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# Evolution of China's financial system and its impact on economic development

Lino Sau

**Abstract:** In this paper, I try to show and emphasise how China has adopted alternative economic policies in the transition and in the evolution of its financial system. In fact, the 'step by step' or 'gradualism' approach followed is in contrast to the fashionable idea that indiscriminately prescribes market-oriented financial system architecture to emerging and transition economies, and is, I believe, more close to the financial policies recommended by Post-Keynesians.

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## 1 INTRODUCTION

The orthodox and dominant view in economic policy recommended a reform programme for transition and developing countries in the form of ‘shock therapy’ approach or ‘big bang’ under the assumption that “one size fits all” (cf. Kolodko, 1999; McMillan, 1994; McMillan and Naughton, 1992). Shock therapy was the results of the Washington Consensus: the consensus achieved in Washington among the United States Treasury, the IMF, and the World Bank (cf. Williamson, 2000). As a matter of fact, this approach emphasised that the best modus operandi for developing and transition economies were liberalisation, deregulation and privatisation in all sectors of the economy (cf. Stiglitz, 2002; Marangos, 2003, p.451); that is, unfettered free market, a reduce role for institutions and state and immediate integration into the international economic and financial system are the most important policies goals.

Post-Keynesians, in contrast, recommended different economic policies reforms for transition economies than the ones suggested by the mainstream (cf. Marangos, 2003, p.450, 2004, p.455): gradual price liberalisation, which involved maintaining fixed prices and wages and subsidies, government intervention to stimulate investment and incomes; discretionary monetary policy as essential measures to reduce unemployment; provision of appropriate incentives and regulation for the development of a healthy financial system and use of discretionary power to restructure the banks, prior to privatisation.

In this paper, I try to show and emphasise how China has adopted alternative economic policies in the transition and in the evolution of its financial system.<sup>1</sup> In fact, the ‘step-by-step’ or ‘gradualism’ approach followed is in contrast to the fashionable idea that indiscriminately prescribes market-oriented financial system architecture to emerging and transition economies, and is, we believe, more close to the financial policies recommended by post-Keynesians.<sup>2</sup> We consider China’s financial system because the vast literature, up to date, was concentrated mainly and particularly on the ‘real sphere’ of the Chinese economy and the contributions examining the ‘financial sphere’ and, above all, the evolution of the structure of its financial system remain relatively few. As to methodology, we consider both the theoretical and the empirical aspects concerning with the transition of the financial systems in emerging countries (cf. Allen et al., 2007; Tadesse, 2005; Stiglitz, 2002).

The paper is structured as following: in Section 1, we consider and overview the literature dedicated to the analysis of the relevance of the financial architecture and to the comparison of different financial systems; in Section 2, we go on to the origin and development of the reforms in the Chinese system, highlighting the aspects of gradualism; in Section 3, we analyse the evolution of the financial system in China; finally, we draw our conclusions.

## **2 WHY FINANCIAL ARCHITECTURE MATTERS?**

As well-known, the post-Keynesian view refuses the dichotomy between the real and financial sectors of the economy; on the contrary, money and finance are integral in the understanding of the economy, that is, financial structure matters for real decisions (cf. Minsky, 1986; Arestis and Howells, 1992; Fazzari and Papadimitriou, 1992).

Financial architecture is traditionally the mix of institutions, tools and markets that characterises a country's financial system.<sup>3</sup> Consideration of this aspect becomes crucial once we depart from the 'ideal world' of Arrow-Debreu<sup>4</sup> to analyse a concrete economy characterised by fundamental uncertainty, incomplete markets, the presence of onerous transaction costs, imperfect and asymmetric information between insiders and outsiders to the firm – all quite striking aspects, especially when we consider an emerging and transition country like China. Fundamental uncertainty and informational problems are indeed more accentuated in emerging and transition countries than in developed countries (Cf. Levine, 1997; Mishkin, 1996; Sau, 2003). Indeed, the transitional process raises a specific 'transitional uncertainty' due to institutional and structural transformation of the economy. This is because the post-Keynesian financial policy recommendations are most useful to the transition economies than the orthodox prescriptions (cf. Marangos, 2004, p.442).

