Did government decentralization cause
China’s economic miracle?

Hongbin Cai a Daniel Treisman b

Many scholars attribute China’s market reforms and the remarkable economic performance they have fostered in part to the country’s political and fiscal decentralization. Political decentralization is said to have stimulated local policy experiments and restrained predatory central interventions. Fiscal decentralization is thought to have motivated local officials to promote development and harden enterprises’ budget constraints. The locally diversified structure of the pre-reform economy is said to have facilitated liberalization. Reexamining these arguments, we find that none establishes a convincing link between political or fiscal decentralization and China’s successes. We suggest an alternative view of the reform process in which growth-enhancing policies emerged from competition between pro-market and conservative factions in Beijing.

a Guanghua School of Management, Peking University, Beijing, China 100871
b Department of Political Science, University of California, Los Angeles, 4289 Bunche Hall, Los Angeles CA 90095-1472

January 2007

Forthcoming in World Politics

*We thank Richard Baum, Thomas Bernstein, Bo Li, Dorothy Solinger, James Tong, Dali Yang, and Li-An Zhou for comments and suggestions.
1 Introduction

What roles have political and fiscal decentralization played in China’s economic reforms and in the remarkable development they fostered? Since the late 1970s, China has liberalized most prices, de-collectivized agriculture, and integrated into world markets. These changes fueled an unprecedented period of growth that increased GDP per capita from $674 in 1978 to $5,085 in 2004 (in PPP-adjusted 2000 dollars).¹ Scholars have attributed this economic miracle to many causes—recovery from the Cultural Revolution, initial underdevelopment, and a rich diaspora, to name a few. But some suggest the country’s decentralized structures of government and public finance played an important part.²

Those who link the success of China’s reforms to decentralization make five main arguments. First, some focus on the pre-reform economy’s cellular organization. Rather than a specialized, nationwide hierarchy, China’s economy consisted of parallel, diversified provincial economies. This reduced dislocations and stimulated competition when markets were introduced. Second, some believe political decentralization encouraged local reform experiments, allowing

---

¹ Based on the International Comparison Program, as reported in the World Bank’s World Development Indicators Database. In non-PPP adjusted 2000 US dollars, the increase was from $153 to $1,162.


Adherents note that decentralization can have costs—increased inequality, policy externalities, the creation of local “dukedom” economies—but argue that in China these were outweighed by the benefits (Qian and Weingast (fn. 2), 3). Blanchard and Shleifer make the more nuanced claim that fiscal decentralization helped in China, but only because it was combined with political centralization (Olivier Blanchard and Andrei Shleifer, “Federalism With and Without Political Centralization: China Versus Russia,” IMF Staff Papers 48 (2001)).
new ideas to percolate up from the grass roots. Third, some argue decentralization created political checks on the central authorities, limiting predation and convincing investors reforms would last. Fourth, some suggest fiscal decentralization gave local officials strong incentives to stimulate economic growth. Finally, some contend decentralization helped harden budget constraints on enterprises, forcing them to restructure.

In this article, we challenge the claim that decentralization had much to do with the success of China’s reforms and its dramatic growth. Grass roots initiatives did, of course, occur, and considerable administrative decentralization took place from the mid-1980s. But the key reforms that reshaped China’s economy began in the late 1970s and early 1980s, before any significant decentralization. In fact, China’s authoritarian centralization helped speed the spread of beneficial discoveries. Provincial governors were not then—and still are not—a reliable check on central abuses, and they certainly do not guarantee property rights. The most cited case of a governor resisting Beijing actually ended in victory for the center: he was removed and his successor forced to accept Beijing’s preferred policy. Fiscal decentralization cannot explain improved performance because any beneficial effect of larger local revenue shares was offset by the sharp decline in the fraction of GDP collected as taxes and available for sharing. Nor can fiscal decentralization have hardened state enterprises’ budget constraints because these did not harden. In fact, loss-making enterprises multiplied in the era of decentralization and rapid growth, and the state banks virtually bankrupted themselves bailing them out. Budget constraints only hardened after central fiscal and monetary policy was tightened. To be clear, day-to-day control over various economic activities did pass to subnational officials during the 1980s, subject to ultimate review from above. However, local discretion had both positive and negative effects; from the evidence, it is not clear which on balance dominated.³

If decentralization does not explain why China’s leaders adopted growth-promoting

---
market reforms, the explanation must lie elsewhere. We suggest another view of politics in post-Mao China. The driving force behind reform was not pressures from or initiatives of autonomous local officials but competition at the center between rival factions with different ideological predispositions and local connections. Faction leaders sought supremacy within the party by demonstrating the effectiveness of their chosen policies across the chess board of China’s territorial administration. Local officials were linked into these factions, and sought to impress higher-ups with suggestions and sometimes spontaneous—even illegal—initiatives. This view, which actually coincides with many traditional understandings of Chinese politics, can explain the temporal pattern of reform, which ebbed and flowed with shifts in the factional balance of power rather than with changes in decentralization. It also explains why reforms continued and economic performance did not deteriorate in the 1990s despite a shift toward recentralization.

2 Centralization and Decentralization

Decentralization means different things to different people. Based on examination of common usage, we distinguish three types. Administrative decentralization occurs when national authorities permit their subnational agents to make certain policy decisions, subject to review and

---

4 For one similar view, see Joseph Fewsmith, *Dilemmas of Reform in China: Political Conflict and Economic Debate* (Armonk, NY: M.E.Sharpe, 1994). For a few of the many works that emphasize the role of factions in Chinese politics, see Andrew J. Nathan, “A Factionalism Model for CCP Politics,” *The China Quarterly* 53 (Jan-Mar 1973); Dorothy Solinger, “Politics in Yunnan Province in the Decade of Disorder: Elite Factional Strategies and Central-Local Relations, 1967-1980,” *China Quarterly* 92 (December 1982); Richard Baum, *Burying Mao: Chinese Politics in the Age of Deng Xiaoping* (Princeton: Princeton University Press, 1994); Lowell Dittmer and Yu Shan Wu, “The Modernization of Factionalism in Chinese Politics,” *World Politics* 47 (July 1995); and Jing Huang, *Factionalism in Chinese Communist Politics* (New York: Cambridge University Press, 2000). We concur with those who see factions as fluid, evolving as the focus of competition changes, and having policy preferences as well as material interests. Since the early 1990s, all major factions have accepted the goal of marketization, so this is no longer a point of contention; they differ in their personnel networks, sectoral and regional connections, and commitment to income redistribution. The main point, for present purposes, is that the key axis of competition ran vertically, dividing members of different factions at each level of the state hierarchy, rather than horizontally, pitting a coalition of local officials against their central counterparts.

possible veto from above. *Political decentralization* can mean either or both of two things. First, a system is more politically decentralized if subnational governments have the right to make certain policy decisions *not* subject to being overruled by higher levels. Second, a system is more politically decentralized if subnational officials are chosen by local residents rather than higher officials. *Fiscal decentralization* is used in various ways, so we will try to interpret which meaning is implied by each argument we examine. We use *government decentralization* to include any or all of these three types of decentralization.

Applying these definitions, we consider China to have been administratively and politically highly centralized in 1978. During the 1980s, the country became much more administratively decentralized. Administrative decentralization peaked around 1988-9, followed by some recentralization in the 1990s. Politically, the system has remained highly centralized throughout. Although in the 1980s subnational officials came to make an increasing share of decisions, especially on economic matters, central authorities could always overrule them or take back authority delegated downwards (as they did in various ways during the 1990s). As for appointments, from the late 1980s village officials have been locally elected. In practice, all other subnational appointments have been made by—or at least subject to approval of—higher authorities, with the center exercising ultimate control. In 1984, the party central committee delegated the right to make and review appointments of sub-provincial officials to provincial party committees; but in 1990 these appointments were again brought under central control. The Chinese regime remains, in Andrew Nathan’s words, “a centralized, unitary system in which power at lower levels derives from grants by the center.”

Although these definitions seem to us reasonable, and correspond to common usage, our

---


7 Andrew J. Nathan, “Authoritarian Resilience: China’s Changing of the Guard,” *Journal of Democracy* 14 (January 2003), 13. In the Appendix, we list important changes in the division of powers between center and localities.
critique in subsequent sections does not depend on them. We do not claim that the arguments we challenge fail given just our definitions of administrative and political decentralization: we claim that they fail given their proponents’ definitions. We examine these arguments in their own terms, focusing on the definitions authors explicitly adopt or those implied by the arguments themselves. The one possible exception is the argument about the cellular organization of the Chinese economy in Section 3; we find this internally consistent and plausible, but contend it has nothing to do with political or administrative decentralization under any definition. Thus, we differ with the authors we discuss not on semantics, but on logic and evidence.

