning stock means you own a slice of a public company. These companies span the global economy and form the core of our private enterprise system. They spur job creation and economic growth while creating products and providing services that improve our quality of life.

When a company needs to raise money to expand it sells stocks or bonds to the public through the financial markets. Individuals become investors in this company by purchasing those securities. More than 90 million Americans own shares of stock through individual investments or through mutual funds. And many more participate in the stock market through the investments of retirement funds, insurance companies, universities and banks.

Owning stock allows investors, large and small, to share in the world's economies growth and vitality. Central to this activity is the NYSE marketplace, where billions of dollars worth of stock change hands each day. Only the highest quality companies can choose to list their securities on the NYSE. And once they do, the NYSE plays a unique role in providing deep and liquid markets for the trading of those securities, benefiting all investors, large and small.

The NYSE has come a long way since 1792, when 24 brokers and merchants signed the historic "Buttonwood Agreement" to trade a handful of securities on New York's Wall Street. In the more than two centuries that have followed the New York Stock Exchange has continued to adapt and evolve into the world's largest global equities marketplace. The NYSE has remained unwavering in its commitment to customers and to building a truly global marketplace with great breadth of product and geographic reach. Its mission is to add

value to the capital raising and asset-management process by providing the highest-quality and most cost-effective marketplace for the trading of financial instruments, to promote confidence in and understanding of that process, and to serve as a forum for discussion of relevant national and international policy issues.

The NYSE is one of two U.S. securities exchanges the NYSE Group Inc. operates:

- The NYSE is the world's largest and most liquid cash equities exchange. The NYSE provides a reliable, orderly and efficient marketplace where investors buy and sell listed companies' common stock and other securities. On June 30, 2006, the NYSE's more than 2,600 listed operating companies –some 450 of which are from outside the U.S.- represent a total global market capitalization of over \$22.6 trillion. In the second quarter 2006, on an average trading day, almost 1.8 billion shares, valued, at over \$68.5 billion, were traded on the NYSE.

- NYSE Arca operates the first open, all-electronic stock exchange in the United States and has a leading position in trading exchange-traded funds and exchange-listed securities. NYSE Arca is also an exchange for trading equity options. NYSE Arca's trading platform provides customers with fast electronic execution and open, direct and anonymous market access. Through NYSE Arca, customers can trade some 8,000 equity securities and more than 175,000 option products. On average, about 700 million shares, valued at more than \$25 billion, are traded through NYSE Arca each day.

NYSE Group pursues listing from all over the world, and the two markets, with their different criteria for listings, allow the Group to attract a wide range of companies. To be considered for a NYSE listing, companies must meet the regulatory criteria. (Companies that today cannot meet the financial listing standards of the NYSE can choose to list with NYSE Arca and begin on a track toward an NYSE listing.) Companies list as initial public offerings (IPOs), as transfers from other markets or as non-U.S. companies cross-listing at exchanges worldwide.

Listed companies pay both initial listing fees and annual fees. In return, their stock is bought and sold on the NYSE or NYSE Arca, following rules set by Securities and Exchange Commission (SEC), a U.S. federal government agency, and NYSE Regulation Inc., the independent NYSE Group subsidiary that regulates the NYSE and the NYSE Arca markets.

This publication focuses on the NYSE, the world's premier equities marketplace. In addition to having the highest overall listing standards of any securities marketplace in the world, the NYSE is among the world's most well-recognized brand names. For 214 years, the NYSE has facilitated national and global capital formation and symbolized the strength and vitality of the U.S. securities markets. Issuers that list with the NYSE benefit from

association with this brand name while gaining access to the world's largest, most liquid market for the trading of their securities.

When companies list for first time on the NYSE, the company's top officials are often invited to ring the Opening Bell on the NYSE Trading Floor. Ringing the Bell, which signals the start and close of the trading day, is part of the NYSE's rich heritage and signifies the opportunities the financial markets provide.

## THE HYBRID MARKET

The NYSE has long been the leader in providing the best prices and lowest trading costs. Its unique market model allows it to accomplish this. The NYSE blends the best aspects of electronic trading and traditional, open-outcry, auction market trading. Buyers and sellers meet directly in a fair, open and orderly market to compete for the best possible price through the interplay of supply and demand. At the NYSE, investors have the broadest choice of trade-execution preferences with the opportunity for price improvement. As the NYSE market continues to evolve, The NYSE Hybrid Market<sup>SM</sup> initiative will build on these attributes by broadening customers' ability to trade quickly and anonymously. To be able to trade securities on the Trading Floor, an Exchange issued trading license is required. Only qualified and approved NYSE broker-dealer entities may acquire and hold trading licenses. Most of those holders are either floorbrokers or specialists:

- **Floor Brokers.** Brokers represent public orders to buy or sell shares and work to get their customers the best price. Brokers participate both in person and electronically on the Trading Floor and have advanced tools to assist them in handling trades on behalf of their clients. Two main types of floor brokers work on the Trading Floor: house brokers and independent brokers. House brokers are employed by brokerage firms that hold accounts for public investors. These market professionals buy and sell securities as an agent for their customers. The majority of independent brokers are "direct access" brokers who deal with institutional investors at low commission rates.

- **Specialists.** Each stock listed on the NYSE is allocated to a specialist, a market professional who acts as the contact point between brokers with orders to buy shares and brokers with orders to sell shares. Specialists act as auctioneers in the specific stocks they are designated to trade at a designated location, called a trading post. All buying and selling of a given stock occurs at that location. Specialists use enhanced technology to

bring buyers and sellers together, improve prices, and serve as a point of accountability for the smooth functioning of the market. The Hybrid Market automates much of what specialists do, helping them become much more efficient.

**Marketplace Technology:** The NYSE's highly sophisticated and robust trading platform includes a broad range of technology tools that help specialists and floor brokers provide value to customers. The NYSE employs advanced communications and computing technologies to deliver fast, efficient, reliable and cost-effective trade executions.

The Exchange has the capacity to trade up to 10 billion shares per day. (The record for shares traded in one day was 3.1 billion on June 24, 2005.) To keep up with the tremendous growth in trading volumes, the NYSE constantly upgrades its technology, which includes developing new electronic workstations for specialists with flat-screen monitors, an order management system for brokers, wireless handheld terminals, a cellular telephone network on the Trading Floor and much more. At the NYSE, 100% of orders are electronically delivered directly to trading posts, booths, or handheld computers on the Floor in the following ways:

- **SuperDOT** (Designated Order Turnaround System): More than 95% of orders to buy or sell stock reach the specialist's workstation directly at the trading post through this electronic order-routing system. After the order has been executed in the Hybrid market, a report of execution is returned directly to the member firm office over the same electronic circuit that brought the order to the Trading Floor. SuperDOT handles most of the smaller orders. It is the larger orders that are represented personally by floor brokers via the Broker Booth Support System (BBSS), NYSE e-BrokerSM and other systems.

**Some words about the systems:**

**BBSS:** This highly sophisticated computer system is used to receive orders on the Trading Floor. The system is connected to the specialist's post and the broker's handheld computer.

- **NYSE e-Broker:** This wireless, handheld tool enables floor brokers to submit and manage quotes and orders, track executions and speed the flow of information between customers and the point of sale.

- **NYSE Direct:** This high-speed electronic connection between NYSE member firms and the Exchange enables immediate electronic execution of customer order.

**Key terms:** Auction Market: Floor brokers and specialists interacting with quotes and orders on the floor of the New York Stock Exchange.

**Bid:** The highest price anyone wants to pay for a security at a given time.



**Broker:** An agent who handles the public's orders to buy and sell securities, commodities, or other property. For this service, a commission is charged.

**Broker Booth Support System (BBSS):** A state-of-the-art order-management system designed exclusively for NYSE members, who enables member firms to quickly and efficiently process and manage their orders and selectively route orders via SuperDOT directly to the trading post, the broker's handheld computer, or the booths on the NYSE Trading Floor. **Commission:** The broker's basic fee for purchasing or selling securities or commodities as an agent. **Floor Brokers:** The largest single membership group of the NYSE, consisting of house brokers and independent brokers.

**House Broker:** is an agent, employed by a brokerage house, who executes the public's order for the purchase or sale of securities or commodities.

**Hybrid Market:** The NYSE Hybrid Markets is the NYSE's new market model currently being phased in, integrating into one venue the best aspects of both the auction market and automated trading while providing customers with the broadest choice of executing trades. **Independent Broker:** Member on the Floor of the NYSE who executes orders for more than one brokerage house. Many independent brokers are "direct access" brokers who deal with the institutional public.

**Initial Public Offering (IPO):** is corporation's first offering of stock to the public.

**Liquidity:** How easily one's assets can be converted back into cash, and the ability of the market in a particular security to absorb a reasonable amount of buying or selling at reasonable price changes. Liquidity is one of the most important characteristics of a good market.

**Listed Companies:** are companies whose shares of stock trade on a securities market.

**NYSE Hybrid MarketSM:** The NYSE Hybrid Market is the NYSE's new market model, integrating into one venue the best aspects of both the auction market and automated trading while providing customers with the broadest choice of trade execution preferences.

**Offer:** The lowest price anyone will take to sell a security at a given time.

**Specialist:** A member of the NYSE who is responsible for maintaining a fair and orderly market in the stocks they are allocated. At all times, specialists must put their customers' interests above their own.

**Stock:** A "share" represents partial ownership in a company. Investors who purchase stock have voting rights at the company's annual stockholders' meeting.

**SuperDOT:** The electronic order-routing system through which NYSE member firms transmit market and limit orders directly to the trading post where the security is traded or

to the member firm's booth. After the order has been completed a report of execution is returned directly to the member firm office over the same electronic circuit that brought the order to the Trading Floor.

**Trading Floor:** is the 52,000 square feet in five rooms at the New York Stock Exchange where stocks and other products are bought and sold.

**Trading Posts:** The 20 horseshoe-shaped counters staffed by specialists and clerks on the Trading Floor of the NYSE where stocks are bought and sold. Each trading post is responsible for over 100 stocks. These terms are totally needed for a new investor to understand basic meanings of the market.

## THE NYSE IS MOVING FORWARD

Building on its proud heritage, the NYSE is poised for growth and opportunity in a rapidly changing and ever-competitive environment. Its spirit of innovation and sense of promise and purpose will enable it to constantly adapt and evolve.

In the decades to come, the NYSE will remain a marketplace of growth, efficiency and performance while setting the standard for fairness, quality and reliability. It will leverage the power of innovation to better compete and grow while serving customers and all market participants. And it will take seriously its privileged responsibility owed to America's 90 million investors, the capital-raising and asset-management process, and the economic well-being of our nation and the world.

Educating the Public Part of that responsibility is to educate the investing public. The NYSE has a long-standing commitment to investor education. Many individual investors, students and educators across the U.S. and around the globe have learned about the stock market and investing through programs the NYSE sponsors and develops, such as those described below, which are offered free of charge.

In addition, it plays active roles in organizations such as the Securities Industry Association, the Foundation for Teaching Economics (FTE), Junior Achievement, National Association of Investors Corporation (NAIC), and the American Association of Individual Investors.

**The Teachers'Workshop Program** is designed for economics, business and social studies teachers who include the stock market in their classroom curricula. Each summer the NYSE conducts five five-day programs that include speakers from the

NYSE staff and constituents, lecture-discussion sessions, support materials, hands-on activities and field trips. Teacher workshops supplement each day's activities and provide an opportunity to share experiences and develop new curriculum approaches. Teachers also have an onsite visit to the Trading Floor, where they meet with market professionals in action. A two-day graduate program is also conducted for teachers who would like a refresher on marketplace issues and events

**Educational Seminars:** College and graduate student groups studying business, finance or economics can participate in lecture discussion sessions that include time for Q&A and a visit to a gallery where they can watch the activity on the Trading Floor. This program includes meetings with specialists and floor brokers, as well as NYSE executives from various divisions.

**A Day on the Trading Floor:** This program allows academicians and journalists who specialize in business, finance and economics to spend a full day at the NYSE and experience the Trading Floor firsthand. These sessions, which are tailored to the needs of attendees, include interaction with specialists and brokers on the Trading Floor, a visit to the Exchange's state-of-the-art market surveillance unit, and meetings with NYSE executives from various divisions.

## **BEYOND EQUITIES**

### **EXCHANGE TRADED FUNDS (ETFs)**

The NYSE's trading of ETFs is a strong complement to its core equity-trading business. Currently, the NYSE lists 62 ETFs and trades 47 more on an unlisted-trading-privileges (UTP) basis. The Exchange continues to build scale in ETF trading by listing innovative new products like GLD, DVY, FXI and TIP, and by licensing products based on its own indexes like NY and NYC.

On July 20, 2005 Barclays Global Investors announced an agreement to transfer 61 iShares ETFs to the NYSE in three phases, over a two-year period. On November 30, 2005 40 listings which represent the first of those phases, with an additional 16 following in 2006 and the final five in 2007. By adding a total of 61 iShares to the 19 existing NYSE-listed iShares ETFs, these transfers mark a significant step for the NYSE, making it the largest primary market for the complete iShares list and a leader in overall ETF listings.

## **ABOUT THE NYSE- BRANDED ETFs**

To give investors a more defined snapshot of key segments of the world's largest market, the Exchange listed the first two NYSE-branded ETFs. Based on the NYSE U.S. 100 Index (NY), which tracks the top 100 NYSE listed U.S. stocks, and the NYSE Composite (NYC), the Exchange's flagship index comprised of all the NYSE's common stocks, both funds give investors access to the quality and diversity of the NYSE list in a single trade. NY and NYC are sponsored by Barclays Global Investors (BGI).

# **AUSTRALIAN STOCK EXCHANGE**

## **AUSTRALIAN SECURITIES EXCHANGE**

The Australian Securities Exchange (ASX) is the primary stock exchange in Australia. The ASX began as separate state-based exchanges established as early as 1861. Today trading is all-electronic and the exchange is a public company, listed on the exchange itself.

The Australian Securities Exchange as it is now known resulted from the merger of the Australian Stock Exchange and the Sydney Futures Exchange in December 2006.

The biggest stocks traded on the ASX, in terms of their market capitalization, include BHP Billiton, Commonwealth Bank of Australia, Telstra Corporation, Rio Tinto, National Australia Bank and Australia and New Zealand Banking Group. As at 31-Dec-2006 the three largest sectors by market cap were financial services (34%), commodities (20%) and listed property trusts (10%).

The major market index is the S&P/ASX 200, an index made up of the top 200 shares in the ASX. This supplanted the previously significant All Ordinaries index, which still runs parallel to the S&P ASX 200. Both are commonly quoted together. Other indices for the bigger stocks are the S&P/ASX 100 and S&P/ASX 50.

The ASX is a public company, and its own shares are traded on the ASX. However, the corporation's charter restricts maximum individual holdings to a small fraction of the company.

While the ASX regulates other listed companies listed on the ASX, it cannot regulate itself, and is regulated by the Australian Securities and Investments Commission (ASIC).

The current managing director Robert Elstone was appointed in July 2006. Prior to the merger of ASX with the Sydney Futures Exchange (SFE), Robert Elstone was the CEO of the SFE.

## **THE HISTORY OF AUSTRALIAN STOCK EXCHANGE**

The exchange began as six separate exchanges established in the state capitals Melbourne (1861), Sydney (1871), Hobart (1882), Brisbane (1884), Adelaide (1887) and Perth (1889). An exchange in Launceston merged into the Hobart exchange too.

The first interstate conference was held in 1903 at Melbourne Cup time. The exchanges then met on an informal basis until 1937 when the Australian Associated Stock Exchanges (AASE) was established, with representatives from each exchange. Over time the AASE established uniform listing rules, broker rules, and commission rates.

Trading was conducted by a call system, where an exchange employee called the names of each company and brokers bid or offered on each. In the 1960s this changed to a post system. Exchange employees called "chalkies" wrote bids and offers in chalk on blackboards continuously, and recorded transactions made.

In 1969 there was a mining boom, triggered by Poseidon NL discovering nickel in Western Australia. See the Poseidon bubble article. In 1976 the Australian Options Market was established, trading call options. In 1980 the separate Melbourne and Sydney stock exchange indices were replaced by Australian Stock Exchange indices. In 1984 broker's commission rates were deregulated. Commissions have gradually fallen ever since, with today rates as low as 0.12% or 0.1% from discount internet-based brokers. In 1987, following work begun in 1985, the separate exchanges merged to form the ASX. Also in 1987 the all-electronic SEATS trading system was introduced. It started on just a limited range of stocks, progressively all stocks were moved to it and the trading floors were closed in 1990. In 1990 the warrants market was established. In 1993 fixed interest securities were added. Also in 1993 the FAST system of accelerated settlement was established, and the following year the CHES system was introduced, superseding FAST. In 1994 the Sydney Futures Exchange announced futures over individual ASX stocks. The ASX responded with low exercise price options. The SFE went to court, claiming LEPOs were futures (certainly their effect is like futures) and therefore the ASX could not offer them. But the court held they were options and so LEPOs were introduced in 1995. In 1995 stamp duty on share transactions was halved from 0.3% to 0.15%. The ASX had agreed with the Queensland State Government to locate staff in Brisbane in exchange for the stamp duty reduction there, and the other states followed suit so as not to lose brokerage business to Queensland. In 2000 stamp duty was abolished in all states as part of the introduction of the GST. In 1996 the exchange members (brokers etc) voted to demutualize. The exchange was incorporated as ASX Limited and in 1998 the company was listed on the ASX itself. The ASX arranged with the Australian Securities and Investments Commission to have it enforced listing rules for ASX Limited. In 1997 a

phased transition to the electronic CLICK system for derivatives began. In 2006 the ASX announced a merger with the Sydney Futures Exchange, the primary derivatives exchange in Australia.

The Australian stock exchange market closes sharply down on January 16 of 2008 as the benchmark S&P/ASX200 index plunged 150.3 points, or 2.52 percent, to 5,809.7. The Australian share market had its worst day in a decade on January 22 of 2008, plunging over 7 per cent as investors panicked in the face of a looming US recession. The benchmark S&P/ASX200 index suffered its biggest one day drop since October 28, 1997, falling 7.05 per cent to 5186.8 points.

## **BOARD OF DIRECTORS**

ASX is governed by a board of 10 directors:

- Maurice L Newman AC (Chairman)
- Robert G Elstone (Managing Director and CEO)
- Russell Aboud
- Trevor Rowe AM
- Jillian Segal AM
- Michael Sharpe AO
- Ric Holliday-Smith
- Peter Warne
- David Gonski AC
- Shane Finemore

## **SHARE MARKET BASICS**

What are shares: when the investors buy shares in a company, they are buying a part of that company. This means they share in the company's performance in the form of profits which can be given to them as dividends and/or capital growth through the value of their shares increasing. The company they are investing in benefits by using their money

and that of other investors to finance its business or its expansion, without having to borrow money.

### **Benefits of investing in shares:**

Outperforms other investments over the longer term, although past performance is no indication of future performance, history suggests that Australian shares have outperformed other types of investment over the longer term. To find out more the investors can read the Russell report which compares asset classes over the past 10 years.

### **Tax benefits:**

Where companies have already paid tax on their profits, tax credits known as franking credits may be attached to the dividends the company pays to the investors. These franking credits can be used to offset tax payable by them on other income. In addition, shares held for more than 12 months qualify for a 50% discount on any capital gains tax payable.

### **Diversification:**

Many people know the saying "don't put all your eggs in one basket". The Australian sharemarket helps them to do this by offering a wide choice of companies in which to invest. There are over 1700 companies listed on ASX. These companies are involved in a wide range of industries covering most sectors of the economy including financial services, industrials and healthcare. By investing in a range of companies you can spread your risk.

### **Flexibility:**

The investors can buy and sell shares quickly. They can sell shares and generally have access to their money in no more than three days. Other investments often take longer to sell and get their money back. This concept is known as liquidity. Remember some shares can be traded quicker than others due to their increased liquidity.

### **Control over the financial future:**

The investors can decide exactly how their money is invested, enabling them to have a lot of control over their finances. They can of course choose to share this responsibility with a stock broker who can advise them on what shares to buy and sell.

Trading shares has become much cheaper in recent years as stock brokers have made use of new technology to provide a better service to the investors. Buying and selling shares can cost as little as \$25 for a transaction-only service. The investors may need to pay more if they want advice and/or access to research on a company.

Although the share market historically has outperformed other investments over the long term, the market can experience volatility in the short term. Individual stock prices can



go down as well as up. It is important to monitor their shares' performance and to regularly re-evaluate whether they continue to be a good investment for them. They can learn how to do this by completing an online class or by talking to a broker.

## **HOW THE SHARE MARKET WORKS**

All trading takes place electronically on ITS (Integrated Trading System). Every day, the market goes through a number of different phases to allow for various activities, such as establishing opening prices and end of day processing. There are strict regulations governing order priorities. Orders are queued and traded according to price-time priorities. Better-priced orders trade first. If there is more than one order at the same price, the order that was placed first has priority, except in the case of crossings. Currently, most orders are entered into ITS and traded automatically. Some orders, however, are not traded automatically. Technical information about ITS, how it can be accessed by other applications and how it can be used by other computer systems to automatically enter orders into the market.

Understanding how the market works can be as important a part of a trading strategy as an opinion about whether a security is going to increase or decrease in value. For instance, the market goes through a number of different phases each trading day. How trading takes place is determined by the current market phase; the way opening prices are calculated determines which orders will be filled on open and at what prices; a number of different factors determine the life-span of an order. Understanding the ASX sharemarket mechanism will explain some of the events you may have noticed, for example, why the opening price is occasionally some distance away from the market just ten minutes after trading begins why your order has been cancelled or why your order was only partly filled, even though your instructions were to buy or sell at market. It may even help you decide when to trade and what price to place on an order.

## **HOW SHARES & OTHER SECURITIES ARE TRADED**

Opening and closing prices use the same algorithm. The algorithm ensures that all trades at market open and market close take place at the same price. Float prices are calculated in the same way as opening and closing prices.

Securities that may be short sold are referred to as Approved Short Sale Products and Approved Short Sale ETFs. ASX designates which securities are Approved Short Sale Products and Approved Short Sale ETFs. The broker may or may not offer a short selling facility to private investors.

Reasons for short selling include:

- To cover an options position.
- To take advantage of an anticipated fall in the price of an Approved Short Sale Product or Approved Short Sale ETF.

As an example, someone may own Exchange Traded Options giving him the right to buy 50,000 BHP. He intends to exercise the options at some stage in the near future.

To cover this position, he may choose to short sell 50,000 BHP now. In this scenario, he has sold 50,000 BHP shares he does not yet own. Once the options are exercised, he will have bought 50,000 BHP shares and the two trades will net each other out.

If someone is a private investor, he may also exercise put options without owning the underlying shares. The way this is handled depends on his broker.

If he believes the price of an Approved Short Sale Product or Approved Short Sale ETF is going to fall, he may choose to short sell the security now and buy back it back at a cheaper price, if in fact the price does fall.

He must bear in mind the settlement date of these trades. ASX currently schedules settlement for all trades on the third business day following the date the transaction was reported to the market unless the transaction is classed as "deferred delivery or deferred settlement" (in which case the trade(s) must be settled on the date specified by ASX). Settlements which are not met on the scheduled date incur fail fees. To avoid incurring fail fees he must either buy the shares to cover the short position on the day the short position is created or have borrowing arrangements in place with his executing broker to cover the settlement on the third business day.

Another consideration is the margin cover. Margin cover is a requirement of the ASX Market Rules and may be in cash or Cash Market Products. If the broker permits short selling, they must obtain a margin cover of 20% of the value of the trade before placing your short sale order. Whenever the market price of his short sold security rises in excess of 10% of the contract price he must provide additional margin cover of 100% to his broker.

As an example, if a person short sells 1,000 BHP at \$16.00, the total trade value is  $1,000 \times 16$ , or \$16,000. He must provide his broker with margin cover of 20% of \$16,000, i.e. \$3,200.

If the price of BHP rises by 15% while he is short sold, he is required to provide additional margin cover of 100%. That is, if the price increases by \$2.40, he must provide his broker with additional margin cover of \$2,400 (100% of \$2.40 price rise x 1,000 shares).

Short selling must take place in accordance with the ASX Market Rules. Short selling is not permitted if:

- The security is under an offer of takeover.
- The security is not a designated Approved Short Sale Product or Approved Short Sale ETF.
- The order's price is lower than the last sale price, e.g. you cannot place an order to short sell BHP for \$17.00 if BHP last traded at \$17.01 or higher.
- No more than 10% of the securities on issue may be short sold.

All stockbrokers must report their net short sold positions to ASX each trading day. ASX then collates the reports and issues a short sold position list detailing the net short sold quantity of each Approved Short Sale Product and Approved Short Sale ETF.

Private investors are not required to report their short sold positions to ASX, but they are required to tell their stockbroker before placing an order to short sell. A private investor must also notify their stockbroker when they have bought back the short sold shares, otherwise the stockbroker may continue to make margin calls, i.e. for the 20% margin cover.

Other factors are:

- **Basis of quotation:** Securities trade upon the basis that they are entitled to upcoming dividends, rights issues, etc. If this basis changes, the security price generally also changes. Any such changes are displayed on ITS.
- **Takeovers and schemes:** These affect the price of a security and what types of orders can be placed.
- **Trading halts:** Under certain circumstances, trading may be halted in a particular security or in all securities on issue for a particular company. Trading halts are not necessarily punitive and may be at the request of the company concerned.

**Who has direct access to ITS and who has indirect access:**

- Market Participants are licensed to carry out the business of stock broking and are permitted direct access to ITS, or access via their own trading systems.

- Designated Trading Representatives are employed by Market Participants to enter orders into ITS or other proprietary trading systems.

- Retail investors have indirect access to ITS, via Brokers or via their Broker's on-line trading system.

- Other users such as investment banks, cannot enter orders directly into ITS and must trade via a Broker. However, they may be able to use ITS to make enquiries.

The ASX department that manages market, security and information availability for trading and provides advice on ASX Market Rules covering trading matters to Participating Organisations.

- ITS Governors: a committee appointed from Participating Organisations, performing a variety of functions including dispute resolution and ITS exams.

- ASX Market Rules: govern how trading must be conducted on ASX.

- ASX Listing Rules: govern the way a company must conduct itself in order to be listed on ASX.

- Corporations Law Government Legislation: governing the securities industry within Australia.

- An Orderly market: is essential to maintaining the integrity of the marketplace and ensuring all investors are protected from breaches of ASX Market Rules.

- Disciplinary action ASX: may undertake disciplinary action such as fines. The Australian Securities and Investments Commission may prosecute serious breaches of trading regulations.

## **HOW TO BUY SHARES**

Investors' buy and sell orders are entered into the ASX Integrated Trading System(ITS).

The orders are entered by licensed operators within stock broking firms using ITS terminals located in their offices. ITS matches buying and selling requests by price in the order they were entered into the system. Every order is processed on an equal basis, and larger investors do not gain priority. When a buy order is matched with a sell order a trade occurs.

Placing an order with the adviser: most of the stock broking firms require providing funds before they accept the first order to buy shares. Many brokers will require that the buyers set up a client account or trading account before they can start trading. This can take up to a week to finalise but can usually be done in 24 hours. Many brokers will require establishing a cash management account with a bank or financial institution, to which they have access. This is to facilitate the transfer of funds to pay for the purchase of shares and to allocate proceeds from the sales of shares.

When the buyers place an order to buy or sell shares, they have a choice of two ways to tell their adviser what price they will accept. They can place their order 'at market', meaning they will accept a price at or about the market price of the shares at the time place they order. Alternatively, the buyers can place their order 'at limit', and inform their adviser of the highest price they are prepared to pay or the lowest price at which they will sell.

When placing an order with their adviser, make sure their order is confirmed. The adviser will not necessarily call as soon as the order has been filled. However, if the buyers place an order very near the current market price, it may be filled quickly. If they change their mind about the order after it has already been filled, they are still bound to pay for the shares they have bought, or release the shares they have sold, even if they have not yet received the contract note.

Paying and settling: Within three days of broker executing the buyer order they will need to enable the transfer of these shares, either by organising payment for the stock you have purchased, or by providing access to the shares they have sold.

All shareholdings are registered electronically on either CHESS or the issuer sponsored sub-register. CHESS (the Clearing House Electronic Sub-register System) is operated by a subsidiary of ASX on behalf of the listed companies. Issuer sponsorship involves the company (or issuer) through which the shares are issued, controlling the shareholding on their behalf.

To hold shares electronically on CHESS, they usually enter into an arrangement with the broking firm to act as the CHESS sponsor. The CHESS sponsor can then electronically register details of any purchases or sales.

The mechanics of how settle their transactions depend upon where their shares are registered. If the buyers have sold shares held on the CHESS sub-register will need to provide broker with the holder identification number (HIN) to allow access to transfer the shares for settlement. If sold shares are held with an issuer sponsored company, they will

need to provide the broker with their Security-holder Reference Number (SRN) to allow access.

## LISTING ON ASX

Listing is the process of taking a privately-owned organisation and making the transition to a publicly-owned entity whose shares can be traded on a stock exchange.

The world's stock exchanges have been listing companies, trusts and other products for hundreds of years, so the benefits of listing are well known to the market.

They need to examine a wide range of factors in order to gauge if their organisation is ready to list.

The timetable for listing depends on the complexity and scale of the transaction, how quickly the listing can be prepared and how quickly funds are received from investors. The amount of time taken to list can range from three months to two years, with six months being typical.

The road to an initial public offering (IPO) usually involves the following steps:

Step 1: Appoint advisers

Step 2: Talk to ASX

Step 3: Prepare and lodge prospectus

Step 4: Apply to list

Commence trading

At ASX, they can provide the company or trust with invaluable access to retail and institutional investors and exposure throughout the world. By listing with ASX, they will enter a new phase in their organisation's development where they will become part of a select group of organisations on the global capital stage. Listing on ASX has helped thousands of companies achieve their growth ambitions and successfully make the transition to public ownership.

The world's stock exchanges have been listing companies, trusts and other products for hundreds of years, so the benefits of this path are well known to the market.

The listing benefits include:

- Access to capital for growth: listing gives them the opportunity to raise capital to fund acquisitions and/or organic growth.

- Higher public and investor profile: listing generally raises their organisation's public profile with customers, suppliers, investors and the media. The organisation may also be covered in analyst reports and may be included in an index.

- Institutional investment: public listing means their organisation will find it easier to attract institutional and professional investors.

- Improved valuation: being listed generates an independent valuation of their organisation by the market.

- A (secondary) market for their organisation's shares: trading of shares on ASX gives shareholders the opportunity to realise the value of their holdings, which in turn can help broaden their shareholder base.

- Exit strategy for early stage investors: listing provides a mechanism for founders of a company, family interests or early stage investors to exit their investment.

- Alignment of employee/management interests: the process of remunerating their employees, executives and directors with shares is simplified, making it easier to align the interests of the employees with the goals of the organisation.

- Reassurance of customers and suppliers: organisations listed on ASX generally find that the perception of their financial and business strength is improved.

In addition to these benefits, the choice of ASX as the market on which to list offers them particular advantages.

- Scale: As the 8th largest equity market in the world, ASX is able to attract international investors.

- Reputation: ASX has an international reputation for conducting markets of integrity, ensuring vital investor confidence in ASX markets.

- World class systems: ASX markets are driven by leading edge electronic trading, settlement and registry systems.

- Inclusion in S&P/ASX indices: organisations listed on ASX may be included in a range of S&P/ASX indices. Many institutions use indices as a benchmark for the performance of their investment funds, and portfolios will hold shares included in that index.

# NASDAQ STOCK MARKET

The **NASDAQ** (*acronym for National Association of Securities Dealers Automated Quotations system*) is an American stock market. It was founded in 1971 by the National Association of Securities Dealers (NASD), who divested themselves of it in a series of sales in 2000 and 2001. It is owned and operated by The NASDAQ Stock Market, Inc. the stock of which was listed on its own stock exchange in 2002. NASDAQ is the largest electronic screen-based equity securities market in the United States. With approximately 3,200 companies, it lists more companies and on average trades more shares per day than any other U.S. market.

## THE HISTORY OF NASDAQ

When it began trading on February 8, 1971, the NASDAQ was the world's first electronic stock market. At first, it was merely a computer bulletin board system and did not actually connect buyers and sellers. The NASDAQ helped lower the spread (the difference between the bid price and the ask price of the stock) but somewhat paradoxically was unpopular among brokerages because they made much of their money on the spread. Over the years, NASDAQ became more of a stock market by adding trade and volume reporting and automated trading systems. NASDAQ was also the first stock market to advertise to the general public, highlighting NASDAQ-traded companies (usually in technology) and closing with the declaration that NASDAQ is "the stock market for the next hundred years." Its main index is the NASDAQ Composite, which has been published since its inception. However, its exchange-traded fund tracks the large-cap NASDAQ 100 index, which was introduced in 1985 alongside the NASDAQ 100 Financial Index.

Until 1987, most trading occurred via the telephone, but during the October 1987 stock market crash, market makers often didn't answer their phones. To counteract this, the Small Order Execution System (SOES) was established, which provides an electronic



method for dealers to enter their trades. NASDAQ requires market makers to honor trades over SOES.

## **BOARD OF DIRECTORS**

**H. Furlong Baldwin**

Retired Chairman and Chief Executive Officer, Mercantile Bank shares Corporation

**Michael Casey**

Advisor to the CEO, Starbucks Corporation

**Daniel B. Coleman**

Joint Global Head of Equities, Member of the UBS Investment, Bank Management Committee, UBS Securities LLC

**Lon Gorman**

Retired, Vice Chairman, The Charles Schwab Corporation

**Robert Greifeld**

President and Chief Executive Officer, The NASDAQ Stock Market, Inc.

**Glenn H. Hutchins**

Founder and Co-Chief Executive, Silver Lake

**Merit E. Janow**

School of International and Public Affairs, Columbia University

**John D. Markese**

President and Chief Executive Officer, American Association of Individual Investors

**Thomas F. O'Neill**

Principal, Sandler O'Neill Partners

**James S. Riepe**

Senior Advisor and Retired Vice Chairman, T. Rowe Price Group, Inc.

**Deborah L. Wince-Smith**

President, Council on Competitiveness

## **INNOVATION AND TECHNOLOGY**

Throughout its history, NASDAQ has been a beacon for change. When the market opened in February of 1971, every market in the world was floor-based. At that time, NASDAQ was charged with bringing greater efficiency to trading through modern technology — a charge that NASDAQ has been executing on ever since. Today, NASDAQ's fast and efficient electronic market model is the standard that equity markets everywhere are following.

As the largest U.S. electronic stock market, NASDAQ is constantly innovating, always setting the bar of trading technology as high as possible to bring issuers and investors improved execution quality on a faster, more efficient trading platform. Over the years, NASDAQ has consistently invested a great deal in its trading system to further its position as technology leader among the global equity markets.

Most recently, NASDAQ acquired the INET ECN and integrated the NASDAQ, Brut and INET systems into a single platform. Following in the footsteps of the highly successful Opening and Closing Crosses, NASDAQ implemented the NASDAQ Crossing Network — comprised of Intraday Crosses and the Post-Close Cross — a new, fully-anonymous trade execution facility designed to promote the execution of large trades with minimal market impact. Beginning in 2007, NASDAQ will adjust its technology to accept and distribute 1-, 2- and 3-character trading symbols, in addition to the 4-character symbols currently used. And in September 2006, NASDAQ announced that, subject to SEC approval, it will create an equity and index options market in third quarter of 2007.

### **NASDAQ'S SUPERIOR TECHNOLOGY**

#### **Speed**

- Order acknowledgement time is less than 1 millisecond
- Execution time is less than 1 millisecond
- Cancel out time is less than 1 millisecond

#### **Capacity**

- The system has handled over 35,000 messages per second in production

- The system has been tested to over 60,000 messages per second
- Planned capacity enhancements will bring the capacity to over 100,000 messages per second without degrading speed
- The system can handle over 1 billion messages per day

## **SPEED AND PERFORMANCE**

Increasingly companies expect superior performance from their listing market because they know that a better performing market benefits investors with lower costs, tighter spreads and more certainty of getting the price they expect. On all these measures, NASDAQ tops the competition and these differences add up to savings for investors.

### **NASDAQ is Faster**

On average, orders in NASDAQ-listed stocks receive faster executions than orders in comparable NYSE-listed stocks. Faster executions reduce investor uncertainty and decrease the likelihood of the market moving away from the investor's price.

### **Execution Costs are lower**

On NASDAQ, average effective spreads for NASDAQ-listed companies are better than their NYSE-listed comparables. Lower effective spreads mean lower trading costs for investors.

### **NASDAQ Investors Get Better Prices**

Average quoted spreads for NASDAQ-listed securities are lower than their NYSE equivalents. Tighter quoted spreads benefit both traders and investors accessing liquidity.

Institutional investors prefer the certainty of NASDAQ's high-speed market model. Buy-side traders are "voting with their order flow" in favour of NASDAQ's competitive, transparent and accessible market structure.

To view the most current SEC Rule 605 data, visit the NASDAQ Performance Report, a regularly updated snapshot of these key performance benchmarks, which underscore NASDAQ's superior market quality.

## **LEADERSHIP AND VISIBILITY**

Since its inception in 1971, NASDAQ has led the way in defining what a stock market can be. At that time, every market in the world was floor based. Over the years, NASDAQ's superior competitive electronic market model has become the standard that all major markets in Europe, Asia and the U.S have followed. Thriving on competition, NASDAQ committed itself to continuous innovation in both trading technology and the service and value of its listing product.

Today NASDAQ remains at the forefront of the global securities markets. NASDAQ is the largest U.S. electronic stock market. With approximately 3,200 companies, it lists more companies and, on average, trades more shares per day than any other U.S. market. It is home to companies that are leaders across all areas of business including technology, retail, communications, financial services, transportation, media and biotechnology. As a result of years of focused trading system development, NASDAQ is not only the primary market for trading NASDAQ-listed stocks, it is also number one broker-dealer on the floor of the NYSE.

Beyond technological innovations, NASDAQ has redefined the stock market listing product, providing the highest quality service, visibility and value to issuers. In 2000, NASDAQ defied the conventional wisdom of Wall Street and opened the NASDAQ MarketSite in the heart of Times Square. This high-profile venue for opening and closing the market every day continues to be a great source of visibility and exposure for NASDAQ issuers. Recently, NASDAQ has expanded on this idea and held Opening and Closing Bell Ceremonies celebrating issuer milestones and commemorating other special events in remote locations throughout the world.

NASDAQ believes that a listing fee should be more than just a "membership" fee. As such, NASDAQ has a long history of making robust services available to its listed companies as a benefit of listing. Through NASDAQ Corporate Services, NASDAQ-listed companies receive a package of value-added products and services that assist them with market intelligence, compliance, shareholder communications and visibility objectives. In addition, NASDAQ Corporate Services provides companies with access to a portfolio of exceptional services and information programs geared to add value in all stages of accessing the public capital markets.

Through these innovations NASDAQ has uniquely positioned itself to be a true business partner to its listed companies, helping them be the best public companies they can be in the most efficient and cost-effective ways possible. NASDAQ has always been the market of innovation and will continue to improve its world-class listing platform,

corporate services and customer service for the benefit of our listed companies and their investors.

## **MARKET INTELLIGENCE**

Your number-one priority is to run your company. And while you know your stock, you can't watch it every minute of the day. That's why NASDAQ offers you free access to our Market Intelligence Desk ("MID"). Call anytime during market hours to check on your stock's activity. From time to time, we may also contact you to discuss trends or alert you of certain trading patterns.

NASDAQ's Market Intelligence Desk is designed to provide you with a critical touch-point for timely trading analysis and market information. The Desk consists of a team of market professionals, all working to keep your company on top of the market with up-to-the-minute information.

### **Cutting-Edge Technology**

NASDAQ's Market Intelligence Desk utilizes state-of-the-art technology built on a philosophy of providing our companies with a 360-degree view of the markets. Our technological expertise allows us to efficiently incorporate over 20 different information sources into the Desk so that directors can research market developments to their fullest.

### **Constant Monitoring**

The Desk monitors, analyzes and proactively communicates vital market information to NASDAQ-listed companies.

### **One Contact per Company**

Each NASDAQ-listed company is assigned a dedicated Market Intelligence Desk Director. This ensures that service can be tailored to the needs of individual companies.

### **Word on the Street**

In addition to communicating Wall Street sentiment, NASDAQ's Market Intelligence Desk can notify you of certain trading activity, often in context with what is happening in your industry.

## **Easy Access**

The Market Intelligence Desk operates as an inbound and outbound information centre. Not only can you call the Desk by using your own exclusive number, you can also receive Market Intelligence Desk alerts via phone or email.

## **ABOUT BUSINESS**

NASDAQ allows *multiple market participants* to trade through its Electronic Communication Networks (ECNs) structure, increasing competition. The Small Order Execution System (SOES) is another NASDAQ feature, introduced in 1987, to ensure that in 'turbulent' market conditions small market orders are not forgotten but are automatically processed. With approximately 3,200 companies, it lists more companies and, on average, its systems trade more shares per day than any other stock exchange in the world. NASDAQ will follow the New York Stock Exchange in halting domestic trading in the event of a sharp and sudden decline of the Dow Jones Industrial Average. In business, NASDAQ is often used as a non-acronym also.

## **ABOUT MARKET SITE**

Serving as the epicentre for NASDAQ news and events, Market Site is located in the heart of New York's Times Square. Each day Market Site hosts some of the world's most prestigious business leaders to preside over the Market Open

### **Market Site Tower**

Located at 43rd and Broadway, this high-tech electronic display wraps around the cylindrical NASDAQ building, providing up-to-the-minute financial news, market highlights, and advertisements. The Market Site Tower is featured in films, television programming, and news articles. This modern day icon soars 7 stories high and illuminates Times Square 24 hours a day.

## **Market Site Broadcast Studio**

The Market Site houses a state-of-the-art digital broadcast studio that transmits approximately 100 live market updates by a host of networks including CNBC, Bloomberg TV, Reuters, NDTV Profit, CNBD India, Business Week TV and other financial networks to reach millions of viewers around the world with up-to-the-second market news. Dedicated NASDAQ technical and production staff provide real-time trading information to reporters 14 hours a day.

## **MarketSite Events**

NASDAQ Market Site is a unique venue for corporate meetings, product launches, press conferences, and other special events.

## **Live Audience**

NASDAQ is offering an exciting new opportunity. We are currently offering public groups the opportunity to attend and view the NASDAQ Opening or Closing Bell Ceremony from our studio located in the heart of Times Square. Groups of between 10 and 15 guests can be accommodated at each ceremony.

Guests will have the opportunity to view the Opening Bell/Closing Bell Ceremony from inside our studio as well as view live reports from domestic and international business networks.

Guests will be asked to arrive by no later than 9:00am for an Opening Bell and 3:30pm for a Closing Bell. Guests will be greeted by a NASDAQ official and escorted inside our studio to view the Opening/Closing Bell Ceremony.

## **MARKET SHARE**

As of 1 March 2007, NASDAQ is the largest Electronic Communication Network system in terms of shares traded. Approximately two out of every seven shares traded on the American financial markets is traded on the system. For New York Stock Exchange-

listed securities or Tape A, it accounts for about 14-15% of the shares traded. For Tape C securities, it accounts for approximately 45-98% of the trading volume.

## **NASDAQ'S MARKET MAKER SYSTEM**

OTC stocks are traded differently than stocks that are listed on the NYSE or the American Stock Exchange (AMEX). Stocks listed on the NYSE or AMEX is traded using the auction method. In the auction method, specialists handle all trades in specific stocks and either passively matches orders from buyers and sellers or take a position in the stocks themselves. OTC stocks, on the other hand, are traded using a multiple market maker system. There are approximately 500 member firms that make markets in OTC stocks traded on NASDAQ. Some stocks may have 60 market makers, while smaller stocks may have only two. The multiple market maker system, it is argued, provides companies with greater liquidity than the auction system.

Under the multiple market maker system, dealers make markets in OTC stocks by making bids to buy and offers to sell. A dealer's bid price is the highest price at which someone would buy a stock, and the asked price is the lowest price at which someone would sell the stock. The difference between the market's bid and asked prices is known as the bid-asked spread.

The bid-asked spread, which can range from an eighth of a point (\$.125) to half a point (\$.50) per share, results in an additional trading cost for investors. Since 1996, when the **Securities and Exchange Commission** (SEC) accused NASDAQ's market makers of colluding to set prices, spreads have declined. During 1997 there was a 30 percent decline in spreads due to new SEC rules, which resulted in savings to investors of an estimated \$1.3 billion in trading costs.

Prior to the introduction of NASDAQ in 1971, bid asked prices were circulated using daily "pink sheets" that were issued by the National Quotation Bureau in three regional editions (East, Midwest, and West). During the trading day there was no centralized data on bid and asked prices. Trading in the OTC market was slower, and the bid-asked spreads were higher than under NASDAQ. NASDAQ facilitated OTC trading by providing continuous, up-to-the-minute quotations on bid and asked prices through a centralized computer system.



## **MEMBERS AND SERVICES**

The approximately 500 member firms that trade on NASDAQ do so using computers and telephone lines. Unlike the NYSE, there is no trading floor where dealers gather to execute their transactions. Rather, it is all done electronically. In some cases trades can be executed without individual dealers calling each other on the telephone.

NASDAQ offers its dealers three levels of service. Level One service provides bid and asked prices in all securities to all salespersons and dealers through approximately 200,000 terminals. It also provides sales price and volume information on the OTC stocks included in NASDAQ's National Market System. The terminals are usually leased by subscribers from vendor firms such as Quotron. Level Two service utilizes NASDAQ-owned terminals to provide subscribers with a variety of information on the OTC market. Level Three service allows registered market makers to report their trades and daily volume as well as to receive Level Two service.

Other dealer services offered by NASDAQ include the Small Order Execution System (SOES). For trades involving 1,000 shares or less of stocks listed on NASDAQ's National Market System, or 500 shares or less for other NASDAQ issues, trades can be executed electronically under SOES without any telephone calls between dealers. NASDAQ also offers Trade Acceptance and Reconciliation Services, which assists member firms in resolving their uncompleted and advisory OTC trades.

Not all securities that trade over-the-counter are listed on NASDAQ. In order to be listed on NASDAQ a common stock must be registered under section 12(g) of the Securities Exchange Act of 1934, or the equivalent, and must also meet minimum levels for total assets, capital and surplus, public float, number of dealers, and number of shareholders. Those OTC securities that are not listed on NASDAQ trade infrequently and continue to rely on "pink sheets" to disseminate information on their bid and asked prices.

## **FEES**

NASDAQ has a sliding fee system that offers lower liquidity removal fees and more favorable added-liquidity rebates based on how much trading volume the market participant executes on the NASDAQ system.

### ***Quote availability***

NASDAQ quotes are available at three levels. Level I shows the highest bid and lowest offer — the inside quote. Level II shows all public quotes of market makers together with information of market makers wishing to sell or buy stock and recently executed orders. Level III is used by the market makers and allows them to enter their quotes and execute orders.

## **NASDAQ-100**

The **NASDAQ-100** is a stock market index of 100 of the largest domestic and international non-financial companies listed on the NASDAQ stock exchange. It is a modified market value-weighted index; the company weights in the index are based on their market capitalization, with certain rules capping the influence of the largest components. It does not contain financial companies, and includes companies incorporated in Canada (e.g. Research In Motion), Israel (e.g. Check Point), India (e.g. Infosys), Singapore (e.g. Flextronics), Sweden (e.g. Ericsson), Switzerland (e.g. Logitech) and Ireland (e.g. Ryanair); both of these factors differentiate this index from the S&P 500.

## **HISTORY**

The NASDAQ-100 began on January 31, 1985 as a way for the NASDAQ Stock Market to support enhanced media coverage for itself. The index was introduced the same day as the NASDAQ Financial-100 Index and as a result, financial companies were, and still are, excluded from the NASDAQ-100. The base price of the index was initially set at 250, but when it closed near 800 on December 31, 1993, the base was reset at 125 the following trading day, leaving the halved NASDAQ-100 price below that of the more commonly known NASDAQ Composite.

The first annual adjustments were made in 1993 in advance of options on the index that would trade at the Chicago Board Options Exchange in 1994. Foreign companies were first admitted to the index in January 1998, but foreign companies had higher standards to meet before they could be added. Those standards were relaxed in 2002, while standards for domestic firms were raised, ensuring that all companies met the same standards.

The all-time highs for the index, set at the height of the dot-com bubble in 2000, stand above 4,700 points, while its recent bear market lows in 2002 occurred below the 900 point level. The NASDAQ-100 closed above the 2,000 point milestone on July 12, 2007 for the first time since May 2001.

## **Options and ETF**

NASDAQ-100 is often abbreviated as NDX. Its corresponding futures contracts are traded on the Chicago Mercantile Exchange. The regular futures are called ND, as in NDM6 for the June 2006 expiration. The e-mini versions are called NQ. ND and NQ are among the most heavily traded futures at the Chicago Mercantile Exchange.

The NASDAQ-100 Trust Series 1 Exchange-traded fund, sponsored and overseen since March 21, 2007 by Power shares, trades under the ticker NASDAQ: QQQQ. On December 1, 2004, it was moved from the American Stock Exchange where it had the symbol QQQ to the NASDAQ and given the new four letter code QQQQ.

It is sometimes referred to as the "Quad Qs," "Cubes," or simply as "the Qs." Since 2000, it is the most actively traded security in the United States. On July 17, 2007, the ETF closed above \$50 for the first time since early 2001.

## **Standards**

The NASDAQ has over the years put in place a series of stringent standards for which companies must meet before being included in the index. Those standards include:

- Being listed exclusively on NASDAQ in either the Global Select or Global Market tiers

- Being listed for two years (or if it meets certain market capitalization standards, one year)
- Having average daily volume of 200,000 shares
- Being current in regards to quarterly and annual reports, and;
- Not being in bankruptcy proceedings.

Additionally, companies with multiple classes of stock are only allowed to have one class included in the index (usually the largest class in terms of market capitalization).

## **Yearly Rebalancing**

While the composition of the NASDAQ-100 changes in the case of delisting (such as transferring to another exchange, merging with another company, or declaring bankruptcy, and in a few cases, being delisted by NASDAQ for failing to meet listing requirements), the index is only rebalanced once a year, in December, when NASDAQ reviews its components and makes the appropriate adjustments. All changes, regardless of when it occurs, are publicly announced via press releases at least five business days before the change is scheduled to take place.

There are two tools the NASDAQ uses to determine the market values of companies for the annual review:

- Share Prices as of the last trading day of October (usually the 31st unless the 31st falls on a weekend);
- Publicly announced share totals as of the last trading day of November (the 30th unless it falls on a weekend).

Those components that are in the top 100 of all eligible companies at the annual review are retained in the index. Those ranked 101 to 125 are retained only if they were in the top 100 of the previous year's annual review. If they fail to move into the top 100 in the following year's review, they are dropped. Those not ranked in the top 125 are dropped regardless of the previous year's rank.

- A company will also be dropped if, at the end of two consecutive months, the component fails to have an index weighting of at least one-tenth of a percent. This can occur at any time.

The companies that are dropped are replaced by those who have the largest market value and are not in the index already. Anticipation of these changes can lead to changes in the stock prices of the affected companies.

## Differences from NASDAQ Composite Index

The NASDAQ-100 is frequently confused with the NASDAQ Composite Index; the latter index (often referred to simply as "the NASDAQ") includes the stock of every company that is listed on NASDAQ (more than 3,000 all together) and is quoted more frequently than the NASDAQ-100 in popular media.

The NASDAQ-100 is a modified capitalization-weighted average, in which certain companies will have more influence on the performance of the index, even if they are smaller than others.

The methodology was created in 1998 in advance of the creation the NASDAQ-100 Index Trust, which holds portions of all NASDAQ-100 firms. The only time it is to be rebalanced again is if

- One company is worth 24% of the index, or
- Those companies with a weighting of at least 4.5% constitute 48% of the index.

## Companies of NASDAQ-100

Activision, Inc. · Adobe Systems Incorporated · Akamai Technologies, Inc. · Altera Corporation · Amazon.com, Inc. · Amgen Inc. · Amylin Pharmaceuticals · Apollo Group, Inc. · Apple Inc. · Applied Materials, Inc. · Autodesk, Inc. · BEA Systems, Inc. · Bed Bath & Beyond Inc. · Biogen Idec Inc · Broadcom Corporation · C.H. Robinson Worldwide, Inc. · Cadence Design Systems · CDW Corporation · Celgene Corporation · Cephalon, Inc. · Check Point Software Technologies Ltd. · CheckFree Corporation · Cintas Corporation · Cisco Systems, Inc. · Citrix Systems, Inc. · Cognizant Technology Solutions Corporation · Comcast Corporation · Costco Wholesale Corporation · Dell Inc. · DENTSPLY International Inc. · Discovery Holding Co · eBay Inc. · EchoStar Communications Corporation · Electronic Arts Inc. · Expedia Inc. · Expeditors International of Washington, Inc. · Express Scripts, Inc. · Fastenal Company · Fiserv, Inc. · Flextronics International Ltd. · Foster Wheeler Corporation · Garmin Ltd. · Genzyme Corporation · Gilead Sciences, Inc. · Google, Inc. ·

IAC/InterActiveCorp · Infosys Technologies · Intel Corporation · Intuit, Inc. · Intuitive Surgical Inc. · Joy Global Inc. · Juniper Networks, Inc. · KLA-Tencor Corporation · Lam Research Corporation · Lamar Advertising Company · Level 3 Communications · Liberty Global, Inc. · Liberty Media Corporation, Interactive Series A · Linear Technology Corporation · LM Ericsson Telephone Company · Logitech International, SA · Marvell Technology Group, Ltd. · Maxim Integrated Products, Inc. · Microchip Technology Incorporated · Microsoft Corporation · Millicom International Cellular S.A. · Monster Worldwide, Inc. · Network Appliance, Inc. · NII Holdings, Inc. · NTL Incorporated · NVIDIA Corporation · Oracle Corporation · PACCAR Inc. · Patterson Companies Inc. · Patterson-UTI Energy Inc. · Paychex, Inc. · PetSmart, Inc. · QUALCOMM Incorporated · Research in Motion Limited · Ross Stores, Inc. · Ryanair Holdings, PLC · SanDisk Corporation · Sears Holdings Corporation · Sepracor Inc. · Sigma-Aldrich Corporation · Sirius Satellite Radio, Inc. · Staples, Inc. · Starbucks Corporation · Sun Microsystems, Inc. · Symantec Corporation · Tellabs, Inc. · Teva Pharmaceutical Industries Limited · UAL Corporation · VeriSign, Inc. · Vertex Pharmaceuticals · Whole Foods Market, Inc. · Wynn Resorts, Ltd. · Xilinx, Inc. · XM Satellite Radio Holdings, Inc. · Yahoo! Inc.

