

Governing Stock Markets in Transition Economies: Lessons from China

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Jump-starting stock markets in transition economies has proved difficult. These countries lack effective legal governance structures and face severe information problems. Yet not all financial markets failed because of adverse conditions. Using China's initial stock market development as a case study, this article suggests that administrative governance can substitute for formal legal governance. At the core of this governance structure was the quota system. It created incentives for regional competition and decentralized information collection at the IPO stage. It was also used to punish regions and responsible officials when companies from their regions failed, as evidenced herein.

1. Introduction

The literature on law and finance stresses the importance of formal legal shareholder protection (La Porta et al., 1997, 1998) and, especially in emerging markets and transition economies, effective law enforcement (Johnson et al., 2000; Pistor et al., 2000) for stock market development. Yet there are examples of countries where the law is bad and law

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enforcement is weak, where we nevertheless observe substantial market development. Such a country is China. Standard measures for stock market performance suggest that China is performing better than most other transition economies both when compared on a country-by-country basis or when comparing all other transition economies together with China. However, China has only slowly developed a legal framework for stock markets and has a weak law enforcement record. In contrast to most studies that rely exclusively on perception indices for assessing law's effectiveness, we present data on activities by China's key enforcement agencies. The results suggest that so far, formal law and law enforcement have played at best a marginal role in China's market development.

Markets, however, have not developed in a governance vacuum. We argue that during the initial period of stock market development China relied primarily on an administrative governance structure built around the quota system. The quota system, which relies on decentralized administrative governance, has been an important feature of China's market management prior to as well as during the transition period (Qian and Xu, 1993; Xu and Zhuang, 1998). With respect to stock market development, the quota system served two important functions. It helped mitigate the serious information problems investors and regulators face in transition economies. Moreover, it created incentives for local bureaucrats to select viable companies at the initial public offering (IPO) stage. Still, inherent weaknesses in the quota system suggest that the system may not be sustainable in the long run. Indeed, China has formally abandoned the system and the market has begun to "grow out" of the quota system.¹

Several researchers have investigated stock market development and governance structures in selected transition economies of Central and Eastern Europe, in most cases comparing Poland and the Czech Republic (Coffee, 1999; Glaeser et al., 2001), although some have included Hungary (Pistor, 2001). All of these studies have focused on the role of formal law for building and monitoring stock markets and suggest that better investor protection in corporate law and securities regulations tends to foster market development. The current article proposes that formal legal governance structures are not the exclusive way of governing newly emerging

1. This is in line with China's general approach to economic reforms, i.e., to "grow out of the plan," see Naughton (1996).

stock markets in transition economies. In fact, initial conditions in transition economies make it difficult to rely on such devices, because they are prone to enforcement failure (Xu and Pistor, 2004). In particular, these countries have underdeveloped and/or largely untested legal systems, as well as inexperienced and frequently corrupt enforcement agents. Therefore they have a high probability of deterrence failure. Moreover, the socialist legacy implies that firm-specific information is unreliable and that intermediaries capable of verifying information are only emerging. Under these conditions, regulatory failure is a likely outcome.

The article analyzes China's stock market development but is silent on the development of the banking sector or the market for credit and other debt instruments. This does not imply that we judge stock markets to be more important than the banking sector for transition economies' growth prospects. In fact, existing empirical literature suggests that both banks and stock markets contribute to economic growth (Beck and Levine, 2004; Levine and Zervos, 1998). The reason for focusing on stock markets is that in transition economies, these markets were built virtually from scratch over the past decade, thus providing interesting material for studying the interaction between market development and governance structures.

2. China's Stock Market Performance in Comparative Perspective

We compare China with other transition economies that developed a sizable stock market over the past decade.² Stock market development in China took off only in the 1990s, that is, at the same time as in other transition economies (Pistor et al., 2000). China also shares with other transition economies a legacy of central planning and extensive state ownership, setting these countries apart from other emerging markets.

The unit of comparison in virtually all comparative studies of financial markets is the nation-state (Claessens et al., 2002; La Porta et al., 1997; Morck et al., 1999). Such a comparison is not unproblematic given countries' different size as measured by population or gross domestic product (GDP) levels. This is particularly apparent when comparing a country of

2. We include all transition economies that are included in the IFC/S&P *Stock Market Factbook* of 1998.

the size of China with other economies. China today is larger (both in GDP and population) than the sum of 83 countries in Eastern Europe, the former Soviet Union, and all of Africa.³ In terms of population and GDP levels, Poland is smaller in size to the province of Guangdong; Hungary is smaller than large Chinese cities, such as Shanghai and Congqing, in population but substantially poorer than Shanghai, yet much richer than Chongqing.⁴ To take account of these disparities, we compare China not only with individual countries but with all other transition economies combined and present data for selected provinces that are closer in size to the countries in Eastern Europe than China as a whole.

Selecting appropriate criteria for comparing stock markets proves equally problematic. Studies on stock market development have primarily used market capitalization, number of listed firms (Claessens et al., 2002; La Porta et al., 1997; Pistor et al., 2000), and IPOs as a measure for firms' ability to raise capital on the market (La Porta et al., 1997). Research focusing on the interaction between stock market development and economic growth tend to favor liquidity measures (Levine and Zervos, 1998), in particular the turnover ratio (Beck and Levine, 2004). Caution is needed when using these indicators to assess stock market development in transition economies. The number of listed companies, for example, says little about the size of companies and thus the importance of the stock market for the economy. Moreover, in transition economies the size of the market as measured by number of listed firms has frequently been distorted by the peculiarities of a country's privatization history. The Czech Republic, for example, compelled all companies that had completed the mass privatization program to list on the Prague stock exchange. As a result, over 1,700 companies were listed at the end of 1994. Yet the market remained highly illiquid and was plagued with rampant shareholder misuse (Glaeser et al.,

3. Population and total GDP (PPP) for these 83 countries in 2001 were 1.23 billion and US\$ 3,295 billion, respectively; and in China 1.27 billion and US\$ 4,570 billion (Maddison, 2003). We obtain similar results when substituting Latin American countries for African countries.