Two points require clarification. First, in Chinese debates, decentralization is sometimes given a far broader meaning, encompassing both devolution of political authority and economic liberalization. “Decentralization” is often translated as *fenquan*, which means the abdication of planning powers by the government. Clearly, if decentralization means economic liberalization, decentralization cannot explain why economic liberalization occurred. Consistent with Western discussions, we focus on government decentralization. We distinguish all types of decentralization from a mere weakening of the central state apparatus. A common perception in China is that the central authorities’ ability to control economic life has decreased since 1978. However, powers “lost” by Beijing are not necessarily gained by local governments. The increasing complexity of the Chinese economy and society as the country modernizes has made monitoring and control by any level of government less comprehensive.

Second, analysts sometimes equate the occurrence of grass-roots policy initiatives with political or administrative decentralization. That local officials innovate without prior instructions

---

8 Deng, for instance, in his famous December 1978 speech “Emancipate the Mind, Seek Truth from Facts and Unite as One in Looking to the Future,” (People’s Daily Online, *Selected Works of Deng Xiaoping*, at http://english.people.com.cn/dengxp/) advocated devolving more decisionmaking power to the “various localities, enterprises and production teams,” running together what in the West would be thought of as political decentralization and economic liberalization.

9 Of course, distance has always facilitated non-compliance, as suggested by the old Chinese saying “Qiang zai wai jun ming you suo bu shou” [When the Emperor is far away, a general does not obey all his orders].
is taken as evidence in itself that the political system was decentralized. There are two problems with this. First, it leads to circularity. If local innovation is itself an indicator of decentralization, decentralization cannot explain innovation. Second, grass roots initiatives clearly can occur in states universally considered centralized. Even under Stalin’s totalitarian rule, Soviet enterprise managers spontaneously experimented, hoping to be rewarded for success and fearing failure if they stuck to the rules. In 1934, for instance, managers at the Menzhinskii Aviation Firm started paying premia for high quality production, in clear violation of instructions. In 1935, executives at the Stalingrad Dzerzhinskii Tractor Plant “drew up a plan for the total reorganization of the plant and its production, and presented the plan in the national industrial press.” In 1937, at the height of the purges, the Moscow Kuibyshev Electrical Plant nevertheless “decided on its own to revise premium systems in order to give timeworkers greater incentives.”

To our knowledge, no one has suggested such practices rendered the Stalinist system politically or administratively decentralized. If, by contrast, one defines China in 1978 as decentralized because local officials innovated, then decentralization does, of course, explain reform—but in an uninteresting way.

3 The M-Form Economy

Qian and Xu and Xu and Zhuang argue that China’s economy as of 1978 was structured in a way particularly conducive to marketization, at least compared to its northern communist neighbor.

In the Soviet Union, regional economies were mutually dependent, specialized units with different roles in the national division of labor, coordinated by central planners. In China, provincial economies were more self-sufficient and internally diversified. Fearing military

---

10 See David Granick, *Management of the Industrial Firm in the USSR: A Study in Soviet Economic Planning* (New York: Columbia University Press, 1954), 112-16 and 133, who suggests this was common practice in the Stalinist 1930s: “It is in the plants that grass-roots ideas originate; they may later be taken up by higher bodies and spread to all industries or they may be condemned in official instructions. Nevertheless, it is here that they get their first test and hearing.”

11 Yingyi Qian and Chenggang Xu, “Why China’s Economic Reforms Differ: The M-Form Hierarchy and Entry/Expansion of the Non-State Sector,” *Economics of Transition* 1 (June 1993); Xu and Zhuang (fn. 2).
invasion, Mao encouraged local self-sufficiency and devolved much planning and administration to provincial cadres. Whereas in the USSR, single plants often supplied the entire market, in China parallel enterprises in different provinces produced similar goods. Using the vocabulary of Chandler and Williamson, Qian and Xu compare the Chinese economy to a multi-divisional (“M-form”)—and the Soviet Union to a unitary (“U-form”)—organization.

This inherited economic structure helped China as markets replaced planning. Since provinces and counties within them had relatively diversified economies, competition could emerge between rival producers of the same goods. Deliberate redundancy left the system less vulnerable to shocks, reducing the cost of transitional disorganization and the risk of disruption if Beijing conducted localized experiments. Finally, M-form structure enabled central leaders to use yardstick competition to evaluate local officials’ performance.

These arguments are quite compelling. However, they have nothing to do with political, administrative, or fiscal decentralization. They concern China’s economic structure at the start of transition—specifically, its lower industrial concentration and geographical specialization than the Soviet Union’s. Low industrial concentration and diversified regional economies help make market systems more competitive and resilient. But this is true regardless how political authority and fiscal resources are shared between levels of government. The purported benefits of the M-form economy—competition among enterprises, alternative suppliers, less risky local experiments—would help just as much in a politically centralized market economy as in a politically decentralized one. Yardstick competition can be used to evaluate local agents’ performance whether the principals are local voters or central leaders. Market liberalization in an

---

12 Qian and Weingast (fn. 2).


M-form economy, like China’s, may indeed be less disruptive than in a U-form economy, like that of the Soviet Union. But it does not follow that decentralization outperforms centralization in either system. To make this case, some other argument is needed.

4 Local policy experiments

China’s political or administrative decentralization is often said to have stimulated spontaneous local experiments that grew into nationwide reforms. Cao, Qian and Weingast, paraphrasing Justice Louis Brandeis’ famous remark, note that China has relied on “the ‘laboratory of the local governments’ to pursue reform.”15 Xu and Zhuang see China’s reform strategy as distinctive in its success “in using local experiments and in adopting the ‘bottom-up’ approach.”16 The lesson China’s experience teaches, write Montinola et al., is that: “Experimentation, learning, and adaptation all follow from the inception of local political freedom over the economy.”17

Three sets of local experiments are usually singled out. First, Chinese agriculture was transformed by the introduction of the “household responsibility system” (HRS). This apparently began when in 1978 peasants in drought-stricken Fengyang County, Anhui Province, divided their team’s land into separate plots for individual households to farm. Grain yields rose, and the higher authorities embraced the scheme, extending it to other provinces. By 1986, almost all China’s peasants had adopted the HRS.18 Second, four “special economic zones” (SEZ’s) were established in 1979 in Guangdong and Fujian Provinces. These zones were allowed low tax and

16 Xu and Zhuang (fn. 2), 194.
17 Montinola et al. (fn. 2), 78.
tariff rates and flexible investment rules to encourage high technology exports. Their success fueled the proliferation of other privileged zones—“coastal open areas”, “coastal open cities”, “economic and technological development zones”, “hi-tech development zones”, “border open cities”, etc.—totaling around 3,000 by 1993.\(^{19}\) Third, parallel experiments with different profit-retention schemes in state-owned enterprises (SOEs) were begun in 1978 in the provinces of Sichuan and Hubei, followed by experiments in other locations. These led ultimately to the replacement of profit remittances by taxes in SOEs in 1986.

These three sets of experiments laid the foundations for China’s economic transformation. The HRS de-collectivized Chinese agriculture and, along with higher procurement prices, prompted increases in agricultural productivity of more than six percent a year in the early 1980s (see Figure 1). The SEZs began China’s integration into the world economy. Exports grew from $10 billion in 1978 to $593 billion in 2004. The state enterprise reforms had a less clear effect. They may have helped secure moderate productivity growth in 1984-8, although the highest growth in this period was in collective enterprises. In the 1990s, both state-owned and collective enterprises lost ground to the rapidly growing private sector, which has fueled the expansion of the last 15 years (see Figure 2). But the SOE reforms started the process of converting these into market corporations, leading ultimately to their privatization in the late 1990s after attempts to make them profitable failed.\(^{20}\)

Were these experiments the result of political or administrative decentralization? We dispute this for three reasons. First, the theory that political decentralization should stimulate policy innovation is open to serious question. Second, even if decentralization did encourage

---


\(^{20}\) The accuracy of Chinese GDP statistics after 1998 has been disputed (see, e.g., Thomas Rawski, “What is Happening to China’s GDP Statistics?” *China Economic Review* 12, no. 4 (2001)). Some consider official growth rates to be exaggerated. On the other hand, a national economic census in 2005 concluded GDP had been under-reported largely due to inadequate measurement of the service sector.
Figure 1. Total factor productivity growth, percent per year

![Bar chart showing productivity growth by sector from 1980-84 to 1992-96.](chart)


Figure 2. Real output (bn 1978 yuan)

![Line chart showing real output by sector from 1978 to 2002.](chart)

experiments, this could not explain China’s success because the most important reforms were introduced when China was still highly centralized. Third, the speed with which effective local policies were identified, evaluated, and extended, often against the resistance of conservative local cadres, actually owed much to China’s political and administrative centralization.