## **NASDAQ COMPOSITE**

The **NASDAQ Composite** is a stock market index of all of the common stocks and similar securities (e.g. ADRs, tracking stocks, limited partnership interests) listed on the NASDAQ stock market, meaning that it has over 3,000 components. It is highly followed in the U.S. as an indicator of the performance of stocks of technology companies and growth companies. Since both U.S. and non-U.S. companies are listed on the NASDAQ stock market, the index is not an exclusively U.S. index.

## **HISTORY**

Launched in 1971 with a base value of 100 points, the NASDAQ Composite

Index is a broad based index which is calculated under a market capitalization weighted methodology. To be eligible for inclusion in the Composite, a security's U.S. listing must be exclusively on the NASDAQ Stock Market (unless the security was dually listed on another U.S. market prior to 2004 and has continuously maintained such listing), and have a security type of either:

- American Depositary Receipts (ADRs)
- Common Stock
- Limited Partnership Interests
- Ordinary Shares
- Real Estate Investment Trusts (REITs)
- Shares of Beneficial Interest (SBIs)
- Tracking Stocks

Closed-end funds, convertible debentures, exchange traded funds, preferred stocks, rights, warrants, units and other derivative securities are not included. If at any time a component security no longer meets the above criteria, the security becomes ineligible for inclusion in the Composite Index and is removed.

On July 17, 1995, the index closed above the 1,000 mark for the first time. The all-time low for the index had been reached in October 1974 around 54 points, representing a market drop of more than 45% from the time of its introduction. On March 10, 2000, the index peaked at an intra-day high of 5,132.52 and closed at an all-time high of 5,046; the decline from this peak signalled the beginning of the end of the dot-com stock market bubble. The index declined to half its value within a year, and finally found a bear market bottom on October 10, 2002 with an intra-day low of 1,108.49 after a close of 1,114 the previous day. While the index gradually recovered since then, it did not trade for more than half of its peak value until May 2007. The index opened the fourth quarter of 2007 with new 80-month highs, closing above the 2,800 point mark on October 9, 2007. The intraday level of 2,861.51 on October 31, 2007 was the highest point reached on the index since January 24, 2001.

## **NASDAQ BIOTECHNOLOGY INDEX**

The NASDAQ Biotechnology Index includes securities of NASDAQ-listed companies classified according to the Industry Classification Benchmark as either Biotechnology or Pharmaceuticals which also meet other eligibility criteria.

## **NASDAQ FACTS**

Liquidity is moving off the floor at a rapid rate, and NASDAQ is trading greater volumes of NYSE-listed stocks than ever before. In May 2007, 15.7% of total consolidated volume was executed on NASDAQ systems and NASDAQ Execution Services — NASDAQ's broker-dealer — was once again #1 on the NYSE, routing more share volume to the NYSE floor than any other NYSE member. This is not surprising since NASDAQ's trading systems are the faster, more efficient, transparent, better way to trade NYSE-listed securities. Look up an individual NYSE-listed stock and find out just how much of its volume is being traded on NASDAQ by visiting the NASDAQ Market Share calculator.

### **The Facts about Liquidity, Competition and Volatility**

Stock price volatility is important to all public companies because volatility is used to calculate both employee stock options expense and a stock's trading costs. However different measures of volatility are used for each of these calculations and this report explains those differences showing how NASDAQ provides a better listing environment with lower volatility.

### **Companies that switch to NASDAQ trade better**

In this edition of the Market Structure Bulletin, NASDAQ Chief Economist, Dr. Frank Hatheway, talks about recent market developments and what they mean for companies and investors. SEC reports and other independent data are reviewed to evaluate NASDAQ's standing in the marketplace. The analysis clearly demonstrates how NASDAQ provides superior execution quality for companies that switch to NASDAQ. In addition, Dr. Hatheway explains how recent NASDAQ market structure innovations have made NASDAQ a better market for secondary equity offerings. He also discusses the



implications of NASDAQ's exchange registration for all market participants. View the bulletin.

### **Listing Switch Case Studies: Schwab and Cadence**

According to independent, third-party SEC mandated data, shareholders of The Charles Schwab Company and Cadence Design Systems are getting better executions on NASDAQ. Looking at the four-month averages for pre- and post-switch trading, both Schwab and Cadence have experienced increased execution speeds and tighter spreads.

### **NASDAQ Performance Report**

NASDAQ's competitive electronic market structure is designed to provide a fair, fast, efficient and low-cost marketplace for companies and investors. The information provided here is a snapshot of key performance benchmarks, which underscore NASDAQ's superior market quality. This data is updated regularly.

### **NASDAQ Global Platform**

The NASDAQ Stock Market is the largest U.S. electronic stock market and a powerful global brand. Of the approximately 3,200 listings on NASDAQ, 335 are non-U.S. companies from 35 countries representing all industry sectors. The NASDAQ Global Platform<sup>SM</sup> provides companies throughout the world access to U.S. capital formation, which in turn fosters world economic growth and extends business transactions across borders and among cultures.

# **BOMBAY STOCK MARKET**

## **THE HISTORY OF BOMBAY STOCK MARKET**

The history of the capital market in India, the oldest stock exchange in Asia, dates back to the eighteenth century when East India Company securities were traded in the country. Until the end of the nineteenth century, securities trading were unorganized and the main trading centres were Bombay (now Mumbai) and Calcutta (now Kolkata). Of the two, Bombay was the chief trading centre wherein bank shares were the major trading stock. During the American Civil War (1860-61), Bombay was an important source of supply for cotton. Hence, trading activities flourished during the period, resulting in a boom in share prices. This boom, the first in the history of the Indian capital market, lasted for a half a decade. The bubble burst on July 1, 1865, when there was tremendous slump in share prices. Trading was at that time limited to a dozen brokers: their trading place was under a banyan tree in front of the Town Hall in Bombay.

These stockbrokers organized an informal association in 1875-Native Shares and Stock Brokers Association, Bombay. The stock exchanges in Calcutta and Ahmedabad, also industrial and trading centres, came up later. The Bombay Stock Exchange was recognized in May 1927 under the Bombay Securities Contracts Control Act, 1925. The capital market was not well organized and developed during the British rule because the British government was not interested in the economic growth of the country.

As a result, many foreign companies depended on the London capital market for funds rather than on the Indian capital market. In the post-independence period also, the size of the capital market remained small. During the first and second five-year plans, the government's emphasis was on the development of the agricultural sector and public sector undertakings. The public sector undertakings were healthier than the private undertakings in terms of paid-up capital but their shares were not listed on the stock exchanges. Moreover, the Controller of Capital Issues (CCI) closely supervised and controlled the timing, composition, interest rates, pricing, allotment, and floatation costs of new issues. These strict regulations demotivated many companies from going public for almost four and a half decades.

In the 1950s, Century Textiles, Tata Steel, Bombay Dyeing, National Rayon, and Kohinoor Mills were the favourite scrips of speculators. As speculation became rampant, the stock market came to be known as 'Satta Bazaar'. Despite speculation, non-payment or defaults were not very frequent. The government enacted the Securities Contracts (Regulation) Act in 1956 was also characterized by the establishment of a network for the development of financial institutions and state financial corporations.

The 1960s was characterized by wars and droughts in the country which led to bearish trends. These trends were aggravated by the ban in 1969 on forward trading and 'badla', technically called 'contracts for clearing.' 'Badla' provided a mechanism for carrying forward positions as well as borrowing funds. Financial institutions such as LIC and GIC helped to revive the sentiment by emerging as the most important group of investors. The first mutual fund of India, the Unit Trust of India (UTI) came into existence in 1964.

In the 1970s, badla trading was resumed under the disguised form of 'hand-delivery contracts-A group.' This revived the market. However, the capital market received another severe setback on July 6, 1974, when the government promulgated the Dividend Restriction Ordinance, restricting the payment of dividend by companies to 12 per cent of the face value or one-third of the profits of the companies that can be distributed as computed under section 369 of the Companies Act, whichever was lower. This led to a slump in market capitalization at the BSE by about 20 per cent overnight and the stock market did not open for nearly a fortnight. Later buoyancy came in the stock markets when the multinational companies (MNCs) were forced to dilute their majority stocks in their Indian ventures in favour of the Indian public under FERA, 1973. Several MNCs opted out of India. One hundred and twenty-three MNCs offered shares were lower than their intrinsic worth.

Hence, for the first time, the FERA dilution created an equity cult in India. It was the spate of FERA issues that gave a real fillip to the Indian stock markets. For the first time, many investors got an opportunity to invest in the stocks of such MNCs as Colgate, and Hindustan Liver Limited. Then, in 1977, a little-known entrepreneur, Dhirubhai Ambani, tapped the capital market. The scrip, Reliance Textiles, is still a hot favourite and dominates trading at all stock exchanges.

The 1980s witnessed an explosive growth of the securities market in India, with millions of investors suddenly discovering lucrative opportunities. Many investors jumped into the stock markets for the first time. The government's liberalization process initiated during the mid-1980s, spurred this growth. Participation by small investors, speculation,

defaults, ban on badla, and resumption of badla continued. Convertible debentures emerged as a popular instrument of resource mobilization in the primary market. The introduction of public sector bonds and the successful mega issues of Reliance Petrochemicals and Larsen and Toubro gave a new lease of life to the primary market. This, in turn, enlarged volumes in the secondary market. The decade of the 1980s was characterized by an increase in the number of stock exchanges, listed companies, paid up-capital, and market capitalization.

The 1990s will go down as the most important decade in the history of the capital market of India. Liberalisation and globalization were the new terms coined and marketed during this decade. The Capital Issues (Control) Act, 1947 was repealed in May 1992. The decade was characterized by a new industrial policy, emergence of SEBI as a regulator of capital market, advent of foreign institutional investors, euro-issues, free pricing, new trading practices, new stock exchanges, entry of new players such as private sector mutual funds and private sector banks, and primary market boom and bust. Major capital market scams took place in the 1990s. These shook the capital market and drove away small investors from the market.

The securities scam of March 1992 involving brokers as well as bankers was one of the biggest scams in the history of the capital market. In the subsequent years owing to free pricing, many unscrupulous promoters, who raised money from the capital market, proved to be fly-by-night operators. This led to erosion in the investors' confidence. The M S Shoes case, one such scam which took place in March 1995, put a break on new issue activity.

The 1991-92 securities scam revealed the inadequacies of and inefficiencies in the financial system. It was the scam, which prompted a reform of the equity market. The Indian stock market witnessed a sea change in terms of technology and market prices. Technology brought radical changes in the trading mechanism. The Bombay Stock Exchange was subject to nationwide competition by two new stock exchanges-the National Stock Exchange, set up in 1994, and Over the Counter Exchange of India, set up in 1992. The National Securities Clearing Corporation (NSCC) and National Securities Depository Limited (NSDL) were set up in April 1995 and November 1996 respectively to improve clearing and settlement and dematerialized trading. The Securities Contracts (Regulation) Act, 1956 was amended in 1995-96 for introduction of options trading. Moreover, rolling settlement was introduced in January 1998 for the dematerialized segment of all companies. With automation and geographical spread, stock market participation increased.

In the late 1990s, the Information Technology (IT) scrips were dominant on the Indian bourses. These scrips included Infosys, Wipro, and Satyam. They were a part of the favourite scrips of the period, also known as 'New Economy' scrips, along with telecommunications and media scrips. The new economy companies are knowledge intensive unlike the old economy companies that were asset intensive.

The Indian capital market entered the twenty-first century with the Ketan Parekh scam. As a result of this scam, badla was discontinued from July 2001 and rolling settlement was introduced in all scrips. Trading of futures commenced from June 2000, and Internet trading was permitted in February 2000.

On July 2, 2001, the Unit Trust of India announced suspension of the sale and repurchase of its flagship US-64 scheme due to heavy redemption leading to panic on the bourses. The government's decision to privatize oil PSUs in 2003 fuelled stock prices. One big divestment of international telephony major VSNL took place in early February 2002. Foreign institutional investors have emerged as major players on the Indian bourses. NSE has an upper hand over its rival BSE in terms of volumes not only in the equity markets but also in the derivatives market.

It has been a long journey for the Indian capital market. Now the capital market is organized, fairly integrated, mature, more global and modernized. The Indian equity market is one of the best in the world in terms of technology. Advances in computer and communications technology, coming together on Internet are shattering geographic boundaries and enlarging the investor class. Internet trading has become a global phenomenon. The Indian stock markets are now getting integrated with global markets.

## **Concept of stock exchange in India**

The Securities Contracts (Regulation) Act, 1956, has defined Stock Exchange as an "association, organization or body of individuals, whether incorporated or not, established for the purpose of assisting, regulating and controlling business of buying, selling and dealing in Securities".

Stock exchange as an organized security market provides marketability and price continuity for shares and helps in a fair evaluation of securities in terms of their intrinsic worth. Thus it helps orderly flow and distribution of savings between different types of investments. This institution performs an important part in the economic life of a country,

acting as a free market for securities where prices are determined by the forces of supply and demand. Apart from the above basic function it also assists in mobilizing funds for the Government and the Industry and to supply a channel for the investment of savings in the performance of its functions.

The Stock Exchanges in India as elsewhere have a vital role to play in the development of the country in general and industrial growth of companies in the private sector in particular and helps the Government to raise internal resources for the implementation of various development programmes in the public sector.

As a segment of the capital market it performs an important function in mobilizing and channelising resources which remain otherwise scattered. Thus the Stock Exchanges tap the new resources and stimulate a broad based investment in the capital structure of industries.

A well developed and healthy stock exchange can be and should be an important institution in building up a property base along with a socialist in India with broader distribution of wealth and income. Thus Stock Exchange is a vital organ in a modern society. Without a stock exchange a modern democratic economy cannot exist. The system of joint stock companies financed through the public investment as emerged has put the vast means of finances almost to entrepreneurs' needs.

The Stock Exchange comes close enough to a perfectly competitive market allowing the forces of demand and supply a reasonable degree of freedom to operate as compared to other markets specially the commodity markets. This segment of the factor market can be considered as a perfect or a nearly perfect market. Apart from providing a mechanism for transacting business in stock and shares it generates genuine potential for a new entrepreneur to take up initiative in the private sector enterprises and allows the expansion of investing community by offering gainful development of their otherwise sluggish or shy capital. The Stock Exchange must assume the responsibility of protecting the rights of investors specially the small investors in the Joint Stock Companies.

## **Evolution of stock exchanges in India**

Any attempt at raising the standard of living of the masses must address itself to the task of producing the right quantity of the right types of goods and have them available for consumption at the right time. This requires large-scale production through coordination of

activities of hundreds of people under the same roof even when the product is the simplest to make.

This, however, calls for raising vast amounts of financial resources for the purpose of acquiring land, buildings and equipments, besides purchasing raw materials and employing labour. No one individual or a small group of individuals is rich enough to provide all the capital required by modern business enterprise and savings of hundreds, if not thousands, of people must be mobilized.

The corporate form of organization is well adapted to the task of raising capital from many people. This is done by issuing or offering for sale at cash, different types of securities, that is, shares and bonds, which offer to individual investors a means of productively employing capital/savings suited to his/her needs and temperament.

The need for offering for sale different types of securities is obvious. Some people may desire safety of the amount they have invested and a regular income from their investment. To them the corporation or company may offer debenture bonds- a certificate issued under the seal of the company promising a refund of the loan on a specified date and payment of interest at prescribed intervals.

Other investors may be willing to commit their savings for an indefinite period of time and to assume greater risk while still desiring safety of capital and stability of income. To them the corporation will sell preference shares. Still other investors may be willing to shoulder the business risk that goes along with the ownership of the business in the hope that the profit realized would be large enough to compensate the greater risk they are assuming.

But no one will buy these securities unless there exists an organized market where the holders can dispose of them, should the need arise, and new investors can purchase them. Over the years, such organized markets have come into existence in all democratic and capitalistic countries including India. Such a market is called stock market or a stock exchange in English speaking countries and a 'bourse' in continental Europe. There is, obviously, no need for stock exchange in Communist countries since in such countries all the productive organizations are owned by the government.

Organised stock exchanges in India are of recent origin. As late as 1933 there were only three stock exchanges – one each at Ahmedabad, Bombay and Calcutta, but trading in securities was in vogue much prior to that year. Of course, no one can tell when the first transaction took place, however, it is generally agreed that business in securities had begun as early as the concluding years of the 18th century, that is, between the years 1790 and 1800 A.D.

## **Existing structure of the stock exchanges in India**

The Act recognizes stock exchanges with different legal structure. Presently the stock exchanges which are recognised under the Securities Contracts (Regulation) Act in India, could be segregated into two broad groups – 20 stock exchanges which were set up as companies, either limited by guarantees or by shares, and the 3 stock exchanges which are functioning as associations of persons (AOP) viz. BSE, Ahmedabad Stock Exchange and Indore Stock Exchange.

The 20 stock exchanges which are companies are: the stock exchanges of Bangalore, Bhubaneswar, Calcutta, Cochin, Coimbatore, Delhi, Gauhati, Hyderabad, Interconnected SE, Jaipur, Ludhiana, Madras, Magadh, Managalore, NSE, Pune, OTCEI, Saurashtra-Kutch, Uttar Pradesh, and Vadodara. Of these, the stock exchanges of Ahmedabad, Bangalore, BSE, Calcutta, Delhi, Hyderabad, Madhya Pradesh, Madras and Gauhati were given permanent recognition by the Central Government at the time of setting up of these stock exchanges. Apart from NSE, all stock exchanges whether established as corporate bodies or Association of Persons (AOPs), are non-profit making organizations.

## **The National stock exchange of India limited**

The National Stock Exchange of India Limited has genesis in the report of the High Powered Study Group on Establishment of New Stock Exchanges, which recommended promotion of a National Stock Exchange by financial institutions (FIs) to provide access to investors from all across the country on an equal footing. Based on the recommendations, NSE was promoted by leading Financial Institutions at the behest of the Government of India and was incorporated in November 1992 as a tax-paying company unlike other stock exchanges in the country.

On its recognition as a stock exchange under the Securities Contracts (Regulation) Act, 1956 in April 1993, NSE commenced operations in the Wholesale Debt Market (WDM) segment in June 1994. The Capital Market (Equities) segment commenced operations in November 1994 and operations in Derivatives segment commenced in June 2000.



## **NSE's Mission in India**

NSE's mission is setting the agenda for change in the securities markets in India. The NSE was set-up with the main objectives of:

1. Establishing a nation-wide trading facility for equities, debt instruments and hybrids,
2. Ensuring equal access to investors all over the country through an appropriate communication network
3. Providing a fair, efficient and transparent securities market to investors using electronic trading systems, enabling shorter settlement cycles and book entry settlements systems.
4. Meeting the current international standards of securities markets.
5. The standards set by NSE in terms of market practices and technologies have become industry benchmarks and are being emulated by other market participants. NSE is more than a mere market facilitator.

It's that force which is guiding the industry towards new horizons and greater opportunities.

## **Corporate Structure of NSE**

NSE is one of the first de-mutualised stock exchanges in the country, where the ownership and management of the Exchange is completely divorced from the right to trade on it. Though the impetus for its establishment came from policy makers in the country, it has been set up as a public limited company, owned by the leading institutional investors in the country.

From day one, NSE has adopted the form of a demutualised exchange - the ownership, management and trading is in the hands of three different sets of people. NSE is owned by a set of leading financial institutions, banks, insurance companies and other financial intermediaries and is managed by professionals, who do not directly or indirectly trade on the Exchange. This has completely eliminated any conflict of interest and helped NSE in aggressively pursuing policies and practices within a public interest framework.

The NSE model however, does not preclude, but in fact accommodates involvement, support and contribution of trading members in a variety of ways. Its Board comprises of

senior executives from promoter institutions, eminent professionals in the fields of law, economics, accountancy, finance, taxation, etc, public representatives, nominees of SEBI and one full time executive of the Exchange.

While the Board deals with broad policy issues, decisions relating to market operations are delegated by the Board to various committees constituted by it. Such committee includes representatives from trading members, professionals, the public and the management. The day-to-day management of the Exchange is delegated to the Managing Director who is supported by a team of professional staff. Distinctive Features of NSE.

NSC is able to radically transform the Indian Capital market during the decade of its existence. It has changed the mindset of all market players and has built investor confidence in the secondary markets.

"The NSE is different from most other stock exchanges in India where membership automatically implies ownership of the exchange. The ownership and management of NSE have been totally delinked from the right of trading members. This pattern has been adopted.

Since broker owned stock exchanges are also broker managed there is a clear conflict of interest. This is a structurally unstable model, as it inevitably leads to emergence of power groups, and investor interests invariably take a back seat.

## **Introduction of Technology Initiatives**

Stock exchanges today have to rely increasingly on information technology to stay competitive in delivering services. This is primarily because of newer trading channels used for communicating and transacting like Internet and On-line security trading. The IT department of NSE employs 150 IT professionals forming a third of its total staff strength. The exchange has invested close to Rs.400 Crores in computers, software and communication equipment. It is therefore recognized as one of "Top IT User" organizations.

In line with global trends NSE is structured and operates much like an information technology company. It has the largest VSAT network in this part of the world with a huge and complex web of hardware and software. It has a detailed disaster recovery site that

mirrors all operating systems. The NSE has set up its own Internet Webster, which is visited daily by four Lakh persons

## **Stock Exchange Technology**

The modern stock exchange technology does not need the traditional type of brokers to match investors' orders as they used to do on the physical-trading floor. The automated Trading screens can match buy and sell orders without the intervention of brokers. Today brokers are needed only for settlement responsibilities.

NSE introduced a nation-wide VSAT driven screen based trading system Operations commenced in Mumbai and rapidly spread all over India. NSE today offers investors trading facilities in over 280 cities and town through 4000 terminals. For the first time NSE introduced in India screen based trading with automated matching.

The system conceals the identity of the parties to an order or trade. This help better functioning of the market as disclosures of identity would put most members at a disadvantage. The trading system operates on price time priority.

This means given the same set of orders, the orders that come first receive priority in matching. When an order does not find an immediate match it remains in the system and is displayed to the whole market, till a fresh order comes in or the earlier order is modified or cancelled. The market screens at any point of time give the members complete information on the total order depth in a security, the high price, the low price, the last traded price and other related information.

## **How to Invest in the Indian Stock Market**

### **Step One**

Register with a stockbroker or investment firm with ties to the Indian stock market. The defining factor when hiring financial assistance is experience with the market in which the investors invest their money. Stockbrokers can be costly, but they tend to respond quickly to queries about individual stocks.

## Step Two

Examine the BSE 200 index to determine the strength of their investments in India. This index covers the 200 best-performing businesses in India on a daily basis. They can look at individual businesses in their favoured industrial sector to assess the wisdom of potential investments.

## Step Three

Go out on a limb with a technology stock through the BSE TECK index. The Indian economy features a rapidly expanding biotechnology and computer-development sector that has been a boon to investors. Past success should be taken with a grain of salt, however, because similar growth in the United States in the 1990s resulted in lost profits for investors.

## Step Four

Locate growing companies with small amounts of capital through the BSE Small-Cap Index. This index features hundreds of young companies with low funding that are looking for investors to take them to the next level. They can invest in a company at a cheap share price without a great deal of risk.

## Step Five

Track the progress of their stocks online with the Bombay Stock Exchange's commitment to quick updates. The BSE index transmits information to local brokers, international websites and business-television networks every 15 seconds.

## Step Six

The investors spend the investment dollars wisely as they invest in the Bankex index. This index tracks the progress of India's top 12 banks and allows them to make an investment in their growth.

# SHANGHAI STOCK EXCHANGE

## THE HISTORY OF SHANGHAIS' STOCK EXCHANGE (SSE)

The Shanghai Stock Exchange (SSE) is a Chinese stock exchange based in the city of Shanghai, with a market capitalization of nearly US\$1.7 trillion making it the largest in mainland China and ninth largest in the world. The current exchange was re-established on November 26, 1990 and was in operation on December 19 of the same year. It is a non-profit organization directly administered by the China Securities Regulatory Commission (CSRC). It endeavours to provide a transparent, open, safe and efficient marketplace. The Shanghai Stock Exchange performs the following major functions: provide securities trading venue and facilities; formulate business rules; accept and arrange for listings; conduct market surveillance and monitor securities trading; regulate members and listed companies; manage and disseminate market information.

As of December 2004, a total of 875 companies were listed Shanghai Stock Exchange (825 A-shares and 54 B-shares). Besides company stocks, there are other securities products, such as investment funds, corporate bonds and T-bonds

The Exchange has a modern paperless trading system. Orders are matched automatically by the computer system according to the principle of "price precedence and time precedence". The trading system has a maximum daily capacity of executing 28 million trades and settling 60 million transactions at a speed of more than 10,000 transactions per second. There is now a 10% price band that limits the price changes of individual stocks or funds in daily trading (the band is 5% for Special Treatment stocks). Orders can be sent to the Exchange trading system through terminals either on the floor or from member firms' offices. The Exchange is on a 3,600-square-meter trading floor, the largest of its kind in the Asia-Pacific region. Backed by a satellite and optical communication network, the Exchange can disseminate real-time transaction information nationwide and overseas.

Mainland China has a second, smaller, stock exchange: the Shenzhen Stock Exchange, located in the city of Shenzhen. The distinction is made for Mainland China because the Hong Kong Stock Exchange, located in the special administrative region of Hong Kong, is the largest stock exchange in China, and has a separate history.

The formation of the International Settlement (foreign concession areas) in Shanghai as a result of the Treaty of Nanking of 1842 (which ended the First Opium War) and subsequent agreements between the Chinese and foreign governments are crucial to the development of foreign trade in China and of the foreign community in Shanghai. The market for securities trading in Shanghai begins in the late 1860s. The first share list appeared in June 1866 and by then Shanghai's International Settlement had developed the conditions conducive to the emergence of a share market: several banks, a legal framework for joint-stock companies, and an interest in diversification among the established trading houses (although the trading houses themselves remained partnerships).

In 1891 during the boom in mining shares, foreign businessmen founded the "Shanghai Share brokers' Association" headquartered in Shanghai as China's first stock exchange. In 1904 the Association applied for registration in Hong Kong under the provision of the Companies ordinance and was renamed as "Shanghai Stock Exchange". The supply of securities came primarily from local companies. In the early days, banks dominated private shares but, by 1880, only the Hong Kong and Shanghai local banks remained.

Later in 1920 and 1921, "Shanghai Securities & Commodities Exchange" and "Shanghai Chinese Merchant Exchange" started operation respectively. An amalgamation eventually took place in 1929, and the combined markets operated thereafter as the "Shanghai Stock Exchange". Shipping, insurance, and docks persisted to 1940 but were overshadowed by industrial shares after the Treaty of Shimonoseki of 1895, which permitted Japan, and by extension other nations who had treaties with China, to establish factories in Shanghai and other treaty ports. Rubber plantations became the staple of stock trading beginning in the second decade of the 20th century.

By the 1930s, Shanghai had emerged as the financial center of the Far East, where both Chinese and foreign investors could trade stocks, debentures, government bonds, and futures. The operation of Shanghai Stock Exchange came to an abrupt halt after Japanese troops occupied the Shanghai International Settlement on December 8, 1941. In 1946, Shanghai Stock Exchange resumed its operations before closing again 3 years later in 1949, after the Communist revolution took place.

After the Cultural Revolution ended and Deng Xiaoping rose to power, China was re-opened to the outside world in 1978. During the 1980s, China's securities market evolved in tandem with the country's economic reform and opening up and the development of

socialist market economy. On 26 November 1990, Shanghai Stock Exchange was established again and began operation a few weeks later on 19 December.

From the year 2001 to the year 2005 a four-year market slump which saw Shanghai's market value halved (after reaching a peak in 2001). A ban on new IPOs was put in April 2005 to curb the slump and allow more than US\$200 billion of mostly state-owned equity to be converted to tradable shares.

In the year 2006 the SSE resumed full operation as the yearlong ban on IPOs was lifted in May. The world's largest ever (US\$21.9 billion) IPO by the Industrial and Commercial Bank of China (ICBC) was launched in both Shanghai and Hong Kong stock markets.

Finally in the year 2007 a «stock market frenzy" as speculative traders rush into the market, making China's stock exchange temporarily the world's second largest in terms of turnover. Fears of a market bubble and intervention by authorities caused large fluctuation not seen since the past decade.

## **THE FUNCTIONS OF VARIOUS DEPARTMENTS**

The highest authority of the Shanghai Stock Exchange is the Member Meeting and Board of Governors which acts as its decision making body. The SSE has 16 departments and a fully owned subsidiary.

- ▶ **Executive Office:** Mainly in charge of coordinating the internal organizations of the SSE.
- ▶ **Human Resources Department (CPC Organizational Affairs Department):** In charge of personnel management and personnel training.
- ▶ **CPC Committee Office & Disciplinary Inspection Office**
- ▶ **Trading Management Department:** In charge of organizing daily trading activities and of normal operation of the computerized trading system and related communication systems. It also provides relevant services to member organizations.
- ▶ **Listed Company Department:** In charge of arranging listing of securities, auditing quarterly reports, interim reports, annual reports and temporary disclosure of information of listed companies and carrying out supervision of listed companies.

- **Membership Department:** In charge of membership management and carrying out daily supervision of members.
  
- **Bonds & Funds Department:** Arranging issues and listings of bonds and funds and establishing operational regulations for bonds and funds as well as promotion and expansion of the bonds and funds markets.
  
- **Market Surveillance Department:** In charge of real-time monitoring of the trading market, timely discovering extraordinary trading behaviour and conducting investigations and dealing with violations.
  
- **Legal Affairs Department:** In charge of the legal affairs of the SSE.
  
- **Technology Centre:** In charge of technology development of the computerized trading system and providing technical support and services to member organizations.
  
- **Information Centre:** In charge of market statistics and consolidation of information analysis as well as supervision of information dissemination of the SSE.
  
- **Global Business Development Department:** In charge of development of strategic planning of the SSE and R&D of new listing resources and new trading products; In charge of international exchanges and cooperation of the SSE.
  
- **Derivatives Market Development Department:**
  
- **Research Centre:** Organizing and implementing subject studies of the development of market operation and in charge of editing SSE publications.
  
- **Finance Department:** Mainly in charge of internal financial management of the SSE.
  
- **Compliance Department:** Responsible for coordinating internal business units for project implementation, and conducting compliance auditing on the financial status, asset classes of Shanghai Stock Exchange.



- **Administrative Service Centre:** Mainly in charge of internal logistics work of the SSE.
- **Securities Telecommunication Co.,Ltd:** In charge of managing the dedicated satellite communication network of the SSE and providing high-speed transmission channels for marketing services
- **SSE InfoNet Co.,Ltd:** Implementing planning for the SSE's Internet strategy, undertaking a supporting role during the course of SSE's informatization, maintaining operational rights for proprietary information of the SSE and developing value-added information services.

## ***THE STRUCTURE OF SSE***

The securities listed at the SSE include the three main categories of stocks, bonds, and funds. Bonds traded on SSE include treasury bonds (T-bond), corporate bonds, and convertible corporate bonds. SSE T-bond market is the most active of its kind in China. There are two types of stocks being issued in the Shanghai Stock Exchange: A shares and B shares. A shares are priced in the local Renminbi yuan currency, while B shares are quoted in U.S. dollars. Initially, trading in A shares are restricted to domestic investors only while B shares are available to both domestic (since 2001) and foreign investors. However, after reforms were implemented in December 2002, foreign investors are now allowed (with limitations) to trade in A shares under the Qualified Foreign Institutional Investor (QFII) system. There is a plan to eventually merge the two types of shares.

The SSE is open for trading every Monday to Friday. The morning session begins with centralized competitive pricing from 09:15 to 09:25, and continues with consecutive bidding from 09:30 to 11:30. This is followed by the afternoon consecutive bidding session, which starts from 13:00 to 15:00. The market is closed on Saturday and Sunday and other holidays announced by the SSE.

## **THE MARKET DATA OF SSE**

### **MARKET SUMMERY OF SSE**

In 2004, the total turnover on the SSE was RMB 7,692.732 billion, 7.22% lower than the previous year, of which trading of stocks accounted for RMB 2,647.060 billion, or 34.41% of the total turnover. Of the stock trading turnover, A shares trading was RMB 2,622.930 billion, which accounts for 99.09% of the total, B shares trading amounted to RMB 24.13 billion, or 0.91% of the total. Traded on T-bonds reached RMB 4,704.772 billion, which accounts for 61.16% of the total securities trading, of which RMB 296.149 billion was spot trading and RMB 4,408.623 billion was bonds repo. Total funds trading were RMB 24.91 billion.

Daily average trading of stocks was RMB 10.893 billion, 26.06% higher than the previous year; daily bonds trading was RMB 19.540 billion, down 23.54% from the previous year; daily fund trading was 103 million RMB, 31.33% lower than the previous year. Calculated on the tradable share market capitalization, the turnover ratio of A Shares and B Shares were 308.31% and 58.29% respectively.

The SSE 50 Index opened at 997 and closed at 842.73, shedding 15.47% at the end of the year, with peak at 1141.99 and lowest at 833.09. Throughout the year, the SSE 50 index had a fluctuation of 37.08%. The SSE180 index opened at 2820.24 at the beginning of the year and closed at 2362.07, down 16.25%, with its peak at 3278.82 and lowest at 2321.86, fluctuating within a band of 41.22%. The SSE composite index opened at 1492.72 and closed at 1266.50 with the peak at 1783.01 and lowest at 1259.43, fluctuating within a band of 41.57%. The B Share index opened at 104.87 and closed at 75.65, with the peak at 122.94 and lowest at 75.46. The B share index shed 27.86% from the previous year level with a volatility of 62.92%.

In 2004, the Exchange had a total of 37.87 million investor accounts, of which 36.7567 million are retail accounts investing in A shares, up 4.23% from one year ago, 993,600 are B share accounts, which increased by 1.33% from the previous year; 119,700 are institutional investors, down 36.80% from the previous year figure.

As of end of 2006, 842 companies were listed on the SSE and the total market capitalization of SSE reached RMB 7.1612 trillion (US\$915 billion).

### ***SSE's top ten largest stocks***

1. Industrial and Commercial Bank of China (1,397.86 billion)
2. China Life Insurance (904.78 billion)

3. Bank of China (887.31 billion)
4. Sinopec (692.22 billion)
5. China Merchants Bank (201.09 billion)
6. Shanghai International Port (164.56 billion)
7. Baosteel (161.81 billion)
8. Daqin Railway (114.71 billion)
9. CITIC Securities (107.99 billion)
10. Shanghai Pudong Development Bank (104.30 billion)

## **SSE Composite**

The SSE Composite Index is the most commonly used indicator to reflect SSE's market performance. Constituents for the SSE Composite Index are all listed stocks (A shares and B shares) at the Shanghai Stock Exchange. The Base Day for the SSE Composite Index is December 19, 1990. The Base Period is the total market capitalization of all stocks of that day. The Base Value is 100. The index was launched on July 15, 1991. At the end of 2006, the index reaches 2,675.47. Other important indexes used in the Shanghai Stock Exchanges include the SSE 50 Index and SSE 180 Index.

## **Listed companies**

By the end of 2004, the Shanghai Stock Exchange has a total of 837 listed companies. There were 61 new listings in 2004. Total number of listings stands at 881 at the end of the year with a market capitalization of RMB2601.434 billion, down 12.72% from the previous year. Market capitalization of tradable shares also declined by 10.37%, to RMB735.088 billion. As effective of the end of 2004, the listed companies have a total of 470.055 billion shares, of which 136.658 billion shares are tradable shares, which accounts for 29.07% of the total.

In 2004, a total of 45.69 billion RMB was raised through the Shanghai Stock Exchange, down 18.03%, of which A share IPOs were RMB24.484 billion, 46.01% down from the previous year level. RMB21.206 billion were secondary issuance, up 104.10% from the previous year.

## ***Listing Requirements***

According to the regulations of Securities Law of the People's Republic of China and Company Law of the People's Republic of China, limited companies applying for the listing of shares must meet the following criteria:

- The shares must have been publicly issued following approval of the State Council Securities Management Department.
- The company's total share capital must not be less than RMB 50 million.
- The company must have been in business for more than 3 years and have made profits over the last three consecutive years. This requirement also applies to former state-owned enterprises reincorporating as private or public enterprises. In the case of former state-owned enterprises re-established according to the law or founded after implementation of the law and if their issuers are large and medium state owned enterprises, it can be calculated consecutively. The number of shareholders with holdings of values reaching in excess of RMB 1,000 must not be less than 1,000 persons. Publicly offered shares must be more than 25% of the company's total share capital. For company whose total share capital exceeds RMB 400 million, the ratio of publicly offered shares must be more than 15%.
- The company must not have committed any major illegal activities or false accounting records in the last three years.

Other conditions stipulated by the State Council. The conditions for applications for the listing of shares by limited companies involved in high and new technology are set out separately by the State Council.

## **Trading System**

A modern trading system supports SSE's paperless trading at a highest speed of more than 8000 transactions per second. The orders are matched automatically by computer system according to the principle of "price and time priority".

Orders can be sent to the SSE's main framework through terminals either on the floor or from member firms. The SSE owns a huge 3600-square-meter trading floor, which is the largest one in Asia-Pacific area. In addition, the largest domestic satellite and optical communication network, which can disseminate the real-time transaction information to all the country and abroad, has connected the SSE with more than 5000 trading terminals.

The trading hours of the SSE are from every Monday to Friday. The morning session is 9:15am to 9:25am being the time for centralized competitive pricing and 9:30am to 11:30am the time for consecutive bidding. The afternoon session is 13:00pm to 15:00pm being the time for consecutive bidding. The market is closed on Saturdays and Sundays and other holidays announced by the SSE.

## **Clearing System**

The China Securities Central Clearing & Registration Corporation (CSCCRC) is responsible for the central depository, registration and clearing of the securities. It carries out the T+1 settlement for A shares and T+3 for B shares.

## **Market infrastructure**

Recently upgraded, the computer system of the SSE is of world advanced standard. The host computer is capable of executing 29 million orders and settling 60 million transactions at a speed of 16000 transactions per second.

The SSE has established a nation-wide satellite telecommunication network with the most sophisticated equipment, the most complete range of functions, the largest number of users and the widest coverage. It consists of more than 3000 one-way satellite substations and 1800 two-way substations.

The SSE is now performing real-time monitoring on market activities under a sophisticated surveillance system that meets the demand of market operation.

## **Listing Requirement**

According to the regulations of the “Securities Law of the People’s Republic of China” and “Company Law of the People’s Republic of China”, limited companies applying for the listing of shares must meet the following conditions:

- \* The shares must have been publicly issued following approval of the State Council Securities Management Department.
- \* The company’s total share capital must not be less than RMB 50 million.
- \* The company must have been in business for more than 3 years and have main profits over the last three consecutive years. In the case of former state-owned enterprises

re-established according to the law or founded after implementation of the law and if their issuers are large and medium state owned enterprises, it can be calculated consecutively. The number of shareholders with holdings of values reaching in excess of RMB 1,000 must not be less than 1,000 persons.

Publicly offered shares must be more than 25% of the company's total share capital. For company's whose total share capital exceeds RMB 400 million, the ratio of publicly offered shares must be more than 15%. The company must not have been guilty of any major illegal activities or false accounting records in the last three years.

The conditions for applications for the listing of shares by limited companies involved in high and new technology are set out separately by the State Council.

## **INTRODUCTION OF SSE INDEX**

As authoritative statistical indicators widely adopted by domestic and overseas investors in measuring the performance of Chinese security market, SSE Indices are compiled and published by Shanghai Stock Exchange. SSE Indices are price indices including SSE 180 Index, SSE 50 Index, SSE Dividend Index, SSE New Composite Index, SSE Composite Index, Sector Indices, SSE Fund Index, SSE Government Bond Index, and SSE Corporate Bond Index. Among them, the earliest one compiled was SSE Composite Index.

In order to promote the long-term infrastructure construction and the standardization process of the security market, Shanghai Stock Exchange restructured SSE 30 Index and renamed it SSE Constituent Index (SSE 180 Index) in June 2002. As the core of SSE Indices, SSE 180 has made major improvements in methodology on the basis of SSE 30 Index through taking China's current financial market situation into consideration and integrating international experience. Its objective is to select constituents that best represent Shanghai market through scientific and objective method, to establish a benchmark index that will reflect Shanghai market and serve as a performance benchmark and a basis for financial innovation.

SSE Government Bond Index and Corporate Bond Index were launched in 2003. Thus SSE Indices formed a complete system including equity, fund and bond. In early 2004, Shanghai Stock Exchange launched SSE 50 Index in order to reflect the performance of a number of most influential stocks in Shanghai Market. Thus, SSE Composite Index (a whole market index), SSE 180 Index (a performance benchmark

index), SSE 50 Index (an index for good quality, large scale stocks) have formed a 3-level pyramid index structure.

SSE Indices reflect overall price changes of stocks listed at Shanghai Stock Exchange from various perspectives. SSE Indices also reflect the level of prosperity and overall price changes of each industry, thus provide investors with benchmark systems for different investment portfolios. With security market's growing importance in national economy, SSE Indices has gradually become a weatherglass for China's economy.

## **Index Advisory Committee**

In order to ensure scientific methodology, transparency of index adjustment and fairness in constituent selection, Shanghai Stock Exchange has established an Index Advisory Committee, which will evaluate and provide advice for index methodology, constituent selection, index adjustment, and index operation standards.

### Index Universe

A) SSE 180 Index: All A shares listed at Shanghai Stock Exchange excluding stocks that are:

1) IPOs within the last 3 months (unless the daily average negotiable market capitalization of a stock is ranked top 18 in Shanghai Market).

2) Suspended from listing.

3) Experiencing materially abnormal events in operation or management, or severe losses in the latest financial statements.

4) Experiencing large price volatility that shows strong evidence of being manipulated.

5) Considered by the Advisory Committee as inappropriate.

B) SSE 50 Index: Constituents of SSE 180 Index.

C) SSE Dividend Index: A shares listed at Shanghai Stock Exchange that meets the following requirements:

1) Continuously paid dividend in the past two years and the cash dividend yield (after tax) each year is higher than 0

2) Daily average negotiable market cap in the past one year is ranked top 50% of Shanghai A shares.

3) Daily average trading value in the past one year is ranked top 50% of Shanghai A shares.

D) SSE New Composite Index: Constituents for SSE New Composite Index are listed stocks at Shanghai Stock Exchange that have completed Split-share Reform.

E) SSE Composite Index: Constituents for SSE Composite Index are all listed stocks (A shares and B shares) at Shanghai Stock Exchange.

F) SSE A Share Index: Constituents for SSE A Share Index are all listed A shares at Shanghai Stock Exchange.

G) SSE B Share Index : Constituents for SSE B Share Index are all listed B shares at Shanghai Stock Exchange.

H) Sector Indices: Listed companies are divided into 5 sectors: Industrial, Commercial, Real Estate, Utilities, and Conglomerate. Constituents for a sector index are all listed stocks (both A and B shares) of that sector.

I) SSE Fund Index: Constituents for SSE Fund Index are all security investment funds listed at Shanghai Stock Exchange.

J) SSE Government Bond Index: All government bonds listed at Shanghai Stock Exchange.

K) SSE Corporate Bond Index: All none equity-linked corporate bonds listed at Shanghai Stock Exchange.

## **MARKET PARTICIPANTS**

### **INVESTORS**

In 2004, the Exchange had a total of 37.87 million investor accounts, of which 36.7567 million are retail accounts investing in A shares, up 4.23%% from one year ago, 993,600 are B share accounts, which increased by 1.33% from the previous year; 119,700 are institutional investors, down 36.80% from the previous year figure.

### **MEMBERS**

By the end of 2004, the Shanghai Stock Exchange had a total of 161 registered members, of which, 138 are securities brokers and 23 are non-securities brokers. Collectively, the members have 3035 business branches and 4698 trading seats, of which 4644 are A-share trading seats and 54 are B-share trading seats. Of members of securities dealers, there are 50 institutes with a registered capital of more than RMB 1



billion, 17 with a registered capital or more than RMB 2 million and 5 more than RMB 3 billion.

## **Why and how to invest on the Shanghai stock exchange**

The preparations are already running for some time, and because of the massive upheaval the China stock markets have been causing, it seemed a good idea to share a bit about the backgrounds for an outlandish audience. For most of the investors, who do not have the Chinese nationality, it is impossible to invest in those so-called A-shares, but that might change in the future, so getting some sense of orientation is not bad.

Last week in a first move the investors invested 230,000 renminbi (€ 23,000) in a mutual fund. From the start it was clear they had to go for a mutual fund. Following the stock exchange fulltime was no option for the investors and not for their humble advisor.

There are a few figures about the performance of the mutual funds over 2006 from the China Daily:

Fifty-three mutual funds in China reported operating profits of 49.96 billion yuan (6.46 billion U.S. dollars) in 2006, thanks to the country's bull markets. Their net incomes totalled 22.28 billion yuan, while paper profits reached 27.69 billion yuan, according to the annual reports of 53 mutual funds that launched by ten fund management firms.

The record operating profits were seven times greater than the seven billion yuan earned in 2005 by all 206 mutual funds under 46 fund management companies in China.

For the investment the investors needed to go find a new fund. There are some financial institutes that have pretty new funds and an excellent reputation, like the China International Fund Management, partly owned by J.P. Morgan Fleming, and the E-fund Management. But the investor who can not wait until those funds has a bit of a track record. Since their value goes up pretty fast, they are losing money when they do not join the day a fund opened. In the end they picked the China Merchant Fund. The reputation of their team was not as excellent as the other two.

Dip in the Chinese and later the international stock markets earlier this year has put many stock experts outside China on the wrong leg. Wrongly they suggested that the Tuesday dip - still marginal compared to the upswing of 2006 - was a signal that the market would collapse. Some even thought it was a signal the economy as a whole was in trouble. There are two reasons why the investors of the Shanghai Stock Exchange should be suspicious about such a connection. First, foreign analysts seem unable to make a

living without predicting the demise of China. There are two reasons for them to worry, since China is now going to collapse and even books about the issue do not sell.

Second, the government is a much more important player in the economy than most foreign analysts assume. There are basic financial reasons for that. About two-third of the shares of state-owned companies, worth a US\$250 billion, are in the hands of the government. What is happening to those shares is much more important for the confidence in the Chinese stock markets than any financial weather forecast.

When a study at the beginning of this century suggested the government should get rid of those non-tradable shares, the shares came in a free fall. Then, for years, even official denials of the sell-off caused new plunges, since nobody believed those statements. Otherwise companies and the economy can develop almost any problem, the investors do not care. Now, after last year the half-decade movement south ended, because investors believed the government would do things right this time. On top of that, much more capital is available to soak up those funds.

Maybe in ten years time, when all those shares in the hands of government departments are really sold on the market, the stock market might work like it does in the rest of the world: an indicator for the stability of the economy.

# TORONTO STOCK MARKET

## THE HISTORY OF TORONTO'S STOCK EXCHANGE

A group of Toronto businessmen met on July 26, 1852 with the intention to form an "Association of Brokers". Although they may have traded in shares that were available at that time, no official records remain of the groups' transactions.

On October 25th, 1861 24 men gathered at The Masonic Hall. A resolution was passed that day and Toronto Stock Exchange was born. The cost of membership was \$5.00. In its early years the Toronto Stock Exchange trading volume was very modest, amounting to two or three transactions daily. Trading hours were limited to daily half-hour sessions and the trading list consisted of 18 securities.

In the year 1871 the Toronto Stock Exchange had 14 member firms and each of the members paid \$250 to purchase a seat. In the year 1878 the Toronto Stock Exchange became formally incorporated by an Act of the Ontario Legislature. Toronto Stock Exchange moved into its first permanent headquarters at 24 King Street East in Toronto.

In 1901 the price of a Toronto Stock Exchange seat or membership rose to \$12,000. Trading volume approached 1 million shares per year and 100 companies were listed. The Exchange moved to 20 King Street East and continuous auction trading was introduced and in 1913 the Exchange was built and moved into its own building on Bay Street. The technological advances lead to the introduction of the first print-out-ticker which carried a series of trading prices as well as bid and ask offering quotations. In 1914 the fear of financial panic when World War 1 was declared prompted Toronto Stock Exchange to cease operations for three months, beginning July 28, 1914. Trading was also halted on the New York Stock Exchange.

As corporate profits rose during that war, so did stock prices. The 1918 Armistice marked the beginning of a highly speculative and inflationary period in the economy. This was followed, in 1919, by a recession characterized by sharp declines in commodity prices.

From 1922 to 1926 Canadian corporations issued securities worth more than \$700 million. The number of shares traded in 1924 was 908,000. Five years later, the number of shares traded grew to over 10 million a year.

But in 1933 a worldwide depression inflicted financial hardship on Canadians and in the United States over 2000 investment and brokerage firms closed but none of the Toronto' Stock Exchange members were defaulted on their obligations to clients.

In 1934 Toronto Stock Exchange merged with its key competitor, The Standard Stock and Mining Exchange. The merged markets adopt the name, Toronto Stock Exchange and the yearly trading value exceeded \$534 million.

In 1936 Toronto Stock Exchange became North America's third largest exchange also in the year 1937 Toronto Stock Exchange moved to a new facility at 234 Bay St., the first building in Toronto to have air conditioning. In 1955 the price of Toronto Stock Exchange membership was \$100,000 and a record 1billion shares traded worth \$2.6 billion.

For the first time in 1958 the Toronto Stock Exchange Board of Governors required listed Companies to file statements disclosing any change in the company's affairs, which might affect the price of its shares. Also in 1960 Lieutenant General of Ontario, Howard D. Graham, became the first outsider to be appointed President of Toronto Stock Exchange. All prior presidents were appointed from Member Firms and in 1977 J. Pearce Bunting was named the President of Toronto Stock Exchange and he held that position for 18 years, the longest tenure of any Toronto Stock Exchange President. Toronto Stock Exchange launched the world's first Computer Assisted Trading System (CATS) and in the same year the TSE 300 Composite Index was launched.

In 1980 Volume of shares traded on Toronto Stock Exchange reached 3.3 billion, valued at \$29.5 billion, and the Toronto Stock Exchange accounted for 80% of all equity trading in Canada. In 1983 the Toronto Stock Exchange moved to its current location in the Exchange Tower at 130 King Street West.

In 1987 the Toronto 35 Index was created and at the same year on October 19, the stock markets around the world suffered a major correction and which leded the TSE 300 Composite Index to drop more than 400 points in very active trading so the trading for that year topped \$100 billion for the first time ever.

In 1995 Rowland W. Fleming was named President of Toronto Stock Exchange, replacing Pearce Bunting and he served as President for four years. In 1996 Toronto Stock Exchange became the first exchange in North America to introduce decimal trading and in 1997 the Toronto Stock Exchange became the largest stock exchange in North America to choose a floorless, electronic (or virtual trading) environment when its trading floor closed.

In 1999 the Toronto Stock Exchange announced the appointment of Barbara G. Stymiest to the position of President & Chief Executive Officer. She became the first female president of a North American stock exchange. Through a realignment plan, Toronto Stock Exchange became Canada's sole exchange for the trading of senior equities. The Montreal Exchange assumed responsibility for the trading of derivatives and the Vancouver and Alberta Stock Exchanges merged to form Canadian Venture Exchange (CDNX) handling trading in junior equities.

The Canadian Dealing Network, Winnipeg Stock Exchange, and equities portion of the Montreal Exchange later merged with CDNX. Toronto Stock Exchange won Royal Assent from the Lieutenant Governor of Ontario to convert the Exchange into a for-profit organization. The Toronto Stock Exchange set yearly trading records of 29.3 billion shares, valued at \$529 billion.

Toronto's Stock Exchange monthly trading topped \$100 billion for the first time ever in March 2000. The demutualization process is completed when the Toronto Stock Exchange Inc. became a for-profit company, on April 3. Daily trading value topped \$15 billion for the first time ever in May 2000. Toronto Stock Exchange opened an office in Montreal.

In 2001 Toronto Stock Exchange completed overhaul of its trading platform. The Toronto Stock Exchange completes the acquisition of the Canadian Venture Exchange. CDNX renamed TSX Venture Exchange in 2002. TSX Venture Exchange stock list migrated to the Toronto Stock Exchange trading platform in December 2001. S&P/CDNX Index was launched on December 10, 2001. The Index was renamed S&P/TSX Venture Composite Index in May 2002 and in the same year Standard and Poor's agreed to take over management of the Toronto Stock Exchange 300 Composite Index on May 1st. it was renamed the S&P/TSX Composite Index. The Canadian Foundation for Investor Education and Capital Markets Institute at the University of Toronto hosted a Symposium on National Securities Regulation. TSX Markets, a business of TSX Group, implemented new trading features including POSIT and Iceberg Orders.

On April 8, 2002, The Toronto Stock Exchange Inc. re-branded its organization and adopted the acronym TSX. Canadian Venture Exchange is renamed TSX Venture Exchange and TSE/CDNX Markets is re-branded to TSX Markets. TSX Group CEO Barbara Stymiest officially opened a new office in Montreal. The office services both junior and senior issuers in Quebec Linda Hohol are named President of TSX Venture Exchange. TSX Group launched TSX Datalinx, the new name for its data business. TSX Group, through its trading services division, TSX Markets, purchased a 40 per cent equity

interest in CanDeal, an electronic trading system for institutional debt market professionals. In September, TSX filed a preliminary prospectus for an initial public offering of its common shares. To celebrate the 150th birthday of Toronto Stock Exchange, Canada Post issued a commemorative postal stamp.

