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The transformation of the Chinese stock market between 1990 and 2012

The main purpose of this paper is to examine the transformation of the stock market in the People's Republic of China (i.e. concentrated on stock exchanges in Shanghai and Shenzhen; the stock exchange in Hong Kong was omitted) from its beginnings in the early 1990s, through rapid development over the next two decades, up to the financial crisis of 2008 (the period examined is 1990–2012). The paper presents a short history of the Chinese stock market before and after 1990. Other topics covered include unique stock classification system, comparison of the two stock exchanges, main market participants (including barriers for institutional and foreign investors), and legal/regulatory environment evolution. The next part of the paper consists of an analysis of the main stock market's development indicators (in both absolute and relative terms). The findings conclude that, in the said period, Chinese stock market has undergone a deep transformation, especially when its size and liquidity are being considered. However, there are still many aspects in which it remains underdeveloped, particularly in the supervision system's area.

Przemiany na chińskim rynku akcji w latach 1990–2012

Głównym celem tego artykułu jest prześledzenie zmian, które zaszły na rynku akcji w Chińskiej Republice Ludowej (tzn. na rynku skoncentrowanym wokół giełd papierów wartościowych w Szanghaju i Shenzhen; giełda w Hong Kongu została pominięta) od jego początków we wczesnych latach 90. XX w., poprzez okres szybkiego rozwoju w ciągu dwóch kolejnych dekad, aż do globalnego kryzysu finansowego od 2008 r. (badany okres to lata 1990–2012). W artykule przedstawiono zarys historii chińskiego rynku akcji przed i po 1990 r. Omówiono także takie tematy, jak unikatowy system kategoryzacji akcji, porównanie dwóch giełd, struktura uczestników obrotów (wraz z barierami dla inwestorów instytucjonalnych i zagranicznych) oraz ewolucja otoczenia prawnego rynku. W kolejnej części artykułu poddano analizie zmiany podstawowych wskaźników rozwoju rynku akcji (w ujęciu absolutnym oraz relatywnym). Z przeprowadzonych rozważań wynika, że w badanym okresie chiński rynek akcji przeszedł głęboką transformację, zwłaszcza w wymiarze swych rozmiarów oraz płynności. W wielu obszarach pozostaje on jednak słabo rozwinięty – jego problemem jest przede wszystkim słaby nadzór giełdowy.

Keywords: China, emerging markets, stock market, market capitalization, market liquidity

JEL classifation: G10, G18, G38, K22, E44

Introduction

Chinese stock market is currently one of the largest in the world in terms of size (measured by market capitalization) and turnover (value of transactions in equities). Such a position is the result of a fast development of this part of the financial sector, which began in the early 1990s with the establishment of two mainland stock exchanges, in Shanghai and Shenzhen. Main purpose of this paper is to examine the transformation of the Chinese mainland stock market from its beginnings, through rapid development over the next two decades, up to the global economic turmoil of 2008 and its consequences. The time period covered is 1990–2012. In contrast with previous works in this field, this analysis is not limited to the quantifiable features of the stock market. Third of the Chinese stock exchanges, the one in Hong Kong, will not be included in the analysis due to the fact that it comprises a separate stock market, one of the most developed in the world, which for many years evolved separately [even now it remains to a large degree independent from the authorities and institutions of the People's Republic of China (PRC), e.g. it has its own supervision system, trading rules, and quoting currency].