4. In 2001 the population and per capita GDP (PPP) for Hungary were 10.07 million and US\$ 7,457, respectively; the equivalent numbers for Shanghai were 16.4 million, US\$ 16,011, and for Chongqing 30.5 million and US\$ 2,422, respectively (Maddison, 2003); GDP (PPP) for Shanghai and Chongqing are estimated using National Statistical Bureau (2002) data and employing the Maddison (2003) approach.

2001). In response, most of these companies were delisted in 1997 by regulatory fiat (Pistor, 2001). With regard to market capitalization, it is important to note that company value in the former socialist countries was only remotely related to market prices. Although firms' financial accounts have been translated into market-based standards, their informational content remained problematic, as they often did not reflect the actual operation of the company (Bailey, 1995), and the translation process itself created not only new errors but also possibilities for manipulation. Furthermore, when substantial proportions of shares in a market are never traded, total market capitalization data may grossly overstate the value of companies. Ownership of listed companies in transition economies tends to be highly concentrated. In Central and Eastern Europe, blockholders control on average between 40% and 50% of voting stock (Berglöf and Pajuste, 2003). In China, 60% of a company's shares on average are nontradable shares held by government or government-controlled entities.⁵ Finally, turnover ratio may be a good liquidity measure, but excessive turnover ratios could be indicative of a highly speculative market, not a highly developed one (Allen, 2004). In the absence of ideal performance indicators, we report several "standard" indicators for 2002. We include data for China and for other transition economies that have been covered in the S&P *Emerging Stock Market Factbook* since at least 1998 (see Table 1). We report the estimated market capitalization of tradable shares for transition economies by discounting the 40% that are, on average, held by blockholders,⁶ and in China the average 60% that are nontradable shares.

The data suggest that China has done remarkably well and indeed has outperformed all other transition economies on what might be the most important indicator, namely, the ability of listed firms to raise funds. With regard to individual countries, only Romania has more companies listed than China but, as the data on turnover suggest, has a highly illiquid market. The ratio of nominal market capitalization over GDP in Russia is close to China and higher in Estonia, but lower in all other countries. Using market capitalization of tradable shares only, Estonia and Russia

5. Data made available by the CSRC suggest that on average, nontradable shares amounted to 60.3% between 1999 and 2002.

6. Note that the actual number reported by Berglöf and Pajuste is closer to 47%, but we prefer a conservative estimate.

Table 1. Stock Market Indicators: China and Transition Economies in Central Eastern Europe Compared (2002)

	Population (in 1,000)	Listed Firms	Total Market Cap/ GDP	Tradable Market Cap/GDP	Turnover Ratio
Bulgaria	7,707	354	.05	.03	28.4
Croatia	4,334	66	.2	.12	4.2
Czech Republic	10,264	78	.28	.17	48.7
Estonia	1,423	14	.44	.26	5.5
Hungary	10,106	48	.25	.15	52.2
Latvia	2,385	62	.09	.06	17.6
Lithuania	3,611	51	.12	.07	13.5
Poland	38,634	216	.16	.1	22.4
Romania	22,364	4,870	.12	.07	12.2
Russia	290,349	196	.4	.24	36.1
Slovakia	5,415	354	.09	.06	46.1
Slovenia	1,930	35	.24	.15	27.9
Ukraine.	48,760	184	.08	.05	5.7
Aggregate EE- FSU	4472,82 ^a	6,528 ^a	.2 ^b	.12 ^b	24.65 ^b
China	1,275,389	1,235	.4	.16	67.6
Chongqing ^c	30,513	26	.41	.14	65
Guangdong ^c	85,225	138	.52	.16	331.7
Shanghai ^c	16,408	144	1.61	.41	391.8

^a Total.^b Average.^c data for 2001.

Source: S&P *Stock Market Factbook* (2003); National Statistical Bureau, *Statistical Yearbook of China*, 2002; Shanghai Wind Co. Ltd., WISE Information System.

have substantially higher market capitalization than China as whole but substantially lower than Shanghai. Finally, China has the most liquid of all stock markets, with only Hungary coming close. Yet Guangdong and Shanghai regions have a much higher turnover ratio than any other country in our sample, suggesting some speculative trends.

An important indicator for companies' ability to raise finance on stock markets are the number of IPOs and the amount raised by them. Companies in Central and Eastern Europe have only rarely used IPOs to raise capital. Analyzing stock market development in nine transition economies between 1994 and 2001, Pajuste (2002) concludes that IPOs have been few and far between. The major exception is Poland, with 47 IPOs between 1994 and 2001. By contrast, in the same period of time, there were 873

IPOs in China. Between 1998 and 2001 alone, China witnessed 414 IPOs with firms raising a total of 508.6 billion RMB (or US\$ 61.6 billion).⁷ No other transition economy is even close.

