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# The Financial Markets of China

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<p>The purpose of this study was to examine and analyze the financial markets of China. The intention was to form a comprehensive picture of the current state and the latest developments of the markets. Specific attention was paid to the accessibility and opportunities offered to foreign participants in the markets. The study concentrates on mainland China, excluding Hong Kong and Macau.</p> <p>The research was conducted using qualitative methodology, by collecting data first and then analyzing it using financial market theories. The data was collected from various sources, including business news, academic journals, official websites, statistics databases and interviews. The analysis was based on different aspects of efficient markets; the allocative, operational and informational efficiencies.</p> <p>The results revealed that while the financial markets of China have a modern and quickly developing appearance, they are still far from being open and efficient. The most important limiting factor in the financial markets is the regulation of the foreign exchange market. The government also holds a strong control over all the other aspects of the markets as well. The access for foreign companies is currently restricted; only a limited number of licensed foreign institutions are allowed to operate with the local currency, and even then only within set quotas. The markets are, however, constantly developing. The foreign exchange is slowly opening up, presenting new investment opportunities for foreign investors in the future.</p>	
Keywords	China, financial markets, market efficiency, foreign exchange, government control

Tekijä(t) Otsikko	Timo Niemi Kiinan rahoitusmarkkinat
Sivumäärä Aika	56 sivua huhtikuu 2012
Tutkinto	tradenomi
Koulutusohjelma	liiketalous
Suuntautumisvaihtoehto	kansainvälinen liiketoiminta
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<p>Tämän opinnäytetyön tavoitteena oli tutkia ja analysoida Kiinan rahoitusmarkkinoita. Tarkoituksena oli luoda kokonaisvaltainen kuva markkinoiden nykytilanteesta ja viimeisimmistä käännteistä. Huomiota kiinnitettiin erityisesti ulkomaalaisten toimijoiden pääsyyn markkinoille ja markkinoiden heille tarjoamiin mahdollisuuksiin. Tutkimus keskittyi manner-Kiinaan, ja Hong Kong ja Macao rajattiin tutkimuksen ulkopuolelle.</p> <p>Tutkimus tehtiin käyttäen kvalitatiivisia metodeja. Työssä kerättiin ensin tietoa markkinoiden nykytilanteesta ja tulkittiin tätä rahoitusmarkkinoiden teorioilla. Tutkimusaineisto kerättiin useista eri lähteistä, joihin lukeutuivat talousuutiset, tieteelliset julkaisut, viralliset verkkosivustot, tilastotietokannat ja haastattelut. Analyysi perustui markkinoiden tehokkuuden eri osatekijöihin: allokointitehokkuuteen, operatiiviseen tehokkuuteen ja informaatiotehokkuuteen.</p> <p>Tulokset osoittivat Kiinan rahoitusmarkkinoiden modernin ja nopeasti kehittyvän ulkokuoren alla olevat puutteet. Markkinat eivät edelleenkään ole avoimet eivätkä tehokkaat. Ratkaisevin puute rahoitusmarkkinoilla on valuuttamarkkinoiden säännöstely. Valtion kontrolli on vahva valuuttamarkkinoiden lisäksi myös muilla rahoitusmarkkinoilla. Ulkomaalaisten yritysten pääsy markkinoille on tarkasti säädelty. Vain rajattu määrä ulkomaalaisia toimijoita saa käydä kauppaa maan valuutassa ja näidenkin kaupankäyntiä rajoitetaan kiintiöin. Markkinat kuitenkin kehittyvät edelleen ja Kiinan valuuttakauppaa ollaan vapauttamassa. Tämä tarjoaa entistä enemmän sijoitusmahdollisuuksia ulkomaalaisille yrityksille tulevaisuudessa.</p>	
Avainsanat	Kiina, rahoitusmarkkinat, markkinoiden tehokkuus, valuuttamarkkinat, valtion kontrolli

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## **1 Introduction**

### 1.1 Choosing the Topic

The subject for this thesis is the financial markets of China. Ending up with this topic was the result of a long process. My preference would have been to write the thesis based on an assignment given by a company, giving the thesis some real practical value. Unfortunately no suitable assignment was to be found and I had to pick the subject for myself. The choice was affected by both personal interests and professional ambitions.

I have been interested in Asian cultures for a long time. The cultural differences in language, arts and ways of thinking fascinate me. This personal interest combined with the strongly growing economies of the region has led me to specialize towards Asia as a business area in my studies. Therefore, I preferred to have a topic concerning the region and its economies.

Asia is a large region, whether measured geographically, by the population or by the economy. People's Republic of China, usually referred to just as China, stands out as a giant in all three aforementioned dimensions. From a professional point of view, its' economy is the most important factor. China's economic growth in recent decades has been considered phenomenal. Since its' economy begun to open in the late 1970s it has become the second largest economy in the world (The World Factbook. 2012).

Besides the economic importance, my decision to conduct a research on China was affected by my personal connections with the country. Having spent a semester in Sun-Yat Sen University in Guangzhou as an exchange student I had created connections with local students and university staff. Many of the students have since graduated and are now working in the financial sector. By using my personal relationship network, known as "guānxi" in Chinese, I could gain some insider information on the local business environment.

The financial aspect of the thesis was affected not only by my connections in China, but also by the ongoing events and employment. The European sovereign debt crisis

was dominating the headlines in the media at the time when I picked my topic, arousing my curiosity towards finances and financial institutions. Another affecting factor was my internship at a Finnish bank that I had just started.

Looking for a financial topic concerning China, I finally decided to conduct a general analysis of the current situation in the financial markets of China. I settled on a general analysis rather than a more specific examination of a particular aspect since the exotic location already narrowed down the general interest in the subject. I still wanted the thesis to have a practical aspect to it, and therefore decided to take the interests of foreign operators into special consideration.

The financial markets are a broad topic, so the final challenge was to narrow down the topic. First of all I decided to leave out Hong Kong and Macau since they have separate financial systems of their own; I would concentrate on mainland China. Secondly I would concentrate on the most important financial markets. Even with these limitations the amount of information available would be too much to handle in a single bachelor's thesis. Thus the thesis only concentrates on the most important aspects and recent reforms within the markets.

## 1.2 The Purpose of the Research

China's economy is still growing strong. It has shown considerable resilience against the global economic problems, but still faces many potential risks. The strong economic growth has also brought along a strong inflation. The weak domestic demand and large dollar reserves make the economy vulnerable to crises in the U.S. and European economies. (The World Factbook. 2012.) The stability of China's financial framework and banks has been under suspicion by outside observers (China Economic Outlook. 2012, 9).

The purpose of this thesis is to first of all to analyze the current state of the financial markets in China. The analysis will look into their development, how healthy and stable they are, and what sort of vulnerabilities and weaknesses there are. Weak and unstable markets are a risk to the economy and may cause a financial crisis within China. Undeveloped markets on the other hand may slow down the economic growth. The

analysis will also chart out the most recent developments and the future plans of development of the markets.

Secondly the thesis examines the markets from the point of view of foreign operators. Many are interested in gaining their share of the profits offered by China's strong economic growth. The analysis will examine the accessibility of different roles in the markets from the point of view of foreign companies. The different investment possibilities and their viability will also be studied.

### 1.3 Previous Studies

China's economic growth has been studied widely from numerous aspects. The financial sector is under the constant observation of investors and researchers alike. A great number of news, articles and research papers can be found published by business magazines and academic journals.

In 2007 Salih N. Neftci and Michelle Yuan Ménager-Xu co-authored a book with the title "China's Financial Markets". The book, used as one of the sources of the thesis, collected the writings of a number of professionals and experts within the different financial markets. Although the quality of the writing varies, the book provides a good source of information of the past developments in the markets. Although up to date at the time of publication, the markets have since developed considerably, making the book outdated.

Another good yet outdated source on the subject is "Banking in China" by Violaine Cousin, published likewise in 2007. The book offers a detailed and comprehensive look into the banking sector and money markets in China.

However much has happened in the financial markets since 2007. The late-2000s financial crisis and ensuing global recession has been followed by the European financial crisis still going on at the time of the writing of the thesis. The Chinese financial markets themselves have also continued to develop with numerous reforms and revisions of policy. More recent studies and research papers on the markets have been done since concentrating on singular aspects of the markets, but not a general overview.



The objective of this thesis is to build on the existing knowledge using the latest information and developments, creating a comprehensive overview of the current situation.

#### 1.4 Theory, Empiricism & Methods

In order to analyze financial markets we first need to define what the financial markets are and what is their purpose. These definitions can be learned from a great number of textbooks on finances and financial markets. Several of these were used to gather the information in order to ensure the validity of the information. Similarly multiple academic sources were chosen to provide the theory for the analysis of the markets.

The analysis of the markets is in large, generic scale. Because of the more generic nature of the research, a qualitative, exploratory method of research was adopted. The analyses of the markets are done by comparing the data from different sources with the theories of efficient markets and financial markets in general.

The research material for the analyses is collected from a great number of sources. The previous studies form the historical foundation, which is updated and expanded by more recent data. This data is collected from articles, online publications, academic journals, and official websites. Statistics are retrieved from databases specialized in Chinese financial and economic data. Further information gathering can be done through interviews with professionals working within the financial sector in China.

The credibility of the information gathered needs to be carefully considered. Information gathering in China is made difficult by the strong governmental control. The official figures are considered to be only "for reference" even by the top government officials in China (Kirby 2011, 29). The interviews are also very subjective, representing the opinions and experiences of individual persons. For better reliability, credible business and academic sources are favored. Information will be checked from multiple sources when possible.

#### 1.5 Research Questions

The objective of this thesis is to find answers to the following questions:

1. What are the financial markets of China?
2. How well do the markets function?
3. What kind of possibilities the markets offer to foreign participants?

The research questions can be further refined by follow-up questions: what financial markets exist in China, who are the participants in the markets, how are they controlled and supervised, do they fulfill their function, how accessible are they, and what risks are there.

To answer these questions the following theoretical concepts need to be defined:

- What are the financial markets?
- What is the purpose of the financial markets?
- How do you measure the efficiency of the markets?

## **2 Theoretical Framework**

### 2.1 Financial Markets

#### 2.1.1 Defining Financial Markets

A market is a place where buyers and sellers meet to exchange goods and services. The buyer wants or needs something the seller has in excess. The product is exchanged in a transaction in which the buyer gives something to the seller in exchange. In a barter economy this could be another good or service, but in a money economy it is money. (Sloman 2004, 15.)

In a free-market economy the prices of goods are determined by their supply and demand. If there is more of a good available than there is demand for it, there is a surplus of the good and the price will fall, as the sellers compete with each other in order to sell their goods. On the other hand, if the buyers are willing to purchase more of a good than there is available, there is a shortage and the prices will rise, as the buyers compete for the goods. (Sloman 2004, 40-41.)

Money provides liquidity to market transactions. The buyer might not necessarily have something the seller wants or needs, but with money the seller can go and buy what he or she wants from another seller. Money itself can be considered as a good. It is a good used to transfer value from one transaction to another, a medium of exchange. It can also be used to store wealth and it provides means of evaluation of the value of goods and services in terms of prices. (Sloman 2004, 330-331.)

Financial markets exist for transactions between those with surplus wealth and those who need funding (figure 1). Financial markets provide a place for allocating the funds efficiently from one party to another, provide information to help decision making and risk assessment, and provide liquidity for investors and methods of dispersing the risks. Financial institutions acting as intermediaries provide services which make the financial markets more easily accessible by the average investor or business in need of funding. (Knüpfer & Puttonen 2009, 49-51.)

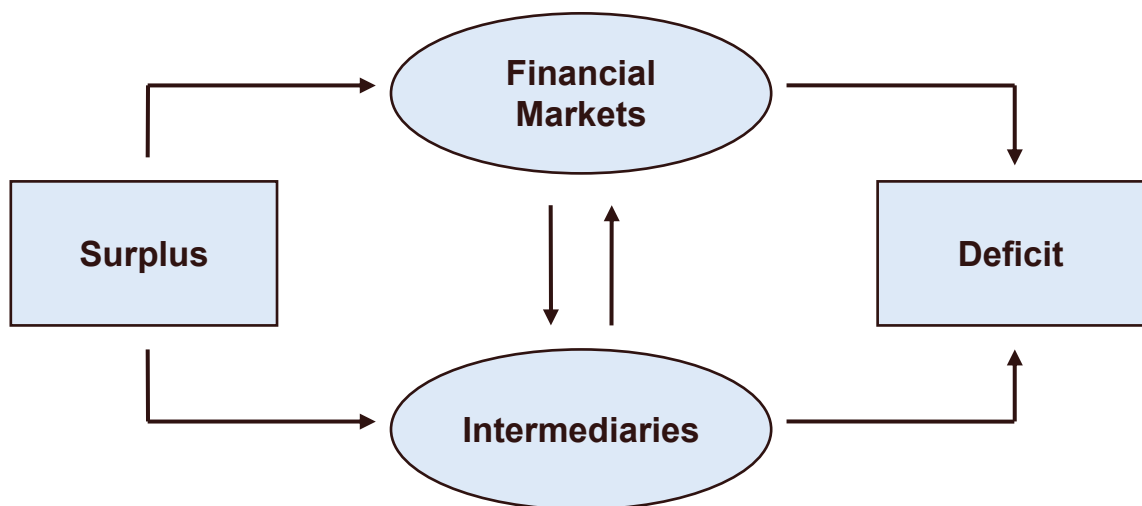


Figure 1. The role of financial markets in the economy (Knüpfer et al. 2009, 49).

