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Srovnání Šanghajské burzy cenných papírů s Hongkongskou burzou cenných papírů
Comparison of the Shanghai Stock Exchange and the Hong Kong Stock Exchange

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1. Introduction
 2. Characteristics of the Main Principles of the Stock Exchange Markets
 3. Description of the Functioning of the Shanghai Stock Exchange
 4. Description of the Functioning of the Hong Kong Stock Exchange
 5. Comparison of the Selected Stock Exchanges
 6. Conclusion
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List of Abbreviations
Declaration of Utilization of Results from the Bachelor Thesis
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1 Introduction

During last decade, global economy developed rapidly, especially China. Nearly every year, China has a stable GDP growth remained at eight to nine percentage points, which shows the steady increase of China's overall economic situation. So Chinese are richer than before. Many foreigners are optimistic about the huge market in China, which may has high profitability. More and more money flows into China financial market, both from foreign investors and from local residents. Stock markets are the core part of financial markets, and stock exchanges are the most important components of stock markets. Individual investors and institutional investors both invest their money in the stock exchanges.

In China, the Shanghai Stock Exchange and the Hong Kong Stock Exchange are the most important exchanges, and they are functioning well. Both Shanghai and Hong Kong want to be the first-level international financial center in the world with the help of government. They have their own characteristics, similarities and differences, advantages and disadvantages. The objective of the thesis is the comparison of the stock exchanges in Shanghai and Hong Kong, including a conclusion how these two exchanges should work in the future.

In the first part of thesis, there is the description of characteristics of the main principles of the stock exchange markets, including histories, definition and functions of the stock exchange, and an overview of worldwide stock exchanges. In the second part and third part of thesis, there are descriptions of the functioning of the Shanghai Exchange and the Hong Kong Stock Exchange. At last, characteristics of the two stock exchanges are compared, such as their histories, regulations, products, services, and there is a prediction about their future operations.

2 Characteristics of the Main Principles of the Stock Exchange Markets

From 1609, the first stock exchange was established in Amsterdam and few people knew about stock, to now, there are stock exchanges everywhere and even a child knows about stock. Stock markets become the core part of financial markets, and stock exchanges are the most important components of stock markets. The world has been changed by the emergence of the stock exchange.

2.1 Definition of Stock Exchanges

A stock exchange is a marketplace for centralized securities transactions, which is approved the establishment by government competent authority of securities, according to the relevant laws of the state. The existence of stock exchanges *provides a platform* for stock brokers and traders to exchange stocks, bonds, derivatives and other financial instruments, for the issue of redemption of securities and other financial tools and capital events like the payment of income and dividends.

A stock exchange is an *organized market*, such markets were originally open to all, but at the moment, only members of the stock exchange can buy and sell directly and each stock exchange has its own requirements or standards for membership. Usually, the members are securities companies, who can buy and sell for themselves or for others. As individuals, they can't have the membership, so they can delegate securities companies to purchase or sell the stocks. Of course, the securities companies will charge commissions for their services.

A security may be bought or sold *only if it is listed* on a stock exchange, and it may not be listed unless it meets the certain requirements set by the exchange's board of governors. The initial offering of stocks and bonds to investors is by definition done in

the primary market and subsequent trading is done in the secondary market. Supply and demand in stock markets are driven by various factors that, as in all free markets, affect the price of stocks. A primary market is a market for creating or originating new financial instruments, a secondary market is a market for trading existing instruments (Chisholm, 2002).

What's more, it can be a physical place where traders meet to conduct business, at least for record keeping, or an electronic platform, because trade is little linked to such a physical place. Electronic networks make modern markets mature, provide them great speed for development and reduce the cost of transactions.

The emergence of the stock exchange gave companies, governments and other groups a platform to sell securities to the investing public, created a permanent market and became so as to achieve the long money capital investment institutions. It ensures fair and orderly trading, as well as efficient dissemination of price information for any securities trading on that exchange.

2.2 Function of Stock Exchanges

Nowadays, stock exchanges become one of the indispensable parts of a developed economy. And stock exchanges have multiple functions. Usually, this may include the following eight main points.¹

1) It provides securities trading place.

Due to the existence of this market, both buyers and sellers of securities have a centralized place to trade, they can transfer the securities they held into cash anytime, to ensure that the securities in circulation continuously.

¹ Source: <http://www.baidu.com>.

2) The share prices are formed and notified there.

Because the buying and selling of securities are centralized and carried out in public, the accomplishments of securities trading in the stock exchange form the share prices of various securities. By using the bilateral bid method, the share prices are approximately fair and reasonable in a theoretical level. The share prices should be notified to the public, not only for investors. At the stock exchange, share prices rise and fall depending, largely, on market forces. Share prices tend to rise or remain stable when companies and the economy in general show signs of stability and growth. An economic recession, depression, or financial crisis could eventually lead to a stock market crash. Therefore the movement of share prices can be an important indicator of the general trend in the economy. Usually, we regard that as the barometer of the economy.

3) Various types of social capital are centralized to participate in investment.

With a growing number of stocks get listed in the stock exchange, the increasing of the number of transactions, extremely wide range of funds can be attracted to invest in the stock exchange. In this way, stock exchanges provide companies with the facility to raise capital for expansion through selling shares to the investing public.

4) The reasonable flow of investment is guided there.

Stock exchanges provide free mobility of capital, and through the daily information announcement of the stock market and listed companies, reflect the profitability and development of the issuing companies, then guide the social capital to flow to the most needed and most favorable direction.

5) It sets the trading rules.

There are rules in order to set blueprints, and fair trading rules in order to achieve a fair deal. Trading rules include the listing of delisting rules, offer bidding rules, information disclosure rules as well as delivery and settlement rules. The main difference between different exchanges key lies in the differences in trading rules, and

the same exchange also may use a variety of trading rules, and thus forming market segments. For example, Nasdaq segments the market into global select market, global market and capital market, according to the different listing requirements.

6) It maintains the trading order.

Any trading rules are not perfect, and trading rules may not be able to be effectively implemented, therefore, one core function of the stock exchange is that, the supervision of various violation behaviors of the principle of fairness and trading rules, so as to ensure fair and orderly trading.

7) It provides trading information.

Securities transactions rely on the information, including information of listed companies and securities transactions. Stock exchanges have responsibility to supervise and censor the information provided by listed companies, have obligation to notify the real time trading situation.

8) It improves the transaction quality.

As opposed to other businesses that require huge capital outlay, investing in shares is open to both the large and small stock investors, because a person buys the number of shares they can afford. Therefore, the stock exchange provides the opportunity for small investors to own shares of the same companies as large investors. Both amateur and professional stock investors, they can get the same information from the stock exchange, avoid high transaction cost and slow transaction speed resulting from asymmetric information, breach of contract and other factors. Increasing the transaction opportunity, accelerating the transaction progress, decreasing the transaction cost, all in all, improving the transaction quality.

2.3 History of Stock Exchanges²

Financial institutions allow fund to flow efficiently between surplus and deficit units (*Madura, 2011*). When people talk about stocks, they are usually talking about stocks of some companies whether they are profitable or unprofitable, good or bad. These companies *raise capital* for investment through stock exchanges, while offering investors the opportunity to share in company profits. But, all these companies must get listed on a stock exchange.

And, people must be surprised to learn that the first stock exchange thrived for decades without a single stock actually being traded. 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. But, of course, it wasn't always in that way. Growing out of nothing, there were *many steps* along the road to our current system of stock exchange.

The earliest time of the history of stock exchanges can be traced to *12th century France*, some people were concerned with managing the debts of agricultural communities on behalf of the banks and these men also traded in debts. These men were the first brokers.

In the 1300s, the *Venetians* who worked as moneylenders looking to unload a high-risk, high-interest loan might exchange it for a different loan with others. They also bought government debt issues and they were the first to start trading the securities from other governments. They would carry slates with information the various issues for sale and meet with clients, much like a broker does today.

In 1351, the *Venetian Government* outlawed spreading rumors about lowering the price of government funds. Because of this rumor people in Pisa, Verona, Genoa and

² Source: <http://www.investopedia.com>.

Florence also started trading in government securities which was possible because there were independent city states ruled by a council of powerful citizens during the 14th century.

Belgium boasted a stock exchange as far back as 1531, in *Antwerp*. Brokers and moneylenders would meet there to deal in business, government and even individual debt issues. It is odd to think of a stock exchange that dealt exclusively in promissory notes and bonds, but in the 1500s there were no real stocks. There were many flavors of business-financier partnerships that produced income like stocks do, but there was no official share that changed hands.

In the 1600s, the Dutch, British, and French governments all gave charters to companies with East India in their names. When the East India companies formed, combined with royal charters forbidding competition, they made great profit. Because the shares in the various East India companies were issued on paper, which were the first company shares ever issued in 1602, investors could sell the papers to other investors. Unfortunately, there was no stock exchange in existence, so the investor would have to track down a broker to carry out a trade. In 1609, the *Amsterdam Stock Exchange (ASE)* was established in Amsterdam, Dutch, which became the first official stock exchange in the world.³

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, but most of the world's exchanges have now become *fully electronic*. The world has been gradually changed according to stock

³ more history, see annex 1.

exchanges, from its birth to prosperity, from Europe to globe.

2.4 Stock Exchanges in all over the World

Stock transactions originated in Europe, rose in America, spread to Asia. There are some famous stock exchanges with high market capitalizations, which represent the first-level stock exchanges in America, Europe and Asia.

2.4.1 NYSE-New York Stock Exchange⁴

NYSE is by far the *world's largest stock exchange* by market capitalization of its listed companies. The New York Stock Exchange traces its origins to 1792, when twenty-four brokers and merchants signed the “Buttonwood Agreement,” agreeing to trade securities on a commission basis and laying the basis for securities trading in New York City. In the beginning there were five securities traded in New York City with the first listed company on the NYSE being the Bank of New York. In 1817, New York brokers formed the New York Stock & Exchange Board (NYS&EB). In 1863, name was shortened to New York Stock Exchange (NYSE).

NYSE Euronext, the holding company created by the combination of NYSE Group, Inc. and Euronext N.V., was launched on April 4, 2007. NYSE Euronext (NYSE/New York and Euronext/Paris: NYX) operates the world’s largest and most liquid exchange group and offers the most diverse array of financial products and services. NYSE Euronext, which brings together six cash equities exchanges in five countries and six derivatives exchanges, is a world leader for listings, trading in cash equities, equity and interest rate derivatives, bonds and the distribution of market data.

The *historic combination* of NYSE Group and Euronext in 2007 marked a milestone

⁴ Source: <http://www.nyx.com/en>.

for global financial markets. It brought together major marketplaces across Europe and the United States whose histories stretch back more than four centuries. The combination was by far the largest of its kind and the first to create a truly global marketplace group.

2.4.2 NASDAQ⁵

NASDAQ began forty years ago at the National Association of Securities Dealers, or NASD. The NASD wanted to create a way for investors to buy and sell stocks on a computerized, transparent, and fast system. This would *eliminate* the burden and inefficiency of in-person stock transactions, which had been the prevalent model for nearly a century. The NASD believed that investors could make more money by closing the price gaps between buyers and sellers, and technology had evolved enough at that point to make it happen.

On February 8, 1971, the National Association of Securities Dealers Automated Quotation (NASDAQ) went live with median quotes for 2,500 over-the-counter securities. The revolutionary, disruptive model that the NASD developed in 1971 is now the standard for markets worldwide.

In 2006, NASDAQ completed its separation from the NASD and began to operate as a national securities exchange. In 2007, NASDAQ combined with the powerful Scandinavian exchange group OMX and officially became The *NASDAQ OMX* Group, further demonstrated its commitment to technology and innovation across global markets.

⁵ Source: <http://www.nasdaqomx.com/>.

2.4.3 LSE-London Stock Exchange⁶

The modern capital markets have become truly global in their scale and their scope. Although New York is the biggest financial center in the world, many of developments that led to today's international marketplace for money actually originated in London. (*Andrew M. Chisholm, 2002*)

The London Stock Exchange is *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.

In 1698, John Castaing began 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 organized trading in marketable securities in London. Stock dealers were expelled from the Royal Exchange for rowdiness and started to operate in the streets and coffee houses nearby, in particular in *Jonathan's Coffee House* in Change Alley.

In 1773, the brokers erected 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 changed the name to "The Stock Exchange". In 1866, deregulation of the market, known as "*Big Bang*", trading moved from being conducted face-to-face on a market floor to being performed via computer and telephone from separate dealing rooms, the exchange became a private limited company under the Companies Act 1985.

⁶ Source: <http://www.londonstockexchange.com/home/homepage.htm> .

In October 2007 the exchange merged with Borsa Italiana, creating Europe's leading diversified exchange business, *London Stock Exchange Group*. The exchange is the most international of all the world's stock exchanges, with around 3,000 companies from over 70 countries admitted to trading on its markets. It's not only the global leader in the field of foreign exchange transactions and European bonds, but also accepted more than two-thirds of the international stock underwriting business.

2.4.4 TSE-Tokyo Stock Exchange⁷

Stock exchanges started very late in Asia, but usually they had a rapid development. Korea Stock Exchange, Tokyo Stock Exchange, Shanghai Stock Exchange and Hong Kong Stock Exchange are some of them. Asian Stock Exchanges are close connected to European Stock Exchanges and American Stock Exchanges. Asian Stock Exchanges used to follow the development pace of Europe, and now they are endeavoring to create stock exchanges with their *own styles*.

Even though the Tokyo Stock Exchange just has a short history of development, it is one of the world's largest stock exchanges now. The Tokyo Stock Exchange was established on May 15, 1878, as the *Tokyo Kabushiki Torihikijo*. Trading began on June 1, 1878. 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). The Tokyo Stock Exchange reopened under its current Japanese name on May 16, 1949, pursuant to the new Securities Exchange Act.

