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Kansainvälisten toimintojen koulutusohjelma



On the Functionality of the Present Chinese Stock Market From a Foreign Institutional Investor's Perspective

Kansantalous: kansantalouden
pro gradu -tutkielma
Aku Penttinen 22141-8
2.4.1996

Helsingin
Kauppakorkeakoulun
Kirjasto

6524

Kansantaloustieteen

laitoksen

laitosneuvoston kokouksessa 11/4 1996 hyväksytty

arvosanalla cum laude approbatur

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On the Functionality of the Present Chinese Stock Market From a Foreign Institutional Investor's Perspective

Tutkimuksen tavoite

Tutkimuksen tavoitteena on antaa kuva Kiinan kansantasavallan nykyisten osakemarkkinoitten toimivuudesta ulkomaisen institutionaalisen sijoittajan näkökulmasta.

Lähdeaineisto

Tutkimuksen lähdeaineistona on käytetty ulkomaisia taloustieteen teoksia ja artikkeleita sekä osakepörssien ja arvopaperivälittäjien julkaisuja.

Tutkimuksen kulku

Tutkimuksen alussa esitellään Kiinan merkitystä maailmantaloudessa, Kiinantuntemuksen tasoa länsimaissa sekä pääomamarkkinoitten ja institutionaalisen sijoittajan merkitystä taloudelle. Seuraavaksi paneudutaan markkinoitten toimivuuden teoriaan ja sovelletaan sitä Kiinan osakemarkkinoille ulkomaisen institutionaalisen sijoittajan näkökannasta.

Tulokset

Kiinan osakemarkkinat eivät ole länsimaisten standardien mukaan hyvin toimivat, mutta eräät toimivuuden osa-alueet ovat jo kehittyneet hyvin.

Avainsanat

Kiina, markkinoitten toimivuus, osakemarkkinat, institutionaalinen sijoittaja

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Acronyms

| | |
|---------------|---|
| ADR | American Depository Receipt |
| ADS | American Depository Security/Share |
| CITIC | China International Trust & Investment Corporation |
| CLSA | Credit Lyonnais Securities Asia |
| CSRC | China Securities Regulatory Committee |
| FII | Foreign Institutional Investor |
| GATT | General Agreement on Tariffs and Trade |
| GDP | Gross Domestic Product |
| GNP | Gross National Product |
| JAI | Jing An Index |
| MOF | Ministry of Finance |
| MOFTEC | Ministry of Foreign Trade and Economic Co-operation |
| NASDAQ | National Association of Securities Dealers Automated Quotations System |
| NCNA | New China News Agency |
| NYSE | New York Stock Exchange |
| OTC | Over-the-Counter |
| PRC | The People's Republic of China |
| RMB | Renminbi (one of the two names of the Chinese currency) |
| SAC | Securities Association of China |
| SCERS | State Commission for Restructuring the Economic System |
| SCSC | State Council Securities Policy Committee |
| SEEC | Stock Exchange Executive Council |
| SEHK | Stock Exchange of Hong Kong |
| SHPBC | Shanghai Branch of the People's Bank of China |
| SHSE | Shanghai Stock Exchange |
| SHSEC | Shanghai Securities Commission |
| SPC | State Planning Commission |
| SSCCRC | Shanghai Securities Central Clearing and Registration Corporation |
| SSEI | Shanghai Stock Exchange Index |
| STAQS | Securities Trading Automated Quotations System |
| SZPBC | Shenzhen Branch of the People's Bank of China |
| SZRC | Shenzhen Securities Registration Company Ltd |
| SZSE | Shenzhen Stock Exchange |
| SZSEC | Shenzhen Securities Commission |
| ZSE | Zurich Stock Exchange |

1. Introduction

The economic development of the People's Republic of China has been noticed in the West on a larger scale only very recently although the economic reforms started in the late 1970s. The enormous potential of the most populous country in the world with both great natural and human resources had been in the shadows of other events. In the late 1980s and early 1990s the western world was more interested in the end of the cold war and its consequences in the former communist countries with their emerging economies. The new forming role of China in the world economy was not understood.

The Chinese never directly copied the centrally planned economic system from the Soviet Union but always made adjustments to it according to their preferences and culture which has led to the existence of a rather unique economic system. Markets have had a more central role in the Chinese economic model than they had in the Soviet Union.

Capital markets have a central role in an economic system. Because of political reasons they have not been able to develop freely in China and are thus at a lower level of development than in the western industrial countries. Their importance has, though, been understood in China and politicians and officials are devoted to liberalising regulations and improving the investment climate in the capital markets.

The aim of this thesis is to study the functionality of the present emerging stock market in the Chinese mainland from a foreign institutional investor's viewpoint. The main investment products available to foreign institutional investors and the functionality of the markets will be covered. The perspective of a foreign institutional investor was chosen as it will probably take a while before private

investors flood the Chinese markets *en masse*. It is the author's humble wish that this work would add something to the knowledge of China as the largest emerging market in the world with many investment opportunities.

2. The Importance of this Study

Compared to the size of the PRC's economy very little time and energy has been invested in research and study of the capital markets in mainland China. Thus the knowledge of the Chinese capital markets in western industrial countries is not as profound as could be expected.

2.1 The Size and Growth of the Chinese Economy

The People's Republic of China is by all standards a large country.

Table 2.1 GDP Per Head of Developing Countries

| 1992 | GDP per head in USD | | GDP, billion USD |
|-------------|----------------------------|--------------------------------------|------------------|
| | Exchange rate ¹ | Purchasing power parity ² | |
| China | 370 | 2460 | 2870 |
| India | 275 | 1255 | 1105 |
| Brazil | 2525 | 4940 | 770 |
| Mexico | 3700 | 6590 | 590 |
| Indonesia | 650 | 2770 | 510 |
| South Korea | 6790 | 8635 | 380 |
| Thailand | 1780 | 5580 | 320 |
| Pakistan | 400 | 2075 | 240 |
| Argentina | 6870 | 5930 | 190 |
| Nigeria | 275 | 1560 | 190 |
| Egypt | 655 | 3350 | 180 |
| Philippines | 820 | 2400 | 155 |

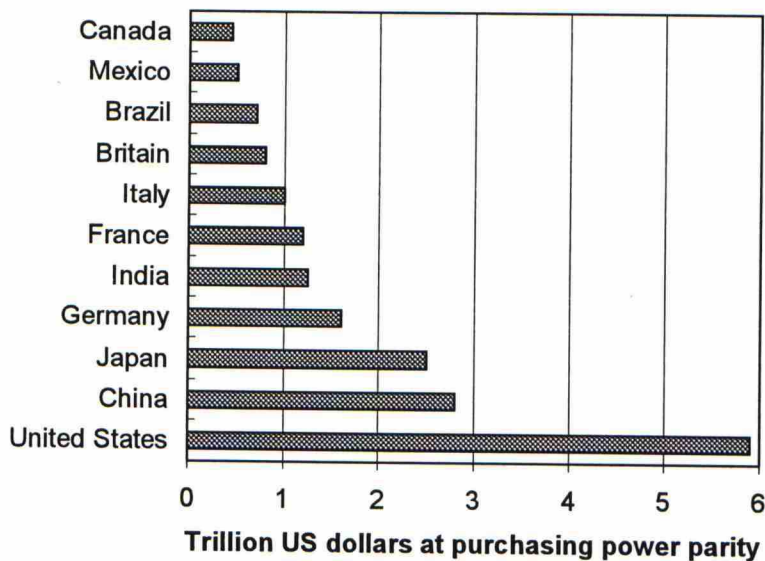
Source: The Economist, May 15 1993, page 83.

¹ These figures have been calculated using nominal exchange rates.

² These figures have been calculated using PPP exchange rates.

With more than 1.2 billion inhabitants, an area third only to Russia and Canada and plenty of natural resources China has potential to become an economic superpower. Deng Xiaoping has declared that China's goal is to be the largest economy in the world by 2020. The opinions on the size of PRC's economy vary much but as one of the latest studies shows measured by purchasing power the Chinese GDP per capita is higher than in the Philippines (see table 2.1 above) and the total GDP is already the second largest in the world (see figure 2.1 below). If the GDP is measured per capita China falls very far behind industrial countries.

Figure 2.1 The world GDP League



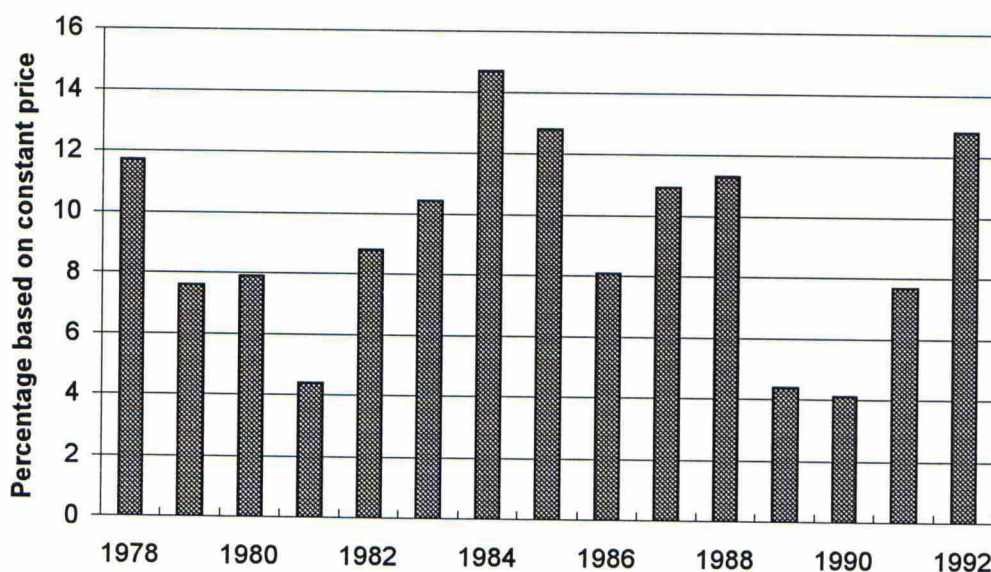
Comparable Russian data not available

Source: *The Economist*, May 15, 1993.

Not only is the Chinese economy large but it has also been growing with an immense pace since the first real economic reforms were introduced in the late 1970s. For many years the economic growth has reached and even exceeded 10 per cent p.a. and not once fallen below 4 per cent p.a. (see figure 2.2 below), a

level last seen in the industrialised world decades ago, and with no real signs of a slowdown in sight China seems to be on the edge of a real transition to becoming an economic superpower. Although there are no guarantees of the continuation of the reformistic politics after the death of Deng Xiaoping it would be foolhardy to deny the opportunities and possibilities the PRC has to offer. Making historic parallels may be a dangerous way to try to interpret the world but as the fall of the Soviet Union has shown us, a process once started is very hard to stop.

Figure 2.2 The Growth of GNP in China

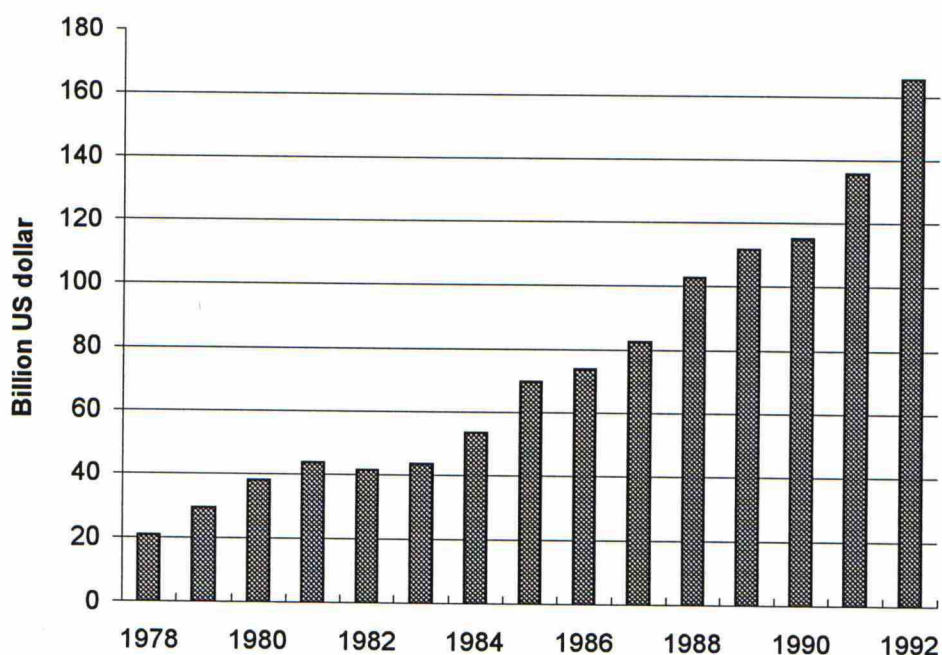


Source: Statistical Yearbook of China, 1992, page 31.