1. A short history of the Chinese stock market

1.1. The stock market in China before 1990

Trading in stocks in China began after the Opium Wars, during the forced foreign trade liberalization in the middle of the 19th century. First securities transactions were conducted in Hong Kong and Shanghai. In 1864, first foreign company issued its shares; this financing method was used by still functioning today Hong Kong and Shanghai Banking Corporation (current name: HSBC) [Ji, Thomas, 2003]. Another important date is 1891, when first shares trading associations were established in Shanghai and Hong Kong; they were later converted formally into stock exchanges. Both exchanges were used mainly by foreign companies. Simultaneously, a purely Chinese market developed – first public company was founded in 1872, and, together with the ones established later, it was listed on the stock exchange in Shanghai. However, their shares were traded mostly informally. At the end of the 19th and the beginning of the 20th century, trading in Chinese companies was taken over by national brokers; it was a period of speculative bubbles, which resulted in the collapse of formal trading systems. The stock market was rebuilt in 1914, when the Chinese Stockbrokers Association in Shanghai was founded. The first development phase of the Chinese stock market ended with the formal opening of the stock exchanges in Hong Kong in 1914 [HKEx, 2013], in Beijing in 1918, and in Shanghai in 1920 and 1921 [Ji, Thomas, 2003]. Before the Japanese invasion, the stock exchange in Shanghai was the largest and most advanced in terms of trade mechanisms and financial instruments offered. Later, trading was halted almost completely. Reopening took place in 1945, but a few years later, in 1949, after the capture of Shanghai by the communist army, the stock exchange was closed (like all the others in the PRC). As a result, the develop- ment paths of the stock markets in the PRC and Hong Kong (controlled by the United Kingdom) diverged.

The restoration of the stock market in the PRC started with the reforms of Deng Xiaoping. In 1984, Chinese government approved the first public issuance of shares for decades; however, local authorities sold shares of controlled enterprises even before that date [Wong, 2006]. Initially, trading was carried out without the intermediation of financial institutions and without the state control over capital flows (authorities, trying to finance the inefficient state-owned enterprises, SOEs, decided not to limit them). It soon became clear, however, that most of the capital was not raised by SOEs but by private or partially private companies. As a result, control over the stock market was tightened in 1990 through the establishment of 24 regional stock exchanges and limiting the issuance of shares to SOEs only [Ji, Thomas, 2003; Wong, 2006]. Such organization of stock trading proved to be inefficient, so, in the same year, smaller exchanges were closed and all trading became concentrated on stock exchanges in Shanghai and Shenzhen.

1.2. The stock market in China after 1990

The establishment of stock exchanges in Shanghai and Shenzhen in 1990 was a milestone in the reenactment of this part of the financial system in the PRC. Over the next years, starting from 1992, supervisory authorities were created and the scope of securities trading regulations was gradually extended. One of the most significant elements was the shares classification system and control of the maximum investments in securities allowed and funds raised by the issuance of shares [Wong, 2006]. First separate stock supervisory body, the China Securities Regulatory Commission (CSRC), was formed, sharing control tasks with the central bank. Until the mid-1990s, the development of the stock market was restricted by the authorities, as it was regarded as too capitalist. Changes occurred after 1997, when it was officially accepted as a part of the followed economic model [Heilmann, 2002]. Despite the Asian crisis, the government decided to support its development by easing restrictions on the purchase of shares (including transactions conducted by domestic and foreign institutional investors) and public offerings. The most important aim of these actions was to accelerate the process of partial privatization. In 1997–1998, the CSRC was reorganized, and in July 1999 first securities law entered into force, marking the end of the stock market formation stage and its full formalization [Bojańczyk, 2008]; in 2005, commercial law was amended, introducing the division of companies' authorities between executive directors and supervisory board. At the same time, major changes took place on stock exchanges, e.g. the introduction of automated trading systems, electronic communication network between the brokerage agencies in different parts of the country, and the emergence of mutual funds investing in stock. Moreover, the structure of listed companies changed, as more private companies were admitted to listing. Parallel functioning of two stock exchanges did not result in increased competition and offering companies and trading participants more favourable conditions – the main cause was the fact that both exchanges are state-owned and have different priorities. Large corporations are listed mostly in Shanghai, while the small and medium ones – in Shenzhen (cross-listing, i.e. simultaneous listing on both floors, is prohibited).