3. Law and Law Enforcement in China

In terms of market development, China outperformed other transition economies, but it underperformed with regard to the quality of the law on the books and actual law enforcement. China has made major efforts to develop a formal legal framework over the past 25 years, but it started from a very low level. During the Cultural Revolution, which ended in 1976, China had all but dismantled the formal legal system it had begun to create in the early twentieth century and continued under Soviet influence in the 1950s. As a result, by the time China launched its economic reforms in the late 1970s, it had to build its legal system virtually from scratch. Unlike Central Eastern European and most former Soviet Union countries, however, China did not embrace the notion of establishing a legal framework for a market economy based on private property rights. The corporate law enacted in 1994, for example, was designed for state-owned enterprises and set forth detailed procedures for corporatizing them. By contrast, it is mostly silent on newly created companies with different ownership structures (Fang, 1995; Wang, 1994). In fact, China did not fully recognize the notion of private property in its constitution until March 2004. Not surprisingly, the formal legal framework governing securities markets was also targeted at state-owned enterprises (Zhu, 2000).

Using comparative data on the quality of the law on the books and indicators for the effectiveness of law enforcement, China performs below the average of other transition economies (Table 2). On the widely used LLSV indicators for shareholder rights protection (La Porta et al., 1998), China scored 3, as compared to the average score of 3.61 for all other transition economies. The quality of law enforcement is frequently measured by perception data. China's ranking is fairly low on most indicators with some variation depending on which indicator is used. Because our focus is on legal governance of securities markets, we use "regulatory quality" from the World Bank's governance database. The average for all transition economies is 62.13; China's score is only 57.

7. With 6 companies being delisted in this period, the net increase of listed companies was 40 billion RHB (see CSRC, www.csrc.gov.cn).

Table 2. Legal Shareholder Protection 1998

Country	Formal Law (LLSV)	Regulatory Quality
Bulgaria	4	39.9
China	3	57
Croatia	2.5	46.4
Czech Republic	4.5	73.2
Estonia	3.75	76.5
Hungary	3	79.8
Latvia	3.5	61.7
Lithuania	3.75	67.8
Poland	3	77
Romania	3	44.3
Russia	5.5	26.8
Slovakia	2.5	62.8
Slovenia	2.5	82.5
Ukraine	2.5	12
Average	3.61	62.13

Source: On formal law, see Pistor et al. (2000); Allen et al. (2004) based on indicator definition by La Porta et al. (1998). On regulatory quality, see the World Bank's governance indicators available online at www.worldbank.org/wbi/governance.

The data on shareholder rights protection provided by statutory law and the quality of law enforcement based on perception data says little about actual enforcement activities. We have therefore collected data on China's track record of enforcement. Following La Porta et al. (2005), we distinguish between private and public law enforcement. Private enforcement refers to civil litigation, whereas public enforcement assesses regulatory enforcement activities taken by the state regulator, the China Securities Regulatory Commission (CSRC) and the stock exchanges.

3.1. Private Enforcement

Private enforcement of investor rights have virtually been absent in China so far, not because of a lack of demand for them but because courts have restricted investor law suits (Chen, 2003). Private litigation began to take off only in 2001 in response to a fraud at Guangxia company, which was exposed by the financial journal *Caijing* (Magida, 2003). The company, from Ningxia Hui Autonomous Region, one of the poorer provinces in China, originally engaged in computer software. Prior to seeking listing on the Shenzhen stock exchange, it redirected its activities into wine

growing and subsequently diversified into real estate, hotels, and car dealerships. In 2001 it made plans for listing on the Hong Kong main board, but these plans were undermined when *Caijing* published allegations of serious fraudulent misrepresentation. At the core of the allegation was misrepresentation of the company's export activities, in particular the wrongful claim that the company had close ties to an old, well-established German company. In addition, the company had misstated the financial accounts of its subsidiaries. Only after the press had revealed this fraudulent scheme did the Shenzhen stock exchange and the CSRC become active, suspending trading and launching an investigation. Disgruntled investors sought to take the matter into their own hands and brought civil action; 1,000 cases were filed in Wuxi, Jiangsu Province, against Guangxia alone.⁸ A trial date for the Guangxia case was set for October 15, 2001, but prior to that date the Chinese Supreme Peoples' Court (SPC) intervened with a notice that temporarily banned all investor law suits in China.⁹ The notice stated that "our country's capital markets are in a period of continuous standardization and development and a number of problems have arisen including insider trading, cheating, market manipulation and other behaviors." The court acknowledged that these behaviors "infringe upon investor's legal rights," but pointed out that "under current legislative and judicial limits [courts] still don't have the conditions to accept and hear this type of cases."¹⁰

The notice was opposed by investors as well as law firms representing them and was also criticized by the CSRC, which had supported investor litigation. In January 2002, the SPC modified the notice of September 2001. The court now stated that investors may bring civil action for misrepresentation of information—not, however, for insider trading or

8. Bei Hu, "Call for Trial Guidelines in Civil Actions; Courts Told to Stop Accepting Cases Involving Damage Claims by Investors Pending Internal Consultations," *South China Morning Post*, September 26, 2001, LEXIS, News Library, ARCH File.

9. Zuigao Renmin Fayuan Guanyu She Zhengquan Minshi Peichang Anjian Zhanbu Shouli De Tongshi [Supreme People's Court Notice on the Temporary Ban on Acceptance of Securities Related Civil Compensation Cases], September 21, 2001, No. 406, available online at www.chinalawnet.com/law/law07_12.asp. According to Chinese law, the SPC may issue guidelines about judicial practices even in the absence of a specific case brought before it.

10. *Ibid.* Translation by Daniel Magida.

market manipulation. Lower-level courts were directed to hear cases, but only after the CSRC had investigated them and had found wrongdoing. A lawsuit had to be filed within two years after the CSRC's rulings. Individual or independent actions as well as group or joint actions (*gongtong*) were permitted, but class actions were explicitly ruled out.¹¹ In January 2003, the SPC issued more extensive rules governing investor lawsuits, the Private Securities Litigation Rules (PSLRs). The PSLRs relax the rules on joint litigation. Litigants are allowed to file jointly and elect between two and five representatives. The PSLRs also require that lawsuits are filed in the jurisdiction where the defendant company is registered. This rule is likely to reinforce the well known "home bias" of China's courts (Lubman, 1995). It also implies that expertise in securities matters will take a long time to build, as these cases will not be pooled in courts with the greatest expertise.