On October 24, 2002, Toronto Stock Exchange hosted a black tie gala dinner for 200 to celebrate its 150th birthday. Toronto Stock Exchange set a yearly volume record of 46.3 billion shares traded. In January 2003, TSX Group Inc. declared its first quarterly dividend as a public company.

On April 29, TSX Group Inc. announced it had raised the quarterly dividend to \$0.18 a share from \$0.15 a share. On May 8, TSX Group Inc. hosted its first Annual General Meeting as a public company. In June, TSX hosts first ever "Canada Day in New York City", showcasing Canadian issuers to a U.S. business audience. In August, TSX Markets launches Specialty Price Crosses, enabling participating organizations to have great flexibility in reporting trades. In October, TSX Group declares a special dividend of \$5 for each common share, payable December 31, 2003. In December, TSX sets New Year trading volume record of 55.5 billion shares.

In 2004 TSX hosts European Showcase for 10 Canadian companies in Frankfurt, Germany. TSX Group raises quarterly dividend to \$0.25 from \$0.18. TSX Group acquires NGX Canada Inc., an electronic exchange that trades and clears natural gas and electricity contracts, for \$38-million. TSX sets new monthly trading record in January 2004 with over 7.2 billion shares changing hands. February 2, TSX Markets launches U.S. dollar order book for trading in selected stocks.

In March, TSX launches Market on Close, a facility to stabilize orders and pricing at the end of the trading day. In June, TSX Canada Day in New York attracts 200 members of New York business community. In July, TSX Group increases quarterly dividend from \$0.25 to \$0.33. On September, for the first time ever the TSX Canada Day in London at The Savoy. On December 2, Richard Nesbitt named CEO of TSX Group Inc. In December, TSX Markets launched "Multiple Give-Up" - a feature whereby Toronto Stock Exchange and TSX Venture Exchange investors have greater choice in clearing and settlement decisions.

In January, 2005 the TSX Group sends a delegation to China to attract international listings. In a speech to the New York Harvard Club in April, TSX Group CEO Richard Nesbitt discusses what he terms the under-reported strengths of the Canadian market. At its first Annual General Meeting in Calgary in April, TSX shareholders approve a 2 for 1 stock split, effective May 17. In April, the TSX Group dividend is increased to \$0.40 a

share, the S&P announced Canada's first independent, multi-dealer priced fixed income index, the S&P/TSX Canadian Bond Index.

In July, TSX Group dividend is increased to \$0.25 a share on a post split basis. In October, TSX Group CEO Richard Nesbitt speaks to delegates at Security Traders Association Conference in Boca Raton, Florida. His message is that Canada is a compelling investment story for investors also in the same month; the TSX Group announced an accounting change in the reporting of initial and additional listing fees. TSX Group now recognizes revenue from initial and additional listing fees amortized on a straight-line basis over an estimated service period of 10 years.

In November, TSX surpasses all-time trading value record of \$944 billion and in December, for the first time ever, trading on Toronto Stock Exchange topped \$1 trillion for the year. TSX total value traded in 2005 was \$1.1 trillion, up 29% from 2004. The TSX Venture Exchange announced the TSX Venture 50™, the first-ever ranking of Canada's top emerging public companies. The list was designed to showcase the Exchange's leading companies and to increase investor awareness of the top performing companies on TSX Venture. Iceberg orders and voluntary attribution were added as trading features to TSX Venture Exchange.

On February 1, 2006 the TSX Group Inc. announced it had increased its quarterly dividend from \$0.25 to \$0.33 per share. In February, TSX Group Inc. announced that its Board of Directors has amended its Director Qualification Policy to require any director who does not receive majority support in an uncontested election to submit his or her resignation to the Board. On February 3, TSX Group and The DeGroot School of Business at McMaster University established the DeGroot-TSX Research Centre in Capital Markets Studies, also in the same month the TSX Markets announces details of two new trading products: TSXpress and ATX also the TSX names Richard Nadeau as head of TSX listings and is located in Montreal.

In April, TSX announces FIX Gateway is in production. In May, TSX announces next generation trading platform and smart order router. In June, TSX Group unveils new and enhanced web site tsx.com. In June, TSX Group and Thomson Financial announce alliance to deliver customized market intelligence and analysis to financial professionals in Canada with TSX Connect. In August, TSX Group subsidiary Natural Gas Exchange (NGX) acquires Oxen Inc. and Alberta Watt Exchange. In August, TSX Group and UBC establish the "TSX Capital Markets Initiative at the University of British Columbia Faculty of Law".

Fall 2006, TSX Group visits Australia, China, Israel and South America on listings business development tours. In October, Brazil's BOVESPA, TSX & TSX Venture Exchange sign Memorandum of Understanding with the objective to share information and experience & to facilitate interlistings between BOVESPA, Toronto Stock Exchange and TSX Venture Exchange. In October, TSX Group Inc. expands Canadian Fixed Income presence and acquires Shorcan Brokers Limited and Scotia Capital's Fixed Income Indices. In October, Toronto Stock Exchange trading surpassed 64.17 billion shares for the year – breaking the previous yearly volume record.

In January, 2007 TSX Group Inc. increases dividend by fifteen percent to \$0.38 per common share. In February, TSX Group's Chief Information Officer Brenda Hoffman announced a plan to replace core trading engine hardware with new HP Integrity NonStop servers that use the Intel Itanium 2 processor. On March 5, TSX Group and International Securities Exchange announce DEX- A new Canadian derivatives exchange scheduled to begin operations in 2009.

On March 28, TSX Group and Intercontinental Exchange, Inc. announced the formation of a transformative technology and clearing alliance for the North American natural gas and Canadian power markets. In April, Toronto Stock Exchange and TSX Venture Exchange kick off first U.S. listings business development campaign in New York City. May's Toronto Stock Exchange trading activity hits new monthly highs for volume, value and transactions. On June 6, TSX Group announced the purchase of The Equicom Group Inc. – a leading provider of investor relations and related corporate communication services in Canada.

## **About TSX Group Inc. (TSX-X)**

TSX Group operates Canada's two national stock exchanges, Toronto Stock Exchange serving the senior equity market and TSX Venture Exchange serving the public venture equity market, Natural Gas Exchange (NGX), a leading North American exchange for the trading and clearing of natural gas and electricity contracts and Shorcan Brokers Limited, the country's first fixed income interdealer broker.

TSX Group also owns The Equicom Group Inc., a leading provider of investor relations and related corporate communication services in Canada. TSX Group is headquartered in Toronto and maintains offices in Montreal, Winnipeg, Calgary and Vancouver.



## **Growth**

The strength of TSX Group is reflected in the broader strength of the Canadian economy. For eight consecutive years, Canada has been the only G7 country with a federal government in budget surplus. For the past five years employment has been growing while inflation rises more slowly.

Canada's economy is broadly diversified with key strengths in manufacturing, financial services and life sciences. Add this to Canada's diverse resource base - from the tar sands to coal and natural gas, from nickel to copper and diamonds - and you can understand Canada's immense advantages in the global competition for investment and economic activity. The Economist Intelligence Unit has named Canada the best country in the world to do business in through 2008. The breadth and strength of the Canadian market has made Canada a key investment destination in global terms. It's a great place to invest in energy and materials. It's a great place to raise capital and use Canadian expertise.

As a result, TSX Group continues to punch above its weight in equity financings raised by listed issuers. The seventh largest exchange group in the world, TSX Group ranked third in the world in equity financings in 2005, according to the World Federation of Exchanges. Toronto Stock Exchange and TSX Venture Exchange raised CDN \$52.4 billion in equity financings in 2005, up 3.4 per cent from the previous year.

Since 2000, eight out of 10 sectors of the S&P/TSX Composite Index have outperformed the comparable sector of the S&P 500. From December 31, 1999 through December 31, 2005, the S&P/TSX Composite climbed 34 per cent, compared to a decline of 15 per cent on the S&P 500.

## **Innovation**

Throughout more than 150-year history, TSX Group has been a pioneer of new products. This tradition of innovation has helped to establish their reputation as a global leader in capital markets.

TSX Group:

- Introduced the exchange world to computer trading in 1977. Twenty years later, Toronto Stock Exchange was the first major North American exchange to go completely electronic.
- Launched the first exchange-traded fund (ETF) in the world in March 1990. In 2005, they listed the world's first inter-listed ETF.
- Was the first exchange group in North America to use decimalized trading in 1996.
- Developed the market for income trusts that have since become one of the hottest parts of their market. Income trusts, such as REITs, royalty trusts and business trusts are an effective way for entities with predictable cash flow to raise capital.
- Became the first North American stock exchange group to become publicly listed in 2002.

TSX Group continues to introduce innovative products and services that anticipate the demands of market participants, setting the stage for even faster, fairer and more efficient trading. TSX Group was the first North American stock exchange group to become publicly listed, when it began trading with the symbol "X" on Toronto Stock Exchange in 2002.

## **Competition**

TSX Group's niche in North America is the small and medium-sized companies that give their stock exchanges and their economy, their special dynamism. They are the heart of this market and they are the source of its big companies.

Toronto Stock Exchange is also home to some of the largest companies in Canada, with about 200 issuers inter-listed on U.S. exchanges. This means they compete every day with the largest market in the world. Their trading engine is already among the fastest of all global exchanges. Speed is critical as new algorithmic trading strategies shift trading to electronic markets where trades can be completed quickly and at lower costs. They are responding with even faster trading speeds and lower fees.

## Lines of Business

Toronto Stock Exchange is the right choice for issuers with solid track records of business management. Known for their high standards of transparency and fairness, and their innovative approaches to trading, TSX offers their approximately 1,500 senior issuers a dynamic market to raise capital. TSX issuers raised \$46 billion in 2005, the third highest value of financings among members of the World Federation of Exchanges.

TSX is the global leader for listing mining and oil and gas companies operating around the world. But their issuers also represent a broad range of industries from across Canada, the United States and beyond. Issuers list a number of different types of securities on TSX, including conventional securities and innovative equity-related products such as exchange-traded funds, income trusts and investment funds.

TSX provides opportunities to access public equity capital efficiently, liquidity for existing investors and the prestige and market exposure associated with Canada's senior exchange. A listing on TSX is world-class and straightforward for those looking to connect with institutional and retail investors. TSX Venture Exchange is a public venture capital marketplace for emerging companies.

They provide a fair marketplace where growth companies can raise capital to develop and market their products and services. For investors, TSX Venture provides opportunities to seek ground-floor investments in growth companies that may be the next market stars. While TSX Venture continues to demonstrate its strength in attracting resource companies, TSX Venture's approximately 2,200 issuers represent a diverse mix of industry sectors, including industrial, life sciences, technology and financial services. With high-quality standards that are specially designed for junior issuers, TSX Venture Exchange accommodates emerging companies with different needs and financial pressures than larger, established businesses. This is a long-standing strength.

They have a century of experience in providing the capital-raising infrastructure tailored to the small and medium-sized businesses that drive economic growth. Many ambitious private companies look to accelerate their growth by going public on TSX Venture Exchange.

This may mean using the traditional initial public offering (IPO) route, or using a vehicle unique in Canada to TSX Venture known as the Capital Pool Company (CPC) program. It may also mean undertaking a reverse takeover of a company trading on TSX Venture or NEX, a board that TSX Venture Exchange maintains for small public companies looking to refinance and reactivate.

Whichever of these three ways a company chooses to go public, our issuers can take advantage of a streamlined graduation path to Toronto Stock Exchange, providing even greater growth opportunities for companies and their investors.

## Expertise

In the hottest trading areas - oil and gas and mining - TSX Group has the broadest selection for traders. In mining, they list more than half of the public mining issuers in the world. They offer the same choice in oil and gas, with more oil and gas issuers on their two equity exchanges than we will find on any exchange group in the world. They will find the same range of choice in technology and life sciences, two sectors that showcase top Canadian innovation to international investors. These issuers are supported by a deep pool of professional expertise in Canada that ranges from geologists through engineers to accountants, lawyers and analysts. Their expertise extends to setting standards suitable for the wide range of issuers listed on their exchanges. TSX Group's high standards are designed to serve the interests of investors without unnecessarily impeding the growth of issuers. Under regular review, their listing and disclosure standards provide the guidance issuers need to meet the combined expectations of investors and all other market participants.

**Attribution Choices:** Following the introduction of new cross-marketplace regulations in 2001 making order attribution elective in Canada, TSX Markets introduced for its Participating Organizations the option of having a unique firm identifier shown on an order (an "attributed" order) or alternatively, remaining unattributed, or "anonymous." Order attribution for TSX Venture Exchange was launched in late 2005. This choice combines the best features of an attributed marketplace with those offered by anonymous trading systems.

**How it works:** On an order-by-order basis, and using access technology provided by one of the Toronto Stock Exchange's or TSX Venture Exchange's Order Access Partners, a Participating Organization or Member may elect attribution or anonymity. If attributed, the Participant's unique numeric ID will be provided via market information displays for all orders and trades.

If anonymous, the non-specific numeric "001" will be associated with the order for the life of that order, including after execution, in all market information displays. At the end of the day where a trade is executed anonymously, Toronto Stock Exchange and TSX

Venture Exchange will relay underlying Participant identity for that trade to the Central Depository for Securities (CDS), in order that the trade may be settled.

Market Regulation Services Inc., the independent trading regulator, tracks the "true" identity on all orders and trades. Where required, the compliance and risk management departments of the relevant Participating Organizations and Members may review their firm's anonymous orders and trades during the trading day, and, again where required, may retrieve the identity of an anonymous counterparty at the end of the trading day.

**Benefits:** With the choice of attribution, Participating Organizations and Members, and their investing customers can:

- Advertise an interest or activity in a security by choosing to attribute orders and trades, or
- Avoid market impact costs associated with holding a known position or interest in a security.

## Corporate Information

TSX Group is connecting global capital markets to Canada from its pre-eminent domestic base; TSX Group's reach extends internationally, providing the global financial community with access to Canada's equity capital and energy markets.

Each TSX Group operation is connected to and supports the activities of the others; all are focused on providing exceptional customer service from their offices in Vancouver, Calgary, Winnipeg, Toronto and Montreal. Toronto Stock Exchange (TSX) - As Canada's senior equities market, TSX provides an efficient, liquid market for a broad cross-section of Canadian issuers. TSX assists about 1,500 issuers through services designed to increase retail and institutional investors.

TSX Venture Exchange - Serving the public venture equity market, TSX Venture Exchange provides access to capital for companies at the early stages of their growth while offering investors a well-regulated market for making venture investments. TSX Markets - TSX Markets facilitates trading on TSX and TSX Venture and provides innovative trading products to increase investor participation, particularly across North America. Natural Gas Exchange (NGX) - As a leading North American energy exchange, Natural Gas Exchange connects the buyers and sellers of natural gas and electricity contracts, enabling them to manage the risks inherent in energy trading, and provides the associated clearing and settlement services.

TSX Datalinx - To meet growing global demand for financial and capital markets information, data is packaged and sold with more than 118,000 subscriptions worldwide

via TSX Datalinx, connecting the Canadian capital markets to investors at home and abroad. TSX Technologies - Fundamental to these operations is TSX Technologies, which powers the operations of TSX Group through state-of-the-art trading technology. Listing, trading and market data which are supported by trading technology. These are the key elements of TSX Group.

Canadian markets have become a magnet for investment from around the world. Through TSX Group's equity and energy markets, investors and issuers have discovered: Fast, low-cost and liquid trading, a range of innovative trading products, more oil and gas issuers than any exchange group in the world, the single largest source in the world of equity financing for mining issuers, the second largest exchange group in the world for technology companies, the S&P/TSX Composite Index that has risen 34 per cent since the end of 1999, compared to a decline of 15 per cent on the S&P 500, and all backed by a strong economy – Canada is the only G7 country in surplus for eight years running – and a country rich in natural resources.

# TOKYO STOCK EXCHANGE

The Tokyo Stock Exchange, or TSE, is the second largest stock exchange market in the world by monetary volume located in Tokyo, Japan, second only to the New York Stock Exchange. It currently lists 2,271 domestic companies and 31 foreign companies, with a total market capitalization of over 5 trillion USD.

The TSE is incorporated as a kabushiki kaisha with nine directors, four auditors and eight executive officers. Its headquarters are located at 2-1 Nihombashi Kabutocho, Chūō-ku and Tokyo, Japan. Its operating hours are from 9:00 to 11:00 am and from 12:30 to 3:00 pm. From April 24, 2006, the afternoon trading session started at its usual time of 12:30 p.m.

The main indices tracking the TSE are the Nikkei 225 index of companies selected by the Nihon Keizai Shimbun (Japan's largest business newspaper), the TOPIX index based on the share prices of First Section companies, and the J30 index of large industrial companies maintained by Japan's major broadsheet newspapers. There are 89 domestic and 19 foreign securities companies participate in TSE trading.

There are three separate sections within the TSE market. The first, second sections, and Mothers (venture capital market). The first section is for the largest, most successful companies - often referred to as 'blue chips'. The second section is for smaller companies with lower trading volume levels. Mothers (market for the growth and emerging stocks), established in November 1999, and is for newer, innovative venture enterprises, both in Japan and overseas. As of March 2006, there are 1,721 First Section companies, 489 Second Section companies and 156 Mothers companies.

## THE HISTORY OF TOKYO STOCK EXCHANGE

In the 1870's, a securities system was introduced in Japan and public bond negotiation began. This resulted in the request for a public trading institution; and, the "Stock Exchange Ordinance" was enacted in May 1878. Based on this ordinance, the "Tokyo Stock Exchange Co., Ltd." was established on May 15, 1878; and trading began on June 1st.

In March 1943, the "Japan Securities Exchange Law" was enacted to reorganize the Stock Exchange as a war-time controlled institution. On June 30, 1943, 11 stock exchanges throughout Japan were unified and a quasi-public corporation, the "Japan Securities Exchange", was established (dissolved in April, 1947).

With worsening war conditions and air-raids on the main island of Japan, the securities market was forced to suspend trading sessions on all securities markets from August 10, 1945. It was difficult to re-open the Stock Exchange by a Memorandum of Supreme Commander of Allied Powers (SCAP) in September 1945; however, trading was restarted by unofficial group transactions in December of 1945.

The Securities and Exchange Law was enacted in March of 1947, and entirely revised in April of 1948. On April 1, 1949, three stock exchanges were established in Tokyo, Osaka and Nagoya. Trading on these exchanges began on May 16. In July of that same year, five additional stock exchanges were established in Kyoto (merged into Osaka Securities Exchange in March 2001), Kobe (dissolved in October 1967), Hiroshima (merged into Tokyo Stock Exchange in March 2000), Fukuoka, and Niigata (merged with Tokyo Stock Exchange in March 2000). In addition, the Sapporo Securities Exchange was established in April 1950. Consequently, Japan now has five stock exchanges.

The trading floor of the TSE was closed on April 30, 1999, and the exchange switched to electronic trading for all transactions. A new facility, called TSE Arrows, opened on May 9, 2000. In 2001, the TSE restructured itself as a stock company: before this time, it was structured as an incorporated association with its members as shareholders.

The exchange was only able to operate for 90 minutes on November 1, 2005, due to bugs with a newly installed transactions system, developed by Fujitsu, which was supposed to help cope with higher trading volumes. The interruption in trading was the worst in the history of the exchange. Trading was suspended for four-and-a-half hours.

During the initial public offering of J-Com on December 8, 2005, an employee at Mizuho Securities Co., Ltd. mistakenly typed an order to sell 610,000 shares at 1 yen, instead of an order to sell 1 share at 610,000 yen. Mizuho failed to catch the error; the Tokyo Stock Exchange initially blocked attempts to cancel the order, resulting in a net loss of 347 million US dollars to be shared between the exchange and Mizuho.

Both companies are now trying to deal with their troubles: lack of error checking, lack of safeguards, lack of reliability, lack of transparency, lack of testing, loss of confidence, and loss of profits. On 11 December, the TSE acknowledged that its system



was at fault in the Mizuho trade. On 21 December, Takuo Tsurushima, chief executive of the TSE, and two other senior executives resigned over the Mizuho affair

On January 17, 2006, the Nikkei 225 fell 2.8%, its fastest drop in nine months, as investors sold stocks across the board in the wake of a raid by prosecutors on internet company livedoor. The Tokyo Stock Exchange closed early on January 18 due to the trade volume threatening to exceed the exchange's computer system's capacity of 4.5 million trades per day. This was called the "livedoor shock." The exchange quickly increased its order capacity to five million trades a day.

## **CORPORATE GOVERNANCE**

The mission of Tokyo Stock Exchange, Inc., subsidiary of Tokyo Stock Exchange Group, Inc. (TSE Group), is to act as the central securities market of Japan - a vital element of public infrastructure.

The TSE Group, through the fulfillment of its subsidiary's mission, seeks to secure stable income while maintaining the balance between its public nature and profitability. Therefore, the basic corporate governance philosophy is based on the following principles: to increase the transparency of management by clarifying the authorities and responsibilities of each corporate body and exercise accountability; to reflect the opinions of investors and a wide variety of other stakeholders in management and operation of the market; and to ensure impartial decision-making free from the influence of particular stakeholders as a self-regulatory organization, thereby providing the securities market with a high level of confidence and liquidity.

## **THE BOARD OF DIRECTORS**

The TSE Group has adopted a company with committees system in order to clarify the authority and responsibilities involved in the execution of its operational and administrative functions. Specifically, three committees consisting mainly of external directors – a nomination committee, an audit committee, and a compensation committee –

are established, executives responsible for executing business activities are assigned, and the management oversight function and the business execution function are separated.

The Board of Directors responsible for overseeing management consists of 16 or fewer members (16 members as of August 1, 2007) to enable substantive discussions. Also, 10 of these 16 directors are appointed from outside the company in order to increase the transparency and accountability of management, and enhance oversight of the adequacy of business execution.

Of the ten external board members, five are from companies listed on the TSE, two are legal experts, one is a certified public accountant, one is an independent journalist, and one is a former officer of the central bank. Each board member has deep insight in his or her specific field of expertise, making this an enhanced system that allows the TSE Group to actively incorporate a variety of different external perspectives into company management.

In addition to making decisions on the fundamental policy of and important issues affecting management, the Board of Directors also oversees executives' administration of business activities in accordance with these decisions.

**Nomination Committee:** The Nomination Committee is comprised of three directors, two of whom are external directors. This committee decides on proposals to be submitted at the General Shareholders Meeting regarding the selection and dismissal of directors.

**Audit Committee:** The Audit Committee is comprised of four directors, three of whom are external directors. Of the external directors, one is a former officer of the central bank, one is a lawyer, and one is a certified public accountant. The Audit Committee holds regular meetings as well as extraordinary meetings when necessary.

Based on the auditing plan and the distribution of duties determined at the Audit Committee meeting, efficient audits are conducted by monitoring and verifying the establishment and operation circumstances of the internal control system while maintaining close collaboration with accounting auditors, the Internal Auditing Office, auditors of subsidiary companies and others.

**Compensation Committee:** The Compensation Committee is comprised of three directors, two of whom are external directors. This committee determines the compensation of each of individual directors and executives.

**Internal Auditing Office:** Internal control systems are established within each respective division to prevent violations of statutory laws and regulations, the TSE Group's articles of incorporation, internal rules and others. Additionally, to reinforce the systems, an Internal Auditing Office under the direct control of the President & CEO has been

established. The Internal Auditing Office performs internal audits of each division and reports the results of those audits directly to the President & CEO.

President's Advisory Committee: The TSE Group established the President's Advisory Committee, a private discussion group involving the president, as a forum to exchange a wide range of opinions about the TSE Group and the securities market in general. This committee is comprised of representatives from listed companies, persons from academic circles and others.

### ***Board of Directors:***

- Taizo Nishimuro Chairman of the Board
- Atsushi Saito President & CEO
- Yasuo Tobiyama Executive Vice President, COO & CFO
- Shigeaki Itsuki Director
- Hiroshi Okuda Director
- Toshiaki Katsushima Director
- Yasuhiro Sato Director
- Satoshi Shiibashi Director
- Koji Shindo Director
- Nobuko Takahashi Director
- Masakazu Hayashi Director
- Yoshinari Hara Director
- Tsuguoki Fujinuma Director
- Hitoshi Maeda Director
- Charles D. Lake II Director
- Masahiro Wakita Director

### ***Nomination Committee:***

- Taizo Nishimuro Chairman of the Committee
- Hiroshi Okuda Member of the Committee
- Hitoshi Maeda Member of the Committee

## **Audit Committee:**

- Satoshi Shiibashi Chairman of the Committee
- Shigeaki Itsuki Member of the Committee
- Toshiaki Katsushima Member of the Committee
- Koji Shindo Member of the Committee

## **Compensation Committee:**

- Yasuhiro Sato Chairman of the Board
- Atsushi Saito President & CEO
- Yasuo Tobiyama Executive Vice President, COO & CFO
- Yoshinori Suzuki Senior Executive Officer & CIO
- Tomoyoshi Uranishi Senior Executive Officer
- Hiroyuki Iwakuma Senior Executive Officer
- Masaki Shizuka Executive Officer

## **COMPLIANCE PROGRAM**

The Tokyo Stock Exchange Group and its subsidiaries (the TSE group) have introduced the compliance program as one of the measures for enhancing corporate governance. This program aims to instil in the TSE group an awareness of the laws and regulations governing its business operations and compliance with group rules, and to achieve proper risk management through the exercise of an efficient internal control function. The program consists of three parts:

### **1. Establishment of the Charter of Corporate Behaviour**

In order to clarify the TSE group's social responsibility as a group of openly-managed companies and develop a harmonious relationship with society, the charter of corporate behaviour lays out the basic policies for the group's behaviour as corporations from both a moral and ethical standpoint. This charter was developed from an investor-cantered point of view to achieve corporate transparency.

## **2. Development of internal structure**

The President & CEO of Tokyo Stock Exchange Group, Inc. is appointed as the officer responsible for compliance and oversees all compliance-related activities. Furthermore, in response to legal developments such as whistle-blower protection laws, an internal compliance hotline has been set up in order to accept reports or consultation from within the company about issues regarding compliance with laws, regulations and the charter of corporate behaviour.

## **3. Education and training**

The TSE group held internal briefings and created many opportunities to disperse information about the compliance program before it was introduced, and continues to hold internal training sessions, verify usage of the compliance hotline, and conduct internal surveys. The group also appoints compliance managers in each department and holds activities on a departmental basis designed to heighten awareness of compliance.

Through this compliance program, the TSE group will fulfil its role in society by carrying out fair and transparent corporate activities.

# **THE RELATIONSHIP BETWEEN INVESTORS, SECURITIES COMPANIES AND TOKYO STOCK EXCHANGE**

Tokyo Stock Exchange (TSE) fulfils a number of duties related to the operation of a securities market. It examines companies to assess their suitability as listed companies, it requires these companies to comply with disclosure requirements so that investors are able to make informed decisions, and it provides a market place for those companies' shares to be traded. As a self-regulatory organisation (SRO), TSE is responsible for maintaining a transparent, equitable and reliable market. The provision of such a market helps support a healthy economy.

Only securities companies that have a TSE Trading Participant license of may trade securities directly in this market. Therefore individual investors and other non-trading participant securities companies must route their orders via one of these trading participants.

Thus for example, the orders of customers of Trading Participant A will be routed to the TSE market as brokerage orders of Trading Participant A, while the orders of

customers of securities company B which is not a trading participant, will be routed from securities company B to Trading Participant C, from where they'll be routed to the TSE market as brokerage orders of Trading Participant C.

Trading Participants are required to screen orders before sending them to the TSE market, so as to avoid insider trading or other manipulative transactions. Once Trading Participants are sure that the orders are legitimate, they will be placed and declared as brokerage orders.

Trading Participants are also able to make trades on their own "proprietary" accounts, using their own cash and securities, which they must declare as such when they send these orders to the market. This is often referred to as "dealing".

The sections responsible for brokerage and proprietary trading are strictly segregated within securities companies so that there is no possibility of information being shared between the two. This is important to prevent illegal transactions and to keep the market fair for all investors.

After the orders placed by Trading Participants have been executed, clearing and settlement takes place between Trading Participants and TSE. "Clearing" and "settlement" refer to the exchange of money and securities respectively between the transactions counter-parties.

## **QUARTERLY DISCLOSURE**

In order to enable investors to make rational investment decisions, Tokyo Stock Exchange, Inc. believes it is necessary to provide the market more frequently with information concerning the changes in listed companies' operational and financial situations, and therefore it has begun to promote policies for quarterly disclosure.

However, in order for those policies to be effective certain conditions must be met. The accuracy of a minimum level of information, as well as the comparability of that information, from companies that already provide quarterly disclosure must be preserved.

Also, a consensus must be reached between the users and providers of the information as to what type of information is necessary. In order to preserve that accuracy and comparability and reach consensus, TSE has joined with all other domestic stock

exchanges, Japan Securities Dealers Association, and JASDAQ to establish an investigative committee to research preparation and disclosure of quarterly financial information.

## MAJOR FUNCTIONS

TSE is a central institution in the secondary market and its major functions are as follows.

**1. Provision of a Market Place:** Trading which takes place on the Tokyo Stock Exchange progresses continuously throughout each trading session using computerised trading systems, in compliance with Exchange rules. Transaction prices are available to the public.

**2. Monitoring trading:** Real-time trading on the computer trading systems as well as completed transactions is carefully monitored in order to keep trading in line with Exchange rules and properly determine prices. Upon discovery of any rule violation, improper conduct or unfair trading, appropriate measures are taken.

**3. Listing securities:** Securities which are traded on TSE adhere to listing criteria established and approved by the TSE.

**4. Monitoring listed securities:** TSE continuously monitors listed companies and securities in order to maintain high listing standards. TSE can suspend the trading of, or delist, a security if listing criteria are not met.

In order to ensure investor protection and fair and transparent transactions, TSE requires the accurate, swift, and fair disclosure of corporate and security information. Rules relating to the disclosure of corporate information are stated in the Securities and Exchange Law.

TSE maintains guidelines for the timely disclosure of important corporate information resulting from business activities. The TSE also provides a filing system which facilitates investor access to disclosure documents.

**5. Supervision of Trading Participants:** Trading participants are those who conduct transactions on the TSE market. In order to guarantee the safety of transactions and to fulfil to the utmost the public purpose of the TSE, they must maintain a high level of quality and a deep sense of confidence. In order to achieve this, an examination system is being introduced at the Exchange whereby strict investigations are carried out to assess the

state of prospective participants' businesses and assets at the time of their application for trading permission.

## TRADING

Prior to the close of their trading floor (April 1999), stock transactions were handled by floor-traders. The image of the bustling trading floor is one that most people are familiar with. Nowadays though, all transactions on the TSE market take place automatically via a highly computerized trading system.

**1. Orders from Trading Participants to TSE:** Orders placed by investors to Trading Participants go through trading network of each trading participant to the TSE trading system.

**2. Processing:** The trading system registers and sorts all orders received according to, amongst other things, the originating Trading Participant, the name/code of the issue, the order size (volume), the price, the type of order (buy/sell) and the time the order was received.

**3. Execution:** The trading system executes all registered orders according to the trading rules of TSE, and execution reports are immediately sent to the Trading Participants electronically.

**4. Dissemination of market information:** In addition to processing and executing a large volume of trades, TSE also disseminates market information on a real-time basis. Thus investors can see at what price each stock is trading at and how many shares are available, allowing them to make informed investment decisions. Generally individual investors can access such information via information vendor terminals and securities companies' websites.

**5. Margin trading:** allows investors to sell stocks that they do not actually own; and buy stocks with funds they do not possess. Securities companies lend investors the necessary stocks/funds. Thus, if an investor thinks that XYZ stock is going to increase in value, he can borrow money from the securities company to buy the stock. Then he resells the stock later at the higher price, making a profit, and then repays the funds he borrowed. Likewise, if the investor thinks that ABC stock is going to decrease in value, he can borrow



the stock from the securities company to sell it at the current price. He then repurchases it at the lower price, making a profit, before returning it to the securities company.

**6. Trading units:** are the minimum amounts of each individual stock that may be traded, and are determined by each individual listed company. Currently the majority of domestic listed companies use a trading unit of 1,000 shares. Stocks' trading units are identified in newspapers' market pages.

TSE is working to encourage listed companies with high prices and large trading units to reduce the size of their trading units to allow greater access to individual investors, who are currently put off by the expense involved in buying even one unit.

Basically there are two kinds of order available on the TSE equities market, 'limit' and 'market' orders.

**Limit orders:** Limit orders are orders at specific prices, meaning that investors have stated that they want to sell/buy at a specific price or better. In other words a limit order represents the lowest/highest price that the investor is willing to sell/buy at. Limit orders offer investors the reassurance that they won't find themselves selling/buying at an unexpected low/high price.

Consequently though, limit orders can only be executed when there are orders matching the specific price requirements, which mean there is a relatively high probability that they won't be executed. Also, limit orders tend to be inferior to market orders in terms of price.

**Market orders:** Market orders don't indicate specific prices, but are executed at the best available price on the market at the time. They take precedence over limit orders, so they may be executed more easily than limit orders. This is a key merit for investors who need speedy transactions.

However, because investors do not put any price conditions on their orders, it is possible that they might end up with undesirable prices during periods of market instability. Thus it is very important that investors give careful consideration when placing market orders. However, there are some other types of orders only effective under certain conditions. Some examples are given below.

- 1) Limit/market orders effective only during the opening/closing auction.
- 2) Limit orders that become market orders at the closing auction if not already executed.
- 3) Incomplete market orders, with the remaining shares turned into a limit order at the first executed price.
- 4) Incomplete market orders, with the remaining shares cancelled.
- 5) Limit orders at the most recently executed price.

6) Limit orders at one tick prior to the most recently executed price.

7) Limit orders for selling short.

The ever-diversifying range of financial products and the rapid development of information technology mean that investors are demanding faster and more convenient trading tools. This variety of orders is just one TSE initiative to respond to these demands, allowing investors greater choice and flexibility in their investment decisions.

## **ALL ABOUT LISTING AND DELISTING**

### **SIGNIFICANCE OF LISTING**

In general, a company whose stock is listed on a stock exchange (hereinafter a "listed company") is said to enjoy the following benefits:

1) A listed company enhances its ability to raise funds by clearing the way for direct financing, including raising capital through a public offering issued at market price and/or of the applicant company, and conduct a briefing with the president the issuance of warrant bonds and other securities. By expanding its fund-raising ability, a company can improve and enhance its fundamental quality.

2) Becoming a listed company leads to increased public awareness and status as a company with future potential, thereby improving corporate publicity while enhancing social trustworthiness with clients, financial institutions, and others. In addition, executives and employees alike grow to appreciate the company more, which is reflected in its business performance and allows it to secure highly capable manpower.

3) By going public, the organizational structure of a company shifts from individual management to a more organizational style of operation, thereby enhancing the internal management framework.

While a listed company can enjoy the above advantages, it must also bear new social responsibilities and obligations such as being required to make earnings announcements and disclosing corporate information timely and appropriately.

### **INITIAL LISTING**

A company applying for an initial stock listing is required to meet certain numerical criteria outlined in the "Criteria for Listing Examination of a Stock." Once these criteria are met, the Tokyo Stock Exchange (hereinafter the "TSE") conducts an examination of the applicant company, focusing on whether it can disclose corporate information, etc. appropriately, and whether it is carrying out its business in a fair and faithful manner. Based on the results of the examination, stocks deemed appropriate for listing are listed on the TSE.

## **CLASSIFICATION OF LISTED STOCKS**

Both domestic and foreign stocks are listed on the TSE. Most of the listed stocks are classified as 1st Section issues or 2nd Section issues, while other stocks are listed on Mothers, a market for emerging companies with high growth potential.

When receiving an application for 1st Section assignment from a listed company in the 2nd Section, the TSE conducts an examination at the end or mid-term point of each fiscal period and analyzes the state of the applicants' share distribution, trading volume situation, etc. to determine whether the applicant meets the criteria for reassignment as outlined in "Criteria for Assignment of a Listed Stock to the 1st Section." Issues which meet these criteria are assigned to the 1st section. In principle, newly listed domestic stocks (excluding Mothers issues) are assigned to the 2nd Section. However, if the TSE has received the relevant application from the initial listing applicant, the exchange may assign stocks that are expected to have particularly high liquidity to the 1st Section at the time of listing.

If a 1st Section issue falls under the criteria regarding the number of shareholders, etc. outlined in the "Criteria for Reassignment of a Listed Stock from the 1st Section to the 2nd Section," the TSE reassigns the issue to the 2nd Section.

## **SUPERVISION OF LISTED COMPANIES**

In addition to setting forth procedures for alteration listing, etc., in order to properly oversee listed securities, the TSE obligates listed companies to make timely and appropriate disclosure of corporate and other information under the "Rules on Timely Disclosure of Corporate Information by Issuer of Listed Security and the Like," should an event occur that has a significant impact on investment decision-making. Through these

rules, the TSE conducts meticulous listing supervision so that corporate information is disclosed to investors in an accurate, prompt, and fair manner.

## **DELISTING**

In the event that fair price formation has become prohibitive due to situations such as an insufficient amount of a listed stock's absolutely floating shares or the listed company falling into a state of bankruptcy, the stock falls under the "Criteria for Delisting of Stock," and is delisted accordingly.

If a listed stock is likely to fall under the Criteria for Delisting of Stock, the TSE assigns it to the Post for Issues under Supervision to publicize this fact. If the decision has been made to delist a stock, the TSE assigns it to the Delisting Post to allow investors time to close their positions, etc. regarding the stock for a certain period (one month in principle).

About Listing Examination: Among other things, listing is a way for a company to diversify its fund acquisition methods by offering the stock it issues to an unspecified number of investors as a vehicle for investment. Since these investors can continuously buy and sell the shares of listed companies in the market, they demand that these companies be able to ensure their confidence. The role of the Listing Examination Department is to determine a company's suitability for listing based on certain quality criteria – in other words, the listing examination criteria.

## **LISTING EXAMINATION PROCESS**

Listing Examination Criteria are generally comprised of two parts: formal criteria and substance criteria. Formal criteria are the minimum requirements that a company must meet when applying for listing. They establish the standards necessary to secure adequate liquidity after listing, as well as the minimal conditions required to ensure the company's ability to continue as a going concern.

During listing examinations, the TSE first determines whether or not the company applying for listing fulfils these criteria. After passing the formal criteria examination, the applicant company then proceeds to the substance examination. This examination is generally conducted by a team of two people. During the actual examination, the TSE will determine whether or not the applicant company meets the relevant criteria through

hearings and such, focusing primarily on information such as the Listing Application Securities Report included in application documents submitted by the applicant company.

**Formal Requirements:** The formal requirements that companies must meet when applying for listing include conforming to Article 205 of the Securities Listing Regulations, as well as fulfilling the pre-listing rules regarding IPOs and secondary offerings, etc. as set forth in Article 217 in the same Regulations. An evaluation as to whether or not an applicant company meets these formal requirements will be carried out based on the documents submitted during the time of listing application.

**Substance Examination:** During the substance examination for the 1st and 2nd sections, the TSE will review the applicant company's profitability and ability to continue as a going concern, managerial soundness, effectiveness of corporate governance and internal control framework, properness of disclosure of corporate information, etc. and other information the TSE deems necessary from the standpoint of public value or investor protection. Specifically, the TSE will conduct several hearings with the applicant company based on the pre-submitted documents, as well as conduct on-site inspections at factories or stores. During the last phase of the examination, among other things, the TSE will conduct hearings with the Certified Public Accountant auditing the applicant company, hold interviews with the president and auditor of the applicant company, and conduct a briefing with the president of the TSE.

#### **Listing Examination Criteria for Mothers:**

**Formal Requirements:** Mothers is a market positioned alongside the TSE 1st and 2nd sections. As opposed to these two sections, where criteria focus on certain levels of past business performance, companies listed on Mothers are expected to show solid growth in the future. As such, this market places more of an emphasis on disclosure and does not have criteria for attributes such as level of profit. In this way, Mothers and the 1st and 2nd sections are two clearly defined markets with different concepts, and accordingly, the formal requirements for each are also different.

Specifically, companies applying to Mothers must conform to Article 212 of the Securities Listing Regulations, as well as fulfil the pre-listing rules regarding IPOs and secondary offerings, etc. as set forth in Article 217 in the same Regulations. An evaluation as to whether or not an applicant company meets these formal requirements will be carried out based on the documents submitted during the time of listing application.

**Substance Examination:** During the substance examination for Mothers, the TSE will review the applicant company's properness of disclosure of corporate and risk

information, etc., managerial soundness, effectiveness of corporate governance and internal control framework, and other information deemed by the TSE as necessary from the standpoint of public value or investor protection. Specifically, the TSE will conduct several hearings with the applicant company based on the pre-submitted documents, as well as conduct on-site inspections at factories or stores. During the last phase of the examination, among other things, the TSE will conduct hearings with the Certified Public Accountant auditing the applicant company, hold interviews with the president and auditor of the TSE.

## **CORPORATE PHILOSOPHY OF THE TSE GROUP**

***“We will strive to create a sound market with a high level of reliability and convenience from the standpoint of investors and other market users, and thus contribute to the realization of a more prosperous society.”***

This corporate philosophy expresses the goals and sense of values that the Tokyo Stock Exchange Group and its subsidiaries (the TSE group) strive for everyday in conducting their corporate activities. In addition to laying a foundation for management plans and decision making, the corporate philosophy is a basic guideline that serves as the cornerstone for the activities of all directors, executives and employees of the TSE group.

Specifically, their corporate philosophy asserts that "the TSE group will fulfil the social responsibility it has been charged with by ensuring market fairness and reliability; providing a highly convenient and efficient infrastructure for trading, clearing & settlement; and earning the confidence of many market users including investors, listed companies and trading participants to achieve a sustainable, dynamic market."

In addition, the "Basic Management Policy", "Management Objectives", and "Business Strategy" will all be outlined in the "Medium-Term Management Plan" in a timely manner under their permanent "Corporate Philosophy".

# HONG KONG STOCK EXCHANGE

## HONG KONG STOCK EXCHANGE

HKEx is the holding company of The Stock Exchange of Hong Kong Limited, Hong Kong Futures Exchange Limited and Hong Kong Securities Clearing Company Limited. It brings together the market organisations which have transformed Hong Kong's financial services industry from a domestically focused market to become a central market place in Asia attracting investment funds from all over the world.

HKEx was listed in June 2000 following the integration of Hong Kong's securities and derivatives markets. As a market-driven organisation, answerable to its shareholders, HKEx competes vigorously for opportunities in the region and around the world.

HKEx's operations are organised into focused units, directly supervised and controlled by management and the board of directors. The board, the highest decision-making body, determines HKEx's objectives, missions, strategies, policies and business plan and monitors their implementation by management.

In its role as the operator and frontline regulator of the central securities and derivatives marketplace in Hong Kong, HKEx regulates listed issuers; administers listing, trading and clearing rules; and provides services, primarily at the wholesale level, to customers of the exchanges and clearing houses, including issuers and intermediaries - investment banks or sponsors, securities and derivatives brokers, custodian banks and information vendors - who service the investor directly. These services comprise trading, clearing and settlement, depository and nominee services, and information services.

## HISTORY

In his 1999 Budget Speech, Hong Kong's Financial Secretary announced comprehensive market reform of the stock and futures markets. The reforms were designed to increase competitiveness and meet the challenges of an increasingly globalised market.

Under the reform, The Stock Exchange of Hong Kong Limited, Hong Kong Futures Exchange Limited demutualised and together with Hong Kong Securities Clearing Company Limited, merged under a single holding company, HKEx. The merger was

completed on 6 March 2000 and HKEx listed its shares by introduction on the stock exchange on 27 June 2000.

Reports of securities trading in Hong Kong date back to the mid-19th century. However, the first formal market, the Association of Stockbrokers in Hong Kong, was not established until 1891. The Association was re-named the Hong Kong Stock Exchange in 1914.

A second exchange, the Hong Kong Stockbrokers' Association was incorporated in 1921. The two exchanges merged to form the Hong Kong Stock Exchange in 1947 and re-establish the stock market after the Second World War.

Rapid growth of the Hong Kong economy led to the establishment of three other exchanges - the Far East Exchange in 1969; the Kam Ngan Stock Exchange in 1971; and the Kowloon Stock Exchange in 1972.

Pressure to strengthen market regulation and to unify the four exchanges led to the incorporation of the Stock Exchange of Hong Kong Limited in 1980. The four exchanges ceased business on 27 March 1986 and the new exchange commenced trading through a computer-assisted system on 2 April 1986. Prior to the completion of the exchange merger in March 2000, the unified stock exchange had 570 participant organisations.

Established in 1976, Hong Kong Futures Exchange Limited is a derivatives leader in the Asia-Pacific region. It provides efficient and diversified markets for trading futures and options contracts by its more than 130 participant organisations, including many that are affiliated to international financial institutions.

Derivatives market under HKEx operates futures and options markets on a broad range of products, including equity index, stock\_and interest rate. HKEx and its subsidiaries, HKFE Clearing Corporation Limited and SEHK Options Clearing House Limited, operate rigorous risk management system which enables participants and their clients to meet their investment and hedging needs in a liquid and well-regulated market place.

Hong Kong Securities Clearing Company Limited was incorporated in 1989. It created CCASS, the central clearing and settlement system, which started operating in 1992 and became the central counterparty for all CCASS participants.

The clearing operation is based on the immobilisation of share certificates in a central depository. Share settlement is on a continuous net settlement basis by electronic book entry to participants' stock accounts in CCASS. Transactions between CCASS participants are settled on T+2, the second trading day following the transaction.



## **LIST OF BOARD OF DIRECTORS**

Independent Non-executive Chairman

ARCULLI Ronald Joseph\* GBS JP

**Executive Director, Chief Executive**

CHOW Man Yiu, Paul SBS JP

**Independent Non-executive Directors**

CHA May-Lung, Laura\* SBS JP

CHENG Mo Chi, Moses\* GBS JP

CHEUNG Kin Tung, Marvin\* SBS JP

FAN Hung Ling, Henry\* SBS JP

FONG Hup\* MH

KWOK Chi Piu, Bill

LEE Kwan Ho, Vincent Marshall

LOH Kung Wai, Christine

STRICKLAND John Estmond GBS JP

WEBB David Michael WONG Sai Hung, Oscar

## **MISSION**

HKEx is the operator and frontline regulator of the central securities and derivatives marketplace in Hong Kong. In this role, HKEx works closely with the Securities and Futures Commission (SFC) to regulate listed issuers; administers listing, trading and clearing rules; and provides services at the wholesale level to customers of the exchanges and clearing houses, including issuers and intermediaries - namely investment banks or sponsors, securities and derivatives brokers, custodian banks and information vendors - who service the investor directly. The only exception to HKEx's wholesale role is the Investor Participant Account Service, which is mainly a custody service provided to retail investors as well as institutions.

As an infrastructure provider, HKEx is essentially an IT-based enterprise. HKEx provides services along the core part of the securities and derivatives transaction chains. These services comprise trading, clearing and settlement, depository and nominee services, and information services.

In the strategic plan for 2007-09, HKEx adopts the following mission statement.  
***“To be a leading international marketplace for securities and derivatives products focused on Hong Kong, Mainland China and the rest of Asia.”***

## **ADMISSION CRITERIA**

### **Stock Exchange (SEHK) Participantship:**

The requirements of Exchange Participantship of SEHK are as follows:

- be a company limited by shares incorporated in Hong Kong.
- become a Clearing Participant of CCASS if it intends to clear its own Exchange Trades and shall comply at all times with the CCASS Rules; or have a valid, binding and effective CCASS Clearing Agreement with a General Clearing Participant ("GCP") of CCASS if it intends to clear its Exchange Trades through a GCP of CCASS.
- hold at least one Stock Exchange Trading Right.
- be a licensed corporation licensed under section 116(1) of the Securities and Futures Ordinance ("SFO") to carry on Type 1 regulated activity under the SFO.
- have all executive director(s) registered with SEHK as Responsible Officer(s).
- comply with the financial resources requirements specified in the Securities and Futures (Financial Resources) Rules made by the SFC under the SFO and where applicable, the financial resources requirements made under SEHK Rule 408.

### **Futures Exchange (HKFE) Participantship:**

HKFE has four different categories of Exchange Participantship, each of which has different conditions and privileges:

1 Trader - A participant which only trades for its own account.

- be a company incorporated in Hong Kong and substantially owned by one individual.
- hold at least one Futures Exchange Trading Right.
- is a licensed corporation licensed under section 116(1) of the Securities and Futures Ordinance ("SO") to carry on Type 2 regulated activity under the SO.
- hold a valid business registration certificate under the Business Registration

Ordinance ("BRO").

- in the case of an Exchange Participant intending to trade or trading from time to time through HKATS, comply with all requirements for the maintenance, operation, use and security of HKATS insofar as they relate to the Exchange Participant.
- have all executive director(s) registered with HKFE as Responsible Officer(s).
- have at all times at least one representative available to trade through HKATS on every Business Day.
- comply with the financial resources requirements specified in the Securities and Futures (Financial Resources) Rules and where applicable the financial resources requirements under Rule 313A.

2 Broker - A participant which trades for its own account and acts as agent for transactions of other participants.

- be a company limited by shares incorporated in Hong Kong.
- hold at least one Futures Exchange Trading Right.
- be a licenced corporation licensed under section 116(1) of the Securities and Futures Ordinance ("SFO") to carry on Type 2 regulated activity under the SFO.
- hold a valid business registration certificate under the BRO.
- in the case of an Exchange Participant intending to trade or trading from time to time through HKATS, comply with all requirements for the maintenance, operation, use and security of HKATS insofar as they relate to the Exchange Participant.
- have all executive director(s) registered with HKFE as Responsible Officer(s).
- have at all times at least one representative available to trade through HKATS on every Business Day.
- comply with the financial resources requirements specified in the Securities and Futures (Financial Resources) Rules and where applicable the financial resources requirements under Rule 313A.

3 Futures Commission Merchant - A participant which trades for its own and clients accounts, and acts as agent for transactions of other participants.

- be a company limited by shares incorporated in Hong Kong.
- hold at least one Futures Exchange Trading Right.
- be a licenced corporation licensed under section 116(1) of the Securities and Futures Ordinance ("SFO") to carry on Type 2 regulated activity under the SFO.
- hold a valid business registration certificate under the BRO.
- in the case of an Exchange Participant intending to trade or trading from time to

time through HKATS, comply with all requirements for the maintenance, operation, use and security of HKATS insofar as they relate to the Exchange Participant.

- have all executive director(s) registered with HKFE as Responsible Officer(s).
- comply with the financial resources requirements specified in the Securities and Futures (Financial Resources) Rules and where applicable the financial resources requirements under Rule 313A.

4 Merchant Trader - A participant which trades for its own account and is a merchant in a deliverable commodity trade on HKFE.

- be a company limited by shares incorporated in Hong Kong.
- hold at least one Futures Exchange Trading Right.
- be a licensed corporation licensed under section 116(1) of the Securities and Futures Ordinance ("SFO") to carry on Type 2 regulated activity under the SFO.
- hold a valid business registration certificate under the BRO.
- in the case of an Exchange Participant intending to trade or trading from time to time through HKATS, comply with all requirements for the maintenance, operation, use and security of HKATS insofar as they relate to the Exchange Participant.
- have all executive director(s) registered with HKFE as Responsible Officer(s).
- (a) be a limited company whose principal business comprises dealing in one or more commodities underlying an Exchange Contract; or

(b) be a limited company which is a subsidiary of a company or entity whose principal business comprises dealing in one or more commodities underlying an Exchange Contract; and all the business of dealing in Futures Contracts and/or Options Contracts of a Merchant Trader must be conducted in connection with or ancillary to the said principal business of the Merchant Trader or its holding company.

- comply with the financial resources requirements specified in the Securities and Futures (Financial Resources) Rules and where applicable the financial resources requirements under Rule 313A.

### **Stock Options Exchange Participantship:**

SEHK has two categories of options participantship, each of which has different requirements :

1) Options Trading Exchange Participant - A participant which can directly trade options through HKATS.

- be an Exchange Participant of SEHK.
- be a Participant of The SEHK Options Clearing House Limited ("SEOCH") or have entered into a Clearing Agreement with a General Clearing Participant ("GCP") of SEOCH to the effect that the GCP undertakes to clear for the applicant all options trades done in SEHK.
- have installed at one or more registered business addresses such computer equipment and software as may be specified by SEHK and the Options System Operator for gaining access to HKATS and ensure that such computer equipment is operated and maintained in accordance with the requirements of SEHK.
- have in place, to the satisfaction of SEHK, staff and internal operating and security procedures necessary, amongst other things, to enable it always to have access to HKATS for the purpose of conducting its Exchange Traded Options Business and, where applicable, for processing instructions from its clients and for the purpose of providing professional services to its clients.

2) Options Broker Exchange Participant - A participant which can only trade options through an Options Trading Exchange Participant.

- be an Exchange Participant of SEHK.
- have in place exclusively with one Options Trading Exchange Participant, which is a Direct Clearing Participant or a General Clearing Participant of SEOCH, an Options Broking Agreement;
- have in place, to the satisfaction of SEHK, staff, computer equipment and internal operating and security procedures necessary, amongst other things, to enable it always to have access to updated price information regarding options traded on SEHK for the purpose of conducting its Exchange Traded Options Business and, where applicable, for processing instructions from its clients and for the purpose of providing professional services to its clients.

### **Hong Kong Securities Clearing Company (HKSCC) Participantship:**

1) The requirements of Direct Clearing Participantship of HKSCC are as follows:

- be an Exchange Participant of SEHK.
- undertake to (i) sign a Participant Agreement with HKSCC; (ii) pay to HKSCC an admission fee of HK\$50,000 in respect of each Stock Exchange Trading Right held

by it; and (iii) pay to HKSCC its contribution to the Guarantee Fund of HKSCC as determined by HKSCC from time to time subject to a minimum cash contribution of HK\$50,000 in respect of each Stock Exchange Trading Right held by it.