The financial system performs a number of functions: it mobilises saving, allows for the diversification and sharing of risk; it produces and disseminates information; it allows for the monitoring of managers and enhances corporate governance; and it facilitates investments and innovation. Thus, we see depending on the financial system both efficiency in the allocation of

resources and the stability of the economic system (cf. Fazzari and Papadimitriou, 1992; Allen et al., 2004; Minsky, 1996; Minsky and Whalen, 1996/97).

The literature that compare different financial systems is still characterised by the (cf. Allen and Gale, 1999; Levine, 2002) contrast of the so-called bank-based view, with the market-based view. The two topologies of financial structure are in fact taken to be alternative, having found application in such different economic systems as those of Germany and Japan (bank-based systems), on the one hand, and the USA and the UK (market-based systems), on the other.

Upholders of the bank-based view lay particular stress on the way a monetary economy<sup>5</sup> develops thanks above all to the action of coordination guaranteed by the presence of certain institutions, among which banks play a decisive role. In fact, the banks play a very special and indeed central informative role (Stiglitz, 1985; Stiglitz and Weiss, 1988): they are the 'social accountants'; they perform the activities of screening potential clients and monitoring in the case of clients obtaining credit; finally, they not only acquire but also produce information.<sup>6</sup>

However, advocates of the market-based view stress the virtues of particularly extensive, widespread and liquid financial markets (in shares, bonds and private equity; (cf. Boot and Thakor, 1997; Allen and Gale, 1999). In fact, it is these that most favour the financing and constitution of new firms and, thus, of the more innovative projects.

Nevertheless, the post-Keynesian approach to transition emphasises (cf. Marangos, 2004, p.445) that the reforms necessary for each market economy could only be determined country by country. This recommendation is valid also for the implementation of the financial system. Therefore, the 'optimal' financial architecture should not be viewed in a static way as it depends on a set of country-specific factors in a given period, including particularly: a) the level of uncertainty, incompleteness and asymmetry of information marking the economic system (cf. Stiglitz, 2002, 2004; Capasso, 2004); b) the development of the institutions and legal system within which the banks and markets operate; If we take this perspective into account, in the course of the phase of transition from planning to market economy, China was clearly in a critical situation in relation to both the former and the latter aspect (cf. McMillan and Naughton, 1992; Marangos, 2006).

According to this analysis, in the case of a country showing these characteristics, it will prove preferable to develop a bank-based system (cf. Tadesse, 2002, 2005, for an empirical

investigation) to begin with, and only when the above-mentioned specific factors have improved or changed, work towards further development of the financial markets. This gradualist approach is indeed in contrast to the fashionable idea that indiscriminately prescribes market-oriented financial system architecture to emerging and transition economies. As Marangos (2003, p.451) point out:

“in transition economies, institutions essential to market economy were either distorted or did not exist, and market behaviour was unfamiliar or immature. Market institutions had to be developed from scratch.”

As we will see in the following sections, we hold this approach to be particularly significant in that it helps us to appreciate the reasons why China still has a largely bank-based financial system and is moving only gradually towards effective boosting of the national financial markets and opening up to the international financial markets.

### **3 GRADUALISM IN THE REFORMS OF THE CHINESE FINANCIAL SYSTEM**

In this section, the focus is on the origin and development of the complex of intermediaries and markets characterising the Chinese financial system. Here, we have an evolution that is still in progress and that was launched as a result of the implementation of gradual reforms brought in as from the end of the 1970s to the present day.

With regard to the banking system, we must take a backward glance and recall that the advent of the People's Republic of China (1949) brought in its wake, in the space of just one year, the blanket nationalisation of the financial institutions and firms. For this reason, for nearly 30 years (1950–1978), the country's financial system remained anchored on one single bank: the People's Bank of China. This was entirely of under state ownership and remained until 1978 under the direct control of the Ministry of Finance. Playing the twofold role of central bank and commercial bank, the People's Bank of China was in the privileged position of being able to control practically all the financial transactions that took place in the country.