Since the PSLRs were issued, many investor lawsuits have been refiled to comply with these rulings. Table 3 summarizes lawsuits filed after the September 2002 SPC ruling that have been widely reported in the Chinese press and their current state of resolution. So far, not a single civil law case has resulted in liability imposed by a court, although some cases have been settled after court mediation. We interpret this evidence to suggest that so far civil liability has little deterrence effect.

3.2. Public Enforcement

Public law enforcement in the form of fines or other sanctions imposed by a regulator has been equally weak. Today the major regulatory agency of China's financial markets is the CSRC. In the early days, regulatory law enforcement powers were scattered among various state agents, including the state-owned stock exchanges, the People's Bank of China (PBC), the CSRC, and the State Council Securities Commission (SCSC). The centralization of regulatory functions was a response to failures of this governance structure. Investor riots broke out in 1992 after it was discovered that the shares of a company to be floated to the public had been almost fully subscribed by government insiders, including agents of the PBC (Walter and Howie, 2003). This event prompted

11. The difference between joint and class actions is that in the former, all litigants must be named individually and the outcome of the case has no effect on class members not specifically mentioned and not participating in the trial.

Table 3. Private Enforcement in Chinese Courts

Date	Defendant	Litigants	Court	Status
9/2001	Yorkpoint Science and Technology	360 minority investors	Beijing No. 1 Intermediate People's Court, Guangzhou Intermediate People's Court	Pending
6/2002	ST Jiuzhou	3 investors	Xiamen Intermediate People's Court	Rejected on procedural grounds
11/2002	Jiabao Industrial	1 investor	Shanghai No. 2 Intermediate People's Court	Investor receives compensation in settlement
11/2002	Hongguang	11 investors	Chengdu Intermediate People's Court	Investors settle with individual underwriter through mediation; cases against company still pending
12/2002	Jiabao Industrial	24 investors	Shanghai No. 2 Intermediate People's Court	Pending
09/2003	Daqing Lianyi	381 investors	Harbin Intermediate Court (Heilongjiang Province)	Current status
2003	Bohai Group	1 investor	Jinan Intermediate People's Court	
02/2003	Jinzhou Gang	1 investor	Shenyang Intermediate People's Court	Pending
02/2003	ST Tongda	5 investors	Shanghai No. 1 Intermediate People's Court	Pending
03/2003	Shengwan Keji	72 investors	Harbin Intermediate People's Court	Pending
03/2003	Sanjiu Yiyao	3 investors	Shenzhen Intermediate People's Court	Pending
03/2003	ST Tianyi	1 investor	Wuhan Intermediate People's Court	Pending
04/2004	Yinguangxia	Several investors	Yinchuan Intermediate People's Court	Pending

Source: Compilation by authors from press reports. No claim is made that they fully reflect all pending cases.

the State Council to establish the State Council Securities Commission as well as the CSRC. In 1998, the two agencies were merged into a single agency, the CSRC. In 1998 the CSRC assumed ministerial status and in 1999 China's first comprehensive Securities Law was enacted. The law vests the CSRC with the primary power to regulate markets, yet allows it to delegate decisions to the stock exchanges. Under the law, the CSRC may issue implementing regulations. In fact, the CSRC has made extensive use of this authority by enacting a host of rules and regulations for issuing companies and intermediaries. One of the most important changes for the CSRC's role as regulator of financial markets came in 2000 with the expansion of its enforcement units in the central office in Beijing, as well as in its local branch offices (Walter and Howie, 2003). Still, available data on enforcement activities reflect a declining trend. Table 4 summarizes enforcement activities by the CSRC from 1998 until the end of March 2004. The numbers stand for enforcement events, not companies against which enforcement actions were taken, suggesting that the total number of companies that were subject to enforcement proceedings may be even lower.

Interpreting enforcement activities is difficult in the absence of comparative data that could be used as a benchmark. However, it is worth noting that in 2003, when total enforcement procedures reached 51, there were 1,278 companies listed in Shanghai and Shenzhen, implying that at most 1 in 25 companies was the subject of any kind of enforcement activity. Moreover, the sanctions administered were often benign, with only 22% of all

Table 4. Public Enforcement by Chinese Regulators 1998–2004

Year	Enforcement Actions Taken by Regulatory		Number of Companies Listed on Two Major Exchanges
	Agencies	Of Which Punishment	
1998	3	3	853
1999	12	9	950
2000	16	7	1,088
2001	71	9	1,160
2002	62	8	1,235
2003	51	11	1,287
Totals	215	47	NA
Av p.a.	35.8		NA

Source: Enforcement data made available by CSRC; number of listed companies from www.csrc.gov.cn/en/statinfo/index.en.

Note: Enforcement activities include actions taken by the CSRC, the Shanghai and Shenzhen stock exchanges, and other enforcement agencies. SE = stock exchange; NA = not applicable.

enforcement actions resulting in fines as opposed to warnings or informal reprimands. Thus, actual enforcement activities by courts and regulators suggest that formal legal governance has played at best a marginal role in the early stages of China's stock market development.