Taking these points in order, there are several reasons to doubt the common intuition that decentralization stimulates policy innovation. First, local experiments generate positive informational externalities. Discoveries from one region can be usefully applied in others. Local leaders will care less about such spillovers than a national leader, whose jurisdiction encompasses the whole country. Second, the risk for a local official experimenting in his unit is greater than that for a central government experimenting in one of the country’s many districts. Together, these factors suggest central leaders should generally be more eager to introduce local experiments than their local counterparts. Central leaders should also be better able or motivated to coordinate experiments across regions and rapidly exploit discoveries nationwide. China’s experience contains evidence of each of these effects.

Even if a stronger logic linked decentralization to experimentation, this could not explain China’s experience. The three most significant, trail-blazing experiments occurred at a time when China’s political and administrative systems were highly centralized. As of 1978, China was one of the most centralized countries in the world—a communist autocracy, in which local cadres not


22 Hongbin Cai and Daniel Treisman, “Political Decentralization and Policy Experimentation” (Manuscript, Department of Political Science, UCLA, 2005).

23 Ibid.

only were not free to set policies but knew they could go to jail for trying. In Section 2, we defined “political decentralization” as the local selection of local officials or the right of local officials to decide policies without being overruled. As of the late 1970s, neither of these applied. Until village elections began in the late 1980s, appointment of all subnational officials—even if formally local—was controlled by higher levels. As for choosing policies, one can judge how free local officials felt from the precautions some took. The production team leader implicated in the Fengyang peasants’ scheme reportedly agreed only after the peasants pledged to raise his children until age 18 if he should be imprisoned.25

A 1978 editorial in the People’s Daily cataloged an impressive list of fears that kept most local officials from innovating: “The fear of being labeled as a ‘capitulationist’; the fear of being dismissed from one’s post; the fear of being expelled from the party; the fear of being divorced by one’s wife; the fear of serving a prison term; and the fear of being beheaded.”26 Repression was less extreme than in the Cultural Revolution. Nevertheless, officials knew that in the past initiative had been punished as often as rewarded. In fact, reforms similar to the HRS had been introduced several times under Mao, but “each such attempt had been ruthlessly criticized”; the official who backed the first such reform, in Zhejiang Province in the 1950s, was later “named a ‘rightist element,’ expelled from the party, and sent down (xia fang) for labor.”27 “Decentralism” was traditionally labeled a serious breach of discipline. As late as 1985, party secretary Hu Yaobang felt the need to reassure local officials that, although they might be fired for committing this “mistake”, at least they would “normally not be deprived of their material privileges, nor would their family members and relatives be discriminated against”.28 The local risk-taking of

25 Chung (fn. 18), 90; Fewsmith (fn. 4), 28.
26 People’s Daily, December 7, 1978, quoted in Chung (fn. 18), 41.
27 Fewsmith (fn. 4), 23-4.
peasants in Anhui and elsewhere is actually remarkable evidence of their desperation and enterprise despite a history of Leninist political centralization.29

Even those who believe political decentralization stimulated reform apparently agree that China was highly centralized as of 1978-81, at least compared to non-communist countries. In a series of articles, Qian and Weingast trace the success of reforms in China to a kind of federalism in which local governments have “primary authority over the economy within their jurisdictions” and “the allocation of authority and responsibility has an institutionalized degree of durability so that it cannot be altered by the national government.”30 However, according to Qian and Weingast it was only in 1984-8 that “federalism, Chinese style, took shape.” As of the late 1970s, the most one could say was that China was administratively and economically “decentralized in comparison with economies of the Soviet Union and Eastern Europe”—compared, that is, to other communist dictatorships.31

Among communist countries, it is true China’s economic administration was relatively decentralized after 1978. For the next decade, one could contrast China’s successes with the reform failures of the more centralized USSR. However, by late 1989 political decentralization in the Soviet Union had clearly outstripped that in China. The Baltic republics were racing toward independence, and by early 1991 Gorbachev was trying to save the Soviet Union as a loose confederation. After its partly free regional elections in 1990, Russia was also more politically decentralized than China, with economic policies diverging in the regions. If decentralization explains why reforms worked better in China than the Soviet Union in the 1980s, it cannot explain why China fared better than Russia in the 1990s. The opposite should have occurred.

29 The memory of the catastrophic famine of 1958-61 may also have emboldened peasants (see Dali L. Yang, Calamity and Reform in China: State, Rural Society, and Institutional Change Since the Great Leap Famine (Stanford: Stanford University Press, 1996)).

30 Qian and Weingast (fn. 2), 6, italics in original.

31 Ibid., 13, 15.
Examined closely, China’s “local” experiments were not always as local as might appear. Central authorities were often deeply involved, if not from the start then from soon after. And central involvement clearly helped, speeding the spread of useful discoveries, reducing redundancy, and overcoming resistance to reform. The Fengyang peasants apparently acted spontaneously. But higher level reformers promoted the model vigorously. Hu Yaobang and Zhao Ziyang toured sluggish provinces, scolding their leaders, and teams were sent to expose and “rectify” foot-dragging cadres.\(^{32}\) The Heilongjiang party leader, who resisted the HRS, was removed.\(^{33}\) The Sichuan SOE experiments, although sometimes portrayed as a spontaneous initiative of Zhao Ziyang, then provincial party chief, were one of a centrally coordinated set of pilot schemes. Lee, who analyzed a number of these, contends that those in Sichuan were authorized in advance by the State Economic Commission and other State Council ministries.\(^{34}\) Central ministries monitored and reviewed the schemes, codified them in five policy documents, and ordered similar experiments in Beijing, Tianjin, and Shanghai.\(^{35}\)

If the SEZ’s were an experiment, they were clearly an experiment of the central authorities. Initial authorization came in a July 1979 State Council directive.\(^{36}\) Deng claimed leaders of Guangdong Province—two old comrades of his—suggested the idea, but without Deng’s support nothing would have come of it, and their slowness to implement the reforms casts

---


33 Fewsmith (fn. 4), 125. Demand from the population was also important in the HRS’s spread (Xiaopeng Luo, “Rural Reform and the Rise of Localism,” in Jia Hao and Zhimin Lin, eds., *Changing Central-Local Relations in China: Reform and State Capacity*, Boulder: Westview Press, 1994).


doubt on the enthusiasm of these two oldtimers.\textsuperscript{37} Frustrated with their delays, Deng replaced them in late 1980 with more committed reformers.\textsuperscript{38} Similarly, in Fujian the leaders were replaced in the early 1980s for their delay in building the Xiamen SEZ. First secretary Liao “distinguished himself by his lack of enthusiasm for reform.”\textsuperscript{39} Deng sent a more dynamic ally instead. The zones’ host provinces helped work out implementation; but central authorities regulated this process, set guidelines, monitored the results, and authorized extensions.\textsuperscript{40}

Central control also shows in the way SEZ locations were chosen. To reduce political and economic risk, they were placed in relatively sparsely populated, underdeveloped provinces. Fujian “had no international airport, and its major ports and railroad system were inadequate for moving large volumes of freight and passengers.”\textsuperscript{41} Guangdong also “suffered from the lack of a strong industrial base as well as insufficient infrastructural facilities.”\textsuperscript{42} In 1988 an additional SEZ was sited on the island of Hainan, in part because “leaders of the CCP believed that Hainan was expendable.”\textsuperscript{43} Only after the idea was tested in the periphery was it extended to the less “expendable” Shanghai. Although grass roots initiatives played a part in these reforms, their design and geographical spread owed much to the authoritarian centralization of Chinese politics.

Local experiments continued in some areas as economic administration was decentralized

\textsuperscript{37} Barry Naughton, “Deng Xiaoping: The Economist,” \textit{China Quarterly} 135 (September 1993), 509.


\textsuperscript{40} Stoltenberg (fn. 36), 640-41.

\textsuperscript{41} Shieh (fn. 39), 305.