For millennia China has had a xenophobic attitude towards foreign countries and their inhabitants but now the Chinese seem to have understood that the policy of disengagement in international trade and affairs is perhaps not the best solution

after all. The liberalisation of trade and capital flows has been going on ever since the transition towards a “socialistic market economy” began and China would have wanted to be among the founder members of the World Trade Organisation, the follower of GATT. As is seen in figure 2.3 below total trade flows, i.e. total export and import, between China and the rest of the world have grown immensely from a level of circa 20 billion US dollars in 1978 to nearly 170 billion in 1992

Figure 2.3 Total Export and Import of China



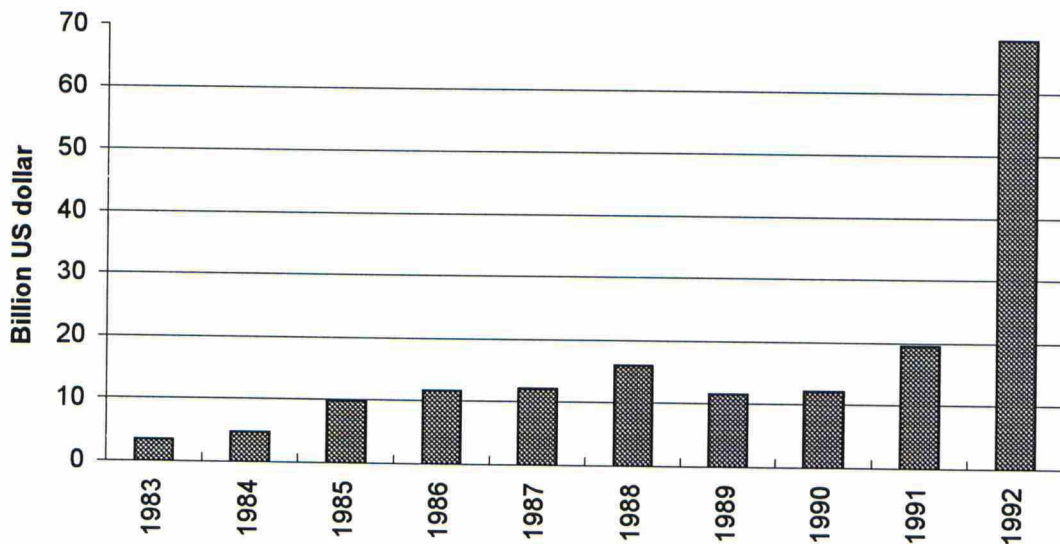
Source: Statistical Yearbook of China, 1992, page 627.

The exchange rate used in the tables in the Statistical Yearbook of China which figures 2.3, 2.4 and 2.5 are based on is calculated by the People’s Bank of China (PBC). This computed exchange rate (USD/Yuan) is not formed in any open foreign exchange market and may be subject to propagandist purposes and does therefore not give an independent picture of the data. The problem of unreliable

and questionable data is a definite handicap in China research that one must always take into consideration when one is working with statistical data. An eight-fold increase in the trade with the outside world in only 15 years can, nevertheless, be called an upward trend even by the most conservative standards.

If a violent collapse of the political system, which the Russians did not succeed in avoiding, does not take place in China during the main steps in the transition to a market economy there is reason to believe that the Chinese could manage to change their political system without damaging the economy in the progress. The reason for this could be that the socialistic system has been eroding ever since the first reforms took place and so many different entities with political power, like the People's Liberation Army (PLA), have thriving businesses of their own.

Figure 2.4 Foreign Investment (Contract) in China



Source: Statistical Yearbook of China, 1992, page 641.

International investors have always been very nervous about political instability and there is no reason for believing that they would act differently in the case of China. As the figure 2.4 below shows the consequences of the events on Tiananmen Square in 1989 can be one of the causes of a fall in the amount of foreign contract investment into the PRC. As mentioned above it is wise to regard information containing Chinese data in US dollars at least with some level of scepticism.

2.2 The Knowledge of China in the West

As the PRC had been ranked for decades among other developing socialist countries without very much of a bright economic future little interest was shed on its economic system. Before 1978 there was very little activity by western companies in the PRC. Economic superpowers have always used a vast majority of their funds granted to international economic research to the study of those countries they currently have interests in. Studies of developing countries have always been in a minority what comes to funds. It is only a few years ago that western industrialist countries have started to realise the enormous potential of the Chinese economy.

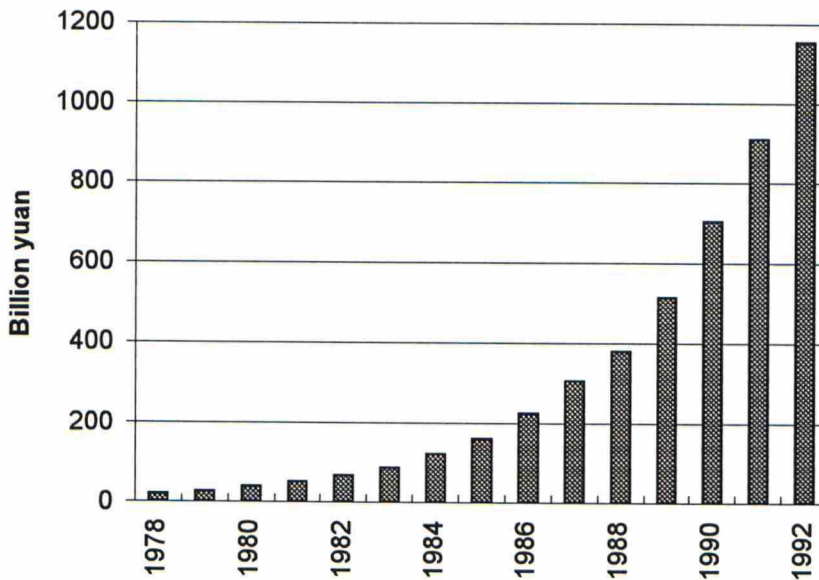
The People's Republic of China cannot directly be compared with the former socialist countries of Eastern Europe because China's socialism has always been different from that in the Soviet bloc. China has never had a total confidence in a centrally planned economy but instead given markets some, although with western standards very little, power. The Chinese have also chosen another way to transition towards a market economy, perhaps a more balanced one. The Poles chose to take shock therapy, the Russians do not seem to have chosen yet but China tries to go slowly, step by step. They seem to have managed to separate, at

least for a while, the economical and political reforms quite well. The problem is that no one knows for how long it can go on. This is another good reason to try to add something to the knowledge of the Chinese economy.

2.3 The Importance of Capital Markets

Capital markets, of which equities markets form an essential part, are of very great significance in the important process of resource allocation whose effectiveness, on the other hand, is a major determinant of how much well-being an economy can produce to its participants. Without well-functioning capital markets savings will not be distributed effectively according to the yield-risk-criteria but inefficiencies will exist and the economy will not perform as well as it could.

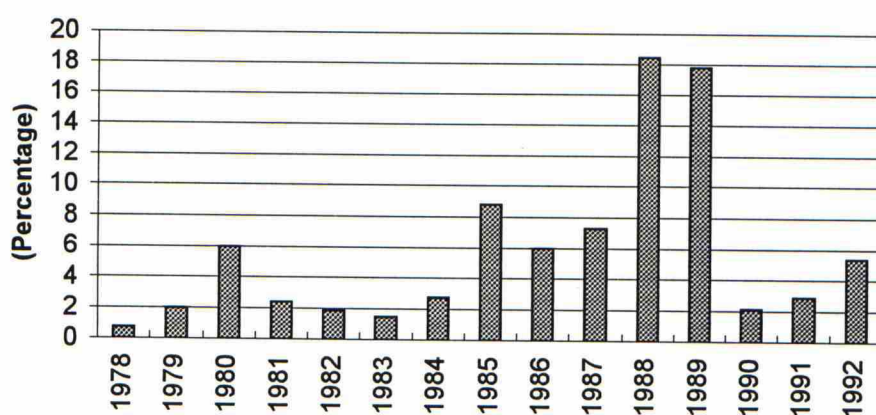
Figure 2.5 Total Household Saving in China



Source: Statistical Yearbook of China, 1992, page 281.

As the 70-year-experiment of socialism in the former Soviet Union has shown us the lack of price incentive in the economy can have disastrous consequences. Many believe that the major reason for the collapse of communism in the ex-Soviet Union but not in the PRC has been the different views on markets. In China, apart from the most important products, markets have been given some power in the process of price determination. The Chinese capitals markets, though, have been extremely profoundly regulated. Only very recently have the economic reforms been extended to the capital markets but the progress will be long and hard.

Figure 2.6 Inflation in China



Source: Statistical Yearbook of China, 1992, page 235.

As can be seen in figure 2.5 above there is an exponentially growing demand for investment possibilities caused by the dramatic increase in household savings since 1978. The data of figure 2.5 is based on the Statistical Yearbook of China and as there is no specification of whether the household savings are in nominal or real value, it is important to regard this data with scepticism. Chinese inflation figures are disclosed in figure 2.6. When the data in figures 2.5 and 2.6 is compared it becomes evident that household savings have risen in real value regardless of the

type of the data in figure 2.5. Savings ratios have historically been higher in emerging markets than in industrialised countries but the Asians, like the Japanese case shows, seem to be more eager to save than Europeans or North Americans even at later stages in the industrialisation cycle.

It is useful for the Chinese, their trading partners as well as international investors planning to invest in China to deepen the knowledge of capital markets in China which this study tries to do. In this way a basis for improving the markets will be laid and the amount of misunderstanding and fear due to uncertainty is reduced.

2.4 The Institutional Investor's Role in the Economy

An institutional investor is an investor who invests the pooled funds of investors with either the lack of time and knowledge or the will to analyse different investment opportunities. Typical examples of institutional investors are pension funds and mutual funds. The institutional investor receives compensation for its work usually in the form of a commission of some sort.

The institutional investor's perspective was chosen for this study because only an investor with a great amount of resources can have a realistic chance of investing profitably in an emerging market. An institutional investor has enough time and funds to invest in studying various investment opportunities and looking for new ones so that these costs do not total to more than a small fraction of its resources. Many investment products, especially in emerging markets where the capital markets are not yet totally developed, are also available only in so large nominal entities that smaller private investors would easily find themselves investing too large a part of their means into too few projects and not spreading their risk in an optimal way.

3 The Objectives of this Study

3.1 The Identification of the Research Problems

3.1.1 Complete Description of the Research Problems

The aim of this thesis, as told in the introduction, is to study the functionality of the present emerging equity markets in the Chinese mainland from a foreign institutional investor's viewpoint. The main stock markets as well as the products available for trading on them will be covered and the functionality of these markets will be analysed.

In entering the Chinese markets the FII will be confronted with many barriers of different sorts, both legal and cultural in nature. The most important legal barriers will be described and analysed so that a picture of the PRC stock markets available to a FII is formed. Cultural barriers between western industrial countries and China are, needless to say, enormous and without doubt interesting but they are not within the scope of this study.

The equity markets, including stock exchanges and possible over-the-counter markets, will be covered as thoroughly as is only possible according to the availability of research material. Roughly the first half of the paper, i.e. chapters 1-4 are suitable for international institutional investors planning on investing in the Chinese equities market and should help them in their decision whether or not to enter the PRC markets. The latter part of the study, that is chapters 4-6, is more suitable for institutional investors already active in the PRC stock markets.

When the various markets are described it is sensible to analyse their functionality and lucrativeness from a FII perspective. The settlement systems, transaction costs and availability of information will also be researched into.

The FII is after a net profit on its investments and is therefore also interested in the taxation system and regulations that affect the total net value of its capital. These will, of course, also be covered.

3.1.2 List of Research Problems

Below is a list of the research problems to which answers will be searched for in the following chapters.

What kind of stock markets exist in the PRC?

What kind of bond markets exist in the PRC?

What products are available to a FII on these markets?

How well do these markets function?

How safe are the markets?

What kind of settlement and clearing systems are there?

Are the markets fair?

How transparent are the markets?

What is the breadth of the markets like?

How is the depth of the markets?

How liquid are the markets?

How high is the volume of the markets?

How high are the transaction costs?

What are the limits to profit-taking?

Do a FII have to pay any taxes in the PRC and if yes; how high are they?

The structure of the next two chapters will be mainly based on these questions.

3.2 Outlines and Definitions

3.2.1 The Geographical Outlines

The current political borders of the People's Republic of China will form the geographical outlines of this study. The political entity on the island of Formosa known as Taiwan will not be part of the study as Beijing is not in power there. Although the United Nations have not approved Taiwan as a member and thus it cannot be referred to as a totally independent state, it is wiser to limit the study to the PRC only, as it is recognised by the international community.

The 1st of July 1997 the PRC will take over Hong Kong from the British. No one knows what will happen to the wealthy financial centre after that. This study treats Hong Kong as an independent state and not as a part of the PRC although many claim that Beijing officials already have great influence especially on the political front in Hong Kong as discussions on changes to its political and legal system take place before the power shift.