The surplus side comprises of various entities both natural and legal, who have managed to acquire surplus funds and wish to lend them out for profit. These include ordinary households with savings, enterprises with more profits than they can invest in their own operations and possibly even governments and governmental organizations. The biggest borrowers on the deficit side are businesses and governments who are in need of additional finances, but also households who want to finance purchases of items or real estate that they cannot afford. (Mishkin & Eakins 2003, 16.)

The 'good' traded in financial markets is wealth, in different forms. The price for the good is its increase in value for the lender – it is more beneficial to lend the money than hold on to it (Mishkin et al. 2003, 17). This may be an interest paid for the sum borrowed by the borrower, an increase in the value of a security received in return for the capital invested or some other value increasing factor, such as a change in the exchange rates of different currencies etc. Most investments carry a risk, which is usually reflected in the expected profits of the investment. Higher risk investments provide higher profits. This difference is the risk premium for the investment. (Knüpfer et al. 2009, 134.)

Efficient financial markets ensure that the capital resources are allocated where they are best utilized (Knüpfer et al. 2009, 51). In free-market economy the limited resources are put to an optimal use, maximizing economic growth and benefiting the economy as a whole. However, few markets are perfectly free. (Sloman 2004, 43-44.)

### 2.1.2 Types of Financial Markets

Financial markets can be classified in many ways. Markets could be divided by how the trading is conducted, physically on location or through modern telecommunication devices. Division could also be made based on whether the markets are open all the time or limited to trading only during certain hours. Often it is useful to divide the market based on whether it is the primary market, i.e. the initial public offer of a security, or the secondary market, that is, the aftermarket for the subsequent trade of the securities. (Blake 2000, 20-22.)

For the purposes of this thesis, however, a division was chosen based on the categories used by most of the literature on financial markets and the actual legislative and physical divisions within Chinese markets. The financial markets are divided into money markets, bond market, equity markets, foreign exchange market (forex), futures and derivatives markets and finally a collection of contractual investment markets, including mortgages, insurances and investment funds.

The money, bond and equities markets are usually considered as the most important financial markets in most countries. The money markets supply short term funding in large quantities (Mishkin et al. 2003, 215-216). The bond market similarly supplies long term funding (Mishkin et al. 2003, 245). Both of these provide securities which represent the debt and are tradable in the secondary market. Equities market deals with shares of stock in company ownerships, which may entitle the owners to dividends of their profits (Mishkin et al. 2003, 258).

Foreign exchange market handles the trade between different currencies. In order to conduct business between different countries with different currencies, there usually has to be some kind of exchange between the currencies. (Mishkin et al. 2003, 313.) The central government of China has traditionally had a strong control over its own currency. China's considerable U.S. dollar reserves are also often a feature in the economic news. The analysis will have a look at how tightly the Chinese renminbi is controlled today and whether China's membership in World Trade Organization has had any effect in loosening the control.

Future and derivative markets transfer risks (Knüpfer et al. 2009, 207). They are based on market instruments that are used when dealing with securities or foreign currencies. While the mechanics and tools vary, the concept behind them is usually the same: a party in the market wants to minimize risks and receive a predictable compensation for a future transaction. Different instruments are used to transfer the risk to another party, who may either profit or make a loss. (Knüpfer et al. 2009, 215-217.) The products in these markets are more complex and the analysis won't go deep into their details, but an overall view on the current situation in these markets in China will be presented.

In addition to the major financial markets, an overview will be taken on smaller markets such as mortgages, insurances and funds markets. Many experts fear that China may be facing a real estate price bubble, therefore mortgage markets are of particular interest.

### 2.1.3 Participants in Financial Markets

Besides the different financial markets, it is important to chart out and analyze the different participants in the markets. These can be divided to the previously mentioned three different categories: the lenders, the borrowers and the intermediaries. In addition to these there is another group of organizations that is important to the markets – the regulatory bodies and institutions controlling the markets and their rules.

The lenders are the ones with the surplus wealth that they want to invest. Their motivation is often seeking profit, but the safety of the investment can also be a decisive factor. Participants in this group include ordinary households with savings, businesses with more income than they can spend in their own operations, governments and nationally owned enterprises etc (Mishkin et al. 2003, 17). While entities such as pension and investment funds are much larger in scale, the combined savings of the households is nevertheless an important source of funding. While analyzing the financial markets of China, it is important to find out not only what kind of participants are providing the wealth for lending, but also whether they are domestic or foreign in origin.

The borrowers need financing, creating the demand in financial markets. Most of the demand comes from enterprises that need funds to expand their operations and governments with funding deficits, but consumer credit, mortgages and other loans for households also contribute to the demand (Mishkin et al. 2003, 17). It is easy to assume that the strong economic growth of China creates a demand as the enterprises wish to expand. The increasing demand for real estate and housing also requires a lot of capital. The analysis should also resolve whether the financial markets of China are open and a realistic choice for foreign participants seeking financing.

The intermediaries are the service providers of the financial markets. They make the markets more easily accessible to participants of different scales and different funding periods. An intermediary such as a bank can collect the deposits of a large number of households and pay an interest to the savings, while lending this money in a larger amount to an enterprise seeking to expand. The intermediaries include depository institutions, contractual savings institutions and investment intermediaries. Examples of these could be banks, insurance companies and mutual funds, respectively. (Mishkin et al. 2003, 26-29.) The analysis examines the current intermediaries in the markets and also whether this category is open to foreign operators or not.

Financial markets, like all markets, have laws, rules and regulations to control them. Financial markets are vital to the economy and therefore it is important to keep them stable. Safety and legal safeguards also make it safer for the lenders to invest their funds in the markets, increasing the supply in the markets. Governmental control in China is known to be tight in many matters. An important part of the analysis is in finding out what sort of rules and regulations there are regarding the financial markets in China and which governmental bodies are responsible to upkeep them.

## 2.2 Analyzing the Markets

### 2.2.1 Efficiency

The efficiency of financial markets has been a subject of study for a great number of researchers and analysts. So far there has not been a single unified theory that would gain the support of most professionals of financial analysis. Arguably the most successful theory so far is the Efficient Market Hypothesis, which however has also received strong criticism.

David Blake introduces three different elements of efficiency in his book "Financial Market Analysis". These are allocative efficiency, operational efficiency and informational efficiency. When a market is efficient in all three categories, he defines the market as perfectly efficient. (Blake 2000, 389.)

In order for a market to be allocatively efficient, the highest bidder should be the one who receives the resource. (Blake 2000, 389.) Allocative efficiency is one of the cornerstones of a free market. Without allocative efficiency the market prices will not be decided by supply and demand. This would mean that certain parties in the market are favored to others, which in turn encourage the unprivileged parties to seek other markets where they are treated more fairly. It would also undermine one of the key purposes of financial markets, which is to put the resources in optimal use.

Operational efficiency refers to transaction costs and whether they are a barrier to free trade or not. In an optimally operationally efficient market there would be no transaction costs at all, allowing for free exchange of goods. However, in the real world the

people, who operate the markets, maintaining their infrastructure and offering services, require compensation. Blake settles for an operationally efficient market where the transaction prices are "determined competitively", so that there are no excessive costs or monopolies. (Blake 2000, 389.)

Often it is assumed that financial markets are more or less allocatively and operationally efficient, and the attention focuses on their informational efficiency. A market is considered informationally efficient if it "instantaneously and fully reflects all relevant available information" in its prices (Blake 2000, 389). This concept was introduced as the Efficient Market Hypothesis (EMH) by Eugene Fama in his Ph.D. thesis in the early 1960s. EMH presumes that financial markets are informationally efficient. Further studies have divided the hypothesis into three categories, known as information sets, depending on the quality of the available information. (Blake 2000, 390-392.)

In weak-form information set, the prices reflect only the price histories of the securities. In such markets a technical analysis on the price history is useless. Semi-strong-form information set contains all information on historical profits and all publicly available information on the securities. Analyzing financial statements provides no benefit in such a market since the information is public. The final set is the strong-form information set, which includes all information, both public and inner circle. In such a market inner circle information would be of no value and insider traders would have no advantage over the market. (Knüpfer et al. 2009, 165.) Such a market is only theoretical speculation and impossible in practice.

The evidence supporting the efficient market hypothesis is conflicting. Several studies have seemed to support the fact that the prices in securities markets reflect at least the weak-form and semi-strong-form information sets (Blake 2000, 394-398). However, similarly many researchers have pointed out that the markets have phenomena that break the rules of the EMH (Blake 2000, 398-400). The overall result seems to be, that most markets are informationally efficient, but they are not perfectly efficient (Knüpfer et al. 2009, 176).

This thesis does not concentrate on the theory and mechanics of measuring informational efficiency. The important thing is to analyze the efficiency of the Chinese finan-



cial markets. This can be done by collecting information and doing comparison with other financial markets around the world.

For allocative efficiency it is important to find out whether there are any first priority buyers or whether the markets follow the normal free market rules and the highest bidder is the one receiving the resource. For operational efficiency it is important to know who are operating and controlling the actual infrastructure of the market. The markets should also be checked for any excessively expensive transaction costs, limiting the operational efficiency.

The most challenging part is in evaluating the informational efficiency of the markets. There is no generic tool or theory to be used to measure the efficiency of a whole market as such. Therefore it is difficult to find a final and conclusive answer to the informational efficiency of the financial markets of China, but this is not necessary for the purposes of this analysis. It should be possible to make a reasonable estimate by collecting information from multiple sources, compiling it and comparing the Chinese markets to their international counterparts.

### 2.2.2 Liquidity

Many financial markets can be divided into primary and secondary markets. The primary market is the initial release of a security or a similar financial instrument. The secondary market is the aftermarket where these are subsequently traded. The purpose of the secondary market is to provide liquidity to the investors. This encourages more investors to invest in the first place, since they have a way of liquefying their assets, should it be necessary. (Blake 2000, 21-22.)

The liquidity of the secondary markets needs to be taken into consideration while analyzing the financial markets of China. The liquidity can be partially linked to the operational efficiency of the markets, since high transaction costs discourage smaller trades. Liquidity is also affected by accessibility of the markets – easier access means more people trading, which consequently means that there are more potential buyers and sellers.

In order to analyze the liquidity of the markets, information needs to be gathered on the restrictions to trade, transaction costs and the activeness of the market. These can be learned from official market regulations, first hand experiences from interviews and statistics on trade activity. These in turn can be compared to similar markets elsewhere in the world.

### 2.2.3 Accessibility

Accessibility of the financial markets of China is strongly linked to their operational efficiency and liquidity. It is worth noting separately though because of the thesis' objective of finding out the possibilities the markets have to offer to foreign investors and companies. The central government in China holds a tight control over the nation, including its financial sector. The economy in general started to open in the late seventies, but the financial markets have really started to develop only since the Security Law of 1999 and WTO membership in 2001 (Neftci & Ménager-Xu 2007, 2-7).

For this analysis it is important to find out both the official and unofficial barriers of entry for foreign companies in the financial markets of China. Though WTO membership has opened many markets and activities to foreign operators, many still remain closed or strictly regulated. In addition to the official laws and regulations there are also various practical difficulties, ranging from linguistic difficulties to cultural customs, which raise the threshold for foreign companies to enter the markets. All these need to be handled for the analysis to be complete.

## 2.3 Definitions

Various concepts and definitions are used in the thesis which may be less familiar to the reader. The purpose of this subchapter is familiarizing the reader to them.

The currency of China is referred to with many names: yuan, renminbi, RMB, and CNY (Neftci et al. 2007, 113). The name of the currency in Chinese is *rénmínbì*, meaning literally "people's currency". Yuan is the primary unit of the currency and therefore often used to refer to it. RMB is the abbreviation of renminbi, while CNY is the cur-

rency's official ISO 4217 code (ISO 4217). All names are used interchangeably in the literature on Chinese finances and economics.

While examining the banks in China, the Basel III international regulatory framework is mentioned. Basel III was created by the Basel Committee on Banking Supervision, a cooperative committee of central banks around the world (History of the Basel Committee and its Membership. 2011). The objectives of Basel III is to improve the shock absorption capabilities of the banking sector, their risk management and governance, and their transparency (International regulatory framework for banks (Basel III). 2011).