\textsuperscript{42} Cheung (fn. 38), 122.

in the mid-1980s. The privatization of small state-owned enterprises and of housing began with local experiments. It is hard to measure whether the frequency of experiments increased over time; however, the HRS, SEZs, and SOEs in the late 1970s certainly show decentralization was not necessary for major local policy innovations. As before, some of the later “local” experiments actually began with a lot of central input. For instance, local experiments began in housing privatization in Zhengzhou, Changzhou, Siping and Shashi, and then Yantai in the mid-1980s; they were pilot projects designed and authorized by central authorities.44

In sum, most of the experiments that shaped China’s reforms were not initiated by innovative, autonomous local leaders in defiance of an ideologically-blinkered center. Most are better seen as gambits in a game played between competing factions centered in Beijing. Vertically structured, pro- and anti-reform factions spanned the state’s many tiers. Most often, experiments began in provinces where Deng had strong supporters—Anhui (Wan Li), Sichuan (Zhao Ziyang), Guangdong (Yang Shangkun)—and spread fastest where Deng had allies. Until 1981, the HRS spread fastest “in the provinces like Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Henan, and Inner Mongolia where Deng’s forces dominated, or in the remote areas like Ningxia and Yunnan.”45 When feeling secure, Deng and his allies replaced conservative local leaders with their own men, who then engaged in more “local” experiments.46 Decentralization was selective and aimed at circumventing Deng’s central opponents. As reforms proved effective, Deng promoted provincial supporters such as Zhao and Wan Li to Beijing, from where they could direct reform nationwide. Other Deng allies at the center (Hu Yaobang and Song Renqiong) protected local reformers from party discipline and ideological attacks in the national press.47


45 Huang (fn. 4), 371-5.

46 For instance, in 1985 Beijing sent Liang Buting, a protégé of Hu Yaobang, to serve as party secretary and inject “reformist spirit” into the conservative province of Shandong (Chung (fn. 18), 133).
Grassroots initiatives were certainly important. But the main battle front ran not between center and regions but through the heart of Beijing.\textsuperscript{48}

5 Resisting central abuses

One argument for decentralization is that powerful local governments can entrench liberal economic policies by coordinating to resist predatory central interventions. Qian and Weingast contend that China’s provincial governors have defended economic reform against central hardliners. They point to the reformist governor of Guangdong, Ye Xuanping, who opposed attempts by Premier Li Peng in 1988-90 to recentralize budget revenues: “In China, … the central government tried to reverse local political authority underpinning market-oriented reform in the aftermath of Tiananmen Square in 1989. Led by the Governor of Guangdong, the governors of many provinces resisted so that the central government eventually backed down.”\textsuperscript{49}

This incident is worth examining. In 1988-90, conservative party leaders sought to rein in inflationary pressures and increase central revenues. Li Peng and his allies wished to replace the fiscal contracting system with one in which tax revenues would be more evenly shared. At several meetings in 1989-90, Ye, sometimes supported by other governors, criticized this. At one conference of provincial governors, his speech was reportedly met by “wild applause.”\textsuperscript{50} This might have seemed a serious challenge, coming from a popular provincial politician and the son of one of the country’s military leaders. Marshal Ye Jianying, Ye Xuanping’s father, was one of

\textsuperscript{47} Huang (fn. 4), 375.

\textsuperscript{48} For a similar view, see Solinger (fn. 4).

\textsuperscript{49} Yingyi Qian and Barry R. Weingast, “Federalism as a Commitment to Preserving Market Incentives,” \textit{Journal of Economic Perspectives} 11 (Autumn 1997), 90; see also Montinola et al. (fn. 2), and Susan Shirk, \textit{The Political Logic of Economic Reform in China} (Berkeley: University of California Press, 1993), ch. 9.

\textsuperscript{50} Frank Gibney, Jr., “China’s Renegade Province,” \textit{Newsweek International}, February 17, 1990, 35.
the founders of Communist China. In 1977, he had orchestrated the coup that deposed the Gang of Four, making possible Deng’s return.  

This did not stop Beijing removing Ye Xuanping the following year, along with the Guangdong party secretary, whose term was ending. Two more junior officials, also reformist but more deferential, were appointed. In late 1993, the tax contracting system Ye favored was replaced by Li Peng’s preferred arrangement. Provincial governments no longer collected tax for the center, and their share was cut drastically, although they received compensatory transfers. In preparation, the center also removed the Jiangsu party chief, and other regional officials were “dumped for rubbing up Beijing the wrong way.” To underline Beijing’s victory, Zhu Rongji even praised Guangdong’s leaders for serving as a “model for submission by the part to the whole.” Ye’s resistance had delayed Li’s plans a little. But as an effort to block central interventions, it seems a rather limited success.

In fact, it is not clear the image of center-region conflict accurately captures what was going on. Ye’s “provincial rebellion” may actually have been instigated from Beijing. Deng feared Li Peng’s retrenchment would slow growth and undermine his achievements. Shortly before the 1990 meeting at which Ye challenged Li, Deng reportedly sent his old friend, President Yang Shangkun, to tell Ye that Deng would support resistance to Li. Li’s hesitations in responding may also have had as much to do with central politics as provincial pressure. In the post-Tiananmen uncertainty, Li knew too vigorous an attack on the pioneering provinces might


52 Ye was reassigned to a ceremonial post in Beijing.


54 Yang (fn. 53), 104.

provoke a counterattack from central reformers, and very possibly Deng himself.

Central authorities had little trouble removing regional leaders on many other occasions. The average tenure of provincial leaders declined in the 1980s, as cadres were more quickly rotated, promoted, or demoted.\textsuperscript{56} Between 1991 and mid-1994, more than 10,000 officials at different levels were moved around, and in late 1994 and early 1995 Beijing reshuffled the leaders of more than half the provinces and major cities.\textsuperscript{57} In 1994, while touring Heilongjiang, Vice Premier Zhu Rongji dismissed party boss Sun Weiben on the spot.\textsuperscript{58}

Beijing did have temporary difficulty dislodging some recalcitrant governors (as occurred with Ye). But this was not because provincial officials operated some corporate defense mechanism or coordinated to protest violations of some implicit constitution. Rather, individual governors exploited their vertical networks, enlisting protection of powerful patrons at the center.\textsuperscript{59} Ye had excellent connections in the party via his father. As a child, he had camped out in the caves of Yan’an along with Mao, Deng, and the other early communists. His appointment in 1985 showed Deng’s commitment to reform in Guangdong.\textsuperscript{60} This complicated Li Peng’s task, but did not save the Guangdong leadership.

China’s economic reforms have acquired credibility over time. This reflects the sheer number of citizens and firms with a stake in their continuation and the increasing complexity of the economy, which makes restoration of tight state control hard to imagine. Provincial governors are important players in Beijing politics, as they have almost always been. But the historical record to date does not support the claim that the governors can reliably coordinate to limit

\textsuperscript{56} Yasheng Huang, “The Post-Deng Era: Why China Will Not Collapse,” \textit{Foreign Policy} 99 (Summer 1995).

\textsuperscript{57} Willy Wo-Lap Lam, \textit{The Era of Jiang Zemin} (New York: Prentice Hall, 1999), 216-7.

\textsuperscript{58} Ibid.

\textsuperscript{59} Huang (fn. 56), 61.

central interventions.

6  Fiscal decentralization and incentives

Some scholars argue that fiscal decentralization gave Chinese local officials strong incentives to promote economic growth, contributing to high growth nationwide. By fiscal decentralization, they mean assigning local governments a large share of marginal revenues from profit or income taxes. From 1980, the central authorities began signing fiscal contracts with provincial governments over the division of tax revenues. Jin et al. report that over time these gave provinces ever larger shares of marginal revenues, while becoming increasingly credible. By 1989, more than two thirds of provinces had the right to keep all marginal revenues. These scholars argue that letting local officials retain a larger share of marginal revenues should give them stronger incentives to “grow” the tax base by building infrastructure and reducing regulation and bribery. Jin et al. examined a panel of 29 provinces during 1980-92 and found that higher marginal retention rates were associated with faster employment growth in non-state enterprises and faster reform in state-owned enterprises.

One might argue about whether assigning high marginal retention rates to local governments is a kind of fiscal decentralization at all. It does not require the allocation to local governments of any significant decisionmaking rights or fiscal resources. It is quite possible for local governments to retain 100 percent of revenues at the margin, but still get only a tiny share of total locally generated revenues. Jin et al. try controlling for provinces’ shares of total tax revenues—a more common measure of fiscal decentralization—but find these are not associated


62 Jin et al. (fn. 61).
with faster economic reform. In fact, the argument seems more aptly characterized as one about high-powered agency contracts. Such contracts can be useful in all types of regimes where agents have the ability to shirk.