The TSE's *runup* from 1983 to 1990 was unprecedented, in 1990 it accounted for over 60% of the world's stock market capitalization (by far the world's largest) before falling precipitously in value and rankings today.

⁷ Source: <http://www.tse.or.jp/english/>.

The trading floor of the TSE was closed on April 30, 1999, and the exchange switched to electronic trading for all transactions. The stock trading floor was closed on April 30, 1999 in an effort to accelerate the speed and reduce the cost of transactions by member securities companies, and seek further efficiency in the Tokyo market. At the site of the stock trading floor, "TSE arrows" was opened on May 9, 2000 as a new symbol of the Tokyo market. 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.

3 Description of the Functioning of the Shanghai Stock Exchange⁸

3.1 An Overview of SSE⁹

The Shanghai Stock Exchange (SSE) was founded in Shanghai, China on Nov. 26th, 1990 and in operation on Dec.19th the same year. SSE has become the most preeminent stock market in Mainland China in terms of number of listed companies, number of shares listed, total market value, tradable market value, securities turnover in value, stock turnover in value and the T-bond turnover in value. But its origin dated back to 19th century when the International Settlement (*foreign concession areas*) in Shanghai was formed.

As the result of the *Treaty of Nanking* of 1842 (which ended the First Opium War) and subsequent agreements between the Chinese and foreign governments, foreign concession areas were 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 shares list appeared in June 1866 and by then Shanghai's International Settlement (foreign concession areas) 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 Sharebrokers' Association" headquartered in Shanghai as China's first stock exchange, which was the *predecessor* of SSE. In 1904 the Association applied for registration in Hong Kong under the provision of the Companies ordinance and was

⁸ Source: <http://www.sse.com.cn/sseportal/en/home/home.shtml>.

⁹ Source: <http://www.baidu.com/>.<http://en.wikipedia.org/wiki/Wiki>.

renamed as the "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 which 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. Recovery and the establishment of the Stock Exchange were in June 1949 and February 1950, in Tianjin and Beijing. The two stock exchanges established in the specific historical conditions, the goals established by its specific historical content, differ with the stock exchange of the old China. Soon, the government withdrew the two stock exchanges. The stocks market dropped out the stage again, and this time, nobody knew when it would come back.

After the *Cultural Revolution* ended and Deng Xiaoping rose to power, the government decided the route of developing the economy, and 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 re-established and operations began a few weeks later on 19 December. After half an hour on the morning of Dec.19th, when the morning session closed, there clinched a deal 49 times, face value reached 5.87 million. The stock exchange really functioned well was in 1992, after the leader Deng Xiaoping made his *southern tour*, on May.21th, all stock market prices was let go and would be led by market. It resulted in stock prices soared from 21th to 23th, insanely jumped 570% in 3 days, and this day was regarded as the real birth of Chinese stock market.

Since then, SSE really made a huge development, even the Asian financial crisis in 1998 couldn't stop the pace of SSE. A four-year's 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 2006, The SSE resumed full operation as the yearlong ban on IPOs was lifted in May. The world's second largest (US\$21.9 billion) IPO by the Industrial and Commercial Bank of China (ICBC) was launched in both Shanghai and Hong Kong stock markets. From 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. After reaching an all-time high of 6,124.044 points on October 16, 2007, the benchmark Shanghai Composite Index ended 2008 down a record 65% mainly due to the impact of the global economic crisis which started in mid-2008. Even though there was only one market crash in 2008 in SSE, it seemed like it is still in a bad situation. At the year of 2010, Agricultural Bank of China completed the world's largest IPO to date worth US\$22.1 billion.

At the end of 2010, SSE boasted 1,500 listed securities and 894 listed companies, with a combined market capitalization of RMB 17,900.724 billion and a total of 98.51 million trading accounts. In 2010, the total trading amount of Shanghai Stock

Exchange is the third in the world, only after the New York stock exchange and NASDAQ. A large number of companies from key industries, infrastructure and high-tech sectors have not only raised capital, but also improved their operation mechanism through listing on Shanghai stock market.

3.2 Vision of Future Development

After years of development, SSE's blue-chip market size and the real economy has achieved positive results. The potential for blue-chip, emerging blue-chip, the classic blue-chip level for the growth of the main line of SSE *multi-level blue chip* market structure more clearly.

Entering the new century, SSE is faced with great opportunities as well as challenges to further boost the market construction and regulation. Combining the cutting-edge hardware facilities, favorable policy conditions in Pudong, exemplary role of Shanghai economy, SSE is fully committed to the goal of State-owned industrial enterprises reform and developing Shanghai into an international financial center with great confidence.

SSE will further optimize the structure and layout of the *blue-chip* market for blue-chip market and constantly add fresh blood to the subject and the stage for the value of investments, rational investment.

Combined with China's current economic "*structural adjustment, change method, steady growth*" in the background, SSE will continue to strengthen the restructuring of the national economy, private enterprises and small and medium capitalization companies, which truly reflects the blue-chip market on the real economy supported.

SSE will continue in the future continue to adhere to market services strategy to

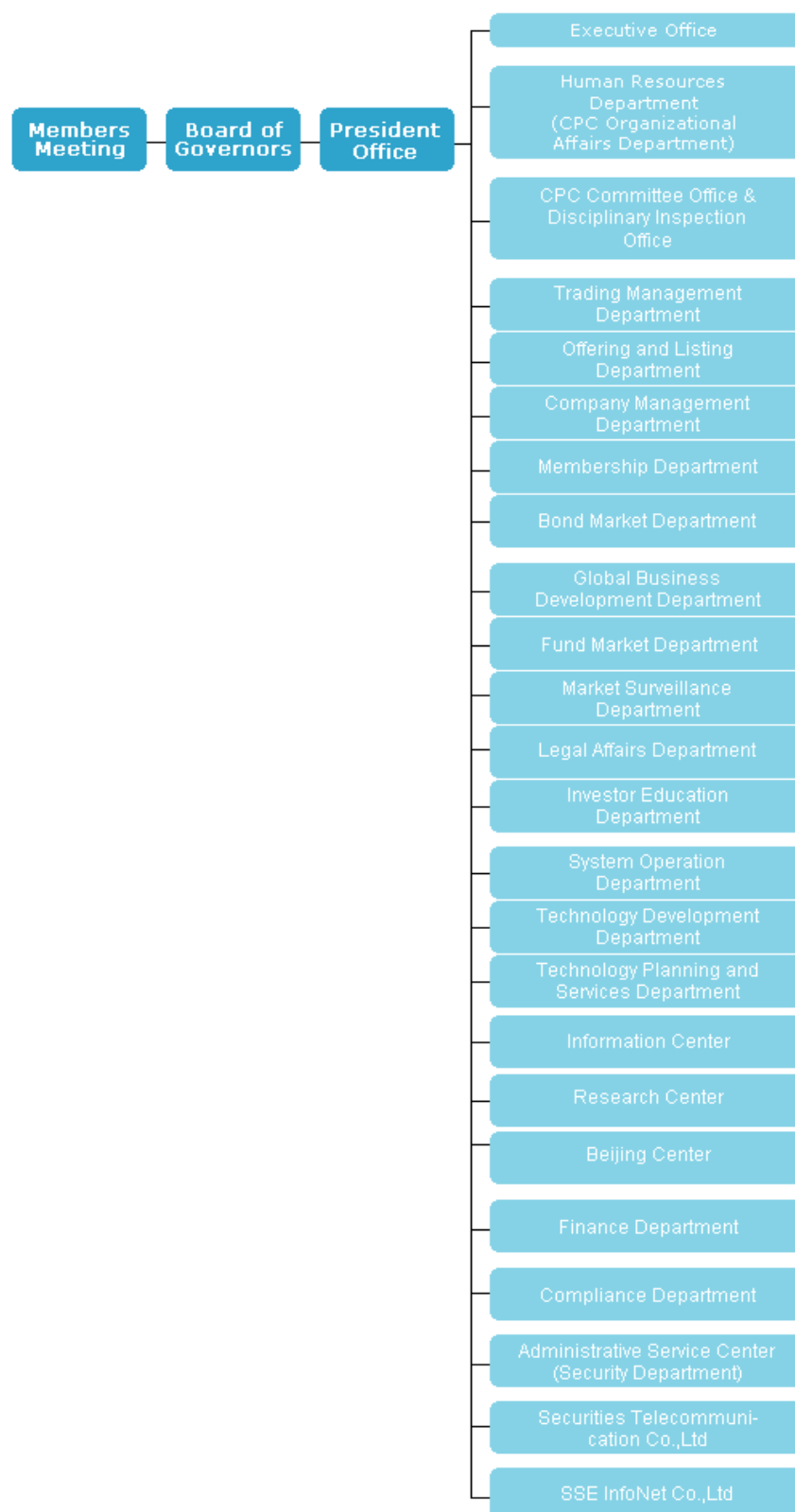
further strengthen the sense of service, innovative services, the release of Exchange activity, the needs of the real economy, the blue chip market for the construction of reality, and actively promote the construction and improvement of the multi-level capital market system. In conjunction with the CSRC, actively deepen various reforms in mergers and acquisitions, dividends, delisting, and down to promote SSE blue-chip market in promoting China's economic restructuring, the development of new industries and play a greater role in the service of economic and social situations.

3.3 SSE Organizational Structure

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 22 departments and 2 fully owned subsidiaries¹⁰, see Chart 3.1

¹⁰ About the functions of various departments, see annex 2.

Chart 3.1 organizational structure of SSE



Source: http://www.sse.com.cn/sseportal/en/c01/c01/c03/p1000/c15010103_p1000.shtml.

3.4 Products and Services

SSE is one of the only two stock exchanges in mainland China, and it's the big one. In SSE, it has four main products, which are shares, funds, bonds, share warrants.

Shares

A shares, ie, RMB ordinary shares, issued by China for domestic agencies, organizations or individuals (not including Taiwan, Hong Kong, Macao investors) shares of common stock subscribed and traded in RMB. Only Chinese citizens within China may trade the companies issuing "A shares" listed in Shanghai and Shenzhen stock exchanges.

B shares in China are foreign-invested shares issued domestically by Chinese companies. B shares are also known as RMB Special Shares. B shares are issued in the form of registered shares and carry a face value denominated in RMB. B shares, however, are subscribed and traded in foreign currencies (US Dollars) and are listed and traded inside China. Both Chinese citizens and foreigners are allowed to trade in the B Share market (*Jshop.jawin.com, 2008*).

Funds

Closed-end funds, closed mode of operation of the Fund, is a fixed share of the total approved funds in the fund contract period, fund shares can be legally established stock exchange transactions, the fund share-holders shall not apply to redemption funds.

Exchange Traded Funds (ETFs) are passively managed and open-ended funds. ETFs are designed to track the performance of their underlying benchmarks (eg an index, a commodity such as gold, etc) and offer investors an efficient way to obtain cost-effective exposure to a wide range of underlying market themes.

Bonds

The national bond is issued by the central government to raise financial capital, a government bond is issued by the central government to investors, and promise to pay interest during a certain period, and due credit and debt repayment of the principal certificate.

The local government bonds, refers to the consent of the State Council's approval, issued in 2009, provinces, autonomous regions, municipalities and the municipal government for the issuance and repayment of the principal, issued by the Ministry of Finance and agency debt service and pay the issue fee negotiable book-entry bonds.

Corporate bonds, is that the company issued in accordance with legal procedures, agreed to debt servicing securities in more than one year period.

Convertible bonds were issued in accordance with legal procedures, within a certain period in accordance with the agreed conditions can be converted to shares of the company bonds.

Repurchase bond transactions refers to the bond buyers and sellers in transactions at the same time agreed to at a future date at a price and then reverse the transaction behavior. The bonds the repurchase type only is the Treasury and by the People's Bank of China approved the issuance of financial bonds.

Share warrants

Share warrants, the third person other than the issuer or the underlying securities issue, agreed that the holders of a specified period or a specific maturity date, the right to buy or sell the underlying securities to the Issuer in accordance with the agreed price, or charged by cash settlement settle difference securities.

Services

SSE provides five main services, which are issuing and listing services, transaction services, information services, training services, investor services.

Innovative businesses

SSE has some innovative businesses, such as bulk trading, the electronic platform of fixed income securities, securities margin trading, asset-backed securities, fund expert of SSE, bilateral quotations, national bonds outright repo and ETF.

3.5 Listing Requirements

An issuer that applies to SSE for listing its IPO shares shall meet the main following conditions:

1. Its shares have been issued to the public with the approval of the China Securities Regulatory Commission (CSRC).

2. It must be a limited liability company of legal existence, and have a trading record of not less than three financial years with management continuity for at least the three preceding financial years and a continuity of ownership and control throughout the most recent audited financial year (except for being approved by the State Council).

3. In the last three financial years, it has the aggregate net profits of at least RMB 30 million and the aggregate revenues shall not be less than RMB 300 million.

4. At the end of the most recent audited financial year, its intangible assets account for 20% or less of the net assets and there is no existence of covering losses.

5. The amount of share capital before listed shall not be less than RMB 30 million, and after listed it shall not be less than 50 million, its shares issued to the public account for 25% or more of its total shares. If the total share capital after listed exceeds RMB 400 million, its shares issued to the public account for 10% or more.

6. It has not committed any serious illegal act and there has been no falsehood in its financial reports in the most recent 3 years.