- open and maintain a single current account with one of the CCASS Designated Banks and execute authorisations to enable the Designated Bank to accept electronic instructions from HKSCC to credit or debit the account for CCASS money settlement, including making payment to HKSCC.
- provide a bank guarantee or a form of insurance to HKSCC to secure an amount of not less than HK\$100 million, as security for liabilities arising from defective securities deposited by it into CCASS, if so required by HKSCC.
- have a minimum liquid capital of HK\$3,000,000 (as imposed by the Board of HKSCC on 3 October 2005).

2) The requirements of General Clearing Participanship of HKSCC are as follows:

- (a) be a licensed corporation which is licensed to carry on Type 1 regulated activity under the Securities and Futures Ordinance (Chapter 571 of the laws of Hong Kong); or  
(b) be a registered institution which is registered to carry on Type 1 regulated activity under the Securities and Futures Ordinance (Chapter 571 of the laws of Hong Kong)
- (if the applicant is a licensed corporation)
  - (a) be a company limited by shares incorporated in Hong Kong; and
  - (b) have liquid capital of not less than HK\$300,000,000 or its required liquid capital under the Financial Resources Rules, whichever is the higher; or
  - (c) have paid-up share capital of not less than HK\$300,000,000 and have liquid capital of not less than HK\$100,000,000 or its required liquid capital under the Financial Resources Rules, whichever is the higher.
- (if the applicant is a registered institution)
  - (a) have a minimum credit rating of A3 or equivalent by a credit rating agency recognized by HKSCC; or

(b) be a Hong Kong dollar note-issuing bank.

- demonstrate to the satisfaction of HKSCC that it has an established clearing business in securities listed and/or traded on the Exchange or it has the financial and operational capacity to establish and operate a clearing business in securities listed and/or traded on the Exchange.
- undertake, if its application is successful, to sign a Participant Agreement; to pay to HKSCC as provided in the Participant Agreement an admission fee of HK\$50,000 or HK\$50,000 in respect of each Stock Exchange Trading Right held by the applicant (if applicable) whichever is the higher (or such other amount as may be specified by HKSCC from time to time); to pay to HKSCC its Contribution in accordance with the Rules; to arrange indemnity insurance in a form acceptable to or as prescribed by HKSCC; and to provide, if required, assurances acceptable to HKSCC in respect of its obligations to HKSCC as a result of its participation in CCASS, including, but not limited to, liabilities for defective Eligible Securities deposited by it into CCASS, such assurances to be in the form of insurance, a guarantee from a bank or in such other form as shall be acceptable to HKSCC; and to procure the agreement of its Designated Bank to comply with the requirements of HKSCC for CCASS money settlement purposes.

Other than Direct Clearing and General Clearing Participantship, HKSCC has Clearing Agency, Custodian, Investor, Stock Lender and Stock Pledgee Participantship. Please refer to Chapter 3 of the Rules of HKSCC for their admission requirements.

#### **HKFE Clearing Corporation (HKCC) Participantship:**

HKCC has two categories of Participantship, each of which has different conditions and privileges :

1 General Clearing Participant ("GCP") - A participant which registers and clears trades for its own and clients accounts and on behalf of Non-Clearing Participants.

- be an Exchange Participant of HKFE.
- have a liquid capital of not less than the higher of:
  - (a) its required liquid capital under the Financial Resources Rules; or
  - (b) HK\$20,000,000.

- contribute HK\$7,500,000 Participant Deposit to the Reserve Fund referred to in Chapter VII of the HKCC Rules.

2 Clearing Participant ("CP") - A participant which only registers and clears trades for its own and clients' accounts.

- be an Exchange Participant of HKFE.
- have a liquid capital of not less than the higher of:
  - (a) its required liquid capital under the Financial Resources Rules; or
  - (b) HK\$5,000,000.
- contribute HK\$1,500,000 Participant Deposit to the Reserve Fund referred to in Chapter VII of the HKCC Rules.

### **The SEHK Options Clearing House (SEOCH) Participants:**

SEOCH has two different categories of Clearing Participants, each of which has different requirements:

1 Direct Clearing - A participant which can register and clear its own and clients accounts.

- be an Options Trading Exchange Participant of SEHK.
- have in place procedures and a back office computer system appropriate to the type of SEOCH Participant applied for.
- have a liquid capital of not less than the higher of:
  - (a) its required liquid capital under the Financial Resources Rules; or
  - (b) HK\$5,000,000.
- contribute HK\$1,500,000 to the Reserve Fund referred to in Chapter 3 of the SEOCH Rules.

2 General Clearing - A participant which can register and clear its own account, its clients' accounts and other Options Trading Exchange Participants' own and clients' accounts.

- must be an Options Trading Exchange Participant of SEHK.
- have in place procedures and a back office computer system appropriate to the type of SEOCH Participant applied for.
- have a liquid capital of not less than the higher of:
  - (a) its required liquid capital under the Financial Resources Rules; or
  - (b) HK\$20,000,000.



- contribute HK\$5,000,000 to the Reserve Fund, with an additional HK\$1,500,000 in respect of each Clearing Agreement entered into with Options Trading Exchange Participants from the fourth agreement onwards referred to in Chapters 3 and 4 of the SEOCH Rules.

Other than the above criteria, an applicant shall also demonstrate that:

- its shareholders and directors are fit and proper.
- its has adequate operation and risk management control.

## LISTING IN HONG KONG

Companies list their shares for reasons that are unique to the particular circumstances of each company and its shareholders and management. A company may seek a listing because its shareholders would like to realise part of their investment; or because it lacks the funds to expand its business operations. Whatever your company's reasons for listing, a listing status could offer a company the following advantages:

- **Access to capital for growth** with opportunities to raise funds both at the time of listing and at later stages
- **Broader shareholder base** could potentially lead to a more liquid market in the trading of the company's shares
- **Employee incentive and commitment** resulting from the grant of employee share options to tie in the company's key staff
- **Higher profile and visibility** in the market could generate reassurance among the company's customers and suppliers
- **Increased corporate transparency** could lead to the grant of credit lines on more competitive terms from the company's bankers
- **Greater efficiency** resulting from rigorous disclosure standards demanded of listed issuers will lead to an improvement in their control, management information and operating systems

Whatever your reasons for listing, it is important that you consider and discuss with your advisers all the factors which are specific to your company and the vision of its management.

### **Advantages of Listing in Hong Kong:**

Once a company has decided to pursue a listing, it must also consider a suitable market on which to list its shares. In this connection, some of Hong Kong's advantages as a listing venue are set out below:

- **Gateway to Mainland China:** With close trading and business links to other Asian economies, Hong Kong is strategically placed in a high growth region. As an internationally recognized financial centre with an abundance of professional expertise, this Exchange has provided many Asian and multinational companies with fund-raising opportunities.
- **Leveraging on Mainland China's Growth:** Hong Kong provides an ideal platform for issuers to achieve exposure in the rapidly growing Mainland Chinese market. Together with China's accession into the World Trade Organisation (WTO) and Beijing's hosting of the Olympics in 2008, companies will be able to leverage on the multitude of opportunities offered by this escalating economy.
- **Home Market Theory:** As Hong Kong is part of Mainland China, this market is the first choice for Mainland Chinese companies seeking a listing on an international overseas market. The applicability of the "home market" theory is reinforced by the statistic that a significant portion of the trading value of Mainland Chinese enterprises is conducted in Hong Kong where such companies have a dual listing in Hong Kong and another major overseas exchange.
- **Strong Legal System:** Hong Kong has a well established legal system based on English common law which provides a strong and attractive foundation for companies to raise funds as well as confidence to investors.
- **International Accounting Standards:** Apart from Hong Kong Financial Reporting Standards and International Financial Reporting Standards, this Exchange also accepts the use of generally accepted accounting principles in the United States of America ("US GAAP") or other accounting standards by new applicants under certain circumstances.
- **Sound Regulatory Framework:** The Listing Rules are on a par with international

standards and demand from listed issuers a high level of disclosure. Their stringent corporate governance requirements ensure that investors have access to timely and transparent information which allows them to appraise the position and prospects of the companies.

- **Free Flow of Capital and Information:** With zero capital flow restrictions, numerous tax advantages, currency convertibility and the free transferability of securities, Hong Kong offers an attractive market for both issuers and investors alike.
- **Advanced Clearing and Settlement Infrastructure:** Hong Kong boasts sound and solid securities and banking sectors which are supported by a strong trading, clearing and settlement infrastructure. Further, the Hong Kong Monetary Authority's US Dollar Clearing System allows local financial institutions to settle US dollar transactions real time in the Asian time zone against the delivery of Hong Kong dollars, instead of 12 hours later in the New York time zone. This reduces the foreign exchange settlement risk caused by the time gap between the settlement of Hong Kong dollars and US dollars.

### **The role of HKEX**

At HKEx, they are committed to performing their public duty to ensure orderly and fair markets and that risks are managed prudently, consistent with the public interest and, in particular, the interests of the investing public. This Exchange is able to offer a transparent and well-regulated market for companies of all types and sizes to list their shares. Investors can also participate in the growth of both local and overseas companies listed on this Exchange in the confident knowledge that they are investing in a market that meets international standards.

### **The markets of HKEX**

This Exchange operates two markets on which companies may choose to list their shares: the Main Board and the Growth Enterprise Market. The two markets are of equal standing but have a distinct profile to cater to the different needs of companies.

**Main Board:** A market for companies that meet the exchange's profit or other financial standards requirement. The industries of companies listed on this Main Board range from conglomerates and banks to utilities and property plays.

**Growth Enterprise Market (GEM):** A market for enterprises from all industries that have growth potential, but do not have a performance track record. GEM's high corporate governance standards make it an attractive market for both companies and investors alike.

### **Listing Considerations**

A listing is a logical step in the life-cycle of companies. However, whether a listing is right for your company is dependent on the particular circumstances of each company and whether its directors and management are committed to the on-going obligations such decision entails.

A decision to list must be made after due and careful assessment of your company, its business strategy and the intentions of its shareholders and management. Preliminary questions to ask include:

- what is the **rationale** for listing the company? For example, are its shareholders looking to realise part of their investment in the company, or is the company looking for capital to fund its development? And does a listing fit into the company's overall strategy?

- are the company and its management aware of the **time and cost** involved in a listing exercise?

- are the shareholders ready to accept a degree of **loss of control** in the company, where certain transactions may require the prior approval of the company's independent shareholders?

- is the management prepared to accept the rigorous **on-going obligations** that are demanded of a listed company and accept closer scrutiny by the public?

- are the directors aware that any changes of personnel at the board level may affect the company's **share price and investor confidence**?

- is the company's management willing to **commit time to meeting and communicating** with its investors and research analysts?

- will the management be able to **balance** the company's short term performance such as maximising shareholders' value with its longer term corporate strategy?

- are the directors aware of their **fiduciary duties** and restrictions on dealings once a company is listed?

Even if you are able to answer the above questions with confidence, HKSE strongly advises you to discuss with your advisers whether a listing is right for your company and the issues and challenges your company may face.

### **Listing Methods**

**Offer for Subscription:** An offer to the public by, or on behalf of, an issuer of its own securities for subscription.

**Offer for Sale:** An offer to the public by, or on behalf of, the holders or allottees of securities already in issue or agreed to be subscribed.

**Placing:** The obtaining of subscriptions for, or the sale of securities by, an issuer or intermediary primarily from or to persons selected or approved by the issuer or the intermediary.

**Introduction:** An application for listing of securities already in issue where no marketing arrangements are required.

### **General Principles for the Listing of Securities**

The listing of securities on the Exchange is governed in such a way as to ensure that investors have and can maintain confidence in the market. The general principles are set out below:

- Applicants are suitable for listing;
- The issue and marketing of securities are conducted in a fair and orderly manner and potential investors are given sufficient information to enable them to make a properly informed assessment of an issuer;
- Investors and the public are kept fully informed by listed issuers, and in particular immediate disclosure is made of any information, to be evenly disseminated, which might reasonably be expected to have a material effect on market activity in, and the prices of, listed securities;
- All holders of listed securities are treated fairly and equally;
- Directors of a listed issuer act in the interests of its shareholders as a whole, particularly where the public represents only a minority of the shareholders.

### **Listing Schedule**

An IPO entails numerous steps and procedures before the securities of a company become listed. Apart from selecting a suitable sponsor and other professional parties, a potential new applicant must undergo relevant due diligence to verify its readiness to go public. With the help of sponsors, the new applicant must also prepare a listing document so that prospective investors are able to appreciate and appraise the company's business and prospects.

The IPO schedule below illustrates the typical process of an IPO preparation:

- Planning and Preparation
- Selecting the sponsor, advisers and underwriters
- Strategic discussion

- Preparing the timetable
- Considering and implementing the legal requirements within the company
- Structuring
- Preparing the business plan and new issue concept
- Preparing the equity story
- Choosing the market segment
- Preparing the offering prospectus
- Due diligence
- The Listing Application
- Submitting the application for admission
- Dealing with the Exchange
- Obtaining approval from the (GEM) Listing Committee of the Exchange
- Realisation and Marketing
- Preparing investor relations activities and briefing analysts
- Publishing the offering prospectus
- Targeting and contacting investors (e.g. roadshows)
- Price Determination (if applicable)
- Price determination and method of allocation
- Price stabilisation and greenshoe option

### **Parties Involved in a New Listing**

A listing exercise involves various professional parties which have their own unique role in the process. This section aims to explain the key players in a share offering.

**1. Sponsors:** A company must appoint a suitable sponsor for its listing proposal. Sponsors of Main Board listings must be a member of the Exchange, issuing house, merchant bank or other similar person who is acceptable to the Exchange. Meanwhile, sponsors of GEM listings must be licensed or registered under the Securities and Futures Ordinance. Companies planning to apply to list on GEM must select a sponsor from a List of GEM Sponsors approved by the Exchange. The sponsor will be responsible for preparing the company for listing, for lodging the formal listing application and all supporting documents with the Exchange, and for dealing with the Exchange on all matters arising in connection with the application.

For Main Board companies, the requirement to have a sponsor will end once the new applicant is listed, although it is recommended that the listed issuer retain the services of its sponsor for at least one year following its listing. However, under their Main Board

Listing Rules, a PRC issuer is required to retain for at least one year following its listing the services of its sponsor, or other financial adviser or professional firm which is acceptable to the Exchange. In addition, GEM companies are required to appoint a sponsor for a fixed term period covering at least the remainder of the financial year during which the listing occurs and the two financial years thereafter.

Before you appoint a sponsor, HKSE strongly advises you to speak with a selection of sponsors to assess their suitability to act as sponsor to your company's listing. You should select a sponsor that is able to offer comprehensive and impartial advice regarding all aspects of the listing process.

**2. Reporting Accountants:** All accountants' reports must be prepared by professional accountants who are qualified under the Professional Accountants Ordinance for appointment as auditors of a company and who are independent of the issuer.

Reporting accountants are responsible for reviewing the company's financial records and position, and preparing the new applicant's group accounts in accordance with relevant accounting standards and regulatory guidelines. This will enable prospective investors to make informed investment decisions.

**3. Legal Advisers:** Legal advisers are responsible for ensuring that the new applicant will be in compliance with the laws of each of the relevant jurisdictions. They will also work closely with the sponsor and reporting accountants on any restructuring undertaken by the new applicant.

**4. Underwriters/Placing Agents:** These are typically securities firms and the Exchange Participants of HKSE who would be responsible for distributing the securities of the company during a share offering. Underwriters are required to underwrite any shares not taken up by investors.

**5. Valuers:** Valuers are required to be appointed to attribute a value to a new applicant's properties prior to a listing. Valuers may also be appointed to prepare valuation on other assets of the company.

### **About Sponsors**

The roles of sponsors and independent financial advisers (IFAs) are of special importance in Hong Kong due mainly to the unusually large proportion of listed companies and listing applicants whose domicile and main operations are located outside the jurisdiction.

Policy developments: On 19 October 2004 the Stock Exchange of Hong Kong Limited (SEHK), a wholly-owned subsidiary of Hong Kong Exchanges and Clearing Limited (HKEx), and the Securities and Futures Commission (the SFC) jointly published a

Consultation Conclusions Report on the Regulation of Sponsors and IFAs (the Conclusions Report). SEHK also published amendments to the Listing Rules (Main Board and GEM) consistent with the policy conclusions set out in the Conclusions Report. The rule amendments commence on 1 January 2005, subject to certain transitional arrangements set out in the news release of 19 October 2004.

The policy conclusions and rule amendments address, amongst other things:

- when an issuer must appoint a sponsor or post-listing adviser (known as compliance adviser);
- the role and responsibilities of issuers in assisting sponsors and compliance advisers;
- undertakings and declarations required to be given by sponsor firms to SEHK;
- independence requirements for sponsors and compliance advisers; and
- the roles and responsibilities of sponsors and compliance advisers including the due diligence SEHK expects sponsors should typically perform.

#### **Participants Shareholding Reports (For Listed Issuers)**

A CCASS Participants Shareholding Report ("PSH Report") contains the shareholding records of CCASS Participants in CCASS on a specified date in respect of particular listed securities which have been admitted into CCASS. The PSH Report shows the shareholding of all CCASS Participants (i.e. Brokers, Custodians, Stock Lenders, Stock Pledgees, Clearing Agency and Investors).

Listed companies' Directors and other duly authorized person(s) can request for PSH Reports related to the securities issued by their own listed company and admitted into CCASS.

Each PSH Report shows shareholding information on a particular day. Shareholding information for the past 12 months can be retrieved. All the shareholding information shown in the reports reflects the shareholdings of Participants after settlement of trades. All Exchange trades are required to be settled on T+2 (T= Trading Day).

## **GROWN ENTERPRISE MARKET (GEM)**

As a gateway to Mainland China and with close trading and business links to other Asian economies, Hong Kong is strategically placed in a high growth region. Over the years, Hong Kong has developed into an internationally recognised financial centre and has provided many Asian and multinational companies with fund-raising opportunities.



Growth enterprises particularly those emerging ones, i.e. enterprises that have good business ideas and growth potential, however, may not always be able to take advantage of these opportunities. A great number of them do not fulfil the profitability/track record requirements of the existing market of the Stock Exchange of Hong Kong (i.e. main board of the Exchange) and are therefore unable to obtain a listing. The Growth Enterprise Market (GEM) is designed to bridge this gap.

GEM offers growth enterprises an avenue to raise capital. The Growth Enterprise Market does not require growth companies to have achieved a record of profitability as a condition of listing. This removal of entry barrier enables growth enterprises to capitalise on the growth opportunities of the region by raising expansion capital under a well-established market and regulatory infrastructure. Besides the listing of local and regional enterprises, international growth enterprises can enhance their business presence and raise their product profile in China and Asia by listing on GEM.

GEM offers investors an alternative of investing in "high growth, high risk" businesses. The future performance of growth companies particularly those without a profit track record are susceptible to great uncertainty. Because of the higher risks involved, GEM is designed for professional and informed investors. It works on the basis of caveat emptor or buyers beware.

GEM provides a fund raising venue and a strong identity to foster the development of technology industries in Hong Kong and the region. GEM is opened to growth companies big and small engaged in all industries. Technology companies in particular should find it attractive to align them with the strong growth theme of the market. In providing a fund raising venue and a strong identity to technology companies, GEM complements and supports the HKSAR Government's initiative to promote the development of technology industries in Hong Kong.

GEM promotes the development of venture capital investments. GEM provides both an exit ground and a venue for further fund raising for investments made by venture capitalists. This facilitates more and earlier investments to be made by the venture capitalists in support of the growth of the industry.

## **Organisation**

GEM is a market operated by the Stock Exchange of Hong Kong and governed by the Board of the Stock Exchange of Hong Kong. The Board of the Stock Exchange of Hong Kong has arranged for all of its powers and functions in respect of all listing matters

related to GEM to be discharged by the GEM Listing Committee and/or its delegates, subject to the review procedures set out in the GEM Listing Rules. The GEM Listing Committee comprises members drawn from a wide discipline, including practitioners, listed company representatives and industry experts. The governance of GEM is designed to ensure that the market operates fairly, orderly and efficiently.

### **Regulatory philosophy and major features of GEM**

GEM operates on the philosophy of "buyers beware" and "let the market decide" based on a strong disclosure regime. Its rules and requirements are designed to foster a culture of self compliance by listed issuers and sponsors in the discharge of their respective responsibilities. The following major features are to support this philosophy:

**Greater, More Frequent and Timely Disclosure:** GEM requires a listing applicant to disclose in detail its past business history and its future business plans which are key components of the listing documents. After listing, a GEM issuer is required to make half yearly comparison of its business progress with the business plan for the first 2 financial years, publish quarterly accounts in addition to half yearly and annual accounts and a shorter period is allowed to make available this information to the public. To allow market participants easy access to information, GEM has a separate website which provides comprehensive information covering all aspects of the market including company announcements and other information of listed issuers, trade prices and market statistics.

**GEM Sponsor Scheme:** In recognition of the pivotal role that a GEM sponsor plays in the listing process, a GEM sponsor is required to satisfy a set of detailed eligibility criteria and assume clear responsibilities in the discharge of its duties. Amongst its duties, a GEM sponsor is required to conduct due diligence and to satisfy itself, to the best of its knowledge and belief and having made due and careful enquiries, that proper disclosures have been made.

From the time of listing, an issuer is required to establish a strong corporate governance base to facilitate its compliance with the GEM Listing Rules and adherence to proper business practices. These measures include the appointment of a qualified accountant to supervise its finance and accounting functions, designating an executive director as the compliance officer, appointment of 2 independent directors and the establishment of an audit committee. In the first 2 years after listing, a GEM issuer is also required to retain a sponsor to advise and assist the company and its directors in the discharge of their listing obligation

At the time of listing the Exchange reviews the listing documents of an applicant to ensure that they comply with the requirements of the Companies Ordinance and the GEM Listing Rules. However, the Exchange does not assess the commercial viability of any applicant. The Exchange similarly reviews all public announcements made by an issuer after it has been listed. However, the responsibility for the correctness, quality and sufficiency of the disclosed information made by an issuer rests ultimately with the issuer and its directors.

## **Principal Listing Requirements**

In recognition that promising growth enterprises may not always have achieved a past profit record, the GEM Listing Rules does not impose a profit requirement on listing applicants.

A listing applicant must appoint a GEM Sponsor to submit its listing application and the appointment must continue for a fixed period covering at least the period comprising the remainder of the financial year in which listing takes place and the 2 full financial years thereafter (the "Period").

The new applicant must be incorporated under the laws of Hong Kong, the PRC, Bermuda or the Cayman Islands.

Operating history:

1. demonstrate at least 24 months of Active Business Pursuits immediately preceding the date of submission of the listing application. Such requirement can be reduced to 12 months if:

(a) the company has a total turnover of not less than HK\$500 million in the last 12 month period as reported upon in the accountants' report contained in the initial listing document, total assets of not less than HK\$500 million as shown in the balance sheet in respect of the last financial period reported upon in the accountants' report, or market capitalisation of at least HK\$500 million determined as at the time of listing;

(b) at the time of listing, the company has a minimum market capitalisation of HK\$150 million in public hands which is held by at least 300 shareholders, with the largest 5 and largest 25 of such shareholders holding in aggregate not more than 35% and 50% respectively of the equity securities in public hands; and

(c) the initial public offer price of the shares is not less than HK\$1.

2. have actively pursued a focused line of business;

3. be under substantially the same management and ownership over the period of Active Business Pursuits;
4. control the board of the subsidiary or subsidiaries and have an effective economic interest of not less than 50% of that subsidiary or those subsidiaries, if the active business is carried out by its subsidiary or subsidiaries; and
5. have an accountants' report covering at least 2 full financial years immediately prior to the date of listing document or if the new applicant satisfied the conditions set out in items (1)(a) to (c), at least the 12 month period from the commencement of its Active Business Pursuits.

The new applicant must meet the following requirements:

1. for companies with a market capitalisation of not exceeding HK\$4 billion, the minimum public float is 25% subject to a minimum of HK\$30 million
2. for companies with a market capitalisation of over HK\$4 billion or above, the minimum public float is the higher of : i) the percentage that would result in the market value of the securities in public hands equal to HK\$1 billion (determined as at the time of listing); and ii) 20%; and
3. the new applicant must have not less than 100 public shareholders at the time of listing. A minimum of 300 public shareholders at the time of listing if the new applicant meets the requirement of 12 months' Active Business Pursuits.

Corporate governance:

The new applicant must have:

1. appointed competent personnel to fill the following positions: Company Secretary, Qualified Accountant, Compliance Officer and Authorised Representatives;
2. appointed at least 2 Independent Non-executive Directors; and
3. established an audit committee.

### **Initial Cost of Listing**

The major categories of the initial cost of listing normally include the following:

1. Professional fees
  - sponsor fee
  - company's legal adviser fee
  - sponsor's legal adviser fee
  - reporting accountants fee
  - property valuation fee

- public relation adviser fee

## 2. Cost of publications

- prospectus, application forms, share certificates and other printing fee
- translation fee

## 3. Marketing expenses

## 4. Others

- share registrar fee
- receiving banker fee
- underwriting commission, if applicable
- initial listing fee
- transaction levy
- trading fee

# TRADING MECHANISM

## Trading mechanism of the exchange

The trading system of the Exchange is an order-driven system. During the Pre-opening Session, the system accepts at-auction and at-auction limit orders only. During the Continuous Trading Session, the system accepts limit, enhanced limit and special limit orders only, with an option for an "All-or-Nothing Qualifier" that confines the order to be either executed immediately in full or rejected, without being written into the central order book.

Trading is conducted through terminals in the Trading Hall of the Exchange or through the off-floor trading devices at Exchange Participants' offices.

## AMS- Trading Sessions:

The maximum order size for automatch stocks is 3,000 board lots. The maximum number of outstanding orders per broker ID has been removed while the number of orders in each price queue has been increased to 20,000 effective 29 January 2007. Orders are

accumulated over a certain period of time and matched at a pre-defined order matching period. Orders are matched in order type, price and time priority (at-auction orders carry a higher matching priority), at the final Indicative Equilibrium Price ("IEP"). The Pre-opening Session was introduced in March 2002.

The maximum order size for automatch stocks is 3,000 board lots. The maximum number of outstanding orders per broker ID has been removed while the number of orders in each price queue has been increased to 20,000 effective 29 January 2007. Orders are continuously executed in strict price and time priority. An order entered into the system at an earlier time must be executed in full before an order at the same price entered at a later time is executed.

## **Order Types**

AMS currently supports the following order types for automatching:

**Pre-opening Session:** The AMS/3 only accepts at-auction and at-auction limit orders during the Pre-opening Session as long as the order price input into the AMS/3 does not deviate 9 times or more from the previous closing price or the nominal price (as the case may be), if available.

1. **At-auction Order:** An at-auction order is an order with no specified price and is entered into the AMS/3 for execution at the final Indicative Equilibrium Price (IEP). It enjoys a higher order matching priority than an at-auction limit order and will be matched in time priority at the final IEP.

Any outstanding at-auction orders will be cancelled before the commencement of the Continuous Trading Session.

2. **At-auction Limit Order:** An at-auction limit order is an order with a specified price. An at-auction limit order with a specified price at or more competitive than the final IEP (in case of buying, the specified price is equal to or higher than the final IEP, or in case of selling, the specified price is equal to or lower than the final IEP) may be matched at the final IEP. An at-auction limit order will be matched in price and time priority at the final IEP. No at-auction limit order will be matched at a price worse than the final IEP.

Any outstanding at-auction limit orders will be carried forward to the Continuous Trading Session and treated as limit orders provided that the specified price of that at-auction limit order does not deviate 9 times or more from the nominal price. Such orders will be put in the price queue of the input price.

**Continuous Trading Session:** The AMS/3 only accepts limit, enhanced limit and special limit orders (with an option for an "All-or-Nothing Qualifier" that confines the order

to be either executed immediately in full or rejected without being written into the central order book) during Continuous Trading Session as long as the order price input into the AMS/3 (i) does not deviate 9 times or more from the nominal price, if available, and (ii) follows the quotation rules unless the restriction is waived.

1. Limit Order: A limit order will allow matching only at the specified price. The sell order input price cannot be made at a price below the best bid price, if available whereas the buy order input price cannot be made at a price above the best ask price, if available.

Any outstanding limit order will be put in the price queue of the input price.

2. Enhanced Limit Order: An enhanced limit order will allow matching of up to 5 price queues (i.e. the best price queue and up to the 5<sup>th</sup> queue at 4 spreads away) at a time provided that the traded price is not worse than the input price. The sell order input price cannot be made at a price of 5 spreads (or more) below the current bid price whereas the buy order input price cannot be made at a price of 5 spreads (or more) above the current ask price.

Any outstanding enhanced limit order will be treated as a limit order and put in the price queue of the input price.

3. Special Limit Order: A special limit order will allow matching of up to 5 price queues (i.e. the best price queue and up to the 5<sup>th</sup> queue at 4 spreads away) at a time provided that the traded price is not worse than the input price. A special limit order has no restriction on the input price as long as the order input price is at or below the best bid price for a sell order or at or above the best ask price for a buy order.

Any outstanding special limit order will be cancelled and will not be stored in the AMS/3.

## **Trade Types**

AMS currently supports the following trade types:

- Automatch Trade: An automatch trade is a trade concluded through the AMS by automatic matching of buys and sell orders submitted by Exchange Participant(s).
- Direct Business Transaction: A direct business transaction refers to the business transacted by an Exchange Participant who acts for both the buyer and the seller, whether as principal or agent.
- Non-Direct Business Transaction: A non-direct business transaction refers to the business transacted by two Exchange Participants, one as buyer and the other as seller.

- **Manual Trade:** A manual trade is a trade concluded by Exchange Participant(s) not through the AMS for which the selling party is responsible to report the trade details to the Exchange through the AMS.
- **Odd Lot Trade:** An odd lot trade is a trade with the quantity of shares less than one board lot.
- **Auction Matching Trade:** An auction matching trade refers to the automatic order matching of the auction orders during the order matching period in the pre-opening session. Automatic order matching of the auction orders shall be conducted in accordance with Rule 517(1) (a) and no order shall be input into the AMS, amended or cancelled. All transactions concluded based on the methodology specified in Rule 517(1) (a) during the order matching period shall be deemed to have been concluded at the commencement of the order matching period.
- **Pre-opening Trade:** A pre-opening trade is a trade concluded before the commencement of morning session including that concluded on the previous day but not recorded in the AMS.

Order and trade information is disseminated to the market and investors through the market data feed, the Exchange's website and other information systems. There is also a news system to display compliance and Exchange news and news on listed companies in both English and Chinese to enhance information dissemination to Exchange Participants and the public.

#### Quotation Rules

The first bid or ask order entered into the trading system on each trading day is governed by the opening quotation rule. The first order if it is a bid must be higher than or equal to the previous closing price minus twenty-four spreads. The first order if it is an ask must be lower than or equal to the previous closing price plus twenty-four spreads. The first order, whether it is a bid or ask, shall not in any case deviate 9 times or more from the previous closing price. Quotations for buy and sell order other than the opening quotations are governed by another set of quotation rules and a scale of spreads. In particular, a buy order or a sell order shall not be made at a price that deviates 9 times or more from the nominal price. However, quotation rules in general do not apply to at-auction limit orders, except that a buy at-auction limit order or a sell at-auction limit order shall not be made at a price that deviates 9 times or more from the nominal price.

The spread table is available under the Second Schedule of the Rules of the Exchange.

#### **AMS/3 Trading System**



The third generation of the AMS is a trading system developed by the Stock Exchange of Hong Kong Ltd. and was launched on 23 October 2000. The system consists of four key components - (1) Trading Terminal; (2) Multi-Workstation System ("MWS"); (3) Broker Supplied System ("BSS"); and (4) Order Routing System ("ORS").

Exchange Participants can choose among Trading Terminals, Multi-Workstation System and Broker Supplied System as their trading facilities. Depending on the type of trading facility used by the Exchange Participants, investors can place orders via various channels to their brokers. The Order Routing System, developed by the Exchange, enables investors to place trading requests electronically over the Internet and other access channels (such as mobile phones using the network of operators who participate in AMS/3). Only Exchange Participants using MWS and BSS can receive investor orders through ORS.

# MADRID STOCK EXCHANGE

## THE HISTORY OF MADRID STOCK EXCHANGE

1831: King Fernando VII founds the Madrid Stock Exchange, 20 October marks first day's trading. Banks railways and iron and steel companies are first companies traded.

1854: First official Bulletin of share prices published.

1866: Bank of Spain created.

1868: Peseta comes into being.

1878: Construction of Current Madrid Stock Exchange begins.

1893: Queen Maria Christina opens present day Madrid Stock Exchange of 7 May.

1898: Spain loses Cuba, Puerto Rico and the Philippines, triggering a 20% drop in share prices.

1900: MSE enjoys spectacular renaissance thanks to influx of funds from Cuba and the Philippines. 61 companies listed by end of the year.

1914: First World War. Madrid Stock Exchange remains open and trading volumes continue to rise.

1923: Coup d' etat led by Miguel Primo de Rivera Economic policy under the dictatorship fuels increase in public works. Telefonica and Campsa created.

1929: Wall Street Crash. MSE not immediately affected.

1936: Civil War prompts closure of MSE

1940: Trading on MSE recommences on 5 March

1953: Spanish economy begins to open up triggering rapid growth. Stock Exchange is a major beneficiary of the expansion

1959: Stabilisation Plan fuels stock market rally lasting until 1970

1960: The growth of the tourism sector results in anew oost to the economy

1969: D.Juan Carlos is named heir to the throne

1973: Oil crisis

1974: New settlement system, on which the current book entry system will be based into operation

1975: Stock Market takes severe battering due to economic and political factors-death of General Franco, gradual transition to democracy and the oil crisis

1978: Approval of Spanish Constitution and technical improvements to market systems encourage inward investment

1986: Spain joins European Economic Community attracting massive influx of foreign capital and triggering an economic boom, which ends only with the 1987 world stock market crash

1988: Incorporation within European Monetary System further boosts Spain's investor appeal. New stock market legislation passed, which totally transforms Spain's Stock Exchange

1989: Continuous stock market (CATS, or Toronto Computer Assisted Trading System) comes into operation. Seven large caps initially traded, rising to 51 by year end. Following institutions established: National Securities Market Commission (CNMY), market regulator. Sociedad de Bolsas, organization responsible for technical management of electronic trading system Exchange and Stock Market agents replaced by stock broking firms and agencies. Stock Market governing bodies changed, former Trade Councils being replaced by public limited companies called Governing Councils

1990: Gulf War and changes in Eastern Europe destabilize world markets

1991: MEFF Holding, the Spanish market for equity and fixed income derivatives, created Fixed-income electronic trading system comes on line. Investor watchdog for MSE introduced.

1992: SCLV, the new clearing and settlement service, comes into operation and with it the new book-entry settlement system

1993: Open outcry trading abandoned for fixed-income securities, now only traded on the electronic system

1995: CATS stock trading system replaced by the more modern SIBE (Spanish Stock Market Interconnection System). Spectacular increases in trading volumes and market capitalization

1996: Compliance with European convergence criteria boosts Spanish economy

1998: Economic growth, privatizations, stock market flotations and market modernization help make the Stock Exchange a part of every day Spanish life with close to eight million Spaniards investing in equities

1999: Latibex, the market for euro-denominated LatAm securities comes into operation

2000: Bolsa de Madrid launches the market for high growth enterprises

2001: The September 11 terrorist attacks started a new term of continuous crumbling of prices in the Stock Exchange of the world

2002: The holding Bolsas y Mercados Espanoles, which groups secondary markets and registry, clearing and settlement systems, came into existence. Its size will enable it to play a decisive role in shaping the European stock market map. Euro notes and coins began to circulate in the 12 member status of European Monetary Union as of January 1. Since then Spain's securities markets have traded only in euros.

## **IN RECENT YEARS**

The Spanish securities market has made significant progress. The technical, operational and structural systems underlying the market today have resulted in significant growth in its activity and importance. Large investment volumes have been processed and the markets have been given greater transparency, liquidity and efficiency. This growth and new EU market regulations are directing the current efforts of all participants in the Spanish securities market.

**Bolsas y Mercados Españoles (BME)** encompasses the companies that direct and manage the securities markets and systems in Spain. It brings together, under a single activity, decision-taking and coordination unit, the Spanish equity, fixed-income and derivatives markets and their clearing and settlement systems. The BME Group is formed by the Barcelona, Bilbao, Madrid and Valencia stock exchanges, MF Mercados Financieros and Iberclear.

BME is the Spanish markets' response to the new international financial setting, where investors, intermediaries and firms demand an ever-expanding range of services and products within a framework of security, transparency, flexibility and competitiveness.

By uniting their efforts, Spanish markets have attained a top-level size within the European setting and a diversified structure that covers the entire chain of value in securities markets from trading to settlement, including the provision of information and data-processing services. This size and structure permit a more efficient use of resources, cost reduction and the streamlining of services. Thanks to this position, BME is set to play a decisive role in the shaping of the stock market map in Europe.

## **STRUCTURE AND OPERATIONS**

The reorganization of Spain's financial market under the national umbrella of the Spanish Stock Market includes the bolsas, the derivatives markets, and fixed-income

markets. Trading is linked through the electronic Spanish Stock Market Interconnection System (SIBE), which handles more than 90% of transactions; all fixed-income assets are traded through SIBE.

The Madrid Stock Exchange General Index (IGBM) is the exchange's principle index and represents the construction, financial services, communications, consumer, capital/intermediate goods, energy, and market services sectors. The IBEX-35 Index is a capitalization-weighted index comprising the 35 most liquid Spanish stocks traded in the continuous market, and is Bolsa de Madrid's benchmark. Bolsa de Madrid also offers the FTSE-Latibex Index, a European market for Latin American stocks; and the Ibex New Market Index for emerging companies. Settlement is T + 3. Trading on SIBE is conducted from 9 a.m. to 5:30 p.m.; open outcry from 10a.m. to 11:30 a.m., both Monday through Friday.

## HOW TO INVEST IN STOCKS

**Investor profile:** Perhaps the first decision to be made by any saver about to make an investment is exactly how much risk he is willing to assume or, in other words, the level of profit/loss to apply to his investment. The risk/return profile of each individual depends, among other factors, on age, psychological make-up, the horizon over which the investment is to be made and the portion of income available for saving. It is particularly important to define the term of the investment. Studies on different markets, Spain's included, have shown that equities are a safe and a profitable investment in the long term. Assuming long enough periods, of 10 years or more, a diversified portfolio of shares provides superior returns to those of any other financial asset.

**Choosing your product:** Starting from this analysis and preferably with the assistance of a professional, the investor must decide the products that he will make up his portfolio and in which proportion, so his investment will fit to his particular profile.

Fortunately, the Spanish market provides a wide choice of products and securities, which ensures investors the right combination to suit their expectations. Among the most popular investment products on the market are: shares, mutual fund unit-holdings, bonds, bills and other fixed-income assets. One of the guiding principles for choosing your portfolio products and securities is diversification that is, not concentrating the investment in just one or a few securities.

Another concern is the liquidity of the investment, since not all products or securities can be readily disposed of when the investor wishes. The liquidity of a security depends on its trading frequency and volume; the more days a security is traded and the greater its trading and cash volume, the more liquid it will be.

The last point on the investor's basic checklist should be the tax treatment of the investment. Generally speaking, equity investment has an advantaged tax treatment provided its time horizon is sufficiently long.

Choosing the intermediary: Investment decisions are not only about what, when and how much to invest but also about selecting and using the most suitable channel. The most direct route into the stock market is through the so-called market members. These intermediaries, specialising in equity investment, are the only entities qualified to buy and sell directly on the market. At present, the Bolsa de Madrid has 52 members: 34 securities broker-dealers, 9 securities brokers and 9 credit institutions. Other financial entities are empowered to administer securities, manage portfolios or process orders through to market members, but not to intervene directly in the market. Banks and savings banks, with their extensive branch networks, have a direct line to the widest number of investors.

But other intermediaries, like portfolio managers and commercial brokers, can also receive orders from clients and forward them to market members for their execution. The first step for the investor is to approach one of these intermediaries and open a securities account. This is the account through which the investor's securities portfolio will be administered (purchases and sales, subscriptions, dividends, attendance at Shareholders' Meetings, etc.).

It will also form the basis for cash movements arising from market transactions. Before formally opening a securities account, the investors should check out the fees they will be charged and the scope of the intermediary's service delivery (type of orders, ordering procedures: via internet, telephone, etc). Investors may also wish to supplement this administration function with more in-depth advice.

For this reason, intermediaries offer the possibility of subscribing management contracts whereby it is the intermediary which decides on the purchase or sale of specific securities depending on market performance and the investment guidelines agreed with the client. Naturally, this service means paying a higher fee than for the simple administration or custody of securities.

The client must be furnished with information on all transactions executed, the economic rights accruing to securities and financial operations affecting the same, alongside quarterly and annual statements on the composition and value of his portfolio.

Once a securities account has been opened and sufficient funds advanced, the client can issue the relevant purchase and sale orders. These orders must invariably be clearly worded and specify certain conditions: identification of the investor and type of security, the direction of the order (buy or sell), the validity of the same, and the execution price and volume. Unless the client indicates otherwise, the assumption will be that the purchase-sale should be affected at the best price available on the market and that the order will stand until the end of the session in progress.

Formalisation of the order triggers an extraordinarily rapid process of execution and confirmation. Current technology means that any investor, regardless of his whereabouts, has the same opportunities to buy or sell on the market. The routing systems installed by securities broker-dealers and most other financial intermediaries ensure that order details reach the continuous market operator in a matter of seconds.

This operator will then check the data and enter the order in the Spanish Stock Market Interconnection System where it is matched with an opposing order in tenths of a second. This sets in motion an informational flow whereby the transaction is confirmed with the investor.

In the case of securities listed on the continuous market, the whole operation will take just a few seconds, provided the investor is willing to buy or sell at the market price. Immediately following transaction execution, the intermediary will prepare the settlement details. Settlement is the process of securities delivery against cash payment attendant on any market trade. All data on the trade, together with the pertinent settlement instructions, are transferred from the Bolsa to IBERCLEAR (Securities Clearing and Settlement System), in charge of registering securities and settling stock market transactions. This entity also checks that all system participants (securities broker-dealers, banks and savings banks) concur with the settlement details. It then enters the securities with the institution designated by the client and sends instructions for the corresponding cash amounts to be debited or credited in the accounts which entities hold for this purpose at the Banco de España.

**Investment costs:** Investors must bear three types of costs on transacting in the Spanish stock market: the fees charged by the entity or intermediary used, Bolsa trading fees and the settlement fees of IBERCLEAR. This is on top of the administration or custody fees payable to the securities account administrator.

1. Brokerage fees: The fees applied by stock market intermediaries have been free and negotiable since 1 January 1992. Intermediaries are legally obliged to display their prices to the public and notify them to the CNMV (National Securities Markets

Commission). The investor will thus be fully informed, from the outset, of what his equity investment will cost. For individual investors, brokerage fees generally run from 0.2% to 0.3% of the cash amount of each transaction; among the cheapest rates worldwide. Logically, these fees may also be substantially lower for larger transaction and cash volumes.

2. Bolsa trading fees

3. IBERCLEAR settlement fees Fees per operation range from 0.04 to 0.75 euro, depending on the cash amount of the same.

4. The securities administration or custody fees charged by the broker-dealer, broker or bank holding the securities account are usually between 0.15% and 0.25% p.a. of the nominal value of the securities on deposit. This is incremented by charges for specific operations like dividend collection, the subscription of new securities, bond conversion, etc.

All these costs must be clearly specified in the administration or deposit agreement concluded with the client on opening the securities account. Investors in the continuous market can place their orders:

**By price:**

1. Limit orders: buy or sell orders issued with a price limit. Buy orders cannot go through at higher than the price limit set, while sell orders cannot go through at any lower than the limit set. A limit order is executed immediately, if counterparty can be found at the specified price or better. In the absence of counterparty, or one with sufficient volume, the order or the unfilled volume of the same will be held in the order book until counterparty is found.

2. Market orders: order to buy or sell a security at the best available price

3. Market to limit orders: introduced without a price limit and executed at the best counterparty price.

**By conditions:**

1. Execute or kill: the volume of the bid unfilled on entry is excluded by the system

2. Minimum execution: subject to the pre-condition that if a specified minimum volume is not traded on entry, the whole bid is excluded by the system.

3. All or nothing: a special variant of minimum execution orders, in which the minimum coincides with the total order amount.

4. Hidden volume: part of the volume assigned to the order is not disclosed to the rest of the market, but is fed in progressively as the visible portion is traded.



The investor may change any feature of an order introduced but not yet traded, except the direction (buy or sell) and the security specified. However, price alterations or volume increases will incur a loss of priority. The unfilled portion of an order or set of orders may be cancelled. The term of an order may also be specified on entry: valid for the trading session in progress, valid to a certain date and valid up to 90 days.

## **TRACKING THE INVESTMENT**

Plentiful and timely information to the investor public is an essential prerequisite for market transparency as well as a key driver of long-term success.

The maturity of a market can be measured by its transparency and liquidity, two concepts which are closely interrelated. The Securities Markets Law enshrines transparency as one of the foundational principles of the Spanish market. Its article 35 stipulates the information to be provided by issuers admitted to trading. A Ministerial Order of 18/1/91 regulates the content and form of such published information. Royal Decree 726 of 23/6/89, in its article 14, makes it incumbent upon stock exchanges to disseminate information on market operations, using the most appropriate media in each case.

A number of Bolsa and CNMV circulars go into greater detail on the reporting requirements of market participants. Information, accordingly, is one of the securities market issues meriting most regulatory attention. From the vast amount of data available, we can single out certain variables with a major bearing on listed companies' prices. Firstly, company earnings and current interest rates, secondly, the international economic set and, finally, the political and social climate prevailing.

Stock markets value companies on a daily basis using objective means. This valuation is based not so much on the present or past situation of a company as on its future earnings capacity. The market values expectations and translates them daily into real data. The periodic release of company results and their comparison with past earnings and those of sector comparables provide a basic pointer for investors.

As analysts generally arrive at their fair-value estimates by discounting future financial flows, the profit forecasts provided by companies should be read alongside the estimates published in research reports. Interest rate conduct is another key determinant of stock market performance. Remember that, as a general rule, interest rate rises push down the prices of listed shares and vice versa. A country's economic climate both influences and is influenced by the performance of its corporate sector.

Investor sentiment as regards the likely evolution of the country's economy as a whole prompts buying or selling trends in the market which pressure prices upwards or downwards. This economic setting can be tracked via the macroeconomic data published on a regular basis by various organisations. Unemployment figures, inflation rates, consumer behaviour, corporate order books and numerous other indicators have to be factored into stock market forecasting.

In an increasingly global, international economy, the Bolsa is also more and more permeable to the performance of other financial markets. Most influential of all is the New York exchange, whose opening levels set a reference in each day's trading. This phenomenon does not owe solely to the United States' status as the leading world economy, but also to the fact that Spain's biggest cap stocks are also listed on Wall Street so suffer some degree of knock-on from stateside events.

The next most influential after New York are London S.E., Euronext and German S.E. Investments in business projects require a framework of stability and confidence for their long-term development. Uncertainty is the enemy of investment. When political and social circumstances preclude a reasonable stability in economic policymaking and corporate sector regulation, companies hesitate to make the investments needed to build up their competitiveness and profitability. In short, macro and microeconomic data and the conduct of international markets must be analysed in the context of a country's particular political and social juncture.

For these reasons, the information sources open to Spanish investors have become increasingly numerous and sophisticated over the past decade. Most important among them are:

- The communications media: the specialist daily press and the economic pages of general-interest newspapers provide abundant quantitative and qualitative information on financial markets. We can also find numerous magazines, of varying periodicity and circulation, targeting a specific reader public (individual investors, entrepreneurs, sector professionals, etc.). Some of these publications can be accessed via Internet. Television is also increasing the air time devoted to investment matters, and certain broadcasters now offer designated economic-interest channels.

- The Bolsa de Madrid has established a number of communications channels pursuant to its obligation to provide information to the market.

- The Official Quotation Bulletin, published daily on Bolsa de Madrid website, sets out stock prices and trading volumes alongside official announcements on listed companies.

- It provides the market with the quarterly reports of issuing companies (balance sheets, P&L accounts and other relevant information). Listed firms are also required to facilitate their annual accounts, management reports and audit reports at each year's accounting close.

- The Bolsa publishes an annual "Fact Book" which includes a description of its functioning alongside key statistical data.

- Since 1995, the Bolsa de Madrid has run a website, [www.bolsamadrid.es](http://www.bolsamadrid.es), offering general information on the market and share prices with some delay vs. real time.

InfoBolsa services:

InfoBolsa PowerStation Digital: subscribers (supplied by Infobolsa with a decoder box) receive on-screen information via satellite on national and international markets in real time, delayed time or at the close of each day's trading. Information is structured into channels, so users can select those of most interest and configure the service in a customised manner. They are also provided with a trading module for issuing buy/sell orders to national and international markets.

InfoBolsa NetStation: national and international economic-financial news service available in real time via Internet. Company subscribers can route this information on to branches and clients using their corporate Intranet.

InfobolsaNet: a service whereby Infobolsa-supplied financial information components and tools can be loaded onto any website, without the need for customised developments or technical infrastructures. All these components can be tailored to the needs and the corporate image of client websites. This service also delivers on-line market trading solutions.

Infobolsa portal [www.infobolsa.es](http://www.infobolsa.es): specialised in national and international stock markets. Users can access real-time information on the Spanish continuous market, alongside in-depth financial information, forecasts and recommendations by market analysts (fundamental analysis, chartism, etc.) on Spanish, European and Latin American companies. The Infobolsa portal also lists the trading prices of European and American stock markets, national fixed-income securities, derivative products, mutual funds, interest rates and exchange rates, and has just incorporated an economic news section offering up-to-date general and financial information, price tracking, agendas, etc.

Canal Infobolsa: Canal Satlite Digital subscribers can run rapid checks on top world indices and the Spanish continuous market or the exchange rates of main currencies, select the most important financial market news items or track the latest movements in

mutual funds. The Infobolsa channel is available in two versions; a premium channel with real-time information and a basic channel operating in non-real time.

WIF (World Integrated Feed): digital data flow via satellite whereby subscribers can receive and process national and international economic and stock market information in real or non-real time, using a single format.

InfoBolsa Tactil: specialist service for companies wishing to offer national market information to their clients and the wider public, using a platform with a touch-sensitive screen.

Cronobolsa via Internet: a low-cost information service geared to investors seeking last-minute news on national stock market events.

Bolsa on Time: prices of continuous market shares and indices and of futures on the Ibex 35, updated on user demand.

Pro-File: a file service providing daily information on closing prices, brokers, trades etc. in national markets, including financial information and significant events.

# **SWISS STOCK EXCHANGE**

## **ABOUT THE SWISS STOCK EXCHANGE**

The Swiss Stock Exchange or SWX is the 6th largest stock security exchange in the world and the 3rd largest stock exchange in Europe. The SWX is based in Zurich. It is the automated stock exchange system resulting from the merger between Basle, Geneva and Zurich stock exchanges. The market index of SWX is primarily the Swiss Market Index which comprises the country's 30 major equity securities. The Swiss Stock Exchange and Securities Trading Act of 1995 govern the Swiss Stock Exchange. This act contains provisions on the requirements and duties of companies listed in the SWX.

SWX has been certainly innovative, with a fully integrated and electronic trading platform. The Swiss Stock Exchange deals with stocks, warrants and bonds that are regularly traded; although, SWX also deals with other securities aside from stocks including government bonds and other derivatives like stock options. The SWX has been providing services for trading of Eurobonds since 1998. SWX is known for its products, especially the Swiss Index group of market indicators, which includes the Swiss Market Index, Swiss Performance Index, and the Swiss Bond Index.

SWX has adopted necessary measures in order to improve its stock reporting guidelines. The purpose of these measures is to reduce or eliminate the probability of inside trading.

The SWX now requires listed companies to report transactions totalling \$79,000 which was made by any member of their company's management.

The SWX has recorded high trading volume and turnover in the year 2006, which exceeded the usual turnover and trading rates. Apparently, there was an increased in derivative security trading with a turnover growth of 49% and trading volume growth of 62%. There was also a considerable turnover growth in international bonds of 25.5%

In January 2007, the Swiss Stock Exchange implemented new rules which are intended for bringing about changes in the procedures and benefits to issuers, traders and stock exchange participants.

The SWX Swiss Exchange is a central link in the value chain of the Swiss financial marketplace. It organises, operates and regulates key aspects of Switzerland's capital

market. The commercial activities of the SWX encompass the following business fields: cash market operations, information products, the development and operation of fully electronic trading platforms, and the admission of securities to trading on the Exchange.

The SWX is one of the world's most technologically advanced securities exchanges. Though firmly rooted in Switzerland's strong financial centre, the SWX resolutely pursues a strategy focused on internationality.

In translational collaboration, the SWX works with select partners to provide top-rate securities exchange services. A significant factor in this regard is its broad range of products, but perhaps even more so it's integrated, fully electronic trading, clearing and settlement system. With a single click of the mouse, securities orders are executed, cleared, settled and confirmed.

The shares traded on SWX are mainly held in the Swiss-based accounts of domestic and international investors. Bonds, Exchange Traded Funds (ETFs), Exchange Traded Structured Funds (ETSFs) and other investment funds are also traded on the SWX Platform. Securitised derivatives are traded on Scoach. In terms of trading turnover, the SWX Swiss Exchange operates the largest Europe's market segment for listed and exchange-traded warrants.

The warrants market on the SWX is distinguished by its wide range of products and favourable listing conditions, not to mention its ability to respond quickly and flexibly to new investor needs. The SWX Swiss Exchange performs another key function by maintaining the regulatory framework for securities issuance and trading, as well as monitoring and enforcing compliance with these regulations. The SWX, whose legal form is that of an association, represents the interests of Switzerland's financial marketplace while defending the interests of all market participants.