As telecommunications and computers develop with an even accelerating pace the physical location of a modern capital market has become less and less important, although many markets, e.g. the futures markets in Chicago, still have open out-cry procedures instead of computerised systems. The telephone, facsimile, telex and computer systems enable 24-hour global trading of almost any security no matter on which exchange it is registered.

The physical location of a capital market can be said to be of greater importance in the PRC than in the industrialised countries as telecommunication systems are less developed and less reliable. The geographical distance, on the other hand, may not be as great a barrier to the functionality of the markets as may be the various political regulations that limit trading to certain areas.

3.2.2 The Period of Time Covered

It is the aim of this study to give as *current* a view of the Chinese capital markets as possible. Due to the state of the Chinese statistical data, language problems and scarcity of research material it may be that all issues covered above in the research problems cannot be answered by data of the day. If this is the case, the newest available information will be used provided it does not date further back than to 1978. Pre-transition data will be used as little as possible.

The objective of this paper is *not* to do a historical comparison of the pre-1978 and post-1978 China. It should, however, not be forgotten that China is in a very dynamic period of transition and to be able to understand today's China it is necessary to comprehend the past. This is why a brief historical preview on most issues is given before the state of current affairs is discussed. Understanding the past is the key to understanding today's events.

3.3 The Method of Research

The main methods of research will be those of description, comparative analysis and logical conclusion. First the Chinese investment products and the markets they

are traded on are described, then they are compared with those in the West to get insight of their level of development and functionality after which conclusions of the functionality of these markets are formed. As no numerical empirical study will be performed the tools of econometric analysis are not available, although other studies may, of course, be referred to.

The study also gets features of an institutional analysis as many Chinese economic institutions, e.g. the stock exchanges, are described and analysed.

The variation in the level of detail in the course of the study is due to the lack of material on the subject and *not* the aim of the paper. Detailed information is available on some subjects, in the analysis of which it also is used, but other subjects have to be dealt with a very low level of information. Because of this some parts, especially in the first half of the paper, are closer to macro-economic analysis as others, especially in the latter part of the study, are analysed with the tools of micro-economics.

3.4 The Course of the Study

3.4.1 The Parts of the Study

Chapter 4 is the first part of the study which starts to search for answers for the research problems defined in chapter 3. Here the various forms of stock trading in the PRC are analysed and it is decided which parts of the total equity market is suitable for a FII.

Chapter 5 is based on the analysis of chapter 4. In this chapter the functionality of the PRC stock market available to a FII is examined.

Chapter 6 contains the conclusions that the study arrives at based on the information of the earlier chapters. All research problems and questions will be answered provided the information needed is available.

3.4.2 Problems with the Availability of Research Material

International literature and articles of domain are the major sources of information of this study. Due to language problems and the state of the Chinese statistical office, which according to western standards could even be called primitive, the use of original Chinese material is impossible. The scarcity of international material is also a problem. The best available research material and data is, of course, used but it is necessary not to forget the critical attitude towards the obtainable information.

As already mentioned in chapter 3.3, the lack of information on some subjects causes a variation in the level of detail in the method of research from macro to micro and vice versa. This variation is not a conscious choice but rather forced by the amount of information available and the reader is therefore kindly asked to keep this in mind while studying the paper.

In addition to literature and articles also brochures of various brokerage houses are used to obtain information on brokerage fees and the like. These sources of information must, of course, be treated with special scepticism as they are not produced objectively. Detailed facts, e.g. of brokerage commissions, are considered to be valid sources of information.

4. The China Equities Market

4.1 Chinese Stock Exchanges

This chapter covers the various, official and unofficial, stock markets in the PRC.

4.1.1 Official Stock Exchanges

The PRC's stock market consists of two official stock exchanges: the Shanghai Stock Exchange (SHSE) and the Shenzhen Stock Exchange (SZSE).

The SHSE officially opened on 19 December 1990, although it had been in existence since 1984 when a small number of shares and bonds were issued in Shanghai and Shenyang. The SZSE was established in 1987 on an experimental basis without formal approval. The SZSE began unofficial operations in December 1990 and received formal approval to operate on 3 July 1991, at which time it had 14 members and six listed companies.

Both exchanges have been authorised by the State Council to operate on an experimental basis. Both exchanges consider that they operate within a general framework of self-regulation and are viewed as powerful and influential economic structures. Non-PRC members have recently been admitted to both the SHSE and SZSE. Companies from other areas of China are now permitted to list on the SHSE and SZSE.

4.1.2 A Comparison of SHSE and SZSE

While the SZSE initially emerged as the more developed exchange, the SHSE has overtaken it in recent years¹. The SHSE had a central depository before the SZSE and expanded in membership at a much faster rate. The SHSE has also established satellite trading floors outside Shanghai, including one in Beijing, which now gives it more of a national network than the SZSE. On the other hand, the SZSE has established several information centres - for example in Guangzhou and Chengdu - and disseminates prices outside Shenzhen using VSAT satellite network. Both exchanges exclusively trade shares listed on their own exchange and thus no opportunity for arbitrage between the two markets exists.²

The rapid pace of development that the SHSE has enjoyed in contrast to the SZSE can be attributed to a variety of factors. As the companies listed on the SHSE are generally large, industrial companies, they tend to be more closely tied to the fundamental economic development of the domestic market, as opposed to the export-oriented companies in Shenzhen, which are more dependent on outside economic prosperity. Companies listed on the Stock Exchange of Hong Kong (SEHK) are more similar to those listed in Shenzhen, but have the advantage of more stringent reporting requirements and the listing on a more established exchange in a better regulated market. In other words, investors who are interested in investing in export companies are more comfortable with those listed on the SEHK than on the SZSE. If they want to invest in a company with exposure to China's domestic market, they look to Shanghai. Either way, Shenzhen is becoming increasingly overlooked³.

¹Heath 1995c, 86-87.

²Barham (et al) 1994, 3.

³Barham (et al) 1994, 29.

Trading has slowed in the PRC in 1993 and 1994 but the SZSE has seen a disproportionate decline. The geographic proximity of the SZSE and the SEHK also creates a unique situation that is accentuated by the reversion of Hong Kong to the PRC in 1997. There are two different views as to how the relationship between the two exchanges will evolve up to, and after, 1997. Some feel that the similarity in listed companies, nearness of the two exchanges and Hong Kong's pre-eminence do not bode well for Shenzhen. But, it is also envisioned that the two exchanges could successfully co-exist after 1997. One possible scenario would have the SZSE take on an almost "second board" status, listing smaller companies that do not meet Hong Kong's listing requirements.

4.1.3 Other Stock Exchanges

In light of the initial success and experience in Both Shanghai and Shenzhen, authorities in other cities such as Beijing, Chengdu, Shengyang, Tianjin and Guangzhou have been lobbying to establish their own securities exchanges. Hainan island started an exchange which was rapidly closed by the authorities because of its weak regulatory structure. In fact, unofficial stock trading centres exist in most large cities and this unofficial market is now believed to be larger than the official markets of Shanghai and Shenzhen¹, although no official statistics are available. The unofficial exchange in Chengdu was also curbed and the 42 companies there, which had issued tradable stock certificates, were ordered to convert them into non-tradable stock right holding certificates which. However, this has not deterred unofficial trading.

¹Barham (et al) 1994, 4.

Some of the cities wanting to open stock exchanges already operate bond trading centres which are within current regulations (e.g. Wuhan). The current draft of the proposed new, national Securities Law suggests that additional exchanges will be established. However, Ton Zengyin, Vice Chairman of the China Securities Regulatory Committee (CSRC), has publicly stated that a third exchange will not be established in near future. He does concede that the two existing do not adequately meet the demand and that another is needed in Northern China.

The number of exchanges is likely to depend on the technological developments put in place. In 1994 there existed 17 stock exchange centres with different statutes¹. From 1997, of course, the SEHK will be a PRC exchange. At the present time, a work group has been established to investigate possible areas where the SEHK and SZSE could co-operate. This initiative could pave the way for unification of the two exchanges after 1997 into one exchange to serve southern China.

4.1.4 Computerised Stock Markets

In addition to the two stock exchanges, there are two² computer based OTC markets for securities trading. The first of these is the Securities Trading Automated Quotations System (STAQS), which was developed by the Stock Exchange Executive Council (SEEC) and launched on 1 July 1992. It has been described as the Chinese version of the National Association of Securities Dealers Automated Quotation System (NASDAQ) adopted in the US. STAQS is based in Beijing and uses a telecommunications network which allows trading of securities as earlier attempts to establish a national electronic market were defeated by lack of telecommunications capacity. To date, trading on STAQS has been dominated

¹Pong 1995, 41.

²Barham (et al) 1994, 5.

by government debt instruments although some corporate bonds and legal person shares (referred to as C Shares, please see below) are also traded on this market.

The second of these OTC markets went live on 28 April 1993, and was established by the China Securities Trading System Corporation Ltd (CSTS). CSTS is owned by the People's Bank of China (PBC), four other big banks, the People's Insurance Company and three national securities companies. CSTS trading system is known as the National Electronic Trading System (NETS) and has been installed in the following cities: Beijing, Haikou, Guangzhou, Fuzhou, Zhanjiang, Shanghai, Shenzhen, Hangzhou, Zhuhai, Wenzhou, Chendu, Chungqing, Xian, Changsha, Hainan, Huaifang, Shaoguan and Xiamen. The system is used to trade securities which have already been issued in those cities and which are held by legal persons. NETS uses the PBC's VSAT technology and satellites to link up the six trading centres. CSTS has long-term plans to extend the system into a national trading system based on a satellite communications network.

4.2 Different Types of Shares

There are five different types of ordinary shares that can be classified as common stock by Western standards in the PRC at the moment. Preferred stocks exist but as they are in such an extremely small minority¹ and as foreign investors are not allowed to trade them they can be excluded from this study without causing any significant damage to its scientific credibility. Shares of interest to this paper are A Shares, B Shares, C Shares, H Shares and N Shares² which all are described below.

The largest category are **A shares** which are ordinary shares denominated in RMB that may only be subscribed by, and traded amongst, legal persons and individuals

¹Yi 1994, 265.

²Barham (et al) 1994, 11-13.

of the PRC. A Shares are listed on the SHSE and SZSE. The CSRC has recently suggested that it will permit non-PRC nationals to purchase A Shares through specially authorised funds, but no firm details have yet been issued and it is reported that the PBC does not support the idea at this stage. Nevertheless, the suggestion has resulted in a large number of foreign brokers submitting expressions of interest to the CRSC and therefore A shares are dealt with in this study although they are not directly available to FIIs.

Several companies which have issued A Shares have also issued **B shares** which have been in the market since 1991. B Shares, which are denominated in RMB, are equivalent to A Shares except that they are traded in foreign currencies and may only be subscribed by, and traded amongst, foreigners and residents of Hong Kong, Macau and Taiwan (The PRC does not officially regard residents of these three politically independent entities as foreigners). B Shares are traded in Hong Kong dollars in Shenzhen and in US dollars in Shanghai. The Chinese officials are now proposing that B Shares should be called domestically listed and foreign invested shares and that PRC nationals with access to foreign currency should be allowed to purchase B Shares as well as A Shares. In reality, PRC nationals have already been acquiring B Shares through overseas relatives and Hong Kong entities, so these new regulations would merely formalise and facilitate the current situation.

The CSRC have stated that they would like to remove the distinction between A and B Shares and thus permit PRC and non-PRC nationals to buy and sell both types of shares. Foreign ownership of any company's shares would be subject to a 35 % maximum limit. A merger of the A and B Shares is not really feasible until the yuan becomes a fully-convertible currency which is not very likely to occur before the year 2000.¹

¹Barham (et al) 1994, 12.

Due to much more intense speculation in the A Share market, A Shares in both Shanghai and Shenzhen usually trade at much higher P/E than their B Share counterparts. The gap has, however, been getting smaller, especially in Shenzhen where some B Shares are trading at a premium. It is estimated that B Shares in Shenzhen are trading at an average discount of 19 % on A Share prices. The corresponding figures for the shares in Shanghai is approximately 52 %.¹

In July 1993, a new category of shares was created, called **H Shares**. H Shares are the same as B Shares but are listed only on exchanges outside of the PRC, notably on the Stock Exchange of Hong Kong (SEHK) and the New York Stock Exchange (as ADRs). They may only be subscribed and traded amongst foreigners and residents of Hong Kong, Macau and Taiwan.

An additional category of shares not found in ordinary market economies have been issued by some companies to the state-owned enterprises which own the companies. Known as **C Shares** (or legal person shares), these shares may only be traded by state-owned enterprises, government institutions and state departments. Individuals are prohibited from holding C Shares. On the other hand, Chinese state institutions, enterprises and departments having legal person status are entitled to purchase natural person A Shares as well as C Shares. C Shares are mainly traded on the electronic STAQS and NETS markets (see above). New issues of C Shares have been banned since June 1993.