7. It has a complete business system and the ability to directly market-oriented operating independently.

8. It shall establish and perfect the system according to relevant laws, and standardized operation.

9. It should have a clear direction for raising funds, in principle, should be used on the main business.

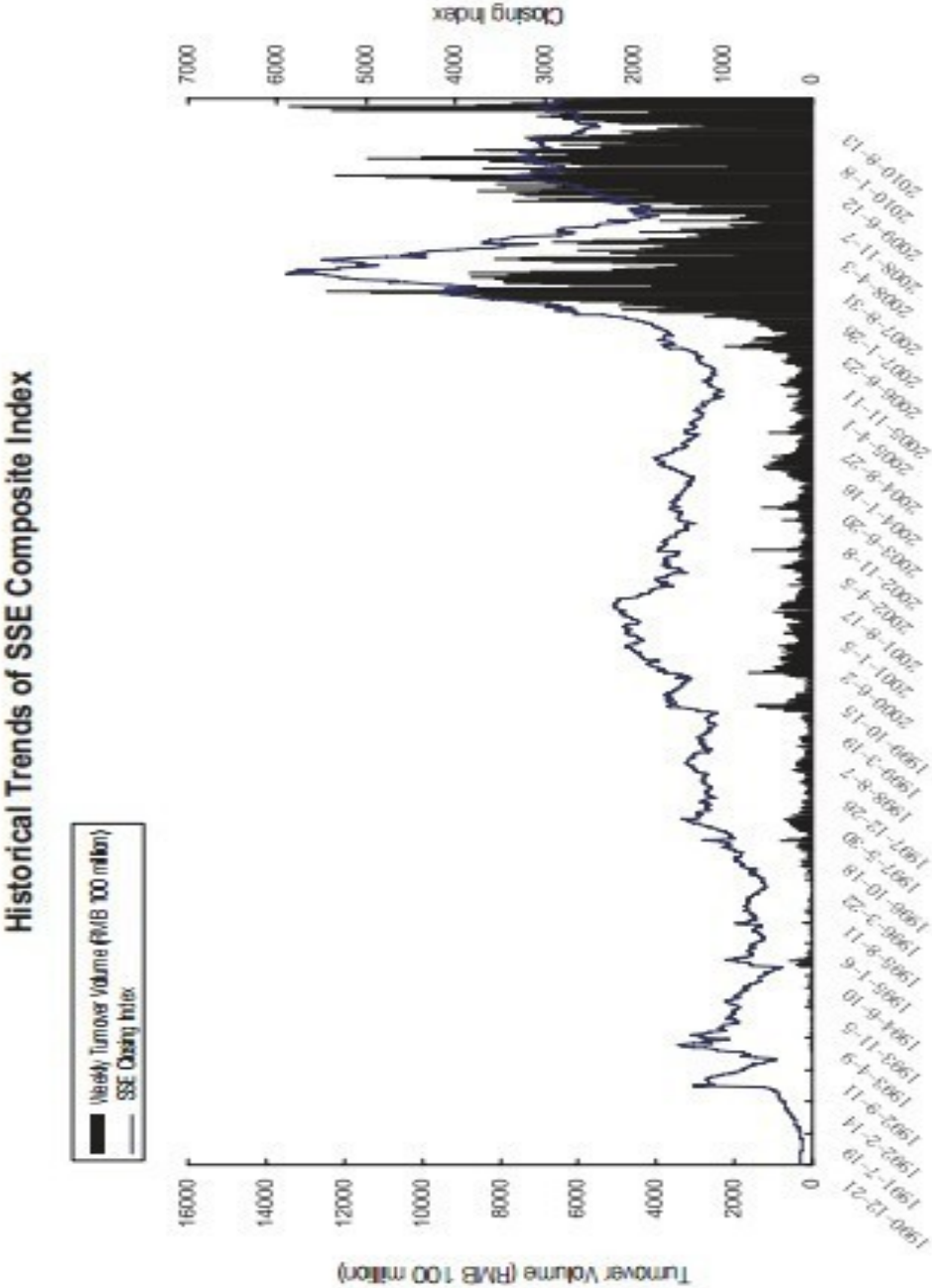
3.6 Indexes

SSE indices are the authoritative statistical indices widely followed and used at home and abroad to *measure the performance* of China's securities market. SSE Index Series consists of 75 indices, including 69 equity indices, 5 bond indices and 1 fund index, covering several series such as market-size, sector, style, strategy and thematic series and becoming a continuous improved index system.

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*.

SSE Composite Index takes December 19, 1990 as the base day and the total market capitalization of all the listed stocks on the same day as the base period, with a base of 100 points. It was published from July 15, 1991 and is the most widely used index in China's securities market. See Chart 3.2

Chart 3.2 Historical Trends of SSE Composite Index



Source: http://www.sse.com.cn/sseportal/en/pages/p1005/p1005_content/factbook_us2011.pdf

Calculation Formula

a) SSE Indices are all calculated using a Paasche weighted composite price index formula.

b) Composite Indices and Sector Indices are weighted by shares.

The formula is

$$\text{Current index} = \frac{\text{Current total market cap of constituents}}{\text{Base Period}} \times \text{Base Value}$$

$$\text{Total market capitalization} = \sum (\text{price} \times \text{shares issued})$$

c) B share Price unit

B share stocks are denominated in US dollars when B share index are calculated. For calculation of other indices, B share stock prices are converted to RMB at the applicable exchange rate (the middle price of US dollar on the last trading day of each week) at China Foreign Exchange Trading Center.

SSE Index Series measures the market trends in Shanghai securities market in general or from different dimensions and can reflect the performance and price movement of companies across a diverse range of industries. It offers investors different benchmarks for portfolio analysis. With the securities market set to play an increasingly important role in the national economy, SSE Indices will gradually become a barometer of the Chinese economy.

3.7 Listed Companies

Till the end of 2010, there are 894 companies listed on SSE. Here list the top ten companies who made up for 35.95% of the total market capitalization. From more to less, followed by China National Petroleum Corporation (CNPC) 10.15%, Industrial and Commercial Bank of China Limited (ICBC) 6.21%, Agricultural Bank of China (ABC) 4.40%, Bank of China Limited 3.53%, Sinopec Group 3.15%, China Life

Insurance 2.48%, China Shenhua 2.28%, Ping An Insurance 1.50%, China Merchants Bank 1.26%, Shanghai Pudong Development Bank 0.99%.

The statistics of listed companies, see Table 3.1

Table 3.1 Listed Companies in SSE

	Year								
	2002	2003	2004	2005	2006	2007	2008	2009	2010
No. of listed companies	715	780	837	834	842	860	864	870	894
No. of new listed companies	70	67	61	3	13	25	6	9	28
No. of listed securities	826	914	996	1,073	1,126	1,125	1,184	1,351	1,500
Total market capitalization (100 Million RMB yuan)	25,363.72	29,804.92	26,014.34	23,096.13	71,612.38	269,838.87	97,251.91	184,655.23	179,007.24
Share funds raised (100 Million RMB yuan)	614.30	557.41	456.90	299.77	1713.51	6701.33	2236.85	3343.15	5532.14
Total turnover value (100 Million RMB yuan)	48,527.72	82,911.56	76,927.32	49,775.61	91,912.32	380,025.56	271,842.02	441,874.67	398,395.73
Total turnover volume (100 Million shares)	1,781.10	2,692.73	3,607.74	3,986.59	10,283.93	24,325.38	16,311.60	33,679.64	25,964.43
Total number of trades (10 Thousand deals)	17,556.55	20,661.06	26,016.46	21,013.98	44,726.43	161,733.24	127,884.22	214,261.00	166,149.08

Source ¹¹: <http://www.sse.com.cn/sseportal/ps/zhs/home.html> .

¹¹Statistics are collected from <http://www.sse.com.cn> .

3.8 System of Trading

SSE market transactions, electronic auction, the trading of all exchange-traded securities are required to publicly declare bidding host computer by the host automatically brokered transactions in accordance with the principle of price priority and time priority. SSE next-generation trading system peak order processing capacity of 80000 T / sec, the system bilateral transactions capacity of less than 120 million, equivalent to the size of the single market daily turnover of 1.2 trillion yuan, and have parallel scalability.

The computerized trading system of the SSE is fully connected automatically with numerous brokerages and banking systems, as well as with the central clearing system of the China to perform the busiest transactions in the world daily.

3.9 Regulation

As self-discipline management of legal persons, SSE under the direct management of the China Securities Regulatory Commission, which is one of the enterprise units directly under the State Council and the authorized department governing the securities and futures markets of mainland China. (*Jshop.jawin.com, 2008*)

Since its inception, SSE continued to improve self-regulatory penalty procedures to safeguard the legitimate rights and interests of relevant parties. In recent years, SSE in the process of securities market regulation, according to the China Securities Regulatory Commission on the timely detection and timely report and in a timely manner to stop the requirements “*sooner self-regulation*” concept, and constantly increase the regulatory innovation efforts, innovative form of supervision, to enhance the self-management quality. During the real-time monitoring, when the exchange

finds out securities prices have unusual fluctuations or the securities transaction exception, SSE has the ownership of temporary suspension, written warning, restrictions related to securities accounts transactions and other measures.

SSE has always been to supervision according to law and" *regulatory compliance* "as the basic guidelines and principles of self-regulation. In recent years, this Securities Law, Company Law and other laws and regulations as the core, released by the China Securities Regulatory Commission administrative rules as a framework through continuous improvement of the Listing Rules, the members of management rules and trading rules, and basic self-regulatory rules, and timely supplemented in the form of a variety of guidelines, notifications, etc., forming a multi-level self-regulatory system of rules.

SSE bases its development on the principle of "*legislation, supervision, self-regulation and standardization*" to create a transparent, open, safe and efficient marketplace. The SSE endeavors to realize a variety of functions: providing marketplace and facilities for the securities trading; formulating business rules; accepting and arranging listings; organizing and monitoring securities trading; regulating members and listed companies; managing and disseminating market information.

4 Description of the Functioning of the Hong Kong Stock Exchange¹²

4.1 An Overview of HKEx

HKEx, or Hong Kong Exchanges and Clearing Limited, is the holding company of The Stock Exchange of Hong Kong Limited, Hong Kong Futures Exchange Limited and Hong Kong Securities Clearing Company Limited, which was listed in June 2000 in Hong Kong, China following the integration of Hong Kong's securities and derivatives markets. And now one of the world's largest exchange owners based on the market capitalization of its shares.

HKEx brings together the market organizations 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.

Securities Market

It reported the history of the stock exchange in Hong Kong would begin in the mid-19th century, and informal securities exchanges were known to have been in existence since 1861. 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

¹²Source: <http://www.hkex.com.hk/eng/index.htm> .

exchanges - the Far East Exchange in 1969; the Kam Ngan Stock Exchange in 1971; and the Kowloon Stock Exchange in 1972.

However, sometimes, more stock exchanges don't mean better market. The securities market went into a mess and it lasted more than 10 years. Pressure to strengthen market regulation and to unify the four exchanges led to the incorporation of SEHK, 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.

In 2000, it completed the merger with the Hong Kong Futures Exchange Limited.

Derivatives Market

Established in 1976, the Hong Kong Commodity Exchange (the predecessor of Hong Kong Futures Exchange Limited) is a derivatives leader in the Asia-Pacific region. The main products traded on the commodity exchange were cotton futures, sugar futures, soybean futures and gold futures. The Hong Kong Commodity Exchange was renamed the Hong Kong Futures Exchange (HKFE) on 7 May 1985.

HKFE launched on 6 May 1986 its flagship product, the HSI Futures, which is still its most popular futures product in HKEx's derivatives markets today. In 2000, it completed the merger with the Stock Exchange of Hong Kong Limited.

Securities Settlement

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 immobilization 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. The company also offers nominee service.

Now, HKEx uses CCASS/3, the latest generation of the Central Clearing and Settlement System, which was developed to meet the securities market's needs and accommodate market growth. The system supports multi-market settlement, extended hours of market operation, and alternative settlement cycles.

After the World War II, the securities market has developed for about 65 years. Through this period, HKEx only experienced twice market crash, in 1973 and in 1987. And it bore a little crash in 2008, but it recovered quickly and made a progress. As at 31 March 2012, 1,337 and 173 companies were listed on the Main Board and GEM respectively with a total market capitalization of \$19,775.3 billion. In addition, there were 4,094 DWs, 1,097 CBBCs, 9 REITs, 89 ETFs and 209 debt securities listed.

4.2 Vision of Future Development

As a *market-driven* organization, answerable to its shareholders, HKEx competes vigorously for opportunities in the region and around the world. Due to half of its market performance is benefited from the Mainland market, HKEx will develop strategies to connect with the mainland, so as to compatible system of the two markets. At the same time, it will increase publicity and attract more foreign companies to Hong Kong.