## **THE HISTORY OF SSE**

The Swiss Stock Exchange (SWX), based in Zurich is the first stock exchange in the world to incorporate a fully automated trading, clearing and settlement system in 1995. The Swiss Stock Exchange (SWX) is controlled by an association of banks which number 55. Each of these banks has equal voting rights in the matter of decision making concerning the management and regulation of the Swiss Stock Exchange.

Having the most competitive economy in the world according to the World Economic Forum, has not rescued the Swiss economy from its slow growth that began back in the early 1990s. From being the richest in the European continent through the larger portion of the last century, Switzerland presently ranks fourth amongst the European countries (having a population that exceeds one million) after Ireland, Denmark and Norway.

The Swiss Stock Exchange (SWX) is the joint owners of the Eurex, the world's largest futures and derivatives exchange along with their German partners Deutsche Börse. In July 2004 however the Swiss Stock Exchange (SWX) rejected a proposal of merger from the German company that analysts anticipate as profitable for many small companies enlisted on the Swiss Stock Exchange (SWX).

The Swiss Stock Exchange (SWX) has a blue-chip index as its stock market index. It is called the Swiss Market Index (SMI) and comprises of a maximum of thirty largest and at the same time most liquid, large and mid-cap SPI stocks.

The good news is that in September 2006 the Swiss Market Index (SMI) crossed its previous all time high which was set nearly eight years ago. This reflects the improved performances of the major Swiss companies enlisted on the Swiss Stock Exchange.

The most recent reports state that The Swiss Stock Exchange (SWX) is willing to engulf the electronic stock market - Virt-x, which was founded in the first place through the merger of the Swiss Stock Exchange with Trade point, a London based electronic stock market.

## **BOARD OF DIRECTORS**

**Prof. Dr. Peter Gomez**

**Chairman of the Board Swiss Financial Market Services**

Prof. Dr. Peter Gomez has been Chairman of the Board of Swiss Financial Market Services since beginning of 2008. He previously held the same post at the SWX Group

since 5 May 2006. Since 2005 he has been the Dean of the Executive School of Management, Technology and Law at the University of St. Gallen, a position that he continues to hold. He has been a full professor of business economics since 1990 and headed the university as its rector from 1999 through 2005.

Apart from his academic credentials, he also has experience in the entrepreneurial world. He was a member of the Executive Committees of Ringier and the Distral Group, as well as a founding partner of Valcor AG, Küssnacht, a consulting firm specialising in strategic management and M&A.

### **Dr. Urs Rügsegger**

#### **CEO Swiss Financial Market Services**

Dr Urs Rügsegger has been the CEO of Swiss Financial Market Services since beginning of 2008. Prior to this, he held the position of Head of the Executive Committee of St. Galler Kantonalbank. He joined the bank in 1993 as Head of Controlling, Accounting and Risk Management and was appointed to the Executive Committee in 1997. In 2000 he took charge of the IPO project, which was successfully launched in 2001. As Head of the Executive Committee of St. Galler Kantonalbank he also held various positions with the Association of Swiss Cantonal Banks since 2001.

After completing his business studies at the University of St. Gallen, Urs Rügsegger started his career at Swiss Re in the area of IT. He was deeply involved in the development of commercial applications and the restructuring of Swiss Re's service branch. He transferred to St. Galler Kantonalbank in late 1993 after assuming financial responsibility for Audatex, the international subsidiary group.

### **Dr. Heinrich Henckel**

#### **CEO Division Cash Markets**

Heinrich Henckel was appointed to the Management Committee of the SWX Swiss Exchange in 1998 and has been Head of the Management Committee since December 2000. He is also responsible for the Cash Market division at Swiss Financial Market Services, which includes the SWX Swiss Exchange and its affiliate SWX Europe (former virt-x), a London-based international stock exchange, as well as the market data provider EXFEED. He was a member of the SWX Group Executive Committee and a member of several Boards of Directors within the SWX Group (Eurex, Scoach, virt-x and Exfeed). For



a period of three years ending in 1998, Heinrich Henckel was a lawyer with Baker & McKenzie in Hong Kong, Jakarta and Zurich.

Prior to this, he was a legal expert on the Swiss Admission Board and at Credit Suisse. Heinrich Henckel studied law at the University of Fribourg and acquired his solicitor's degree in the Canton of Zurich. He acquired his doctorate at the University of Fribourg and is the author of various publications dealing with stock-market trading and the capital market.

## MANAGEMENT

The Management Committee of the SWX Swiss Exchange is identical with the senior management body of the Cash Markets Division of Swiss Financial Market Services. It comprises the divisional CEO as well as departmental heads. The divisional CEO is also a member of the SFMS Group Executive Board".

**Heinrich Henckel** was appointed to the Management Committee of the SWX Swiss Exchange in 1998 and has been Head of the Management Committee since December 2000. He is also responsible for the Cash Market division at Swiss Financial Market Services, which includes the SWX Swiss Exchange and its affiliate SWX Europe (former virt-x), a London-based international stock exchange, as well as the market data provider EXFEED.

He was a member of the SWX Group Executive Committee and a member of several Boards of Directors within the SWX Group (Eurex, Scoach, virt-x and Exfeed). For a period of three years ending in 1998, Heinrich Henckel was a lawyer with Baker & McKenzie in Hong Kong, Jakarta and Zurich. Prior to this, he was a legal expert on the Swiss Admission Board and at Credit Suisse. Heinrich Henckel studied law at the University of Fribourg and acquired his solicitor's degree in the Canton of Zurich. He acquired his doctorate at the University of Fribourg and is the author of various publications dealing with stock-market trading and the capital market.

**Christoph Bigger** was elected to the SWX Swiss Exchange Management Committee in December 2006 and is responsible for Business Development & Operations. He joined SWX Swiss Exchange in 2004 as Head of Strategic Business Development and acted as Project Manager in charge of the Scoach Switzerland Ltd. joint venture. His professional career included various management functions at Bank Leu Ltd, Credit

Suisse First Boston and Clearstream Banking in Luxembourg before he moved to DAB Bank AG, where he ran the Paris and Zurich subsidiaries. Christoph Bigger graduated in business and law from the University of Fribourg and qualified as an attorney-at-law in the canton of St. Gallen.

**Werner Bürki** has been a member of the Management Committee of the SWX Swiss Exchange since July 2002 and, since October 2001, has held the position of CEO of EXFEED Ltd., a company he established as a European provider of raw financial data. He has also been a member of the STOXX Supervisory Board since December 2002. He started his career in 1992 as a sales manager with Dow Jones Markets Switzerland AG. By 2001, he had become a member of that company's Executive Committee and Board of Directors, whereas in June 1998 he assumed the position of General Manager Switzerland for Bridge Information Systems. During that phase, Werner Bürki introduced the Dow Jones platform to the Swiss market and was responsible for the merger between Dow Jones Markets and Bridge Information Systems. Werner Bürki graduated from business school in Zurich. Earlier in his career, he was a specialist in the field of options and futures trading, and in 1987 completed additional specialized studies at the New York Institute of Finance.

**Lee Hodgkinson** was appointed CEO of virt-x in December 2006. Lee also heads the Client and Product Group of the SWX Swiss Exchange and virt-x. Before this Lee was a member of the SWX Swiss Exchange Management Committee for three years, holding responsibility for the Market Operations division, where he led the development of the SWX's high-capacity transaction platform. Lee joined virt-x in 2001 as Head of Operations before becoming Director of Business Development. He began his career in the Markets Division of the London Stock Exchange, where he worked for nine years. In autumn 2006, he spent 7 weeks at Harvard Business School participating in the General Management Programme.

**Chris Landis** was elected to the SWX Swiss Exchange Management Committee in 2003 and is Head of the Information Technology Division. He has been employed by the SWX Swiss Exchange and its predecessor organizations since 1993. Chris Landis bore operational responsibility for the EBS project infrastructure. Prior to becoming Head of the Member Support Centre in 1995, he was in charge of developing and conducting educational courses for trader representatives and system administrators.

In the capacity of Senior Vice President, Chris Landis has been in charge of the Information Technology Division since 1999, with a major focus on developmental and external IT projects. After graduating with a Type B Matura in Zurich in 1978, Chris Landis

continued studying in the fields of human medicine, information technology and economics.

**Rodolfo Straub** has been a Member of the Management Committee of the SWX Swiss Exchange and Head of the Admission Division since October 2007. Previously, as Head of Capital Markets at the Zurich Cantonalbank since 1999, he was responsible for acquiring and advising capital-market customers and for carrying out transaction mandates.

He was also Vice President of the Issuance Committee of the Swiss Cantonal Banks and, from 2003, Deputy Director of the Pfandbriefzentrale der schweizerischen Kantonalbanken. From 1982 through 1999, Rodolfo Straub was employed at UBS in the areas of capital-market consulting, key account management and credit product management for Swiss multinational clients. Both at UBS and at the Zurich Cantonalbank, Rodolfo Straub gained deep insight into the needs of Swiss and foreign issuers. In addition, from 1998 through 2006, he developed a firm understanding of political processes as mayor of Oberrieden. Rodolfo Straub completed law school at the University of Zurich in 1980.

## **MARKET DATA**

This section combines and consolidates current and historical information such as:

- SWX price data
- Closing prices
- Volume and turnover
- Indices
- Historical closing prices
- Historical price data.

The detailed information pertaining to the individual trading segments is updated continually and is also available to users in the form of data packages (historic closing prices / indices / statistics).

This data improves the transparency of the marketplace and ensures that participants are kept fully informed on an ongoing basis. As a result, the markets can be analysed, and BackOffice personnel at banks and financial services companies have access to targeted support.

The SWX Swiss Exchange is also pleased to supply standardised, individualised and in-depth data analyses. Among the products offered are price and volume readings, as well as related key figures such as market statistics and indices.

The indices calculated by the SWX are yardsticks for the performance of the domestic securities market. In combination with trading statistics and historical data, they provide valuable insight into the trends affecting capital investments - for institutional and private investors, alike.

## ***HISTORICAL PRICES***

### ***Securities traded at the SWX - Closing Prices Download Section***

This table provides daily SWX market data for downloading. The files are first published at 17:35 CET and contain the closing prices and on-market volumes. The files are updated every hour until 22:35 as off-order book data may still change.

Large off-order book bond trades are often subject to the delay publication regime and are thus only published the next day. Volume and turnover published under the delay publication regime are available on the correction data file on the day of publication. The first update of the correction file is published at 07.30 CET.

The SWX Group is fully committed to this financial marketplace: it ensures the proper functioning of Switzerland's securities exchange infrastructure and thus the viability of the country's capital market. The SWX Group affords securities dealers efficient access to both the domestic and the international capital market. Via a number of subsidiary companies and financial holdings, it is active in various business fields and regulatory environments. In addition to Switzerland, it is also present with a recognised stock exchange (virt-x) in London, Europe's most important financial centre. The SWX Swiss Exchange and virt-x are the home exchanges and determining markets for internationally leading Swiss companies. The prominence of the participants in these exchanges and the companies traded there contribute to a high degree of liquidity in their respective trading venues. A further market of international significance that the SWX Group makes available to the Swiss financial centre is Eurex, the world's largest exchange for standardised derivatives.

The SWX Group offers its customers a comprehensive range of solutions that address all aspects of domestic and cross border securities dealings as well as the admission of securities to trading. Thanks to its in-depth knowledge of local and

international market conditions, the close involvement of its participants in the strategic and operative decision-making processes, as well as its technological competence, the SWX Group is in a position to develop qualitatively outstanding and cost-effective trading platforms that fulfil the specific needs of market participants.

The Members of the Board of the SWX Group are the same as the Board Members of the SWX Swiss Exchange Association and the Board Members of the SWX Swiss Exchange subsidiary.

At the SWX Group level, the Group Executive Committee is in charge of operative management. It bears responsibility for coordinating the core businesses from a strategic standpoint, as well as for managing the financial holdings of the Group.

A joint management team heads SWX Swiss Exchange, virt-x and EXFEED. This integrated approach to management facilitates consistency in the strategy of the core business fields, expedites decision-making processes and accelerates response times within the Group. The respective Management Boards of SWX, virt-x and EXFEED are responsible for operative management of the core businesses.

## VISION

The SWX Group ranks among Europe's pre-eminent providers of securities exchange services and fosters the integration and efficiency of the international capital markets.

The SWX Group operates virt-x, the first pan-European stock exchange, and, with its financial interest in Eurex, is involved in the world's largest derivatives market. It is therefore at the forefront of the progressive move towards integration of Europe's financial and capital markets.

Through its innovative business models, leading-edge technological platforms and market-oriented regulatory framework, the SWX Group means to play an active role in shaping these developments and thereby maintain the strong position of the Swiss financial centre and SWX.

- **Customer-oriented provider of securities exchange services in Europe:**  
In pursuing its goal of generating the maximum benefit for its shareholders and customers, the SWX Group is committed to the best interests of the Swiss financial marketplace and especially its participants.

- **Globally leading securities trading systems:** The SWX Group embodies a combination of outstanding expertise in the fields of securities trading, electronic trading platforms and financial market regulation. Through its international reach and close interaction with market participants, SWX develops efficient solutions aimed at meeting the challenges of tomorrow.
- **Efficient access to transnational capital markets:** In order to advance the interests of Switzerland's financial marketplace, the SWX Group desires to be in the vanguard of efforts to internationalise the financial and capital markets. Given its significant home market and already successful pan-European platforms, the SWX Group is in a solid starting position.

## SWISS VALUE CHAIN

The Swiss Value Chain, which enables the fully automated execution, clearing and settlement of securities transactions, provides high-quality services to the Swiss financial marketplace. This unique mechanism is a joint development of the SWX Group (trading), SIS Swiss Financial Services Group AG (securities clearing and custodianship, and since May 2003 also the central counterparty for transactions) and Swiss Interbank Clearing Ltd (money transfers).

Despite the fact that the companies that provide Switzerland's financial market infrastructure do not belong to a common holding entity, they coordinate all the processes involved in trading, clearing and settlement not just amongst each other, but also in accordance with the needs of market participants. As a result, SWX has been the first to realise straight-through processing both on a national and on a translational scale.

The settlement partners of virt-x are CrestCo, Euroclear Bank and SIS SegalInterSettle AG, while those of SWX are Clearstream International, Euroclear Bank and SIS SegalInterSettle AG.

The services of the Swiss Value Chain, in conjunction with these international organisations, have brought about an overall reduction in transaction-related costs as well as an increase in the quality of service enjoyed by market participants.

Both at the domestic and at the international level, the Swiss Value Chain demonstrate that, in spite of their competing with each other in certain areas, different organisations can cooperate efficiently and, even more importantly, to the benefit of all market participants.

## DERIVATIVE MARKET

On 1 January 2007, the Swiss Financial Market Services and Deutsche Börse combined their trading activities in structured products in the jointly owned subsidiary Scoach, thereby leveraging their strengths in a market segment that has tremendous growth potential.

## LISTING PROCEDURE

In principle, the listing procedure for debt securities (bonds and derivatives) is based on Arts. 50 ff. LR.

The necessary listing application must be lodged with the Admission Board by the issuer or a recognised representative in writing in either German or French.

The application must be submitted to the SWX at least one month prior to the date scheduled for listing (Art. 50a LR) along with the necessary annexes to the application (Arts. 52 f. LR). The Admission Board examines the application on the basis of the submitted documents and approves it if it complies with the provisions of the Listing Rules. In particular, the listing procedure requires the publication of a listing prospectus (Arts. 32 ff. LR) and a listing notice (Arts. 45 ff. LR).

If the products are newly developed and have never been listed on the SWX Swiss Exchange in this form before, it may be useful to have the suitability of the particular product examined in the context of a preliminary decision by the Admission Board (Art. 60 LR). This gives the issuer the knowledge that the security is suitable for listing and allows it to choose the best time to launch the product.

The issuer has the option to make use of provisional admission pursuant to Arts. 61 ff. LR. If it does so, the following procedure applies:

a. The applicant must submit an application form, obtainable from the Admission Board, and the so-called Termsheet, which sets out the conditions for the security in question. If the form is completed, provisional trading may commence at the earliest three business days after the application is submitted. It is the discretion of the SWX to determine the precise time.

b. The issuer is then required to submit a listing application within two months in order to ensure that the security can be listed on the SWX.

Since December 2002, it is possible to apply for the admission for bonds and derivatives online. With Internet Based Listing (IBL), an automated Web-based application, applications for provisional listing can be processed online, and derivative products can already be traded the day after the application is submitted.

## **CLEARING & SETTLEMENT**

The Swiss financial market infrastructure is often referred to as the Swiss Value Chain.

The infrastructure providers of the Swiss financial market recognised at an early stage how the processing of securities transactions might be made more efficient and the costs reduced. The principle of Straight through Processing (STP) was vigorously applied; existing processes were automated, restructured and embedded within international frameworks. Right from the start, the SWX Platform was developed as a fully integrated trading platform with direct links into the settlement infrastructure, as locked-in transactions, thereby removing any requirement for dual entry into multiple environments.

Executing a transaction on exchange leads to a fully automated instruction for eligible products to the CCP and for others directly into settlement at the Central Securities Depository (CSD). Usually, neither the front or the back office are involved manually in the process, so SWX market participants could enjoy savings of up to 80 % in back-office settlement due to the full STP links in place. The result is that processing securities within the Swiss Value Chain is one of the most efficient within Europe.

To complement this, SWX introduced a Central Counterparty Service using the CCP services of SIS x-clear AG (SIS x-clear).

## **TRADING SYSTEM**



The trading system of the SWX, originally launched as EBS System, was renamed "SWX Platform" for legal reasons.

With the SWX Platform, SWX Swiss Exchange offers a fully automated trading platform on which supply and demand determine the prices of the financial instruments.

The SWX thereby performs an important national economic task; which it can better fulfil the more liquidity it attracts. Network effects and economies of scale play a key role. The importance of network effects tends to focus trading on specific securities and segments. The technical and regulatory frameworks are of primary importance in this regard.

Right from the start, the SWX Platform was developed as a fully integrated trading system with direct STP links into the clearing and settlement system: when a trade is executed, the relevant settlement instructions are forwarded straight through to the CSD as a "locked in" trade.

## **SETTLEMENT**

SWX's integrated settlement solution is based on the co-operation of three Central Securities Depositories (CSDs) and International Central Securities Depository (ICSD's).

Settlement is the transfer of ownership and exchange of securities generally on a delivery versus payment (DvP) basis which leads to settlement finality of a trade and is usually supported by a "CSD" or International Central Securities Depository (ICSD).

### **Locked-in trades**

The great advantage of the locked-in trade procedure is that settlement is fully automated and that errors from the re-entry of data can be avoided completely. This is because no extra matching is necessary for settlement as all necessary information is already available when the trade is executed.

To facilitate locked-in settlement a power of attorney (POA) is required. For SIS a power of attorney is included within the general conditions. To enable SWX to arrange settlement in Euroclear and Cleastream Luxembourg members must complete the applicable POA's.

### **Admission**

The Admissions Division is the competency centre of the SWX Swiss Exchange, virt-x and Scoach Switzerland Ltd. for securities and decides on the admission of securities to trading and the maintenance of tradability. The procedure for admission to trading or introduction to the Exchange is called "listing". Securities are examined with regard to whether or not they fulfil the conditions for trading on the Exchange. Different conditions apply to different types of securities (shares, funds, bonds, derivatives).

The Admission Board approves securities for trading on the SWX, virt-x and Scoach Switzerland Ltd. This includes securities in the Swiss Market Index (SMI) and the Swiss Leader Index (SLI), which are admitted to trading on the SWX but trade on virt-x, and the derivatives traded on Scoach Switzerland Ltd.

Issuers on the SWX benefit not only from professional listing, but also from a fully automated trading system and integrated clearing and settlement of their securities. Additional benefits for companies listed on the SWX include the expertise of the resident analysts and the financial power of international investors. Securities traded on the SWX, virt-x and Scoach Switzerland Ltd. have high international visibility and are one of the cornerstones of the Swiss financial marketplace.

## Tradable securities

**-Straight bonds:** The purpose of straight bonds is to raise medium- to long-term capital on the capital market. Straight bonds are usually divided into bonds with a value of CHF 5000. Bond purchasers usually receive the agreed interest on a yearly basis. Upon completion of the duration, the bond is fully redeemed.

**- Floating-rate bonds:** Floating-rate bonds or floaters are bonds with variable interest. The interest rate is determined anew on a regular basis according to a certain key. - **Zero bonds:** Zero bonds are bonds that do not throw off any interest throughout the time of their duration. The yield is achieved by having a purchase price that is lower than the red- **Dual-currency convertible bonds:** Dual-currency convertible bonds attempt to benefit from the different interest rates between countries. While a bond is paid for and throws off interest in one currency, it is redeemed in another. - **Subordinate bonds:** In the event of liquidation or bankruptcy of the issuer, the claims of bondholders are secondary to the claims associated with non-subordinate claims.

- **Convertible bonds:** Bond featuring a conversion right. Within a certain period and for a certain price, the bondholder can convert his or her bonds into a certain amount of equity securities.

- **Warrants bonds:** Warrant bonds are bonds that feature a warrant in addition to interest coupons. Usually, the warrant entitles the holder to buy shares or other equity securities at a predetermined price during a certain period of time.

- **Loan Participation Notes:** In terms of their functionality and inherent risks, LPNs represent an investment that is comparable to a straight bond. In return for the capital provided (nominal amount), the issuer makes interest payments at regular intervals and, upon maturity, the bond issue is repaid at par.

But in contrast emission price.

to a straight bond, an LPN involves a tripartite relationship: as a general rule, a bank acts as the effective issuer ("legal issuer") vis-à-vis the investor; but from an economic standpoint, the actual borrower is a company ("economic issuer"). That company indirectly obtains debt capital in the market-place via the legal issuer, i.e. a bank that is normally also the lead manager of the transaction. The bank (legal issuer) issues LPNs for the sole purpose of financing the loan it has granted to the company (economic issuer).

The lender, which from a legal point of view issues the LPNs as an indirect representative of the economic issuer, books the economic issuer's interest and capital payments into a bankruptcy-secured account and guarantees that it will pass through these cash flows to the investor.

## **INFORMATION**

In this section, the SWX Swiss Exchange publishes market-relevant information arranged according to the following topics:

### **SWX Messages**

SWX Messages contain Exchange-related information for the attention of issuers, participants and traders. Also published here are Surveillance & Enforcement (SVE) Messages, Admission Board Communiqués and Circulars, as well as Disclosure Office Notices.

### **Official notices**

On a daily basis SWX publishes the official notices relating to Exchange-listed companies. These notices contain the following kinds of information:

- Changes in capital (capital increases/decreases, stock buyback offers, significant changes in equity capital structure, etc.)
- Dividends (ex date, amount, payment date, etc.)
- Interest rates (for floating-rate debt instruments)

### **Media releases**

Exchange-relevant information for the attention of the general public is disseminated by means of media releases. These releases are sent directly to the media for further publication.

### **Publications**

SWX offers a wide array of publications covering various topics and specialised areas. Most of these publications are available for downloading, whereas some may also be ordered as brochures.

### **RSS Newsfeed**

Via the "RSS Newsfeed", users (market participants, issuers and other interested parties) can subscribe to receive notifications and market data.

# FRANKFURT STOCK EXCHANGE

## FRANKFURT STOCK EXCHANGE

Frankfurt, one of the world's first stock exchanges, became a leader among eight German stock exchanges already in the middle of the 20th century by serving 90% of the German market today. From 1993, the blue-chip company Deutsche Börse AG is an operator of the Frankfurt Stock Exchange (FSE).

With more than 77,000 securities listed and 260,000 trades processed daily, Frankfurt Stock Exchange takes the position of the world's third largest stock market and the world's sixth largest by market capitalization. It has a total turnover of 5.2 Trillion per year.

Although FSE exercises some traditional broker-supported floor trading, most of the trading is done via the fully electronic trading system Xetra that enables 15 countries trading on a single platform. With the location-independent system, even 47% of the FSE's market participants come from abroad.

Currently about 6823 companies are quoted on the FSE. Based on stock market newcomers' needs and requirements, they can enter the market in 3 alternative ways: Prime, General, or Entry Standard. Companies going public by Prime and General Standards are regulated by the EU rules. Whereas companies choosing the Entry Standard, which is one of the easiest ways to enter the capital market, are supervised by the stock exchange itself.

With current 79 index funds, FSE has the largest range of exchange traded funds in Europe. An investor has a choice of 55 passively managed index funds and 24 actively managed funds to trade in. Unlike classical funds, the prices of the FSE's exchange traded funds are determined every minute in continuous trading and orders are exercised immediately.

## THE HISTORY OF FRANKFURT STOCK EXCHANGE

Fairs, coins and bills of exchange: 11th - 17th century  
The roots of FWBB Frankfurter Wertpapierbörse (Frankfurt Stock Exchange) go back to the period of

medieval fairs. The Frankfurt autumn fair is first mentioned during the Assumption holiday in the year 1150. The autumn fair is believed to have had its origin in the 11th century as a harvest fair. Since the year 1330, when Emperor Ludwig the Bavarian expanded this privilege to include a spring fair as well, the city became an important centre for commercial and monetary transactions. As a result of the trading activity during the fair, the manufacture of goods on order gradually developed into merchandise production for an open and nationwide market.

Already at the beginning of the sixteenth century, due to its well-known fairs Frankfurt had become so prosperous that Luther termed the city "the silver and gold hole" of the German Empire. Through the immigration to Frankfurt of Dutch and French merchants who had been persecuted because of their Protestant belief, during the sixteenth century wholesale commerce and the banking sector also became established in Frankfurt. Merchants from all over Europe came to Frankfurt in order to engage in trade.

Since there was still no single currency either in Europe or in the German Empire, and the various countries fell apart into numerous small economic regions with their own monetary systems, payment was based on a large variety of coins.

Because of this, monetary transactions in Frankfurt proved to be extremely troublesome. The confusing abundance of means of payment and the free exchange rates made it easy to engage in usury and swindles. To counter the deterioration of coinage, merchants at the fair met in 1585 in order to establish uniform exchange rates. Today, this event is regarded as the moment of the Frankfurt Stock Exchange's birth.

From that day on, during the fair a group of merchants met periodically to update the uniform and binding exchange rates for transactions in notes and coins. In German, the name Burs (the equivalent of the French bourse) was documented in writing as a designation for this meeting as early as in 1605.

The German term Arse (and French bourse) come from the fifteenth century, from the Belgian city of Bruges. The word described a periodic meeting of rich Italian traders at ter buerse plaza a market place that was named after the patrician family Van der Beurse, who had lived there (Lat. bursa = "bag" or "change purse").

The first official exchange list, which presented the average prices for twelve denominations of currencies, appeared in 1625. The oldest exchange list from the Frankfurt Stock Exchange that still exists dates from the year 1721. The list already contained exchange rates for 16 coinage types. Initially, the meetings continued to be held on the open field in front of the Frankfurt town hall.

It was only in 1694/95 that the traders moved to the Braunfels building at the Liebfrauenberg, thereby selecting the city's most important and spacious building as their fixed meeting place.

In 1682, the first Exchange Rules and Regulations were enacted, which led to the establishment of an official stock exchange administration. Initially, only trading in bills of exchange was undertaken on the Frankfurt Stock Exchange.

Patricians, princes and commodity markets: 18th - 19th century: Periodic trading in promissory notes and bonds was initiated at the end of the seventeenth century. A market was thus born in which non-merchants could invest their assets as well. In 1707, the directors of the Frankfurt Stock Exchange met to form the Deputies of the Merchants (Deputierten der Kaufmannschaft), an official trading representation body for the city.

In 1808, the Chamber of Commerce was formed out of these Deputies. The stock exchange, which had been established 223 years previously as a private institution operated by a number of merchants, was brought under the umbrella of the Chamber of Commerce. It thus became a public-sector institution.

Trading in government bonds began on the Frankfurt Stock Exchange at the end of the eighteenth century. In 1779, Bankhaus Bethmann placed the first bond denominated in the millions for the German Emperor in Vienna. To be in a position to arrange this huge sum, for the first time this bank issued so-called fractional bonds (Partialobligationen) in Frankfurt. Anyone with funds could buy these securities at the bank. The investor thereby actually acquired part of the overall bond issue as well as the right to a share in the regular interest earnings. This instrument of capital mediation that was introduced by Bankhaus Bethmann made it possible for the Frankfurt banks to arrange large bond issues in the future.

With the advancement of Bankhaus Rothschild in Frankfurt to the leading capital intermediary among the European dynasties, the city developed into a centre for international capital with one of the major international stock markets besides London and Paris. The restricted space at the location in Haus Braunfels became less and less appropriate in view of the importance of the stock exchange. For this reason, in the mid-nineteenth century it built its own prestigious building located near the Paulskirche on the Paulsplatz. The building was based on the plans of the Frankfurt architect Friedrich Peiper and opened its doors in 1843.

The industrial revolution in Germany made the advantage of financing costly projects through share issues obvious.

The first share issue – a participating certificate of the Austrian National Bank (Österreichische Nationalbank) – had been traded in Frankfurt back in 1820.

The main focus of trading on the Frankfurt Stock Exchange, however, was still on bonds. In contrast to the other large European stock exchanges, the Frankfurt market was initially cool to the ever more popular shares in numerous stock corporations. Until 1850, the Frankfurt Stock Exchange primarily developed into a centre for trading in secure government bonds and funds. This specialization lent Frankfurt the reputation of «solid Frankfurt». Frankfurt became the "gateway for capital exports" because based in this market, foreign bonds were additionally also placed on the other European stock exchanges.

The "New Stock Exchange" was opened in 1879. In their plans for the building, the well-known Frankfurt architects Heinrich Burnitz and Oskar Sommer succeeded in creating an extremely harmonious combination of functionality and prestige. In addition to the main railway station and the Old Opera, the New Stock Exchange is still one of the most important Frankfurt structures dating from the Wilhelminian epoch.

Following the "Gründerjahre" boom period innumerable companies were restructured as stock corporations (among 1870-74, 857 stock corporations were founded in Prussia). Frankfurt nevertheless remained restrained vis-à-vis these securities. Frankfurt's attention continued to be directed towards US bonds and international government securities.

Thanks to the city's good international contacts, during the years after 1871, when Berlin was the capital of the newly founded German Empire and became host to the country's most important stock exchange, Frankfurt was nevertheless able to assert its international position and its role as a central stock exchange. At the end of the 19th century, the absolute necessity of adapting to the general economic situation in the country was recognized in Frankfurt. In order not to endanger its prestige as an economic capital, and contrary to former endeavours, Frankfurt altered its economic policy and strove to attract industry and intensified share trading activities. This development in the direction of a true stock exchange met the challenge of the Berlin Stock Exchange's dominance.

The Frankfurt exchange could now offer companies, primarily located in southern Germany, an alternative to Berlin for the raising of capital. The 29 German stock exchanges were only subject to a uniform organization under the Stock Exchange Act of 1896. In addition, the previous local provisions applicable in Frankfurt gave way to a nationwide arrangement that has remained largely in effect down to this day.



Wars, stocks, and the economic miracle: 20th century: The internationally oriented Frankfurt Stock Exchange was very hard hit by World War I and its consequences. Foreign shares and bonds were sold by German investors out of fear of instrumentalization by the opposing states; freed up capital was invested mostly in government bonds. By the end of the war, all foreign securities had disappeared from German exchange lists, as a result of which especially Frankfurt lost its standing as an international stock exchange. By the end of the war, the international contacts of the Frankfurt Stock Exchange had been destroyed. Stock market transactions only began restabilizing during the twenties.

However, the world economic crisis followed in 1930, with its disastrous effect on the economy. Huge volumes of assets fall victim to inflation. The German stock exchanges even had to be closed temporarily in 1931.

With the Nazi takeover in 1933, overall economic policy was incorporated into the general government and war policy. Stock exchange supervision was taken away from the states and made the domain of the central government, with the number of stock exchanges reduced from 21 to 9. The Frankfurt Stock Exchange incorporated the Mannheim Stock Exchange in 1935, with the merged institution called henceforth the Rhine-Main Stock Exchange. Although the Frankfurt Stock Exchange continued to function as a "domestic stock exchange", in fact it no longer fulfilled an important function. Nazi economic controls hindered the development of the free market and with it stock market trading as well. By and large, potential capital assets were only supposed to benefit the war economy and could no longer be invested in larger bonds or shares. The Frankfurt Stock Exchange building was badly damaged during an allied air raid in 1944. Stock exchange meetings could therefore only be held in the cellar rooms of the building.

Following the collapse of the Nazi regime in 1945, the exchange remained initially closed for half a year. Nevertheless, it was already reopened in September 1945 as one of the first German stock exchanges.

It was only following the currency reform of 1948 and the growing consolidation of the German economy that the Frankfurt Stock Exchange gradually recovered its old significance. Beginning in 1956, the purchase of foreign securities was again permitted in Germany. Frankfurt could accordingly return to its tradition of international business, again occupying the top position in Germany. The stock exchanges played an important role as capital intermediaries for the country's postwar reconstruction. Through their activity, they were also decisively involved in the subsequent "economic miracle" and the achievement of a top world economic position by the Federal Republic of Germany.

Into the 21st Century: DAX, Xetra, Eurex, Clearstream and, of course, its own IPO have been the milestones for Deutsche Börse since 1988. Over this period, the company has changed from a mere market-place organizer for share trading to an international service provider to the securities industry covering the entire process chain of exchange trading.

Deutsche Börse offers its customers all the products from trading through to the settlement of transaction; from the provision of information products to system development. The clearest signal of this change was the IPO of Deutsche Börse AG on 5 February 2001.

Deutsche Börse introduces the DAX: In 1988 Deutsche Börse introduced the DAX. Today, it is one of the most well-known blue-chip indices in the world. With such a successful index behind it, the entity under public law, FWB® Frankfurter Wertpapierbörse (Frankfurt Stock Exchange), was able to become Deutsche Börse AG in 1993 which has been the operating body of the Frankfurt Stock Exchange since then.

Its success in recent years is not due to the change in the company structure alone. Back in 1969 Deutsche Börse began processing some of its data electronically. With the launch of Xetra in 1997, the company heralded in a completely new exchange era. Since then, floor trading has diminished in importance. With the fully electronic Xetra trading, the exchange is now wherever there are screens. Xetra has established itself as one of the leading trading systems in the world.

The subsidiaries Eurex, Clearstream and Deutsche Börse Systems drive the growth and internationalization process of Deutsche Börse Group. Eurex is the largest market organizer for the trading and settlement of futures and options in the world. With Clearstream Deutsche Börse offers the settlement of securities transactions and the safekeeping of securities. Deutsche Börse Systems builds and operates trading systems, supporting Deutsche Börse's global network of participants.

Deutsche Börse has also proved its innovation skills as a stock market organizer. In March 1997 it established Neuer Markt®, thereby giving smaller growth companies completely new opportunities for raising equity. Transparency requirements were particularly stringent for this new market segment.

Deutsche Börse reforms the stock market: In response to the Fourth Capital Market Promotion Act, Deutsche Börse reformed the German stock market. Since 1 January 2003, issuers on the Frankfurt Stock Exchange have been able to choose between a listing in either Prime Standard or General Standard. Whereas Prime Standard integrates the stringent transparency requirements of Neuer Markt, the minimum statutory

requirements apply in General Standard. Neuer Markt was closed. In March 2003, TecDAX® was launched as the new blue-chip index for technology shares.

With the Introduction of Entry Standard within the Open Market in October 2005, a new segment for small and medium-sized companies was created. Their shares can be included in exchange trading while meeting less stringent formal requirements.

New products and initiatives for private investors: In April 2000, the market segment XTF was introduced, making it possible to continuously trade index funds at a stock exchange in Germany for the first time. Since November 2000, actively managed funds have also been listed in the market segment Xetra Active Funds.

New upper limits on brokerage fees for floor trading were implemented in April 2005 for warrants, knock-outs, certificates and reverse convertibles orders. Since July 2005, private investors have been guaranteed no-spread trading in most DAX, MDAX, TecDAX and SDAX titles at the Frankfurt Stock Exchange.

As of April 2006 Deutsche Börse has covered international markets in the new index family DAXglobal. With the introduction of ETC Exchange Traded Commodities in November 2006, investors gain access to a broad range of euro-denominated commodities for the first time.

In April 2007 the Frankfurt Stock Exchange reorganized bond trading and now offers trading in three segments: the standard bond segment, the quality segment, select bonds, and the premium segment, prime bonds. The segments differ in terms of execution time, spread and quote traffic.

In November 2007, Deutsche Börse created an independent segment for companies from the real estate sector. REITs – Real Estate Investment Trusts – are subject to special tax benefits, but must in turn comply with certain legal requirements. For example, a REIT company must distribute the majority of profits to the shareholders. The securities are traded on the stock exchange and add to the spectrum of real estate investments available to investors.

Modernization of the trading floor: In October 2006, reconstruction work began on the main trading floor at "Alte Börse", the older stock exchange building. After completion of this first phase of refurbishment, the floor of the Frankfurt Stock Exchange was reopened at the end of February 2007. The main trading hall was adapted to the changing needs of the lead brokers, and it has been given a new, modern look.

November - December 2007 marked the second phase of modernization of the Main Trading Hall. The wall panelling was replaced, TV broadcasting ambience and conditions were improved and the Visitors Gallery was completely redesigned. The wall panelling was

refurnished and accentuated by a stylized world map created by fluorescent lights. It surrounds the Hall and shows the most important trading venues worldwide. Moving LED displays show the respective benchmark indices as well as news from these venues.

## **MANAGEMENT BOARD OF THE FRANKFURT STOCK EXCHANGE**

As the executive body of Frankfurt Stock Exchange, an entity under public law, the Management Board is responsible for all tasks not expressly assigned to other exchange bodies.

The legal foundations for the activities of the Management Board are anchored in the Stock Exchange Act. In accordance with its provisions, the Management Board is responsible for managing the Frankfurt Stock Exchange.

Individual executive tasks, assigned to the Management Board, include:

- admission of persons and companies to exchange trading
- decisions on the inclusion, suspension and discontinuance of an official listing of securities
- decisions on the price-fixing of securities
- definition of the organization and business procedures of the Frankfurt Stock Exchange
- Maintaining order on the trading floors.

The members of the Management Board of the Frankfurt Stock Exchange are full-time employees and- in line with the organizational model of a stock corporation- are controlled by the Exchange Council. They ensure that exchange-relevant laws, ordinances, standard terms and conditions and other regulations are implemented and complied with accordingly. In this context it may assign responsibility for the carrying out of these tasks to other persons.

As the executive body of the Frankfurt Stock Exchange, an institution under public law with partial legal capacity, the Management Board is thus a public administration authority. It may issue administrative acts addressed to third parties and is thus a public authority under administrative law.

Management Board:

- Frank Gerstenschläger (Chairman)
- Rainer Riess (Deputy Chairman)
- Roger Müller
- Jürgen Röthig

## **THE EXCHANGE COUNCIL**

The Exchange Council is a key forum for discussing fundamental issues and developments at FWB Frankfurter Wertpapierbörse (Frankfurt Stock Exchange). The Management Board requires the approval of the Exchange Council on all questions of fundamental significance. Among other things, the Exchange Council is responsible for the appointment, withdrawal and supervision of the executive management. Furthermore, it issues the Exchange Rules, the Fee Regulations and the Conditions for Transactions on the Exchange.

The FWB Exchange Council has 18 members, who are elected for a term of three years. The acting Exchange Council was elected on 21 November 2007 and met for its constituent session on 18 January 2008.

## **SUPERVISORY BODIES**

The proper conduct of exchange trading as well as the correct pricing process is monitored by the Trading Surveillance Office (henceforth referred to as 'TSO'). Several institutions cooperate closely in this sector. Market surveillance's aim is to protect the investor and to gain the confidence in the market mechanisms.

Trading Surveillance Office supervises trading activities: The Trading Surveillance Office is an independent supervisory body of the exchange and monitors the markets. The TSO supervises price fixing and the proper conduct of trading on the floor as well as on the electronic trading system Xetra and Eurex. The TSO analyses irregularities and notifies the supervisory bodies and the management boards of the exchanges. The TSO also informs BaFin on cases which involve the competencies of this supervisory authority.

Exchange Supervisory Authority initiates sanctions: The Exchange Supervisory Authorities are responsible at the state level. The Exchange Supervisory Authority of the

state Hesse is incorporated in the Hessian ministry of Economic Affairs, Transportation and Regional Development. Inter alia, the area of competencies of this authority comprise pricing processes, the supervision of the proper conduct of trading as well as the investigation of violations of the Exchange Act. The authority assesses the irregularities reported by the TSO and may however also directly supervise the markets. Besides the Disciplinary Committee and the management boards of the exchanges, the Exchange Supervisory Authority may also impose sanctions on market participants. Over and above this, the authority approves the rules and regulations of the Frankfurt Stock Exchange as well as Eurex.

BaFin takes disciplinary action against market abuse: The Federal Financial Supervisory Authority (henceforth referred to as 'BaFin') is responsible for investigations in the case of insider trading and market manipulation at the federal level. Moreover, the BaFin investigates potential violations of publication requirements.

## **A LISTING AT THE FRANKFURT STOCK EXCHANGE: THE PREFERRED CHOICE FOR COMPANIES**

Deutsche Börse organizes one of the most efficient capital markets worldwide with optimum conditions for issuers and investors alike. Issuers broaden their equity basis with an initial public offering (IPO). In contrast to debt capital, equity is available for an unlimited period of time and increases the flexibility of a company. Equity can be used without restrictions for long-term projects, for example to:

- A) consistently pursue growth strategies
- B) position oneself in international competition
- C) use own shares as acquisition currency
- D) increase awareness vis-à-vis investors
- E) Promote the attractiveness as employers for highly qualified managers.

With a listing at FWB Frankfurter Wertpapierbörse (Frankfurt Stock Exchange) companies keep all these opportunities open for themselves. Regardless of whether they decide in favor of an admission to trading in Entry Standard, of a cost-efficient listing in General Standard or utilize the additional benefits of Prime Standard: their shares are traded on a pan-European platform and attract the attention of national and international

investors. Selection and sector indices increase the awareness of companies which are listed in Prime Standard.

Since 17 April 2007 the new Listing and Trading Segment Deutsche Börse REITs offers companies with REIT status a first class entry point to the European capital market.

Advantages of a listing at the Frankfurt Stock Exchange:

- A) highest transparency standards in Europe
- B) high liquidity through trading on the Xetra platform with an international) network of market participants, Designated Sponsor function and low transaction costs
- C) favorable listing fees and one of the fastest listing processes worldwide
- D) Visibility through inclusion in a selection index and allocation to a sector index via industry groups
- E) access to professional support before and after the IPO through Deutsche Börse Listing Partners.

# CONCLUSIONS

In 1982, the external public debt crisis of the developing countries was triggered by the combined effects of the rise in interest rates imposed by the United States two years earlier, and the fall in prices of raw materials, particularly oil. The epicentre was in the South and the first casualties were the governments of the developing countries, who suddenly found they owing enormous amounts in debt repayments.

The financial crises of the 1990s practically only affected developing countries - there was the Mexican crisis of 1994-1995, the Asian crisis of 1997-1998, the Russian crisis of 1998, the Brazilian in 1999, Turkish in 2000, Argentine in 2001-2002 and Brazilian again in 2002. Each crisis was triggered by sudden movements of capital and speculative attacks on the currencies of the countries concerned. Financial capital that had been directed towards these countries before the crisis was withdrawn, causing the crisis. It was a question of capital flight to safety, with capital being returned to the financial centres of the North, considered more secure. In August 2007, a financial crisis exploded in the North in the world's leading economy.

In 2008 news of a possible recession in the United States led to lower major global stock markets. From London to Tokyo, drops in indices were reported. In Europe, London's FTSE slid by 3.6 percent to 5685.2, while Paris' Cac-40 suffered a 6.7 percent decline and Frankfurt's Dax fell 5.4 percent.

Asian markets also reflected a downturn. Tokyo's Nikkei 225 index dipped by 3.9 percent, its lowest decline since October 2005, while India's Sensex tumbled by 7.4 percent. Hong Kong's Hang Seng index showed a 5.5 percent slip to 23,818.86. This is the Special Administrative Region's second largest percentage decline since Sept. 11, 2001. Similar downtrends were reported in South Korea, Australia, Singapore, Taiwan and the Philippines.

Countries grow faster relative to the rest of the world after a stock exchange opens. The evidence also indicates that a more efficient allocation of resources rather than more capital accumulation is the primary channel through which a stock exchange affects output growth.

It would be basic to answer if a stock exchange is a causal factor in growth. There are two ways of thinking about this question. One way would be whether it is causal in the sense that it is exogenous to growth. The answer to this must be that most if not all of



these stock exchanges were opened because of an expectation that they would be profitable ventures; they clearly are endogenous.

Nonetheless, ancillary legal developments are important for opening a stock exchange, operating it and making the anticipated positive return. Our evidence suggests that such legal developments can facilitate growth by easing the way for a stock market. A second way of thinking about the causal role of a stock exchange is whether prohibiting a stock exchange can reduce growth. Our evidence points in the direction of saying that suppressing a stock exchange or impeding its operation is a good way to reduce economic growth.

Another interesting matter is whether there is any cost saving from expanding the stock exchange businesses with special perspectives and insight given into the experience of exchanges by regions of the world and by size of the exchanges. Overall in the combined data, the result shows that activities related to both trading and firm-specific information processing possess economies of scale separately.

Disaggregated results indicate that the exchanges in North American and European exchanges report substantially higher economies of scale relative to the exchanges in the Asia-Pacific regions. Moreover it portrays that there is an increasing trend of the largest exchanges gaining the most cost effectiveness.

The result supports the formation of mergers and alliances among the biggest exchanges. It clearly encourages the increasing of standardisation and scale. The overall scale elasticity however says that in case of small and medium size exchanges all self evident pooling of activities may not be cost saving.

Our findings also suggest that regulation matters a lot for the efficiency of operative infrastructure companies in securities markets. We find returns to scale in America, regulation regarding the American exchanges and securities markets is more homogenous than the corresponding ones in Europe and Asia that shows least progress in continental wise harmonisation of regulation. To what extent this represents a sustainable solution regarding the most traded listed companies in small national markets is questionable as the trading of securities globalise rapidly.

Regional stock exchanges are deprecated. They will be superseded by new structures in a global market. These new features include online industry networks, global and specialist stock exchanges and a global private equity industry that can provide capital for any size of transaction - small and large in any market.

Companies will need time to change their approach and use these new features of the global equity market. Regional stock exchanges are likely to throw up a lot of

depreciation errors, or public relations messages, as they struggle with emerging global exchanges and online industry networks. The pace of industry consolidation has rapidly increased in the last 18 months as the global stock exchange is created.

With economies of scale, a global stock exchange may be able to provide access to the equity market for companies which previously could not get access. It is unclear whether the global exchanges currently being created will improve access to the equity market by smaller companies.

Most countries have a stock exchange. Countries without a stock exchange aspire to have one. The World Federation of Stock Exchanges has a membership of 55 exchanges from all over the world representing 97 % of world stock market capitalisation, (approximately \$35,000 billion). There are a further 24 affiliates, and 32 bourses which are correspondents. Stock exchanges have cast a huge shadow over the financial markets. They were the primary means for companies to raise capital for companies. There is often only one exchange in each country. They had a monopoly on providing capital to companies. They focused on the largest companies and smaller companies struggled to find access to capital.

After one hundred years, they still do the same thing in the same way. Match buyers and sellers and distribute information through closed networks. New technology offers a new and more efficient structure for a stock exchange. Current technology could allow a single computer to execute all the stock exchange transactions in the world. The internet could mean that anyone could transact through that computer. There is a continuing economic cost of not applying the new structures that have resulted from advances in technology.

The economic cost includes the lost opportunity of a large number of companies being unable to access the market for capital in regional economies.

The specific reasons that the vast majority of stock exchanges are deprecated are listed below:

- They know the rise of a global broadband internet that gives every point on the globe access to every other. However, penetration of broadband is approaching 90% in key countries. The capacity to distribute information is now accessible to every individual by leasing a web server for a small monthly fee.

- Global online industry networks will emerge to support the global equity market. Advisers previously tied to regional exchanges will begin to work in other countries over the internet. Local advisers will list companies on the best global exchange for the company, rather than a local listing.

- Stock exchanges only assist a company with order execution and do not guarantee companies liquidity. Companies are ultimately responsible for coordinating equity research, investor introductions, media and public relations that may deliver liquidity.

- Stock exchanges have not assisted listed companies with the collaborative aspects of the equity market. They have preserved their proprietary networks and restricted the flow of information. The networks and a flow of information have been restricted.

- Companies list on stock exchanges for liquidity and to access capital markets. For many companies, a listing on a stock exchange does not provide this. Large companies will gravitate toward five global stock exchanges or electronic contract networks. Smaller companies are not guaranteed liquidity. The private equity industry has grown significantly and can provide capital for any size of transaction - small and large. Regional stock exchanges may lose their large companies and smaller companies are less likely to list.

- Advances in technology mean that the matching of buyers and sellers can be processed by a single computer. A single global exchange would have a significant cost advantage (due to economies of scale) compared to exchange restricted to a local market.

- It is expensive to list on a stock exchange. For many companies, access to capital via a stock exchange is simply not economic. Many companies are unable to access capital and die. Small and medium enterprises are considered essential to economic development. A global stock exchange is likely to emerge with significant economies of scale. It may even be able to service companies that could not previously list.

- “Search engines”, a semantic web and dedicated online networks means that any market participant can find qualified information or market participants with a desktop internet search. This is a contrast to decades of building relationships and meeting people.

- Individual entrepreneurs can design an online industry network with open source software and scale it to service a global audience using Amazon EC2. There will be many entrepreneurs that develop new structures for niches within the financial markets. Many of these will encroach upon stock exchanges. These new ventures will target niches that stock exchanges have not pursued - collaborative activities and technology to deliver significant cost savings

- Global capital markets are likely to emerge in the next few years. Capital markets will no longer be US centric and other financial centres are playing a greater role in global capital markets.

- Stock exchanges have not innovated - they still perform the same function they performed more than a hundred years ago - match buyers and sellers, and distribute text to a regional audience. Stock exchanges have chosen to maximise revenue from regional

monopolies, applied technology to reduce cost and maximise profits for shareholders. There was, however, a significant opportunity that has been missed. For some, the opportunity still remains. For the majority, the opportunity has passed. Perhaps, the need to meet quarterly performance outweighed strategic opportunities.

There will be an online industry network for the equity market which supports the global capital market and is complementary to stock exchanges.

An online industry network is unlikely to be a “stock exchange”. It would leave the low margin capital intensive matching of buyers and sellers of shares for others. An online industry network is likely to focus on the collaborative activities.

Regional stock exchanges are deprecated. It may take time for this to be reflected in revenue, balance sheets and customer numbers. The few exchanges that can adapt and understand the internet may survive and thrive. The opportunity remains for some. Many stock exchanges have significant capital, quality relationships with regulators and a desire to preserve the status quo.

The large exchanges are applying their vast capital to consolidate the industry. However, the future of even the largest exchanges is not assured. All stock transactions could be executed through a single computer located on the internet. This is likely to be well understood by many stock exchanges given their competitive pressure received from electronic contract networks over the last two decades. Stock exchanges could delay the emergence of online networks, but are unlikely to stop them.

# APPENDIX

# LONDON STOCK EXCHANGE

	IFRS			UK GAAP <sup>1</sup>	
	Year ended 31 March 2007 £m	Year ended 31 March 2006 £m	Year ended 31 March 2005 £m	Year ended 31 March 2004 £m	Year ended 31 March 2003 £m
<b>Income Statement</b>					
<b>Revenue</b>					
- Issuer Services	63.2	56.9	43.3	45.7	42.8
- Broker Services	163.8	125.5	100.6	94.7	87.5
- Information Services - ongoing	105.9	94.1	86.7	79.9	83.8
- Derivatives Services - exceptional	-	6.4	-	-	-
- Derivatives Services	9.3	7.7	6.8	6.1	-
- Other income	7.4	6.9	7.0	10.7	11.8
<b>Total revenue (see<sup>2</sup> below)</b>	<b>349.6</b>	<b>297.5</b>	<b>244.4</b>	237.1	225.9
<b>Operating expenses</b>					
- before exceptional items and goodwill amortisation <sup>3</sup>	(164.0)	(171.0)	(159.8)	(154.2)	(144.5)
- exceptional items	(11.4)	(41.1)	(6.8)	-	(11.6)
Operating profit before exceptional items and goodwill amortisation <sup>3</sup>	185.6	120.1	84.6	82.9	81.4
Profit before taxation	161.5	93.5	92.2	88.8	79.2
Profit for the financial year	110.6	66.8	64.5	63.1	52.4
Basic earnings per share	50.5p	27.8p	24.2p	21.6p	18.0p
Diluted earnings per share	49.4p	27.4p	23.9p	21.4p	17.8p
Adjusted basic earnings per share	56.2p	37.4p	24.2p	21.2p	20.8p
<b>Balance sheet</b>					
Non-current assets	132.8	137.6	154.1	197.9	148.9
Current assets	134.3	276.1	206.3	285.6	268.7
Current liabilities	(329.4)	(78.7)	(76.8)	(85.5)	(67.7)
Non-current liabilities	(287.6)	(46.2)	(47.3)	(32.3)	(37.9)
<b>Net (liabilities)/assets</b>	<b>(349.9)</b>	<b>288.8</b>	<b>236.3</b>	365.7	312.0
<b>Cash flow</b>					
Net cash flow from operating activities before exceptional items	198.6	145.9	100.9	105.4	74.8
<b>Other information</b>					
Operating margin before exceptional items and goodwill amortisation <sup>2,3</sup>	53.1%	41.3%	34.6%	35.0%	36.0%
Share price - high	£13.50	£11.90	£5.90	£3.83	£5.03
Share price - low	£10.00	£4.49	£3.37	£2.80	£2.70
Total dividend per share declared in respect of financial year	18.0p	12.0p	7.0p	4.8p	4.3p

## Basis of preparation of Financial Record

<sup>1</sup> Financial information for years ended 31 March 2003 and 2004 is presented under UK GAAP. In line with IFRS 1 paragraph 37, the Company has not restated financial information for periods prior to the date of transition to IFRS (1

April 2004). The main changes arising from the introduction of IFRS are in respect of goodwill amortisation, pensions, sharebased payments, lease rentals, property depreciation and dividends.