The framework sets minimum levels of capital adequacy to the banks in order to provide an adequate buffer of capital to protect against credit risks. Capital adequacy ratio (CAR) is one of the tools used to measure the capital adequacy. CAR evaluates the total capital in relation to the weighed risks of the financial institution. Core capital adequacy ratio (CCAR) does the same using only "tier one capital", which includes the equity capital of the bank and disclosed reserves. (Capital Adequacy Framework (Standardised Approach). 2010, 4-6 & 11.)

A part of the money markets is the repo market. Repo is a repurchase agreement, in which one party sells a security to another with the promise of repurchasing it back at a later date (Blake 2000, 170). The security therefore serves as collateral to the amount of cash paid by the repo buyer, and the difference in selling and repurchasing prices form the interest of the "loan".

While observing the stock markets, the concept of P/E ratio is used. P/E ratio, also known as price-to-earnings ratio, measures the market value of a company to its profits. Different values are used for appraising and forecasting different things, but most commonly the P/E ratio is calculated by dividing the company's market capitalization with its total annual earnings. High P/E value shows that the markets believe the company has potential for growth, or is a low risk investment. (Martikainen & Martikainen 2006, 134-137.) P/E ratio is not an accurate tool and mainly evaluates the market appreciation of companies. In this study the P/E ratios used are the average values for listed companies, used to study the differences in appreciations of different shares.

### **3 The Financial Markets of China**

#### 3.1 Financial Institutions

##### 3.1.1 People's Bank of China

People's Bank of China (PBC) serves as the central bank in China. It was established on December 1, 1948 by joining three commercial banks: Huabei Bank, Beihai Bank and Xibei Farmer Bank (Neftci et al. 2007, 68). For several decades it continued serving as a commercial bank while also functioning as the government treasury and supervising the financial system in China (Cousin 2007, 21).

Along with the economic reforms that begun in the late 1970s, the commercial banking functions were transferred to four state-owned banks while the PBC's role as a supervisory body and the central bank was being reinforced by the State Council (Cousin 2007, 4). The status however was not officially confirmed until the new banking law was passed on March 18, 1995. Further reforms in 2003 separated the supervisory responsibilities from the PBC to separate committees, leaving it with the roles of the central bank and state treasury. (Neftci et al. 2007, 69.)

As the central bank and state treasury, PBC is responsible for the monetary policy of China, the issuing and administrating of renminbi, regulating the interbank markets, administering the foreign exchange market, controlling the gold reserves and various other functions to monitor, gather information from and control the fund flows (Neftci et al. 2007, 69). It is important to note though, that the PBC is not independent from the state. It reports to the State Council and needs its approval for any important decisions or policies to implement. (Cousin 2007, 21-22.)

People's Bank of China influences the financial markets with different instruments. It sets the minimum reserve requirements for the commercial banks operating in China. It also sets the benchmark interest rates. In the past it affected interest rates more directly with the Chibor, the China Interbank Offered Rate, but this has since been replaced by Shibor, the Shanghai Interbank Offered Rate, which is arithmetically calculated (Neftci et al. 2007, 47; Leung & Lu 2011, 289). It can and often has intervened in the financial markets directly through rediscounting, re-lending and intervening in the

open markets. (Cousin 2007, 22-23.) One of the most important influences PBC has is over the exchange rate of renminbi, which has been closely tied to the U.S. dollar (Neftci et al. 2007, 117).

### 3.1.2 Regulatory Bodies

In China the financial sector is divided into three segments, which are banking, securities, and insurance. China has three regulatory commissions to monitor and control these segments. These are the China Banking Regulatory Commission (CBRC), China Securities Regulatory Commission (CSRC) and China Insurance Regulatory Commission (CIRC). (Neftci et al. 2007, 197-198.)

CBRC regulates the banking sector in China. Its responsibilities were originally carried out by the People's Bank of China, until the reform of 2003 (Neftci et al. 2007, 69). CBRC grants the licenses for financial intermediaries to operate, defines the rules and regulations for their supervision and conducts the supervision and resolves any bank crises and high risk situations in the banking system. It operates independently from the PBC under the control of the State Council. (Cousin 2007, 23.)

CSRC and CIRC were created in 1998, following the Asian financial crisis of 1997 (Laurenceson & Chai 2003, 19). CSRC was originally the executive arm of the State Council Securities Committee. The latter was terminated and its functions were transferred to the CSRC. (Neftci et al. 2007, 32.) Both commissions, like CBRC, are under the direct control of the State Council.

The responsibilities of CSRC include the supervision and regulation of China's securities and futures markets. It draws and carries out the principles, policies and rules related to these markets. (Neftci et al. 2007, 198-199.) CIRC carries out similar tasks regarding the insurance companies (Neftci et al. 2007, 350).

While each of the three regulatory commissions has its own segment of responsibility, they often overlap. This creates some confusion among conglomerates which have subsidiaries operating in multiple segments, since the laws and regulations may vary. Each company follows the rules of the commission that its core business falls under.

(Neftci et al. 2007, 361-363.) What this means in practice is, that two companies that might be operating in same markets and offering similar services as part of their portfolio might have to follow different sets of regulation.

It should be underlined that these commissions, being in charge of both regulation and supervision, have both the legislative and executive powers (Neftci et al. 2007, 197-199). This comes as a contrast to the separation of powers usually seen in developed economies.

Another important regulatory body in the Chinese financial markets is the State Administration of Foreign Exchange. It operates under the People's Bank of China and manages the currency reserves and the exchange rate of renminbi. (Cousin 2007, 27.) Foreign exchange is still strongly regulated and SAFE handles all the bureaucracy involved (Neftci et al. 2007, 113-114). Like the regulatory commissions, SAFE both sets and supervises the regulations under its jurisdiction.

### 3.1.3 State-Owned Banks

China has four large state-owned commercial banks: the Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB), Bank of China (BoC) and Agricultural Bank of China (ABC) (Cousin 2007, 121). These are often referred to as the "big four". Out of these, Bank of China has been ranked by the Financial Stability Board (FSB) as one of the globally important financial institutions (Policy Measures to Address Systematically Important Financial Institutions. 2011, 4). These are institutions that the FSB considers to be too important for the global financial transaction system to be allowed to fail.

The four banks started out as specialized banks in sectors reflecting their names, but have since become more generic commercial banks serving customers in all sectors. Originally wholly owned by the state, they have since become joint stock commercial banks with part of the stocks traded in stock exchanges. Regardless of this, they still remain under the control of the state and the senior management is largely politically appointed. (Cousin 2007, 121-124; China finance: Financial regulators are reshuffled.

2011.) The last one of the four to get listed was the ABC, which listed on the Shanghai and Hong Kong stock exchanges in 2010 (2010 Annual Report, Profile).

The years of planned economy and politically directed lending to state-owned enterprises left the banks with a considerable amount of non-performing loans (NPL). In order to clean up the bank's balance sheets of these loans before the public offerings, the government established four asset management companies in 1999: Cinda, Huarong, China Orient, and Great Wall. The non-performing loans were sold to these companies in multiple phases between 1999 and 2006. The face values of the NPLs sold was a total of CNY 1.88 trillion. (Asmild & Matthews 2012.)

The task of the asset management companies is to manage the non-performing assets through debt collection, asset leasing, transferring and restructuring. Cinda Asset Management was the first one to become listed in Shanghai Stock Exchange and Huarong is expected to follow its example next (China Huarong Asset Management Eyeing Initial Public Offering 2011).

Table 1. State-owned commercial banks – key figures (CSMAR Solution. 2012).

in million RMB	ABC			BoC		
	2006	2008	2010	2006	2008	2010
Total assets	5,343,943	7,014,351	10,337,406	5,325,273	6,955,694	10,459,865
Total loans	3,102,309	3,014,984	4,788,008	2,337,513	3,189,652	5,537,765
Non-performing loans	n.a.	134,067	100,405	98,220	87,490	62,470
Total customer deposits	4,730,372	5,989,706	8,719,603	3,949,572	4,925,352	7,539,153
Net interest income	72,060	193,845	242,152	120,707	162,936	193,962
Net profit	5,807	51,453	94,907	41,892	65,073	109,691
Loan/deposit ratio (%)	65.58	50.34	54.91	59.18	64.76	73.45
NPL ratio (%)	23.43	4.32	2.03	4.04	2.65	1.10
CCAR (%)	n.a.	8.04	9.75	11.44	10.81	10.09

in million RMB	CCB			ICBC		
	2006	2008	2010	2006	2008	2010
Total assets	5,448,511	7,555,452	10,810,317	7,509,118	9,757,654	13,458,622
Total loans	2,795,196	3,683,575	5,526,026	3,533,978	4,436,011	6,623,372
Non-performing loans	94,399	83,882	64,712	137,745	104,482	73,241
Total customer deposits	4,721,256	6,375,915	9,075,369	6,248,049	8,223,446	11,145,557
Net interest income	140,368	224,920	251,500	163,118	263,037	303,749
Net profit	46,319	92,642	135,031	48,719	111,151	166,025
Loan/deposit ratio (%)	59.20	57.77	60.89	56.56	53.94	59.43
NPL ratio (%)	3.29	2.21	1.14	3.79	2.29	1.08
CCAR (%)	9.92	10.17	10.40	12.23	10.75	9.97

Today the four banks are among the largest globally. Their figures appear good (table 1). Their loans to deposit ratios show that they can still afford to lend more. Their core capital adequacy ratios (CCAR) are on healthy levels, some even close to their Basel III CAR minimum requirement of 11.5% (Chan 2011a). Most of the NPLs still remain within their asset management companies though, which causes concern about China's financial stability.

### 3.1.4 Other Banks

In addition to the big four state-owned banks, a number of joint-stock commercial banks, city commercial banks and various credit cooperatives exist in China. The most important of these are the joint-stock banks, made possible by the economic reforms in the late 1980s. The joint-stock structure means that part of the capital is held by the state, either directly or indirectly. (Cousin 2007, 130.)

Table 2. Selected joint-stock commercial banks – key figures (CSMAR Solution. 2012).

in million RMB	Bank of Communications			China Merchants Bank		
	2006	2008	2010	2006	2008	2010
Total assets	1,719,483	2,678,255	3,951,593	934,102	1,571,797	2,402,507
Total loans	910,307	1,298,776	2,190,490	549,420	852,754	1,402,160
Non-performing loans	18,034	25,460	24,988	12,006	9,677	9,686
Total customer deposits	1,420,331	1,674,173	2,588,404	773,757	1,250,648	1,897,178
Net interest income	39,803	65,636	84,995	21,508	46,885	57,076
Net profit	12,269	28,520	39,172	7,107	20,946	25,769
Loan/deposit ratio (%)	64.09	77.58	84.63	71.01	68.18	73.91
NPL ratio (%)	2.01	1.92	1.12	2.12	1.11	0.68
CCAR (%)	8.52	9.54	9.37	9.58	6.56	8.04

in million RMB	CITIC Industrial Bank			China Minsheng Banking Corp.		
	2007*	2008	2010	2006	2008	2010
Total assets	1,011,236	1,187,837	2,081,314	700,449	1,054,350	1,823,737
Total loans	565,866	651,352	1,246,026	441,030	646,475	1,037,723
Non-performing loans	8,492	10,157	8,533	5,597	7,921	7,339
Total customer deposits	779,215	935,408	1,730,816	583,315	785,786	1,416,939
Net interest income	26,170	36,091	48,135	16,170	30,380	45,873
Net profit	8,290	13,320	21,779	3,831	7,893	17,688
Loan/deposit ratio (%)	72.62	69.63	71.99	75.61	82.27	73.24
NPL ratio (%)	1.48	1.36	0.67	1.23	1.20	0.69
CCAR (%)	13.14	12.32	8.45	4.35	6.60	8.07

\* Data unavailable from 2006



Due to their later establishment the joint-stock banks haven't suffered as much from politically dictated loans as the big four and have therefore better asset quality in general. On the other hand, they do not enjoy the guarantee by the state that the state-owned banks have and they are more strictly regulated. (Cousin 2007, 130.) As can be seen from the table 2, the NPL ratios of the joint-stock commercial banks are considerably lower than among the state-owned banks. Their core capital adequacy ratios are however lower than those of the state-owned banks, far from their Basel III CAR requirement of 10.5 percent (Chan 2011a). The joint-stock banks are also only a fraction of the size of the state-owned banks.