As a *commercial entity* with public duties, responsible for the operation of the central marketplace, HKEx must carefully consider the broader interests of the market. In addition, its initiatives should reinforce Hong Kong's standing as an international

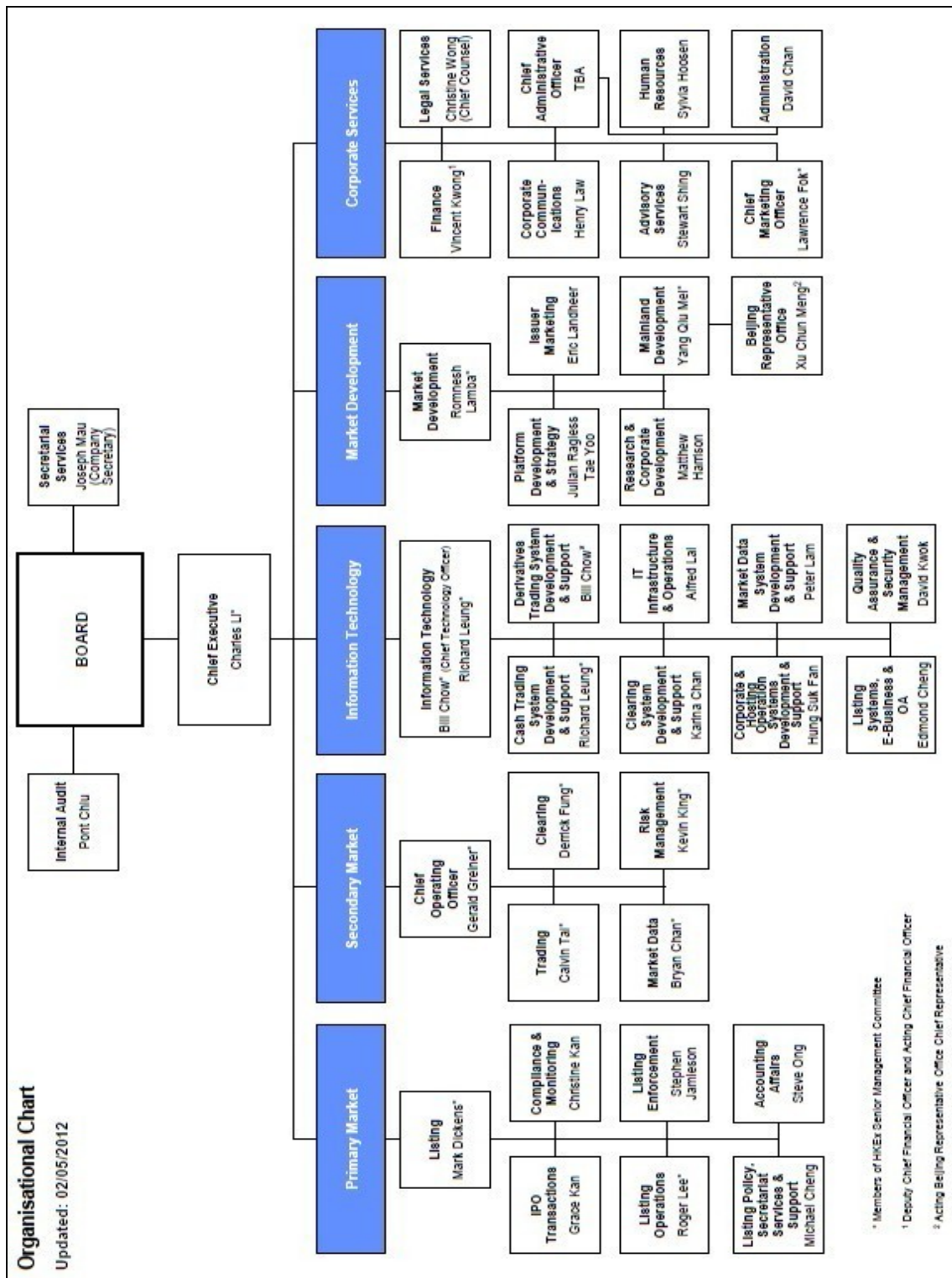
financial center and support the country's further development.

Hong Kong has a *well-functioning, efficient judicial* system, helps to contract the enforcement of arbitration and insurance claims. Hong Kong has a rich experience of international financial workforce. Faced with the continued instability in global political and economic situation, the investor confidence remained weak, the trend of global exchange mergers and acquisitions, HKEx will in accordance with the previously developed strategy, focusing on the implementation of the planned project. HKEx's mission is to create and operate active international public financial markets in Hong Kong.

4.3 HKEx Organizational Structure

HKEx's operations are organized 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. The organizational chart is below, see Chart 4.1

Chart 4.1 Organizational Chart of HKEx



Source: http://www.hkex.com.hk/eng/exchange/org/Documents/org_chart.pdf.

4.4 Products and Services

As HKEx is the sole operator of the Hong Kong stock market, a variety of securities and derivatives such as shares, Exchange Traded Funds, structured products, futures and options can be bought and sold through HKEx's markets. Comprehensive pre-trade and post-trade services, primarily at the wholesale level, are also available through HKEx. And in HKEx, there are two markets: Securities Market and Derivatives Market.

Securities Market

In the securities market, HKEx has six main products, which are Equity Securities (Shares), Hong Kong Depositary Receipts (HDRs), Stapled Securities, Unit Trusts / Mutual Funds, Structured Products, Debt Securities.

Equity Securities (Shares), comprise ordinary shares and preference shares. Most of the equity securities listed on the Stock Exchange are ordinary shares.

Depositary receipts (DRs) are securities issued by a depositary representing underlying shares of an issuer which have been placed with the depositary or its nominated custodian. The depositary is the agent of the issuer and acts as a bridge between the DR holders and the issuer. 'HDR' is the informal name for a depositary receipt program listed on HKEx securities market. At this stage, the HDR framework applies on the Main Board only and it is not applicable on the Growth Enterprise Market.

Stapled Securities generally refer to an arrangement under which different securities of the issuer are listed on the basis that they are legally bound together and cannot be transferred or traded separately. There will only be a single price quotation on the Exchange for Stapled Securities and no price quotation will be given

for individual components forming the Stapled Securities.

Structured Products

Derivative warrants fall under the category of derivative investment instruments or structured products, they can be linked to a single security or a basket of securities, stock indices, currencies, commodities or futures contracts (like crude oil futures). Derivative warrants are issued by a third party, generally an investment bank, independent of the issuer of the underlying assets. The issuer of derivative warrants may not be the issuer of the underlying assets but should hold or have a right to hold the underlying assets. In Hong Kong, usually warrants refer to derivative warrants. And almost all derivative warrants currently traded in Hong Kong are cash-settled. The issue and exercise of derivative warrants has no effect on the quantity of the underlying assets (such as ordinary shares). Derivative warrants provide the market with a wider range for instruments for hedging or investment purposes.

Callable Bull/Bear Contracts (CBBC) are structured products, as derivative warrants. They are leveraged investments that track the performance of the underlying assets without requiring investors to pay the full price required to own the actual assets. They are issued either as Bull or Bear contracts, allowing investors to take bullish or bearish positions on the underlying assets. BBC are issued by a third party, usually an investment bank, independent of HKEx and of the underlying assets.

Equity Linked Instruments (ELI) are structured products which can be listed on the Exchange. When an investor purchases an ELI, he is indirectly writing an option on the underlying shares. If the market moves as the investor expected, he earns a fixed return from his investment which is derived mainly from the premium received on writing the option. If the market moves against the investor's view, he may lose some or all of his investment or receive shares worth less than the initial investment. There are three different types of ELI listed on the Stock Exchange: Bull, Bear and Range.

Unit Trusts / Mutual Funds

Exchange Traded Funds (ETFs) are passively managed and open-ended funds. ETFs are designed to track the performance of their underlying benchmarks (eg an index, a commodity such as gold, etc) and offer investors an efficient way to obtain cost-effective exposure to a wide range of underlying market themes. ETFs can be broadly grouped into two types: Physical ETFs (ie. traditional or in-specie ETFs) and Synthetic ETFs.

A Real Estate Investment Trust (REIT) is a collective investment scheme that aims to deliver a source of recurrent income to investors through focused investment in a portfolio of income-generating properties such as shopping malls, offices, hotels and service apartments. At least 90 per cent of its net income after tax is paid to investors in the form of dividends at regular intervals.

Debt Securities listed on the Stock Exchange include bonds and notes which represent loans to an entity (such as a government or corporation) in which the entity promises to repay the bondholders or note-holders the total amount borrowed. That repayment in most cases is made on maturity although some loans are repayable in installments. Unlike shareholders, holders of bonds and notes are not owners of an entity but its creditors. In return for the loan, the entity will usually compensate the bondholders or note-holders with interest payments during the life of the bond or note.

Derivatives Market

Currently, main products traded in the HKEx derivatives market are Equity Index Products, Equity Products, Interest Rate and Fixed Income Products, Gold Futures.

In the equity index product family, there are Hang Seng Index Futures and Options (including Flexible Index Options), H-shares Index Futures and Options (including Flexible Index Options), Mini-Hang Seng Index Futures and Options, Mini H-shares Index Futures, Dividend Futures, HSI Volatility Index Futures and BRICS

Futures. Equity products cover stock futures and stock options. For interest rate and fixed income products, there are the Hong Kong Interbank Offered Rate (HIBOR) Futures and Three-Year Exchange Fund Note (EFN) Futures. And Gold futures can be used for trading or hedging.

Services

HKEx also provides Securities Clearing and Settlement Services, Derivatives Clearing and Settlement Services, Data Products, Issuer Services, Hosting Services.

4.5 Listing Requirements

The following shows some of the basic requirements for listing equity securities on the Exchange. There are some differences between the Main Board and the Growth Enterprise Market (GEM).

(I) Financial Requirements

A Main Board new applicant must have a trading record of not less than three financial years and meet one of three financial criteria: Profit Test, Market Cap/Revenue Test, Market Cap/ Revenue/Cashflow Test. A GEM new applicant has relative low financial requirements.

(II) Accounting Standards

A new applicant's accounts must be prepared in accordance with either Hong Kong Financial Reporting Standards or International Financial Reporting Standards.

(III) Operating History and Management

A Main Board new applicant must have a trading record period of at least 3 financial years with management continuity for at least the 3 preceding financial years and ownership continuity and control for at least the most recent audited financial

year. A GEM new applicant has relative low requirements¹³.

(IV) Public Float

At least 25% of the issuer's total issued share capital must at all times be held by the public. Where the issuer has one class of securities or more, the total securities of the issuer held by the public at the time of listing must be at least 25% of the issuer's total issued share capital. However, the class of securities for which listing is sought must not be less than 15% of the issuer's total issued share capital, having an expected market capitalization at the time of listing of not less than, HK\$50 million for main board and HK\$30 million for GEM. The Exchange may, at its discretion, accept a lower percentage of between 15% and 25% in the case of issuers with an expected market capitalization at the time of listing of over HK\$10 billion.

(V) Spread of Shareholders

For Main Board, the equity securities in the hands of the public should be held among at least 300 holders. For GEM, the equity securities in the hands of the public should be held among at least 100 persons. Not more than 50% of the securities in public hands at the time of listing can be beneficially owned by the three largest public shareholders.

(VI) Minimum Market Capitalization

The expected market capitalization of a new applicant at the time of listing must be at least, HK\$200 million for Main Board and HK\$100 million for GEM.

(VII) Offering Mechanism

For Main Board, a new applicant may not list by way of placing only if there is likely to be significant public demand for its securities. For GEM, a new applicant is free to decide on its offering mechanism and may list on our Exchange by way of

¹³ About the detailed requirement (I)(II)(III) of Main Board and GEM, see annex 3.

placing only.

(VIII) New Issue Price

Both the Main Board and the GEM Listing Rules do not impose conditions on the new issue price. However, new shares cannot be issued at a price below their nominal value.

(IX) Suitability for Listing

Both the issuer and its business must, in the opinion of the Exchange, be suitable for listing. An issuer or its group (other than an investment company) whose assets consist wholly or substantially of cash or short-dated securities will not normally be regarded as suitable for listing, except where the issuer or group is solely or mainly engaged in the securities brokerage business.

4.6 Indexes

Market indexes of HKEx are the Hang Seng Index (HSI), the Hang Seng China Enterprises Index (HSCEI/H-share Index), the Hang Seng Volatility Index (VHSI), the Hang Seng China-Affiliated Corporations Index (the Red-chips Index), S&P/HKEx Large Cap, S&P/HKEx GEM and the China Securities Index (CSI) 300.

The Hang Seng Index (“HSI”) serves as a market benchmark that reflects the overall movement of the Hong Kong stock market. The HSI was launched on 24 November 1969 and is one of the earliest stock market indexes in Hong Kong. The HSI measures the performance of the largest and most liquid companies listed in Hong Kong. To better reflect the stock market movements of the major sectors, four sub-indexes were introduced in 1985. The constituent stocks of the HSI are grouped under Finance, Utilities, Properties, and Commerce and Industry sub-indexes. The HSI is a freefloat-adjusted market capitalization weighted index with a 15% cap on

the weighting of individual constituent stocks.

The formula of the HSI is set out below:

$$\sum (P_t \times IS \times FAF \times CF)$$

$$\text{Current Index} = \frac{\sum (P_t \times IS \times FAF \times CF)}{\sum (P_{t-1} \times IS \times FAF \times CF)} \times \text{Yesterday's Closing Index}$$

P_t : Current Price at Day t

P_{t-1} : Current Price at Day (t-1)

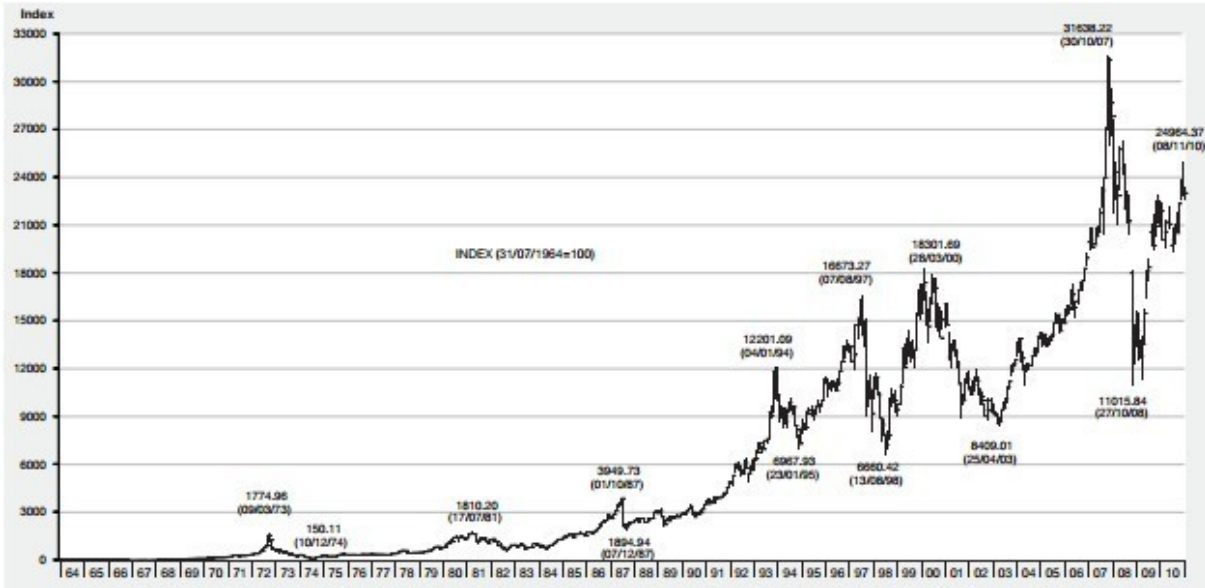
IS: Issued Shares

FAF: Freefloat Adjusted Factor, which is between 0 and 1

CF: Capping Factor, which is between 0 and 1

Here is the monthly movement of HSI, see chart 4.2

Chart 4.2 Hang Seng Index, movement (1964-2010)



Source: <http://www.hkex.com.hk/eng/stat/statrpt/factbook/factbook2010/Documents/04.pdf>.