2. Chinese stock market: features and evolution

2.1. The stock classification system

A unique feature of the Chinese stock market is the shares classification system introduced in 1992 [Wong, 2006], which, after slight changes, is still in force. Stocks are divided into three categories according to investment restrictions (available for local and/or foreign entities), stock exchange, and listing currency. Table 1 contains a brief overview of the system. In view of decreasing interest in type B segment (primarily due to the popularity of listings of mainland Chinese companies on a stock exchange in Hong Kong and lifting of restrictions for foreign investors in type A segment), Chinese stock market currently seems to become more uniform, with only two types of stocks: A and H. Such a trend should be

Table 1. Stock classification system in China

Type	Currency	Stock exchange(s)	Description
A	RMB	Shanghai, Shenzhen	the most important category in terms of capitalization and turnover; available for domestic and foreign investors (since 2002, but still with restrictions)
B	USD/HKY	Shanghai (USD), Shenzhen (HKY)	available for domestic (since 2001) and foreign investors
H	HKY	Hong Kong	main Chinese stock market access channel for foreign investors; Chinese (i.e. domiciled in the PRC) companies are listed in Hong Kong through the dual listing

Source: Own elaboration, based on: [Fowler, Li, Naughton, 2008; Hansakul, Dyck, Kern, 2009].

assessed positively from the point of view of the stock market development as it becomes more transparent, with no artificial division between segments in different currencies, resulting in possible increased number of market participants, thus facilitating access to financing for corporations.

2.2. The structure of the Chinese stock market: stock exchanges

Out of the two mainland Chinese stock exchanges, the larger one is located in Shanghai, with the market capitalization (i.e. value of all shares of listed companies measured in market prices) ca. 120% higher than the one's in Shenzhen (see Table 2). Despite the differences in capitalization, in terms of turnover (market value of stocks traded) the position of both exchanges was similar. In 2012, Chinese companies sold on the primary market through domestic exchanges shares worth USD 81,6 bn (sum of shares during initial public offerings and by companies already listed), ca. 60% through the exchange in Shanghai, and the rest through the one in Shenzhen (in 2011, the proportions were inverse) [Marszk, 2012]. However, Shenzhen was first in terms of the number of listed companies – it is used mostly by smaller companies, thus its capitalization is lower. Taking into account the capitalization compared with the turnover, available securities are traded more actively in Shenzhen.

Table 2. Stock exchanges in Shanghai and Shenzhen in 2012: comparison

Indicator	Shanghai	Shenzhen
capitalization (USD bn)	2547,2	1150,0
market turnover (USD bn)	2629,7	2397,5
shares sold on the primary market	48,8	32,8
number of listed companies	954	1540

Source: Own elaboration, based on: [WFE, 2013].

2.3. The structure of the Chinese stock market: market participants

Access to the Chinese stock market was restricted since its beginnings in the current form. Limitations included the classification system described above as well as, ban on financing stock purchases with bank loans and on shares purchases by financial institutions such as insurance companies and pension funds; in the second half of the 1990s, this limitation was extended to all SOEs and listed companies [Wong, 2006]. Due to the deteriorating financial situation of banks and search for alternative funding sources, since 1999 the authorities began to liberalize these rules – the process that ended in September 1999, when institutional investors were granted access to the stock market. A year earlier, the first Chinese investment fund was established [Maswana, 2001], and, in 2002, the Qualified

Foreign Institutional Investors (QFIIs) initiative was launched in order to allow foreign investors (satisfying specified requirements) to trade in A shares, by exchanging foreign currencies into RMB (within set limits) [PwC, 2012].

The consequence of the past barriers is the relatively weak position of institutional investors on the Chinese stock market, strengthening, though, in the last years, and the prevalence of individual investors [Hansakul, Dyck, Kern, 2009]. In 2010, individual investors conducted (in value terms) ca. 60% of the transactions and possessed ca. 40% of the shares constituting free float capitalization. In comparison, in 2006 their participation in capitalization was at 70% [KPMG, 2011]. At the end of 2012, 77 investment companies were registered in the PRC, offering 1173 mutual funds with total net assets under management of USD 468 bn, including USD 220 bn in equity [CSRC, 2013]. Apart from the investment companies, which were the largest group of institutional investors, next biggest groups in terms of share in stock market capitalization and turnover were consecutively: state social security and pensions fund, insurance companies, pension funds, QFIIs (207 entities owning shares worth USD 49 bn), and brokerage houses. The relatively weak position of the institutional investors influenced adversely processes taking place on the stock market due to the predominance of speculative transactions carried out by retail investors (in addition, it is estimated that a significant part of individual accounts are in fact owned by state institutions, such as the police, army, and local authorities, using them to bypass regulations obligating them to deposit funds in banks only) [CSRC, 2013].