Still, accepting the authors’ definitions, is the argument compelling? A more specific reason exists to doubt its application to China. Formally, such arguments assume provincial officials maximize an objective function like the following:

\[ U = rstY(e) - C(e) \]

where \( Y \) is the provincial tax base, which increases with provincial government effort, \( e \); \( C \) is the cost of exerting effort, also increasing in \( e \); \( t \) is the expected effective tax rate; \( s \) is the proportion of tax revenues that is shared between governments; and \( r \) is the province’s marginal share in shared revenues. Given standard assumptions that \( Y \) is concave and \( C \) convex, the provincial government’s optimal effort increases with \( rst \). If \( s \) and \( t \) are fixed, then optimal effort must also increase with \( r \). This is the claim about incentives in China. As \( r \) rose in the 1980s, this should have increased local officials’ incentive to support business, generating higher output.

But, in this case, \( s \) and \( t \) were anything but fixed. First, \( s \) fell in the 1980s as the central authorities changed the rules to increase their revenues. Under fiscal contracting, before revenues were shared certain “central fixed revenues” were reserved for the center. These included customs duties, some taxes, and remittances or profit taxes paid by the center’s “own” state-owned enterprises. During the 1980s, the central government increased the scope of central fixed revenues, shrinking the pool available for sharing. Consequently, \( s \) fell from about 85 percent of

---

63 For a similar formalization, see Jin et al. (fn. 61).

64 Another problem with this argument is that it ignores the central government’s potential to either support or impede economic activity (Treisman 2006).

total budget revenues to about 60 percent.\textsuperscript{66} At the same time, total budget revenues as a share of GDP, which might serve as a proxy for the effective tax rate, $t$, were also falling. Total budget revenues fell from about 28 percent of GDP in 1979 to about 16 percent in 1990, depleted by tax evasion, decline of the old state enterprises, and difficulties collecting from the new non-state sector. (The tax rate, $t$, is the expected—not actual—rate, so one might argue that only the formal rate matters. However, the steady drop in collections was obvious to officials and must have influenced their expectations.)

We estimated the marginal retention rate, $r$, for 29 provinces in 1980-90, based on their existing fiscal contracts. Our measure of the average $r$ for these years is close to that presented by Jin et al. in their Figure 1.\textsuperscript{67} This increased from around 68 percent in 1980 to a little below 90 percent in 1990. However, the increase in $r$ was probably more than offset by simultaneous decreases in $s$ and $t$ (see Table 1). We estimate that the product $rst$ fell from about 15 to about 8 percent. If these figures are approximately right, incentives to stimulate the economy weakened in the average province rather than improving. Although fiscal incentives might explain why growth was faster in some provinces than others, it is unclear—given the fall in shared revenues as a fraction of GDP—how such incentives could explain rapid growth nationwide.

In another sense, the argument about marginal retention rates may miss the point. Throughout this period, local governments could set up various extrabudgetary and "off-budget" funds, all revenues of which they generally got to keep. Local governments usually had "complete authority over determination of tax rates and the amount of fees that fall into the categories of extra budget."\textsuperscript{68} Subnational extrabudgetary fund revenues equaled 70 percent of subnational budget revenues in 1995 and 47 percent in 2002. On several occasions, central authorities tried to regain control over such flows, but with limited success. For instance, from

\textsuperscript{66} Ibid., 90; see Table 1.
\textsuperscript{67} Jin et al. (fn. 61).
\textsuperscript{68} Qian and Weingast (fn. 2), 17.
January 1983 Beijing imposed a 10 percent tax on extra-budgetary revenues, later increased to 15 percent. Such efforts prompted local governments to move money into off-budget funds, completely outside formal control. Revenue from fees, most of which were paid into local off-budget funds, were estimated at 413 billion RMB in 1996, more than half the country’s total budgetary revenues.

### Table 1: Estimating fiscal incentives, China 1979-1990

<table>
<thead>
<tr>
<th></th>
<th>Estimated marginal retention rate (average for 29 provinces)</th>
<th>Estimated percentage of tax revenues that was shared</th>
<th>Total government revenues as percent of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( R )</td>
<td>( s )</td>
<td>( t )</td>
</tr>
<tr>
<td>1979</td>
<td>85.7</td>
<td>28.4</td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>68.2</td>
<td>84.0</td>
<td>25.7</td>
</tr>
<tr>
<td>1981</td>
<td>69.4</td>
<td>79.4</td>
<td>24.2</td>
</tr>
<tr>
<td>1982</td>
<td>78.1</td>
<td>77.0</td>
<td>22.9</td>
</tr>
<tr>
<td>1983</td>
<td>78.3</td>
<td>70.2</td>
<td>23.0</td>
</tr>
<tr>
<td>1984</td>
<td>78.3</td>
<td>65.1</td>
<td>22.9</td>
</tr>
<tr>
<td>1985</td>
<td>82.2</td>
<td>62.1</td>
<td>22.4</td>
</tr>
<tr>
<td>1986</td>
<td>84.7</td>
<td>59.5</td>
<td>20.8</td>
</tr>
<tr>
<td>1987</td>
<td>85.1</td>
<td>61.7</td>
<td>18.4</td>
</tr>
<tr>
<td>1988</td>
<td>88.7</td>
<td>60.2</td>
<td>15.8</td>
</tr>
<tr>
<td>1989</td>
<td>88.7</td>
<td>62.5</td>
<td>15.8</td>
</tr>
<tr>
<td>1990</td>
<td>88.7</td>
<td>58.7</td>
<td>15.8</td>
</tr>
</tbody>
</table>


Thus, both before and after the decentralizing reforms of the 1980s, local governments could collect revenues they did not have to share with anyone. If residual claimancy creates

---

69 See Oksenberg and Tong (in Sources to Table 1), 28.

70 Xin-Qiao Ping, “Fiscal Decentralization in Chinese Economic Reform” (Manuscript, China Center for Economic Research, Peking University, 2000).

71 Ibid., 21.
incentives to support growth, these incentives existed both before and after the introduction of fiscal contracts. Increases in subnational governments’ marginal retention rate for taxes might encourage subnational governments to shift revenues from extrabudgetary or off-budget funds into the formal tax system. It should also reduce incentives for local governments to help enterprises underreport output to evade taxes that would have to be shared with Beijing. This could increase reported output, but it is not clear why local governments would be more supportive of economic activity than they were before.

A final problem with the fiscal incentives argument is that it is inconsistent with experience after 1993. The tax reform implemented in 1994 replaced a system of fiscal contracts with high regional retention rates with one in which the largest tax, VAT, was shared between provinces and center with the provinces retaining only 25 percent. Other taxes were assigned entirely to one level or the other, but their bases often overlapped. If local governments supported the growth of local businesses, for instance, they would get to keep 100 percent of additional business tax receipts, but would get only 25 percent of additional VAT and none of any additional export taxes generated. This must have significantly weakened local incentives. Worse still, a complicated system of compensatory transfers made it hard to tell what the net retention rates actually were. In the early years, according to Wang, “no one knew what constituted real central revenue or local revenue.” Yet there was no observable decline in the willingness of local governments to support local business after 1994. Although the fluctuations of the business cycle complicate comparisons, and dwindling opportunities for reallocating labor were reducing potential growth, the average growth rate in the seven years after the reform (1994-2000) was 8.1 percent, exactly the same as that for the seven years before it (1987-2003). The OECD estimates

Loosely regulated local extrabudgetary funds also existed in Russia in the 1990s, a country Jin et al. suggest grew more slowly because of poor fiscal incentives.

that in the period 1993-98, increases in productivity added 3.4 percentage points to annual
growth, compared to 1.7 percentage points in 1988-93 and 2.4 points in 1983-88. Increases in
capital also added more to growth in the later period.\footnote{OECD, \textit{OECD Economic Surveys: China} (Paris: OECD, 2005), 32.}

An alternative explanation would attribute local officials’ increasing efforts to promote
growth precisely to the system’s enduring centralization. Subnational officials in China undergo
detailed performance reviews by their superiors, and are rewarded or penalized based on their
success in achieving specific targets.\footnote{Kai-yuen Tsui and Youqiang Wang, “Between Separate Stoves and a Single Menu: Fiscal
Decentralization in China,” \textit{The China Quarterly} 177 (May 2004), 71-90.} Promotions, demotions, and job-related benefits all depend
on such reviews, which have become increasingly formal. Criteria have varied over time. Under
Mao, promotion depended, in part, on ideological conformity. But as reformers came to dominate
in the 1980s, targets focused increasingly on economics.\footnote{More recently, criteria have included environmental protection and worker safety.}
As of the mid-1990s, the system for evaluating provincial leaders assigned 60 out of 100 points to targets related to economic
performance.\footnote{Tsui and Wang (fn. 75), 77.} This is clear in the results. Li and Zhou examined top officials in 28 provinces in
1979-1995, and found promotions were significantly more likely—and demotions less likely—in
provinces with higher growth.\footnote{Hongbin Li and Li-An Zhou, “Political Turnover and Economic Performance: The Incentive Role of
Personnel Control in China,” \textit{Journal of Public Economics} 89 (September 2005).} Similarly, Maskin et al. found provincial officials were more
often promoted to the Party’s Central Committee if their province’s relative growth rate
increased.\footnote{Maskin et al. (fn. 14).} Career concerns create strong incentives to improve economic performance. They
explain better than fiscal factors why the rise of market reformers in Beijing led to reforms and
growth in the provinces, continuing after 1994.