<sup>2</sup> Analysis of revenue numbers for UK GAAP for years ended 31 March 2003-2004 exclude turnover from joint ventures, and reflect reclassifications between segments as reflected in the IFRS numbers.

<sup>3</sup> Operating expenses, operating profit, and operating margin before exceptional items all exclude goodwill amortisation in the [Interim Management Statement for the three months ended 31 December 2007](#)

## 24 January 2008

London Stock Exchange Group plc (“the Exchange”) today issued its Interim Management Statement for the three months ended 31 December 2007 (“Q3”) together with a summary of revenues for the nine months to date. The Q3 data reflects inclusion of Borsa Italiana from 1 October 2007, with comparative information for the equivalent period in the prior year reflecting the Exchange only. In addition, pro forma comparatives have been presented for Q3 and nine months year to date separately as if Borsa Italiana had been acquired on 1 April 2006 (“pro forma basis”). Details relating to the pro forma calculations are set out with tables at end of this statement. All figures are non-pro forma unless otherwise stated. All figures are unaudited.

In summary, the Exchange delivered a strong overall financial performance, with good growth continuing in the third quarter, compared with the same quarter last year:

- Revenue for the third quarter up 87 per cent to £167.9 million
- On a pro forma basis revenue for Q3 increased 15 per cent; 13 per cent in constant currency
- Average daily order book cash equities trading for the combined UK and Italian markets grew 56 per cent to 916,000, comprising trading on SETS up 89 per cent to 645,000; and equities order book trading on Borsa Italiana up 11 per cent to 271,000
- Trading on SETS in January currently up more than 130 per cent at over 900,000 bargains/day
- Primary market activity remained resilient in slow market conditions, with a total of 108 equity new issues in the period, including 34 new issues on the Main Market (and PSM); and seven new issues in Italy
- Total terminals taking real time London Stock Exchange data rose very strongly, up 20,000 since Q3 last year to 133,000 at end of December 2007, including a 13,000 rise in the number of professional terminals; and professional users of Borsa Italiana’s DDM market data service increased by 10,000 to 158,000
- Post trade operations performed well, with growth in clearing and custody businesses, and revenues up 15 per cent on a pro forma basis

Financial results for the nine months ended 31 December 2007 show:

- Revenue up 47 per cent to £371.0 million
- On a pro forma basis year to date revenue increased 19 per cent; 18 per cent in constant currency

Commenting on financial performance and prospects, Clara Furse, Chief Executive Officer, said:

“The Exchange has delivered excellent revenue growth, with both the London and Italian operations contributing to this very good overall result. In particular, trading on our cash equities platforms has been strong. We are making good progress on integration of the businesses and we are confident of a good outcome for the current financial year.”

## Financial Results

For the three months ended 31 December 2007, revenue was £167.9 million, up 87 per cent on the previous year (2006: £89.9 million), and up 15 per cent on a pro forma basis (2006 pro forma: £146.4 million). The principal drivers of this underlying good performance were the continued strong growth in order book trading, together with good results in Information and Post Trade operations.

Similar factors also contributed to a strong result for the nine months ended 31 December 2007, with revenue of £371.0 million, up 47 per cent on the equivalent period last year (2006: £253.2 million). On a pro forma year to date basis, revenue was £494.1 million, an increase of 19 per cent (2006 pro forma: £416.3 million).

## Issuer

The Issuer operations produced a resilient performance in Q3 in slow market conditions for new issuance arising from reduced liquidity in credit markets. Revenue increased 34 per cent to £25.2 million (2006: £18.8 million), although it was down 3 per cent on a pro forma basis (2006 pro forma: £26.1 million).

In Q3 there were a total of 108 new equity issues on the London and Milan markets (2006: 191).

During the quarter there was a total of 101 new issues on the London markets, down on the same period last year (2006: 183), including 34 on the Main Market and PSM (2006: 51). International IPOs remained strong, with 28 in Q3 (2006: 39), once again outstripping the number on NYSE-Euronext and Nasdaq.

In Italy, new issue activity was good overall, with 7 new equity issues in the period (2006: 9), and an uplift in bonds, ETFs and ETCs funds, although the number of new securitised derivatives listed in the quarter more than halved, at 1,086 (2006: 2,549).

As at 31 December 2007, the total number of companies on our London markets increased to 3,307 (2006: 3,256), including 1,694 on AIM (2006: 1,634). At the same time there were 344 companies on the Italian market (2006: 311).

On a year to date basis, Issuer revenue increased 28 per cent to £60.6 million (2006: £47.5 million), benefiting from the strong performance in H1. On a pro forma year to date basis, revenue was £75.9 million, an increase of 12 per cent (2006 pro forma: £67.9 million).

## Trading

Trading operations delivered an excellent result as revenue in Q3 increased 84 per cent to £76.9 million (2006: £41.7 million), and up 22 per cent on a pro forma basis (2006 pro forma: £63.2 million). The total value of cash equities traded during the period on the combined markets increased 33 per cent to £0.8 trillion (2006: £0.6 trillion), while the average number of cash equity trades per day increased 56 per cent to 916,000 (2006: 587,000).

With very strong trading volumes throughout the quarter, SETS, the London Stock Exchange's electronic order book, was a major driver of revenues. The average number of SETS bargains per day for the quarter grew strongly, reaching record levels at 645,000 (2006: 342,000), an increase of 89 per cent. Value traded on SETS increased 46 per cent to £570 billion (2006: £392 billion). For the quarter, the average value of a SETS bargain decreased 24 per cent to £14,000 (2006: £18,000). Combined with more market users achieving higher volume discounts, the average yield per bargain continued to reduce, reaching £0.86 for the quarter (2006: £1.32).

Cash equities trading in Italy increased nine per cent in Q3, with 16.8 million trades in the period (2006: 15.4 million), and average daily trades up 11 per cent at 271,000 (2006: 245,000). Value traded increased 16 per cent to €374 billion (2006: €324 billion), and on an average daily basis was up 17 per cent to €6.0 billion (2006: €5.1 billion).

Derivatives operations enjoyed a good quarter, with total combined contracts traded up 38 per cent at 20.3 million (2006: 14.7 million). This total comprised trading on IDEM which grew 11 per cent to 8.9 million (2006: 8.0 million), and contracts traded on EDX which increased 70 per cent to 11.4 million (2006: 6.7 million).

The notional value traded in the Fixed Income operations (Borsa Italiana MOT bond trading and MTS) decreased to €4.3 trillion (2006: €5.0 trillion). While trading in government bonds was generally resilient, trading in the money markets segment declined, principally reflecting issues in credit markets since the summer.

For the nine months ended 31 December 2007, the Trading operations produced another excellent performance, with a 49 per cent increase in revenue to £182.0 million (2006 pro forma: £122.2 million). On a pro forma year to date basis, revenue was £228.8 million, an increase of 23 per cent (2006 pro forma: £185.3 million).

## Information

Information operations performed very well during the quarter. Revenue for Q3 rose 50 per cent to £40.9 million (2006: £27.3 million) - up 14 per cent on a pro forma basis (2006 pro forma: £35.8 million) - with excellent growth in the number of terminals as well as good performance by other information products.



The overall number of terminals taking real time LSE data rose strongly, increasing to 133,000, up 20,000 since the same point last year (31 December 2006: 113,000), a new record level. Included in this number were 107,000 terminals attributable to professional users, up 13,000 over the same time last year (31 December 2006: 94,000), and up 4,000 since the half year end.

In Italy there was significant growth in the number of professional and private users of its DDM services (which provides real time market information) to 158,000 and 727,000 respectively (2006: 148,000 and 648,000 respectively) and in the number of its Market Connect screens (which provide real time data and other financial contents through a suite of applications) to 18,494 (2006: 4,568).

Reflecting strong demand for the Exchange's data products, Information Services' revenue for the financial year to date increased 27 per cent to £99.0 million (2006: £78.2 million). On a pro forma year to date basis, revenue was £117.5 million, an increase of 14 per cent (2006 pro forma: £102.7 million).

## Post Trade

Post Trade operations, the Italian-based clearing, settlement and custody businesses, delivered a good third quarter result with revenues of £20.2 million, an increase of 15 per cent on a pro forma basis over the equivalent prior year period.

The CC&G clearing business benefited from an increase in volume of clearing transactions, with the number of equity and derivative contracts growing by 9 and 12 per cent respectively (17.2 million equity contracts (2006: 15.7 million) and 8.9 million derivative contracts (2006: 8.0 million)).

In the third quarter, Monte Titoli registered a four per cent rise in the average value of assets under custody, growing from €2.7 billion to €2.8 billion. Settlement operations saw a reduction in settlement instructions, down from 14.9 million to 12.9 million, principally due to consolidation in the domestic Italian banking sector.

On a pro forma basis for the financial year to date, revenue was £60.3 million, an increase of 18 per cent (2006 pro forma: £51.3 million).

## Current Trading and Prospects

The Exchange has continued the strong performance seen in the first half of the year into H2. Trading volumes on SETS have reached new levels and equities trading in Italy has been positive. Demand for real time price and trading data remains strong in London and Italy, and the Issuer business has performed well, though primary market conditions have been testing in Q3 and may remain so in the current quarter. As well as reflecting the inclusion of Borsa Italiana, second half costs are expected to be above H1, due in part to performance related and share based payments.

The Exchange is confident of a good outcome for the enlarged group in this current financial year, and looks forward to the benefits from the combination with Borsa Italiana as integration work continues.

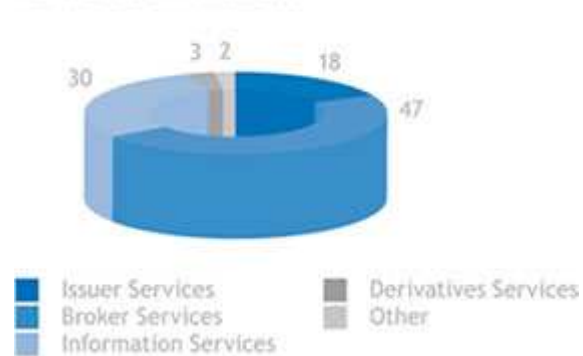
Further information is available from:

London Stock Exchange	Patrick Humphris – Media	+44 (0) 20 7797 1222
	Alessandro Pavesi – Media	+39 02 72426 211
	Paul Froud – Investor Relations	+44 (0) 20 7797 3322
Finsbury	Alex Simmons	+44 (0) 20 7251 3801

K GAAP numbers for years ended 31 March 2003-2004.

Year ended 31 March	2007	2006	Growth
Revenue before exceptional items	£350m	£291m	20%
Operating profit before exceptional items	£186m	£120m	55%
Operating profit	£174m	£85m	104%
Profit before tax	£162m	£93m	73%
Basic earnings per share	50.5p	27.8p	82%

**REVENUE BEFORE EXCEPTIONAL ITEMS (£M)\***  
 YEARS ENDED 31 MARCH

**REVENUE BEFORE EXCEPTIONAL ITEMS (%)**  
 YEAR ENDED 31 MARCH 2007

**OPERATING PROFIT BEFORE EXCEPTIONAL ITEMS AND GOODWILL AMORTISATION (£M)\***  
 YEARS ENDED 31 MARCH

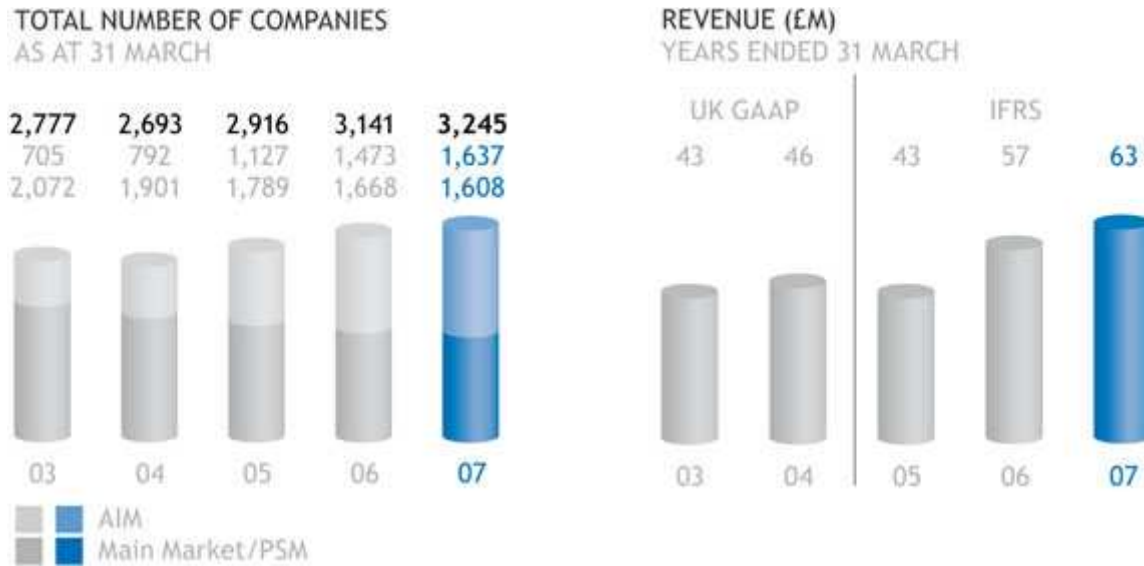
**ADJUSTED BASIC EARNINGS PER SHARE (PENCE)\***  
 YEARS ENDED 31 MARCH

**CASH GENERATED FROM ONGOING OPERATING ACTIVITIES (£M)\***  
 YEARS ENDED 31 MARCH


\* Based on IFRS for 2005, 2006 and 2007 and UK GAAP for 2003 and 2004.

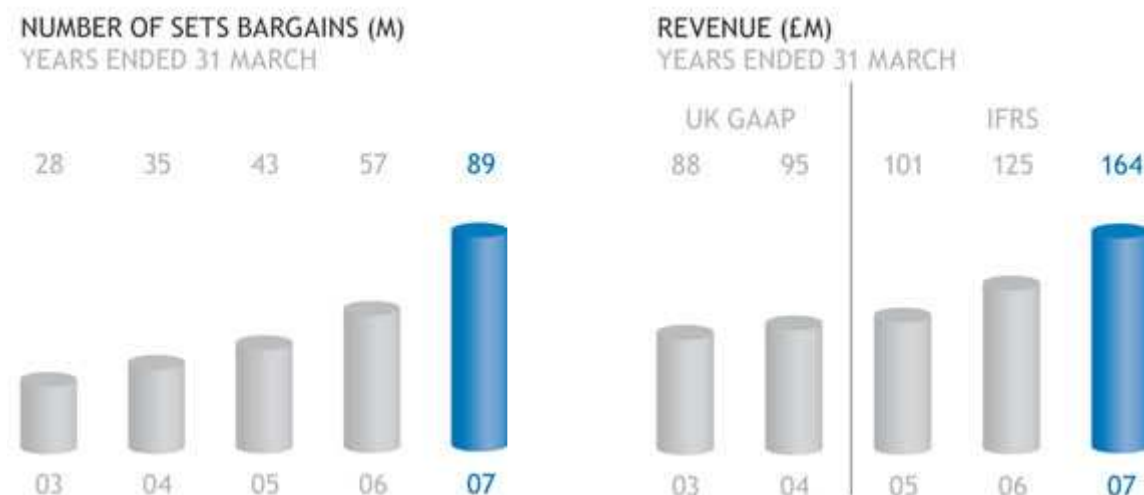
**DIVISIONS**

### Issuer Services



Companies across the world come to the London Stock Exchange to raise money for growth. Joining one of our primary markets – the Main Market, Professional Securities Market (PSM) or AIM – gives companies the opportunity to access one of the world’s deepest and most liquid pools of low cost investment capital.

### Broker Services

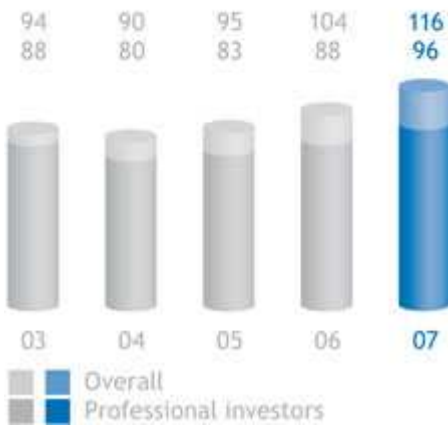


More than 350 firms worldwide trade as members of the London Stock Exchange. Our systems provide fast and efficient access to trading at very low cost, allowing investors and institutions to tap quickly into equity, bond and derivatives markets. Internationally recognised standards of regulation and a leading market model put our markets among the most attractive and liquid in the world.

### Information Services

### INFORMATION SERVICES

TOTAL NUMBER OF TERMINALS (000)



### REVENUE (£M)

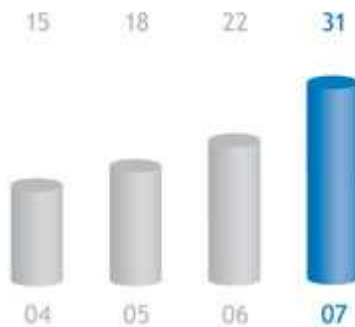
YEARS ENDED 31 MARCH



Information is the lifeblood of the stock market. Fast provision of reliable information creates the transparency and liquidity that is the hallmark of the London Stock Exchange. We supply high-quality, real-time prices and trading data, news and other information to the global financial community. We have invested in new technology to create the latest applications and deliver extremely low levels of latency on our market data.

### Derivatives Services

TOTAL NUMBER OF CONTRACTS TRADED (M)  
YEARS ENDED 31 MARCH



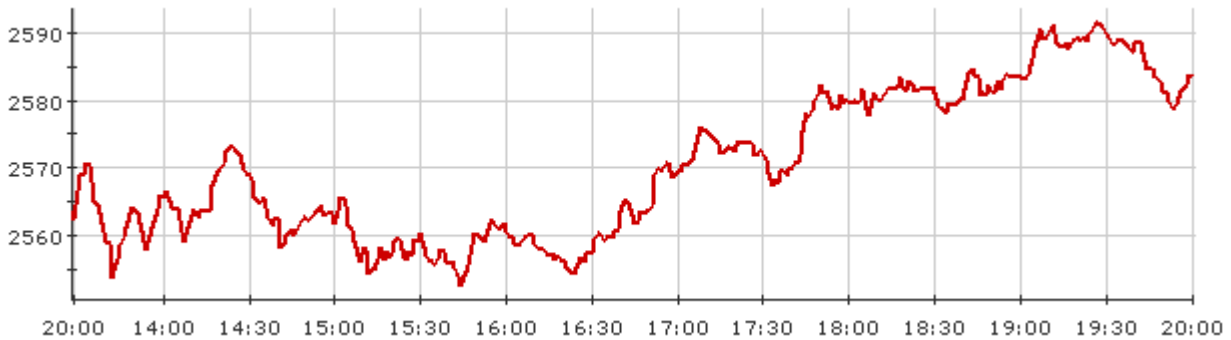
REVENUE (£M)  
YEARS ENDED 31 MARCH



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# NASDAQ STOCK EXCHANGE

## Nasdaq Index 15 min delay



\*All Times GMT

Select time span for charts:

Intra-day

GO

index value	change	%	52 wk-h	52 wk-l
2583.28	21.04 ▲	0.82 ▲	2720.04	2057.71

Click name to view detailed share information

### Top 5 winners

value	change	%
<a href="#">VEECO INSTRUMENTS</a>	18.54	1.31 ▲ 7.51
<a href="#">TASER INTERNATIONAL</a>	15.27	0.94 ▲ 6.61
<a href="#">GARMIN LTD</a>	85.23	5.17 ▲ 6.47
<a href="#">Monster Worldwide Inc. - Commo</a>	39.99	2.26 ▲ 5.96
<a href="#">EVERGREEN SOLAR</a>	8.62	0.48 ▲ 5.88




### Top 5 losers

value	change	%
<a href="#">VALUECLICK INC</a>	21.06	5.00 ▼ 19.22
<a href="#">Force Protection, Inc.</a>	15.39	1.05 ▼ 6.38
<a href="#">UTSTARCOM INC</a>	3.25	0.19 ▼ 5.78
<a href="#">CNET NETWORKS INC</a>	7.46	0.27 ▼ 3.49
<a href="#">IMMUCOR INC</a>	31.55	1.00 ▼ 3.11


More index pages

Click name to view detailed information and chart











## Global

	time	index value	change	%
<a href="#">BBC Global 30</a>	Mon 21:41	5755.36	32.05 	0.56 





## Europe / Africa

	time	index value	change	%
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### London

<a href="#">FTSE 100</a>	Mon 16:41	6206.10	9.10 	0.15 
<a href="#">FTSE 250</a>	Mon 16:36	11071.70	87.20 	0.79 
<a href="#">FTSE 350</a>	Mon 16:41	3261.70	0.20 	0.01 
<a href="#">FTSE All Share</a>	Mon 21:48	3211.15	0.46 	0.01 
<a href="#">FTSE Techmark</a>	Mon 16:36	1639.66	10.41 	0.63 









### Pan European

<a href="#">FTSEurofirst 300</a>	Mon 17:15	1517.74	2.32 	0.15 
<a href="#">DJ Eurostoxx 50</a>	Mon 20:30	4239.18	5.40 	0.13 

### Amsterdam AEX

Mon 21:45	525.76	0.93 	0.18 
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### Frankfurt

<a href="#">Dax</a>	Mon 17:32	7456.31	4.63 	0.06 
<a href="#">MDax</a>	Mon 17:32	10523.60	28.71 	0.27 
<a href="#">SDax</a>	Mon 17:32	6040.76	30.10 	0.50 
<a href="#">TecDax</a>	Mon 17:32	898.32	7.08 	0.79 

### Paris Cac 40

Mon 17:10	5646.36	2.40 	0.04 
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### Brussels Bel 20

Mon 21:45	4336.03	5.96 	0.14 
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### Madrid IBEX

Mon 21:38	14507.90	79.60 	0.55 
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### Zurich


<a href="#">SMI</a>	Mon 16:30	8697.16	8.41 	0.10 
<a href="#">SPI</a>	Mon 16:33	7127.30	2.10 	0.03 

### Moscow RTS

Mon 22:53	1961.04	6.02 	0.31 
-----------	---------	--	--

<a href="#">Johannesburg All Share</a>	Mon 21:38	28156.23	441.78 ▲	1.59 ▲
--	-----------	----------	----------	--------


### South Asia

	time	index value	change	%
 <a href="#">Bombay BSE Sensex</a>	Mon 20:23	15260.91	n/a	n/a

<a href="#">Karachi KSE-100</a>	Mon 22:58	13634.84	n/a	n/a
---------------------------------	-----------	----------	-----	-----

<a href="#">Colombo CSE All Share</a>	Mon 22:53	2441.40	20.10 ▼	0.82 ▼
---------------------------------------	-----------	---------	---------	--------

### Asia Pacific


	time	index value	change	%
 <a href="#">Sydney All Ordinaries</a>	Mon 22:58	6146.50	n/a	n/a

<a href="#">Hong Kong Hang Seng</a>	Mon 22:58	22739.90	n/a	n/a
-------------------------------------	-----------	----------	-----	-----

<a href="#">Tokyo Nikkei</a>	Mon 22:58	17289.30	n/a	n/a
------------------------------	-----------	----------	-----	-----

<a href="#">Singapore STI</a>	Mon 23:03	3526.29	0.00	0.00
-------------------------------	-----------	---------	------	------

### Americas

	time	index value	change	%
 <b>New York</b>				

<a href="#">Dow Jones</a>	Mon 21:30	13358.31	92.84 ▲	0.70 ▲
---------------------------	-----------	----------	---------	--------

<a href="#">Nasdaq</a>	Mon 23:10	2583.28	21.04 ▲	0.82 ▲
------------------------	-----------	---------	---------	--------

#### Chicago Mercantile Ex.

<a href="#">S&amp;P 500</a>	Mon 22:38	1473.91	14.96 ▲	1.03 ▲
-----------------------------	-----------	---------	---------	--------

<a href="#">Russell 2000</a>	Mon 22:38	784.23	6.40 ▲	0.82 ▲
------------------------------	-----------	--------	--------	--------

<a href="#">Buenos Aires General</a>	Mon 22:58	2149.89	92.89 ▼	4.14 ▼
--------------------------------------	-----------	---------	---------	--------

[Sao Paulo Bovespa](#)

Mon 22:58

52922.23

3076.31

5.49

[Mexico IPC](#)

Mon 22:58

31103.53

n/a

n/a

## NASDAQ Obtains Clearance From the Committee On Foreign Investment in the United States

Plans for Proposed Acquisition of OMX AB On Track

NASDAQ Formally Withdraws Stand-alone Offer for OMX, Will Proceed With Acquisition of OMX From Borse Dubai

NEW YORK, Dec. 31, 2007 (PRIME NEWSWIRE) -- The Nasdaq Stock Market, Inc. (Nasdaq:[NDAQ](#)) today announced that it has obtained clearance from The Committee on Foreign Investment in the United States (CFIUS) concerning Borse Dubai's investment in NASDAQ, which will allow NASDAQ to proceed with its plans to combine with Stockholm-based OMX AB (publ) (OMX). NASDAQ and Borse Dubai Limited (Borse Dubai) had previously voluntarily submitted their agreement to CFIUS for review.

As a result of CFIUS approval, NASDAQ said today that as part of its transaction with Borse Dubai, announced on September 20, 2007, it has formally withdrawn its offer for OMX and supports Borse Dubai's all cash offer of SEK 265 per share to acquire OMX. All other previously agreed conditions for Borse Dubai to open its offer have now been fulfilled or waived in accordance with the agreements between Borse Dubai and NASDAQ. Provided Borse Dubai owns in total at least 67% of the shares of OMX and the conditions for closing the transaction under the agreement with NASDAQ have been satisfied or waived, Borse Dubai will sell all OMX shares it owns to NASDAQ for consideration in NASDAQ shares and cash, as previously announced. At the same time, NASDAQ will make an investment in Dubai International Financial Exchange, as previously announced.

NASDAQ's now-withdrawn stand-alone offer for OMX was conditional upon being accepted to such an extent that NASDAQ becomes the owner of shares representing more than 90 percent of the outstanding shares in OMX on a fully diluted basis(1). Borse Dubai will open its offer for OMX for acceptances when the offer document has been approved by relevant authorities.

Taking into account that Borse Dubai today, before the opening of its offer, controls shares, options and irrevocable undertakings which will result in Borse Dubai holding approximately 48.3 percent of OMX's issued share capital and votes when the options and irrevocable undertakings are exercised in accordance with what has previously been announced, it is clear that the 90 percent acceptance condition in NASDAQ's stand-alone offer cannot be fulfilled.

NASDAQ therefore announces today that it withdraws its stand-alone offer for OMX, in accordance with the agreements with Borse Dubai and as presented in statement AMN 2007:32 from the Swedish Securities Council.

(1) Condition number 1 in NASDAQ's announcement of the NASDAQ offer from May 25, 2007.

### About NASDAQ

NASDAQ is the largest U.S. equities exchange. With approximately 3,100 companies, it lists more companies and, on average, trades more shares per day than any other U.S. market. It is home to companies that are leaders across all areas of business including technology, retail, communications, financial services, transportation, media and biotechnology. NASDAQ is the primary market for trading NASDAQ-listed stocks as well as a leading liquidity pool for trading NYSE-listed stocks. For more



information about NASDAQ, visit the NASDAQ Web site at [www.nasdaq.com](http://www.nasdaq.com) or the NASDAQ Newsroom at [www.nasdaq.com/newsroom/](http://www.nasdaq.com/newsroom/).

#### Cautionary Note Regarding Forward-Looking Statements

Information set forth in this communication contains forward-looking statements, which involve a number of risks and uncertainties. NASDAQ cautions readers that any forward-looking information is not a guarantee of future performance and that actual results could differ materially from those contained in the forward-looking information. Such forward-looking statements include, but are not limited to, statements about the transactions contemplated by NASDAQ's agreements with Borse Dubai and OMX and the date on which Borse Dubai's offer for OMX will be opened for acceptances. Additional risks and factors are identified in NASDAQ's filings with the U.S. Securities Exchange Commission (the "SEC"), including the definitive proxy statement filed on November 19, 2007 and its Report on Form 10-K for the fiscal year ending December 31, 2006 which is available on NASDAQ's website at <http://www.nasdaq.com> and the SEC's website at [www.sec.gov](http://www.sec.gov). NASDAQ undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

#### NDAQO

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#### [Back to Press Releases](#)

#### Statement From NASDAQ Regarding CFIUS

NEW YORK, Dec. 28, 2007 (PRIME NEWSWIRE) -- A NASDAQ press release regarding The Committee on Foreign Investment in the United States (CFIUS) approval of NASDAQ's application was distributed in error. A formal announcement will be distributed when appropriate.

NASDAQ is the largest U.S. equities exchange. With approximately 3,100 companies, it lists more companies and, on average, trades more shares per day than any other U.S. market. It is home to companies that are leaders across all areas of business including technology, retail, communications, financial services, transportation, media and biotechnology. NASDAQ is the primary market for trading NASDAQ-listed stocks as well as a leading liquidity pool for trading NYSE-listed stocks. For more information about NASDAQ, visit the NASDAQ Web site at [www.nasdaq.com](http://www.nasdaq.com) or the NASDAQ Newsroom at [www.nasdaq.com/newsroom/](http://www.nasdaq.com/newsroom/).

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NASDAQ

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NASDAQ	2583.28	21.04	0.82	▲ %
DJIA	13358.3	92.84	0.70	▲ %
S&P 500	1473.91	14.96	1.03	▲ %
NASDAQ-100	1973.93	17.74	0.91	▲ %
NASDAQ-100 PMI	1958.29	2.10	0.11	▲ %
NASDAQ-100 AHI	1977.58	3.65	0.18	▲ %
Russell 1000	801.85	8.13	1.02	▲ %
Russell 2000	784.23	6.40	0.82	▲ %
ETSE All-World exc-US*	255.62	0.29	0.11	▲ %
ETSE RAEI 1000*	6122.57	60.98	1.01	▲ %

NASDAQ TOOLBAR

### Top Business News Headlines

- 3:35PM ET [BOND REPORT: Treasuries Decline As Stocks Pull Off A Rise](#)
- 1:59PM ET [BOND REPORT: Treasuries Decline As Stocks Veer Toward Flat Line](#)
- 1:15PM ET [UPDATE: News Corp. Won't Pursue Dow Jones If Bancroft Vote Tally Holds](#)
- 1:14PM ET [MARKETWATCH FIRST TAKE: HSBC Suggests Faster-than-expected Turn In Some Areas](#)

### Intraday Unusual Volume - Top 5 Up

- ALL NEWS HEADLINES ▶
- NASDAQ Market Announcements
    - [NASDAQ Announces Second Quarter 2007 Results](#)

Symbol	Volume %	Price %	Change	News
<a href="#">WMAR</a>	403%	▲ 8.04%	<a href="#">news</a>	
<a href="#">RCCC</a>	376%	▲ 34.42%	<a href="#">news</a>	
<a href="#">BMTI</a>	342%	▲ 3.72%	<a href="#">news</a>	
<a href="#">MBHI</a>	263%	▲ 6.14%	<a href="#">news</a>	
<a href="#">ROCM</a>	223%	▲ 8.66%	<a href="#">news</a>	

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### Expected Offerings Week of 7/30/2007

Company Name (Symbol)	Price
<a href="#">CONCHO RESOURCES INC (CXO)</a>	\$14.00 16.00
<a href="#">VIRTUSA CORP (VRTU)</a>	\$14.00 16.00

\* Click Company Name for Filing Info

### [Economic Events & Analysis](#)

11:00 AM ET [4-Week Bill Announcement](#)  
 1:00 PM ET [3-Month Bill Auction](#)  
 1:00 PM ET [6-Month Bill Auction](#)

### Intraday

52 Week	High	Low
NASDAQ	<a href="#">16</a>	<a href="#">128</a>
Amex	<a href="#">8</a>	<a href="#">32</a>
NYSE	<a href="#">14</a>	<a href="#">176</a>

### Analyst Changes

Intraday  
 Recommendations      Forecasts  
[52](#) Upgrades              [489](#) Increased  
[9](#) Downgrades            [638](#) Decreased  
[2](#) Coverage Initiated  
[Stocks with the most Analyst Activity](#)

### Today's Events

[Upcoming Splits](#)  
[New SEC Filings](#)

### Earnings

[513](#) Expected Reports

### Surprises

[47](#) Exceeded  
[2](#) Met  
[28](#) Failed

### • [NASDAQ and OMX to Combine](#)

#### NASDAQ Heatmaps®

Spot NASDAQ, NYSE, and Amex stock trading opportunities.

[NASDAQ-100 Pre-Market](#) | [ETF](#) | [NASDAQ-100](#) | [Custom Heatmap](#)

HMAP	DCBA
10.86%	0.98%
NAGQ	XBCY
-1.74%	-12.57%

### NASDAQ CEO Signature Series

• Superior Offshore International, Inc. [DEEP], James J. Mermis, CEO

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• Bionovo, Inc. [BNVI], Isaac Cohen, O.M.D., L.Ac., Chairman & CEO

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• United Stationers Inc. [USTR], Richard W. Gochnauer, President & CEO

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• Tessera Technologies, Inc. [TSRA], Bruce McWilliams, President & CEO

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• Hercules Technology Growth Capital, Inc. [HTGC], Manuel Henriquez, President & CEO

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• Thermage, Inc. [THRM], Stephen J. Fanning, President & CEO

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# SHANGHAI STOCK EXCHANGE

## Osaka Securities Exchange Signs MOU With Shanghai Stock Exchange

09/09/04

Osaka Securities Exchange Co., Ltd. (OSE) announces that Shanghai Stock Exchange (SSE) and the OSE have signed a Memorandum of Understanding (MOU).

We have recently witnessed growing economic and financial ties between China and Japan and the rising demand for international listing among Chinese leading companies. Under such circumstances, both exchanges have been equally reinforcing R & D activities and enhancing their product lines. The MOU aims at establishing and strengthening the relationship between the two exchanges for the mutual benefit.

Mr Zhu Congjiu, President of the SSE and Michio Yoneda, President & CEO of the OSE attended the signing ceremony, in which Mr Yoshihisa Akiyama, Chairman of Kansai Economic Federation joined.

Under the MOU, the SSE and the OSE have decided to reinforce the relationship in the following areas:

- Exchange of information on each market
- Regular meetings at senior executive level
- Short-term exchange of staff
- Joint projects, joint seminars, etc.

### **Shanghai Stock Exchange announces 2007 strategy**

The Shanghai Stock Exchange (SSE) Monday released its 2007 development plan, which highlights nine points for building a world-class stock market with an efficient trading system and product diversity.

According to the plan, the SSE will step up efforts to attract more mainland companies that have already listed on the Hong Kong bourse to seek a dual listing in Shanghai. In addition, it will try to attract more initial public offerings by leading State-owned companies to boost market size.

The SSE said it would create a favorable market environment to speed up the listing process and to encourage mergers and acquisitions among listed companies.

With the Shanghai Composite Index the leading market indicator rising more than 130 percent in 2006, the SSE is one of the world's fastest growing stock markets. Most of the mainland's larger enterprises, such as the Industrial and Commercial Bank of China, Bank of China, Baosteel and China Unicom, are already listed in Shanghai.

The combined market value of the 10 largest Shanghai listed companies account for more than 50 percent of the total market value.

"The SSE has substantially increased its investment value and market status in the world, as it strives for world-class stock market status," said SSE Chairman Geng Liang.

The SSE's goal for 2007 is to structure a more diversified market with the balanced development of stocks, bonds and a number of financial derivatives. Covered warrants and other structural products derived from blue-chips stocks are expected to be launched in 2007 to increase market liquidity.

"We have made full preparation for the launch of covered warrants, but are still waiting for approval from the regulatory authorities," said the SSE's manager of financial derivatives Chen Hao.

The bond market will be an important area for the SSE to develop in 2007, and particularly the trade in state bonds, corporate bonds and asset securitization products. The SSE will develop an electronic system for bond trading this year.

The stock trading system will also be updated early this year to include more functions. The new system is expected to be put on trial during the non-trading period in April.

This is a very important year for the SSE, which is faced with unprecedented opportunities and challenges, a spokesman from the SSE said.

The share reform was almost completed in 2006, resulting in a more rational market. By the end of 2006, there were a total of 1,269 companies that underwent the share reform, accounting for 94 percent of the total. This year, the SSE will help the remaining companies undergo the reform process.

Market sources agree that there is a lot of work left. Despite the tremendous progress made in recent years, the SSE is still behind other mature stock markets in the world in terms of efficiency and product diversity. So, the SSE is trying to significantly narrow the gap in 2007.

## **Shanghai Stock Exchange sets up first review panel**

GOV.cn Tuesday, June 13, 2006

The [Shanghai Stock Exchange](#) said on Monday that it has set up its first listings review committee. The committee, made up of officials, lawyers, accountants and scholars, has the power to decide on the listing, suspension and de-listing of securities on the exchange.

The move was made in accordance with the new Securities Law promulgated at the beginning of 2006. Before the law took effect, both issuance and listing reviews were vetted by the [China Securities Regulatory Commission](#), the country's securities watchdog. The new Securities Law stipulated that

listings reviews should be passed to the exchange.

Separate listings committees for equities and bonds previously existed at the exchange, but they were composed mainly of exchange staff and did not operate transparently.

Song Yixin, a lawyer from the Shanghai Newhope Law Firm, said the listings committee is expected to raise the credibility of the exchange.

Of the 36-member committee, more than half come from law firms, accounting companies, research institutes and stockbrokerages and banks.

"The biggest benefit for the investors is that it provides a social examination system," Song said. "Chances are very small that these celebrity members will risk their fame for fraud."

He endorsed the new practice as a "good beginning."

In its May regulation on stock listings, the Shanghai Stock Exchange announced that the examination rights of stock listing, suspension and de-listing goes to the exchange itself. This time, the examination expands to bonds.

At least five members out of the 36 will take part in every approval process, including a lawyer and an accountant.

## Shanghai stock index nears 3500 points

<http://www.chinaview.cn/index.htm> 2007-04-11 19:35:06

Adjust font size:



A share holder is having lunch before a stock index board in Hefei April 11, 2007. The benchmark Shanghai Composite Index closed at 3,500 points after blasting through 3,400 points on Tuesday. (Xinhua Photo)

[Photo Gallery>>>](#)

BEIJING, April 11 (Xinhua) -- Chinese shares continued their record setting pace, soaring to yet another record high on Wednesday, with the benchmark Shanghai Composite Index nearing the 3,500 after blasting through 3,400 points on Tuesday.

The key stock indicator, which tracks both A- and B-shares, peaked at 3,497.52 points and ended the day at 3,495.22, up 1.48 percent over the previous close. It rose 50.93 points on Wednesday with turnover of 157.819 billion yuan (20.5 billion U.S. dollars).

The Component Index on the Shenzhen Stock Exchange also gained 101.10 points to close at 9753.77 points on a transaction volume of 83.936 billion yuan (10.9 billion U.S. dollars).

The combined turnover for the two bourses also set a new high of 241.755 billion yuan (31.4 billion U.S. dollars). Turnover on Tuesday was 232.853 billion yuan (30.2 billion U.S. dollars) which was the previous record.

The Shanghai stock exchange recorded 456 gainers and 374 losers, with 62 shares unchanged, while the Shenzhen exchange saw 331 gainers and 253

losers, with 72 shares unchanged. Banking, steel and nonferrous metal shares again lead the way.

With the Shanghai index continuing to post record highs, analysts with Shenyin Wanguo Securities say a correction can be expected.

Other analysts, however, believe the bullish trend will be maintained, backed by the growing national economy.

On Wednesday, the Hushen 300 Index, which tracks stocks on the Shanghai and Shenzhen stock exchanges, closed at 3,121.32 points, up 39.75 points from the previous close.

#### **Related:**

#### **[Chinese shares close at record high](#)**

BEIJING, April 9 (Xinhua) -- China's benchmark stock index almost broke another milestone coming within two points of the 3,400 barrier on Monday, with metal, textile and pharmaceutical shares leading the way.

The Shanghai Composite Index rose 75.36 points, or 2.27 percent, from the previous day to end Monday trading at a new record high of 3,398.95 points. [Full story](#)

#### **[Chinese shares open lower on April 6](#)**

BEIJING, April 6 (Xinhua) -- Chinese shares opened lower on Friday. The benchmark Shanghai Composite Index opened at 3,287.68 points, down by 31.46 points, or 0.95 percent.

The index, which tracks both yuan-denominated A shares and hard-currency B shares traded on the Shanghai Stock Exchange, closed at 3,319.14 points on Thursday. [Full story](#)

## Shanghai Stock Exchange

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[.pdf version](#) of this customer profile (201 KB .pdf)

### **State-of-the-art Stratus® ftServer® systems power mission-critical Shanghai Stock Exchange operations into the 21st century**

The Shanghai Stock Exchange (SSE), located in Shanghai's new Pudong financial district, first commenced operations in December 1990. Supervised by the China Securities Regulatory Commission, the SSE is charged with the orderly functioning and development of Shanghai's stock market, now the largest bourse in the People's Republic of China.

**"In fact, Stratus fault-tolerant systems do not differentiate between 'main' and 'backup' systems, as any of two or more mutually redundant components can**

**function as the main system at any time."**

At the SSE, brokers occupy mainly 'virtual' seats and a smaller number of 'actual' seats, with most member firms conducting transactions online. With 1,608 exchange seats and 5,700 terminals, the SSE boasts the largest trading hall in the Asia-Pacific region. Its trading system interfaces with the outside world via a satellite communications network transmitting real-time market intelligence daily to 3,000 satellite-receiving stations around China.

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## **Mission-critical trading center**

The SSE computer system plays a mission-critical role in the exchange's day-to-day business. As investors place their buy/sell orders online via a satellite and terrestrial fiber-optic network, the SSE computer system processes and confirms the trades automatically in real time. Absolute system reliability is thus required to ensure that all transactions can be completed with nano-second accuracy. As a Stratus spokesman observed: "For a bank ATM, two hours of downtime would be an unfortunate inconvenience, but for the Shanghai Stock Exchange, a mere five minutes of outage would be a major disaster."

The information system and the SSE computerized trading system are closely integrated. Sky Net, the largest stock communications satellite network in China, and Ground Net, the SSE's DDN leased-line network, provide mutual redundancy for the transmission of vital real-time trading information from SSE brokerages to investors all over China. Overseas subscribers can also receive a relay of the same information through wire services such as Reuters and Dow Jones. Consequently, the efficient operation of the entire network and thus the SSE itself hinges on the stability of the core computer system, which in turn directly affects not only the profitability of brokers and investors, but also the service reliability and reputation of the Exchange.

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## **Stringent Evaluation**

Shanghai Stock Exchange management first recognized the potential value of using Stratus servers during the early 1990s. Since then they have conducted a series of stringent evaluations of Stratus systems. In 1999, SSE purchased their first Stratus Continuum® system and spent a year testing it. The following year, after a highly successful trial run, SSE ordered several more Stratus products to further test and evaluate their integrated performance. Today, 33 Stratus Continuum systems and two Windows®-based Stratus ftServer 3210 systems are deployed online as the SSE computer system's front-end communications and trading system.

"The SSE people really put our systems through their paces," said a Stratus spokesman. When testing Stratus system reliability, redundant back-up components were closed down and the main system allowed to function on a stand-alone basis. While full service was maintained, the back-up systems were restarted and the main system closed down. In this way, all modules were thoroughly tested and the system's ultra-high availability verified. As the Stratus spokesman added: "In fact, Stratus fault-tolerant systems do not differentiate between 'main' and 'back-up' systems, as any of two or more mutually redundant components can function as the main system at any time."

Having passed all tests with flying colors, the SSE's Stratus systems have gone on to provide an ultra-reliable foundation for the smooth running of the exchange's trading system.

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**"For a bank ATM, two hours of downtime would be an unfortunate inconvenience, but for the Shanghai Stock Exchange, a mere five minutes of outage would be a major disaster."**

## **Solid foundation, powerful system**

The switch to Stratus systems was exceptionally smooth; the Stratus equipment was fully compatible



system, and the highest levels of uptime, 99.999% and above, provide a solid guarantee for the entire system.

In addition, the SSE's operational experience is such that system-switching time has been shortened from 30 to 40 minutes to less than one minute, which assures the exchange of a stable platform for its mission-critical operations.

The SSE is now the leading stock market in Mainland China. Its computer system can now execute 29 million orders and settle 60 million transactions per day at a speed of 8,000 transactions per second. While the SSE ranks thirteenth in the world and third in Asia, by total capitalization, its transactions rate is now the highest in the world. "With the adoption of Stratus fault-tolerant systems, the SSE is surely up there with other world-class stock exchanges," said the Stratus spokesman.

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## SWISS STOCK EXCHANGE

### Swiss Stock Exchange

The Swiss Stock Exchange(SWX), based in Zurich is the first stock exchange in the world to incorporate a fully automated trading, clearing and settlement system in 1995. The Swiss Stock Exchange(SWX) is controlled by an association of banks which number 55. Each of these banks have equal voting rights in the matter of decision making concerning the management and regulation of the Swiss Stock Exchange.

Having the most competitive economy in the world according to the World Economic Forum, has not rescued the Swiss economy from its slow growth, that began back in the early 1990s. From being the richest in the European continent through the larger portion of the last century, Switzerland presently ranks fourth amongst the European countries (having a population that exceeds one million) after Ireland, Denmark and Norway.

The Swiss Stock Exchange(SWX) is the joint owners of the Eurex, the world's largest futures and derivatives exchange along with their German partners Deutsche Børse. In July 2004 however the Swiss Stock Exchange(SWX) rejected a proposal of merger from the German company, that analysts anticipate as profitable for many small companies enlisted on the Swiss Stock Exchange(SWX).

The Swiss Stock Exchange(SWX) has a blue-chip index as its stock market index. It is called the Swiss Market Index (SMI) and comprises of a maximum of thirty largest and at the same time most liquid, large and mid-cap SPI stocks.

The good news is that in September 2006 the Swiss Market Index (SMI) crossed its previous all time high which was set nearly eight years ago. This reflects the improved performances of the major Swiss companies enlisted on the Swiss Stock Exchange.

The most recent reports state that The Swiss Stock Exchange(SWX) is willing to engulf the electronic stock market - Virt-x, which was founded in the first place through the merger of the Swiss Stock Exchange with Tradepoint, a London based electronic stock market.

For more information on the Swiss Stock Exchange log on to [answers.com](http://answers.com), [about.com](http://about.com)



# About us

The **SWX Swiss Exchange is a central link in the value chain** of the Swiss financial marketplace. It organises, operates and regulates key aspects of Switzerland's capital market.

The commercial activities of the SWX encompass the following **business fields**: cash market operations, information products, the development and operation of fully electronic trading platforms, and the admission of securities to trading on the Exchange.

The SWX is one of the world's most technologically advanced securities exchanges. Though firmly rooted in Switzerland's strong financial centre, the SWX resolutely pursues a strategy focused on internationality. In transnational collaboration, the SWX works with select partners to provide top-rate securities exchange services. A significant factor in this regard is its broad range of products, but perhaps even more so its integrated, fully electronic trading, clearing and settlement system. With a single click of the mouse, securities orders are executed, cleared, settled and confirmed.

The **shares** traded on SWX are mainly held in the Swiss-based accounts of domestic and international investors.

Other products traded on the SWX Platform are **bonds** (CHF-denominated bonds as well as international bonds), **traditional investments, Exchange Traded Funds** (ETFs, known as exchange-traded index funds) and **securitised derivatives**. In terms of turnover, the SWX Swiss Exchange operates Europe's largest market segment for listed and exchange-traded warrants. The warrants market on the SWX is distinguished by its wide range of products and favourable listing conditions, not to mention its ability to respond quickly and flexibly to new investor needs. The SWX Swiss Exchange performs another key function by maintaining the **regulatory framework** for securities issuance and trading, as well as monitoring and enforcing compliance with these regulations. The SWX, whose legal form is that of an association, represents the interests of Switzerland's financial marketplace while defending the interests of all market participants. The SWX is subject to Swiss law. The Federal Act on Stock Exchanges and Securities Trading (SESTA) prescribes the concept of self-regulation, which obligates the SWX to meet international standards in its regulatory activities. The SWX itself is supervised by the Swiss Federal Banking Commission (SFBC).

## TOKYO STOCK EXCHANGE

By **MARTIN FACKLER**

Published: December 13, 2005

TOKYO, Dec. 12 - What exactly is going on at the Tokyo Stock Exchange?

Last month, a computer glitch shut down trading on the exchange, the world's second-largest after the New York Stock Exchange, for almost an entire day. Then last week, a typographical error by the Mizuho Securities brokerage generated a \$330 million loss. On Friday, the prime minister demanded corrective steps, and regulators began an investigation.

"I can't imagine problems like these happening at the New York Stock Exchange," said Neil Katkov, an analyst in Tokyo for Celent, a research firm based in Boston that specializes in financial technology. The Tokyo Stock Exchange, he said, "hasn't brought its procedures and technology up to the norms of international exchanges."

The latest electronic mix-up began last Thursday during the initial public offering of J-Com, a small recruiting company. An employee at Mizuho, a subsidiary of the Mizuho Financial Group, mistakenly typed an order to sell 610,000 shares at 1 yen, or less than a penny each, instead of an order to sell one share at 610,000 yen (\$5,057) as intended, the brokerage said.

At that price, the sale would have been worth \$3.1 billion, far more than the company's actual value. But the number of shares ostensibly being sold far exceeded the shares on offer.

Mizuho's computer failed to catch the error, but that wasn't all. As Mizuho tried frantically to cancel the order, the computer at the Tokyo Stock Exchange blocked its efforts for about 10 minutes, the exchange said. Mizuho finally managed to buy back most of the mistaken order before investors did.

But investors did buy about 100,000 of the nonexistent shares. Mizuho said Thursday that the typo would cost it 27 billion yen, or about \$230 million, to reimburse buyers and cancel the order. But on Monday the stock exchange raised the total loss to 40 billion yen, or \$330 million, ordering Mizuho to pay investors a premium of 300,000 yen, for a total payment of 910,000 yen for each share sold. The higher sum reflected an advisory group's calculation of where J-Com shares would have traded had the market not been flooded with the mistaken sell order.

But the exchange also said it would share the cost of the debacle with Mizuho. It was not clear, however, how much of the loss the exchange would assume.

In a hastily called news conference late Sunday evening, the exchange's president and chief executive, Takuo Tsurushima, admitted that a failure by the exchange's computer system was also at fault. Previously, the exchange had squarely blamed Mizuho, saying that the brokerage had not only botched the trade order but also had made an error as it tried to stop the order.

But Mr. Tsurushima also made reference to a glitch on Nov. 1 that froze trading on the Tokyo Stock Exchange for all but 90 minutes of an entire day, an unusual and embarrassing mishap for one of the world's top bourses.

"I feel a heavy responsibility for having caused turmoil in the market twice in such a short time," Mr. Tsurushima told reporters. He said he might resign, a customary gesture in Japan to take responsibility.

The investors will get cash instead of J-Com stock, the exchange said. Cash settlements have been used in the past to compensate investors when natural disasters disrupted trading, but are rare otherwise.

On Monday, Japan's Financial Services Agency ordered the Tokyo Stock Exchange to report on the cause of Thursday's failures. Japanese media reports said the agency may also order the exchange to completely revamp its computer system.

That computer system was designed by Fujitsu, the Japanese electronics company. Last month, Fujitsu said it cut the pay of its top executives as punishment for the company's role in the November failure.

Even Prime Minister [Junichiro Koizumi](#) commented on the problem. "We need to think more about putting safety measures in place to prevent confusion," he said Friday, according to the Associated Press.

The twin mishaps have raised concerns about the reliability of the Tokyo Stock Exchange's computer system at a time when a rebound in Japan's economy is bringing record trading volumes. Critics have castigated the exchange for failing to invest in modern computer systems or upgrade the system it has.

And some traders say the incidents point to a deeper underlying problem. They fault a bureaucratic culture of secrecy at the exchange that makes it reluctant to reveal details of its trading systems, even to brokerages. Some foreign trading firms have complained that the exchange does not respond to even routine inquiries about its systems.

Experts say other exchanges are far more transparent and rely on give-and-take with members to detect possible problems in the complex computer systems. They say the New York Stock Exchange routinely tests its computer system with big brokerages to avoid mishaps.

But Mr. Katkov, the Celent analyst, noted that Thursday's failure highlighted another problem: the inadequate computer systems used by Japanese financial companies. "An advanced electronic trading system should never have let this trade out of the gate," he said.

### ***Bond Futures Trading Participant (60)***

Links are only provided to those companies offering English-language websites. These are indicated by a next to the company name.

## **Japanese government bonds end morning lower as stocks continue rebound**

24/1/2008 02:55 London Time | story 0178

TOKYO (Thomson Financial) - Japanese government bond prices ended the morning session lower Wednesday as the continued rebound on the stock market encouraged investors to lock in profits on the recent surge. But the top-heaviness on the Tokyo stock market encouraged investors to buy bargain bonds, supporting the downside.

The benchmark Nikkei 225 Stock Average finished the morning up 184.86 yen or 1.4 percent at 13,013.92, off a high of 13,134.77.

"It is still difficult for us to see a fully-fledged upturn in the stock market," said Makoto Yamashita, a Lehman Brothers strategist.

"So we will continue to recommend buying bonds, as the correction is seen as a blip," he said.

Speculation about an interest rate cut in Japan is also keeping bond prices from falling too far.

There is an increasingly widespread view that the Bank of Japan is now open to the possibility of rate cuts in coordination with the US and euro-zone central banks in the event of another acceleration in the global equity slide, Barclays Capital Securities strategist Chorato Morita said in a note to clients.

At a press conference after the Bank of Japan decided unanimously Tuesday to keep interest rates unchanged, its governor, Toshihiko Fukui, failed to speak of the the need to adjust "interest rates gradually to coincide with the pace of improvement in the economy and prices" -- the expression he usually uses to indicate the need for higher interest rates.