Therefore, 1978 came to represent a sort of watershed in the analysis of China's financial structure. On the one hand, it marked the 'divorce' between the People's Bank of China and the Ministry of Finance (the bank became a partially autonomous entity, but remaining under government supervision); on the other hand, the period following after 1978 is of particular interest with respect to the transformations that took place in the credit system, seeing the birth of three newly constituted state banks that deprived the People's Bank of China of many of its functions as a commercial bank. These three new state banks were the Agricultural Bank of China, which was to focus on activities in support of the agricultural and rural areas; the Bank of China, which was to specialise in transactions related to foreign trade and investment; and the People's Construction Bank of China, which was to deal with the financing of real-estate investments.

Alongside these, three large banks there came a fourth rather later, in 1984: the Industrial and Commercial Bank of China, which totally removed all the commercial activities that still depended on the People's Bank of China, giving rise to the state credit bloc known as the 'Big Four', which constitutes, as we will endeavour to show, the core of the Chinese bank credit system.

In the second half of the 1980s, new financial intermediaries of a local nature began to develop, such as the Regional Banks (partly in the ownership of the local government), the network of Rural Credit Cooperatives under the supervision of the Agricultural Bank and, finally, the Urban Credit Cooperatives. The same period also saw the birth of the first non-bank intermediaries such as the Trust and Investment Corporations and the first foreign financial institutions, but their functions proved somewhat limited.

This emerges fairly clearly from Table 1, which classifies the various bank topologies present in China taking into account total deposits and outstanding loans. Considering the period 2000–2005, we see just how the so-called Big-Four dominated within the Chinese bank credit system, both for volume of total assets (16,932 billion RMB in 2004, including 10,086 billion in loans) and for deposits (14,412 billion RMB in 2004), well above the other commercial banks (private, foreign and local). One consequence of this was the low degree of competition within the banking system, which characterised it for quite a long time (cf. Demirgüç-Kunt and Levine, 2001).



<i>Types of banks</i>	<i>Total assets</i>	<i>Total deposits</i>	<i>Outstanding loans</i>	<i>NPL (%)</i>
<i>2004</i>				
• 4 State-owned banks	• 16,932.1	• 14,412.3	• 10,086.1	• 15.57
• Other comm. banks	• 4,697.2	• 4,059.9	• 2,885.9	• 4.93
• Foreign banks	• 515.9	• 126.4	• 255.8	• 1.34
• Urban credit coop.	• 171.5	• 154.9	• 97.9	• --
• Rural credit coop.	• 3,101.3	• 2,734.8	• 1,974.8	• --
<i>2003</i>				
• 4 State-owned banks	• 16,275.1	• 13,071.9	• 9,950.1	• 19.74
• Other comm. banks	• 3,816.8	• 3,286.5	• 2,368.2	• 7.92
• Foreign banks	• 333.1	• 90.7	• 147.6	• 2.87
• Urban credit coop.	• 148.7	• 127.1	• 85.6	• --
• Rural credit coop.	• 2,674.6	• 2,376.5	• 1,775.9	• --
<i>2002</i>				
• 4 State-owned banks	• 14,450.0	• 11,840.0	• 8,460.0	• 26.1
• Other comm. banks	• 4,160.0	• 3,390.0	• 2,290.0	• --
• Foreign banks	• 324.2	• --	• 154.0	• --
• Urban credit coop.	• 119.0	• 101.0	• 66.4	• --
• Rural credit coop.	• --	• 1,987.0	• 1,393.0	• --
<i>2001</i>				
• 4 State-owned banks	• 13,000.0	• 10,770.0	• 7,400.0	• 25.37
• Other comm. banks	• 3,259.0	• 2,530.7	• 1,649.8	• --
• Foreign banks	• 373.0	• --	• 153.2	• --
• Urban credit coop.	• 128.7	• 107.1	• 72.5	• --
• Rural credit coop.	• --	• 1,729.8	• 1,197.0	• --

**Table 1** State and non-state banks (RMB billion). *Source:* Allen et al. (2007) appendix based on Almanac of China's Finance and Banking (2000–2005)