\footnote{OECD, \textit{OECD Economic Surveys: China} (Paris: OECD, 2005), 32.}
\footnote{Kai-yuen Tsui and Youqiang Wang, “Between Separate Stoves and a Single Menu: Fiscal
Decentralization in China,” \textit{The China Quarterly} 177 (May 2004), 71-90.}
\footnote{More recently, criteria have included environmental protection and worker safety.}
\footnote{Tsui and Wang (fn. 75), 77.}
\footnote{Hongbin Li and Li-An Zhou, “Political Turnover and Economic Performance: The Incentive Role of
Personnel Control in China,” \textit{Journal of Public Economics} 89 (September 2005).}
\footnote{Maskin et al. (fn. 14).}
7 Hard budget constraints

Qian and Roland argue that, when capital is mobile, decentralizing fiscal authority can harden budget constraints on state enterprises.\textsuperscript{80} They present a model in which enterprises lobby local—but not central—governments for aid. Local governments must divide their budget between building infrastructure—which increases local profitability, and so helps attract capital—and bailing out insolvent firms. Since reducing infrastructure investments prompts an outflow of capital, local governments face a higher opportunity cost of spending on bailouts than a central government would (assuming capital is less mobile across national than regional borders). Thus, local governments should be less eager to provide subsidies than a central government. Qian and Roland contend that such effects have hardened budget constraints on SOEs in China.

The argument is elegant. But it is not clear it establishes that fiscal decentralization contributed to better economic performance in China, for two reasons. First, even if competition for capital hardened budget constraints on some state enterprises, it simultaneously softened them for those, whether private or state-owned, that partnered with external—especially foreign—investors. Second, there is little evidence that decentralization and competition for capital did harden budget constraints on state-owned enterprises. On the contrary, they appear to have softened. Financial discipline was tightened in the late 1990s. But this reflected a reimposition of controls by the central government, not an increase in political or fiscal decentralization.

To take these points in turn, local governments can compete for mobile capital in various ways. Building infrastructure is only one, and not always the most cost-effective. Investors may be lured to a region precisely by the local government’s promises of soft credit, subsidies, or tax breaks. Provincial and municipal governments in China have made such offers quite explicit. The Jiangsu government pledged in a 1986 regulation that: “Problems concerning the funding of the

\textsuperscript{80} Yingyi Qian and Gérard Roland, “The Soft Budget Constraint in China,” \textit{Japan and the World Economy} 8 (1996); Qian and Roland (fn. 2).
investment of the Chinese party to a foreign investment enterprise will be fully resolved…. The various banks with which a foreign investment enterprise has opened an account will give priority when formulating loan targets to guaranteeing availability of working capital loans and short-term working funds for the foreign investment enterprise.” Qinhuangdao Municipal Government promised its development company would “be responsible for and partially or wholly handle the loans for short-term working funds needed for production and distribution, as well as for other needed credit of enterprises with foreign investment.” Xiamen, Heilongjiang, Guangdong and many other units have made similar commitments.\(^{81}\) Foreign investors are often required to partner with a Chinese SOE, whose budget constraints are softened by such privileges.

Subnational governments have often pressured local banks and state bank branches to fund favored firms. A 1987 survey found most non-performing state bank loans had been made “under pressure from local governments.”\(^{82}\) Until the late 1990s, local governments helped appoint and promote the directors of local state bank branches.\(^{83}\) Bank employees relied on local governments for water, electricity, housing, and schooling for their children.\(^{84}\) Local governments also held shares in many joint equity and commercial banks and continued to meddle in their operations.\(^{85}\)

Provincial governments have often guaranteed foreign loans, explicitly or implicitly. Some set up financial trust companies to channel government-guaranteed loans to local projects.


\(^{83}\) OECD (fn. 74), 170.


Table 2: State subsidies to loss-making state-owned enterprises

<table>
<thead>
<tr>
<th>Year</th>
<th>Total billion RMB</th>
<th>% GDP</th>
<th>Central billion RMB</th>
<th>Local billion RMB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>50.7</td>
<td>5.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>32.5</td>
<td>3.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td>37.6</td>
<td>3.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td>44.6</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>59.9</td>
<td>3.5</td>
<td>22.7</td>
<td>37.1</td>
</tr>
<tr>
<td>1990</td>
<td>57.9</td>
<td>3.1</td>
<td>21.0</td>
<td>36.9</td>
</tr>
<tr>
<td>1991</td>
<td>51.0</td>
<td>2.4</td>
<td>23.6</td>
<td>27.4</td>
</tr>
<tr>
<td>1992</td>
<td>44.5</td>
<td>1.7</td>
<td>16.8</td>
<td>27.7</td>
</tr>
<tr>
<td>1993</td>
<td>41.1</td>
<td>1.2</td>
<td>10.2</td>
<td>30.9</td>
</tr>
<tr>
<td>1994</td>
<td>36.6</td>
<td>0.8</td>
<td>5.8</td>
<td>30.9</td>
</tr>
<tr>
<td>1995</td>
<td>32.8</td>
<td>0.6</td>
<td>5.9</td>
<td>26.9</td>
</tr>
<tr>
<td>1996</td>
<td>33.7</td>
<td>0.5</td>
<td>7.2</td>
<td>26.6</td>
</tr>
<tr>
<td>1997</td>
<td>36.8</td>
<td>0.5</td>
<td>9.6</td>
<td>27.3</td>
</tr>
<tr>
<td>1998</td>
<td>33.3</td>
<td>0.4</td>
<td>7.5</td>
<td>25.9</td>
</tr>
<tr>
<td>1999</td>
<td>29.0</td>
<td>0.4</td>
<td>5.2</td>
<td>23.8</td>
</tr>
<tr>
<td>2000</td>
<td>27.9</td>
<td>0.3</td>
<td>4.9</td>
<td>23.0</td>
</tr>
<tr>
<td>2001</td>
<td>30.0</td>
<td>0.3</td>
<td>3.8</td>
<td>26.2</td>
</tr>
<tr>
<td>2002</td>
<td>26.0</td>
<td>0.2</td>
<td>4.6</td>
<td>21.4</td>
</tr>
<tr>
<td>2003</td>
<td>22.6</td>
<td>0.2</td>
<td>3.2</td>
<td>19.4</td>
</tr>
<tr>
<td>2004</td>
<td>21.8</td>
<td>0.2</td>
<td>3.6</td>
<td>18.2</td>
</tr>
</tbody>
</table>


Many were in infrastructure, consistent with Qian and Roland’s argument, but other loans went to unpromising state enterprises, often connected to officials. By 1999, China had 242 financial trust companies.86 One, the Guangdong International Trust and Investment Corporation (GITIC), suffered a spectacular bankruptcy in 1999, having amassed a $1.8 billion net debt.87 Provincial officials had promised a bailout just months before.88 Besides local roads and telecommunications, GITIC had invested in state-controlled enterprises manufacturing cement, glass, soft drinks, beer, and motorcycles. It lent about $82 million to one fabric manufacturer in

---


87 Ibid. Similar, although smaller, cases occurred in Guangzhou and Dalian (see Kyodo News International, Asian Economic News, June 26, 2000).

Maoming, Guangdong, which later closed, defaulting on the entire loan. Rather than disciplining local officials, foreign investment often served as a screen behind which local officials could—sometimes corruptly—direct state funds to favored firms.

The second problem with this argument is that fiscal and administrative decentralization in the 1980s did not coincide with any noticeable hardening of state enterprise budget constraints. Some economic decision-making authority was devolved to subnational governments in the mid-1980s just as competition for foreign capital was developing. One might therefore expect to see budget constraints harden in this period. Government subsidies to loss-making state enterprises did drop as a percentage of GDP (see Table 2.) But this source of soft finance was merely replaced by others. In part, loss-making enterprises kept afloat by accumulating arrears to suppliers, workers, or public utilities. However, the most important source of funds was bank loans. Bank credit more than doubled as a share of GDP between 1978 and 1998, from 50 percent to an estimated 108 percent. Most went to state enterprises, which by 1996 were paying less than one third of the interest due.