4. The Quota System as Administrative Governance

Even though formal legal governance was weak, China's market development did not occur in a vacuum. Instead, an administrative governance regime based on the quota system was in operation. The quota system was officially in place from 1993 and 2000. De facto it governed financial markets longer than that, because many companies that had been selected under the quota system were placed on a queue and were released to the market only over time. Information on when the last company that was selected on the basis of the quota system has been listed on the exchange is not available. However, there is little doubt that—certainly until the end of 2002—the majority of companies had been selected in this fashion.¹²

Quotas have been a basic feature of state and regional economic management in China prior to and during the transition period, in particular for allocating critical resources among regions, such as credits as well as energy.¹³ The annual quota for each region was established in an intense bargaining between regional governments and relevant central agencies (i.e., the Ministry for Energy, or the central bank). The system was adapted to financial markets in the early 1990. The first regulatory guidelines for the quota system were issued by the PBC in April 1992. The primary purpose for extending the quota system to China's fledgling stock markets was that the government sought to maintain control over its size and stability (Fang, 1995). In its practical application, however, the quota system went far beyond an instrument to control access to the market. It created the basis for regional competition for the allocation of quotas, which in turn fostered a selection and information collection process that facilitated market development during the crucial start-up period. The CSRC monitored this process. It rewarded regions whose

12. According to Green (2003) the composition of the stock market has only begun to change in 2004.

13. For the purpose of this article, we use the term *region* to refer to administrative subdivision at the provincial level.

companies performed well and punished those whose companies failed or underperformed. Finally, the powers of the CSRC were checked by other parts of the government structure, in particular the State Council, ministries, and competing regional governments. We first describe the mechanics of the quota system and then elaborate on its governance functions.

4.1. The Mechanics of the Quota System¹⁴

Each year the PBC established the amount of shares firms were allowed to issue to the public. In 1993, the first year when the quota system was in full operation, 5 billion shares were made available at the national level. Individual regions received quotas in the amount of 50 million to 500 million shares.¹⁵ Governments at the provincial level negotiated the size of the quota for that region with the respective provincial branch of the CSRC. When they had reached an agreement, the request, together with information about the companies the province wanted to bring to the market, was submitted to the center. The CSRC decided over the allocation of quotas to different provinces and ministries on the basis of the information it had received and within the quantity constraint established by the PBC. As we will further argue later, this promoted competition among the regions and induced them to collect and reveal critical information about the relative quality of companies operating in each region.

After the regional quota had been allocated, the selected companies had to go through an individual approval process. At this stage the applicants were vetted for compliance with the formal merit and disclosure requirements set forth in relevant statutes and regulations (Fang, 1995). In the majority of cases, the CSRC approved these preselected firms, but it could delay admission to the market and on occasion denied it.

4.2. The Quota System as Information System

The quota system functioned to promote decentralized information collection in an environment that faced information problems that far

14. The description on how the quota system worked is based on Fang (1995) and information collected from interviews with agents at the CSRC and the Shanghai and Shenzhen stock exchanges.

15. Individual ministries on occasion obtained much higher quotas. See Fang (1995).

exceeded those commonly known in developed financial markets. Investors as well as regulators face substantial information problems, particularly for companies that launch their IPO, as little information about them is known to the market (Stigler, 1961). In most developed financial markets, mandatory disclosure rules seek to reduce information problems. The efficacy of mandatory disclosure rules, however, depends on the credibility of their enforcement and on a reasonable relation between the information that is disclosed and the actual operation of the firm. These conditions were not present in transition economies, which faced the peculiar problem of trying to bring companies to the IPO stage that had been created and had operated until recently according to nonmarket standards. Moreover, financial intermediaries that could help collect and verify information relevant in a market economy were only emerging, and the market itself had to be created virtually from scratch. Under socialism, companies operated according to accounting standards that contained little information relevant for evaluating a company's worth according to market principles. Even when books were converted into Western-style accounting data, the conversion process was subject to a substantial margin of error (Bailey, 1995; Fang, 1995). Professional market watchdogs capable of and willing to verify accounts were only beginning to emerge, and the creation of an effective governance structure for these intermediaries lagged even further behind. Absent effective governance structures, accountants, auditors, and securities analysts often participated in rather than detected and prevented fraud (Green, 2003)—a phenomenon similar to, if not worse than the behavior of professional watchdogs in the United State during the recent stock market bubble (Coffee, 2004). Against this background, disclosure rules could not be credibly enforced and therefore were ineffective in resolving the severe information problem investors and regulators faced. Instead, mechanisms were needed to induce insiders to reveal critical information that could be used for a meaningful selection of companies for public offerings.

We suggest that the quota system created such a mechanism. It allocated the responsibility for collecting and verifying information to the owners of firms, that is, to regional governments in the case of regional companies (Granick, 1990) and to central ministries in the case of centrally owned firms. Regional governments or ministries have the power to approve the appointment of management in their companies. These control rights also

vested them with the power to request information from them.¹⁶ The information collection process took place behind closed doors. Neither the central government nor investors could verify the information that was revealed in this process (Fang, 1995). Thus, governors, bureaucrats, and company management may well have chosen to cook the books rather than to disclose relevant information and share it with the center. However, the strong indicators for China's financial market performance discussed previously suggest that this strategy did not become the norm. Instead, incentive structures built into the quota system promoted the selection, on average, of more rather than less viable firms.

4.3. Incentive Structures under the Quota System

The quota system created an incentive structure that helped solve informational problems at the IPO stage. It did this (1) by offering carrots to regional governors in the form of future quotas and (2) by threatening with sticks in the form of delisting firms and forced bail-outs by the region in the case of underperformance. Importantly, both carrots and sticks were applied to incentivize regional government officials, not just firm management.