However, from 1997, the entry of new private banks and new intermediaries gradually generate and drive towards greater competition (cf. Allen et al., 2007). Reforms of the banking system were implemented under the supervision of the China Banking Regulatory Commission. This new institution pursued a mixed strategy<sup>7</sup> between the ‘rehabilitation approach’ and the “new entry approach” (cf. Claessens, 1996) but with a bias towards the former. In fact, China was in the first place aiming to enhance the state bank sector (i.e., the rehabilitation approach for the Big Four) before allowing the entry of new banks, whether national or foreign (i.e., the new-entry approach) and thereby raising the level of competition in the sector of intermediaries. In fact, this is in compliance with post-Keynesian financial policies recommendations (cf. Marangos, 2003, p.452) and in contrast with shock therapy approach: China has indeed developed a combination of state-owned and privately owned banks. Gradualism in the reform of the banking system, also avoid the experience of other transition economies that, permitting unrestricted wildcat banking activities, resulting in inflationary pressure.

Furthermore, the 'rehabilitation approach' was managed by the government and the central bank by providing financial support, particularly to the state-banking system;<sup>8</sup> state banks, in their turn, finance firms – particularly State-Owned Enterprises (SOE) – with the provision of credit needed.<sup>9</sup> As stated by Marangos (2003, p.462): "whenever a socialist firm was in the red, the central authority would bail it out with financial assistance in the form of subsidies, reduced taxation, provision of credit". That is the central bank, during the transition, should not be independent (cf. Marangos, 2004, p.455; Arestis and Bain, 1995) as the mainstream approach perceived because this would require independence of civic values, which requires full employment: especially during transition, the actions of an independent central bank would be inadequate.

For post-Keynesians, discretionary monetary policy is essential to reduce unemployment during transition; this is feasible only with a state-controlled central bank and maintaining government-owned banks competing with private banks as in the Chinese banking system.

As to the stock markets, they only came into operation as from the 90s, the introduction of these markets launch as second 'pillar' of the financial system. Gradual elimination of a number of the constraints on private property opened the way for the rise of many private or quasi-private firms and gradually opened channels for savings to find some use other than deposit into the banks.

As noted above, official activation of the two 'national' stock exchanges, the Shanghai Stock Exchange (SHSE) and Shenzhen Stock Exchange (SZSE), took place at the beginning of the early 90s, in 1990 and 1991, respectively. Alongside these, the Hong Kong<sup>10</sup> Stock Exchange (HKSE) subsequently came into action, and it was here that the biggest and most innovative firms were quoted.

One of the most peculiar characteristics of the Chinese stock market is the remarkable segmentation: there are, in fact, a great many shares typologies (cf. Beltratti and Caccavaio, 2006; Allen et al., 2007). An appropriate way to approach classification, and one serving particularly for the observations to be made later on the incidence of this market within the financial system, is with the distinction between Tradable Shares (TS) and Non-Tradable Shares (NTS). The former can be exchanged freely, whereas the NTS (State Shares and Restricted Institutional Shares) can only be sold out privately and are, thus, not subject to public trading in the market. The latter are in fact issued in favour of the founders and employees of a state-owned company and serve the

twofold function of preventing state control from being removed and maximising the subsequent quotation through IPO. The former aspect has to do with the government's endeavours to prevent 'wild privatisations' (cf. Green and Black, 2003) while the restructure of state companies is under way. As suggested by the post-Keynesian approach (Marangos, 2004, p.450):

"selling state enterprises to the highest bidder,...,violated equity principles ... The only people who could purchase firms were those who had benefited under the previous regime through the black-market and illegal activities or foreigners."

Furthermore "it is the responsibility of the government to use discretionary measures to ensure the viability of the enterprises before and after privatisation" (cf. Marangos, 2003). In fact, the shock therapy experience in Russia suggested indeed that immediate privatisation of all state enterprises was not the best *modus operandi* to proceed (cf. Bucknall, 1997).

At the beginning of 2005, the NTS still accounted for about 2/3 of all the shares in circulation (cf. Beltratti and Bortolotti, 2006). TS can, in turn, be classified in terms of domestic shares (i.e., A Shares), as being owned and exchanged by domestic investors alone and foreign shares (i.e., B and H shares)<sup>11</sup> denominated in foreign currency and reserved for foreign investors.