2.4. The stock market supervision system in China

Currently, the stock market in the PRC is supervised mostly by the CSRC. Initially, it was a part of central bank's tasks (on the basis of authorities' decision in 1986), but due to the almost non-existent institutional framework and lack of centralized trading systems, its supervision effectiveness was low. In 1992, after riots involving thousands of people, caused by manipulating the allocation of shares by officials during the oversubscribed IPO in Shenzhen, the CSRC was created and, at the same time, restrictions on the issuance of shares were introduced [Wong, 2006]. In the beginning, supervision quality had not improved, though, as evidenced by estimates according to which in the 1990s more than 30% of transactions were subject to stock price manipulations, using up to 70 million illegal fictitious brokerage accounts.

Major changes in the stock supervision system were introduced in the second half of the 1990s – the most important reforms are outlined in Table 3. As a result, current supervisory structure has emerged, under which most tasks belong to the CSRC. Its functions include: preparation, amendment, and implementation of securities legislation, issuing permits to carry out the issuance of shares (in agreement with the National Development and Reform Commission, which determines the size and time of the transaction) [Fowler, Li, Naughton, 2008], conducting investigations, and imposing penalties in case of infringements with cooperation of regional offices [CSRC, 2013]. The CSRC also cooperates with organizations responsible for internal control on both exchanges and market participants' associations.

Table 3. The most important events in the stock market supervision in China since 1997

Year	Event
1997	CSRC gained direct control over trades in shares on stock exchanges in Shanghai and Shenzhen
1999	new securities law entered into force
2001	CSRC announced "stock market supervision year" and started investigations into illegal actions on the stock market
2001	Chinese Supreme Court allowed civil prosecutions against public companies
2003	mutual funds law, regulating their operations
2005	modification of the commerce law, increasing corporate governance requirements
2007	private ownership law, including e.g. better protection of private stockholders' rights

Source: Own elaboration, based on: [Heilmann, 2002; Wong, 2006; CSRC, 2014].

Along with the gradual increase in the sophistication of traded financial instruments and advances in trading systems, the CSRC adopted new regulations at a fairly rapid pace; however, due to high demand for stocks since 2006 onwards, the Commission was unable to sufficiently verify their compliance [KPMG, 2011]. Total effectiveness of the Chinese stock supervision system remains low – the main cause is its too close ties with the authorities. As a result, the CSRC may be regarded as one of the government bodies, which aim is the implementation of the economic policy rather than ensuring the safety of stock market participants. One notable example is a low number of conducted investigations – in the past, the Commission avoided taking such steps because of their possible negative impact on stock prices (particularly of SOEs) [Chen, 2006]. In order to stop the outflow of foreign capital and reduce the perceived risk level of investments in Chinese stocks, after 2010 the number of investigations and value of penalties imposed increased [CSRC, 2013].

3. The Chinese stock market between 1990 and 2012: main development indicators

3.1. Stock market size

The main indicator used to measure the stock market size is market capitalization in either absolute (in current USD) or relative terms (as a percentage of GDP). Due to the lack of data for 1990, both stock market size and the next aspect, i.e. liquidity, are analysed using data from 1991 onwards. Relative indicators are regarded as more reliable as their value is not distorted by exchange rates fluctuations.

The capitalization of the Chinese stock market has increased rapidly in the 1990s, despite the relatively low level of transactions mechanisms advancement and weaknesses of the legal environment. Companies listed were almost exclusively SOEs and stock offerings were used to raise the capital and carry out the limited privatization. Relative market capitalization increased from 0,53% of GDP in 1991 to 21,7% in 1997 (see Fig. 1). The next pro-growth impulse was the partial abolition of barriers for institutional investors and the improvement of the stock supervision effectiveness which resulted in capitalization doubling in the years 1998–2000, despite the Asian crisis and its serious consequences for most countries of the region.