The official policy towards legal person shares has been under review. The main concerns about the market are that it is highly illiquid and the lack of trading allows little opportunity for capital appreciation. The effect is that firms with a large

¹Barham (et al) 1994, 16.

proportion of their capital structure in legal person shares are subject to higher costs of capital than if they had more A or B Shares. However, the lack of liquidity will remain unless the CSRC reverses its decision to ban the listing of new C Shares. At the time of writing, there are only 17 C Shares listed in the PRC (10 on STAQS and 7 on NETS), but 4000 joint stock companies have issued C Shares by way of private placement.

It has been suggested that C Shares should be converted into A Shares or B Shares. One apprehension about allowing the conversion of C Shares is that it will flood an already moribund securities market. At the same time, it is argued that if C Shares were allowed to be converted, the proceeds from the conversion could be used to purchase other classes of shares, and this would therefore add liquidity in the A and B Share markets. As a FII is not allowed to trade them they are of not of great interest to this study and are therefore only dealt with lightly. The case of Dazhong Taxi is presented below to give an illustration of how the conversion of C Shares into B Shares could take place *en masse*.

The issue of the conversion of legal person shares to B Shares became topical in 1994 when Dazhong Taxi expressed its intention to do so. Dazhong proceeded to convert 10 million legal person shares into 10 million B Shares. Shareholders stood to benefit the most as the holding of B Shares afforded them the possibility of appreciation (the trading inactivity on the C Shares market effectively ruled out this possibility) and it helped Dazhong to increase the liquidity of its B Shares. But even though the conversion was approved, officials are still somewhat apprehensive about approving conversion for all companies. Authorities cite the fact that the shares converted in Dazhong's case represented a very small amount of the overall shareholding structure of the company (7.9 %), implying the importance of maintaining state control. Nonetheless, Dazhong will now have foreigners holding 47.62 % of the shares compared with the 44.44 % held by the state. This foreign majority holding is a unique situation among PRC companies. One of the over-riding issues in this market has been official concern about allowing the transfer of state assets into public domain, i.e. shares, and perhaps more significantly foreign ownership.¹

¹Barham (et al) 1994, 13.

Finally, a new category of shares has been created called **N Shares**. These shares are unique as they are not initially listed on any exchange. Instead they are held by a local custodian and used to back up American Depository Securities/Shares (ADSs) listed on the New York Stock Exchange (NYSE) or traded over-the-counter (OTC) in New York in the form of American Depository Receipts. Each ADS represents 20 N Shares. Eventually, the company can opt to list the N Shares on domestic markets in the PRC at which point domestically-traded shares would become fungible with ADSs. The same regulations of subscription and trading of B and C Shares applies to N Shares. As this thesis concentrates on the geographical area of mainland China, N Shares are not analysed.

4.3 The Parts of the PRC Stock Market Feasible to a FII

In deciding which part of the PRC stock market this paper should focus on it is important to keep in mind the original perspective of the thesis, i.e. the viewpoint of a foreign institutional investor. A FII investing in a developing country will, of course, try to minimise the risks involved in trading in a high risk environment as China where rules and regulations may change in a very rapid pace. Investing only at officially acknowledged securities exchanges is the common policy of probably most institutional investors even in developed countries. It is therefore justified to claim that they should do this in a developing country as well. This rational would limit the focus of stock market functionality analysis of this paper to the two official stock exchanges, SHSE and SZSE. As the FII is also legally limited to B share trading at the official stock exchanges it is well-founded to concentrate on these markets.

Although investing in A shares is not legally possible to FIIs the A share markets in Shanghai and Shenzhen play an essential role in the PRC stock markets. As can be seen from table 4.1 below, the market capitalisation of A shares is more than tenfold that of B shares.

The amount of A-share companies available is also much higher than that of B-share companies. As at 30 June 1994, there were 164 A shares and 28 B shares traded on the SHSE and the respective figures for SZSE were 105 A shares and 22 B shares. As A shares form the vast majority of the official PRC stock market in the form of market capitalisation and the number of shares and as these markets move very closely together it is justified to claim that what affects the A share market will also at least to some extent affect the B

share market as well. Therefore, the A share market will also be examined where the use of information of the A share market is well-founded by its effect on the functionality of the B share market. This is most evident in the case of those companies that have issued both A and B shares.

Table 4.1

Market Capitalisation of the Official PRC Stock Exchanges 30th June 1994

| <u>Shanghai Stock Exchange</u> | |
|--------------------------------|---|
| A Shares | RMB 181 262 million (USD 20,9 billion) |
| B Shares | RMB 9 545 million (USD 1,1 billion) |

Shenzhen Stock Exchange

| | |
|----------|--|
| A Shares | RMB 78 109 million (USD 9 billion) |
| B Shares | RMB 6 674 million (USD 770 million) |

Source: Barham (et al), The Capital Guide to China's Securities Markets, 1994, page 3.

The main Chinese OTC markets defined as STAQS and NETS trading systems above are not studied as the only shares traded on them are C shares which FIIs are not allowed to trade and as these markets are highly illiquid and are of much lesser importance to the total PRC equities market than for instance the A share markets which are analysed in this paper.

H and N shares markets are not analysed as they are not within the geographical boundaries of this thesis as was described in chapter 3.2.1.

5. The Functionality of the Chinese B Share Market

In this chapter the functionality of the Chinese B share market will be studied. The parts of the A share market that influence the functionality of the B share market will be covered but only to the degree as they really affect the market available to foreign institutional investors.

The functionality of a financial market can be said to be one of the two essential parts of its lucrativeness, the other part being the available investment products themselves which are handled very briefly in this study if at all. With the functionality of a market it is in this paper understood the flexibility and ease of trading in the market. In this sense a well-functioning market is essential for an effective market price (the opposite not necessarily being true). This study concentrates on the functionality, *not* the efficiency of the market, which is beyond the scope of this paper.

The better-functioning a market is, the closer it is to a perfect market. The first requirement for a perfect market is a sufficiently high number of buyers and sellers so that no individual market agent can influence the market price, i.e. all market agents are price takers and the market price is determined where there is equality of supply and demand. The second requirement for a perfect market is that there exist no transaction costs or impediments that interfere with the supply and demand of the commodity. These impediments are generally referred to as frictions in the market and they result in buyers paying more and sellers receiving less than in the absence of these frictions. Below in table 5.1 is a list of possible causes of friction in a financial market.

To have a more theoretical approach to the analysis of the functionality of the PRC stock market the list below is included in the seven-part classification commonly used in modern financial market theory.

Table 5.1
Possible Causes of Friction in a Financial Market Place

- Commissions charged by brokers
- Bid-ask spreads charged by dealers
- Orders handling and clearance charges
- Taxes on capital gains and dividends and government imposed transfer fees
- Costs of acquiring information about the financial assets
- Trading restrictions, such as exchange-imposed restrictions on the size of a position in the financial asset that a buyer or seller may take
- Restrictions on markets makers
- Halts to trading that may be imposed by regulators where the financial asset is traded
- The lack of the possibility to sell short

Source: Fabozzi (et al), Foundations of Financial Markets and Institutions, 1994, page 311.

These seven sub-types of functionality are the depth and breadth, the trading volume and safety, fairness, liquidity and the transparency of the market¹. This classification is not perfect and not as well established as the theory of market efficiency but under the circumstances in which this thesis is written the above

¹DTB Deutsche Terminbörse, 1993, 17.

classification can be regarded valid enough. Some important features of a financial market, e.g. costs and taxes affecting trading and the possible profits derived from it, do not fall directly into any of these seven categories and are therefore treated separately after the seven sub-classes of functionality mentioned above. Thus, all possible causes of friction in a financial market listed in table 5.1 will be covered in the following analysis.

As an important note to the reader the author wants to emphasise that the variation in the level of details in this chapter is not a conscious choice but forced by the lack of available information. In the scope of this thesis all measures were taken to get as much information on the subjects as is in possible.

5.1 The Safety of the Chinese B Share Market

The safety of a financial market place can be described as the level of certainty with which a transaction once taken is without errors handled through the clearing and settlement system. Minimising default risk is thus an essential part of improving the safety of a market. The safety of a market is a very important factor for foreign investors planning on investing in emerging markets when they compare the lucrativeness to the risks involved in high risk markets. Because of the special importance of safety in emerging countries like China, where the regulatory framework may change dramatically in a short period of time, the issue of safety is covered before other parts of market functionality.

Below is a detailed comparative analysis of the trading, clearing and settlement systems of the two official Chinese stock exchanges and the Zurich Stock Exchange (ZSE) which has a modernised trading, clearing and settlement system

both for stock and bond trading. It is well justified to claim that Switzerland is among the safest, if not the safest, of financial centres. Thus, comparing the PRC stock exchanges to the ZSE is a very hard test.

First the trading systems of the exchanges are analysed, then the clearing and settlement systems. The following description of the trading, clearing and settlement systems at SHSE and SZSE are based on pages 16-26 of *The Capital Guide to China's Securities Markets* edited by Sarah Barham and Ian Hallsworth. This text is the most complete that the author could find. The information on the Zurich Stock Exchange is based on the pages 53-57 of the *Die Zürcher Börse* published by the stock exchange in 1995. When other sources than those mentioned above are used it is shown in the footnotes.

5.1.1 SHSE and SZSE Trading of B Shares Compared to ZSE

Main Frames of the Stock Exchanges

Trading in securities in the PRC is limited to members of the stock exchanges and only securities approved for trading by the People's Bank of China may be traded on the exchanges. Trading B Shares must be carried out through the securities institutions approved by the PBC. Investors outside the PRC must conduct the sale and purchase of B Shares through an overseas dealer approved by the PBC. Approved overseas dealers in turn instruct approved securities institutions actually effect the trades.

However, a new category of membership has just been created, with the establishment of special memberships to deal in B Shares or stocks denominated in

foreign currency. At the SHSE these special seats are available to foreign brokers, but have to be held in the name of a Shanghai broker nominee. These special memberships can send orders directly to their own traders on the trading floor of the SHSE. Overseas securities dealers must, when acting as overseas agents of domestic securities institutions, enter into agency agreements which should be submitted to PBC for approval. In August 1993, the SZSE admitted ten foreign brokers directly to the exchange as special members. Unlike the special seats in Shanghai the foreign broker holds the seat directly (but is not a full member with voting rights).

As is common in the world stock exchanges all trading on the SHSE and SZSE is restricted to authorised brokers. All off-market trading is prohibited. These main frains for trading are exactly the same as in the ZSE. The requirement of being a member of the stock exchange to be allowed to trade at the exchange is directly copied from established Western exchanges. The fact that the body governing the present and potential new stock market members in China is as high an authority as the PBC is only positive for the safety of the markets. In Switzerland the highest authority of the ZSE is at a Cantonal level¹, i.e. not at the federal or highest possible level as it is in China. Any possible critique on the level of safety of the PRC stock markets at the member level is thus directly related to the creditworthiness of the People's Bank of China. This, on the other hand, depends on the country risk. Assuming that the highest credit rating, used as a measure of risk, in a certain country is the level of the country risk itself, the level of safety of the members of the official stock exchanges in China is limited only by China's country risk level.

¹ Zürcher Börse, 1995, 34.

Trading

Before dealing on behalf of a client, an authorised broker must open a stock account for the client which is registered with the stock exchange in question.

The registration of accounts and trading of B Shares in Shanghai are governed primarily by the Supplementary Rules on Trading Market Operations (B Shares) of the Shanghai Stock Exchange, promulgated by the SHSE on 18 February 1992. The Shanghai Securities Central Clearing and Registration Corporation (SSCCRC) is the official clearing house for the SHSE and is responsible for the co-ordination and supervision of the registration of accounts, clearing, settlement, transfer and depository functions.

The registration of accounts and trading of B Shares in Shenzhen are governed primarily by the Operating Rules for the Trading and Clearing of B Shares of the Shenzhen Stock Exchange, promulgated by the SZSE on 31 January 1992. The Shenzhen Securities Registration Company Ltd (SZRC) is the official clearing house for the SZSE.

The structure of the clearing houses at the PRC exchanges does not differ from that of the ZSE.

The account opening can be arranged by any authorised B Share dealer. The account opening form includes detailed information on the investor, such as name, address, identity, nationality, contact telephone numbers, etc., for the purpose of registration. The clearing house then opens a *share depository account* in the name of the investor, who is assigned a unique account number, which must be quoted at the time of placing a buy or sell order. The investor may then instruct the stock

dealer or agent to buy and sell B Shares in person, by telephone, cable or correspondence, as previously agreed when opening the account.

The account opening process takes approximately two days. Foreign institutional investors have the special alternative option of opening an account via their custodian banks. The account opening procedure does not differ relevantly from that of the ZSE.

For a sell order, the investor must ensure that shares are in his account with the clearing house so that stock withdrawal can be made. Short selling is prohibited in the PRC. This is a major difference to most Western stock markets including the Zurich Stock Exchange. The non-existence of short selling cannot have a positive impact on the functionality of the stock market as it lowers the volume and liquidity of the market.