Ever since the introduction of reforms that promoted competition among regions, regional government officials have developed a vested interest in their region's economic performance, which became a critical factor for their own career advancement (Qian and Xu, 1993; Wong, 1991; Xu and Zhuang, 1998). Maskin et al. (2000) provide evidence that yardstick competition among China's regions benefited economic performance at the regional level by incentivizing regional bureaucrats to promote economic growth and development. They show that local officials from better-performing regions (as measured by GDP per capita growth rates) are more likely to be promoted than officials from other regions.¹⁷

Moreover, the performance of regional companies on the two major stock exchanges is directly linked to the region's economic performance, as listed companies gained access to equity finance at a time when central

16. The essence is not changed even when companies have gained increasing autonomy from direct government oversight over the years.

17. They use the probability of a regional official to be selected into the party's central committee as an indicator for promotion. Promotion in the central party or state apparatus is critical for regional officials. See also Huang (1996).

credit allocations were curtailed. In addition, these firms also became less dependent on regional budgets and apparently gained access to bank financing from other regions.¹⁸

5. The Quota System in Operation

If the quota system indeed operated to create a governance structure that promoted more over less viable firms to be listed, we should observe that future allocations of quotas to a region related to past performance of companies from that region. Moreover, we should observe that underperforming regions had a higher incidence of sanctions in the form of delisting, fines, or other reprimands. Our data confirm these predictions.

5.1. Rewards

Table 5 compares the aggregate performance of companies from each region in the period from 1996 to 1999 (period 1) with the allocation of quotas from the end of 1999 through 2002 (period 2). Time series information about the size of the quota allocated to different regions and ministries is not publicly available. However, the number of shares issued by firms from different provinces serves as a good proxy for the size of a region's quota.¹⁹ We use the rate of increase in the number of shares to control for the size of regions. To account for the time lag between the allocation of shares to a province and the actual public offering, we report changes over a three-year period. For stock market performance we report the rate of change in period 1 (1996–99) for total and tradable market capitalization, price/book-value ratio, turnover ratio, and net profits, respectively.

Examining first individual regions, we find that the strongest performing regions in period 1 were rewarded with the largest share allocation in period 2 and vice versa. Similarly, regions with average performance records in period 1 received average share allocations in period 2. Beijing had the strongest performance record in period 1 (Table 5, columns 2–7). In

18. Media reports and interviews by one of us (Xu) with managers of banks and firms in China. Interview notes are on file with the author.

19. It is not a direct measure because of the time lag between quota allocation and the listing of a firm. For example, a company in Hainan Province, Kaili, used the quota allocated to Hainan Province in 1998 but sought approval for listing only in 2000. See note 23.

Table 5. Regional Performance and Quota Allocation

	Gen Performance, 2001		Stock Market Performance Indicators, 1996–99					Quot, 99–02
	GDP/psn	MC/GDP	Tot MC	Trad MC	PB	Turnover	Net Prof	Tot Share
	RMB/psn		(rate of change, in %)					
China	8,365	.43						
Anhui	5,221	.26	28.6	124.1	84.3	–.99	–16.5	37.5
Beijing	25,523	2.41	705.6	953.3	455.4	61.81	171.6	689.7
Chongqing	5,654	.41	172.6	163.5	115.3	–17.28	–50.7	29.7
Fujian	12,362	.22	165.7	215.6	162.3	–11.77	–22.8	47.6
Gansu	4,163	.34	164.8	191.1	25.6	–9.16	7.0	137.5
Guangdong	13,730	.52	85.8	84.8	50.9	–51.67	13.0	53.6
Guanxi	4,668	.21	275.1	306.5	163.3	–13.57	–4.1	119.2
Guizhou	2,895	.38	359.3	409.1	156.0	3.10	–28.5	105.8
Hainan	7,135	1.00	74.2	51.1	56.2	–41.01	–69.6	9.3
Hebei	8,362	.17	239.5	304.4	728.4	–10.14	77.6	41.7
Heilongjiang	9,349	.26	246.1	253.0	138.2	18.86	–1.2	62.0
Henan	5,924	.18	485.3	677.7	267.2	45.38	11.0	60.3
Hubei	7,813	.37	283.8	255.0	89.1	11.12	60.8	34.5
Hunan	6,054	.25	402.7	486.8	71.1	5.04	167.1	55.2
Inner Mo	6,463	.44	417.6	542.4	73.8	–.66	72.3	81.6

(Continued)

Table 5 . Continued

	Gen Performance, 2001		Stock Market Performance Indicators, 1996–99					Quot, 99–02
	GDP/psn	MC/GDP	Tot MC	Trad MC	PB	Turnover	Net Prof	Tot Share
	RMB/psn					(rate of change, in %)		
Jiangsu	12,922	.27	177.6	320.6	188.6	-12.28	36.1	74.2
Jiangxi	5,221	.23	155.3	227.9	54.8	8.45	-12.6	184.0
Jilin	7,640	.44	41.0	210.8	75.6	-26.12	78.5	21.5
Liaoning	12,041	.36	324.7	357.9	158.8	-5.82	121.8	36.7
Ningxia	5,340	.86	409.2	495.8	171.1	7.18	-33.7	59.7
Qinghai	5,735	.67	278.8	294.7	63.6	-13.53	104.5	49.6
Shaanxi	5,024	.28	295.7	271.7	136.1	-21.05	163.0	41.6
Shandong	10,465	.25	305.4	295.7	74.5	-4.07	104.9	71.8
Shanghai	37,382	1.61	96.5	157.1	87.7	-.47	17.0	90.2
Shanxi	5,460	.33	432.6	675.9	174.4	138.41	133.7	63.9
Sichuan	5,250	.40	148.6	176.2	266.2	-19.18	-41.5	36.8
Tianjin	20,154	.45	262.2	342.6	107.6	-.99	66.3	64.0
Tibet	5,307	1.12	387.5	446.7	197.3	149.44	-15.3	72.2
Xinjiang	7,913	.47	366.4	462.8	132.3	7.38	98.0	107.5
Yunnan	4,866	.22	398.1	372.0	214.2	12.46	54.8	30.6
Zhejiang	14,655	.26	280.1	343.0	179.1	4.50	48.9	55.7
Mean	9,377	.50	273.1	337.7	158.7	6.88	42.3	84.7
Median	6,463	.36	278.8	304.4	136.1	-.99	36.1	59.7
SD	7,166	.47	147.9	191.7	135.7	42.35	67.8	118.0
Max	37,382	2.41	705.6	953.3	728.4	149.44	171.6	689.7
Min	2,895	.17	28.6	51.1	25.6	-51.67	-69.6	9.3