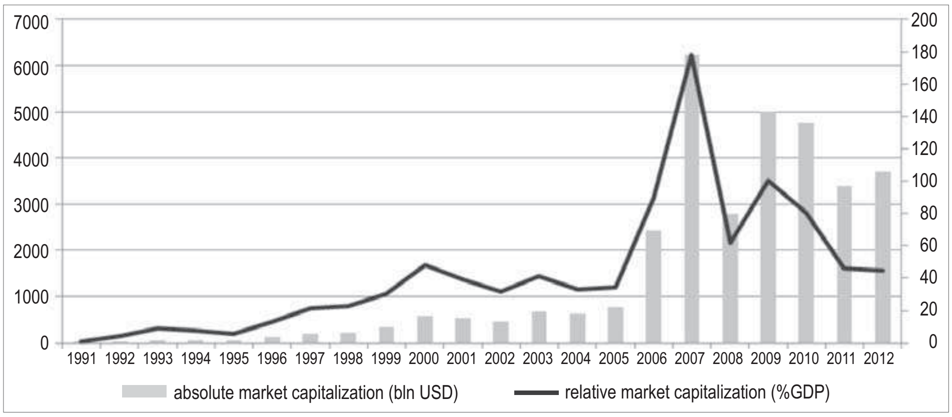

Figure 1. Chinese stock market capitalization: 1991–2012

Source: Own calculations, based on: [WB, 2013].

In the years 2001–2005, the capitalization of the Chinese stock market stayed in the range of 30–40% of GDP (with the lowest value in 2002, at ca. 32%), i.e. below the value reached in 2000. During this period, Chinese economy grew at a high rate (average annual GDP growth rate was above 10%), which can be associated with positive effects of the accession to the World Trade Organization. Capitalization increased at a much lower rate, which did not change even after the reform of the stock system. A sharp increase in the relative capitalization occurred between 2005 and 2007 (it reached 178% of GDP in 2007, the highest level in the history). It was caused by the greater use of stock market by SOEs (public offering of state corporations worth billions of dollars) as well as the improved perception of attractiveness of investment in Chinese stocks among foreign investors, linked with e.g. further changes in the classification system and friendlier legal and institutional environment. Moreover, another important reason for increases in stock prices (one of the components of capitalization) was the GDP growth rate, even higher than before, and related increased households incomes, together with predicted further economic boom.

Just like in the case of other global exchanges, the next few years (since 2008) of the global financial crisis in the beginning brought a significant decline in capitalization (down to 62% of GDP) and later – a one-year rebound in 2009. Between 2010 and 2012, market value of listed companies in relation to GDP (and in absolute terms) decreased and, at the end of 2012, the relative capitalization was at ca. 45%, i.e. below the value of 2006 (and 2000). Decrease in capitalization in China took place despite the fact that the pace of the GDP growth was still high (9–10%), and was caused mostly by the withdrawal of capital by investors predicting possible worsening of the economic situation. Nevertheless, at the end of 2012, in absolute terms, Chinese stock market share was second largest in the world, after the US (USD 3,7 tn); its relative size was close to the average for other emerging markets.

3.2. Stock market liquidity

The indicator used to measure stock market's liquidity is the value of stocks traded on both Chinese stock exchanges (also in absolute and relative terms). The direction of changes in the level of liquidity in China resembled the changes in size (see Fig. 2). Between 1992 and 1997 relative turnover increased from 4% to 39% of the GDP; the rate of growth was thus much higher than for capitalization. The turnover was increasing faster than the value of listed companies – a fairly small number of available stocks was traded actively, and technological deficiencies and underdeveloped legal system did not constitute a major obstacle to national investors (foreign ones were almost absent). Next period of rapid liquidity growth are the years 1999 and 2000, when, in the second one of the periods mentioned, the turnover amounted to USD 72 bn, i.e. 60% of the GDP. It is worth noting that the increased capitalization and liquidity in the last years of the 20th century did not indicate higher stock market development level. It is necessary to take into account the market value based on corrected capitalization, as in the

1990s the percentage of shares that were exchange-traded and available for purchase (i.e. level of free-float of Chinese stock exchanges) was very low due to the administrative constraints.