When an approved securities institution is given instructions to purchase B shares it determines whether a deposit is payable by the investor and, if so, how much it should be. Where an investor buys B shares through an approved overseas stock dealer, the stock dealer will determine whether a deposit is payable and, if so, how much.

Although trading is computerised, the SHSE want to retain their trading floors so that management and supervision is easier and the atmosphere of a traditional market is retained. In 1994, the SHSE opened a satellite trading floor in Beijing which is electronically linked to the trading floors in Shanghai. The “Beijing Stock Exchange Centre”, as it is called, is therefore a remote branch of the SHSE.

Trading on the SZSE is fully automated. Computerised orders are entered through terminals and are valid within the day. The input of orders starts half an hour before the opening of the centralised market. After the orders are accepted by the main computer, automatic matching occurs, starting from the opening of the market. The matching of orders is on a price-time-order priority basis. Both centralised bidding and continuous bidding are used. Centralised order matching is used for the opening and closing of the market. Continuous order matching is used when the opening price cannot be generated from centralised order matching.

The computerisation of the PRC stock markets has reached a high level as the markets are very new and the PRC invests a lot in the development of its financial centres. There are modern stock markets in the world that function with purely computerised trading, as is the case e.g. in Helsinki, and those that have both open-outcry as well as computerised trading as for instance the ZSE. It could possibly be said that the totally computerised version is safer as the hectic environment of an open-outcry session may cause more human errors. Both systems do, however, rely on computers for the clearing and settlement systems and computerised systems may collapse for technical reasons.

The SHSE is open Monday to Friday and has two trading sessions each day. The first session is from 9.39 am to 11.30 am and the second session is from 12.30 p.m. to 2.30 p.m. Opening prices for B Shares are established during a preliminary group trading session that takes place from 9 am to 9.25 am. Business days for B Share trading on the SHSE are those on which the SHSE, clearing agents in Shanghai and banks in New York are all open.

The SZSE is open for trading Monday to Friday and has two trading sessions each day. The first session is from 9.30 am to 11.30 am and the afternoon session is

from 1.30 p.m. to 3.30 p.m. The holiday schedule of the SZSE is the same as the general holiday schedule of the banking industry in the Shenzhen Municipality. Business days for B Share trading on the SZSE are those on which the SZSE and banks in Hong Kong are both open.

The trading days and hours of the PRC exchanges does not dramatically differ from those in the West although it is common for well-established stock markets, including the ZSE, to have only one trading session a day. The London commodities markets have a similar schedule to those of the Chinese markets so it cannot be said that the two-tier system would make a market less well-functioning.

5.1.2 The Clearing and Settlement System of B Shares

The clearing and settlement of B shares at the SHSE and SZSE is effected on T+3, i.e. trade date plus three days, as it is done at the ZSE as well.

In Shanghai, the SSCRC maintains a depository for B Shares and effects settlement on a book-entry basis. Full members of the SHSE may become primary clearing participants, and foreign agents and custodian banks can become ordinary clearing participants. Primary participants are required to deposit US\$ 100 000 into a Market Development Fund and US\$ 200 000 into the SSCRC's Risk Fund. Foreign agents and bank custodians are required to deposit US\$ 50 000 in the Risk Fund. Transactions between primary participants are settled on a net basis whilst transfers involving ordinary participants are processed on a trade-for-trade basis. In all confirmed trades, the SSCRC acts as the counter party and guarantees settlement.

Approved securities institutions and overseas agents must enter into B Share settlement agreements with an approved clearing and settlement bank. All B Share clearing and settlement agreements are submitted to the PBC for approval. A bank which acts as a B Share clearing and settlement bank on the SHSE must be a bank in Shanghai with a license to engage in foreign exchange business and have a high international reputation. The bank must also have considerable experience in international securities clearing and settlement and obtain the approval of the PBC.

In Shenzhen, the Shenzhen branch of the PBC (SZPBC) instructs banks approved by the relevant authority to handle the clearing of B Shares between an authorised stock dealer and an overseas agent. The dealer and the agent must open clearing accounts with these banks. All the clearing funds in connection with B Share transactions may be freely remitted into, and out of, the PRC. All B Share clearing agency agreements must be submitted to the relevant authority for approval.

From 28 June 1993, Shenzhen B Shares have been quoted in HK dollars. As HK dollars have also been used as the clearing currency, this means that, in practice, only one currency, the HK dollar is now used for the issue, trading and clearing of B Shares on the SZSE.

B Shares can only be transferred among overseas investors. Both the dealer and agent must report changes of ownership of the shares to the registry and go through the necessary formalities for a B Share transfer through the registry.

The SZRC operates a depository for B Shares and effects settlement in book-entry form. The participants' stock accounts are debited or credited on a trade-for-trade basis. A separate cash account of authorised members is maintained for settlement. Money positions are only generated when the corresponding stock position is

settled. The system therefore provides delivery-versus-payments. The actual money settlement, however, is through the clearing system of the Hong Kong Association of Banks.

In practice, the SZRC has appointed three foreign banks as its agents (the registration banks as its agents to maintain the book-entry accounts of brokers' and individuals' shareholdings of B Shares. Currently Citibank, Standard Chartered and the Hong Kong Bank are the only authorised registration banks. These three banks are working on the establishment of a central clearing house, as now exists in Shanghai. The SZSE plans to implement the central clearing house by the end of 1994. The registration banks notify the SZRC of the status of their accounts before 11 am on T+4 and the SZRC updates the register based on this information. The SZSE has improved the turnaround time for the trading system to T+1, but intra-day trading is not yet possible. The settlement period remains at T+3.

The details of the settlement process are as follows:

T+0 (Trade date):

On the day of execution, the local broker must issue an execution notice to its foreign agent. B shares are traded under the name of the ultimate beneficiary. Nominee arrangements are not recognised.

At the SZSE both brokers must send completed settlement instructions to the SZRC and investors should remit funds in favour of the broker to cover purchase.

At the SHSE the foreign broker confirms the order to the buyer no later than T+1. The SHSE notifies the SSCRC of all trade details and the SSCRC issues a settlement notification to the clearing participants after 4 m. As banks in New York do not open until after 6 p.m. (T+1, PRC and Hong Kong time), investors in the US do not remit the transaction amount to the foreign broker's account maintained with a correspondent bank in Shanghai until T+2. The seller does not have his proceeds deposited into the foreign broker's account with a correspondent bank until T+3.

On T+1:

At the SZSE the settlement instructions of brokers and confirmations of trades by the SZSE will be sent to the SZRC for reconciliation by 12 noon. The SZSE's records are considered to be free of errors, and are used to resolve any differences among brokers. The SZRC issues a "Provisional Clearing Statement" after 4 p.m. to confirm "locked-in" trades.

At the SHSE both local and foreign brokers send relevant instructions to the Shanghai branch of their correspondent bank. Clearing participants must conform the settlement details to the SSCRC by the 3 p.m. (custodian banks must confirm not later than 12 noon on T+2).

On T+2:

At the SZSE trading brokers must submit trade amendments before 4 p.m. The SZRC then issues a "Final Clearing Statement" by 6 p.m.

In Shanghai the SSCRC matches the confirmations and informs clearing participants of any mis-matches by 3 p.m. Once the settlement details are confirmed, the participants are responsible for settlement on T+3. Authorised foreign brokers remit purchase money (in US dollars) to their account maintained with the Shanghai branch of a correspondent via telegraphic transfer.

On T+3 (Settlement date):

At 9.30 p.m., the SZRC starts the automatic batch run to complete the clearing and settlement procedures. Cash accounts and share registration accounts are updated concurrently.

In Shanghai, all buying participants must deposit sufficient funds into the SSCRC's cash account with the Shanghai branch of a correspondent bank. Once the SSCRC has received the funds, it credits the buying participant's share deposit account and debits the selling participant's share deposit account. The SSCRC then instructs the correspondent bank to remit the funds to the selling participant at 3.30 p.m. In this way the SSCRC provides true delivery-against-payment and has removed the risk - which existed prior to April 1993 - that funds could be remitted to the seller before the relevant shares had been delivered.

Registration is achieved in book-entry form and becomes effective on T+3 in Shanghai as well as Shenzhen.

5.1.3 The Level of Safety Achieved in the B Share Market

Shanghai is determined to become a major financial centre and has thus invested very much in building the basic structures of a stock market. The clearing and

settlement system is almost identical with those of established western exchanges, including the ZSE, with the minor exception of the non-existence of crossing of non-member trades. The clearing house, SSCRC, is a well-functioning institution.

The fact that there exists no central clearing house in Shenzhen makes it differ from most established western exchanges including the ZSE. The settlement and clearing process, perhaps surprisingly, seems to work well. On very conservative standards the existence of one single institution that handles the clearing and settlement procedures may be better than a less integrated system as there are fewer things that may go wrong.

Based on a comparison of the trading, clearing and settlement systems of SHSE, SZSE and ZSE, it seems justified to say that the Chinese have managed to create an astonishingly solid basis for securities trading in only a few years.

The safety of the Chinese stock market, as far as the legal framework of institutions is concerned, can be defined as good even with high western standards. No reports of unsafety in the Chinese B share market has come to the author's knowledge. If there are any problems with the functionality in the Chinese stock markets it is at least not in the legal, institutional structure.

However, as it is commonly known, corruption is widely spread in the PRC and this may, undoubtedly, have an impact on any affairs related to finance as well as other forms of business. The legal structure of the institutions analysed in this paper is solid. It is not in the scope of this paper to judge the solidity of the PRC legal system as a whole but it is assumed that laws and regulations are complied with.

5.2 The Fairness of the Chinese B Share Market

In a fair financial market no participant, with the natural exception of the market maker or makers, has an advantage in ways of trading so that everyone faces the same odds of getting as good a price as possible. The fairness of the market is enhanced through scrupulous controls imposed by a neutral party, most commonly the governing body of the market place, to secure the correctness of all transactions. It regulates the market place and monitors the actions of all market participants. The two main ways to ensure the fairness of the market place are information obligations and intervention¹.

Listed companies should have strict information obligations and inform the stock exchange of all matters which may influence the pricing of their shares so that all parties concerned have identical access to all vital information about accounts, management, general meetings etc.

All trading should be monitored by the stock exchange and the exchange should intervene if any deviations from normal trading patterns occur. The exchange may place a security on an observation list which is a signal to investors that the determining of a price for the security must be undertaken with special care as there is uncertainty about the situation of the company concerned. The exchange may also suspend the trading of a share. The reason may be a sale of a controlling shareholding or merger negotiations or the like. Suspension may, of course, be the result of a request of the company itself.

Insider trading, i.e. trading of a stock on the basis of information not publicly known, should be expressly forbidden as it directly violates the fairness of the

¹ Copenhagen Stock Exchange 1994, 17.

market place. To prevent insider trading the listed companies should implement internal regulations defining strict rules for board members, employees and auditors of trading the company's shares.

5.2.1 Disclosure Standards

As most major international accounting firms already are in China, it could be thought to be reasonable to believe that the standard of information disclosure on Chinese B share companies should have improved to an acceptable level. This is not the case.

At the end of 1993 only 75 of the 183 listed mainland companies submitted acceptable annual reports for the financial year 1993¹. At the end of July 1994 14 companies had failed to submit a report at all and five submitted a copy of a newspaper clipping of financial reports. Obviously there is much room for improvement.

There is a chronic lack of qualified accountants in the PRC. According to one estimate there is a need for 300 000 certified public accountants but there are only approximately 11 000. The problem is emphasised by the fact that all companies have the same fiscal year-end.

B share companies are supposed to present both IAS and Chinese accounts, but one can hardly be too sceptical of the quality of these accounts at this point in time. The accounting standards do not themselves create that many difficulties but the idiosyncrasy of information is the main problem. There is no single way of asset valuation as there are no well-developed markets for companies' various assets.

¹ Barham (et al) 1994, 94.

Profit taxes seem to vary from company to company and the tax system in general seems to be operating by ad-hoc measures. The balance sheet impact of the shift from official exchange rates to the unified rate is still working its way through the accounts of most companies. The problems mentioned above are just a few examples of a much larger pool.¹

5.2.2 Insider Trading Regulation

The laws and regulations prohibiting all use of insider information in trading have been copied from the West and are of a very high standard². It is, however, very questionable how well the implementation of these laws and regulations is monitored. There have been many cases of insider information use by authorities and managers of state owned companies. The effects of corruption in the legal system on this side of market functionality are, of course, dramatic.

Shenzhen gained international notoriety in 1992 when pictures of the potential A share investors queuing in the streets, and later rioting, were flashed across international news networks. More recently, in 1994, Wan Ling, head of the Shenzhen Securities Commission, was arrested while trying to enter Hong Kong, reportedly on a dubious passport. This has reminded people of the numerous problems with corruption and questionable practices in Shenzhen and focuses more negative attention on the SZSE.

5.2.3 Conclusions On the Fairness of the B Share Market

Using the information above it can be said that the fairness of the market place is not among the strongest parts of total market functionality in the PRC stock

¹Moakes 1995, 53.