Despite overstating profits—for instance, by counting unpaid interest on non-performing loans as income—the state banks reported sharply falling profitability.

Data on non-performing loans have been available only sporadically. When they are, they are not always comparable (the method of classification changed in 2003), and are believed to greatly understate the problem. Announcements by monetary officials suggest the rate of non-performing loans was high and increasing in the 1990s, reaching more than one third of the value of GDP.

---

89 Jiachun Fang, Jinrong Tuoguan Jingdian Anli Yanju (Studies of Classical Cases in Financial Trust) (Beijing: Economic Science Publisher, 2002).


93 Lardy (fn. 91), 30.
of outstanding loans in 1999 (see Table 3). The rate only began to decrease after the central government intervened to clean up banks’ balance sheets, as discussed below.

Table 3: Non performing loans of the four main state banks

<table>
<thead>
<tr>
<th>Year</th>
<th>Old classification</th>
<th>5-category classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of total loans</td>
<td>Bn $ US</td>
</tr>
<tr>
<td>1994</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>21.4</td>
<td>79</td>
</tr>
<tr>
<td>1996</td>
<td>24.0</td>
<td>111</td>
</tr>
<tr>
<td>1997</td>
<td>28.4</td>
<td>179</td>
</tr>
<tr>
<td>1998</td>
<td>32.2</td>
<td>239</td>
</tr>
<tr>
<td>1999</td>
<td>34.0</td>
<td>266</td>
</tr>
<tr>
<td>2000</td>
<td>29.2</td>
<td>224</td>
</tr>
<tr>
<td>2001</td>
<td>25.4</td>
<td>213</td>
</tr>
<tr>
<td>2002</td>
<td>21.4</td>
<td>206</td>
</tr>
<tr>
<td>2003</td>
<td>16.9</td>
<td>192</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Lardy (fn. 92), 19, for 1994; OECD (fn. 74), 146, for new-classification 2003-4; Ping Xie, “The Problem of Non-Performing Loans in the Chinese Banking Industry,” Contemporary Bankers (May 2004), for other years. Converted to dollars using official exchange rate, average for period, from World Bank, World Development Indicators.

If budget constraints were hardening, one might expect a decrease over time in the proportion of loss-making enterprises (since losses must be financed by subsidies or borrowing).94 This does not seem to have occurred. Directly comparable data for the entire period since 1978 were not available, but Table 4 shows the trends in two closely related series. The share of loss-making state-owned industrial enterprises did fall between 1976 and 1985. But then it rose dramatically, from 9.6 percent in 1985 to 47.4 percent in 1998. Total losses increased by more than 30 times, from 2.7 billion to 85 billion RMB. In 1996, the state-owned enterprise sector as a whole was in the red. Budget constraints do appear to have tightened somewhat in the late 1990s. Between 1998 and 2000, the share of loss-making state-owned or state-controlled industrial enterprises fell from 40.6 to 34.1 percent, before stabilizing around 35 percent. Did this reflect increasing competitive pressures on local governments as capital mobility intensified?

94 One might expect a temporary increase if discipline were increasing, but if the proportion continues to rise year after year, some source of financing must be covering the losses.
Table 4: Loss-making among state enterprises in Chinese industry, 1975-2004

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of state industrial production enterprises that are loss making (%)</th>
<th>Losses of loss-making state industrial production enterprises (100m Yuan)</th>
<th>Share of state and state-controlled industrial enterprises that are loss making (%)</th>
<th>Losses of loss-making state and state-controlled industrial enterprises (100m Yuan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>31.4</td>
<td>52.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1976</td>
<td>37.2</td>
<td>72.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>27.4</td>
<td>57.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978</td>
<td>23.9</td>
<td>44.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td>23.4</td>
<td>36.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>22.4</td>
<td>31.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>27.7</td>
<td>42.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>25.1</td>
<td>42.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>14.6</td>
<td>28.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>10.5</td>
<td>22.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>9.6</td>
<td>27.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>13.4</td>
<td>47.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td>12.8</td>
<td>50.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td>10.7</td>
<td>71.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>15.9</td>
<td>128.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>30.3</td>
<td>278.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>28.0</td>
<td>300.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>22.7</td>
<td>300.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>29.8</td>
<td>281.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>32.6</td>
<td>273.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>33.3</td>
<td>364.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>37.5</td>
<td>501.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>43.9</td>
<td>607.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>47.4</td>
<td>850.2</td>
<td>40.6</td>
<td>1150.7</td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td></td>
<td>39.2</td>
<td>966.7</td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td>34.1</td>
<td>704.3</td>
</tr>
<tr>
<td>2001</td>
<td></td>
<td></td>
<td>36.0</td>
<td>752.2</td>
</tr>
<tr>
<td>2002</td>
<td></td>
<td></td>
<td>36.1</td>
<td>668.5</td>
</tr>
<tr>
<td>2003</td>
<td></td>
<td></td>
<td>35.2</td>
<td>680.0</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td>35.0</td>
<td>669.5</td>
</tr>
</tbody>
</table>


In fact, there is a simpler explanation. The central government intervened to reimpose control over state bank local branches and tighten credit administratively. In late 1998, the People’s Bank of China replaced its provincial branches with nine regional offices. Local
governments lost influence over appointments of bank personnel, now chosen and monitored by a vertical party committee system. Premier Zhu Rongji ordered state banks to cut wages of managers who authorized bad loans or fire them. Simultaneously, Beijing launched a massive bailout, creating four asset management companies to take over bad loans, and providing 2,295 billion RMB ($277 billion) between 1998 and 2005 in emergency funds. Some provincial investment companies were forced into bankruptcy.

Even local government subsidies to loss-making enterprises fell much more slowly than central ones (see Table 2), although this partly reflects the transfer of some unprofitable central enterprises to local control. Thus, harder budget constraints could be attributed more plausibly to centralization of authority in China, the continuing ability of Beijing to dictate subnational economic policy. Any additional effect of interregional capital competition is difficult to detect.

In fairness, Qian and Roland explicitly acknowledge most of these points. A key condition for fiscal competition to work in their model is that local governments cannot increase the money supply. They recognize this was not true during the period of fiscal decentralization in the 1980s, and do not argue budget constraints hardened until the late 1990s. They even associate this hardening with Beijing’s recentralization of monetary policy. Nevertheless, they conclude that: “China benefited greatly from regional decentralization in its first 15 years of reforms, and the Chinese experience shows that decentralization of fiscal authority has helped in advancing the Reform.” It is this conclusion that we question.


96 OECD (fn. 74), 43.

97 Qian and Roland (fn. 80), 222.
8 Conclusion

China’s remarkable growth coincided with a decentralization of practical decisionmaking on various economic matters in the 1980s, followed by some recentralization in the 1990s. It occurred in a system in which a large share of expenditure and tax collection was at subnational levels. Some scholars believe decentralization facilitated market reforms and catalyzed the country’s economic development. Although sophisticated and thought-provoking arguments along these lines have been developed and are quite widely accepted both in China and in the West, they are ultimately not convincing.

Decentralization could not have stimulated the main policy experiments that shaped China’s reforms since these experiments began in the late 1970s and early 1980s, before any significant political or administrative decentralization occurred. China was, at that time, a hierarchical Leninist autocracy. Considerable administrative decentralization occurred later, but it did not create a credible check on central economic interventions; Beijing remained fully able to fire disobedient provincial governors and impose its policies. Provincial governors who managed to delay central policies did so via vertical ties to central patrons rather than mobilizing horizontal organizations of governors or coordinating a common response. (We have not found evidence of such coordination in the work of other scholars.) Improved local fiscal incentives in the 1980s cannot explain higher growth because the increase in the provincial share of marginal revenues was offset by rapid shrinking of the fiscal pie. Nor could fiscal decentralization have hardened budget constraints on state enterprises because budget constraints did not harden until fiscal authority was recentralized. The relative economic self-sufficiency of China’s provinces may have rendered them less vulnerable to disruption. But this is a fact about the country’s inherited economic structure, not political, administrative, or fiscal decentralization.

Of course local actors were important in the story of Chinese reforms. But they were

98 For an interpretation of agricultural reforms that emphasizes local initiatives, see Yang (fn. 29).
important as actors in a game directed from Beijing. The driving force was not political pressure from subnational officials, spontaneous innovation by them, or competition among them to attract capital. It was competition between central political factions of different ideological flavors, whose leaders sought to win support within the party by demonstrating the effectiveness of their favored policies. Central factions enlisted the aid of sympathizers at all levels, and built vertical networks. Grass roots initiatives, both of reformers and anti-reformers, aimed to win the initiator favor and promotions from the relevant faction leaders. Deng and his associates repeatedly promoted reformers from the provinces to central positions—not just Zhao Ziyang and Wan Li, but later Li Ruihuan and Zhu Rongji—and Deng sent trusted lieutenants to stimulate reforms in lagging areas. In short, this was the kind of competition between vertical teams one would expect in a centralized, multi-tier system.