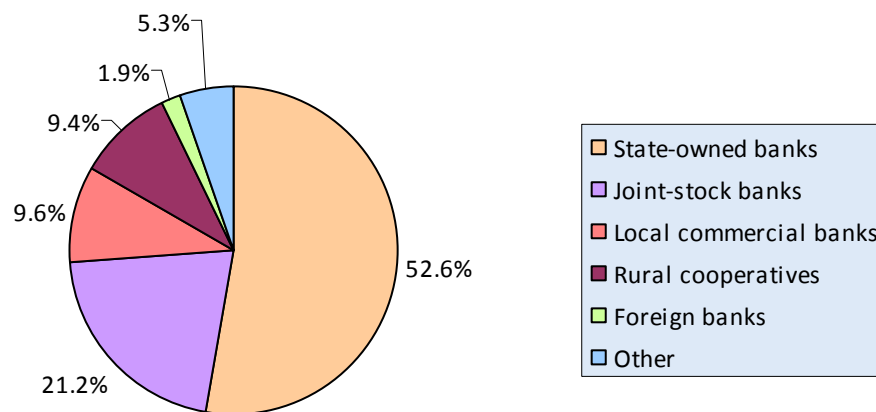


Figure 2. Division of assets in the banking sector in China in 2009 (Almanac of China's Finance and Banking, 2010).

Majority of the banking sector in China is under state control. The pie chart above shows the percentages of assets held by different banks out of the total assets within the banking sector (figure 2). The big four control over half of the assets in the markets. Local commercial banks include city commercial banks and rural commercial banks, although the latter are much fewer in numbers, often replaced by rural credit cooperatives. The other section comprises of the Postal Savings Bank and various finance companies and urban credit cooperatives. (Almanac of China's Finance and Banking, 2010.)

Some exceptions to the state control however exist. China Minsheng Banking Corporation (CMBC) is a joint-stock commercial bank established by non-public, non-state enterprises in 1996. First of its kind, it had its initial public offering in Hong Kong Exchanges in 2009. With the funds gained from its IPO it has expanded strongly. (About CMBC. 2012.) Other privately held banks in China are mainly city commercial banks, smaller in size and operating locally.

The operations of foreign financial institutions in China have been strongly limited. Many still entered the country and established offices once the reforms started in the late 1970s. The initial purpose of their presence was mainly to support their corporate customers operating in China, but the subsequent reforms have allowed them to expand their services. (Cousin 2007, 146-147.) Although the geographic and operating currency restrictions have been lifted from the foreign banks, they still have restrictions to the volumes of their business (Public Notice of the CBRC. 2007). Most recent financial sector reforms have concentrated on the capital markets rather than the banking sector.

## 3.2 Financial Markets

### 3.2.1 Money Markets

The purpose of money markets is to provide short-term (less than a year's time) funding. They are wholesale markets where the transactions are generally done in large scale. Firms and financial institutions often encounter situations where their long-term funding plans do not match their cash flows. Money markets offer them an opportunity to either short-term borrowing for a sudden need or to invest in short-term instead of keeping the funds idle. (Mishkin et al. 2003, 215-217.) The Chinese money markets are divided into four submarkets: the interbank lending market, the repo market, the bond market, and the bills market (Neftci et al. 2007, 41).

Interbank markets refer literally to the markets between different banks. Most of the money market trading in China is done in the interbank markets, although some of it takes place in the Shanghai and Shenzhen stock exchanges (Neftci et al. 2007, 42-43). The interbank markets are regulated by the People's Bank of China and organized by

its sub-institution, the China Foreign Exchange Trade System. The markets are often referred to as the Shanghai interbank market since the CFETS headquarters is located in Shanghai. (About CFETS – Brief Introduction. 2010.)

Table 3. Members of the Shanghai interbank market (About CFETS – Members. 2012).

<b>Property of Institution</b>	<b>RMB Market</b>	<b>Interbank Lending Market</b>
State-owned commercial bank	40	35
Joint-stock commercial bank	79	76
Urban commercial bank	146	114
Policy bank	3	3
Foreign-funded bank	75	70
Rural commercial bank and cooperative bank	147	92
Fund	818	
Fund management company	61	
Rural credit co-operative	439	239
Trust & investment company	54	39
Financial leasing company	13	12
Financial company	79	77
Insurance company	102	7
Securities company	107	74
Asset management company	5	1
Investment company	1	
Auto financing company	6	6
Urban credit co-operative	4	2
Social security fund	68	
Corporate pension	777	
Financial products of trust company	402	
Insurance products of insurance company	34	
Other investment products	11	
Rural bank	1	
Asset management subsidiary of insurance company	11	2
Asset management business of particular customers of fund management company	316	
Portfolio management business of securities company	222	
Oversea institution	42	2
Others	4	2

The table 3 above shows the number of members in the interbank RMB market and lending market divided into categories as various financial institutions. The RMB market comprises all the interbank markets, including the interbank lending market. Majority of the RMB market members are in the capital markets. The lending market is unsurprisingly dominated by banking institutions, but also includes some insurance and securities companies. While foreign-funded banks appear on the list, it should be remembered that their operations in the market are limited by volume (see 3.1.4). The

repo and bonds markets, existing also in the stock exchanges, are much more open and also have many foreign institutions as members. (About CFETS – Members. 2012.)

The interbank markets, especially the interbank lending market, were quite underdeveloped until the recent years. The interbank lending system was formed in the 1980s. It was reformed into its modern computerized form in 1996, but was still limited and primitive compared to the markets today. (Neftci et al. 2007, 45-48.) The money market derivatives, such as interest rate and cross-currency swaps, only started to appear around years 2005-2006 but have been developing at a steady pace (Neftci et al. 2007, 269-270; CFETS Products – Derivative Market. 2012).

Table 4. Trading volumes in the interbank money markets, categorized by maturity (The People's Bank of China – Statistics. 2012).

<b>Interbank Lending Market Trading</b>													<i>unit: 100 million CNY</i>
<b>Year</b>	<b>1d</b>	<b>7d</b>	<b>14d</b>	<b>20d</b>	<b>30d</b>	<b>60d</b>	<b>90d</b>	<b>120d</b>	<b>6m</b>	<b>9m</b>	<b>12m</b>	<b>Total</b>	
<b>2007</b>	80,305	21,780	2,736	502	342	346	316	72	50	3	15	<b>106,466</b>	
<b>2008</b>	106,514	35,005	4,744	1,107	1,135	445	666	185	292	213	185	<b>150,492</b>	
<b>2009</b>	161,666	21,348	5,978	1,022	2,048	538	710	62	97	13	23	<b>193,505</b>	
<b>2010</b>	244,862	24,269	5,061	650	1,613	466	1,340	198	185	30	10	<b>278,684</b>	

<b>Treasury Bonds Repurchase Trading</b>													<i>unit: 100 million CNY</i>
<b>Year</b>	<b>1d</b>	<b>7d</b>	<b>14d</b>	<b>20d</b>	<b>30d</b>	<b>60d</b>	<b>90d</b>	<b>120d</b>	<b>6m</b>	<b>9m</b>	<b>12m</b>	<b>Total</b>	
<b>2007</b>	229,985	158,416	38,464	5,913	4,932	1,513	907	143	138	21	239	<b>440,672</b>	
<b>2008</b>	360,051	150,263	36,413	7,173	7,350	1,086	1,046	133	155	77	82	<b>563,830</b>	
<b>2009</b>	526,452	104,013	32,745	6,566	4,200	1,015	1,360	284	181	31	160	<b>677,007</b>	
<b>2010</b>	676,983	120,619	29,016	5,331	8,735	2,852	1,913	392	550	84	58	<b>846,533</b>	

Majority of the trading today happens in short, overnight and 7 day maturities (table 4). Due to the less strict entry to the repo markets, the volumes in repo are noticeably larger than in the lending market. In the past the longer maturity periods were more popular than today, as the money markets were used as a substitute to lacking capital market instruments. Short-term loans were used for long-term purposes. (Neftci et al. 2007, 47-48 & 89-90.) Reforms in the securities markets have fixed this and the money markets are now better dedicated to their role as a source of short-term funding and a tool for managing bank reserves.

The common interest rates at the money markets are the Shanghai Interbank Offered Rate, or Shibor, and the repo rate, for lending and repo markets respectively. Shibor is arithmetically calculated from the price quotations of 16 commercial banks (About Shi-

bor. 2012). Before the introduction of Shibor in 2007, the China Interbank Offered Rate, Chibor, was used instead (Leung et al. 2011, 289). The repo rates follow closely the Shibor rates, with a slight premium added to them, as can be seen from the figure 3 below. The difference between the rates has decreased since the repo markets were expanded from the interbank market to the stock exchanges as well, but it still allows companies operating in both markets to make a profit (Neftci et al. 2007, 79).

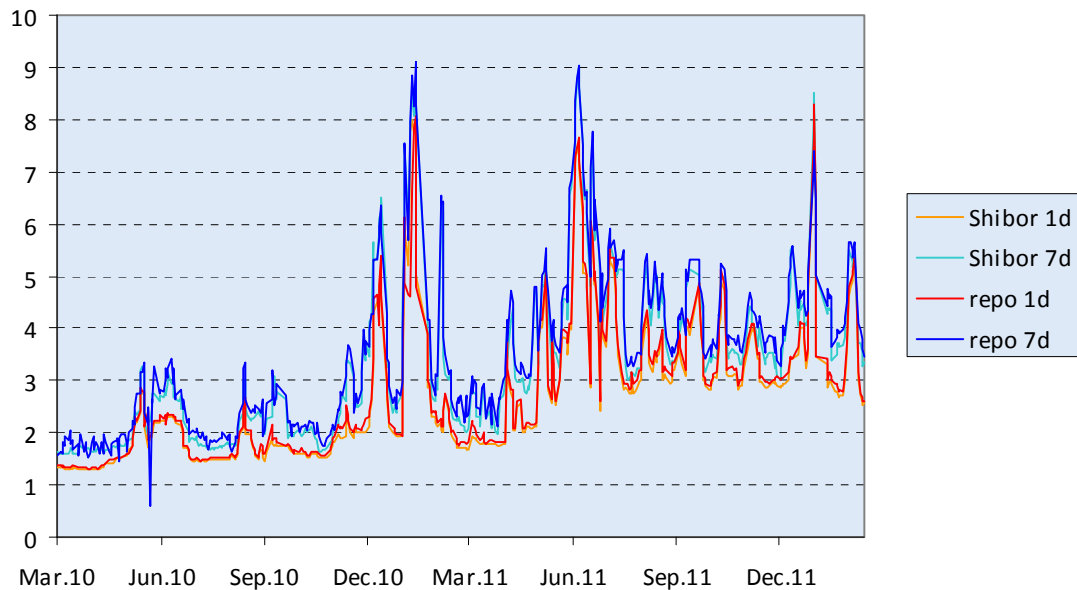


Figure 3. Shibor and outright repo rates 19 March 2010 – 2 March 2012 (Wind Financial Terminal. 2012).

While the interest rates may be determined in the fashion of modern money markets in developed economies, the rates do not reflect the real market prices. Due to political connections, state-owned enterprises receive loans at interest rates up to 3% cheaper than their non-state-owned counterparts (Mixed bag. 2012, 15). In order to overcome this interest rate discrimination, non-state-owned enterprises often try to gain ownership in commercial banks in order to gain cheaper, related lending from them (Lu & Zhu & Zhang 2012, 353-354). As a result, only a small portion of the outstanding loans belong to the private firms. In 2009, they officially accounted for only 2% of the bank loans given (Mixed bag. 2012, 15). The biggest loan takers are the local governments, whose share of the bank lending in 2010 was around 80% (China to control shadow banking and private lending. 2012).

The bonds and bills in the money markets have the same basic functionality; both offer short term funding in return for a security certificate. Most of these money market securities are issued by the People's Bank of China and the state treasury, although corporate bonds and bills also exist. The reforms done in 2002 made the bond and bill issuance process easier, increasing their popularity within the commercial sector (Neftci et al. 2007, 62). Despite this, they still cover only a small fraction of the turnover in the money markets (Leung et al. 2011, 290-293).

Analyzing the money markets in China, the allocative efficiency of the markets is definitely lacking. Although the market has modern price setting mechanisms, political favoritism and corruption overrides their prices and the majority of the resources go to entities linked with the government. As a result the resources are not used effectively; a fact that is manifested in luxurious perks to the employees and extravagant headquarters of the state-owned enterprises (Mixed bag. 2012, 15).

Operatively the money markets are technically modern and without excessive transaction costs (Neftci et al. 2007, 42-43). The system is operated by CFETS under PBC's supervision but makes no excessive profits from its services; therefore the market is in theory operationally efficient.

Informative efficiency should be fulfilled by the Shibor and the free trade between interbank market and stock exchange members, but the political price setting and governmental control undermine the value of the concept. If the prices used are different from the prices set by the market there is little meaning to the available information and how it reflects to the market prices.

The liquidity in the money markets is good, trading is mostly in short maturity and the volumes have increased greatly during the past years. Expanding the repo and bonds markets to the stock exchanges has helped this.