Source: National Statistical Bureau, *Statistical Yearbook of China*, 2002; Shanghai Wind Co Ltd., WISE Information System.

particular, market capitalization of tradable shares increased by 953% and net profits by 172%. Beijing also received the biggest increase in shares in period 2 (column 8) at a rate of 690%. By contrast, Hainan province was the worst performing region in period 1 with an increase in market capitalization of tradable shares of only 51% and a 70% increase in net profits. Not surprisingly and consistent with our predictions, Hainan increased its quota by only 9.3% in the subsequent period—the lowest in the nation. Finally, Shandong, a province that performed at about the national average in period 1, was awarded quotas in period 2 close to the national average.

Another interesting case that illustrates how future allocations of share quotas correspond to performance indicators is Guangdong. Guangdong's overall economic performance on most commonly used measurements, such as per capita GDP, FDI/GDP ratio, and import/export over GDP ratio, has been stronger than most other regions (excluding cities like Shanghai and Beijing). However, listed firms from Guangdong performed substantially below the national mean and median in period 1 and received a comparatively low quota in period 2. Guangdong also had the largest number of delisted firms in the nation (see later discussion for details). The same is true for Jiangsu. Jiangsu ranks second to Guangdong according to economic performance indicators. However, its listed firms performed below national average, which is reflected in a share allocation below the national average (74.2% as opposed to 85%).

The same pattern can be found when examining all regions together. There is a positive correlation between performance indicators of listed firms in period 1 and the size of the quota allocated in period 2. The correlation coefficient of .603 between the percentage increase in tradable market capitalization in period 1 and the percentage increase in quotas allotted in period 2 is substantial; and the coefficient of .305 between the rates of changes in net profits and in quota increase is also reasonably high (Table 6).

5.2. Punishment

In addition to rewarding regions for past performance by increasing their quotas, regions could be punished. The most severe form of punishment is the delisting of firms. Delisting as an enforcement mechanism is not unique to China. It is typically used as a sanction against an individual firm. In the context of China's quota system, however, delisting meant the retroactive reduction of a previously allotted quota. No other company could step in

Table 6. Quota Allocation in Response to Performance (Correlation Coefficients)

Performance (1996–99) (% Increase)	Quota in 1999–2002 (% Increase in Number of Shares Issued by Firms from a Given Region)
Total market cap	.542
Tradable market cap	.603
Price book ratio	.332
Turnover ratio	.270
Net profits	.305

Note: All numbers indicate the rate of change between the first and the last year in the period covered.

Source: Calculation based on data in Table 5.

and use the quota to issue its shares. Moreover, the delisting of a single firm could result in lower quotas allocated to that region in future periods. Between 1999 and mid-2004, a total of 21 firms were delisted nationwide. More than half of them (13) were from three regions in southern China (Guangdong, Hainan, Fujian), and 9 were from Guangdong region alone (see Table 7). In other words, 42% of all firms that were delisted were from Guangdong, whereas the region supplied only 12% of all listed companies.

Our data are consistent with other studies' findings that Guangdong, Hainan, and Fujian tend to have comparatively weak governance structures (Feenstra and Hanson, 2002, using customs data; Xie and Lei, 2003, using survey data on corruption in financial markets).²⁰

Delisting is the most stringent sanction against underperforming firms. Prior to delisting a firm may be placed under "special treatment" (ST) status. The ST system was established in 1998. Firms with abnormalities in their financial status or apparent nontransparency of their financial performance are required to file for ST status. In effect, the company is downgraded and faces either delisting by regulators or a takeover by

20. Using 1997–2002 custom data on imports/exports, Feenstra and Hanson (2002) provide evidence that contract enforcement in China's southern provinces (Guangdong counts for more than three quarters of exports from south coast provinces) was the poorest in the nation: They were 25% to 50% worse than areas of Beijing, Shanghai, or the north coast. Based on a nationwide survey on financial corruption conducted in 2002, Xie and Lu (2003) report that cities in southern China (in their sample, of the five southern China cities, four are located in Guangdong) were the worst in securities sector corruption and the second to the bottom with regard to corruption in the financial sector.

Table 7. Regional Distribution of Delisted Firms

	1999–2004 Delisted firm	Listed Firms 1999	Ratio
China	21	945	2.22
Fujian	2	34	5.88
Guangdong	9	118	7.63
Hainan	2	20	10.00
Hubei	1	46	2.17
Jilin	2	27	7.41
Liaoning	1	45	2.22
Shanghai	3	132	2.27
Sichuan	1	53	1.89
S. China	13	172	7.56

Source: Shanghai WIND Corp Lit., WISE Information System.

competing firms.²¹ To avoid this outcome, regional governments or entities under their control can bail out these firms, or “retunnel” assets back into them (Bai et al., 2002). By implication, and consistent with our interpretation of China’s governance structure for financial markets, regions are punished for underperforming firms as they must find new resources to maintain their control rights.