4.7 Listed Companies

Till the end of 2010, there are 1,413 companies listed on HKEx. Here list the top ten companies who made up for 37.16% of the total market capitalization. From more to less, followed by China Construction Bank Corporation- H Shares (8.00%), China

Mobile Ltd. (7.40%), HSBC Holdings plc (6.73%), CNOOC Ltd. (3.93%), Industrial and Commercial Bank of China Ltd. - H Shares (2.40%), Standard Chartered PLC (2.37%), Bank of China Ltd. - H Shares (1.64%), Hutchison Whampoa Ltd. (1.63%), Sun Hung Kai Properties Ltd. (1.58%), Tencent Holdings Ltd. (1.48%).

The statistics of listed companies, see Table 4.1

Table 4.1 Listed Companies in HKEx

	Year								
	2002	2003	2004	2005	2006	2007	2008	2009	2010
No. of listed companies	978	1,037	1,096	1,135	1,173	1,241	1,261	1,319	1,413
No. of new listed companies	117	73	70	67	62	84	49	73	113
No. of listed securities	1,586	1,785	2,176	2,649	3,383	6,092	5,831	6,616	7,900
Total market capitalization (100 Million RMB yuan)	38,279.99	58,807.21	70,976.43	86,707.36	137,378.41	204,905.65	92,688.75	157,293.93	184,423.40
Share funds raised (100 Million RMB yuan)	1,171.41	2,265.86	2,987.08	3,198.13	5,402.76	5,849.42	3,845.25	5,650.66	7,513.80
Total turnover value (100 Million RMB yuan)	17,416.33	27,388.60	42,125.57	47,916.56	86,275.99	214,488.75	158,875.20	136,534.20	150,588.20
Total turnover volume (100 Million shares)	16,119.30	24,103.80	40,235.50	57,798.10	94,812.70	231,633.70	271,042.90	247,938.70	349,911.80
Total number of trades (10 Thousand deals)	2053.66	2880.34	3724.38	3695.61	6407.70	15158.55	14139.48	17764.15	19394.07

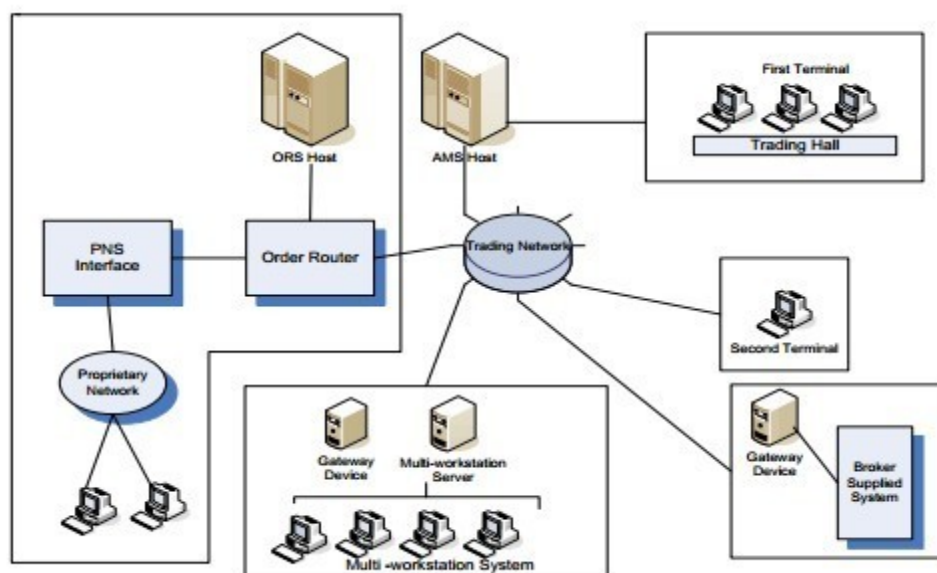
Source¹⁴: <http://www.hkex.com.hk/eng/index.htm>.

¹⁴Statistics are collected from <http://www.hkex.com.hk/eng/index.htm>.

4.8 System of Trading

AMS/3, the third generation of the Automatic Order Matching and Execution System, is the securities trading infrastructure developed by the Exchange. It was launched in October 2000. The system consists of four key components: Trading Terminal; Multi-Workstation System ("MWS"); Broker Supplied System ("BSS"); and Order Routing System ("ORS"). See Chart 4.3

Chart 4.3 *AMS/3 System Overview*



Source: http://www.hkex.com.hk/eng/market/sec_tradinfra/Documents/AMS3_OV.pdf.

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.

CCASS/3, the latest generation of the Central Clearing and Settlement System,

was developed to meet the securities market's needs and accommodate market growth.

Hong Kong Futures Automated Trading System (HKATS) is the electronic trading system for the HKEx derivatives market. Trading is conducted via workstations or Open Application Programming Interfaces (OAPI) located at the premises of Futures Exchange Participants and Stock Options Exchange Participants.

DCASS, the Derivatives Central Clearing and Settlement System, is an integrated clearing and settlement system for all options and futures contracts traded at HKEx.

4.9 Regulation

HKEx operates the centralized securities and derivatives markets in Hong Kong and it is responsible for the front line regulation of listed issuers and for market surveillance. HKEx provides issuers with listing and securities trading services, participants with access to trading and clearing services, and investors with a regulated trading venue supported by information services. HKEx's business and operations functions are under the classification of primary market, secondary market, information technology, market development and corporate services. The Board of HKEx which is the highest authority has overall responsibility for ensuring the integrity of the Group's accounting and financial reporting systems, and that appropriate systems of internal control and risk management are in place.

The principal regulator of Hong Kong's securities and futures markets is the Securities and Futures Commission (SFC), which is an independent statutory body established in 1989 by SFCO. The SFC is responsible for administering the laws governing the securities and futures markets in Hong Kong and facilitating and encouraging the development of these markets.

The Stock Exchange, a wholly-owned subsidiary of HKEx, is the primary regulator of Stock Exchange Participants with respect to trading matters and of companies listed on the Main Board and Growth Enterprise Market (GEM) of the Stock Exchange. The Futures Exchange, a wholly-owned subsidiary of HKEx, is the primary regulator of Futures Exchange Participants with respect to trading matters. HKEx, as a listed company on its own stock market, is regulated by the SFC to avoid any conflict of interest and to ensure a level playing field between HKEx and other listed companies. The Mainland's circuit breakers trigger the suspension of trading in shares of companies when their prices move beyond a certain limit. Hong Kong does not have such a system. Hong Kong law forbids trading suspensions by Hong Kong's stock exchange in the absence of orders given by the Securities and Futures Commission in consultation with Hong Kong's Financial Secretary. HKEx usually contacts a listed issuer if it notices unusual movements in the price or trading volume of its securities, or press reports or market rumors which may affect the price or trading volume of its securities. In those circumstances, the issuer must promptly respond to any such enquiries from the Exchange.

Where the listed issuer is unaware of any matter, it should clarify the situation by publishing an announcement on the HKExnews website as soon as possible. However, a trade suspension is not necessary. Where the listed issuer delays in issuing an announcement covering relevant price-sensitive information, trading in the issuer's securities may be suspended until the announcement is released.

HKEx is committed to performing its *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. It is also committed to working closely with the principal regulator of Hong Kong's securities and derivatives markets, the Securities and Futures Commission, an independent statutory body responsible for administering the laws governing the markets, and facilitating and encouraging the development of the markets.

5 Comparison of the Selected Stock Exchanges

HKEx and SSE are the core financial institutions of Hong Kong and Shanghai, and Hong Kong acts as the financial center of Asia when Shanghai acts as the financial center of China. Both HKEx and SSE have a high market capitalization, a high turnover value and a large number of listed companies, and they want to be the stock exchange like NYSE Euronext in the future. They have some similarities and differences as follows.

5.1 Similarities

There are three main similarities: international traditions, world-class universities and a good business environment.

5.1.1 International Traditions

Hong Kong had been a colony of the British Empire for 155 years. Foreign concession areas first appeared in Shanghai 166 years ago, once twelve countries settled there. These histories left them prosperous economy except mortification. Chinese people met foreigners first inside China in these cities. Foreigners were more than willing to invest and establish factories in the concession or engage in trading activities, they also opened schools, hospitals and other ancillary facilities with their own characteristics. Therefore, concession economic and cultural prosperity was often much higher than its surrounding areas.

Because Hong Kong and Shanghai were port cities, they became trade and logistics centers soon. Thus, many business opportunities appeared there. After a period of time, the local people knew how to do business with foreigners, and became

more open than people in other places of China. Gradually, more and more local people grasped English, especially in Hong Kong where English was one of the official languages. Local people began to have the concept of “international”, and many foreigners are living in Hong Kong and Shanghai now.

5.1.2 World-class Universities

Science and technology are primary productive forces. The education level in Hong Kong and Shanghai is in the first level of China. In Hong Kong, they have the Hong Kong Polytechnic University, the Hong Kong University of Science and Technology, the Chinese University of Hong Kong, the University of Hong Kong, etc. In Shanghai, they own Fudan University, Shanghai Jiao Tong University, Tongji University, Shanghai University of Finance and Economics, etc. So, these are really good chances for cultivating talented people and these people are the potential working labors for these cities.

On the other hand, world-class research universities mean good financial innovations. Economy is a new and old area, with the more intense competition, the importance of financial innovation increases day by day. A strong nation must have a strong financial center, a strong financial center must have a strong financial institution, a strong financial institution must be able to innovate. Hong Kong and Shanghai all have the advantage of innovating, and they can put their research results into practice.

5.1.3 Business Environment

With the rapid development of China's economy and the support of Chinese government, Shanghai and Hong Kong are in an unprecedented pace to glory. Hong Kong locates in the Greater Pearl River Delta Economic Zone, Shanghai locates in

the Yangtze River Delta region, which is in middle ground of China, is the economic hub of north-south, and has a superior advantage of regional economic radiation. The convenient transportation provides many business opportunities

Because of the popularities of Hong Kong and Shanghai, many companies converged there. It resulted in the well development in each industry, average wealth per person is higher than people in other places. People have the willing and ability to do some investment. And some financial policies are formulated according to the economic situation of these cities. More and more foreign capitals were flowed into their markets, because people had an optimistic vision of China's market.

5.2 Difference

This part will be focused on the differences of SSE and HKEx, such backgrounds and regulation.

5.2.1 Backgrounds

Even though it seemed like the market for securities trading in Shanghai began in the late 1860s, it did had really short history. Before the founding of the People's Republic of China in 1949, Chinese people were involved in wars, poverty and ignorance, they didn't have a good and safe environment to develop the economy, to invest their money. And only few people ever heard about it as a strange glossary. It's almost only the foreigners' stuffs, however, it really more or less brought the knowledge of securities to China. And in the first 30 years of new China, the government planned the economic operation. Until 1978, thanks to the reform and opening up policy, the government decided the route of developing the economy. Chinese society began to accept the value of the markets, the separation of powers, free, open and prosperous life. 12 years after the reforming and opening up, SSE went back to people's life.

But at the same period, Hong Kong already survived from two stock market crash, they were on a way to wealth. People were confident to the stock market and people were able to do some investment. Since 1842, Hong Kong had been a colony for 155 years, under British protection and the special geographical and political environment, it didn't be subject to long-term chaos in mainland China, and in a certain degree, it promoted the rapid development of the Hong Kong economy. Based on the rapid population growth in Hong Kong then from a small village gradually developed into an important position in the Asia-Pacific region, one of the modern cities of industrial and commercial areas, has also become one of the "Asian Tigers".

Under the principle of "*one country, two systems*", Hong Kong is one of two special administrative regions of the People's Republic of China, which means it has a different political system from mainland China. So, it has its own economic 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. Listing Rules are on a par with international standards and demand from listed issuers a high level of disclosure. HKEx's 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. 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. 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.

For a good reason, the mainland of China is will continue to control capital inflows and outflows, while Hong Kong does not have any control over capital flows. Although the mainland of China is likely to relax the control of long-term capital inflows and outflows, but at least a period of time will continue to control the short-term capital flows, short-term capital flows may disrupt the foreign exchange market, resulting in unnecessary fluctuations of the RMB exchange rate, which has negative impact on the real economy.

Mainland residents have a higher savings rate, the ample supply of capital, Hong Kong have relatively low savings rate, its GDP is only a small number of copies of the mainland of China's GDP. Hong Kong is a city, it can never be compared with the whole mainland market. However, in the previous a few years, Hong Kong had better performance than mainland.