The second biggest problem with the money markets after allocative efficiency is its accessibility. Entry to all markets is strictly regulated. The interbank lending market is the most difficulty one to enter, followed by the other interbank markets, the stock

exchange repo and bond markets being the easiest to enter. The regulations for foreign companies in the markets are stricter than those for the domestic companies, including restrictions to volumes handled.

Overall the money markets appear as more modern and developed than they are in reality. The government controls everything, leaving only small areas of free market between private lenders and borrowers while dominating the markets as a whole with its state-owned entities.

### 3.2.2 Capital Markets

While money markets' purpose is to provide short term funding, capital markets are used for longer term investments. Investors exchange their funds for various securities, such as shares of stock or bonds. The funding is gathered in the primary market, where governmental and private entities issue their securities. The secondary market between investors usually receives the most media attention though. (Mishkin et al. 2003, 241-242.)

The history of capital markets in China begun in the 1980s, following the economic reforms that begun at the end of the 1970s. The first decade was chaotic, lacking official rules and partially operating without governmental consent. During this time trading was mostly over-the-counter and trading wasn't centralized, a number of small local stock exchanges existed. (Laurenceson et al. 2003, 80-81.) The stock markets were reformed in 1990. The local stock exchanges were disbanded and two national stock exchanges were established as self-regulatory organizations under CSRC's supervision: the Shanghai and Shenzhen Stock Exchanges. (Neftci et al. 2007, 190-191.)

The Shanghai Stock Exchange is the larger and more active of the two, having over twice the amount of trade of the Shenzhen Stock Exchange. Both exchanges are among the largest exchanges in the world measured by their market capitalizations (table 5). The large corporate listings are concentrated in Shanghai, while the Shenzhen Stock Exchange has a SME board for smaller startup companies (SME Board. 2011).

Table 5. 15 largest stock exchanges in 2011 (WFE Statistics – Monthly Reports. 2012).

Rank	Stock Exchange	Market Capitalization (USD millions)
1	NYSE Euronext (US)	11,795,575.45
2	NASDAQ OMX	3,845,131.59
3	Tokyo SE Group	3,325,387.76
4	London SE Group	3,266,418.15
5	NYSE Euronext (Europe)	2,446,767.49
6	Shanghai SE	2,357,423.32
7	Hong Kong Exchanges	2,258,035.20
8	TMX Group	1,912,121.91
9	BM&FBOVESPA	1,228,936.23
10	Australian SE	1,198,187.41
11	Deutsche Börse	1,184,500.16
12	SIX Swiss Exchange	1,089,519.37
13	Shenzhen SE	1,054,684.97
14	BME Spanish Exchanges	1,030,987.55
15	Bombay SE	1,007,182.90

Since the stock exchange reform in early 1990, the volume of trade in both exchanges has grown considerably. Another stage of growth started in 2007, as can be observed from the figure 4 below.

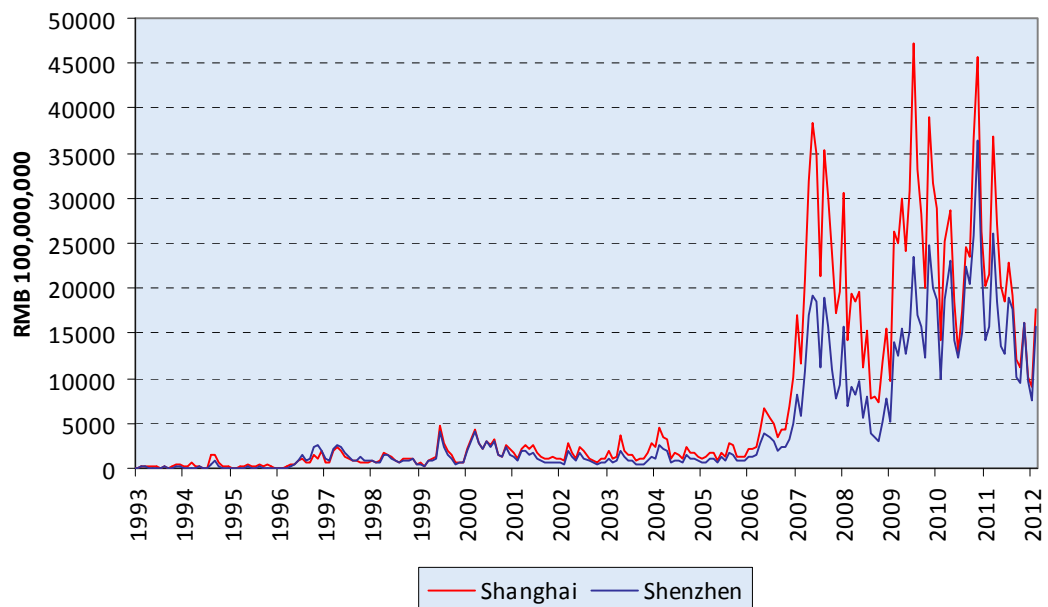


Figure 4. Trade value in SSE &amp; SZSE Jan.1993 – Feb.2012 (Wind Financial Terminal. 2012).



The rapid growth is explained by a number of factors linked to economic reforms. Previously untradable shares in a number of state-owned enterprises were released for trade at the end of 2006, increasing the amount of shares in the markets considerably. At the same time, the number of mutual funds operating in the stock markets also increased, creating more demand. (Firth & Lin & Zou 2010, 687-688.) More liquid money markets since the creation of Shibor and generous loan policies set by the government have also contributed to the growth (Balfour 2009, 25).

The growth has been very volatile however, which is apparent from the erratic shape of the graph. The strong, stable growth of China's economy combined with optimistic investors has created a succession of stock market bubbles. These have had little effect on the economic growth though, which has around the average of 10% since the beginning of economic reforms (World Economic Outlook Database. 2012).

While both stock exchanges are supposedly self-regulatory by nature, in reality regulations and supervision of the markets are under CSRC's control. CSRC not only creates and supervises the laws concerning securities trade; it also has a direct control over the listing of companies and their issuances of stock. This control goes beyond the domestic market too – Chinese companies wanting to list in a foreign stock exchange need CSRC's permission in order to do so. (Introducing CSRC. 2012.)

Listing for foreign companies is not prevented by law, but is a practical impossibility at the moment due to government policy (Securities Law of the People's Republic of China 2009, Chapter II). In order to list in either exchange, the company needs to have CSRC's approval (Listing on SSE – Listing Procedures. 2012; Listing on SZSE – Listing Processes. 2011). So far no foreign companies have been given this approval, but this may change in the near future. A new international stocks board has been prepared in the Shanghai Stock Exchange, waiting only for the government's approval for opening. (Wan & Wong & Zhang 2011.)

The majority of the companies listed in the Chinese stock exchanges are under direct or indirect governmental control. A major incentive in the establishment of the two stock exchanges was to raise money for state-owned enterprises with financial difficulties. The "privatization" was done by adopting a split share structure. Part of the

shares was untradable and held by the government more or less directly. A different part of shares with different rights were released for trade in the stock exchanges. The untradable shares formed the controlling portion of shares, ensuring the state control over the joint-stock company. (Cai 2010, 181-183.)

The process of share structure reform and further privatization of the joint-stock enterprises is still going on. The untradable shares are being converted into tradable shares, but the process has met some opposition from the holders of the existing shares, slowing down the reforms (Firth et al. 2010, 688-689). Although this conversion process might give the impression of the government “releasing” its control over the companies, it still holds the majority in most cases through both direct and indirect ownership (Cai 2010, 183).

The tradable shares in the stock-exchanges, known as A-shares, were initially intended only for domestic investors. In order to attract foreign investors a different category, B-shares, were created. While A-shares are denominated in RMB, B-shares are nominated in foreign currency. In Shanghai, these stocks are traded in U.S. dollars, while in Shenzhen the settlements are in Hong Kong dollars. In addition to these shares there are different share types used for listing on stock exchanges outside the mainland China. The most common of these are the H-shares traded in Hong Kong exchanges. (Neftci et al. 2007, 200-201.)

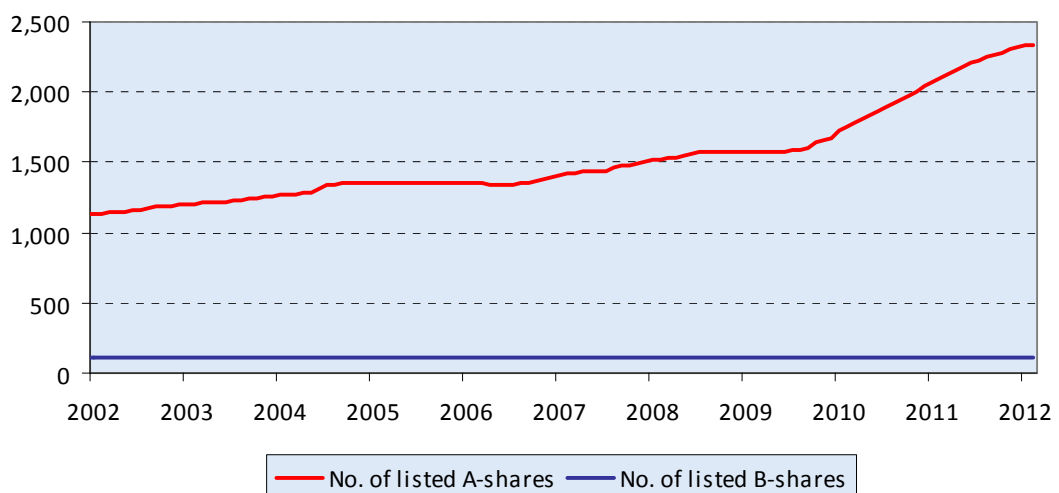


Figure 5. Number of listed companies in Shanghai & Shenzhen Stock Exchanges (Wind Financial Terminal. 2012).

Since their introduction, the regulations for all share types have been loosened. B-shares, originally open to only foreign investors, were opened to the domestic investors as well in 2001. In 2002, a Qualified Foreign Institutional Investor program was established. QFIIs are allowed to invest in A-shares, treasury bills and convertible bonds, but only within CSRC controlled quotas. (Neftci et al. 2007, 196-197.) The restricted opening of A-shares for foreign investors seems to have stopped the development of the B-share markets; the number of companies with listed B-shares has remained roughly the same for the past decade (figure 5). The B-share lists have seen little development since the 2001 reform. It is likely that they will eventually be merged with the A-shares, but this progress has been blocked by the existing non-QFIIs who have no access to the A-share markets. (Anderlini 2007.)

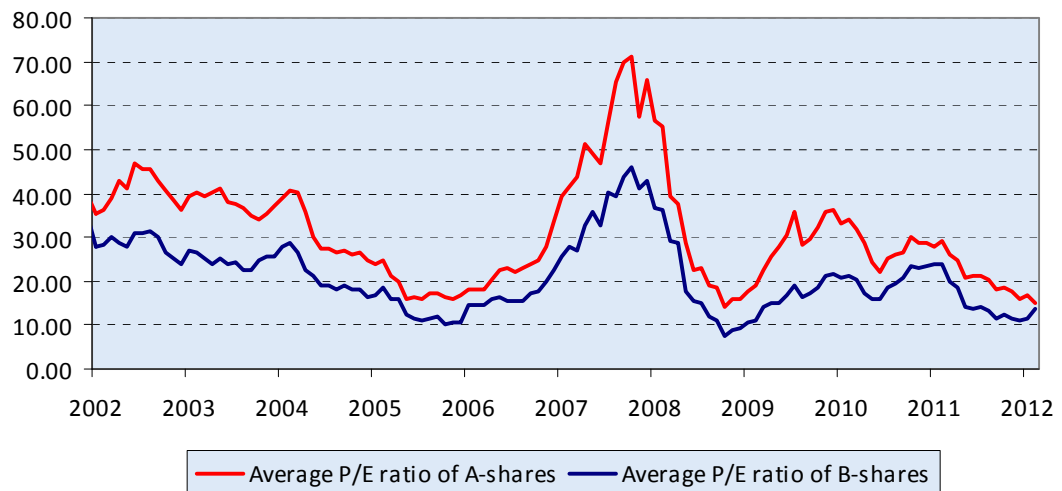


Figure 6. Average P/E ratios of A & B-shares (Wind Financial Terminal. 2012).

While the A and B-shares are practically equal concerning the ownership and rights to the profits of the companies, there are price differences between the different share types. A-shares tend to have a higher price than the B-shares and the shares traded outside the mainland exchanges. (Anderlini 2007.) The average P/E ratios between the different share types show a definite market appreciation of the A-shares in relation to the B-shares (figure 6). The price differences also seem to be inconsistent between different companies, showing that the markets react independently from each other (table 6; Anderlini 2007).

Table 6. Inconsistent price differences between A & B-shares in Shanghai Stock Exchange (Wind Financial Terminal, 2012).