²Barham (et al) 1994, 83.

markets. As institutional investors traditionally require a high standard of company information and thus emphasise this part of market functionality very strongly, it is important to stress this weakness of the Chinese markets. From the perspective of this paper it seems justified to say that the Chinese markets fail the test of functionality at least on the point of market fairness.

5.3 The Transparency of the B Share Market

In a perfectly transparent financial market the market participants are able to observe not just the development of the market price but also the bid and ask sides with the relevant quantities as well as all trades taking place and other information essential for getting a clear picture of the market on real-time basis. In this context the different sources and the amount and quality of relevant information to traders in the Chinese stock market is analysed below.

5.3.1 Sources of Information

The internationally renowned financial information publishers Reuters and Dow Jones Telerate are active in the PRC. They buy the information from the stock exchanges, process it into a more feasible form and forward it to their customers in the same way as they do in any other country. This information forms the basis of the stock market transparency. These western companies most certainly do their best to ensure that their customers receive the information with as little delay and errors as possible. There is no direct reason, with the possible exception of corruption, for suspecting that the modern PRC stock exchanges would not do their part of the process as well as Reuters and Telerate.

The possible problems with market transparency in the Chinese markets, apart from corruption which this paper does not directly deal with, would therefore lie in the form in which the investors receive information if they are not customers of Reuters or Telerate or any similar high grade information provider. The most natural reason for this is the relatively high cost of computerised information versus information obtained through more traditional channels. Although most Western investors, especially institutional ones, can afford the best sources of information the overall lack of transparency in the Chinese market do influence the B share markets as well¹. Therefore other forms of information, including sources and indices, on the Chinese stock markets are covered below.

The SZSE and SHSE announce the total trading volume and trading prices of listed securities for each day to approved news media. Additionally, they approve a fax information service to paying subscribers. The South China Morning Post, The Asian Wall Street Journal and the Hong Kong Standard carry information on market developments in the PRC. Additionally, the SZSE has set up information centres for the public in cities such as Guangzhou and Chengdu.

Despite ambitions to establish itself as a top-class trading floor, Shanghai has been having problems with wild swings in stock prices often driven by market rumours. To counter the rampant rumours the Shanghai Securities administration issued regulations on the distribution of stock information, designed to stabilise the local market and protect the interests of investors. The authorities are especially concerned that the extreme sensitivity of the local market to government policies has made it easy for speculators to manipulate prices through spreading rumours. The new rules were directed at local news media who were told that they should keep their coverage of the stock market within the limits drawn by the authorities.

¹Margolis 1995, 29.

Other information service businesses are only allowed to distribute stock market information which have already been made public through legal channels. The regulations also ban securities publications from selling without authorisation and industry practitioners from making market analysis in public gatherings.¹

5.3.2 Indices On the PRC Stock Markets

Indices help investors to get a better perspective of a market as a whole and thus increase the level of transparency (although the lack of indices does not in such lower the level of market transparency). There are two composite indices to measure the price movement of stocks in Shanghai: the Shanghai Stock Exchange Index (SSEI) and the Jing An Index (JAI). The SSEI, starting at 100 on 19 December 1990, is based on the weighted market capitalisation of all issued shares of each listed company. The JAI, starting from November 1987, is calculated according to the average of daily prices weighted by the daily number of shares traded. Subsequently, the SHSE has broken down the composite index into an A share and a B share index.

The official market index is the Shenzhen Stock Exchange Index, starting at 100 on 6 April 1991, which is based on a weighted average of both A and B shares. Subsequently, the SZSE has broken the composite index into an A share and a B share index. There are plans to introduce a new index of SZSE stocks to provide a better indicator of market changes. This new index would be based on selected A and B shares that have a large number of shares in circulation and are traded actively to give a better view of market developments. The new index is not intended to abolish the old index.

¹Heath 1995b, 80.

To allow foreign investors to have a direct measurement of the performance of B shares Standard Chartered Securities provides a special B share index, which started at 100 on 28 February 1992 when China Southern Glass, the first B Share in Shenzhen, was listed. It is a market share weighted index based on the market capitalisation of all B Shares.

Credit Lyonnais Securities Asia (CLSA) has also introduced a comprehensive set of China stock price indices as follows:

- CLSA All China Index, which monitors the overall stock price movements in China, currently follows 55 listed shares. This index provides an overall picture of price fluctuations in China's equity market.
- CLSA China B Index, which is aimed directly at international investors. The index tracks B Share movements in both Shanghai and Shenzhen and thereby provides a measure for the consolidated B Share movements in China.

The Peregrine Greater China Index is also widely published. This has 84 components, including:

- all B Shares listed in Shanghai and Shenzhen;
- all H Shares listed in Hong Kong;
- companies listed in Hong Kong that have (or derive) at least 20 % of their sales, assets or earnings from China, and which have a market capitalisation of at least HK\$ 1 billion;
- all China Shares listed in New York.

As all of the indices mentioned above are weighted indices, either by market capitalisation or trading volume, they are formed according to industry standards,

as e.g. the Swiss index family of the Zurich Stock Exchange¹, and thus give a good overall picture of the PRC equities market.

5.3.3 Conclusions on the B Share Market Transparency

The western well-known sources and official Chinese suppliers of information provide as high quality of market information as can be demanded by Western standards to everyone who can afford it. The number of sources is not yet as high as in more developed market places which may cause higher prices but does probably not lower the quality of the information provided. The various indices of the PRC markets are of high standard. The strong restrictions on liberty of speech imposed by the authorities, on the other hand, make it necessary to regard the transparency in the markets as fairly low as free information flow is the essential part of market transparency. The Chinese still have a lot to improve on this part of market functionality.

5.4 The Volume in the Chinese Equities Markets

The volume of trading in a certain market is quite simply the transaction volume, i.e. the amount of securities changing ownership. The higher the volume is, ceteris paribus, the better will the market function. The level of volume is an essential part of market functionality² and it affects at least indirectly all other parts of market functionality.

¹ Schweizer Börse 1994, 9.

² Humphrey, 1994, 145.

5.4.1 Trading Levels

The level of trading volume in the Chinese stock market is very strongly affected by the two-tier system of A and B shares. Although SHSE claims that it has set a world record by trading over 520 000 transactions (all types of shares counted) in one day and with the single largest transaction of RMB 5.36 billion (USD 610 million)¹ the average trading volumes in the PRC stock market available to foreign institutional investors, i.e. B shares, are rather low.

The total trading volume of A and B shares has already reached a good level and is still growing rapidly. In 1994 monthly turnover at SHSE had averaged 553 billion yuan summing up to more than 6.6 trillion yuan on a yearly basis. Compared to a 1991 total volume of all types of share in both SHSE and SZSE of 6 billion², the growth in real trading volume has been immense as official inflation has not exceeded a yearly level of 10 during 1991-92. Although the officially announced inflation levels are to be viewed with great scepticism as many western economic research institutes see the true underlying inflation as much higher than the official figures it can nevertheless be said that growth has been very strong when nominal figures show an increase of 100 000 % and annual inflation during the period 1991-94 has most certainly been under 50 %. Shanghai has thus become one of the fastest growing of the emerging markets.

Combined volumes of A shares on the Shanghai and Shenzhen markets exceeded USD 1.5 billion per day on active days, the approximate equivalent of the average daily turnover on the London Stock Exchange³.

¹Barham et al 1995, 16.

²Yi 1994, 266.

³Margolis 1995, 27.

Unfortunately to FIIs who are restricted to B share trading, the B share volumes are much lower than those of A shares. In 1993, average daily turnover in Shanghai was RMB 888.27 million for A shares and only RMB 30.45 million for B shares, in Shenzhen the respective figures were RMB 486.33 million and RMB 10.44 million. In US dollars the B share trading levels were USD 3.47 million and USD 1.19 million respectively.¹ Converting these daily USD figures into yearly figures using a 250-trading-day year (52 weeks with each 5 trading days and subtracting 10 holiday days) gives the figures USD 867.5 million and USD 297.5 million for SHSE and SZSE respectively.

Compared to the leading stock exchanges in the world in table 5.2 these figures seem very small. The world leading stock exchange by volume of trading is the New York Stock Exchange with a turnover of more than 2 000 times that of SHSE. Even the small stock exchange of Helsinki in Finland outnumbers the volume of total B share trading in the PRC. The figures in table 5.2 date from 1992 but as the stock exchange volume has trended upwards in 1993 and 1994 the figures for 1993 would at least on the average be higher than those in table 1992. This, of course, would only make the difference between the PRC and the leading world exchanges larger.

Table 5.2

Turnover On Major Stock Exchanges in 1992

| Country Turnover | Exchange | Total Value of (Billions of USD) |
|---------------------|-------------------------------|-------------------------------------|
| United States | NYSE | 1 765.50 |
| Japan | Tokyo 1 st Section | 465.6 |
| Germany | All Exchanges | 428.6 |
| United Kingdom | London | 221.3 |

¹Barham (et al) 1994, 30.

| | | |
|-------------|----------------|-------|
| France | Paris | 124.5 |
| Canada | All Exchanges | 78.2 |
| Hong Kong | All Exchanges | 75.6 |
| Australia | All Exchanges | 45.5 |
| Netherlands | Amsterdam | 44.5 |
| Spain | Main Exchanges | 42.5 |
| Italy | Milano | 26.4 |
| Sweden | Stockholm | 21.5 |
| Denmark | Copenhagen | 18.9 |
| Singapore | Singapore | 17.2 |
| Norway | Oslo | 10.1 |
| Belgium | Brussels | 6.2 |
| Austria | Vienna | 4.9 |
| New Zealand | All Exchanges | 3.3 |
| Finland | Helsinki | 2.8 |

Source: Fabozzi (et al), Foundations of Financial Markets and Institutions, 1994, page 384.

B Shares listed on the SHSE are traded in board lots of 100 shares. Although these board lots have a nominal value of RMB 1 000 they are traded in US dollars. As the average price of Shanghai B shares on May 24th 1995 was as low as USD 0.37 (please see appendix 1) an average board lot has a dollar value of only USD 37. On this day the most expensive share on the SHSE had a price of USD 0.95 resulting in a minimum board lot value of USD 950 which is a very small investment in the perspective of a FII.

On 24th May 1995 the highest stock price in the SZSE was HKD 6.90 or less than USD 1 which together with the minimum B shares board lot of 2 000 shares results in a dollar value of less than USD 2000 per board lot. As the average nominal value was even lower or HKD 2.69 it is justified to say that the board lot restrictions have a minimal if any effect at all on the volume in the B share markets (please see appendix 2).

On normal busy days Shanghai processes 300 000 bargains a day and Shenzhen is recorded to have processed as many as 500 000¹.

5.4.2 New Listings Affecting Trading Volume

Developments in the B share market in 1994 have not been as positive as officials had hoped. Trading of B shares counters in both Shanghai and Shenzhen has slowed considerably and, at the end of July, indices had dropped 60 % and 50 %, respectively, from peak levels. But just as the A share market rallied following the new CSRC austerity measures, the B share market picked up ground as well, with the Shanghai B Share Index rising by 20 %, and the Shenzhen B Share Index by 10 %. The result is that many of the B share issues that had postponed listing in 1994 are now considering their position.

Although the main reason for many companies deciding to postpone listing is the low level of stock prices, the fall in volume in 1994 must have had at least some effect on the decision process. In an immature emerging market as the PRC there seems to exist a strong natural tendency for boom-and-bust mentality that invariably affects the trading volume as well as most other parts of market functionality.

5.4.3 Conclusions of the Levels of Volume

The B share markets in China have not reached a good, continuous trading volume. The reason for this may be the division between A and B shares or the immature nature of the total market common to other emerging markets. Whatever the reason, the lack of volume lowers the level of functionality of the market.

¹Margolis 1995, 29.

5.5 The Liquidity of the B Share Market

There is at present no uniformly accepted definition of market liquidity but a useful way to think of liquidity and its antonym illiquidity is in terms of how much sellers stand to lose if they wish to sell immediately as against engaging in a costly and time-consuming search¹. Another definition is that a market is liquid if no individual's action have a large effect on the prices of products traded on that market². Liquidity may depend not only on the financial asset but also on the quantity one wishes to trade. The easier it is to trade with as little an effect on the market price, the more liquid the market is. The more liquid a market is, the better it is functioning.

The separation of Chinese and foreign investors through the creation of A and B shares has had the effect of cutting international investors off from the very substantial natural liquidity that is provided by the large and enthusiastic investor base³. This can be seen as the principal reason for the chronic lack of liquidity in the B share markets.

The high volatility, i.e. the wild swings, in the Chinese stock market tend to affect the liquidity and the market seems to "dry up" between the big movements in prices. This leads to low interest from the part of many an institutional investor⁴.

In an effort to increase liquidity in the market, the Shanghai Stock Exchange changed the quotation increments, that is the smallest tick value, for B Shares from \$ 0.01 to \$ 0.0002 on 25th October 1993. This change was made to help alleviate

¹Fabozzi (et al) 1994, 184.