On 29 April 2005, the China Securities Regulatory Commission, a specific institution established for securities markets, launched an important reform project that is likely to have far-reaching effects on the future pattern of the structure assumed by China's financial system. In fact, it provides for the gradual reduction of NTS. More particularly, this reform was applied to the period from April 2005 to September 2006, requiring that holders of NTS have to compensate in a variety of forms (cash, bonus shares, warrants) and holders of TS to have the right to sell their shares (cf. Beltratti and Caccavaio, 2006; Beltratti and Bortolotti, 2006). The reform process consists of two stages: in the first stage, every company involved announces sale, but before the transaction can be made, the forms of compensation are to be established. In this way, the effect of the shock associated with the increase in supply on the share prices and the dilution effect should be softened.

By the end of 2006 (cf. Table 2), in terms of total capitalisation, HKSE was entirely on its own account, sixth, registering an increase of 62.6% over 2005; SHSE and SZSE were still 11th, but

showing a shift from the year before of 220.6% and 97.1%, respectively. These data show that the stock market is likely to gather momentum within the structure of China's financial system.<sup>12</sup>

Improvement is also to be seen in the concentration index for the two mainland stock markets, standing at 71.2% for Shanghai and 37.7% for Shenzhen. Again, the 2006, turnover index came fairly high, indicative of high levels of exchanges, coming to around 153.8% for Shanghai and 251.7% for Shenzhen, while standing at 62.1% for Hong Kong. Subsequent to reform of the stock market, NTS had decreased from 66% (of the total of shares) to 60.6% by February 2006 and down to 57% by June of the same year, whereas TS rose from 34% to 43% (35% of which accounted for by A-shares). To this is to be added that the percentage variation in floating shares in 2006 in comparison with 2005 came to 208.7% for SHSE and 174% for SZSE (cf. world-exchanges.org, 2006).<sup>13</sup>

<i>Rank Stock market</i>	<i>Total market capitalisation (billion \$)</i>	<i>Concentration (%)</i>	<i>Turnover velocity (%)</i>	<i>% Change capit. 06/05</i>
1 NYSE	15.421	47.8	134.3	13.1
2 Tokyo	4.614	60.6	125.8	0.9
3 Nasdaq	3.865	61.7	269.9	7.2
4 London	3.794	84.1	124.8	24.1
5 Euronext	3.708	72.3	116.4	37.0
6 China (Hong Kong)	1.715	78.7	62.1	62.6
7 TSX group	1.700	70.3	173.7	14.7
8 Deutsche Börse	1.637	72.7	130.2	34.1
9 BME (Spain)	1.323	N.A.	167.0	37.8
10 SWX (Swiss)	1.212	71.2	130.2	29.6
11 China (Mainland)	1.145	108.9	405.5	317.7

**Table 2** Comparison of the largest stock markets in the world (2006). *Source:* World-exchanges.org (2006)

As for the Chinese bond market, it is noteworthy that the most significant increase of new bonds was mainly in the state sector, namely Treasury bonds, with an increase of 32.8% in the 1990–2002 period, together with the bonds issued by the State-Owned Banks (SOBs), which registered an increase of 38% in the same period. Compared with these, the bonds issued by the private companies are virtually negligible at 8.2% (cf. Statistical Yearbook of China 1990–2002). The following period (2002–2006) showed gradual advance in the issue of corporate bonds, registering an increase of 20.4% (cf. Statistical Yearbook of China, 1990–2005).

The end of the 90s was marked by the rise of the institutional investors, although they continued to play a relatively minor role in the economic system. The first two Chinese mutual funds were constituted in 1998 (Guo Tai and Nan Fang), and they have now come to number 46 including 13

foreign Qualified Foreign Institutional Investors or joint ventures. There are no traces of hedge funds as short- or very short-term financial transactions are still banned, whether abroad or within the country, while pension funds have great difficulty in getting off the ground (Cf. Allen et al., 2005, 2007). The OECD Report on China (09/05) points out that one of the major shortcomings of the Chinese financial system is precisely the scant representation of institutional investors and urges that the problem be addressed without delay.