Stock name	Dec 2011 price (RMB)			Apr 2008 price (RMB)		
	A share	B share	A/B (%)	A share	B share	A/B (%)
Double Coin Holdings Ltd.	10.6339	3.4711	306.36%	8.3281	4.4346	187.80%
Shanghai Jinjiang International Hotels Development Co.,Ltd.	17.4887	7.4860	233.62%	14.2063	9.3451	152.02%
Shanghai Diesel Engine Company	12.8344	4.6266	277.40%	17.2639	5.7482	300.34%
Shanghai Lujiazui Finance & Trade Zone Development Co.	12.0778	5.2995	227.91%	20.3466	11.9652	170.05%
Shanghai Friendship Group Incorporated Company	12.6640	7.8384	161.56%	15.3197	10.1493	150.94%
Huaxin Cement Co.,Ltd.	13.4904	10.8973	123.80%	23.4028	15.8095	148.03%
Danhua Chemical Technology	16.6470	5.6211	296.15%	21.0471	7.0625	298.01%
Jinshan Development & Construction Co.,Ltd.	6.6568	2.3237	286.47%	11.0771	4.2942	257.95%
SGSB Group Co.,Ltd.	7.0547	2.4401	289.11%	6.8822	3.1574	217.97%
Greatown Holdings Ltd.	4.2230	1.8995	222.32%	4.0161	1.5567	257.99%
	<i>1 USD = 6.2939 RMB</i>			<i>1 USD = 6.9870 RMB</i>		

Normally such price differences would create the opportunity for arbitrage, but this is not the case with China. The strict limitations and regulations make trade between different share types impossible (Anderlini 2007). Companies are also allowed to list in one of the exchanges, cross-listing in both is not possible, preventing any arbitrage between the two stock exchanges (Zhang & Huang 2010). These limitations are the reason why price differences between the different markets exist.

The bond markets operate in both stock exchanges and also in the interbank markets. Majority of the bonds in the markets are treasury bills issued by the state treasury, controlled by the central bank. Other bonds in the market include financing bonds issued by banks and corporate bonds issued by enterprises. (Neftci et al. 2007, 139-141.) In October 2011 the Ministry of Finance also allowed local governments to issue their own bonds in order to improve their finances (China allows local government bond sales to repay debt. 2011).

The bond markets have been mainly open to domestic institutional investors, but the introduction of the QFII program in 2003 made them available for foreign investors as well (Neftci et al. 2007, 142). The access was initially limited to the stock exchanges, but has later been expanded to the interbank markets as well, although still limited by quotas (Anderlini 2010). In addition to secondary market trading, qualified foreign in-

stitutions have been able to underwrite government bonds and treasury bills as well. There are signs that underwriting corporate bonds might become available for foreign investors soon too. (Chan 2011b, 51.)

Analyzing the stock exchanges in China, all sources seem to point towards allocatively efficient markets, where the highest bidder gets the resources, unlike in the money markets. This only concerns the tradable securities though. A considerable amount of untradable shares still exist in the joint-stock companies, which are outside the markets.

The capital markets operate in a modern, computerized environment maintained by CFETS. The transaction costs are low enough to allow private individuals to do investing. Getting listed in the stock exchanges is a different matter though. The process is complicated and bureaucratic; requiring qualified legal and accounting professionals. Limitations and quotas in listing companies favor the state-owned enterprises. (Cai 2010, 184-185.) According to the definitions of operative efficiency, the markets are not fully efficient.

The informational efficiency of the markets is questionable. The markets seem to react to information efficiently and without delay, giving the initial impression of semi-strong form EMH, similar to the stock exchanges of developed economies. The varying differences in the prices of different share types however hint of different information sets affecting the different types of the same company's stock. Also the strong governmental influence on all sides of the markets creates a large number of insiders, all working for the government. This makes the government's influence in the markets very strong. It also raises the risk of insider trading and corruption. Fraudulence and manipulation of prices with false information by corrupt officials and managers has been known to happen. (Cai 2010, 185; Neftci et al. 2007, 211.)

The liquidity of the markets is limited by the strict trading regulations. The stock exchanges are burdened by the different share types. Since many of the companies are under government control and the dividends are minimal the investors' motivations are mainly in the speculation of share value increases (Cai 2010, 182). The lack of investment opportunities, poor interest paid for bank savings and high inflation encourage

people to invest though, making the markets active (Anderlini 2007). The volume of trade is very good, making the secondary markets liquid.

For foreign investors the capital markets are tempting because of China's strong economic growth. The stock markets are however highly volatile. Because of minimal dividends and strict government control, most of the value in shares is in speculation and hoping for further economic liberalization. For the non-QFII, accessibility is restricted to foreign currency B-shares and the limited choice of shares available outside the mainland exchanges. A-shares trade is still limited by quotas even for the QFII. The bond markets offer more reliable profits, but the access to bond markets has even more strict limitations than the stock markets.

While the capital markets may be partially open to the investors, they remain inaccessible to foreign companies seeking funding in China. Becoming listed in China is currently not possible for foreign companies, but there are strong signs that this will change in the near future. Some analytics actually predict that China will become the most popular target for new stock issuances and initial public offerings for international corporations within a decade or two (Listautumisannitkin karkaavat Kiinaan. 2011).

As an overview, the capital markets in China, like the money markets, give a modern appearance on the surface, but the content is still undeveloped. The capital markets mainly serve to provide funding for state-affiliated enterprises, while the investors speculate on the future developments and reforms.

### 3.2.3 Foreign Exchange Markets

Foreign trade has been and continues to be vital for China's economic growth. Foreign trade usually involves trading between entities operating in different currencies. In order to perform transactions with each other, some form of market for exchanging the currencies is needed. Foreign exchange markets exist for this purpose. (Mishkin et al. 2007, 313.) The history of Chinese currency is long, but for this analysis only the recent history and current developments are of interest.

During the planned economy period from 1953 to the beginning of the economic reforms in 1979 all foreign trade was done by state-owned foreign trade companies and all the foreign exchange transactions conducted by the Bank of China. In 1980s the control was very carefully opened to a limited number of domestic and foreign businesses. The central government started to gather its foreign reserves, mandating that a certain portion of the foreign currencies ending in China is to be sold to the state at an official rate. The remaining portion was free to be traded at a market rate, creating a double-tracked exchange system. (Neftci et al. 114-117.)

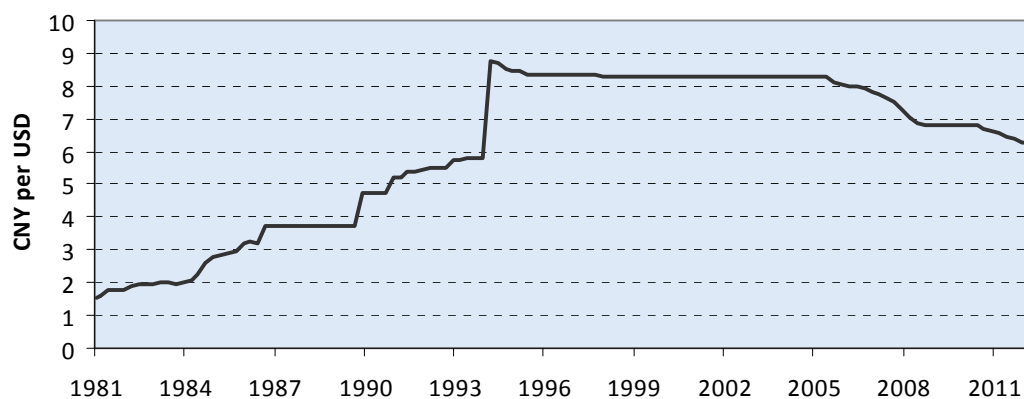


Figure 7. U.S. Dollar to Chinese Yuan Renminbi Exchange Rate (Foreign Exchange Rates, 2012).

The RMB was fixed to the U.S. dollar at a rate of 2.4618 RMB against one dollar for most of the planned economy period. Collapse of the Bretton Woods System in 1973 forced China to adjust the rate several times. In 1981, when the two-tier system was introduced, the exchange rate was fixed at 1.50 RMB against one dollar (figure 7). The pressure of appreciating U.S. dollar forced China to re-adjust the rate a number of times. (Neftci et al. 116-117.)

The two-tiered system ended in 1994 and China has had a single exchange rate system ever since. A new foreign exchange market was established in the interbank market between authorized banks. The official rate was fixed to dollar at the rate of 8.70 RMB against one dollar, and later raised to 8.2770 RMB against one dollar following the 1997 Asian financial crisis. The peg lasted almost a decade, until the People's Bank of China's announcement of "managed floating" on 21 July 2005. (Neftci et al. 117-118.)

The managed float allowed the RMB to fluctuate in a direction determined by the market forces, but the government limited the rate at which it fluctuated. Initially RMB was allowed to appreciate up to 0.3% per day against the U.S. dollar, but this was adjusted later to 0.5% per day. In 2010 the PBC announced that the floatation would be further liberated, but no official guidelines have been published. The “floating” has been halted several times during financial crises to ensure economic stability. (Morrison & Labonte 2010, 2-4.) The tight control over the value of the renminbi has been made possible by the strong foreign reserves that China has accumulated over the years due to trade surpluses (figure 8).

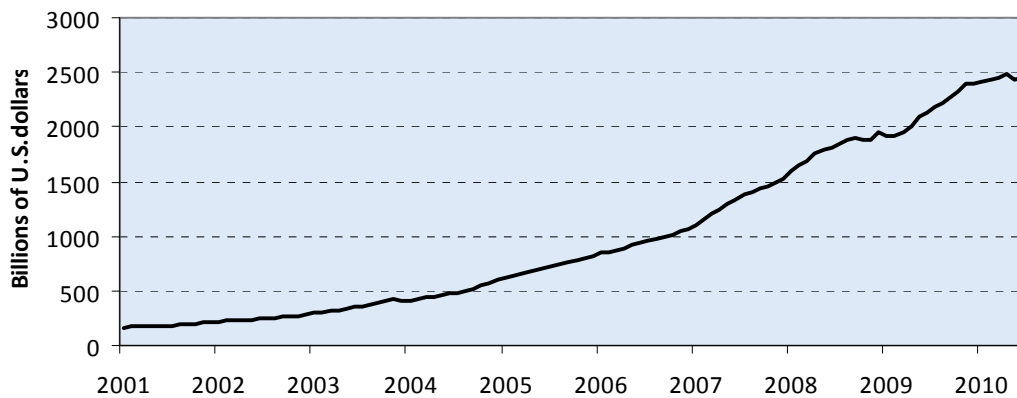


Figure 8. China's foreign exchange reserves (Data and Statistics – Forex Reserves. 2012).

The foreign exchange trade in China is controlled by the State Administration for Foreign Exchange (SAFE), which operates under the People's Bank of China. The technical framework is provided by CFETS and the trade is conducted using the interbank network (About CFETS – Brief Introduction. 2010). Only financial institutions qualified by the SAFE are allowed to handle foreign exchange trade. All foreign exchange transactions are supervised by SAFE (About SAFE – Major Functions. 2012).

Despite the history of rigorous control over the currency, it is going through a process of becoming more international. New currency trade pairs have been added to the CFETS system overseeing the foreign exchange trade. On 22 November 2010, RMB to ruble trade began on the interbank foreign exchange market (China launches RMB, ruble trading on interbank forex market. 2010). A week later Australian and Canadian



dollars were added as well. Previously traded currencies in the foreign exchange are the U.S. dollar, Hong Kong dollar, Japanese yen, euro, British pound, and Malaysian ringgit. (China to launch AUD/CNY, CAD/CNY trading on Nov. 28: CFETS. 2011.) The trade in the interbank market is supervised by SAFE though.

More important to the future internationalization of the yuan are the offshore yuan. The currency started to leak out of the mainland to Hong Kong after its sovereignty was returned in 1997. Later reforms made transactions between mainland and Hong Kong conducted in yuan legal. (Climbing greenback mountain. 2011, 12-13.) The yuan in Hong Kong, known as offshore yuan or CNH, is traded without the control of the Chinese government. Expectations of the yuan appreciating against the U.S. dollar make it popular among the foreign investors, which cause the Chinese importers to favor CNH. This has increased its demand and caused it to appreciate over the official exchange rate of the onshore yuan. Exporters on the other hand prefer doing business in U.S. dollars, since they can be exchanged at the official rate which is beneficial for them. (Mallaby & Wethington 2012, 141-143.)

This cycle is increasing the amount of yuan leaving the country while the central bank is forced to buy U.S. dollars brought in by the exporters, further growing the already considerable foreign reserves. This puts the reserves under the risk of a depreciating dollar, potentially causing the reserves massive losses of value. (Mallaby & Wethington 2012, 136-138.) In order to lure back some of the offshore yuan, reforms are being done in order to allow the yuan to be invested back in China. At the center of these reforms are the R-QFIIs, renminbi qualified foreign institutional investors, which are to be allowed to invest their CNH in the mainland capital markets within set quota limitations. (Chan 2011d, 27.)