5.2.2 Regulation

The highest authority of the SSE is the Member Meeting. Board of Governors is its decision making body. The SSE has 22 departments and 2 fully owned subsidiaries. As self-discipline management of legal persons, the Shanghai Stock Exchange under the direct management of the China Securities Regulatory Commission, which is one of the enterprise units directly under the State Council and the authorized department governing the securities and futures markets of mainland China.

The Shanghai Stock Exchange has always been to supervision according to law and" regulatory compliance "as the basic guidelines and principles of self-regulation. In recent years, this Securities Law, Company Law and other laws and regulations as the core, released by the China Securities Regulatory Commission administrative rules as a framework through continuous improvement of the Listing Rules, the members of management rules and trading rules, and basic self-regulatory rules, and timely supplemented in the form of a variety of guidelines, notifications, etc., forming a

multi-level self-regulatory system of rules.

Now, the regulation mainly about continuing to do the listed companies' information disclosure regulation, insider trading and market manipulation regulation as the center, doing a good job in market supervision and the day-to-day supervision of securities companies and other member agencies, thorough investigation of the illegal activities of securities companies.

Hong Kong is the Special Administrative Region of the People's Republic of China, so in some extent, the regulations in Hong Kong are totally different from Shanghai. HKEx operates the centralized securities and derivatives markets in Hong Kong; it is responsible for the front line regulation of listed issuers and for market surveillance. HKEx provides issuers with listing and securities trading services, participants with access to trading and clearing services, and investors with a regulated trading venue supported by information services. HKEx's business and operations functions are under the classification of primary market, secondary market, information technology, market development and corporate services. The Board of HKEx which is the highest authority has overall responsibility for ensuring the integrity of the Group's accounting and financial reporting systems, and that appropriate systems of internal control and risk management are in place.

The principal regulator of Hong Kong's securities and futures markets is the Securities and Futures Commission (SFC), which is an independent statutory body established in 1989 by the Securities and Futures Commission Ordinance (SFCO). The SFC is responsible for administering the laws governing the securities and futures markets in Hong Kong and facilitating and encouraging the development of these markets.

HKEx is going to improve the quality of the listed regulation, to strengthen the regulation of derivative products development, and to plug the loopholes and

crackdown manipulation, to increase transparency and fairly reflected in the stock price tickets change the value of investments, and to maintain financial security and stability, investor protection rights (including due right to information and transparency), to maintain the competitiveness of local industry.

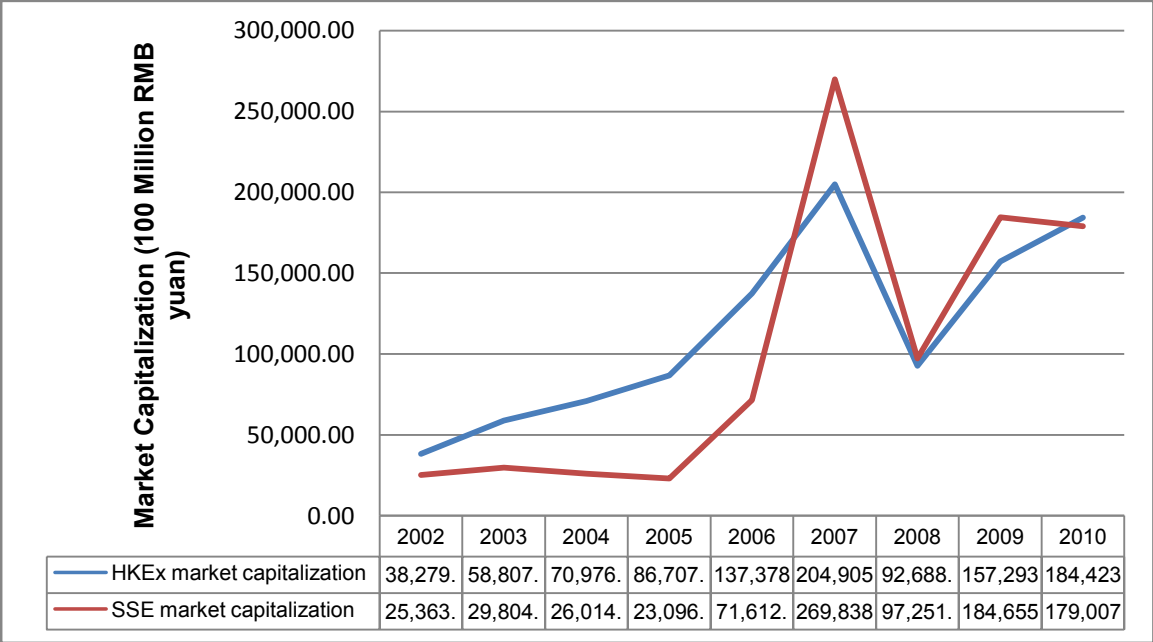
5.3 Comparison of Stock Exchanges¹⁵

The comparison of stock exchanges is focused on market capitalization, number of listed companies, shares, bonds, funds, warrants, IPOs and indexes.

5.3.1 Market Capitalization

Market capitalization shows the operation condition of a stock market, the demand and supply relation of stocks and the scale of stock exchanges in a degree. See Chart 5.1

Chart 5.1 Market Capitalization of SSE and HKEx



Source: <http://www.sse.com.cn/sseportal/ps/zhs/home.html>, <http://www.hkex.com.hk/eng/index.htm>

¹⁵All statistics of this chapter are collected from source: <http://www.hkex.com.hk/eng/index.htm> and <http://www.sse.com.cn/sseportal/ps/zhs/home.html>.

In this chart, the market capitalization of SSE always fell behind HKEx at the first several years, and the market capitalization of HKEx increased stably when the curve of SSE kept flat. Until 2005, both of them met a point, the curves went up rapidly, especially SSE. In 2007, SSE and HKEx reached the same market capitalization, then SSE led the performance. But the magic increase just lasted one year, in 2008, when financial crisis appeared, their market capitalization reduced one second. In 2009, with the control of government, the economy situation went back strongly. After SSE led the performance, it never fell behind again. And when there was a chance, it increased so fast. The huge potential of the mainland market can be proved here.

5.3.2 Number of Listed Companies

In the end of 2010, SSE had 894 listed companies and HKEx had 1,413 listed companies there. See Chart 5.2

Chart 5.2 Number of Listed Companies in SSE and HKEx



Source: <http://www.sse.com.cn/sseportal/ps/zhs/home.html>, <http://www.hkex.com.hk/eng/index.htm>

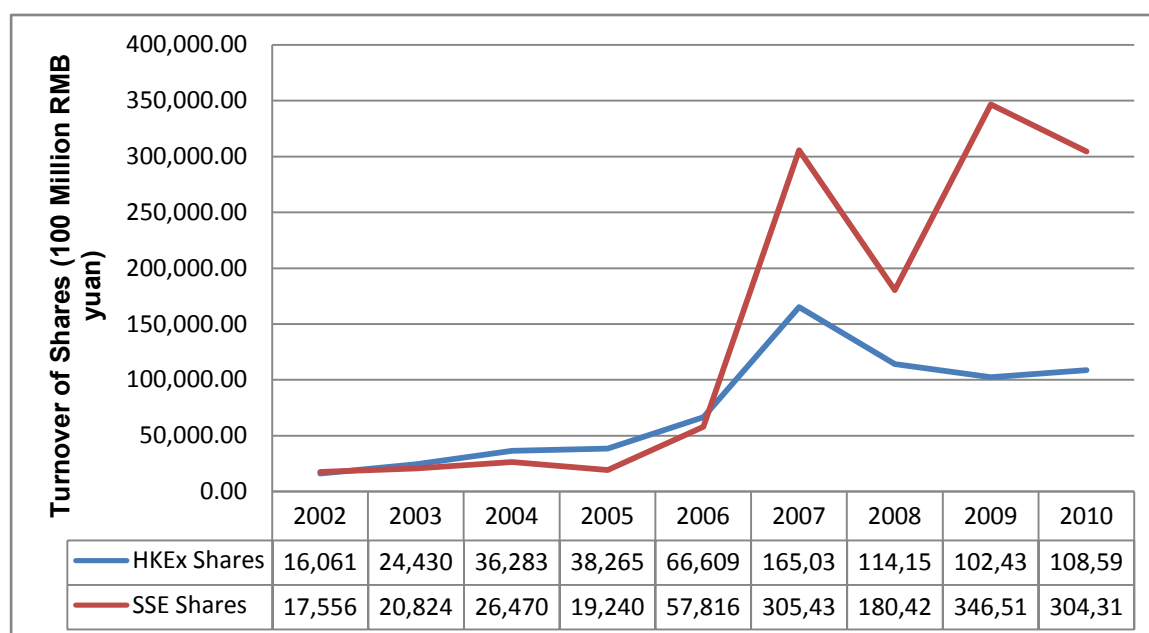
In this chart, HKEx always led the performance, and it seemed like the number of SSE in 2010 was less than the number of HKEx in 2002. From 2002 to 2010, the number of SSE increased 25%, while HKEx increased 45%. HKEx really did a good job for promotion to attract more companies to get listed there. But due to the Chinese capital market was not fully liberalized, companies which could get listed there were very limited. The number of listed companies in a stock exchange showed the active degree of the market and how the stock exchange was interesting and profitable.

5.3.3 Products

Shares

In SSE, they are just two types of shares in one board, A-share and B-share. In HKEx, they have two boards, Main Board and the Growth Enterprise Market (GEM). See chart 5.3

Chart 5.3 Turnover of Shares in SSE and HKEx



Source: <http://www.sse.com.cn/sseportal/ps/zhs/home.html>, <http://www.hkex.com.hk/eng/index.htm>

It's clear that at the beginning of 2002, the turnover of shares in SSE and HKEx were nearly the same. Then, the curve of HKEx grew up slowly until 2005, when SSE fell behind. From 2005, there was an obvious trend of increase in both curves. The real continuous surge was in 2007. At the end of 2007, SSE had 6 times more trading value than the end of 2006, while HKEx just had about 3 times. Since then, SSE had been far ahead in the turnover of shares. However, the wonderful increase just lasted one year. Increasing too fast resulted in too much money had been invested in the China market, with the influence of 2008 financial crisis and Beijing Olympic Games, stock markets fell down and it reached the lowest point at end of 2008. The turnover of shares can be an important financial predictor for market crash. After 2008, the curve of HKEx had a trend of flat, while SSE rebounded strongly. At the end of 2010, the turnover of shares in SSE was nearly 3 times of HKEx.

Bonds

In SSE, bonds are big components of market, there are 5 types bonds, while in HKEx, there are 4 types and one of them is Exchange Fund Notes (EFN) issued by the Hong Kong Monetary Authority (HKMA) on behalf of the Hong Kong Special Administrative Region Government. See Table 5.1,

Table 5.1 Turnover of Bonds in SSE and HKEx

	Year								
	2002	2003	2004	2005	2006	2007	2008	2009	2010
HKEx	0.32	0.21	0.42	0.11	0.10	0.10	0.09	0.09	0.09
SSE	46601.81	61596.4	49997.7	28138.4	18130.3	20399.37	28090.63	39806.3	74914.4

Source: <http://www.sse.com.cn/sseportal/ps/zhs/home.html>, <http://www.hkex.com.hk/eng/index.htm>

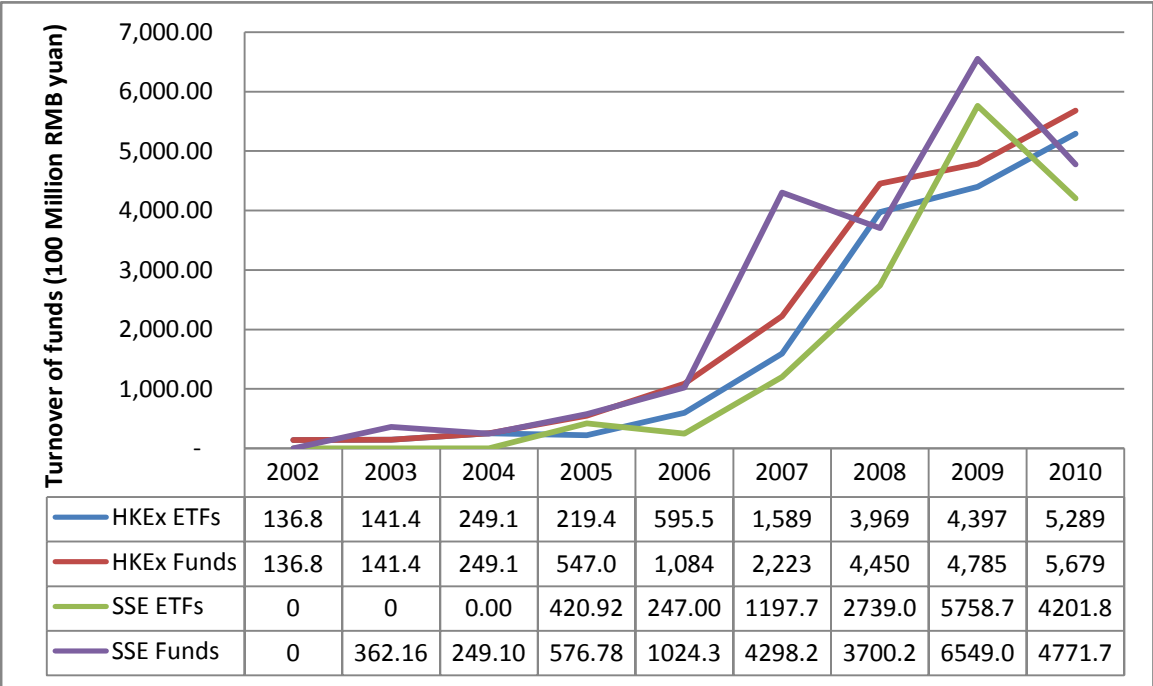
In Table 5.1, unit is 100 Million RMB yuan. There were big differences between the turnover of bonds. Usually the turnover of bonds in HKEx was about 10 million RMB yuan, but the turnover of bonds in SSE was more than 4 trillion yuan. And we could see during 2005 to 2008, when China's economy grew fast and healthy, the turnover of bonds in SSE was just about 2 trillion yuan per year, but in 2009 and 2010,

its average value was 6 trillion yuan. And in some degree, it exposed one factor of China’s GDP growth, when there was a trouble in economy, government would issued more bonds to make some statistic look nice. Thus, it reflected government’s control on the market.