Concerning with international capital flows, the inflows were minimal in 1970s and 1980s, impeded by capital controls and the reluctance of international investors to undertake investment in socialist economy with weak institutions and limited exposure to international trade. A big change raised in 1990s, when Foreign Direct Investment (FDI) inflows surged dramatically on account of the selective opening of China's capital account as well as the rapid trade expansion (cf. Prasad and Jin Wei, 2005). This gradualism in the opening in the capital account is, once again, in contrast with the shock therapy advocated by Washington Consensus – that suggested immediately integration into the international economic and financial system as the most important policies goals for emerging and transition countries – and more close to post-Keynesian policy recommendations.

FDI have dominated China's inflows: a pattern that appears to be favourable for an emerging countries, as FDI tends to be more stable and associated with other benefits such as transfers of technological and management expertise. As for other types of inflows, China has limited its external debt to low levels, and non-FDI private capital inflows have typically been quite limited, until recently. This composition of inflows in China may be considered as the 'right one' taking into account post-Keynesian literature on the recent experiences of financial crisis in emerging and transition countries. Very often, these countries had indeed external debt in relatively short maturity and in foreign currency open the way to maturity and currency mismatches troubles (cf. Cardim de Carvalho, 2000/01; Sau, 2003).

#### **4 THE EVOLUTION OF THE FINANCIAL STRUCTURE IN CHINA**

Having reviewed the main reforms that have affected the Chinese financial system, in this section, we will analyse the structure of the system and attempt to illustrate the evolution in the relative importance taken on by the various forms of financing. Here, we must consider the contributions

by Allen et al. (2004, 2007) up-to-dating them with the effects on the Chinese financial system produced by the most recent reforms.<sup>14</sup> The analysis of the evolution is based in compliance with Allen and his collaborators, on structural indexes, calculated with the method proposed by Levine (2002) and Demirguç-Kunt and Levine (2001).

We will begin with a magnitude that tells us something about the dimensions of the bank credit market as compared with the stock market from the macroeconomic point of view considering, as in Allen et al. (2007) in the 2002 (i.e., previous to the reform program in the stock market).

To this end, on the evidence of the total bank credit in ratio with the GDP (bank credit ratio), we can without a shadow of a doubt confirm that the incidence of the banking system within the Chinese financial structure is indeed significant, actually exceeding unity: (1.11) (cf. 2002: Table 3A).

<i>Years</i>	<i>Bank credit ratio</i>	<i>Capital. ratio</i>	<i>Float. ratio</i>	<i>Overhead costs</i>
1997	0.95	0.24	0.07	–
1998	1.04	0.25	0.08	0.11
1999	1.10	0.30	0.10	0.12
2000	1.08	0.31	0.09	0.10
2001	1.09	0.30	0.10	0.09
2002	1.11	0.32	0.11	0.11
2003	1.13	0.33	0.09	0.10
2004	1.12	0.35	0.13	0.08
2005	1.17	0.39	0.12	0.07
2006	1.12	0.42	0.15	0.06

**Table 3A** Bank and market size indicators. China's financial system evolution: Bank vs. Market based measures (1997–2006). *Source:* see Allen et al. (2007) integrated with IMF (various years)

However, when we turn to the figure for credit supplied to the hybrid sector (i.e., non-state and non-listed firms), as it is called, the value plunges (0.24), demonstrating that the majority of bank loans supplied by the Chinese banks went to SOE or listed firms (as emphasised by Allen et al., 2007).

In the case of the stock market, the situation in 2002 proves the reverse: in fact, China registers a ratio of no more than 0.32 (32%) (market capitalisation ratio). The result drops to 0.11 (11%) if we consider the 'floating supply' of the market in ratio with the GDP (i.e., float supply ratio or total value traded ratio). The latter datum proves particularly significant in that, unlike the total

capitalisation, the floating supply is equal to the value of shares that are exchanged on the market (cf. 2002: Table 3A).

We are aware of the fact that simple comparison between the data taking into account the volume of total credit supplied and the total stock market capitalisation (in ratio to the GDP) are not, however, sufficient to draw conclusions on the relative importance assumed by the banks in comparison with the stock market within the Chinese financial system; in fact, that is, that the structure is bank-based rather than market-based.

In this respect, their analysis is extended to take into consideration the Structure Indices, as they are termed. Now, if we consider the index that measures 'Structure Activity', obtained on the basis of the Log (float supply ratio/bank credit ratio), and the index that measures the 'Structure Size', obtained, in turn, with Log (market capitalisation ratio/bank credit ratio), we get for China: (−2.31) and (−1.24) (cf. Table 3B).