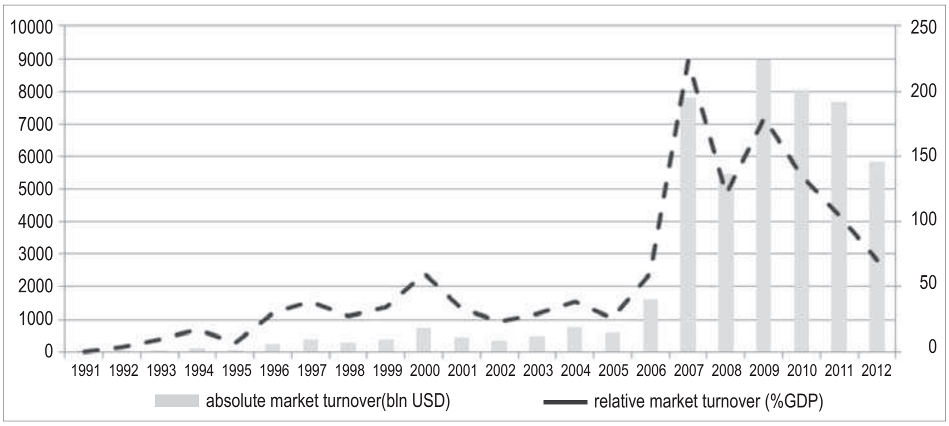

Figure 2. Chinese stock market liquidity: 1991–2012

Source: Own calculations, based on: [WB, 2013].

In 2000 liquidity began to fall, which, paradoxically, was caused to a large extent by actions undertaken by supervision authorities, aimed at improving the quality of corporate management and the protection of shareholders rights. As a result, stock market was left by a significant number of speculative investors, benefiting earlier from the ambiguous market situation (e.g. lack of adequate control over transactions). However, there was no inflow of capital from long-term investors as the market was still regarded as too opaque. Yet another factor were poor financial results of the majority of SOEs in addition with the reduction of state's share and increased supply of their shares – consequently, prices of their stocks fell [Wong, 2006].

Liquidity changes which have occurred since 2006 and their causes were similar to those concerning the capitalization. The highest relative value was reported in 2007 (223% of GDP), absolute in 2009 (slightly below USD 9 tn). Decrease in relative liquidity during the next two years occurred on a smaller scale than in the capitalization aspect, and until 2011 the absolute turnover remained at a level higher than before 2007. Since 2009, market turnover's absolute value in China is world's second highest, after the US – in 2012 the value of transactions amounted to ca. USD 5,8 tn (due to different data sources, this number differs from the sum of turnover of the two exchanges in Table 2).

Conclusions

Since its reestablishment in 1990, the Chinese stock market has undergone a deep transformation from embryonic form, with minimal capitalization and liquidity, to one of the largest and most liquid in the world. However, the level of stock market's development should not be judged only by the value and changes of selected indicators (where the improvement is undoubtedly noticeable), representing measurable characteristics – aspects such as market structure, participants, or supervision should be taken into account as well. According to the 2012's Financial Development Report [WEF, 2012], the Chinese stock market lags behind the most advanced and many emerging markets (e.g. Brazil or India) in categories such as the sophistication of the financial market (49th place out of 62 ranked countries), stock market supervision (38th place), protection of minority shareholders' rights (39th place), or corporate governance (31st place). China's position in this ranking confirms findings mentioned in this text – Chinese market should be assessed as still underdeveloped in many areas.

Main problems of the Chinese stock market should be addressed in the future in order to spur its development. Suggested solutions include eradication of the stock classification system (complicating the market structure and discouraging foreign investors), strengthening the position of institutional investors (through state-controlled banks; higher percentage of such participants could result in e.g. more advanced financial instruments offered), and, above all, removing the links to the authorities in the financial supervision system, thus ensuring proper trading conditions for all groups of market participants. Factors which may influence Chinese stock market development in the future include: proceeding integration with the stock market in Hong Kong, liberalization of the currency regime, lifting barriers for foreign investors, liberalization of other parts of the financial system (above all the banking system, currently controlled almost exclusively by state institutions), and economic policy with its consequences for the economic growth (as well as situation in the global economy). The development of the Chinese stock market may have a profound impact on the global financial system (and economy), changing the direction and intensity of international capital flows – liberalized and more advanced equity market should attract foreign investors, making mainland China one of the key markets in the world.

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