Funds

In SSE, the main funds are close-end funds and ETFs. In HKEx, main funds are ETFs and REITs. Both SSE and HKEx take Exchange Traded Funds (ETFs) as the core products of their funds. See Chart 5.4

Chart 5.4 Turnover of Funds in SSE and HKEx



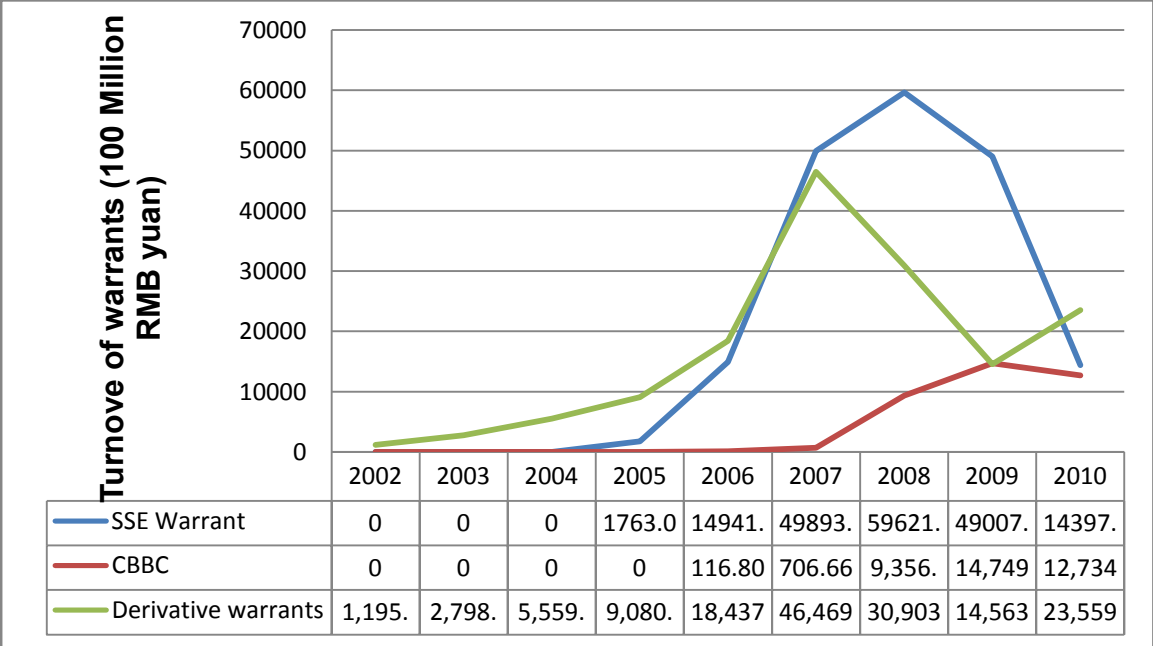
Source: <http://www.sse.com.cn/sseportal/ps/zhs/home.html>, <http://www.hkex.com.hk/eng/index.htm>

These were the only curves which weren’t affected by financial crisis. They were quite the same, and SSE Funds increased like stage. SSE ETFs started quite late, but developed very fast. The investors of SSE are optimistic about the ETFs, so they are willing to invest more money there. And SSE commit to create the ETFs as their star products. And HKEx still has a little more turnover of ETFs than SSE.

Warrants

In HKEx, they have many types of warrants, such as share warrants, derivative warrants, Callable Bull/Bear Contracts (CBBC). And now the callable bull/bear contracts provide more opportunities for investment and they are going to be the star products of HKEx. In SSE, there is no special product in warrants, and warrants only account for a very small part of SSE products. See Chart 5.5

Chart 5.5 Turnover of Warrants in SSE and HKEx



Source: <http://www.sse.com.cn/sseportal/ps/zhs/home.html>, <http://www.hkex.com.hk/eng/index.htm>

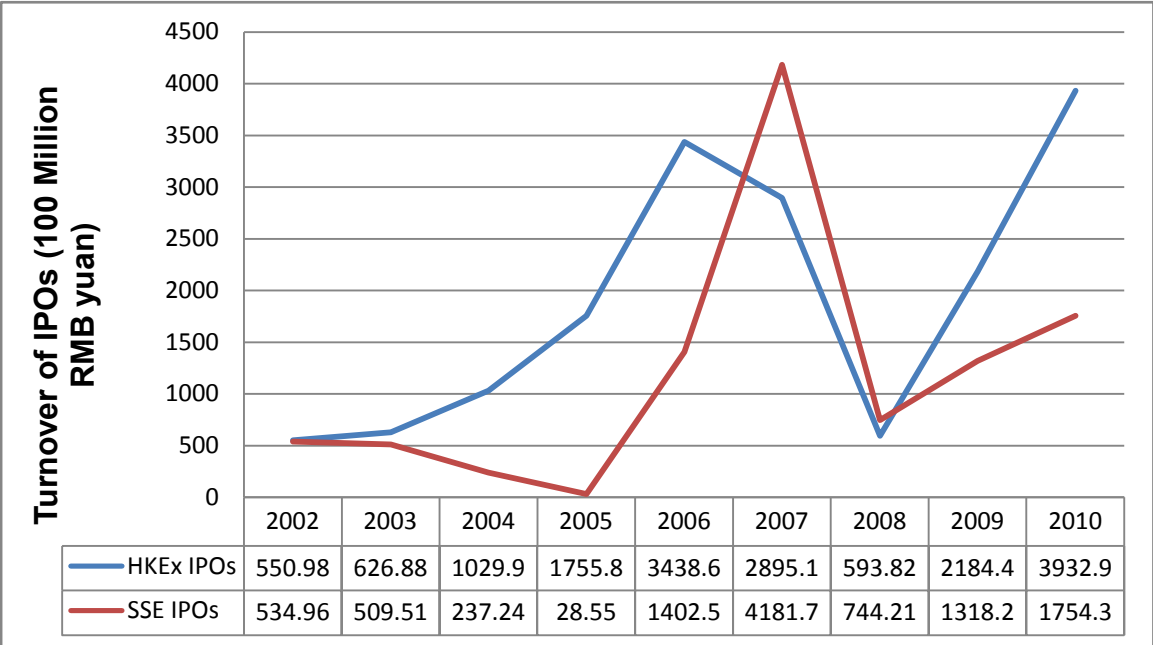
In this chart, the curve of SSE and Derivative warrants went up rapidly from 2006 to 2007. The increase of SSE lasted one more year to 2008, then it went down. Because of the prosperous stock market in SSE, from 2006 to 2008, more and more people saw the great profit from securities market, and they invested a lot of money there. Warrants acted as the relative products of shares, it had great turnover. As certain events occur, the saving and borrowing habits of households, business, and governments are affected (Madura, 2011). Even though there was a strong control of Chinese government on economy, the financial crisis finally affected China’s economy. Many people lost everything in the securities market and left. The turnover of warrants

went down after 2008. The curve of Derivative warrants went down in 2007, because they created CBBC and wanted to make it better. Actually the total turnover of warrants in HKEx kept same from 2007 to 2010.

IPOs

Initial Public Offerings (IPOs) is the first sale of stock by a company to the public. The funds raised by IPOs have a certain connection with the number of IPOs, the price of per share, the number of new listed companies. See Chart 5.6

Chart 5.6 Turnover of IPOs in SSE and HKEx



Source: <http://www.sse.com.cn/sseportal/ps/zhs/home.html>, <http://www.hkex.com.hk/eng/index.htm>

Chart 5.6 is about the money raised by IPOs. From 2002 to 2004, about average 65 new companies listed on SSE per year, but the IPOs were at the lowest point of curve, because these companies only issued few amount of shares, and most of them with a low price. From 2004 to 2005, the IPOs went up so fast, actually the numbers of new listing companies were the same, but companies began to increase the price and volume of IPOs. And in 2006, 2007 and 2010, there are only more than 10 new companies listed, and in these three years IPOs were high. Some big companies had

big IPO numbers after 2008, that's main reason why there was less new listed companies with higher IPOs. It's a new trend of IPO. The curve of SSE can't show the function of new listed companies.

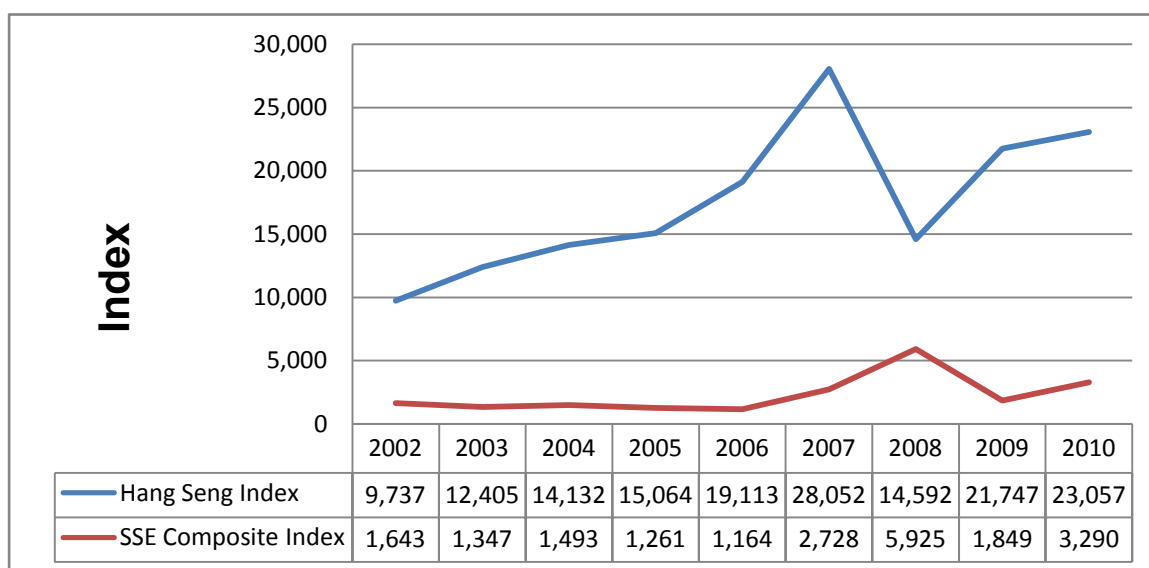
On the other hand, HKEx was much stable, nearly every year 50 new companies were listed there, it fully showed the rule: the more new listed companies, the more IPOs. Here we can also find the big influence by the financial crisis, the bad economy situation decreased the demand of investors, so companies can get less money from the market. However, HKEx had conducted vigorous propagandas after 2008, attracted more rich companies from mainland and other countries to get listed there, so the curve rebounded strongly after.

Indexes

Indexes are the weathervanes of the market, and now indexes also influence the index products, which make the stock market into a bilateral market. In SSE, it has SSE Composite Index. And in HKEx, it has Hang Seng Index (HSI). See Chart 3.2 and Chart 4.2

The historical curve of SSE didn't change a lot until the end of 2006, it kept 2000. In 2007, it once went to 6000, three times more than 2006, and then the market crashed, it went up and down about 3000. Also, the historical curve of HKEx was more stable and increased gradually. And in 2007, it reached the highest point, more than 30,000. See Chart 5.7

Chart 5.7 Index of SSE and HKEx



Source: <http://www.sse.com.cn/sseportal/ps/zhs/home.html>, <http://www.hkex.com.hk/eng/index.htm>

From the curve of Index, we can find out SSE Composite Index increased from 2006 and went up again at 2009. The curve of HSI showed from 2002 to 2007, the HSI had a continuous increase, and then it went down, just reflected the situation of HKEx exactly. Because HSI had a long history and wide range of constituent shares, and it usually changed its constituent shares according to the market, it worked as a precise indicator. And the base point of SSE Composite Index was 100, the base point of HSI was 10,000. So it was useless just cared about the number, but trend.

5.4 Future

Any of a large economy, has a strong, well-functioning financial center support, so China has the very necessity of the establishment of an international financial center. The past 30 years, is the gradual opening up of China's financial industry for 30 years. Determined by the environment of the future, the opening of the financial industry in the future must still gradual process. Building a real international financial center city is required for promoting the market economy system. And it's good for resisting the financial crisis, the development and implementation of financial policies.

Shanghai and Hong Kong both have the superiorities to be the international financial center. Both SSE and HKEx have a large market capitalization, turnover value and a large number of listed companies.

During the past decade, China's economy has a sustained high growth. In the next ten to fifteen years, China will face problems of an aging population, environment, resource constraints, domestic economic structural imbalances and domestic financial system is imperfect. Another challenge is uncertain credit dollars led international monetary system which can't be ignored. China's capital market has not been fully liberalized, the reform is still in a difficult exploration period. It can be called as the strategy transition period before the RMB capital account fully open from now until 2020. In this historic transition period, the construction of China's financial center must think about the strategic layout of Shanghai and Hong Kong.