<i>Years</i>	<i>Structure activity</i>	<i>Structure size</i>	<i>Structure efficiency</i>
1997	−2.60	−1.39	–
1998	−2.65	−1.42	−3.23
1999	−2.40	−1.23	−2.65
2000	−2.42	−1.22	−3.09
2001	−2.41	−1.23	−3.21
2002	−2.31	−1.24	−3.20
2003	−2.28	−1.18	−3.10
2004	−2.29	−1.13	−3.08
2005	−2.27	−1.09	−3.07
2006	−2.10	−0.98	−3.02

**Table 3B** Structure indices: markets vs. banks. *Source:* See Allen et al. (2007) integrated with IMF (various years)

Since the higher the measure, the more the system is market-based, the last two data (i.e., structure size and structure activity) point to some significant conclusions on the predominance of the bank sector over the stock market in the Chinese financial system. In fact, as we have seen, in terms of both volume and indexes, the Chinese financial structure has been dominated by the role of the banks and, as noted in Section 2, above all the state banks (i.e., SOBs).

If one consider the role played by the entire financial system rather than taking the roles of the banks and the financial markets separately, in compliance with Allen et al. (2007), we get indices for the overall development of the financial system (i.e., financial development indices).

The finance-activity index is obtained on the basis of Log (float supply ratio  $\times$  private credit ratio). The finance-size index is obtained considering Log (total market capitalisation ratio  $\times$  private credit ratio). The two indexes prove somewhat low especially in terms of finance size (–2.56) (cf. 2002: Table 3C).

<i>Years</i>	<i>Finance activity</i>	<i>Finance size</i>	<i>Finance efficiency</i>
1997	–4.22	–3.08	–
1998	–4.14	–2.92	–1.99
1999	–3.72	–2.55	–1.94
2000	–3.88	–2.53	–1.97
2001	–2.36	–2.54	–1.98
2002	–2.38	–2.56	–1.96
2003	–2.31	–2.55	–1.78
2004	–1.99	2.33	–1.70
2005	–1.96	–2.36	–1.65
2006	–1.74	–2.29	–1.60

**Table 3C** Financial development indices (Banking and market sectors combined). *Source:* See Allen et al. (2007) integrated with IMF (various years)

On the basis of the indexes dealt with above, we can now survey the evolution that has taken place within the structure of the Chinese financial system, taking into account the period subsequent to stock market reform starting on April 2005. As we have seen (cf. Section 2 and Table 2) in 2006, in terms of total capitalisation, the HKSE came sixth on its own account, with an increase of 62.6%; the SHSE and SZSE were still at the bottom of the list, but showing percentage variations from 2005 of 220.6% and del 97.1%, respectively.

Thus, in the light of the indexes calculated subsequent to the stock market reform, we see the Chinese financial structure evolving gradually, towards a more market-oriented system (cf. 2002 vs. 2006: Table 3A-B-C).<sup>15</sup> In fact, we get an improvement of both capitalisation and float ratio and of structure activity and structure size. The gradualism approach followed by China has indeed achieved satisfactory outcomes, in some cases, superior to those obtained under shock therapy (cf. Marangos, 2004, p.442). As Stiglitz (2002, p.185) points out:



“The ultimate irony is that many of the countries that have taken a more gradualist policy have succeeded in making deeper reforms more rapidly. China’s stock market is larger than Russia’s.”

## 5 CONCLUSION

As well-known, in the last 30 years China’s economic reforms followed successful gradualist or step-by-step approach<sup>16</sup> that are in contrast with the shock therapy policies adopted by many other transition countries suggested, and very often imposed, by the Washington Consensus.

Starting from this finding, in this paper, we set out to show that this is true also in the implementation of its financial system architecture. These reforms have been applied in various ways at various times, dealing first with the banking system, then with the stock market and finally shaping the financial markets, in the broad sense, subsequent to joining by China to the WTO.