Analyzing the foreign exchange markets from the point of view of the efficient market theories is pointless. The exchange rate is under the strict control of the People's Bank of China, backed up by its massive foreign reserves. The floating of the currency is limited, making the analysis of allocative and informational efficiency useless. Operationally the markets are modern, utilizing the CFETS framework to conduct the transactions. The modern computerized system also makes it easy for SAFE to supervise the

markets. Excessive transaction costs aren't an issue in the markets, but rather the limited accessibility and trade quotas, which also limit the liquidity of the markets.

Overall, foreign exchange markets in China are still the most strictly controlled financial markets. Despite this the markets have opened up and continue to do so. Whether this is because of political will or sheer economic pressure is a different matter. Relying too much on U.S. dollar poses a risk and the high inflation rates can be seen as a symptom of an underappreciated currency (China Opens More Options for Yuan. 2011). For foreign operators the most interesting options currently lie in the offshore yuan and the upcoming R-QFII system. It is unlikely that the investors will be investing their offshore yuan in the more expensive A-shares, but the bond markets might be more tempting (Chan 2011d, 27).

#### 3.2.4 Futures and Derivatives Markets

Financial derivatives are financial instruments used to hedge, that is, to reduce or eliminate risk. The most common of these instruments are forward contracts, futures, options, and swaps. The popularity of derivatives in global markets is a relatively new phenomenon. Interest in derivatives has grown strongly in the past couple of decades. (Mishkin et al. 2003, 617.)

The commodities futures market in China was established almost simultaneously with the stock market. The beginning was chaotic, lacking proper laws and regulations. In 1994 the futures market was placed under CSRC's supervision. The trade was organized into three centers: the Shanghai Futures Exchange, the Zhengzhou Commodity Exchange, and the Dalian Commodity Exchange. Further reforms and development took place in the early 2000s. (Neftci et al. 2007, 27.)

The trade in the commodities exchanges can only be conducted by legal persons registered in China (Regulations on Administration of Futures Trading 2008, Chapter II Article 8). Foreign entities can be clients of the trading institutions and can therefore be investors. Trade however is conducted in renminbi, which makes investing slightly more complicated since the currency is not freely tradable. There are several methods

to bypass the limitations but these generally always require the cooperation of a Chinese institution operating in the markets. (Neftci et al. 2007, 245.)

In 2006 a financial futures exchange was established as a joint effort of the three commodities futures exchanges and the two stock exchanges. China Financial Futures Exchange, like the commodities markets, operates under CSRC jurisdiction. (About CFFEX – Introduction. 2010.) Currently the only product available is the CSI 300 Index, a composite stock index of the A-share markets of both stock exchanges (Products – CSI 300 Index. 2010). Trading of the index futures was restricted to Chinese institutions until May 2011, when CSRC decided to allow QFIIs start trading the futures for hedging purposes (China issues index futures trading rules. 2011, 247). Strict limitations however exist in order to prevent the QFIIs from using derivatives to pass their exposure to non-QFIIs (Flatt 2011b, 30). This limits the usefulness of the futures for hedging purposes.

While the commodities and equity derivatives are under CSRC jurisdiction, the RMB derivatives are supervised by CBRC. These include foreign exchange forwards and swaps and interest rate swaps. (Neftci et al. 2007, 266.) These were introduced to the Chinese interbank market in 2005. The interest rate swaps are still in their infancy due to the immature interbank loan market and its erratic interest rates (see 3.2.1). The FX swaps likewise suffer from the strict regulation of the renminbi (see 3.2.3). Most of the RMB derivatives trade is conducted through the interbank market upkept by CFETS. (About CFETS – Brief Introduction. 2010.)

In March 2011 currency swaps were made available by the permission of SAFE. Currency swaps, unlike FX swaps, also include interest rate payments, providing hedging against both foreign exchange and interest rate risks. While RMB trade is still strictly regulated by SAFE, the introduction of the swaps will provide a lot of flexibility for corporate hedging. (Yung & Fung 2011.)

In addition to the interbank market there are also over-the-counter (OTC) derivatives. Due to the strict regulations of the interbank market, the OTC derivatives market has been popular especially among the foreign banks operating in China. This was changed in January 2011, when CBRC announced a set of new regulations placing several limits

on the trade of the OTC derivatives. These limit the OTC derivatives to a maximum of 3% of the bank's core capital, making many foreign banks unable to conduct any more OTC derivative trade before their previous positions wind down. (Flatt 2011a, 36.)

Taking an analytical view, the derivatives markets are still new and forming in China. Allocatively they seem to be working as they should, the highest bidder getting the resource. Operationally they operate over different frameworks, but all computerized and modern with no signs of excessive costs.

The informational efficiency of the markets varies. The commodity exchanges do not seem to always correspond to the global trends (Analysis – China and the Commodity Futures Market. 2012). This has been explained by the restricted amount of information that the domestic investors have on global markets, as compared to the foreign investors (Neftci et al. 2007, 245). The RMB derivatives markets seem to operate more efficiently in regards to information, but are restricted by the limits posed on the currency trade.

The liquidity in the derivatives markets is still not what might be hoped from markets that exist primarily for the purpose of hedging. Introductions of new financial instruments and opening of markets have been followed by government restrictions and regulations, limiting their use.

The accessibility to the markets also varies. The futures markets are limited in accessibility. The commodities exchanges are only open to domestic traders and investors are limited by the availability of renminbi. The RMB derivatives markets operate primarily in the interbank network with limited accessibility. OTC derivative trade has recently been restricted by new regulations.

Overall, the futures and derivatives markets give a conflicting impression. They have been the target of many recent financial reforms, but the limitations and restrictions placed on the trade make them less attractive to investors. The biggest obstacles for the development of the derivatives markets are the immature interest rate markets and the regulated currency.

### 3.3 Mortgage, Insurance and the Funds Industry

The strong economic growth has brought along a growing middle class population in China. A growing number of people have more income than they need for daily living. A lacking social security for health, welfare and retirement makes a strong incentive for saving money, but the high inflation combined with low interests being paid by the banks make people look for better investments for their money. (Kirby 2011, 28; Anderlini 2007.)

The most popular form of investment in China is real estate, especially apartments. It has been estimated that roughly half of the Chinese citizens' net worth is tied up in real assets. (Beer et al. 2012, 23.) Reasons for the popularity are manifold. First comes the practical reason – people need a place to live in. Physical property is also easy to understand and feels perhaps a bit safer as an investment for many people. An apartment may lose its' market value, but it's still an apartment. The Chinese household registration system, hukou, has also affected the demand. Hukou is a kind of a residence permit, limiting people's mobility within China. Hukou is not easily transferable from one location to another. If a person owns an apartment, however, they may easily transfer their hukou to the apartment's location. Hukou is required in order to get married, making an apartment a necessary investment for many young couples. (Mavrides 2010.) The popularity of apartments as an investment has increased their prices. The high profits have increased their popularity as an investment even further. (Day 2012.)

The rising real estate prices have become a risk for the Chinese economy, potentially harming the global economy as well. A great number of experts have warned about a price bubble in the heated markets. (Hirvelä 2011.) The government has taken various measures in order to cool down the real estate market, placing various limitations on the purchases of additional apartments. The reports from early 2012 inform that the growth has stopped and that the prices are now on decline. (China Economic Outlook. 2012.) Whether this is the sign of a controlled descent, or a real estate bubble bursting, remains to be seen.

Either way, the falling prices and demand are causing difficulties to the construction industry in China, which accounts for an estimated 13% of China's GDP (Beer et al.

2012, 23-24). It will also affect the demand for building materials, which in turn will affect the commodity prices globally (Kirby 2011, 33-34). Whole cities that have been built and purchased by speculators have been left empty. One example of these is the Ordos New Town in Inner Mongolia, built to house 100,000 people but left practically vacant (Day 2012). Similar cases exist in industrial and commercial sectors, with countless vacant offices, shopping malls and factories (Kirby 2011, 30-31).

The problems in the real estate markets are believed to cause difficulties to the banks in the form of a growing number of non-performing loans. China's banks however do have a lower exposure to real estate than in many other countries (Roy 2009). Private households are likely to suffer greatly from the loss of value and difficulties in liquefying their real estate assets (Kirby 2011, 30). Many households have financed their purchases through the shadow banking and private loans, being unable to get the funding from official banks (Day 2012).

Investment funds are a relatively new financial service for investors in China. The first funds were established in early 1990s, but the industry only really began to evolve after a new set of regulations was published by the CSRC in November 1997. The funds can invest in both money and capital markets, but also in alternative investments such as real estate or venture capital. (Neftci et al. 2007, 337.)

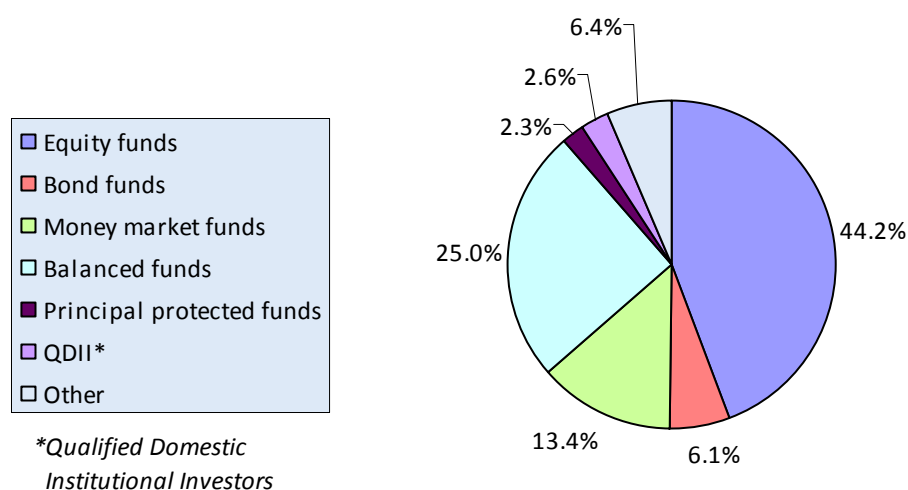


Figure 9. Ratios of different fund types by market capitalization in China in March 2012 (Wind Financial Terminal. 2012).

The funds industry in China is dominated by domestic institutions. Majority of the Chinese funds invest in the stock exchanges (figure 9). Foreign investors were denied the access to the local funds markets in the past, but in October 2011 CSRC relaxed the restrictions for foreign institutions. The capital requirement for foreign institutions in order to operate and sell funds is, however, much higher than the requirements for their domestic counterparts. (Chan 2011c, 69.)

Foreign funds investing in China for foreign markets are allowed to operate within the normal investment regulations. This means that the non-QFIIs are mostly restricted to the foreign currency B-share markets. The QFIIs have a wider selection of investments available, but are limited by their RMB quotas. Similarly the new R-QFII program allows selected institutions to invest their offshore yuan to the mainland markets, but again only within their designated quotas (Cheng 2012, 156).

The insurance business in China during the planned economy before the reforms of late 1970s was under one state-owned company, the People's Insurance Company of China. In the 1980s the reforms allowed new companies to enter the insurance market. By early 1990s, foreign companies were allowed to enter the business as well. The Insurance Law of People's Republic of China was issued in June 1995. It separated insurance business from banking and securities businesses, preventing a company from operating in more than one sector. It also separated different types of insurances into separate companies, forcing companies to specialize in one type of insurances. A number of new, smaller companies were established as a result. (Neftci et al. 2007, 308-309.)

In 1998 CIRC was established to oversee the insurance business. In 2003 due to WTO requirements the insurance sector was restructured once again, allowing insurance companies to conduct business in different insurance types. Further reforms in 2004 allowed cross-sector business again, permitting the insurance companies to operate in securities and banking and vice versa. (Neftci et al. 2007, 310.)