²Peck (et al) 1990, 363.

³Margolis 1995, 27.

⁴Standard Chartered Securities 1995, 93.

the problem of the low percentage of successful quotes (previously only 20 %). Nevertheless, the efforts in the B share market have not been sufficient and the low level of liquidity remains one of the greatest problems with stock market functionality in the PRC.

As there are very few sources of information on liquidity and depth in the PRC stock market in Europe the analysis of this paper must concentrate on other parts of market functionality

5.6 The Depth of the Chinese Stock Market

The depth of a market can be defined as how large a number of a certain security is given bid and ask orders within a certain spread. The higher the number and the smaller the spread, the deeper the market is. Depth is in this sense closely connected with the liquidity of the market (please see above) and as the author was unable to find any exact figures in written format in Finland or Germany the analysis of depth must heavily rely on that of liquidity and volume. In this way at a faint and very inaccurate picture of market depth can be produced. Market functionality seems to be weak on all the three following aspects: Volume, liquidity and depth.

5.7 The Breadth of the B Share Market

The breadth of the market is the amount of independent traders that actively take positions in the market. The more traders there are participating in trading for different reasons, the smoother is the development of the market price.

Speculators, or traders that actively take risky positions, have often completely different motives for trading than hedgers that seek to minimise risk and are thus often on different sides of a trade.

There is a huge retail investor base in the PRC just waiting to be tapped. There are 11 millions¹ domestic investors with registered accounts in the Shanghai and Shenzhen clearing and settlement systems. As a result of the economic boom in China, personal bank accounts have tripled over the past three years to more than RMB 1.2 trillion (USD 120 billion). Almost twice as much believed to be “hidden away under mattresses”. In addition, the savings ratio in some of the fastest growing provinces has reached 45 % of income. The ratio of gross domestic savings to GDP has traditionally been high in emerging markets. As can be seen from table 5.3 below the ratio between savings and GDP has been stabilised on a level of around 40 % in China during the last years. This is higher than in the newly industrialised countries Hong Kong, Taiwan and South Korea.

Table 5.3

Gross Domestic Savings (Percentage of GDP) of Selected Countries

| | 1990 | 1991 | 1992 | 1993 ² |
|-----------|------|------|------|-------------------|
| China | 40.1 | 38.9 | 40.3 | 40.0 |
| Hong Kong | 33.3 | 30.9 | 31.4 | 31.1 |
| S.Korea | 36.2 | 36.4 | 34.9 | 30.6 |
| Singapore | 45.1 | 45.8 | 47.2 | 44.7 |
| Taiwan | 27.9 | 27.8 | 26.7 | 26.8 |

Source: Balakrishnan 1993, 38.

¹Margolis 1995, 29.

² Estimates

Although foreign institutional investors are not allowed to invest in A shares the A share market does correlate very strongly with the B shares market¹. No matter what the reason for this strong positive correlation may be, it is clear that the two officially separated markets, i.e. A and B share markets, move closely together. Whether it is the A share market that influences the B share market or vice versa or whether the forces making the market move are the same for both markets is, of course, not irrelevant. For the focus of this study to analyse the functionality of the B share market available to the foreign institutional investors, however, it seems irrelevant which way the causality goes as long as the markets correlate. Because of this correlation it is wise to analyse both the A and B share market investors to get a good perspective of what kind of investors really form the PRC stock market.

An official survey² by the New China News Agency (NCNA) found that the majority of investors in the SHSE were small-time players with little experience. The survey found that 68 % of the investors were younger than 40; 6 % over 50 years old. In a similar survey conducted by the New York Stock Exchange in 1985 indicated that 31 % of the NYSE investors were older than 54 and 48 % older than 44³. This comparison draws the picture that the people actively participating in the new developments of the Chinese equity markets are rather young. About 90 % of the Chinese investors invested less than 50 000 yuan (about US\$ 5 000) each, and 26.49 % no more than 5 000 yuan (US\$ 500). At the NYSE 36 % of individual shareholders had a portfolio with a value higher than USD 10 000. Thus, when Chinese individual shareholders are compared to those in the USA the Chinese seem rather young and they participate with a smaller portfolio which, of course, is

¹ Margolis 1995, 27.

² Barham (et al) 1994, 69.

³ New York Stock Exchange 1995, 80.

completely understandable when the per capita incomes of the countries are compared.

The NCNA survey also found that many shareholders did not diversify in the kinds of securities they bought; 54 % of the investors did not hold any other securities than shares, and their shareholdings consisted only of one or two different stocks, making them highly vulnerable to price fluctuations. The survey would seem to indicate that the investors have little sense of the risks involved in investing in the stock market. Almost 78 % of the respondents claimed that they had never lost any money.

A number of overseas institutions have been swift to enter the B Share market in Shenzhen and Shanghai. Some of the early investors include Standard Chartered Securities, Jardine Fleming Holdings, Credit Lyonnais Securities (Asia) and SBCI Finance Asia. In addition, a number of institutions have been involved in establishing a series of China funds. By the end of May 1994, some 30 funds (mostly close-ended¹ and listed in Hong Kong, London, Luxembourg or New York) had raised over USD 1.7 billion. This sum is almost equal to the combined market capitalisation of B Shares in Shenzhen and Shanghai - around USD 1.9 billion. However, due to the exchange risk, and the difficulties involved in settlement and stock selection, a sizeable proportion of these funds are now only invested in certain Hong Kong-listed "Red Chip" stocks, or held as cash. As can be seen from table 5.4 below only a proportion of between 3 % and 46.1 % of total fund value was invested in listed B shares.

¹ Unlike mutual funds, closed-end funds sell shares like any other corporation but usually do not redeem their shares (Fabozzi (et al) 1994, 146).

So far as foreign investors are concerned, it is generally agreed that US and European investors have mainly targeted the Shanghai B Share market whilst Hong Kong investors represent around 80 % of the Shenzhen B Share market.

In the early stages US SEC Regulation 17(f)5 effectively barred US investors from investing clients' money in B Shares because there was no central B Share clearing mechanism in the PRC. However, on 26 April 1993, the US SEC gave its long-awaited "no-objection" ruling, enabling US institutional investors to buy B shares on the SHSE and SZSE on the basis that the depository and clearing systems on both exchanges had greatly improved (please see chapter 5.1.2).

Table 5.4
Selected Closed-End China Funds Active in the Chinese B Share Markets

| Fund | Issue Date | Size¹ | Portfolio Allocation |
|------------------------|-------------------|-------------------------|-------------------------------------|
| Cathay Investment Fund | Oct 1992 | 72 | Listed inv. 3.13%, unlisted 36.0 %. |
| China Assets Hldng | Apr 1992 | 74 | Listed inv. 3 %, unlisted 53.8 %. |
| China Investment Co. | May 1992 | 26.7 | Shanghai 6.2 %, Shenzhen 1.64 %. |
| China & Eastern Inv. | Nov 1995 | 70 ² | PRC listed companies 18 %. |
| China Fund Ltd | Apr 1992 | 46 | Shanghai 25 %, Shenzhen 20.7 %. |
| Chine Investissement | Aug 1992 | 10 | B shares 6.5 %. |
| HSBC China Fund Ltd. | Jun 1992 | 90.7 ³ | Shanghai 11.8 %, Shenzhen 3.3 %. |
| LGSC China Fund | Jul 1992 | 351 ³ | Shanghai 21 %, Shenzhen 9.3 %. |
| Shanghai Fund (Cayman) | Jul 1992 | 19.4 | Shanghai 29.7 %; Shenzhen 4.4 %. |

Source: Slade 1995, pages 62-63.

¹ In USD as 31/12/94 unless otherwise stated.

² As of 31/05/95.

³ Million HKD.

The combined breadth of both the A and B share markets would be very good indeed but as long as there is a strict division between A and B shares the investors in the market available to FIIs remain few and they are fairly homogenous as most are after high risk gains in the largest of emerging markets. The level of breadth can thus be described to be fairly low under the current circumstances.

5.8 Transaction Costs in the B Share Market

Transaction costs in the stock market affect the level of market functionality. The lower the costs, the better is the market functioning. To get a perspective of the level of the transaction costs in the Chinese stock markets it is wise to compare the Chinese costs to those in established stock markets, i.e. exchanges that already enjoy an international reputation of at least relatively well-functioning market places. Table 5.5. below gives us a picture of the costs related to buying and selling equities in the main national stock markets.

The effective transaction cost is calculated by dividing all transaction costs by the value of the trade. As most developed countries do not any longer levy taxes on stock transactions the transaction costs mentioned in table consist of brokerage commissions and possibly exchange fees, the latter of which tend to be rather rare nowadays.

As the figures listed are from 1992 and the rapid development in the fields of computerisation and telecommunications has lowered the need of human labour in the brokerage business the figures seem to be higher than the very latest figures. Discount brokerage houses offer execution-only accounts¹ with extremely low

¹ An execution-only account is a trade plan where the investor himself makes all trading decisions and the brokerage house only executes his orders.

brokerage commissions. E.g. with J&B Oxford Company, marketing itself very aggressively as the cheapest of discount brokerages, it is possible to trade US stock for USD 35 per order plus 3 cents per share on the entire order if it consists of more than 2000 shares¹. So buying or selling IBM shares for USD 500 000 through J&B Oxford Company would end up with only paying 0.037 %² in effective transaction costs! Comparing this figure with that in table 5.5 below shows how extremely low the transaction costs may fall if the market is large enough and the brokerage business uses the most modern technology.

In some developed countries stocks can be traded, also in very small amounts, over computer networks available to practically everyone with the know-how of using a normal personal computer. In the United States trading is possible over the internet. The London Stock Exchange has also released its version of computerised trading. In Germany buying and selling equities with a PC through the BTX computer network is much cheaper than mentioned in table 5.5. Trading shares worth approximately USD 500 000 would cost less than 0.3 % in effective transaction cost³.

Table 5.5

Effective Transaction Costs in National Stock Markets 1992⁴

| Country | Buy | Sell | Average |
|-----------|-------|-------|---------|
| Australia | 0.80% | 0.80% | 0.80% |
| Belgium | 0.70 | 0.70 | 0.70 |

¹ JB Oxford & Company, Discount Trading, 1995, 2.

² Buying or selling 5 000 IBM shares at a price of USD 100 per share (approximate average price in October 1995) would cost USD 35 plus USD 150 (USD 0.03 x 5 000). The total cost of USD 185 divided by the total trade value (USD 500 000) will give the effective transaction cost of 0.037 %.

³ ConSors Discount-Broker brochure, 1995, 10.

⁴ Transaction size assumed to be USD 500 000.

| | | | |
|----------------|------|------|------|
| Canada | 0.60 | 0.60 | 0.60 |
| France | 0.58 | 0.58 | 0.58 |
| Germany | 0.58 | 0.58 | 0.58 |
| Hong Kong | 1.07 | 1.07 | 1.07 |
| Italy | 0.72 | 0.72 | 0.72 |
| Japan | 0.45 | 1.00 | 0.73 |
| Netherlands | 0.40 | 0.40 | 0.40 |
| Singapore | 1.20 | 1.00 | 1.10 |
| Spain | 1.00 | 1.00 | 1.00 |
| Sweden | 1.36 | 1.36 | 1.36 |
| Switzerland | 0.55 | 0.55 | 0.55 |
| United Kingdom | 0.75 | 0.25 | 0.50 |
| United States | 0.20 | 0.20 | 0.20 |

Source: Fabozzi (et al), Foundations of Financial Markets and Institutions, 1994, page 385.

Although the figures in table 5.5 above are not quite up-to-date they do give us a picture of the level of and the differences in transaction costs in different developed countries. The costs are lowest in the USA, the Netherlands, the United Kingdom and Switzerland which all have established stock markets with a long history. The Anglo-Saxon countries have a long history of equities trading as equity financing has a long tradition and is more common than for instance in Germany where bank financing is more typical.

The figures in table 5.5 give us the possibility to analyse the level of transactions costs in the PRC by comparing them with those in Western countries. Below in table 5.6 are the direct costs that are linked to trading B shares at the Shanghai Stock Exchange:

Table 5.6

SHSE B Shares Trading Costs:

- Brokerage: 1.0 % of value of deal
- Stamp duty: 0.3 %
- SHSE charge: 0.3 %
- Transaction fee: 0.1 % (on par value) / exchange rate

Total 1.7 %

Source: Barham (et al) 1994, page 32.

The total direct dealing costs at the SHSE sum up to 1.7 % per trade. When compared to established market places this figure seems rather high. In none of the stock markets mentioned in table 5.5 above do the total effective costs for a trade of equities worth USD 500 000 rise above 1.36 % and in the largest financial centres the costs are even lower, e.g. in the United States they are as low as 0.20 % or even less of trade value.