When a listed firm fails on the market, this not only affects that firm and its immediate owners but is a drain of regional resources. The case of Xinjiang Hops illustrates how the fallout from a company’s failure affects actors beyond the company’s management. Xinjiang Hops is China’s largest supplier of barely, located in Xinjiang Uighur Autonomous Region in China’s northwest. It produced 150 tons, or 60% of the national market, of beer a month. The company was listed on the Shanghai stock exchange. In early November 2003, the company’s stock dropped more than the officially allowed daily limit of 10%. The next day the company announced that it had guaranteed the equivalent of US\$215 million, more than twice its assets. A few days later, the party secretary of Xinjiang Uighur

21. A company typically qualifies for special treatment, if (1) a listed company has negative net profits for two consecutive fiscal years; (2) the shareholders’ equity is lower than the registered capital (the par value of the share); (3) a firm’s operations have been stopped and have no hope of restoring within three months; or (4) if the firm is involved in a damaging lawsuit or arbitration. If a firm is unable to turn around within two to three years, it will be further downgraded and may face delisting. For details, see Bai et al. (2002).

Autonomous Region and concurrently a member of the Polit Bureau of the Chinese Communist Party announced that “all relevant financial creditors and raw material suppliers in Xinjiang must go all out to support Xinjiang Hops to help overcome its difficulties and safeguard the company’s future operations.”²²

To summarize, in this section we presented data that are consistent with our analysis that the quota system served important governance functions. It did this by creating incentives—in the form of carrots and sticks—for bureaucrats in regional governments to select more rather than less viable firms for public share issuing and listing. This administrative governance structure effectively substituted for a weak formal legal regime.

A possible weakness in this governance structure is the CSRC. As explained, the CSRC plays a critical role in negotiating quotas with regions and ministries in approving the listing and IPO of individual firms and in administering sanctions against regions. The substantial powers in the hand of this single regulator was a potential source for abuse and corruption. However, the CSRC has not operated in a control vacuum either. The CSRC is directly monitored by the State Council, which is fearful of any repercussions a market collapse might have. Moreover, competing regional governments have incentives to monitor the fair allocation of quotas and the approval of companies they have put forward. Finally, individual companies have discovered judicial recourse as a means to control CSRC actions. In 2001, Kaili company was the first company to win a lawsuit against the CSRC on the grounds that it had overstepped its competences by denying it approval for listing.²³ Although these controls do not eliminate corruption, they have imposed important checks on the actions of the CSRC.

22. Xinhua news report, November 17, 2003.

23. Hainan-Kaili company applied to issue A shares using the quota that had been assigned to Hainan province in 1998. The application was rejected by the CSRC in 2000, citing fraudulent financial reports. Moreover, the CSRC returned all application materials, which implied that Kaili would not be able to apply again. Kaili sued the CSRC in the Beijing Intermediate Court later the same year. On December 18, 2000, the court decided that the CSRC’s decision to deprive Kaili’s qualification to apply for issuing shares had no legal basis. The CSRC appealed to the Beijing Supreme Court. On July 5, 2001, the Beijing Supreme Court decided to maintain the Beijing Intermediate Courts decision against the CSRC (*Legal Daily* [fa-zhi bao] July 25, 2001, www.legaldaily.com.cn/gb/content/2001-07/25/content_21457.htm).

6. Conclusion

This article identifies a decentralized administrative governance structure built around the quota system as the major governance device for the early stages of China's stock market development. It suggests that this structure functioned as a substitute for standard legal governance at the IPO stage. The relative success of the quota system in helping China jump-start financial market development, however, does not necessarily imply that it will be superior to a standard legal regime in the long run. Recent developments illustrate the limits of this system. Firms that had been excluded from the market have discovered that buying up moribund shells of listed companies and inserting their own assets can give them access to the financial markets. This postlisting substitution of assets effectively undermines prelisting governance mechanisms, that is, the very basis of the quota system. Moreover, China has begun to open stock markets to nonstate firms, which may not be as sensitive to the quota system's administrative governance as state-owned firms. Finally, the quota system has been less effective in monitoring postlisting violations than ensuring prelisting selection. Data collected by the CSRC, however, indicate that more than 90% of all violations by firms listed in Shanghai and Shenzhen stock exchanges were related to violation of continuous disclosure.²⁴ In fact, regional officials may have incentives to manipulate data at this stage to avoid the sanctions.

The major response to the apparent weakening of the administrative governance structure has been a shift toward formal legal mechanisms. The CSRC has issued a host of regulations in recent years aimed at enhancing disclosure requirements both at the IPO and at the postlisting stage. Enforcement capacities at the agency have been increased. Courts have bowed to pressures to allow investor lawsuits—at least in principle. Finally, CSRC decisions have increasingly come under legal scrutiny. Although it is too early to assert that this amounts to a trend or that China will be converging on the standard legal model of financial market governance, clearly China currently faces the challenge of transforming the

24. HE Jia et al., "Chinese and Foreign Disclosure Systems Comparison and Their Effectiveness" [Zhong-wai Xinxu Pilu Zhidu jiqi Shiji Xiaoguo Bijiao Yanjou], Table 3-11, Shenzhen Stock Exchange Research Institute, 2002.

governance structure that has sustained market development in the early stages. Unless China effectively addresses the weaknesses of the quota system and develops new governance structures, the country's initial success in jump-starting stock markets may be dismissed as a flawed attempt for using administrative governance in financial market development. If successful, however, the case of China could serve as an example for viable alternatives to a formal legal governance structure, particularly during the initial phases of market development.

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