From the theoretical point of view, this gradual reform process contained elements, we believe, of the post-Keynesians approach to transition (cf. Marangos, 2003, 2004, 2006). Indeed, the financial structure of a country is not be seen in static terms as it depends on a series of specific factors that must of necessity be taken into account. Whenever a country’s legal and institutional systems have seen little development, with serious problems in transitional uncertainty and asymmetry of information – all of which are very evident aspects when we consider a developing country like China – it will be preferable to begin by boosting a bank-based financial system and work in the direction of further development of the financial markets (i.e., market-based financial system) only when these specific factors show real improvement. The shock therapy experience adopted by many transition countries (Bulgaria, 1991; Russia, 1992, Albania, 1992; Estonia, 1992 etc.) revealed that it was a mistake to assume that state enterprises and banks would adjust immediately to market principles (cf. Stiglitz, 2004; Marangos, 2004, p.446).

These findings are borne out by applied analysis performed elaborating on the basis of the contributions by Allen et al. (2007). In fact, on the evidence of the structure indexes, we can only conclude that the Chinese financial system had long been totally bank-base but that it is now developing and slowly evolving towards a more market-based system: for these aspects China is indeed an interesting case study.

Nevertheless, the gradual process described above has ensured, at present time, a certain social and macroeconomic stability but has not prevented problems of financial fragility from arising in the banking sector and problems of corporate governance for the firms (cf. OECD, 2005; Yueh, 2004), which need to be addressed without delay.<sup>17</sup> These aspects are beyond the aim of this paper and need further reflections and investigations for other works.

## NOTES

<sup>1</sup>For an overview on China's gradual economic reforms see: McMillan and Naughton (1992), Chen et al. (1992), Bucknall (1997), Stiglitz (2002), Lau et al. (2000) and Marangos (2006).

<sup>2</sup>Whether the policy decision-makers, were, or not, aware of this aspect is an intriguing question. Nevertheless it is important to point out that, despite the analogies stressed in this paper between China's financial system evolution and Post Keynesians' financial policies, the political transition process is, at present time, in contrast with the ultimate goal of Post Keynesians that is: to develop a democratic and civilised market capitalist society (Davidson and Davidson, 1996; Marangos, 2000/01, 2004).

<sup>3</sup>Despite the recent trend in globalisation, the financial architectures of different economies remain indeed diverse (cf. Allen et al., 2004).

<sup>4</sup>Modigliani and Miller demonstrated that in a perfect capital market, financial structure is irrelevant for investment decisions; furthermore in such a context the financial services of the intermediaries could be performed just as easily by investors (cf. Campbell and Cracaw, 1980; Fazzari and Papadimitriou, 1992).

<sup>5</sup>Minsky (1986) argued that such a system is based on a complex network of debt-credit financial interrelations.

<sup>6</sup>Through indirect signalling effects (cf. Sau, 2003, p.498).

<sup>7</sup>The reform of the Chinese banking system was indeed in contrast if compared with the one adopted in Russia and in Estonia and is more close to the ones adopted both in Hungary and Poland.

<sup>8</sup>That is the 'big four'. On these aspects see Allen et al. (2007).

<sup>9</sup>Nevertheless, the fact that the big four has often financed projects that did not meet commercial loans standards caused an increase in Non Performing Loans (NPL), see Table 1.

<sup>10</sup>In economic and financial statistics Hong Kong remained, as a special administrative region, separated from "Mainland China" (cf. IMF, International Financial Statistics).

<sup>11</sup>H-shares refer to Hong-Kong Stock Exchange.

<sup>12</sup>See also Section 3 and the structural indices analysis.

<sup>13</sup>Stiglitz (2002, p.185) point out that despite gradualist reform in the financial system, the Chinese stock market is now larger than the Russian.

<sup>14</sup>That is the reform in the stock market beginning on April 2005.

<sup>15</sup>This process accords with the approach taken up here in Section 1.

<sup>16</sup>Nevertheless, we agree with Marangos (2006, p.221, 236) that China's economic reforms are very difficult to replicate in other transition countries because the transition process has maintained political-ideological authoritarianism and state control of the whole economy.

<sup>17</sup>This is because there is certain disagreement between some economists about the effectiveness of the monetary and financial reforms (cf. Yusuf, 1994; Allen et al., 2007).

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