The high costs in the PRC stock markets can be due to many factors. Firstly, stamp duty on official stock market trading has been removed in many industrialised countries. Secondly, price competition does not exist in the brokerage business in China as brokerage fees, i.e. commission, are non-negotiable. Brokerage commissions fell dramatically in the United States when competition was allowed.

Direct trading costs are not the only costs that are related to dealing in Chinese stocks. The Shanghai Securities Central Clearing and Registration Corporation fees that foreign investors have to pay are disclosed in table 5.7 below.

Table 5.7

SHSE B Shares Clearing Fees

(1) Investor registration account opening fee:

- Institutional investor: USD 110
- Change of agent or clearing participant USD 2

(2) Share registration fee:

- Subscription per registration:¹ USD 0.50
 - Share allotment fee:¹ same as above
 - Bonus shares fee:¹ same as above
 - Transfer fee: 0.1 % based in par value
-
- Non-trade related share transfer: USD 15 per transfer,
 - Non-trade related share transfer USD 30 per transfer

(3) Annual depository fee: USD 20 per registration number

(4) Clearing / settlement fee:

- Trade by foreign investor under custodian bank: USD 8 per transaction:
- Trade by foreign investor not under custodian bank: USD 4 per transaction:

(5) In/out remittance charge:

- Inward remittance: USD 8 per credit entry
- Outward remittance: USD 10 per remittance

(6) Monthly statement: USD 5 per registration number

Source: Barham (et al) 1994, page 32.

¹ Paid by the issuing company

Below in table 5.8 are the new B Share fees for Shenzhen, which came into effect on 12th September 1994:

Table 5.8
SZSE B Shares Trading and Clearing Fees

| | |
|----------------------------------|------------------------------------|
| • Brokerage ¹ | 0.4290 % per value of deal |
| • SSE levy | 0.0330 % |
| • SSC levy | 0.0110 % |
| • Registration fee | 0.0110 % |
| • Clearing fee | 0.0660 % |
| • Total | <u>0.5500 %</u> |
| Stock transfer - free of payment | HKD 100 flat |
| - against payment | 0.0660 % (Min. HKD 120/Max.HKD625) |
| Stamp duty | 0.3000 % |
| Safekeeping fee | 0.1500 % per annum |
| Fund transfer fee | 0.1000 % (Min HKD 100/Max.HKD 400) |

Source: Barham (et al) 1994, page 33.

It has been reported that the Shenzhen Securities Exchange Commission would soon issue a formal announcement to waive the registration fee for bonus issues and right issues, as well as the handling commission for odd-lot trades.

Comparing the trading costs of a FII in the PRC to those in well-developed markets, e.g. London and New York, one comes to two conclusions: The overall

¹ If a foreign broker gets a deal done through a local broker, the brokerage fee will be shared between them on a 4/3 basis (i.e. 4/7 will go to the foreign broker and 3/7 to the local broker).

costs are high and the structure of costs reminds more of that of futures than of stock markets.

Since the liberalisation of the brokerage industry in the USA in the 1970s institutional investors have been able to negotiate fees of less than 0.25 % of the value of the deal, i.e. much lower fees than those in the PRC. The lack of competition must be the main reason for the high fees as it is hard to imagine why costs in this branch should be higher than in the USA for instance.

The split structure of the costs resembles that of Western futures markets. Stock market trading in developed countries do usually not have any stamp duties or any other costs apart from brokerage fees but futures markets do.

The relatively high level of costs in trading stocks in the PRC is lowering the functionality of the market at least by weakening the breadth of it. The introduction of free competition in the brokerage service would very probably have a positive effect on market functionality through lower brokerage commissions.

As can be seen in the text above, the total costs are lower in Shenzhen. This may be due to a fall in demand for services of the exchange.

5.9 Taxes Affecting B Share Market Functionality

Capital gain and dividend taxes are analysed in this part of the study. Stamp duty and similar fees directly connected with trading shares in the PRC are examined in chapter 5.8.

Taxes on dividends and capital gains are one of the frictions mentioned in the list of possible market frictions in table 5.1. When an FII analyses potential investment prospects using modern portfolio theory it takes two main aspects into consideration, the risk and profit potential of the investment. The higher the risk, the higher must the possible profit be. As taxes on the possible profits, which here include both capital gain and dividend payments, lower the amount of the potential (positive) profit but do not lower the riskiness of the investment they make investments which are affected by higher taxes less lucrative in comparison to those affected by lower or no taxes at all. Empirical evidence show that cutting capital gain and dividend taxes increase stock market volume but raising them does not necessarily have the opposite effect¹. Capital gain and dividend taxes thus lower stock market functionality both through lower breadth, liquidity and volume.

Senior officials of the State Taxation Bureau in Beijing have stated that, for the time being, tax will not be levied on dividends, capital gains or other income derived from the ownership or transfer of B shares². Such statements should be treated with caution, as the policies, laws and regulations in respect of B shares are still in the experimental stage and as the implementation of Chinese law does not comply with Western standards³. There is no guarantee that tax will not be levied on such income in the future. At current Western tax levels, though, there could hardly be a better tax incentive to lock foreign investors to the PRC than *keeping* taxes at zero percent.

As there seems to be no guarantee that the capital gain and dividend taxes for B shares will remain at 0 % in the closest future and as it can be claimed that FIIs

¹ Henderson, 1990, 416.

²Barham (et al) 1994, 23.

³Ching, Frank 1995, 34.

usually prefer investing on a longer term, it is wise to make a comparison of the tax levels that prevailed the announcement of 0 % taxes and international tax levels.

In the Shanghai Municipality, foreign companies or individuals who are not residents of China for income tax purposes, who receive dividends from a Chinese company, or derive capital gains from the sale of shares in a Chinese company, are *normally*, that is before the announcement of 0 % taxes, subject to a withholding tax levied at a fixed rate of 20 %¹. This is reduced to 10 % in respect of such income derived from companies in Shanghai's Pudong district. However, dividends received by foreign investors in Sino-foreign equity joint ventures, co-operative joint ventures and wholly foreign-owned enterprises are exempt from this withholding tax.

In Shenzhen, dividend income from B shares is *normally* subject to a 10 % withholding tax for the portion exceeding the one-year deposit rate². Capital gains tax has not been levied.

Even if the statement of no capital gain and dividend taxes on income derived from B share trading was lifted the level of capital taxes in the PRC seem modest when compared to those in table 5.9 below.

The "normal" PRC levels of capital gain and dividend income taxes of 10 and 20 % in Shenzhen and Shanghai respectively seem low in comparison with industrialised countries. Even the United Kingdom with the lowest tax level of those in table 5.9 seems to put a heavy tax burden on investors when compared to the PRC. The USA, with a 40 % capital gain tax, must be able to attract international investors

¹Barham (et al) 1994, 23.

²Barham (et al) 1994, 27.

with something else than low tax levels. The total riskiness of the PRC capital market is, of course, one major reason for the low B share tax

Table 5.9
Capital and Dividend Income Taxes In Selected Industrialised Countries

| Country | Tax (%) |
|----------------|---------|
| United Kingdom | 25 |
| Ireland | 30 |
| Sweden | 30 |
| Switzerland | 35 |
| USA | 40 |

Source: Die Besten Steueroasen für Ihr Geld weltweit, 1994, 217.

level. At least what comes to the taxation of stock market income China seems to be dedicated to build its financial centres and attract foreign investors.

6. Conclusions

This chapter composes the results of the earlier chapters to conclusions of the level of market functionality of the Chinese stock market from a FII's perspective and gives some proposals on what could be done to improve it.

The level of safety on the two official PRC stock exchanges is high. The trading, clearing and settlement systems are almost directly copied from those of industrialised countries and are of a very good standard. Concentrating the clearing of the SZSE to one central clearing house would raise the level of safety even further.

Fairness is among the weakest parts of the functionality of the Chinese stock market. Disclosure standards are low and regulations are not followed. The quality of company information is not close to that of western standards and insider regulations are not always implemented. A lot has to be done on all of these subjects to improve the level of market fairness to a high standard.

There are good sources of stock market data in the PRC but that does not satisfy all criteria for good market transparency. The restrictions on the liberty of speech are striking and therefore the number of data providers is strictly controlled. The Chinese still have got a lot to improve on this subject.

The level of volume in the B share market available to foreign institutional investors is fairly low compared to the levels of volume in established stock markets in the industrialised world. The main reason for this is the division between A and B shares which should be abolished to raise volume levels to western standards.

There is too little information available within the scope of this study for a valid analysis of the level of liquidity and market depth and breadth of the PRC stock market. These parts of market functionality are, nevertheless, strongly affected by the level of volume in the B share market which is not the best possible. Therefore, it can be assumed that the level of market functionality on these parts is not the best possible.

Transaction costs are high in the B share market. This is due to the existence of stamp duties and numerous other fees as well as the lack of price competition in the brokerage business. Introducing competition would very probably lower commissions.

At the time of writing there are no capital gain or dividend taxes for B shares but this could change on short notice. The level of taxes that were valid before the current regulations came into effect was low relative to industrialised countries.

The functionality of the equity markets of China can be examined from different perspectives. If one wants to apply the hardest criteria for market functionality to the PRC and only accepts a positive or negative answer to the question of whether the stock markets are well-functioning or not, one is doomed to come to the conclusion that they are not. It is, though, wise to keep in mind that only a couple of years ago there were no official stock markets in the PRC at all. In this perspective China has succeeded in something that few would have believed was possible for a country with a socialistic political system. The Chinese stock market is still to be classified as an emerging market but as such it is very lucrative. The market is not functioning perfectly if analysed from a foreign institutional investor's perspective. With the current pace of economic reform, though, there is a good chance that the market could soon be a respected rival to the markets of other Asian emerging economies.

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Appendix 1

Shanghai B Share Prices on May 24th 1995

| Company | Closing Price in USD |
|---|----------------------|
| China Textile Machinery | 0.13 |
| Dajiang Group | 0.54 |
| Dazhong Taxi | 0.78 |
| First Pencil | 0.25 |
| Huaxin Cement | 0.266 |
| Jinjiang Tower | 0.338 |
| Jinqiao Export Processing Development Zone | 0.53 |
| Lian Hua Fiber Corp. | 0.31 |
| Outer Gaoqiao Free Trade Zone | 0.452 |
| Refrigerator Compressor | 0.358 |
| Shanghai Automation Instrument | 0.204 |
| Shanghai Chinese International Travel Service | 0.33 |
| Shanghai Chloride Alkaline Chemicals | 0.244 |
| Shanghai Diesel Engine Work | 0.61 |
| Shanghai Erfengii | 0.154 |
| Shanghai Forever Bicycle | 0.154 |
| Shanghai Friendship & Overseas Stores | 0.412 |
| Shanghai Goods & Material | 0.202 |
| Shanghai Haixin | 0.388 |
| Shanghai Hero Pen | 0.26 |
| Shanghai Industrial Sewing Machines | 0.198 |
| Shanghai Lujiazui Financial & Trade Zone Dev. | 0.702 |
| Shanghai Narcissus Electric Appliance | 0.25 |
| Shanghai New Asia Group | 0.396 |
| Shanghai Phoenix Bicycle | 0.24 |
| Shanghai Posts & Telecom. Equipment | 0.6 |
| Shanghai Rubber Belt | 0.12 |
| Shanghai Sanmao Textile | 0.27 |
| Shanghai Shangling Electric Appliances | 0.888 |
| Shanghai Steel Tube | 0.16 |
| Shanghai Tyre & Rubber | 0.298 |
| Shanghai Vacuum & Electric Devices | 0.226 |
| Wingsung Stationary | 0.21 |
| Yaohua Pilkington Glass | <u>0.948</u> |

Average Nominal Share Price: USD 0.37

Source: Eastern Express, Thursday, May 25th, 1995, page35.

Appendix 2

Shenzhen B Share Prices on May 24th 1995

| Company | Closing Price in HKD |
|--------------------------------------|----------------------|
| Benelex | 1.6 |
| China International Marine Container | 6.9 |
| China Mer Shekou | 4.2 |
| China Bicycle | 1.82 |
| China Vanke | 2.69 |
| Chiwan Wharf | 3.66 |
| Fiyta Holdings | 3.2 |
| Gintian Industry | 2.65 |
| Huafa Electric | 1.46 |
| Konka Electric | 3.7 |
| Lionda Holdings | 2.4 |
| Lizhu Pharmaceuticals | 3.7 |
| Petrochemical Industries | 2.4 |
| Shen Bao | 1.3 |
| Shenzhen Fang Zhi | 1.8 |
| Shenzhen Nansgan Power Station | 2.8 |
| Shenzhen Properties | 2.5 |
| Shenzhen Sez Real Estate | 2.3 |
| Shenzhen Zhongchu | 1.65 |
| Southern Glass | 5 |
| Tellus Machinery | 1.6 |
| Tsann Kuen Enterprises | 2.2 |
| Victory On Textiles | 1.6 |
| Yili Mineral Water | <u>1.5</u> |

Average Nominal Share Price: HKD 2.69

Source: Eastern Express, Thursday, May 25th, 1995, page35.