But an actual rate cut is fairly unlikely, Lehman's Yamashita said.

"Unless the Japanese economy falls back into deflation, the credit crunch shakes the health of the financial system and the yen appreciates rapidly, the Bank of Japan is not likely to actually cut rates," Yamashita said.

At the end of the morning session the yield on the benchmark 10-year bond was 1.375 percent, up from 1.335 percent Wednesday.

The yield on the two-year note edged up to 0.505 percent from 0.495 percent and the yield on the five-year bond rose to 0.810 percent from 0.780 percent.

The yield on the 20-year bond was 2.075 percent, up from 2.040 percent, and the yield on the 30-year bond rose to 2.340 percent from 2.300 percent.

Bond prices move inversely to yields.

The price of the March futures contract for the 10-year bond slipped to 138.38 yen from 138.71 yen late Wednesday.

(1 US dollar = 106.37 yen)

# **History of TOPIX**

Update : Apr. 1, 2007



"Today, the TOPIX closed at \_\_\_ points. . ." You may have seen this type of a report on the T.V. news or other media. TOPIX is the acronym for the "TOkyo stock Price IndeX" – a barometer measuring trends in the stock market as a whole, used as a valuable indicator by people who actively invest in stocks. The TOPIX is calculated using 100 points as the value for January 4, 1968, and as this graph illustrates, the index reflects movements in the Japanese economy. Established after World War II in 1949, the Tokyo Stock Exchange is the nerve center of the secondary market for securities. The TSE has laid the foundation of the market necessary for the exchange of negotiable securities, and has played a pivotal role in ensuring the formation of fair prices and smooth circulation. In order to respond to increasingly active trading in the future, we at the TSE are continuously working to improve market confidence and usability



### *Basic policies to establish internal control system*

Tokyo Stock Exchange Inc. (TSE) adopted a resolution on basic policies to establish an internal control system at the board of directors held on May 16, 2006 as indicated below.

## **1. Framework to ensure that board members and employees carry out their duties in accordance with laws and regulations, and the articles of incorporation of Tokyo Stock Exchange, Inc. (TSE)**

Set up board of director regulations, committee of executive officer regulations, and other relevant regulations such as those for executive officers and administrative authorities so as to carry out operations based upon each person's assigned duties and according to the administrative authority as specified in these regulations.

Incorporate a compliance program in order to implement the following measures.

- Establish and observe internal rules related to compliance (including information management), such as the Charter of Corporate Behavior and codes of conduct for employees. The Charter of Corporate Behavior is to outline universal values and specific action guidelines to be observed by board members, executive officers, and employees from the viewpoint of corporate ethics.
- Designate a Chief Compliance Officer (President & CEO), and an officer in charge of compliance (executive officer in charge of general administration), and establish a secretariat for operations related to compliance (within the general administration department) as an internal system related to compliance.
- Set up the "TSE compliance hotline" as a whistle-blowing system.
- Conduct continuous promotion and educational activities such as holding liaison conferences attended by persons in charge of compliance in each department, distribute information related to compliance by utilizing the company intranet, and carry out in-house training through e-learning.

Conduct internal audits by establishing Internal Auditing Office under the direct jurisdiction of President & CEO.

## **2. System for storing and managing information when board members carry out their duties**

Specify rules/regulations for handling documents (storage of documents, for example) related to carrying out of duties by board members, including minutes of board of director meetings, in the criteria for information security measures and regulations of handling documents, and apply the regulations properly.

## **3. Regulations and other frameworks on risk management**

Establish a framework in which the company operates based upon explicitly delineated duties and administrative authority as specified in the internal rules. TSE created a basic strategy in which board members, executive officers and employees will manage risk according to their assigned duties and administrative authority by conducting operations while observing internal regulations and manuals.

Set up risk management committee regulations. In the event that risk arises or may arise, the risk management committee - which is to be represented by the President & CEO as a committee chairman - will grasp the situation as a whole and respond to the risk in an effort to resolve the problems swiftly.

In particular, be fully aware that the fundamental element of TSE's responsibilities as a market operator is to steadily provide market users with opportunities to conduct transactions with peace of mind. TSE makes necessary efforts to manage risk related to stable operation of its systems, such as standardizing development methods, performing appropriate operation tests, developing and observing detailed instruction manuals, and setting up a special purpose department for development and operation of the systems to carry out thorough quality control for such. In addition, TSE has formulated an appropriate response in the event that continuation of market operation becomes difficult due to natural disasters, terrorist attacks and other unexpected events, by drawing up a "Business Contingency Plan" as a manual to be observed by the entire company, and developing practices, procedures and the like necessary for minimizing risks to investors and market participants and resuming operations as soon as possible.

Taking into consideration the significance of the self-regulatory function for a market operator and the high degree of expectations from the general public for TSE's self-regulation, the exchange takes several various measures to ensure fairness, including organizational measures to ensure the independence of self-regulatory rules that address potential risks when self-regulatory functions do not work properly (various risks including reputation risks when self-regulatory operations are not carried out appropriately). At the same time, in addition to investing management resources proactively, TSE takes every possible measure to handle risk by developing and observing detailed operational manuals, and pursuing improvement in the quality of self-regulatory operations through expanded educational training.

Finally, develop a framework for the entire TSE group - including subsidiaries - in order to secure the accuracy of its own financial information as a market operator with high public value.

#### ***4. Framework to ensure that board members carry out their duties efficiently***

Establish a framework in which the company operates based upon explicitly delineated duties and administrative authority as specified in the internal rules so as to specialize and enhance operations through a system of division of labor. At the same time, secure linkages between related operations by incorporating an operation unit system in the company. In such a framework, in addition to enabling delegation of duties according to their level of importance and enhancing mobility of decision-making procedures, TSE conducts operations more efficiently by incorporating EA (Enterprise Architecture).

Draw up mid-term management and annual budget plans as a company group consisting of TSE and its subsidiaries and affiliated companies. TSE carries out operations effectively through appropriate workflow management as well as formulating the aforementioned plans with an appropriate combination of a top-down approach from management and a bottom-down approach from operational divisions.

#### ***5. Framework to ensure correctness of operations in the corporate group consisting of TSE, its parent company, and subsidiaries***

Create a basic strategy to develop a system for the TSE and each subsidiary to autonomously ensure correctness of operations, and based upon this strategy, secure correctness of operations of the corporate group consisting of TSE and its subsidiaries by managing and supporting subsidiaries appropriately.

Carry out operations in each subsidiary based upon assigned duties and administrative authority specified in internal regulations, as well as define codes of conduct for employees and properly apply them.

In addition to receiving reports and monitoring qualitative information according to the governing regulations of group companies, give subsidiaries necessary advice on matters regarding risk management and compliance.

Board members and employees of subsidiaries shall be able to utilize the "TSE compliance hotline" as a whistle-blowing system.

In each subsidiary, subsidiaries themselves or the Internal Auditing Office of TSE conducts internal audits according to the content of operations and the scale of each subsidiary.

## ***6. Rules regarding employees to support auditors' duties should they require such support***

In order to set rules regarding employees who support the duties of auditors, establish "Regulations regarding employees supporting duties of auditors" as internal regulations, and apply them properly. These regulations include the following contents:

- Employees belonging to the Auditors Office are defined as employees who support the duties of auditors and follow their directions.
- The number of employees belonging to the Auditors Office shall be more than 4 employees including the office head.

## ***7. Rules regarding independence from board members of employees who support auditors***

In order to ensure the independence of employees belonging to the auditors office, establish "Regulations regarding employees supporting duties of auditors" as internal regulations, and apply them properly. These regulations include the following contents:

- Approval of the Statutory Auditors Board (or a specific auditing officer in the case that the Statutory Auditors Board nominates such an officer) must be obtained for recruitment, transfer, performance rating, salary and reprimand of employees working at Auditors Office.
- Board members, executive officers and employees shall pay close attention not to obstruct the independence of employees by imposing unreasonable constraints on the operations of employees belonging to Auditors Office.

## ***8. Framework for board members and employees to report to Auditors, and other frameworks for reporting to auditors***

Establish "Regulations on Reporting to Auditors" as internal regulations to develop a framework for reporting to auditors, and apply the regulations properly. These regulations include the following contents:

- Board members, executive officers and employees are to report promptly on issues regarding operations when requested to by auditors or the Statutory Auditors Board.
- Board members, executive officers and employees are to immediately report to auditors when finding items which may significantly affect operations or the financial situation of



TSE and TSE's subsidiaries or affiliated companies.

## **9. Framework to ensure that auditors conduct audits effectively**

Establish "Regulations on Reporting to Auditors" as internal regulations to ensure the effectiveness of auditors, and apply the regulations properly. These regulations include the following contents:

- The President & CEO is to hold meetings on a regular basis with auditors in order to exchange opinions on management policies, issues TSE should respond to, significant risks surrounding TSE, developing and fostering favorable environments for auditors to conduct audits, important issues on carrying out audits and other issues.
- Board members, executive officers and employees cannot refuse payment of expenses that auditors and the Statutory Auditors Board claim are necessary for obtaining advice from lawyers, public accountants and other specialists or for delegating inspections, examination and other work in order to conduct audits, unless the expense is deemed unnecessary for carrying out auditing duties.

### Glossary

#### A

##### Accumulation

This is another way of saying: professional buying. A stock is under accumulation when volume expands on days when price moves up.

##### Alpha

Alpha measures a stock's average monthly move over the past 12 months if the S&P 500 index is unchanged during this 12-month period. For example, a stock with a high alpha of 7 would be expected to rise 7% in a month given an unchanged S&P 500 index.

##### American depositary receipt

Known as ADRs, these securities are created by a U.S. bank and represent foreign securities that trade in the U.S. financial markets.

##### Annual report

Companies send their shareholders an annual report at the end of a fiscal year. The magazine or brochure sizes up company operations and displays earnings, sales, balance sheets and financial footnotes.

##### Arbitrage

Arbitrageurs make their living by seizing on price differences for a security traded on a different market or in a different form, such as an option or a futures contract. Someone who buys, say, a soybean contract on one market and sells a soybean contract on another exchange is practicing arbitrage by locking in a profit.

##### Ask

This is the quoted ask, or the lowest price an investor will accept to sell a stock. Practically speaking, this is the quoted offer at which an investor can buy shares of stock.

#### B

### Balanced mutual fund

This is a fund that buys common stock, preferred stock and bonds.

### Basic earnings

A simple calculation that takes net income divided by shares outstanding to get per-share earnings.

### Basis point

In the bond market, the smallest measure used for quoting yields is a basis point. One basis point is 0.01 percent of a bond's yield. Basis points also are used for interest rates. An interest rate of 5 percent is 50 basis points greater than an interest rate of 4.5 percent.

### Bellwether stock

The stock of a company recognized as a leader in its industry. For example, IBM is considered a bellwether stock in the computer field. Often, the fortunes of an industry are reflected in the behavior of its bellwether stocks.

### Beta

This measures the volatility of a share of stock. A high beta stock, for example, will rise more in value than the stock market average on a day when shares in general are rising. And it will fall more sharply than the average on a day when shares are falling. The Standard & Poor's 500 Index of stocks, an index that represents large-company stocks, has a beta of 1.

### Bid

This is the quoted bid, or the highest price an investor is willing to pay to buy a security. Practically speaking, this is the available price at which an investor can sell shares of stock.

### Bond

Bonds are debt and are issued for a period of more than one year. The U.S. government, local governments, water districts, companies and many other types of institutions sell bonds. When an investor buys bonds, he or she is lending money. The seller of the bond agrees to repay the principal amount of the loan at a specified time. Interest-bearing bonds pay interest periodically.

### Book to Bill

Book to bill is the semiconductor book to bill ratio. It reports on the amount of semiconductor chips that are booked for delivery as compared with those that companies already have billed for.

### Book value

A company's book value is total assets minus intangible assets and liabilities such as debt. Book value might be more or less than the market value of the company.

### Breadth

This is one of those technical terms you hear in a trading room. It simply demonstrates how broadly a market is moving. When three-quarters of the stocks on the New York Stock Exchange, for example, rise during a given day, an observer might say the stock market had good breadth. Often, observers will measure the number of stocks advancing against the number declining as one way of monitoring breadth.

### Buy Price

Enter here the price you paid for a security. If, for example, you paid 8 1/4 a share for a security, enter 8 1/4.

### C

### Call option

This security gives investors the right to buy a security at a fixed price within a given time frame. An investor, for example, might wish to have the right to buy shares of a stock at a certain price by a certain time in order to protect, or hedge, an existing investment.

### Certificate of deposit

CDs, as they are called, pay interest to investors for as long as five years.

### Change

This shows the change in price of a security from the previous day's closing price. For instance, -1 1/8 means the security has fallen \$1.12.

### Chief Operating Officer (COO)

A person who has full operational responsibilities for the day-to-day activities of an organization.

### Closed-end fund

A closed-end fund sells a fixed number of shares to investors. Those shares sell on an exchange and vary in price, depending on demand for the fund. A fund's shares, for example, can trade below their net asset value or above their net asset value - depending on investors' demand for the shares. Country funds that represent shares in a specific country or region, such as Italy or France, are often closed-end funds.

### Commission

This is a fee an investor pays a broker for buying or selling securities.

### Commodity

A commodity is food, a metal or another physical substance that investors buy or sell, usually via futures contracts.

### Common shares

These are securities that represent equity ownership in a company. Common shares let an investor vote on such matters as the election of directors. They also give the holder a share in a company's profits via dividend payments or the capital appreciation of the security.

### Consumer Price Index

The CPI, as it is called, measures the prices of consumer goods and services and is a measure of the pace of U.S. inflation. The U.S. Department of Labor publishes the CPI every month.

### Consumer stock

The stock of a company that produces consumer-oriented products like food, beverages, tobacco, pharmaceuticals.

### Currency

This shows the currency that a security trades in, such as USD for U.S. dollar.

### Current Yield

If a security has a dividend, the yield is the price of a stock dividend. A \$10 stock that pays a 50 cent dividend for the year has a 5% yield.

### Cyclical stock

The stock of a company whose fortunes are closely tied to the cyclical ups and downs of the economy in general. For example, General Motors is a cyclical stock since its business of selling

autos is highly dependent on a robust economy with its attendant high levels of employment, rising personal incomes, etc.

D

**Day High**

This is the highest price that a security has traded at during the day.

**Day Low**

This is the lowest price that a security has traded at during the day.

**Devaluation**

A lowering of a country's currency relative to gold and/or currencies of other nations. The opposite is revaluation.

**Debenture**

The common type of bond issued by large, well-established organizations. Holders of debentures representing corporate indebtedness are creditors of the corporation and entitled to payment before shareholders upon dissolution of the corporation.

**Convertible Debenture**

Corporate securities (preferred shares or bonds) that are exchangeable for a set number of another form at a prestated price.

**Subordinated Debenture**

A debt that is junior in claim on assets to other debt, repayable only after other debts with a higher claim have been satisfied.

**Diluted earnings**

A calculation that includes stock options, warrants and convertible securities to get per-share earnings.

**Discount rate**

This is the interest rate charged by the U.S. Federal Reserve, the nation's central bank, for loans to member banks. The Fed, as it is called, alters rates to increase or decrease the growth of the nation's economic output.

**Distribution**

This is another way of saying: professional selling. A stock is under distribution when volume expands on days when price moves down.

**Dividend**

A dividend is a portion of a company's profit paid to common and preferred shareholders. A stock selling for \$20 a share with an annual dividend of \$1 a share yields the investor 5 percent.

**Dow Jones Industrial Average**

This is the best known U.S. index of stocks. It contains 30 stocks that trade on the New York Stock Exchange. The Dow, as it is called, is a barometer of how shares of the largest U.S. companies are performing. There are thousands of investment indexes around the world for stocks, bonds, currencies and commodities.

### Duration

A measure of a bond price's sensitivity to a 100-basis point change in interest rates. A duration of 8 would mean that, given a 100-basis point change up/down in rates, a bond's price would move up/down by 8%.

## E

### Earnings per share (EPS)

EPS, as it is called, is a company's profit divided by its number of shares. If a company earned \$2 million in one year had 2 million shares of stock outstanding, its EPS would be \$1 per share.

### Eurodollar

This is an American dollar that has been deposited in a European bank. It got there as a result of payments made to overseas companies for merchandise.

### Ex-dividend

This literally means "without dividend." The buyer of shares when they are quoted ex-dividend is not entitled to receive a declared dividend.

## EDGAR

The Securities & Exchange Commission uses Electronic Data Gathering and Retrieval to transmit company documents to investors. Those documents, which are available via DBC's Smart Edgar service, include 10-Qs (quarterly reports), 8-Ks (significant developments such as the sale of a company unit) and 13-Ds (disclosures by parties who own 5% or more of a company's shares).

### Exchange

There are three main U.S. stock exchanges on which securities are traded. AMEX is the American Stock Exchange. NASDAQ is the National Association of Securities Dealers. NYSE is the New York Stock Exchange.

## F

### 52 Week High

This is the highest price that a security has traded at during the last 52 weeks.

### 52 Week Low

This is the lowest price that a security has traded at during the last 52 weeks.

### Federal funds rate

This is the interest rate that banks with excess reserves at a Federal Reserve district bank charge other banks that need overnight loans. The Fed Funds rate, as it is called, often points to the direction of U.S. interest rates.

### Float

The so-called float is the number of shares of a security that are outstanding and available for trading by the public.

### Futures contract

This is an agreement that allows an investor to buy or sell a commodity, like gold or wheat, or a financial instrument, like a currency, at some time in future. A future is part of a class of securities called derivatives, so named because such securities derive their value from the worth of an underlying investment.

## G

### GAAP (General Accepted Accounting Principles)

Conventions, rules and procedures that define general accounting practice, including broad guidelines as well as detailed procedures.

### Growth stock

The stock of a company whose business is considered recession-resistant and also possesses an above-average growth rate.

## H

### High price

This is the day's highest price of a security that has changed hands between a buyer and seller.

## I

### Initial public offering

An IPO is stock in a company that is being traded on an exchange for the first time. Investors first read a prospectus that describes the potential of the company and the risks of investing in it.

### Insiders

These are directors and senior officers of a corporation -- in effect those who have access to inside information about a company. An insider also is someone who owns more than 10 percent of the voting shares of a company.

## J

### Junk bond

A bond with a speculative credit rating of BB or lower is a junk bond. Such bonds offer investors higher yields than bonds of financially sound companies. Two agencies, Standard & Poor's and Moody's Investor Services, provide the rating systems for companies' credit.

## KL

### Last

This indicates the most recent trade of a security.

### LEAP

A LEAP is a long-term option contract for a company's stock. They usually run for one year or more and are available on several U.S. exchanges.

### Limit order

Investors can place an order to buy or sell securities at a set price. The trade can take place only at that price or a lower one.

### Long

Investors who go "long" simply own stock or another security. It is a term that means the opposite of "short," in which investors are short a stock or security because they have borrowed it and sold it to someone else.

### Low price

This is the day's lowest price of a security that has changed hands between a buyer and a seller.

## M

### Margin

This allows investors to buy securities by borrowing money from a broker. The margin is the difference between the market value of a stock and the loan a broker makes.

### Market Cap

This is the company's market capitalization. If a company has 10 million shares and the company's shares are selling for \$10, the market cap is \$100 million.

### Market order

This is an order to buy or sell a security at the current trading price.

### Momentum

The rate of acceleration of an economic, price or volume movement. An economy with strong growth that is likely to continue is said to have momentum.

### Money market

Money markets are for borrowing and lending money for three years or less. The securities in a money market can be U.S. government bonds, Treasury Bills and commercial paper from banks and companies.

### Money Supply

The stock of money in the economy, consisting of currency in circulation and deposits in checking and savings accounts. M1, M2 and M3 represent money and near-money.

### Moving average

A moving average is an average of a security's price over a specific time period. The average changes, for example, on a 30-day moving average, so that it includes the most current 30 trading days. Moving averages often indicate levels of support or resistance for a security.

### Municipal bond

State or local government offer muni bonds, as they are called, to pay for special projects such as highways or sewers. The interest that investors receive is exempt from some income taxes.

### Mutual fund

Mutual funds are pools of money that are managed by an investment company. They offer investors a variety of goals, depending on the fund and its investment charter. Some funds, for example, seek to generate income on a regular basis. Others seek to preserve an investor's money. Still others seek to invest in companies that are growing at a rapid pace. Funds can impose a sales charge, or load, on investors when they buy or sell shares. Many funds these days are no load and impose no sales charge.

## N

### Net asset value

Listed as NAV in mutual fund listings, net asset value is the market value of a fund's shares. It is calculated at the close of trading.

### Net Change

This is the difference between a day's last trade and the previous day's last trade.

### Net Profit

This is the difference between the total price you paid for a security, with the brokerage commission you paid, and the current value. It will show either a profit or a loss.

### Number of Shares

This is the number of stock shares that a company has outstanding.

### Notes

Enter here important notes, such as your reason for buying or selling a security.

### NYSE Beta Index

The beta is the covariance of the stock in relation to the rest of the stock market. The Standard & Poor's stock index has a beta coefficient of 1. Any stock with a higher beta is more volatile than the market. Any with a lower beta does the reverse.

### O

#### Open

The price at which a security opens the trading day. Generally, the opening price reflects the previous day's close -- unless extraordinary news or demand to buy or sell have occurred before the market opens.

#### Open-end mutual fund

A fund that sells its shares at net asset value is an open-end fund. It creates shares as investors demand them. Investors buy the shares at their market price. Most mutual funds are open-end funds. Those that aren't are closed-end funds that sell a fixed number of shares to investors.

#### Open order

An open order is any order to buy or sell securities that has yet to be executed.

### Options

These contracts give the holder the right to buy or sell securities at a set price or a set period of time. Investors often use them to protect, or hedge, an existing investment. An option is part of a class of securities called derivatives, so named because these securities derive their value from the worth of an underlying investment.

### Over-the-counter

The O-T-C market is for securities not listed on a stock exchange.

### P

#### Pay Date

The date on which a declared stock dividend or a bond interest payment is scheduled to be paid.

### Percent Change

This calculates the percentage change in the price of a security from the previous trading day's closing price.



### Percent Profit

This is your profit or loss expressed as a percentage of your original investment and including the cost of your brokerage commission. If you bought 1,000 shares of a stock at \$10, paid a \$100 commission and saw the shares rise to \$14, your percentage would be 39.6 percent.

### Preferred shares

Preferred shares give investors a fixed dividend from the company's earnings. And more importantly: preferred shareholders get paid before common shareholders.

### Premium

This generally refers to extra money an investor is willing to pay to buy or sell something. For a bond, a premium is the amount for which the security sells above its par value. For a stock, a premium is the amount that a security's price exceeds those of its peer group, or comparable stocks.

### Previous

This is the closing price of a security from the previous trading day.

### Prime Rate

The interest rate banks charge, determined by market forces affecting a bank's cost of funds and the rates the borrowers will accept. This rate tends to become standard for the banking industry when a major bank raises or lowers its rate.

### P/E

A stock has a price-to-earnings ratio: the share price divided by earnings per share for the company's most recent four quarters. A projected P/E divides the share price by estimated earnings per share for the coming four quarters.

### Put option

This security gives investors the right to sell fixed number of shares at a fixed price within a given time frame. An investor, for example, might wish to have the right to sell shares of a stock at a certain price by a certain time in order to protect, or hedge, an existing investment.

### QR

### Reaction

This term has been around as long as the stock market itself and is used to describe a short-term drop in prices.

### Real time

A real-time stock, bond, option or futures quote is one that reports the most current price available when a security changes hands. A delayed quote shows a security's price 15 minutes and sometimes 20 minutes after a trade takes place.

### Record Date

The date on which a shareholder must officially own shares in order to be entitled to a dividend. After the date of record the stock is said to be ex-dividend.

### Relative Strength

Stocks which have been strong relative to all other stocks should continue to be relatively stronger in the future and securities which have been relatively weak tend to continue to be weaker.

## Return on equity

Return on equity measures the return, expressed as a percentage, earned on a company's common stock investment for a specific period. It is calculated by common stock equity, or a company's net worth, into net income. The calculation is performed after preferred stock dividends and before common stock dividends. The figure shows investors how well -- how effectively -- their money is being used by managers.

## S

### Securities & Exchange Commission

The SEC is a federal agency that regulates the U.S. financial markets.

### SEC EDGAR

The Securities & Exchange Commission uses Electronic Data Gathering and Retrieval to transmit company documents to investors. Those documents, which are available via DBC's Smart Edgar service, include 10-Qs (quarterly reports), 8-Ks (significant developments such as the sale of a company unit) and 13-Ds (disclosures by parties who own 5% or more of a company's shares).

### Security

This piece of paper proves ownership of stocks, bonds and other investments.

### Sell Price

Enter here the price you received when you sold a security. If you received \$10 for a share that you sold at 10, then enter 10.

### Settlement date

In U.S. financial markets, an investor must pay for the purchase of shares by the third business day after he or she buys securities. And an investor must deliver an investment that he or she has sold by the third business day after the transaction.

### Shareholders' equity

This is a company's total assets minus total liabilities. A company's net worth is the same thing.

### Shares

Enter here the number of shares you own. If you bought shares of a specific security at different times and various prices, enter the total number of shares here and enter the average price for the purchases under Buy Price.

### Short sale

Investors who borrow stock and sell it to someone else are betting the shares go down in price. Then, they can buy back the stock at a lower price and pocket the difference as profit. Going "short" is the opposite of going "long," or owning shares for the long haul.

### Short interest

This is the total number of shares of a security that investors have sold short -- borrowed, then sold in the hope that the security will fall in value. An investor then buys back the shares and pockets the difference as profit.

### Special

CBS MarketWatch's portfolio and multiple quote pages offer special buttons that give users the choice to do more research. N = News - This function searches news sources including CBS MarketWatch and Reuters for news pertaining to the ticker symbol selected. S = SEC filings. E =

Earnings information from Zacks. H = Hoover's capsules. M = MarketGuide. F = Fundamentals, such as price-earnings ratios and 52-week highs and lows. C = 180 day Chart. FP = Mutual Fund profiles.

### Spinoff

A company can create an independent company from an existing part of the company by selling or distributing new shares in the so-called spinoff.

### Split

Sometimes, companies split their outstanding shares into larger number of shares. If a company with one million shares did a two-for-one split, the company would have two million shares. An investor, for example, with 100 shares before the split would hold 200 shares after the split. The investor's percentage of equity in the company remains the same.

### Spread

This is the gap between bid and ask prices of a stock or other security.

### Stock ticker

This is a lettered symbol assigned to securities and mutual funds that trade on U.S. financial exchanges.

### Symbol

This is the ticker symbol of the security. New York Stock Exchange and American Stock Exchange tickers, for example, are three or fewer letters. Example: Ford is F. Nasdaq tickers are four and sometimes five letters. Example: Data Broadcasting Corp. is DBCC. Mutual Fund tickers end with the letter "X." Options tickers have their own help tables.

### T

#### Tick

This refers to a change in the price of a security. An uptick occurs when the last trade in a security takes place at a higher price than the prior trade. A downtick occurs when the last trade in a security takes place at a lower price than the prior trade. An indicator may be fashioned from the difference between the number of NYSE issues showing upticks on the last trade and the number of NYSE issues showing downticks on the last trade. This indicator is known as the TICK, and is found on many quote screens. A TICK of +236 means 236 more NYSE issues last traded on upticks than those trading on downticks.

#### Trade sizes

On most trading screens, investors can see the amount of stock available for buyers and sellers. In a stock with a bid price of 18 and an ask price of 18 1/2, for example, a trade size of 10x5 indicates that investors have bids in to buy 10 blocks of 100 shares at the price of 18. Sellers, on the other hand, are willing to sell five blocks of 100 shares at 18 1/2.

#### Trading halt

Trading of a stock, bond, option or future contract can be halted by an exchange while news is being broadcast about the security.

#### Triple-Witching

This occurs on the third Friday of March, June, September and December when futures and stock options, based on the S&P 500 index, all expire on the same day.

### Turnover (Securities)

The volume of shares traded as a percentage of total shares listed on an exchange during a period, usually a day or a year. The same ratio is applied to individual securities and the portfolio of individual or institutional investors.

## U

### U.S. Treasury bill

U.S. government debt with a maturity that is less than a year is a bill.

### U.S. Treasury bond

U.S. government debt with a maturity of more than 10 years is a bond.

### U.S. Treasury note

U.S. government debt with a maturity of one to 10 years is a note.

## V

### Value

This is the current price of the security multiplied by the number of shares you own. If you own 1000 shares of Apple Computer, and the shares are selling for \$25, the value should be \$25,000.

### Value stock

A stock perceived by the marketplace to be undervalued based on criteria such as its price-to-earnings ratio, price-to-book ratio, dividend yield, etc.

### Volatility (Historical)

This describes the fluctuations in the price of a stock or other type of security. If the price of a stock is capable of large swings, the stock has a high volatility. The pricing of options contracts depends in part on volatility. A stock with high volatility, for example, commands higher prices in the options market than one with low volatility. Volatility may be gauged by several measures, one of which involves calculating a security's standard deviation. Stock investors sometimes prefer to measure a stock's volatility versus that of an index, such as the Standard & Poor's 500 Index. This is known as a stock's beta. A beta of 1.2 implies a stock that is 20% more volatile than the S&P 500. When the S&P rises 10%, the stock is expected to rise 12%.

### Volume

This is the daily number of shares of a security that changes hands between a buyer and a seller.

## W

### Warrant

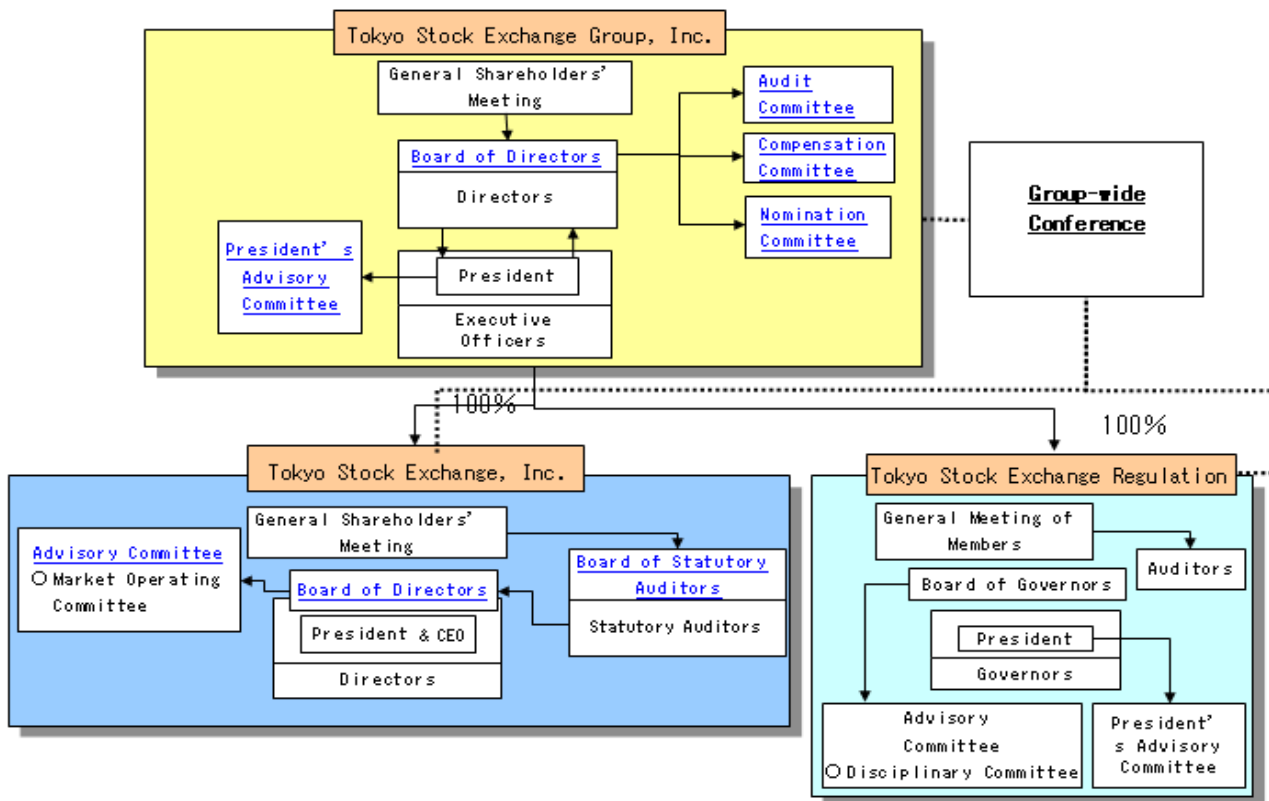
This piece of paper gives an investor the right to purchase securities at a fixed price within a fixed time span. Warrants are like call options, but with much longer time spans -- sometimes years.

## XYZ

### Zero coupon bond

Such a debt security pays an investor no interest. It is sold at a discount to its face price and matures in one year or longer.

Governance Structure of TSE group (As of August 1, 2007)

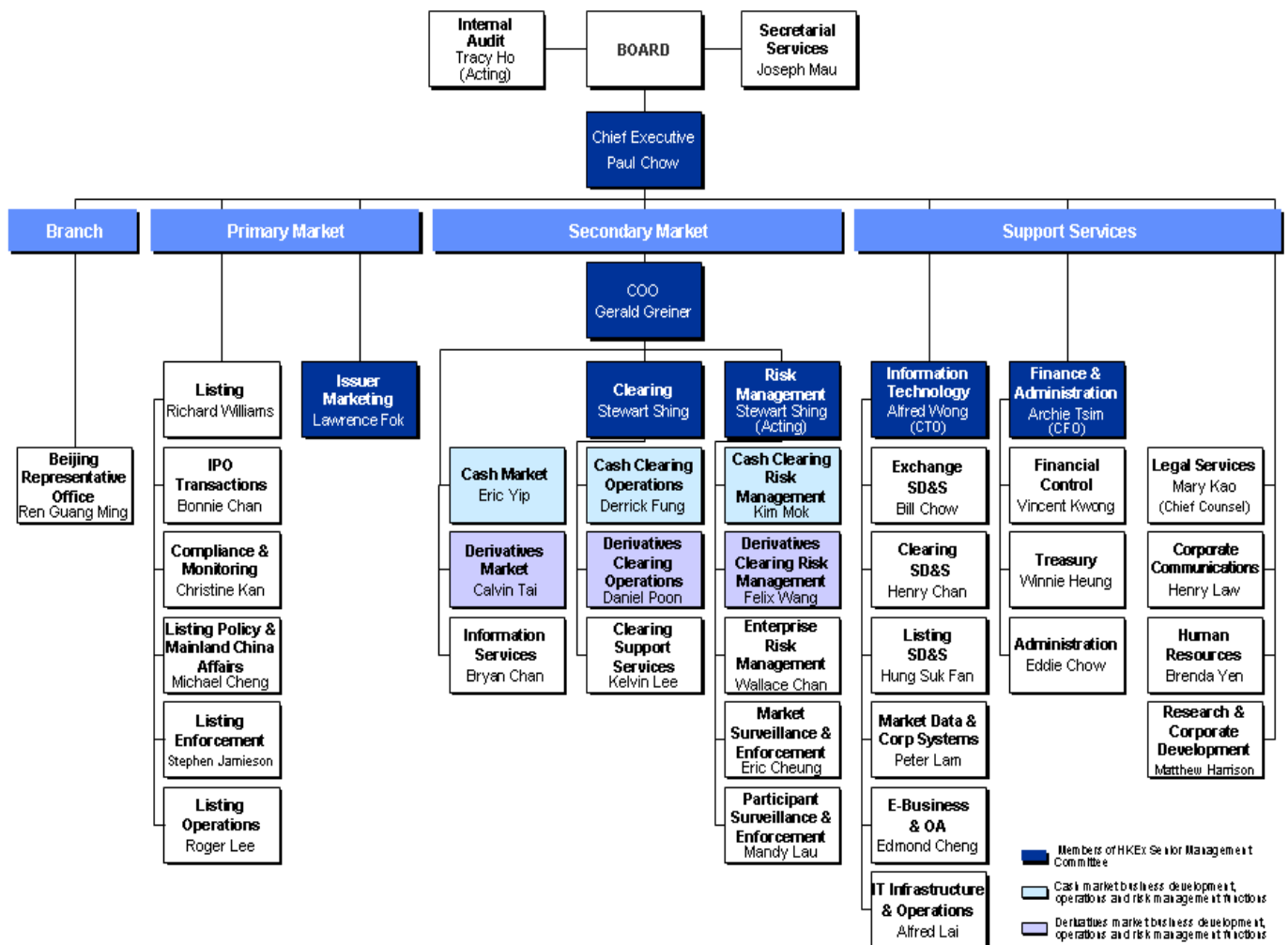




## HONG KONG STOCK EXCHANGE

Listed companies are required to pay an annual listing fee which shall be calculated by reference to the nominal value of the securities which are or are to be listed on the Exchange. This fee is payable in advance in one instalment.

### Main Board



## Glossary For Bonds

### Callable Bond

A bond which is redeemable by the issuer prior to the maturity date at a specified price.

### Convertible Bond

A bond that can be converted into a fixed number of ordinary shares at a pre-determined price at any date before the bond matures.

### Discount Bond

A bond that is sold below the par value.

### Floating-rate Bond

A bond for which the interest rate is adjusted periodically, linking to the level of a market reference yield.

### Mortgage Bond

A kind of bond that pledges either real property (using a mortgage) or personal property as security.

### Zero-coupon Bond

A bond that bears no interest return but it is sold at a discount from the par value.

### **Par Value**

The value of a bond, as stated on the coupon. Interest is calculated on par value.

### **Coupon Rate**

The annual rate of interest, calculated on the bond's par value, which the issuer promises to pay to bondholders.

### **Coupon Frequency**

The number of interest payment that the bond issuer promises to pay to bondholders. Coupon payments are usually made each six months or each year.

### **Accrued Interest**

Interest due from issue date or from the last coupon payment date to the settlement date.

### **Basis Point**

One 1/100 of 1 per cent i.e. 0.01%. Yield differences among fixed-income securities are stated in basis points.

### **Maturity Date**

The date when the principal amount of the bond is payable.

### **Premium**

The amount by which the price of a bond exceeds its par value.

### **Yield to Maturity**

It represents the total of coupon payments until maturity, plus interest on interest, and whatever gain or loss is realized from the security at maturity.

### **Credit Ratings**

An indicative rating set by rating agencies to assess the overall ability of the issuer to fully repay the debt obligation. Minimum investment grade is generally set at Baa or BBB or above.

### **Default**

Failure on the part of the issuer to pay interest and/or principal when due.

## **Glossary**

**Updated: 16 August 2007**



The meanings ascribed to each of the terms in this Glossary have been simplified to facilitate the reader in understanding this section of the Exchange's Website on "Listing in Hong Kong". In the event of discrepancy, the full descriptions of the terms set out in the Listing Rules shall prevail.

### **Term**

<b>Assets Ratio</b>	The total assets which are the subject of the transaction divided by the total assets of the listed issuer
<b>Business Day</b>	Any day on which the Exchange is open for the business of dealing in securities
<b>Commission</b>	The Securities and Futures Commission
<b>Connected Person</b>	<ul style="list-style-type: none"> <li>● in relation to a company other than a PRC issuer, means a director, chief executive, substantial shareholder or management shareholder (for GEM issuers only) of such company or any of its subsidiaries or an associate of any of them.</li> <li>● in relation to a PRC issuer means a promoter, director, supervisor, chief executive, substantial shareholder or management shareholder (for GEM issuers only) of the PRC issuer or any of its subsidiaries or an associate of any of them.</li> </ul>
<b>Consideration Ratio</b>	The consideration divided by the total market capitalisation of the listed issuer, calculated by reference to the average closing price of the listed issuer's securities as stated in the Exchange's daily quotations sheets for the five business days immediately preceding the date of the transaction.
<b>Controlling Shareholder</b>	Any person who is, or group of persons who are together, entitled to exercise or control the exercise of 30 per cent (or such other amount as may from time to time be specified in the Takeovers Code as being the level for triggering a mandatory general offer) or more of the voting power at general meetings of the issuer, or who is or are in a position to control the composition of a majority of the board of directors of the issuer.
<b>Discloseable Transaction</b>	A transaction or a series of transactions by a listed issuer where any percentage ratio is 5% or more, but less than 25%.
<b>Equity Capital Ratio</b>	The nominal value of the listed issuer's equity capital issued as consideration divided by the nominal value of the listed issuer's issued equity capital immediately before the transaction.
<b>Exchange</b>	The Stock Exchange of Hong Kong Limited
<b>Exchange Participant</b>	A person who may trade on or through the Exchange
<b>Exchange's Website</b>	The official website of Hong Kong Exchanges and Clearing Limited ( <a href="http://www.hkex.com.hk">www.hkex.com.hk</a> )
<b>GEM Listing Rules</b>	Rules Governing the Listing of Securities on the Growth Enterprise Market of the Stock Exchange of Hong Kong Limited
<b>Growth Enterprises Market or GEM</b>	An alternative market to the Main Board, GEM is a market for smaller companies with growth potential to raise capital
<b>H-Shares</b>	Overseas listed foreign shares of a PRC issuer which are listed on the Exchange
<b>HKEx</b>	Hong Kong Exchanges and Clearing Limited
<b>Hong Kong Financial Reporting</b>	Financial reporting standards approved by the Council of the Hong Kong Society of Accountants (HKSA) and includes all Statements of Standard

<b>Standards (HKFRS)</b>	Accounting Practice and interpretations of HKFRS approved by the HKSA from time to time
<b>IPO</b>	Initial Public Offering
<b>Initial Management Shareholders</b>	Applicable to GEM issuers, any management shareholder of the issuer immediately prior to the date of the issuer's initial listing document.
<b>International Financial Reporting Standards (IFRS)</b>	Financial reporting standards and interpretations approved by the International Accounting Standards Board, and includes all International Accounting Standards and interpretations issued under the former International Accounting Standards Committee from time to time
<b>Issuer</b>	Any company or other legal person any of whose equity securities are the subject of an application for listing on the Exchange or some of whose equity securities are already listed on the Exchange
<b>Listed Issuer</b>	In the case of equity securities means any company or legal person some of whose equity securities are already listed on the Exchange
<b>Listing Appeals Committee</b>	The listing appeals sub-committee of the Board of Directors of the Exchange
<b>Listing Committee</b>	The listing sub-committee of the Board of Directors of the Exchange with responsibility for the Main Board
<b>Listing Document</b>	A prospectus, a circular and any equivalent document (including a scheme of arrangement and introduction document) issued or proposed to be issued in connection with an application for listing
<b>Listing Rules</b>	Main Board Listing Rules and GEM Listing Rules
<b>Main Board</b>	The stock market opened by the Exchange prior to the establishment of GEM and which continues to be operated by the Exchange in parallel with GEM
<b>Main Board Listing Rules</b>	Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited
<b>Major Transaction</b>	A transaction or a series of transactions by a listed issuer where any percentage ratio is 25% or more, but less than 100% for an acquisition or 75% for a disposal.
<b>Management Shareholders</b>	Applicable to GEM issuers, any person who is (or group of persons who are) entitled to exercise or control the exercise of 5% or more of the voting power at general meetings of the issuer and who is (or are) able to direct or influence the management of the issuer.
<b>Market Capitalisation</b>	The market value of the entire size of an issuer, which shall include all classes of securities of the issuer, irrespective of whether any of such class(es) of securities are unlisted, or listed on other regulated market(s)
<b>New Applicant</b>	In the case of equity securities means an applicant for listing none of whose equity securities are already listed
<b>Notifiable Transaction</b>	Being a Share Transaction, Discloseable Transaction, Major Transaction, Very Substantial Disposal, Very Substantial Acquisition or Reverse Takeover.
<b>Overseas Issuer</b>	An issuer incorporated or otherwise established outside Hong Kong
<b>Percentage Ratios</b>	The percentage ratios comprising the Assets Ratio, Profits Ratio, Revenue Ratio, Consideration Ratio and Equity Capital Ratio.
<b>PRC</b>	For the purposes of the Listing Rules, the People's Republic of China, other than the regions of Hong Kong, Macau and Taiwan
<b>PRC Issuer</b>	An issuer which is duly incorporated in the PRC as a joint stock company
<b>Profits Ratio</b>	The profits attributable to the assets which are the subject of the transaction divided by the profits of the listed issuer

<b>Promoter</b>	As to any PRC issuer, any person who undertook the establishment of such issuer, subscribed for shares of such issuer and assumes liability for such issuer's establishment, prepared the initial articles of association of such issuer and convened the inaugural meeting of the subscribers of shares of such issuer, or any person who performed a similar role under PRC law in the establishment of a PRC issuer
<b>Reporting Accountant</b>	The professional accountant who is responsible for the preparation of the accountants' report included in a listing document or circular
<b>Revenue Ratio</b>	The revenue attributable to the assets which are the subject of the transaction divided by the revenue of the listed issuer
<b>Share Transaction</b>	An acquisition of assets (excluding cash) by a listed issuer where the consideration includes securities for which listing will be sought and where all percentage ratios are less than 5%.
<b>Short-Dated Securities</b>	Securities such as bonds, bills or notes which have less than one year to maturity.
<b>Significant Shareholders</b>	Applicable to GEM issuers, any person other than a Management Shareholder who, immediately prior to the date of the new applicant's initial listing document and immediately prior to the date on which securities of the new applicant commence trading on GEM, is (or group of persons who together are) entitled to exercise or control the exercise of 5% or more of the voting power at general meetings of the new applicant
<b>Substantial Shareholder</b>	In relation to a company means a person who is entitled to exercise, or control the exercise of, ten per cent. or more of the voting power at any general meeting of the company
<b>Supervisor</b>	A member elected to the supervisory committee (□□□) of a PRC issuer which under PRC law performs a supervisory function in relation to such issuer's board of directors, the manager and other officers
<b>Takeovers Code</b>	The Code on Takeovers and Mergers approved by the Commission as amended from time to time
<b>Very Substantial Acquisition</b>	An acquisition or a series of acquisitions of assets by a listed issuer where any percentage ratio is 100% or more.
<b>Very Substantial Disposal</b>	A disposal or a series of disposals of assets by a listed issuer where any percentage ratio is 75% or more.

## **Transaction Costs**

### **Updated: 28 May 2007**

#### **General**

The following fees apply to each security transaction<sup>1</sup>:

## **Brokerage<sup>2</sup>**

Effective 1 April 2003, the brokerage of security transactions becomes freely negotiable between brokers and their clients.

## **Transaction Levy**

Effective 1 December 2006 , a Transaction Levy of 0.004% (rounded to the nearest cent) is charged per side of the consideration of a transaction, and the amount is collected for the SFC.

There is no Transaction Levy on Pilot Program and Exchange Traded Funds (ETF) Market Maker transactions (except for ABF PAIF (Stock Code 2821)).

## **Investor Compensation Levy**

Effective 19 December 2005, the payment of Investor Compensation Levy (i.e. 0.002% per side of the consideration of a transaction, rounded to the nearest cent) has been suspended by the SFC as the net asset value of the compensation fund exceeds \$1.4 billion, as per the Securities and Futures (Investor Compensation - Levy) (Amendment) Rules 2005.

## **Trading Fee**

A Trading Fee of 0.005% per side of the consideration of a transaction (rounded to the nearest cent) is payable to the Exchange. There is no Trading Fee on Pilot Program and ETF Market Maker transactions.

## **Trading Tariff**

A trading tariff of HK\$0.50 is payable to the Exchange on each and every purchase or sale transaction. The decision on whether or not to pass the trading tariff on to investors is at the discretion of brokers.

## **Stamp Duty on Stock Transaction**

Unless stated otherwise, all securities listed on the Exchange are subject to a stamp duty at a rate of 0.1% (rounded up to the nearest dollar) on the value of the transaction, on both the buyer and the seller. Please [click here](#) for a full list showing securities not subject to Hong Kong Stamp Duty. Stamp Duty remissions apply to all Options Market Maker jobbing transactions and Pilot Program and ETF Market Maker transactions.

## **Transfer Deed Stamp Duty**

Independent of the quantity of shares traded, the Government levies a transfer deed stamp duty of HK\$5.00, payable by the registered holder of the pertaining share certificate(s), i.e. the seller, on each new transfer deed.

## **Transfer Fee**

Independent of the quantity of shares traded, the registrar of each listed company levies a transfer fee of HK\$2.50 per share certificate from the registered holder, i.e. the buyer, for each new certificate issued.

## **Initial Public Offer Shares**

Of the transaction costs discussed above, brokerage, transaction levy and trading fee are applicable to initial public offer share. For ease of reference, below please find a simple illustration of how some of the above transaction costs are involved and calculated in an application for new shares offered by a new listing issuer. Contents of the below illustration are agreed following consultation among the Exchange, the SFC and the Hong Kong Association of Banks and the demonstration is mainly for the benefit of the public in understanding the method of calculating a correct amount in application for new shares.

### **Formula for Amount Payable for Initial Public Offer Shares**

1. The amount payable for initial public offer shares ("Amount Payable") comprises four elements, namely:
  - (i) **Application Money** - the offer price of the number of the shares applied for;
  - (ii) **Brokerage Fees**<sup>2</sup> - 1% of the Application Money;
  - (iii) **SFC Transaction Levy**<sup>3</sup> - 0.004% of the Application Money; and
  - (iv) **the Exchange Trading Fee**<sup>4</sup> - 0.005% of the Application Money

2. Each component in (1) above should be calculated *separately* to arrive at a sub-total. Where applicable, the relevant sub-total should be rounded to the nearest cent i.e. if the third digit after the decimal point is 0.005 or above, it should be rounded up; otherwise it should be rounded down. The four sub-totals should then be added together to arrive at the Amount Payable.

3. For example:

No. of Public Offer Shares Applied	: 2,000 shares
• Issue Price	: HK\$5.23
• Brokerage	: 1%
• SFC Transaction Levy	: 0.004%
• The Exchange Trading Fee	: 0.005%

<b>Component</b>	<b>Sub-total (Before rounding)</b>	<b>Sub-total (After rounding)</b>
Application Money [2,000 x \$5.23]	N/A	\$10,460.00
Brokerage [\$10,460 x 1%]	N/A	\$104.60
SFC Transaction Levy [\$10,460 x 0.004%]	\$0.4184	\$0.42
the Exchange Trading Fee [\$10,460 x 0.005%]	\$0.523	\$0.52
<b>Amount Payable for Public Offer Shares</b>		<b>\$10,565.54</b>

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<sup>1</sup> Brokers or custodians have to pay HKSCC service fees for use of the clearing, settlement, custody and nominee services offered by CCASS. Investors may be charged by their brokers or custodians for such CCASS services unless investors settle with brokers or custodians outside CCASS. The decision on whether and how to pass these CCASS related service fees on to investors will be totally at the discretion of the brokers or custodians. For details of CCASS service fees, please [click here](#).

- 2 The brokerage of IPO transactions is currently set at 1% of the application money (Paragraph 7 of Appendix 8 to the Rules Governing the Listing of Securities ('Main Board Listing Rules') and Paragraph 6 of Appendix 9 to the Rules Governing the Listing of Securities on the Growth Enterprise Market ('GEM Listing Rules')).
- 3 Treatment as mandated in Paragraph 5 of Appendix 8 to the Main Board Listing Rules - Transaction Levy on New Issues states that the Transaction Levy together with the Investor Compensation Levy shall be calculated on an aggregated basis (rounded to the nearest cent) by applying the percentage rates as specified from time to time in the Securities and Futures (Levy) Order and the Securities and Futures (Investor Compensation - Levy) Rules to the total consideration payable to the issuer by investors. Similar reference can also be found in Paragraph 3 of Appendix 9 to the GEM Listing Rules. Due to the suspension of payment of the Investor Compensation Levy, investors are not required to pay Investor Compensation Levies in respect of sales and purchases of securities and futures contracts with effect from 19 December 2005 until terminated by a termination notice published by the SFC. Effective 1 December 2006, the Transaction Levy is being reduced from 0.005% to 0.004% of the consideration for each purchase or sale of securities pursuant to the Securities and Futures (Reduction of Levy) Order 2006.
- 4 Treatment as mandated in Paragraph 6 of Appendix 8 to the Main Board Listing Rules - Trading Fee on New Issues

## AUSTRALIAN STOCK EXCHANGE

Today is a dangerous day for the Australian stock market. Our gut trading instinct tells us to look for a big intra-day reversal after a big plunge at the open. The futures market, spooked by last night's massive selling in Europe, has priced in a big decline at the open. But after that, then what?

By our reckoning, the market has corrected its mistake of last August. No one appreciated the consequences of a bear market in credit at the time. Stocks rallied. Then came the fourth quarter for the banks and financials. It was a disaster.

Mr. Market has basically said, "Right, I got that wrong. The bear market in credit is a big fat negative for earnings and economic growth. A recession is coming in the world's largest economy, and the Reserve Bank may put up interest rates again. Sell."

You should think about buying this week. Very carefully.

Where's the floor of the Australian stock market? If the [ASX/200](#) goes a lot further below 5,500, investors are fundamentally reexamining their assumptions and expectations. The declines in Europe last night matched the figures posted in the first few trading days after 9-11. And as we write, the Dow futures are down a whopping 500 points, over 4.3%.

One interpretation for these moves is that we've entered a bear market and not a correction. So far, it's looked and felt like a correction. But if it gets worse, it means the market will now acknowledge

the serious rot in the global financial system, especially the credit markets. Stocks will fall at least another 5%, and probably 10%. The chart below shows why.

The post 9-11 market crashed 18%. It then rallied straight back up 21% in early 2002, before crashing again, this time by 22%. The early March 2003 was the low from which Australia's long bull run began.

The past is not always prologue. But you can see the parallel. The August credit shock wiped off all of 2007's share gains from the Australian stock market. Then came the fake-out rally. Order was restored for awhile. Now the other shoe dropping, the one that acknowledges, as with 9-11, that something is fundamentally different about the world we operate in.