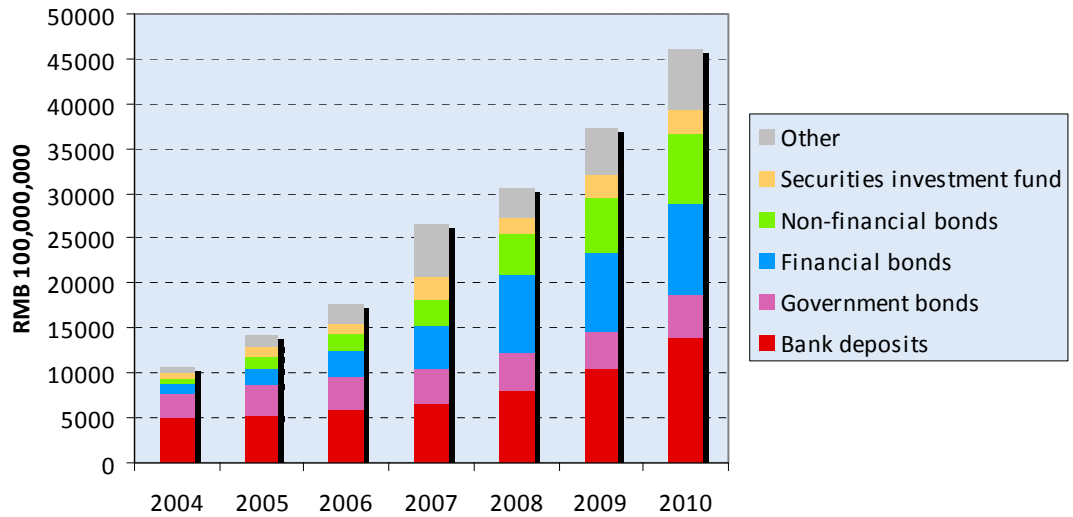


Figure 10. Insurance company investments in China (CEInet Industry Database. 2012).

The insurance business has grown considerably in the recent years. Since 2004 the insurance companies have exercised their regained right to do cross-sector investments. Majority of the investments have been done in relatively safe instruments, mainly bonds. A considerable portion of the wealth has been saved as bank deposits as well, favoring safety over profits. (figure 10.)

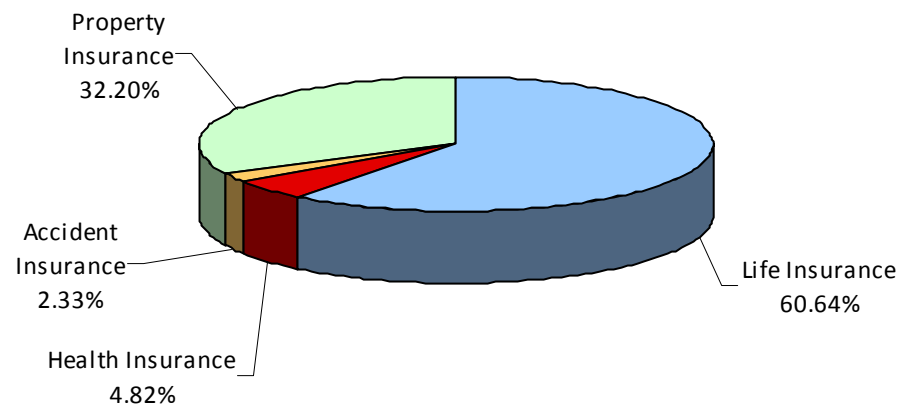


Figure 11. Insurance premium shares per insurance type (Insurance industry data for 2011).



The most popular type of insurance in China is the life insurance (figure 11). Its share of the industry's premium revenues is decreasing though, as the property insurances have become more popular. From 2004 to 2011 property insurances' share of the premiums rose by about 7%, while life insurances' share dropped by over 5% (Neftci et al. 2007, 313; Insurance industry data for 2011).

The growing insurance business may appear attractive to foreign companies, but the entry to the Chinese market is not easy. The requirements of the insurance license regulations are not hard to fill for many international companies, but the attitudes of the regulators pose more of a challenge. (Chao & McGee 2009, 36.) Like all financial licenses, the ultimate decision depends on the approval of the regulatory body. In the insurance business it is the CIRC. The approval is largely political by nature and can be denied on a whim. Some international companies have managed to enter the market regardless of the difficulties though. In 2010 the foreign companies held 5.19% of the assets of the insurance industry (CEInet Industry Database. 2012).

The choice of financial services offered for private households is still limited. The market segment is growing strong along with the growing middle class population, showing great potential for the future. Overcoming the customer behavior and mistrust in new financial concepts poses a challenge though.

### 3.4 Cultural Issues

In addition to the actual market environments, there are also cultural aspects that need to be taken into account when considering the financial markets from the point of view of a foreign operator. The strong presence of the government has become apparent in the previous chapters. Relationship networks and corruption are often mentioned in context with China. The official language of China, although spoken by over a billion people, is also something which poses challenges to the western companies, especially with the legal documents and bureaucracy.

Strong authority of the government has a long history in China. Confucian principles support or a strong hierarchy and expect people to act as befits their role in the hierarchy (Huotari & Seppälä 2002, 183). People who opposed the political system were not

tolerated (Huotari et al. 2002, 105-106). In this sense, very little has been changed by the communist revolution in 1949. In 1979, after decades of planned economy, economic reforms under Deng Xiaoping's control begun to open China (Huotari et al. 2002, 152).

Despite all the reforms and the strong economic growth since 1979, the economy is still strongly controlled by the government. The central and local governments directly and indirectly own over 100,000 companies. In order to operate in China, a foreign company needs to come in terms with the government. The main competitors for foreign companies are often government-affiliated firms. (All change. 2011, 45-46.)

While government control is an example of the vertical axis present in the Asian societies, relationship networks lie on a more horizontal level. In China these are represented by "guānxi", a mutual obligation derived from either personal connection or connection through a mutual acquaintance. The importance of personal relationships in conducting business in China has been explained partly by Confucianism, partly because of the socioeconomic environment with poor legal protection. (Lasserre & Schütte 2006, 170)

Guanxi can be used to achieve things more easily and faster – whether getting through the Chinese bureaucracy, finding information or making business contacts. International business practices and globalization have affected guanxi's importance somewhat. (Lasserre et al. 2006, 170.) Its role in business is far from disappearing though, and is in some ways reinforced by foreign managers adapting the local customs for their own means (Nolan 2011, 3370). Still, having guanxi is a supporting factor while conducting business, not a decisive one (Zolkiewski & Feng 2012, 24). The use of relationship networks for conducting business has often been connected with nepotism and corruption by the Western people. It is however a trait of the collectivistic nature of Asian cultures. From Asian point of view not looking after those close to you would be considered as cold and uncaring.

According to Transparency International's Corruption Perceptions Index in 2011, China had the rank of 75 out 183 countries with a score of 3.6 out of 10 (Corruption Perceptions Index 2011). While the rank may be above 108 other countries, it tells more

about the poor situation in developing and underdeveloped economies than about China's success in fighting against corruption. The corruption affects ordinary people the most, like farmers forced to sell their land to communist party affiliated developers. The party leaders, worried about protests and unrest, have expressed their worries and promised to do more about corruption. (Grammaticas 2012.) Despite regular news on corruption trials and death sentences the problem persists. Any foreign companies operating in China are likely to encounter either corruption directly or its' effects.

Another cultural aspect affecting foreign companies in China is the language barrier. Although Mandarin Chinese is one of the widest spoken languages in the world it poses a challenge for the foreign companies. Although some of the laws and regulations concerning corporations have been officially translated into English, conducting any legal action requires both expertise in Chinese law and the ability to speak and write Chinese. This is especially critical for many financial activities, such as corporate finance, real estate and M&A. Because of the growing economy and high demand, there is a shortage of skilled corporate lawyers who can communicate in both Chinese and English. (Bisogni 2008.)

It is important for a company to familiarize itself with any new business environments it may enter into. The cultural aspects affect all fields of business in China, including the financial markets. An unprepared company may find entering the market impossible, if it does not know how to handle the government officials and the local legislation and all the bureaucracy it involves. A prepared company on the other hand may find competitive advantages adopting the local customs and ways of handling things through local relations (Zolkiewski et al. 2012, 27-28). Acquiring the required local expertise may be difficult and prohibitively expensive for smaller enterprises.

## **4 Conclusions**

### **4.1 Combining the Results**

When I started this research project I had a rather good impression on the financial markets of China due to the numerous reforms that had been done during the recent years. The research revealed a different image. The financial markets of China appear

as modern and efficient. The computerized trading uses latest technology and the reformed legislation is based on its Western counterparts. Underneath the shiny surface, however, still lies the strong governmental control. The regulatory offices favor the state owned businesses while arbitrarily denying licenses for private operators.

Table 7. A comparison of the financial markets of China.

		<b>Money Markets</b>	<b>Capital Markets</b>	<b>Foreign Exchange</b>	<b>Derivatives</b>
<b>Efficiency</b>	<b>Allocative</b>	Poor price favoritism for state-owned enterprises	Efficient highest bid wins	Poor political control over price and allocation	Efficient highest bid wins
	<b>Operational</b>	Efficient modern system with standard costs	Partly efficient trading with standard costs, favoritism in listing and issuance	Efficient modern system with standard costs	Efficient modern systems with standard costs
	<b>Informational</b>	Semi-strong importance undermined by price favoritism	Weak price differences between different share types of same company	Weak price limited by policy	Weak prices do not fully reflect global trends
<b>Liquidity</b>		Good steady flow of financial instruments	Average liquidity limited by different share types	Poor political limits on availability and uses	Partly good Futures liquid, other derivatives suffer from limitations
<b>Accessibility</b>		Restricted strict entry regulations and limits on trade volume	Partly restricted B-shares open, other types limited to QFII, QFII trade quotas	Very restricted limited number of authorized traders, availability limited	Partly restricted only investment for foreigners, availability limited by access to RMB

Comparing the different financial markets, common features can be noticed (table 7). Operationally the markets are modern. China has invested in the infrastructure of the markets and the costs of the computerized trade are fair. Informational efficiency suffers from various government interventions and their unpredictability outside the government circles. Liquidity tends to be good, partly due to the active economy. It does, however, suffer somewhat from government restrictions to the trade and quotas. Accessibility is the most critical factor for the foreign participants of the markets. Foreign access is strongly restricted, RMB licenses being mostly limited to a small number of large international financial institutions.

The greatest obstacle to the efficiency of the financial markets of China is its' foreign exchange market. Strong control over both the value and the availability of renminbi is restricting the free flow of capital and suffocating the development of other financial markets. Even the most developed of the markets, the capital markets, suffer considerably from the currency control. The RMB leaking out of China through Hong Kong and the exchange rate being "semi-fixed" to the U.S. dollar are placing the state treasury's stability under a strain.

The government has realized this and is concentrating its efforts on paving a way for the internationalization of the renminbi. Despite the occasional setbacks and new restrictions being set, the overall direction has been towards a more open and international system. The progress, however, is happening at a careful pace decided by the Chinese government, not at the pace that the international audience might hope for. Nevertheless, the financial markets of China will continue to evolve.

Although the environment for businesses is harsh, China's economic strength is a fact. Those who endure through the bureaucracy, legal difficulties and corruption may be well rewarded. Many of the financial markets are already very lucrative even though still developing. The others have much potential for growth. Large international financial institutions know this and are ensuring their footholds on the future profits. Smaller operators will find the entry to the markets too difficult and expensive at this stage.

#### 4.2 The Reliability and Quality of the Research

The research was explorative and qualitative by nature. The books used were written by authors of academic and professional backgrounds. Many of them are used as study books in different colleges and universities. News on recent developments was collected from often acclaimed business magazines and journals. Research papers released in academic journals were used to confirm ongoing trends and their effects. Statistics and figures were collected from academic databases and official publications.

The credibility of the source materials used is overall good and most can be confirmed. Majority of the references are made to materials widely available through university

libraries for research purposes. Many sources are also publicly available on various governmental and international organizations' websites. The data released by the Chinese government cannot be trusted to be absolutely correct; not even the government believes it (Kirby 2011, 29). This analysis, however, concentrates on the general trends and doesn't rely on calculations done with exact figures. Therefore the information is useful, if with certain reservations.

Interviews with academic and professional people in finances were conducted, but in the end the results were used more as background material rather than actual research data. The answers to questions were subjective to each individual and not therefore fully reliable. The information received was, however, very useful in charting out the recent developments and points of interest.

The amount of information available on the subject is nearly limitless. Only a fraction of it could be included. The focus was in key points and recent developments concerning foreign institutions in the markets. Only facts which appeared in multiple sources were used, with reference being made to the best sources available.

Being a generic analysis, a similar analysis could easily be conducted on the same theoretical premises to any other country's financial markets. The results only reflect the current situation though. The financial markets of China are developing all the time – this thesis only captures the moment of its writing.

#### 4.3 Subjects for Further Studies

The financial markets of China continue to evolve. During the few months of the writing of this thesis there were several announcements and headlines concerning the financial markets and their opening. The Chinese government is careful and wants to proceed at its own pace, but small steps are constantly taken. This study tries to bring out the most important phenomena and topics at the time of the writing.

The subject of the thesis was to conduct a purposefully generic overview and analysis on the current situation. Each individual segment of the financial markets offers plenty of material for research. An analysis could also be done from even more practical point

of view: for instance from the point of view of a particular industry, or even a company wishing to enter the markets.

Even on generic level without going any deeper into the individual markets there was a lot more material available to study than could be handled in one thesis. The continuous development also keeps providing new research material even for a generic level analysis such as this. The information in this analysis will inevitably become outdated in only a few years time, bringing a chance for a new update.

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