The financial industry based in Hong Kong is a Special Administrative Region of China's central government responsibilities to continue to maintain Hong Kong's prosperity. Hong Kong is a city of the dominant position of "one country, two systems, domestic offshore" special is the one adjacent to the Mainland's international financial center, New York, London and Shanghai do not have special advantages. We can afford to give full play to Hong Kong as China's financial opening up a "bridgehead" and the risk of "buffer" role, you can give full play to the role of Hong Kong as an important fulcrum of the country's financial strategy, work closely with the two cities.

In Shanghai, as soon as possible to promote financial reform and financial liberalization, the focus on the development of RMB financial markets, and the proper development of the Shanghai dollar offshore market and offshore RMB market. In Hong Kong, with the country's financial strategy, to seize this historic opportunity to focus on the development of an offshore RMB market and the continued prosperity of Hong Kong's financial industry, and at the same time to step up research on Hong Kong's further prosperity of metropolitan economic structure, upgrade issues.

When the Chinese capital market is fully liberalized, then the RMB is completely free of convertibility, the RMB market is naturally a huge international market, the world's largest RMB financial center must be in Shanghai, and the market comparable to New York and London, to be the world's major international financial centers. Then, Hong Kong in RMB financial markets may be attached to Shanghai, both of them are international financial centers, but each division with different features.

Cause there are two stock exchanges in mainland, so it's better for SSE to merge with Shenzhen Stock Exchange, to be the only stock exchange, to extend the scale of business. And SSE can also think about merging with Shanghai Future Exchange, to own the full share of securities market and derivative markets, to follow the mode of HKEx. And when the time comes, SSE can merge with HKEx, to be the real first level Stock Exchange. Thus, Shanghai will be the international financial center.

5.5 Summary

Because of the special history of Hong Kong, it had different economic policies and a relative long operation history. And this led to HKEx's irreplaceable place in next few years. Compared to SSE, HKEx had 1413 listed companies in the end of 2010 while SSE had 894. HKEx led SSE in warrant filed. And SSE was better than HKEx in total market capitalization, total turnover value, total turnover volume, total number of trades, and turnover of shares, bonds.

HKEx had a mature market, not only in securities market but also in derivatives markets. Because of the comprehensive and diversified advantages, HKEx still had average 84 new listed companies per year. The more listed companies you had, the more dynamic was the exchange, investors would have more choices. In HKEx, there were Main Board and GME, which was good for companies and investors. And from their official websites, there were full clear information about exchange and disclosure,

both in Chinese and in English. SSE mainly offered services for investors of mainland China, so many of its information only can be found in Chinese, it was hard for a people who didn't know Chinese to join in the market. And about HSI, it's more professional than SSE Composite Index, it had a long history, a wide range of constituents which covered all the industries, and updated regularly and effectively. The commission fees in HKEx were lower than SSE, and there were lower taxes than mainland, but it's a little more difficult to go listed in HKEx. HKEx had higher requirements of listing, and had more stringent rules and regulation for the companies.

SSE with 22 years' history developed so quickly, but there were some problems of laws, regulations and disclosure, all these need to be improved. SSE focused on the business and product innovation, cared about the small and middle size companies, created a multi-level blue-chip market. Because Chinese government wanted to build Shanghai as the international financial center, they made good policies for SSE. In China, there seemed no competition for SSE, so SSE had the whole market of mainland, when it produced a good product, it would be increased rapidly. And both of them were trying to make a good environment for investors, to strengthen supervision, to innovate business, to educate investors. They both had brand products, CBBC in HKEx and ETFs in SSE.

So, HKEx as the financial center of Asia was better than Shanghai as the financial center of China, and it would last few more years. HKEx was more mature and comprehensive, better service, cheaper trading fees and longer experience. SSE had bigger internal market, better government policies, more high-level labors.

In the future, HKEx would prepare for the RMB financial market and attract foreign investors. SSE should innovate business and products, take advantage of local market to improve the service level.

And there are three main methods for the corporation between SSE and HKEx. In order to strengthen the overall goal of the Shanghai and Hong Kong financial cooperation, Shanghai and Hong Kong under the CEPA framework, the State Council on the Shanghai should speed up the development of modern service industry and advanced manufacturing, building an international financial center and shipping center as a guide, in accordance with the complementary advantages, mutual benefit and win-win "principle, strengthen cooperation and exchanges to jointly enhance the international competitiveness of the country's financial industry. To strengthen the priority areas of Shanghai and Hong Kong financial cooperation, including the strengthening of cooperation in the development of financial markets, encourage and support financial institutions, mutual establishment and strengthening of financial personnel training and trade cooperation. Including the Shanghai Stock Exchange and HKEx listed in the enterprise, product development, cooperation and information exchange to strengthen cooperation. To improve the dialogue and exchanges of Shanghai and Hong Kong financial, organized by the Hong Kong Financial Services and the Treasury Bureau and the Shanghai financial co-lead the organization and coordination of the two government departments, financial regulators, representatives of organizations in the financial market, regularly every year in Shanghai and Hong Kong to take turns meeting.

6 Conclusion

The objective of this thesis was about the comparison of the Shanghai Stock Exchange and the Hong Kong Stock Exchange. SSE and HKEx had a large market capitalization and a large amount of turnover in the past. HKEx acted as the financial center of Asia was better than Shanghai acted as the financial center of China, and it would last few more years. HKEx was more mature and comprehensive, better service, cheaper trading fees and longer experience. SSE had bigger internal market, better government policies, more high-level labors.

HKEx shall focus in the Asian dollar market, the RMB assets in international management, derivatives markets and the Asian financial cooperation. SSE should focus on speeding up the construction of the territory of RMB financial markets, to support the building of Hong Kong's offshore RMB market, and good domestic and foreign financial transactions in RMB regionalization process channel and system construction. And SSE should do a good job of product development, business and product innovation. These two stock exchanges shall have more and deeper cooperation and communication.

When the Chinese capital market is fully liberalized, then the RMB is completely free of convertibility, the RMB market is naturally a huge international market, the world's largest RMB financial center must be in Shanghai, and the market comparable to New York and London, to be the world's major international financial centers. In the future, Hong Kong in RMB financial markets may be attached to Shanghai. And maybe HKEx will be a big branch of SSE, which works as a department for overseas investors.

In this way, Shanghai will be the international financial center in China, and support the development of China's economy.

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List of Abbreviations

GDP	Gross Domestic Product
NASDAQ	National Association of Securities Dealers Automated Quotations
ASE	<i>Amsterdam Stock Exchange</i>
NYSE	New York Stock Exchange
LSE	London Stock Exchange
TSE	Tokyo Stock Exchange
SSE	Shanghai Stock Exchange
<i>ETF</i>	<i>Exchange Traded Funds</i>
CSRC	China Securities Regulatory Commission
HKEx	Hong Kong Exchanges and Clearing Limited
HKFE	Hong Kong Futures Exchange
CCASS	Central clearing and settlement system
HDR	Hong Kong Depositary Receipts
BRIC	Brazil, Russia, India and China
GEM	Growth Enterprise Market
HSI	Hang Seng Index
SFCO	Securities and Futures Commission Ordinance

Declaration of Utilization of Results from a Diploma (Bachelor) Thesis

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List of Annexes

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Annex 1

Timeline of history

In 1609, the Amsterdam Stock Exchange (ASE) was established in Amsterdam.

In 1685, the Berlin Stock Exchange was established in Germany.

In 1724, the Paris Stock Exchange was established in France.

In 1773, the first stock exchange in London was officially formed.

In 1792, the New York Stock Exchange was established.

In 1947, the Hong Kong Stock Exchange was established.

In 1949, the Tokyo Stock Exchange was established.

In 1971, Nasdaq was established.

In 1990, the Shanghai Stock Exchange was established in China.

In 2000, Euronext was formed following a merger of the Amsterdam Stock Exchange, Brussels Stock Exchange, and Paris Bourse.

In 2007, Euronext merged with NYSE Group to form NYSE Euronext, which became the "first global stock exchange".

Annex 2

Functions of various departments in SSE

•Executive Office:

Mainly in charge of coordinating the internal organizations of the SSE.

•Human Resources Department (CPC Organization Affairs Department):

In charge of personnel management and personnel training.

•CPC Committee Office & Disciplinary Inspection Office:

In charge of the CPC-related affairs, publicity, disciplinary inspection and affairs of the SSE Labor Union.

•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.

•Offering and Listing Department:

The function of Offering and Listing Department contains: conducting marketing to pre-listed companies and providing services, including asset reorganization, to the listed companies, reviewing the application materials of the issuers and arranging for listing, rights issue as well as add-on offering of the listed companies etc.

•Company Management Department:

In charge of 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.

•Bond Market Department:

In charge of the planning of the bond market, bond offering and listing, daily regulation on and safe operation of bond trading, so as to nurture and develop the exchange bond market.

•Global Business Development Department:

In charge of international exchanges and cooperation, management on overseas business trips, formulation of SSE Strategic Plan, research into overseas markets and implementation of overseas market promotion schemes.

•Fund Market Department:

In charge of the R&D of funds, fund promotion, daily regulation on and safe operation of fund trading, so as to nurture and develop the exchange fund market.

•Market Surveillance Department:

In charge of real-time monitoring of the trading market, timely discovering extraordinary trading behavior and conducting investigations and dealing with violations.

•Legal Affairs Department:

In charge of the legal affairs of SSE.

•Investor Education Department:

Conducts investor education, market services and training, aiming at improving investors' risk awareness and enhancing the services of the Exchange so as to promote market development.

•System Operation Department:

Centrally operates monitors, deploys and maintains the technology infrastructure and systems, while ensuring safe operation.

•Technology Development Department:

Centrally develops technology systems and provides support for system application; improves or adjusts system functions based on business demands; optimizes system performance and framework in compliance with the existing technology master plan of SSE.

•Technology Planning and Services Department:

Centrally plans the function, framework, deployment, interface of the Exchange's technology systems and infrastructure; centrally plans the data safety policies and track the changes; organizes technology tests and simulations; constantly enhances the technology services for the Exchange and its market participants.

•Information Center:

In charge of market statistics and consolidation of information analysis as well as supervision of information dissemination of SSE.

•Research Center:

Organizing and implementing subject studies of the development of market operation and in charge of editing SSE publications.

•Beijing Center:

Liaises with related organizations in Beijing, arranges logistics for officials from SSE to Beijing, collects relevant information for the Exchange, and assists in the market promotion in North China.

•Finance Department:

Mainly in charge of internal financial management of 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 Center (Security Department):

Mainly in charge of internal logistics work of SSE.

•Securities Telecommunication Co.,Ltd:

In charge of managing the dedicated satellite communication network of 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.

Annex 3

Detailed requirement (I)(II)(III) of HKEx

(I) Financial Requirements

Main Board				GEM
A Main Board new applicant must have a trading record of not less than three financial years and meet one of the following three financial criteria:				A GEM new applicant must have a trading record of at least two financial years comprising:
	1. Profit Test	2. Market Cap/ Revenue Test	3. Market Cap/ Revenue/ Cashflow Test	<ul style="list-style-type: none"> i. A positive cashflow generated from operating activities in the ordinary and usual course of business of at least HK\$20 million in aggregate for the two financial years immediately preceding the issue of the listing document ii. Market cap of at least HK\$100 million at the time of listing
Profit Attributable to Shareholders	At least HK\$50 million in the last 3 financial years (with profits of at least HK\$20 million recorded in the most recent year, and aggregate profits of at least HK\$30 million recorded in the 2 years before that)	-	-	
Market Cap	At least HK\$200 million at the time of listing	At least HK\$4 billion at the time of listing	At least HK\$2 billion at the time of listing	
Revenue	-	At least HK\$500 million for the most recent audited financial year	At least HK\$500 million for the most recent audited financial year	
Cashflow	-	-	Positive cashflow from operating activities of at least HK\$100 million in aggregate for the three preceding financial years	
Note: The Exchange may accept a shorter trading record period and/or may vary or waive the above profit or other financial standards requirement.				

(II) Accounting Standards

<p>A new applicant's accounts must be prepared in accordance with either Hong Kong Financial Reporting Standards or International Financial Reporting Standards.</p> <p>Banking companies must also comply with the Financial Disclosure by Locally Incorporated Authorised Institutions issued by the Hong Kong Monetary Authority.</p>	
Main Board	GEM
<p>For Main Board new applicants, accounts of an overseas-incorporated issuer prepared in accordance with generally accepted accounting principles in the United States of America (US GAAP) or other accounting standards may be acceptable by the Exchange under certain circumstances.</p>	<p>For GEM new applicants, accounts prepared in accordance with US GAAP are acceptable if the company is listed, or will be simultaneously listed, on either the New York Stock Exchange or the NASDAQ National Market.</p>

(III) Operating History and Management

Main Board	GEM
<p>A Main Board new applicant must have a trading record period of at least 3 financial years with:</p> <ol style="list-style-type: none"> 1. management continuity for at least the 3 preceding financial years; and 2. ownership continuity and control for at least the most recent audited financial year. <p><u>Exception:</u> Under the Market Cap/Revenue test, the Exchange may accept a shorter trading record period under substantially the same management if the new applicant can demonstrate that:</p> <ol style="list-style-type: none"> 1. its directors and management have sufficient and satisfactory experience of at least three years in the line of business and industry of the new applicant; and 2. management continuity for the most recent audited financial year. 	<p>A GEM new applicant must have a trading record of at least 2 full financial years with:</p> <ol style="list-style-type: none"> 1. substantially the same management throughout the 2 full financial years; and 2. a continuity of ownership and control throughout the full financial year immediately preceding the issue of the listing document. <p><u>Exception:</u> The Exchange may accept a shorter trading record period and waive or vary the ownership and management requirements for:</p> <ol style="list-style-type: none"> 1. newly-formed "project" companies; and 2. natural resources exploitation companies, supported by reasons acceptable to the Exchange.