And what is that difference? The price of money is going up. So is the perception of risk. One visible clue is the yen. It's getting stronger.

That's bad news for emerging markets and speculative assets. Traders borrow in yen (where interest rates are low) to invest in higher-yielding assets like the Australian dollar. Yen strength means global investors are in full flight from riskier assets. That does not bode well for the Australian stock market and the Australian dollar, at least in the short term.

As you can see above, the yen is getting stronger against a basket of foreign currencies, especially against the dollar and the euro. The stronger the yen gets, the weaker you can expect global stock markets to be. You can see that Yen strength began right as the credit crisis hit in July. Since then, with one brief pause, traders have been getting out of risky positions and into... into what?

That's a question you might want to ask whoever runs your superannuation fund. Professional money managers loathe being in cash. That's what banks are for. But it would have made sense for money managers to increase their cash position late last year. Maybe that's what happening now, a simultaneous liquidation/reduction in the amount of money investors have in stocks.

Investors are getting out of the line of fire. Again, we think it makes sense to take a close look at stocks you want to own for the long term today. But we know it's a hard thing to do. Psychologically, it's fascinating to watch share prices fall. Emotionally, it's agonizing. Rationally, you need to keep your wits about you.

Lots of concerned e-mail this morning. "I know it's only the opening trades, but how's that for blood on the streets this morning? Particularly the stocks I keep on my watch lists anyway which is mainly resources, they are getting smashed!"

Still, we wouldn't be surprised to see Australian stock market draw a line in the sand at around 5,500. We don't expect it to close on the lows today. We expect it to make a new 52-week low and then turn around. Woolworth's, Telstra, and other non-resource blue chips will begin to look irresistible to fund managers whose job is to stay fully invested in equities. Call options on the index would be a great trade today, if you were trading.

Your risk of calling a bottom is that valuations and earnings are no longer driving the market. If it were just economic expectations, we reckon the market would settle around 5,500. But something else is in the air too, fear.

When a fearful mob gets going, you'd better stay out of its way and keep a close eye on your capital. "Be greedy when others are fearful and fearful when others are greedy." However, for very



long-term investors, this week may present you with some of the best buying opportunities you'll see in the next ten years.

The alternative-a worldwide financial panic-is certainly possible. Yet this is when it pays to tune out the din and crash of the press. Just step back a moment. Many investors are panicking right now. Stocks are oversold. While we are firm believers in the credit bear, we are not knee-jerk bears. The selling is already over done. Now it's really just a question of timing your entry on the long-side and in the right companies.

In that respect there's no particular rush. Let the sellers exhaust themselves. It will happen sooner or later. It often happens mid-day, when someone steps in to buy. We suspect that will happen here in Australia-if not today, then this week.

Of course we are mindful that there are still a lot of unknown unknowns out there. Sectors exposed to the credit crisis are falling like dominoes. The whole process of selling can feed on itself, especially with so much trading done by computer model. You get cascading prices.

Interest rates? Aussie producer prices rose at less than half the rate economists expected in the fourth quarter. But they were still up 2.6% over the same time last year. Consumer price inflation data comes out tomorrow. But our guess is that in the current financial environment-unless tomorrow's data are an absolute shocker-the RBA will not put up interest rates. Not even 25 basis points.

Lower oil and commodity prices will take some of the sting out of inflation. And you might even see a bit of a "reverse wealth effect." When the tone of the news becomes fearful and bearish, people reduce consumption and spending. The RBA should get all the benefits of a rate rise without actually raising rates.

And the gold price? It's selling down like everything else. The American dollar's gotten a boost from expectations of a Fed rate cut. Gold could decline to \$800 on a technical basis if investor's are truly spooked.

But how about this for a thought... prompted by big declines in U.S. equity markets, the Fed announces-between meetings-its super cut of 100 basis points. The market expects 50 and would prefer 75. But we expect Big Ben to surprise to the upside and deliver his wildest swing yet. In any event, the market has priced in a cut. When the news hits, dollar weakness and gold strength should resume. Stay tuned.

Dan Denning  
The Daily Reckoning Australia

P.S. to get The Daily Reckoning direct to your inbox sign up to our [free e-mail newsletter](#) or if you prefer to use RSS, subscribe to the [Daily Reckoning RSS feed](#).

## **The Listing Rules**

ASX Limited ("ASX") offers a market for trading in securities. Trading takes place through trading participants. ASX's market rules govern trading participants' relationships with ASX, with each other and with clients. ASX supervises the market for securities issued by listed entities. One way

it does this is by setting standards for the behaviour of listed entities through its Listing Rules.

ASX's Listing Rules govern the admission of entities to the official list, quotation of securities, suspension of securities from quotation and removal of entities from the official list. They also govern disclosure and some aspects of a listed entity's conduct. Compliance with the Listing Rules is a requirement for admission to the official list. It is also a requirement under the contract that an entity enters into on being admitted.

The Listing Rules are not just binding contractually. They are enforceable against listed entities and their associates under the Corporations Act. See sections 793C and 1101B of the Corporations Act. The Listing Rules create obligations that are additional, and complementary, to common law obligations and statutory obligations. Under the Corporations Act, listing rule amendments must be lodged with ASIC. They are subject to disallowance by the Minister.

The Companies business unit of ASX makes day to day decisions on the application of the Listing Rules. Guidance Note 17: ASX Companies and Guidance Note 21: Appeals provide further details of how decisions are made and the appeal process which is available in respect of decisions.

Inquiries concerning admission to the official list are welcome and entities considering applying for admission are invited to consult with Companies staff. Entities may also wish to consult their professional advisers.

## **ASX's objectives**

The objectives of ASX include:

- providing a fair and well-informed market for financial securities; and
- providing an internationally competitive market.

ASX's Listing Rules are a key element in meeting ASX's objectives. They deal with listing and quotation, market information, trading and settlement, and general supervisory matters.

## **The principles on which the Listing Rules are based**

The principles on which the Listing Rules are based embrace the interests of listed entities, maintenance of investor protection and the need to protect the reputation of the market.

The principles are as follows.

- Minimum standards of quality, size, operations and disclosure must be satisfied.
- Sufficient investor interest must be demonstrated to warrant an entity's participation in the market by having its securities quoted.
- Securities must be issued in circumstances which are fair to new and existing security holders.
- Securities must have rights and obligations attaching to them that are fair to new and existing security holders.
- Timely disclosure must be made of information which may affect security values or influence investment decisions, and information in which security holders, investors and ASX have a legitimate interest.
- Information must be produced according to the highest standards and, where appropriate,

enable ready comparison with similar information.

- The highest standards of integrity, accountability and responsibility of entities and their officers must be maintained.
- Practices must be adopted and pursued which protect the interests of security holders, including ownership interests and the right to vote.
- Security holders must be consulted on matters of significance.
- Market transactions must be commercially certain.

## **Application of the Listing Rules**

ASX has an absolute discretion concerning the admission of an entity to the official list (and its removal) and quotation of its securities (and their suspension). ASX also has discretion whether to require compliance with the Listing Rules in a particular case (ie, apart from waiving the rules). In exercising its discretion, ASX takes into account the principles on which the Listing Rules are based.

ASX may also waive compliance with a listing rule, or part of a rule, unless the rule in question says otherwise. The Listing Rules necessarily cast a wide net. However, ASX does not want to inhibit legitimate commercial transactions that do not undermine the principles on which the Listing Rules are based.

If ASX decides to grant a waiver, it may do so on conditions. The conditions must be complied with for the waiver to be effective. Waivers are published by ASX periodically and are also advised to the ASIC.

The Listing Rules themselves are to be interpreted:

- in accordance with their spirit, intention and purpose;
- by looking beyond form to substance; and
- in a way that best promotes the principles on which they are based.

If an entity does not comply with the Listing Rules, its securities may be suspended from quotation or it may be removed from the official list.

## **Approved CS Facility - ASTC Settlement Rules & ACH Clearing Rules**

For securities to be cleared and settled in an approved CS facility's subregister system, the securities must be able to be settled in accordance with the operating rules of an approved CS facility. For securities to be cleared and settled in the Clearing House Electronic Subregister System ('CHESS'), the securities must be CHESS approved. The ASTC Settlement Rules regulate CHESS approval of securities and the settlement of CHESS approved securities. ASTC is an approved CS facility for settlement. The ACH Clearing Rules regulate the clearing of CHESS approved securities. ACH is an approved CS facility for clearing.

## **How to use this manual**

The listing manual is divided into chapters. Related topics have been grouped together as far as possible.

Each chapter begins with a table of the contents of that chapter. It sets out the main headings in the

chapter and the rules which come under that heading. Some chapters also have an explanatory note, which helps readers to understand the structure and content of the chapter. At the foot of each page is the date of the last amendment and reprinting of that page.

Defined terms (except 'ASX' and 'entity') are marked with a cross (eg, security). The cross is not used in headings or notes or when the word is used in the definition of the term itself (eg, the word 'acquire' is not marked in the definition of 'acquire'). The definitions are found in chapter 19. The terms 'ASX' and 'entity' are used often throughout the manual and, for ease of reading, are not marked.

There are 'end notes' to the rules. These include the history and origin of the particular rule and sometimes include other relevant information, such as an example of the operation of the rule. If there is an example, it does not, of course, affect the operation of the rule.

## Guidance Notes

ASX issues Guidance Notes to promote commercial certainty, reduce costs to business and assist market participants. They set out ASX's general approach to a subject. They should not be regarded as a definitive statement of the application of the rules in every case. Nor do they provide legal advice.

For convenience there is a tab card in this manual for Guidance Notes.

## Market Turnover      \$A 6,756,613,434.00

A positive lead from the US and firmer commodity prices were unable to push the Australian Share market into positive territory today. The All Ordinaries closed the session 2.2% lower at 5754.5pts

US share markets fell at the open of trade but promptly reversed on optimism that the Federal Reserve will slash rates again this week. Earnings news was mixed. Shares in McDonalds fell 6.4% after the fast food giant posted flat sales in December. Shares in Corning rose 3.3% after a positive earnings result.

Base metal prices were modestly higher on the London Metal Exchange (LME) overnight, benefiting from a weaker greenback. The exception was aluminium, losing 0.4%.

Rivals BHP Billiton (BHP) and RIO Tinto (RIO) were both down, with BHP falling 3.0% to \$35.70, and RIO closing 4.2% lower to \$113.57.

The Financial sector was weak across the board. Among the commercial banks, ANZ Banking Corp. (ANZ) was the weakest performer, falling 3.8% to \$26.45.

Allco Finance Group (AFG) recovered today on the back of news that margin lenders have agreed not to sell any more AFG shares. Shares in AFG surged 6.5% to \$3.62. The asset manager slumped last week upon growing concerns regarding its complex investment strategy.

Crude oil prices rose on Monday on expectations that OPEC will maintain production quotas at this week's meeting. Further, in line with other commodities, a weaker greenback served to lift energy prices. However, Australian based oil and gas company Woodside Petroleum (WPL) fell 2.8% to \$45.85.

Australian business conditions remain healthy, but business owners are more wary

about the future. The NAB business conditions index rose 2 points to +17, while business confidence fell 1 point to +5 points.

The Australian dollar finished the session at US\$0.8881 (5pm AEST). This commentary is a general account of the day's trading and is not intended to be taken as a recommendation to buy, hold or sell any particular stock.

## ASX Investment Performance Report - December 2004

- [ASX Investments Report December 2004](#) (PDF 67KB)

The Australian Stock Exchange commissioned Russell Investment Group to report on the performance of various investments on a consistent net basis (i.e. after all costs and taxation) over the ten-year and twenty-year periods ended 31 December 2004. Performance is calculated over these two periods for two reasons: to assist personal investors who invest for the medium and longer term, and to provide a reasonable comparison between investment sectors.

### Report Highlights

- Real returns have been particularly strong for residential investment property, listed property trust investments and Australian shares over the ten year period from 1 January 1995 to 31 December 2004.
- Over the 10 year period ending 31 December 2004, at the lower marginal tax rate, the after-tax returns of residential investment property (10.6% p.a.), listed property (12.3% p.a.), Australian shares (11.6% p.a.), fixed interest (6.7% p.a.) and cash (3.8% p.a.) have all exceeded the average rate of inflation (2.6% p.a.). At the top marginal tax rate, the after-tax returns from residential investment property, listed property and Australian shares were well above inflation. Returns from fixed interest assets were only slightly higher than inflation, but cash returns (after tax) fell slightly short of average inflation.
- Returns from overseas shares were 7.9%. After-tax returns have not been calculated due to complex global tax regimes.
- Overall, at the top marginal tax rate, the effective tax rate for Australian shares is around 22%, residential investment property is around 28%, listed property is around 29%, fixed interest and cash is around 49%. The relatively low effective tax rate for Australian shares can be attributed mainly to the benefits of dividend imputation.

### Results by Investment Sectors – Ten Years

\*Only before-tax return has been calculated

? All returns are net of expenses

## Status notes

There are a number of codes used by [ITS](#) to provide further information about the trading status of a security. These codes are known as status notes and a list of the codes that we display on our site, together with an explanation for each is provided below. For example, XD shown against a security code means the security is currently quoted on an '[ex-dividend](#)' basis and that trading in this security does not carry the entitlement to the dividend payment. If there is no code displayed alongside a security, then the security is trading on a [cum](#) basis where cum means 'with'.

Note: Only the status notes that are displayed on this site are provided below. The notes are updated every day at approximately 4 a.m. Intra-day status notes are not displayed.

A list of [intraday status notes](#) not displayed on this website which you may see still see appearing on your online broking website.

<b>Status note</b>	<b>Description</b>
<b>CB cum bonus issue</b>	A Company has declared that existing shareholders will receive a bonus in the form of additional securities. For example, a company may declare a 1 for 1 bonus issue. This means that for every one security held by a shareholder they will receive one additional security. If the bonus issue is a 1 for 5 bonus, then shareholders will receive 1 additional security for every 5 securities held. Those holders on the Company's Register at the record date will be entitled to receive the additional securities. The purchaser of securities Cum Bonus is entitled to the additional securities. Securities are traded Cum Bonus until the <a href="#">Ex Bonus date</a> . Trading in the actual bonus issue begins on the morning of the Ex Bonus date and ends at the close of trading on the business day the securities are despatched.
<b>CC cum capital return</b>	A Company has declared an amount per security which will be returned to shareholders. The Capital Return may be in the form of cash or securities. If the Capital Return is in the form of securities it is treated as a Bonus Issue in ASX systems. Those holders on the Register at the record date will be entitled to receive the distribution. The purchaser of securities Cum Capital Return is entitled to the return of capital. Securities are traded Cum Capital Return until the Ex Return of Capital date.
<b>CD cum dividend</b>	A Company has declared an amount per security which will be provided to shareholders in the form of a dividend. Securities trade on the basis that the securities carry an entitlement to the next dividend payable by the Issuer. The purchaser of securities Cum Dividend is entitled to the dividend. Securities are traded on a Cum Dividend basis until the Ex Dividend date.
<b>CE cum entitlement</b>	A Company has declared an entitlement issue. In most instances the issues are non-renounceable issues. The purchaser of securities Cum Entitlement is allowed to receive the entitlement. Securities are traded on a Cum Entitlement basis until the Ex Entitlement date.
<b>CF cum takeover offer</b>	Not currently used.
<b>CI cum interest</b>	Applies to interest rate securities only. Securities trade on the basis that the securities carry an entitlement to the next interest payment. The purchaser of securities Cum Interest is entitled to the next interest payment. Securities are traded on a Cum Interest basis until the Ex Interest date.
<b>CL call due</b>	This Status Note is not used on ITS. However where this flag is disseminated through an ASX signal it indicates that a call is due on the security.
<b>CP call paid</b>	CP displays for one day, on the day the call is due and payable. Generally when a security commences trading on a Call Paid basis, a new trading code is established. In the instance when a new trading code is not established, all orders are purged at the end of the trading day prior to the security being quoted on an CP basis.
<b>CQ cum equal access scheme</b>	

Applies to Equal Access Buy Backs. An Equal Access Buy Back (also referred to as an equal access scheme) is an off-market buy back. An equal access scheme is a scheme that satisfies all the following conditions:

- a) the offers under the scheme relate only to ordinary shares
- b) the offers are to be made to every person who holds ordinary shares to buy back the same percentage of their ordinary shares
- c) all of those persons have a reasonable opportunity to accept the offers made to them
- d) buy back agreements are not entered into until a specified time for acceptances of offers has closed
- e) the terms of all the offers are the same.

The issuer sends notices to every shareholder on the Company's Register at the record date offering to purchase a percentage of each shareholder's holding. If the shareholder agrees to sell their shares to the issuer, they simply complete and return the form to the issuer. The purchaser of securities Cum Equal Access Buy Back is entitled to receive the buy back offer. Securities are traded Cum Equal Access Buy Back until the Ex Equal Access Buy Back date.

**CR cum rights issue**

Applies to [renounceable Rights](#) Issues. The Rights issue may be the right to any tradeable product. The purchaser of securities Cum Rights is entitled to receive and trade the Rights securities. Securities are traded Cum Rights until the Ex Rights date. Trading in the Rights securities begins on the morning of the Ex Rights date and ends at the close of business on the Rights Trade Cease date. The renounceable Rights are traded on a deferred settlement basis until the day after the Rights securities are despatched to clients. On the Business day following the despatch date of the Rights, the Rights commence trading on a T+3 settlement basis.

**CT conditional trading**

The security is trading on a conditional basis pursuant to ASX Business Rule 2.12.2. Participating Organisations are notified by circular whenever a security is to commence trading on a conditional basis. Details included in the circular cover the conditions which have not been met and the period of conditional trading. If the conditions are not fulfilled by the close of the conditional trading period (specified in the Circular), shares will not be issued or transferred and conditional trades which have occurred since the commencement of the conditional trading period will be cancelled.

**CZ cum priority**

Existing shareholders of a listed company (for example, ABC Ltd) will receive "priority" when applying for shares in a company seeking quotation of its securities (for example, XYZ Ltd). As a result, if applications to purchase securities in XYZ Ltd is oversubscribed then existing shareholders of ABC Ltd have priority over other applicants for securities in XYZ Ltd. The purchaser of securities Cum Priority has preference over other applicants when applying for securities in a specified company. Securities are traded on a Cum Priority basis until the Ex Priority date.

**NX new - ex interest**

Applies to Interest Rate Market securities. It indicates that the purchaser of the securities via the prospectus has the right to the first interest payment even if they subsequently sell the securities prior to the Ex Interest date. The purchaser of securities on a New Ex Interest basis is not entitled to the first interest payment. Securities are traded on a New Ex Interest basis from the security's first day of quotation until the first interest payment has been paid.

**PA Protection available**

Protection Available may be applied to Company Options when the underlying security goes Ex Entitlement, Ex Bonus, Ex Rights or Ex Priority. It indicates that the investor is guaranteed to participate in an entitlement if they exercise their option on that day. The purchaser of securities trading on a Protection Available basis is guaranteed of participating in the entitlement issue. Securities are traded on a Protection Available basis until the Protection Unavailable date.

**PU Protection unavailable**

PU is displayed for a security when the underlying security commences trading on an Ex basis of quotation and remains until the close of business on the applications close date. Protection Unavailable is a warning to Optionholders that if they exercise their option during the underlying security's Ex period they will not receive the entitlement associated with the underlying security. All orders are purged at the end of the trading day prior to the security being quoted on a PU basis.

**RE Reconstructed**

The reconstruction flag 'RE' is applied from the day the security commences trading on a reconstructed basis and remains for 12 months. Securities which have been reconstructed within the last 12 months may be found via ITS using:

- Function STA/STK –an 'R' is displayed between the security code and company name
- Function D –the term RECONST will be displayed on the second header line
- Detail/Depth/Look & Watch –an RE will be displayed in the basis of quotation field.

A [reconstruction](#) may be a consolidation (reduction in the number of shares on issue) or a split (increase in the number of shares on issue). So, for example, if there is a 3:1 consolidation then the company will issue to shareholders one new share for every three existing shares. This type of change will usually result in the new share price being about three times that of the old. Alternatively if there is a 4:1 split then the company will issue shareholders four new shares for every one existing share and the share price will usually be reduced accordingly, i.e. divided by four in this case. Generally when a security commences trading on a reconstructed basis, a new trading code is established. In the instance when a new trading code is not established, all orders are purged at the end of the trading day prior to the security being quoted on an RE basis.

**XB ex bonus issue**

XB displays for a security from the morning of the [Ex Bonus date](#) (generally four business days before the record date) and remains until the close of trading on the bonus issue date. Trading in a security displaying XB on ITS does not carry the right to receive the [bonus issue](#). For more information refer to the description of [Cum Bonus](#). All orders are purged at the end of the trading day prior to the security being quoted on an XB basis.

**XC ex return of capital**

XC first displays for a security from the morning of the Ex Capital Return date (generally four business days before the record date) and remains until the close of trading on the payment date. Trading in securities displaying XC on ITS does not carry the entitlement to the Return of Capital payment. For more information refer to the description of [Cum Return of Capital](#). All orders are purged at the end of the trading day prior to the security being quoted on an XC basis.

**XD ex dividend**



XD first displays for a security from the morning of the [ex dividend date](#) (generally four business days before the record date) and remains until the close of trading on the date payable. Trading in securities displaying XD on ITS does not carry the entitlement to the dividend payment. For more information refer to the description of [Cum Dividend](#). All orders are purged at the end of the trading day prior to the security being quoted on an XD basis.

**XE ex entitlement**

XE first displays for a security from the morning of the Ex Entitlement date (generally four business days before the record date) and remains until the close of business on application's close date. Trading in securities displaying XE on ITS does not carry the right to securities in the entitlement issue. For more information refer to the description of [Cum Entitlement](#). All orders are purged at the end of the trading day prior to the security being quoted on an XE basis.

**XF ex takeover offer**

Not currently used.

**XI ex interest**

XI first displays for a security from the morning of the Ex Interest date (generally four business days before the record date) and remains until the close of business on the payment date. XI indicates that interest has been paid on the securities. Trading in securities displaying XI on ITS does not carry the entitlement to the current interest payment. For more information refer to the description of [Cum Interest](#). All orders are purged at the end of the trading day prior to the security being quoted on an XI basis.

**XQ ex equal access scheme**

XQ first displays for a security from the morning of the Ex Equal Access Buy Back date (generally four business days before the record date) and remains until the close of business on the day the offer is closed. Trading in securities displaying XQ on ITS does not carry the right to participate in the current buy back. For more information refer to the description of [Cum Equal Access Buy Back](#). All orders are purged at the end of the trading day prior to the security being quoted on an XQ basis.

**XR ex rights issue**

XR first displays for a security from the morning of the Ex Rights date (generally four business days before the record date) and remains until the close of business on the application's close date. Trading in securities displaying XR on ITS does not entitle the holder to receive securities in the [Rights Issue](#). For more information refer to the description of [Cum Rights](#). All orders are purged at the end of the trading day prior to the security being quoted on an XR basis.

**XZ ex priority**

XZ first displays for a security from the morning of the Ex Priority date (generally four business days before the record date) and remains until the close of business on the application's close date. Trading in securities displaying XZ on ITS does not entitle the holder to any priority to subscribe to a new issue or float. For more information refer to the description of [Cum Priority](#). All orders are purged at the end of the trading day prior to the security being quoted on an XZ basis.

## Intraday status notes

The following intraday status notes are not displayed on this website but may be available on your online broking website.

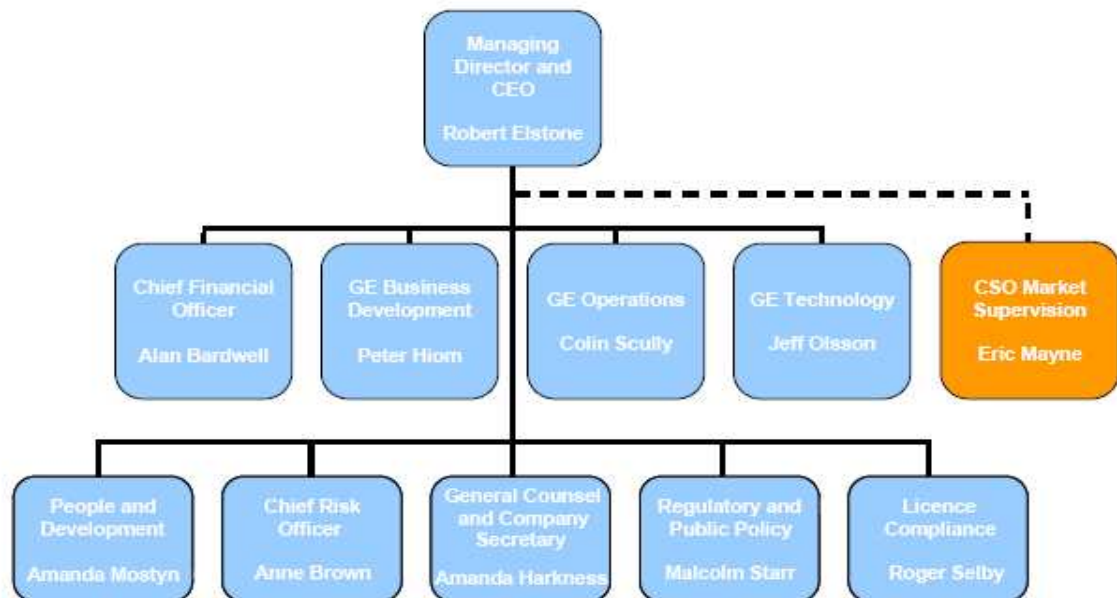
### Status

### Description

**note**

- IN Interest Only**  
Used for Wholesale Interest Rate and Government Loan instruments to indicate that order entry is via the Bulletin Board only as an interest only order.
- NL Late Notice Received**  
If a Company Announcement is disseminated after 4:00 pm, NL appears on the instrument the following trading day and displays for a maximum of one day. If a new Company Announcement is received on the following trading day, the NL is replaced by NR.
- NR Notice Recieved**  
Indicates a Company Announcement message has been disseminated during the current trading day. Remains for that day only.
- NS Under takeover bid. No short selling or specials allowed.**  
Indicates an instrument is under takeover bid. Remains for the duration of the Bid Period.
- RC Rollover Complete**  
Alerts users that the Reset Date for a Rolling Instalment warrant has occurred. A Rolling Instalment warrant is a long dated instalment warrant. Each year the exercise price may be reset by the issuer. The date the exercise price is reset is referred to as the Reset Date. RC (Rollover Complete) will be applied on the ex-Reset (ex-reconstruction) date. An 'RE' tag will also be applied to the security on this date.
- RD Currently under reconstruction**  
Alerts users that this instrument is currently under reconstruction. When the status note is displayed it is highlighted in red.
- RP Rollover Pending**  
Alerts users that the Reset Date for a Rolling Instalment warrant is approaching. A Rolling Instalment warrant is a long dated instalment warrant. Each year the exercise price may be reset by the issuer. The date the exercise price is reset is referred to as the Reset Date. RP (Rollover Pending) will be applied to a security to indicate that the Reset Date is approaching. This status note will be applied to the security from the Announcement Date (date issuer announces the amended terms of the warrant), which is approximately four weeks prior to the Reset Date.
- S1 1 Tenth of a Price Step**  
Indicates an instrument that trades at 1 tenth of a price step for all price levels.
- SH Short Sell Allowed**  
Indicates an Approved Security for short selling.
- TH Trading Halt**  
Indicates an instrument is in a trading halt. Remains until close of business on following day (unless lifted beforehand).
- RA Receiver Appointed**  
Applies to companies that have filed for bankruptcy.

# ASX – Organisational Structure



## FRANKFURT STOCK EXCHANGE

### Australian stock market jumps

**AUSTRALIAN shares have jumped ahead today, following US stock markets which surged in late trade overnight after the Federal Reserve's emergency cut in interest rates on Tuesday.**

The benchmark S&P/ASX200 index gained 2.6 per cent in early trade to 5552.1, and ended the day up 3.11 per cent at 5580.4. The All Ordinaries lifted 2.94 per cent to 5605.8 by the close of trade.

The Australian market has followed the lead from US stocks, which rallied late in the New York session overnight, led by rising shares of financial companies on speculation about capital infusions for bond insurers.

The gains, which sent the Dow up more than 2 per cent, put Wall Street on course to snap a 5-day string of losses. The Dow Jones Industrial Average was up 243.14 points, or 2.03 per cent, at 12,214.33.

The Australian share market yesterday staged its biggest one-day gain since last August, adding \$50.5 billion in value to the bourse. The gains helped recoup some of Tuesday's huge losses, when the share market lost \$110 billion in value on fears of a looming US recession.

The Australian dollar was also much stronger today, being quoted at \$US87.22 cents at 2.30pm AEDT. The local currency overnight had a volatile ride, falling as low as \$US86.12 cents in New York trade after closing yesterday at \$US86.50.

Despite the US Fed rate cut of 75 basis points, European shares fell sharply overnight. The UK's FTSE 100 index fell 2.3 per cent to 5609.30 after comments by the European central bank suggested no near-term rate cuts.

The Frankfurt stock market also closed lower, down 4.88 per cent. The Paris CAC 40 stock market index plunged 4.25 per cent.

*With AFP and Reuters*

*Nicki Bourlioufas is the business editor of NEWS.com.au*

The international stock markets witnessed large swings in prices as a response to reasons other than economic and fundamental values. This includes noise trading and overreaction of traders among other factors, which cause de-stabilizing of the stock market, and may evolve to an international crash as the ones occurred in 1987 and 1989. This phenomenon exists in the stock markets of developed countries. Accordingly, there was a need to investigate the relationship between the price volatility, stock traders practices and the institutional features of the German stock market. In order to state which conditions may or may not help in stabilizing the stock market. Stabilizing of stock market means reducing the conditions that may develop imperfect market. To indicate that, this study was based upon the perceptions of German stock experts, who were a random sample of two groups of Frankfurt Stock Exchange (FSE) members, the bank representatives as the brokers and the maklers as the specialists.

Based on the investigation of the German Stock Market conditions as well as the perception of the FSE members, the following conclusions may be drawn out:

- \* The fall of the other international price indices, and the increase of trading outside the stock exchanges were the most risky conditions which may lead to de-stabilize the German stock market at certain events.
- \* The increasing share of the banks and pension funds in stock market as solid clients and the special mechanism of the German stock exchange including the cash settlement and the present dealing systems were considered as the most safety conditions.
- \* The study indicated also, that there is no significant difference between the perceptions of the two groups (bankers as brokers and Maklers as specialists) of the FSE members concerning most of the de-stabilizing conditions of the stock market, while both groups have no agreement on the important of most of the stabilizing elements of the stock market.
- \* Finally, it is difficult to state that a specific stock market condition may considered as risky or safety factor in all cases. However, such analysis might be a signal for further investigations and follow up.

The origin of the German Stock Market goes way back to the period of the medieval fairs. Although some say that it goes back to the early 9th century, the Frankfurt autumn fair was first mentioned during the Assumption holiday in 1150. The said fair was so successful that it led to the creation of another one, the

Frankfurt Spring fair. The continued growth of trading activity had gradually turned into merchandise production for an open and nationwide market. Moreover, the city of Frankfurt had turned into a wealthy and busy city where immigrants and merchants alike were also involved in trading and the establishment of banking sectors.

The problem with its success, one that benefited the German Stock Market, was that there was no single currency in the German Empire or in Europe, for that matter. As a result, payments in different forms of currencies proved confusing and thus led to other problems.

The solution was found in 1585 when merchants at the fair decided to establish a uniform of exchange. This signified the birth of the Frankfurt Stock Exchange, the oldest in the German Stock Market and third behind London and Paris.

Other notable periods in the timeline of the German Stock Market include the introduction of the first exchange list (1625), the establishment of the First Official Exchange Rules and Regulations (1682), moving their trading activities from outdoor markets to the Großer Braunfels building at the Liebfrauenberg, the city's most influential and spacious building (1694), and the handing of operations to the Chamber of Commerce, resulting in the Frankfurt Stock Exchange's becoming a publicly owned institution (1808).

In the 19th century, other Exchanges in the German Stock Market started becoming prominent and were challenging the Frankfurt Stock Exchange. Among them was the Berlin Stock Exchange, which proved to be its chief competitor.

Both World Wars were consequentially damaging for the German Stock Market as international ties were severed and the Stock Exchanges, although continuing to operate domestically, no longer fulfilled an important function as trade with the free world was abruptly cut.

The collapse of the Nazi Regime once again gave life to the German Stock Market as the German Stock Exchanges once again reopened in September of 1945. Once again, the Frankfurt Stock exchange emerged as the leader in Germany.

Today there are many Exchanges all over Germany in the cities of Berlin, Stuttgart, Hamburg, Bremen, Hanover, the state of Bavaria, and of course, Stuttgart. Together, they combine to make the German Stock Market competitive and among the global leaders in the global stock market.

The troubled US subprime-mortgage market took another German victim, and top economic advisers say the worst is yet to come. Little surprise, then, that a key investment-confidence indicator has plunged.

Peter Bofinger and Wolfgang Franz, two of the five so-called "wise men" who act as economic advisers to the German government, said the peak of the financial market crisis has not yet been reached.

"I expect the peak of the financial crisis to be reached at mid-year," Bofinger told the *Berliner Zeitung* newspaper.

Bofinger said he wasn't surprised by an overall sell-off on the DAX on Tuesday, Jan. 15, after German real-estate investment firm Hypo Real Estate plunged a dizzying 35 percent -- the steepest one-day price drop the Dax has seen to date.

The fall came after the company announced it was writing off 390 million euros (\$580 million) on US subprime debt losses. Shares had made back some gains in early Wednesday trading.

### **Effects of US real-estate pressure**

Investors were taken by surprise by the write-off, because Hypo Real Estate's management had repeatedly said that the firm would be unscathed by the credit crunch, which has swept world markets.

*Bildunterschrift:* [Großansicht des Bildes mit der Bildunterschrift: Hypo Real Estate took one of the biggest falls in Dax history](#)

"The interest rate adjustments for buyers of US real estate are now coming into effect, and that is steadily increasing pressure on real estate markets," Bofinger told the *Berliner Zeitung*.

Meanwhile, Franz said the financial market crisis is not yet over, adding that interest-rate increases for mortgages, which are now coming into effect, will "create problems for some debtors, increasing the likelihood of defaults at banks and also here in Germany."

### **Investors eye US for recession signals**

Hypo Real Estate's announcement on Tuesday came in the wake of more grim news out of the US financial sector; America's biggest bank, Citigroup, reported that it suffered a record \$9.83 billion fourth-quarter loss.

Meanwhile, concerns that a possible US recession will deepen the slowdown in Europe's largest economy pushed down a key German investor-confidence index. A study by the ZEW Center for European Economic Research published on Tuesday showed investor confidence in Germany fell to its lowest point in 15 years.

Investor confidence was at minus 41.6, from minus 37.2 a month earlier -- the eighth straight decline. It was a greater drop than analysts had expected.

### **German growth is slowing**

"The bad news flow from the US banking sector hasn't abated," Alexander Koch, an economist at Unicredit Markets and Investments in Munich, told Bloomberg news service. "There are real concerns about a US recession dragging down German economic growth."

German economic growth slowed to 2.5 percent last year from 2.9 percent in 2006, which was the fastest expansion since the turn of the decade, the Federal Statistics office said on Wednesday. The Bundesbank predicts growth of just 1.9 percent this year.

## **London-Frankfurt Stock Linkup Set**

**By Tom Buerkle**

Published: WEDNESDAY, JULY 8, 1998

**LONDON:** Europe's single currency will be the springboard for a single European stock market that could rival the New York Stock Exchange under an ambitious alliance announced Tuesday by the London and Frankfurt markets.

The two exchanges said they would begin by combining their trading of the biggest German and British equities in a joint venture over the coming year, then seek to develop a single, electronic system for trading stocks of the 300 largest European companies.

The exchanges hope that pooling their resources will attract global investors and cut transaction costs, thereby reducing the cost of capital for European companies and making them more competitive.

"This is important for an emerging European capital market," said Werner Seifert, chief executive of Deutsche Boerse AG, the German stock exchange. "It creates a new center of gravity, from which the whole EU economy will benefit."

Gavin Casey, the chief executive of the London Stock Exchange, said the two partners would urge other European

## Why the Stock Crash Won't Hurt the German Economy

By Tobias Dorfer

Falling share prices, panic in the stock markets: Investors have lost a lot of money this week, but analysts say the German economy will emerge largely unscathed from the turbulence, provided it doesn't drag on.

Lemmings are cute and not especially intelligent. They hurl themselves off cliffs without thinking. One of them jumps, the rest of them follow, all die. So far no one has died in the world's stock markets over the past few days. But investors have been acting like lemmings. One sells, the others follow suit. On Monday alone, that wiped €63 billion (\$91 billion) off the value of Germany's top 30 companies. On one single day. Since then everyone has been calling this a crisis.

But many economists are saying the crisis is virtual and has no bearing on the real German economy, at least not yet.

So far, all that has happened is that shareholders' wealth has been destroyed, says Michael Bräuninger at the Hamburg World Economic Institute (HWWI), one of Germany's six leading economic research institutes. The share price losses themselves won't have a far-reaching impact on the German economy, he said.

Joachim Scheide at the Kiel Institute for the World Economy doesn't yet see any impact on the economy either. "It's much too soon for that," he said. Stocks would have to decline over a longer period for alarm bells to start ringing, he insists.

Many economists said the investor panic led to unwarranted declines in many stocks. "Several stocks were hit even though they're in robust condition," said Udo Ludwig, economist at the Halle Institute for the World Economy. He blamed market psychology for the across-the-board declines in all of Germany's DAX index of top 30 stocks. When one dealer sells, the others follow suit. "It's highly contagious," said Ludwig. Those lemmings again.

### Everything Depends on US Economy

Economists are more concerned about the actual cause of the crash -- the US real estate crisis. "This crisis is far from over," said Norbert Walter, chief economist of Deutsche Bank. The risk of a recession in the US has grown, he said.

That's because the banking crisis is also a crisis of US consumer confidence. Access to credit has become more difficult, resulting in a decline in Americans' purchasing power which has hit consumer spending and the overall economy. That in turn could affect Germany's export-oriented economy, says Ludwig.

HWWI economist Bräuninger appealed for calm. "We should wait and see what happens in America." European Central Bank Executive Board member Jürgen Stark also warned against exaggerating the significance of the fall in German stocks: "The markets are very nervous. We're seeing exaggerations here at the moment," he told weekly newspaper *Die Zeit*.



# TORONTO STOCK EXCHANGE

## 1878 – The Toronto Stock Exchange (TSE, currently TSX)

### European Brokers:

During the first few centuries of Canada's European settlement, colonial businesses and governments borrowed primarily from the London capital market to undertake major investment projects. Public shares of large corporations such as the Hudson's Bay Company, the Grand Trunk Railway, and the Bank of British North America were largely held in Great Britain. In the mid-19th century, however, financial brokers began to emerge in Canada, as the supply of financial instruments, such as government and railway bonds and bank and mining stocks, grew.

### Montréal Stock Exchange:

In 1863, a board of brokers that later called itself the [Montréal Stock Exchange](#) (MSE) was formed in Montréal to informally trade some of these bonds and stocks. In 1874, when the MSE received a charter from the Quebec government, Canada's first stock exchange officially began to operate.

### TSE—Early Years:

The formation of the TSE dates back to 1852, when several Toronto businessmen periodically met with the intention of forming an association of brokers; however, there is no official record of their activities. In October 1861, two dozen Toronto businessmen passed a resolution in the Masonic Hall to create the Toronto Stock Exchange. Their main objective was to establish communications between members to facilitate the exchange of stocks, shares, bonds, mortgages, and other loans.

In 1861, fewer than two dozen companies, most related to banks and real estate, were listed. Trading was limited to daily half-hour sessions, and usually no more than two or three transactions occurred per day. In 1878, the Toronto Stock Exchange (TSE) was officially incorporated through an act of the Ontario legislature. The trading volume grew slowly, with periodic ups and downs, until the outbreak of the [First World War](#).

In 1914, the TSE ceased for three months because of the financial dislocations brought on by the war in Europe, and Canada could no longer rely on the British market for raising capital. To finance the war effort, the Canadian government raised billions of dollars by issuing bonds, which were sold to its own citizens, as well as on the New York bond market. The war also stimulated Canadian industrialization, thereby generating a demand for capital. Throughout the Roaring Twenties, the TSE responded to this demand, and by late in the decade, the number of shares traded grew to over 10 million a year.

### The Great Depression:

During the [Great Depression](#) of the 1930s, the value of stocks fell substantially. To cope with the economic crisis, the TSE merged with the Toronto Stock and Mining Exchange (TSME). Created in 1868, the TSME was the principal competitor of the TSE. By 1936, the TSE had become North America's third largest exchange. Since then, the trading volume and value have continued to grow, with few sharp declines such as the one that occurred during the [stock market panic](#) of October 1987.

The TSE has played a leading role in adopting modern technologies and ideas. In the 1970s, the TSE was the first exchange in the world to develop a computerized system to trade some of its stocks. In 1997, the TSE closed its trading floor in favour of electronic trading. In 1999, in order to compete with foreign exchanges, Canada's major exchanges reached an agreement to realign their responsibilities. The TSE has become the sole market for the preferred stocks or senior equities—stocks that have priority over other stocks in the event of bankruptcy of the company. The Montréal Exchange (ME) has become the sole market for [derivatives](#).

Since April 2000, the TSE itself began to operate as a for-profit corporation—the TSE issued its own stocks and declared its first quarterly dividend in January 2003. In May 2001, the TSE acquired ownership of the Canadian Venture Exchange (CDNX) and the TSE was renamed the TSX. In 2003, more than 1,400 companies were listed on the TSX and approximately \$700 billion of share transactions took place.

Accounting for over 75% of the dollar value of all shares traded in Canada, the TSX is important to all Canadians, including those who have a direct stake in it. The TSX facilitates the formation and allocation of capital, stimulates the private sector's ability to create wealth and jobs, and provides a gateway to Canada for global investors.

From Wikipedia, the free encyclopedia

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## Toronto Stock Exchange

The [Art Deco](#) facade of the former Toronto Stock Exchange building, now incorporated into the [Toronto-Dominion Centre](#).

The Toronto Stock Exchange likely descended from the *Association of Brokers*, a group formed by Toronto businessmen on [July 26, 1852](#). No official records of the group's transactions have survived. On [October 25, 1861](#), twenty-four men gathered at the [Masonic Hall](#) to officially create the Toronto Stock Exchange. The exchange was formally incorporated by an act of the [Legislative Assembly of Ontario](#) in [1878](#).

The TSX grew continuously in size and in shares traded, save for a three month period in [1914](#) when the exchange was shut down for fear of financial panic due to [World War I](#). In [1934](#), the Toronto Stock Exchange merged with its key competitor the [Standard Stock and Mining Exchange](#). The merged markets chose to keep the name Toronto Stock Exchange. In [1977](#), the TSX introduced [CATS](#) (Computer Assisted Trading System), an automated trading system that started to be used for the quotation of less liquid equities.

[Toronto](#) Stock Exchange's home.

On [April 23rd, 1997](#), the TSX's [trading floor](#) closed, making it the second-largest stock exchange in North America to choose a floorless, electronic (or virtual trading) environment. In [1999](#), the Toronto Stock Exchange announced the appointment of [Barbara G. Stymiest](#) to the position of President & Chief Executive Officer. She became the first female president of a North American stock exchange.

Through a realignment plan, Toronto Stock Exchange became Canada's sole exchange for the trading of senior [equities](#). The [Bourse de Montréal](#)/Montreal Exchange assumed responsibility for the trading of derivatives and the [Vancouver Stock Exchange](#) and [Alberta Stock Exchange](#) merged to form the [Canadian Venture Exchange](#) (CDNX) handling trading in junior equities. The Canadian Dealing Network, [Winnipeg Stock Exchange](#), and equities portion of the Montreal Exchange later merged with CDNX.

Former [logo](#).

In [2000](#), the Toronto Stock Exchange became a for-profit company. In [2001](#), the Toronto Stock Exchange acquired the Canadian Venture Exchange, which was renamed the [TSX Venture Exchange](#) in 2002. On [May 11, 2007](#), the main index of the Toronto Stock Exchange traded above the 14,000 point level for the first time ever.

### **[\[edit\]](#) Companies traded on the TSX**

- [List of companies listed on the Toronto Stock Exchange](#)
- [S&P/TSX 60](#)
- [S&P/TSX Composite Index](#) (This replaced the TSE 300 on [May 1, 2002](#))
- [List of Mutual Funds Listed on the TSX](#)

[TSX group](#)

## **Lines of Business**

### **Toronto Stock Exchange... An exchange of opportunity**

Toronto Stock Exchange is the right choice for issuers with solid track records of business management. Known for our high standards of transparency and fairness, and our innovative approaches to trading, TSX offers our approximately 1,500 senior issuers a dynamic market to raise capital. TSX issuers raised \$46 billion in 2005, the third highest value of financings among members of the World Federation of Exchanges.

TSX is the global leader for listing mining and oil and gas companies operating around the world. But our issuers also represent a broad range of industries from across Canada, the United States and beyond. Issuers list a number of different types of securities on TSX, including conventional securities and innovative equity-related products such as exchange-traded funds, income trusts and investment funds.

TSX provides opportunities to access public equity capital efficiently, liquidity for existing investors and the prestige and market exposure associated with Canada's senior exchange. A listing on TSX is world-class and straightforward for those looking to connect with institutional and retail investors.

### **TSX Venture Exchange... Fueling the growth of junior companies**

TSX Venture Exchange is a public venture capital marketplace for emerging companies. We provide a fair marketplace where growth companies can raise capital to develop and market their products and services. For investors, TSX Venture provides opportunities to seek ground-floor investments in growth companies that may be the next market stars. While TSX Venture continues to demonstrate its strength in attracting resource companies, TSX Venture's approximately 2,200 issuers represent a diverse mix of industry sectors, including industrial, life sciences, technology and financial services.

With high-quality standards that are specially designed for junior issuers, TSX Venture Exchange accommodates emerging companies with different needs and financial pressures than larger, established businesses. This is a long-standing strength. We have a century of experience in providing the capital-raising infrastructure tailored to the small and medium-sized businesses that drive economic growth.

Many ambitious private companies look to accelerate their growth by going public on TSX Venture Exchange. This may mean using the traditional initial public offering (IPO) route, or using a vehicle unique in Canada to TSX Venture known as the Capital Pool Company (CPC) program. It may also mean undertaking a reverse takeover of a company trading on TSX Venture or NEX, a board that TSX Venture Exchange maintains for small public companies looking to refinance and reactivate. Whichever of these three ways a company chooses to go public, our issuers can take advantage of a streamlined graduation path to Toronto Stock Exchange, providing even greater growth opportunities for companies and their investors.

### **Toronto Stock Exchange and TSX Venture Exchange at a Glance**

Statistics are as of December 31, 2005, in Canadian dollars. TSX Venture and NEX market statistics are combined.

### **Financing Growth Companies on Toronto Stock Exchange and TSX Venture Exchange**

## **TSX Markets... Innovative thinking, world-class trading products**

TSX Markets facilitates trading on both Toronto Stock Exchange and TSX Venture Exchange - trading over 4,200 issues and averaging over 340 million securities traded per day. At the core is a computer-based central limit order book, with price-time priority, transparency and broad access.

TSX Markets is at the forefront of technology innovation, setting the stage for faster and more flexible trading. We're regularly investing in new capacity and constantly improving to provide a wide range of advanced trading capability, fully integrated with our all-electronic, transparent marketplaces.

TSX Markets provides a full range of trading functionality on TSX. This includes Iceberg orders, after-hours matching, anonymous trading, specialty crosses and a Market On Close facility. In 2006, we plan to introduce a Financial Information Exchange (FIX) gateway, allowing even easier access for U.S.-based investors.

Our markets are based on a dependable, fully electronic model with a clear, predictable rule set. The result? Fast fills and confidence that your order will be treated fairly in the market.

## **Natural Gas Exchange... Connecting energy buyers and sellers**

With NGX, North American energy traders have access to one of the most liquid, secure and efficient marketplaces for trading and clearing natural gas and electricity contracts.

Over 450 traders and risk managers, located in major cities around North America, access the NGX trading system daily for price discovery, trading and access to real-time reporting. In 2005, NGX averaged over 736,000 terajoules per month in spot and forward trading, which exceeded CDN \$70 billion in notional value for the year.

NGX provides electronic trading and price discovery, central counterparty clearing of physical and financial exchange-traded and over-the-counter transactions, counterparty risk mitigation, real-time price index generation and market price information.

At the core of these services is a fair and efficient market structure and a reliable trading system: more than 847,000 energy contracts have been consummated since NGX was created in 1994.

NGX continues to expand into new physical and financial products for market participants. From our base in Calgary, Alberta, NGX is ideally positioned to leverage the broad reach of Canadian natural gas through expansion in the U.S.

### **TSX Datalinx... The source for Canadian market data**

Efficient markets thrive on comprehensive data. TSX Datalinx offers real-time, historical, and index data across a number of asset classes as well as corporate information, news and foreign exchange data to help investors around the world make investment decisions on the Canadian capital markets.

Data is distributed globally by TSX Datalinx over LinxPointOne with over 118,000 subscriptions and via more than 80 financial information service vendors. Many channels provide access to the full depth Market Book display, showing bids, offers, liquidity offered and broker IDs for each price increment. Other TSX Datalinx products include Canadian institutional fixed income data from CanDeal.ca Inc., real-time S&P/TSX index information and disclosure content from CNX Marketlink.

As automated trading volumes and applications continue to grow, more and more customers are coming directly to TSX Datalinx for their Canadian market data.

We continue to enhance our core products and add content to our feed from other markets across a range of asset classes. In 2005, we launched TSX/CP Equities News - a news service in conjunction with the Canadian Press that provides non-biased news on the Canadian capital markets and greater visibility for issuers listed on TSX Group exchanges.

### **TSX Technologies... Powering trading technology**

TSX Technologies is the technology team that powers TSX Group. They ensure trading system availability. They also provide the technology infrastructure to efficiently run the business and to maintain fair and orderly markets.

We have made significant investments to increase capacity and performance on the TSX Group equity exchanges. All of this is backed up by our two fully redundant data and operations centers.

TSX Technologies also provides managed services, application development, architectural services and customized solutions for organizations across industry sectors. This model means that our technology customers deal with a single, accountable service provider, staffed by a team of professionals with extensive expertise in the capital markets.

In providing this world-class service, we draw on a tradition of innovation. We were the first major North American exchange to go fully electronic and to offer decimalized trading. We stay on top of industry trends to ensure that we deliver reliable, fast and flexible trading.

### **Related Links:**

[Board of Directors](#)

[Senior Management](#)

[TSX Group History](#)

[Download the TSX Group Corporate Profile in PDF format](#)

# NEW YORK STOCK EXCHANGE

## NEW TYPES OF ORDERS IN HYBRID MARKET

There are different types of orders  
to buy or sell a stock

### Intermarket Sweep Order (ISO)

A limit order designated for automatic execution at the NYSE even when an away Market center is publishing a better quotation. When sending a ISO, the sender fulfills Reg NMS order protection obligations and NYSE Rules by concurrently sending orders to Market Centers with better prices. These orders will not be subject to auto-routing and trades will be marked with a trade indicator of "F".

### Immediate or Cancel Order (IOC)

A market or limit order that trades immediately and automatically cancels any unfilled portion. IOC orders will be eligible for auto execution and residual sweeping of the Book in the Hybrid Market<sup>SM</sup>.

### NYSE Auction Limit Order<sup>SM</sup>

A marketable limit order that provides an opportunity for price improvement. Auction Limit Orders are exposed to the auction market but retain the possibility of automatic execution if: a specialist is unable to obtain price improvement for the order within a preset time period of up to 15 seconds; or a quoting or trading action triggers automatic execution before the 15 second period expires. Auction Limit Orders will be quoted at a price to attract liquidity (a penny better than the NYSE best bid or offer at the time it arrives at the Display Book) while retaining their limit price, which is the best price at which a customer is willing to buy or sell.

### NYSE Auction Market Order<sup>SM</sup>

A Market Order that provides an opportunity for price improvement. Auction Market Orders are exposed in the auction market but retain the possibility of automatic execution if: a specialist is unable to obtain price improvement for the order within 15 seconds; or a quoting or trading action triggers automatic execution before the 15 second period expires. Auction Market Orders will be quoted at a price to attract liquidity (a penny better than the best bid or offer at the time it arrives at the Display book). All Market Orders that have not been designated for automatic execution will be treated in the Hybrid Market as Auction Market Orders.

### Sweep

Incoming marketable limit orders or market orders designated NX will automatically execute to the extent possible at the best bid or offer and sweep up (or down) to a price determined by the limit price of the order; an intervening LRP; or the price where there is sufficient, cumulative quantity to fill the order.

# **BOMBAY STOCK EXCHANGE**

## **OMX signs Bombay Stock Exchange**

Nordic and Baltic market operator OMX has inked a deal to supply a trading and clearing platform to the Bombay Stock Exchange (BSE). The OMX platform will support the BSE's derivatives and cash securities operations. Under the deal sub-contractors Headstrong and HCL Technologies will deliver some of the components and services required for the project.

The first phase of the system roll-out is targeted for launch by mid 2008.

OMX says the deployment is part of BSE's ongoing efforts to transform its IT infrastructure to match the growing needs of the marketplace. The new trading platform is part of BSE's strategy to increase volume capacity in the cash market. OMX says its clearing system will allow BSE to clear a wider range of products, as well as offer a new clearing services to its members.

In addition to the technology implementation, OMX says the agreement with BSE includes a business partnership with the joint objective to drive and grow business at the Indian exchange.

The deal is the latest in a number of contracts that OMX has won with exchanges around the world. Earlier this week the Swedish group reported a new deal with Agora-X, a new US marketplace for over-the-counter (OTC) commodity contracts. Towards the end of last year OMX also won deals with Tokyo Commodity Exchange, Singapore Commodity Exchange, Singapore Exchange, Bolsa de Valores de Colombia and DEX, a new derivatives exchange that is being launched in Canada.

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