Administrative decentralization coincided with reform in the 1980s, in part because decentralization was itself a reform promoted by Deng and his supporters, in part because Deng sought to circumvent opposition at the center by empowering his allies in the provinces. But economic reforms continued in the 1990s, accelerating in some areas, despite a shift toward recentralization of control and revenues. Table 5 shows our estimates of trends in administrative decentralization, economic reforms, and the strength of pro-reform factions at the center for the first two decades of reform. (The specific events on which these classifications are based, along with the sources, are listed in Table A1 in the Appendix.) Although this exercise obviously involves some subjectivity, we found a great deal of scholarly consensus about the timing of economic reform and the history of factional politics. While the ups and downs of the central pro-reform faction correlate quite closely with the ebbs and flows of economic reform, there is no clear correlation between reform and the degree of administrative decentralization.

We do not mean to suggest centralization always leads to reform and rapid growth. Obviously this is not the case, as China’s history from 1945 to 1978 demonstrates. It was quite possible that pro-reform factions would lose or win only temporary victories, as had happened
many times before. Nor did all the central reformers’ choices reflect an even-handed commitment to liberalization and growth: they played favorites, supporting some subnational units such as Guangdong and later Shanghai, at the expense of others.\footnote{99} Since 1992, when the goal of marketization was essentially accepted by all, factional lines have reflected less fundamental divisions—geographical or institutional loyalties, personal ties, and more muted conflicts over the balance between liberalization and income redistribution.\footnote{100} Nevertheless, factional competition continues to influence central politics and policy, as illustrated by the greater emphasis on development of inland provinces since the more populist faction of Hu Jintao overtook the Shanghai-centered network of Jiang Zemin.

Understanding the role of political and fiscal decentralization in China’s reforms is important since the country’s experience is often taken as an example for other countries. Those who praise China’s gradualist, incremental approach often associate this with decentralization.\footnote{101} Decentralization is sometimes presented as almost a functional equivalent of privatization, an alternative to more fundamental property rights reforms,\footnote{102} or as a source of pluralism—perhaps accountability—even in the absence of democracy. If one accepts decentralization had little to do with the success of China’s reforms, one must seek other explanations for the country’s performance.

---


\footnote{100} This is, of course, a matter of degree. Personal connections were always important in shaping the support group of the usually pragmatic Deng.

\footnote{101} Chen (fn. 2).

\footnote{102} For example, Qian and Roland (fn. 2), 1156.
Table 5: Decentralization, factional competition, and economic reforms in China, 1978-98

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reforms in agriculture, SOEs, SEZs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reforms slower.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reforms accelerate again.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reforms slow down.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Reforms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renewal and continuation of reforms.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privatization, external opening, support of private enterprise, banking system reform.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For detailed sources, see Appendix Table A1. * There is some question about how to characterize the year-to-year changes in the degree of centralization in the 1980s. Administrative reforms in 1993-4 had some decentralizing consequences. Lam (fn. 57) characterizes the 1995-8 period as one of “aggressive efforts” by the center to claw back powers, albeit with only partial success. However, there is agreement that the 1990s witnessed a trend toward re-centralization compared to the late 1980s.
## Appendix

### Table A1. Timeline of events related to decentralization, economic reforms, and factional competition, China, 1978-1998

<table>
<thead>
<tr>
<th>Administrative and political decentralization</th>
<th>Economic reforms</th>
<th>Factional competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979-80: 4 SEZs established in Guangdong and Fujian. Local authorities in them can grant tax breaks, approve small investments, set some other economic policies. Some provinces allowed to set up own foreign trade corporations. Transfer of control over many SOEs from central to subnational governments.</td>
<td>1978: Household Responsibility System introduced in agriculture.</td>
<td>1978-80: Deng, with pro-reform proteges Hu Yaobang, Zhao Ziyang, Wan Li, and help from his friends in the military (and Party Elder Chen Yun initially) wins the battle for supremacy with moderate conservative faction of Hua Guofeng.</td>
</tr>
<tr>
<td>1984: 14 coastal cities become development zones. Nomenklatura changed so that central officials appoint only provincial leaders, their deputies, but not most heads of provincial level bureaus.</td>
<td>1979: Procurement prices in agriculture increased. Restrictions on rural markets relaxed.</td>
<td>Dec 1978: At 3rd Plenum of 11th CC, Deng’s allies brought into Politburo and other leadership roles.</td>
</tr>
<tr>
<td>1988: Hainan becomes SEZ. Provincial governments allowed to authorize investments up to 50 million yuan.</td>
<td>1979: Joint venture law adopted.</td>
<td>1980: In February, Zhao and Wan Li added to the Standing Committee of the Politburo, and Hu becomes general secretary of the Central Committee. In September, Zhao becomes premier.</td>
</tr>
<tr>
<td>1990: Pudong area in Shanghai given SEZ privileges. Nomenklatura changed to reinstate some central state and party control over appointments that had been delegated to lower governments in 1984. Central authorities also get to directly appoint heads of SEZs.</td>
<td>1982: First enterprise shares issued.</td>
<td>1984-5: Reformers Hu and Zhao in strong position, with Deng’s backing.</td>
</tr>
<tr>
<td>Early 1990s: Size of investments provincial governments can independently authorize cut to 30 million yuan.</td>
<td>1983: profit remittances replaced by taxes for SOEs.</td>
<td>1985-89: Strengthening backlash from hardliners such as Deng Ligun and supporters of Chen. July 1985 Chen’s supporters in the Discipline Inspection Commission pursue two cases of major corruption and smuggling in Fujian and Guangdong. (Zhang p.394). Campaign against “bourgeois liberalization”. Deng and supporters try to ride the wave by launching their own anti-corruption campaign. But Deng makes Hu “resign” in January 1987 as</td>
</tr>
</tbody>
</table>
provinces and major cities.

1993: Right to grant tax reductions and exemptions recentralized to the State Council. 2,500 development zones abolished, leaving about 495. Local governments no longer permitted to make loans.

1994: Tax reform reduces provincial revenues. Authority to collect central and shared taxes taken from local governments and given to new national tax bureau. Right of provinces to retain foreign exchange earnings abolished—these must be deposited in centrally controlled banks. Budget Implementation Law prohibits local governments from running deficits.

1984: Additional 14 coastal cities become development zones.
1984: Contract period for private plots extended from 5 to 15 years (for annual crops).
1985: Mandatory purchase quotas in agriculture replaced by voluntary contracts.
1986: Bankruptcy law enacted.
1988: Constitution amended to authorize private enterprise.
1988: New enterprise law to make SOEs autonomous corporations.
1988: Hainan becomes SEZ.
1989-91: Price controls imposed on fixed investment. Investment quotas established for each province, and governor made personally responsible for student protests and insufficient discipline on liberal party members.

Deng moves Zhao to Gen Secretary of CCP. Conservative Li Peng becomes premier in 1987. Inflation and appearance of growing chaos consolidates the hardliners.

May 1989, Jiang Zemin becomes Party Secretary (supported by Chen Yun, but apparently also by Deng).


1989-91: Hardliners around Li Peng assertive. Deng behind the scenes gradually rebuilding pro-reform forces, neutralizing leftist opposition, making new allies in Shanghai.

1992: Deng reappears. Tours the South, calling for accelerated reform, Jan-Feb. 14th Party Congress in October endorses Deng’s economic reforms. Deng gets Zhu Rongji promoted to executive vice-premier in charge of economy.

1992-4 Deng gradually passing power to Jiang, while Zhu directs economic reform.

1995-1997 Jiang consolidating power, triangulating between Li Peng (conservative) and Zhu Rongji (pragmatic reformer), promoting allies from Shanghai. Jiang purges Beijing party boss Chen Xitong. Li weakened by aging and deaths among conservative party elders.

1997: Jiang forces potential challenger Qiao Shi to resign.
1998: Zhu becomes premier, replacing Li.
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992: 14th National Congress of Communist Party</td>
<td>endorses goal of a “socialist market economy”</td>
</tr>
<tr>
<td>1992:</td>
<td>more special development zones designated.</td>
</tr>
<tr>
<td>1992-3:</td>
<td>Major decontrol of prices.</td>
</tr>
<tr>
<td>Late 1991-2:</td>
<td>economic privileges extended to additional cities and zones.</td>
</tr>
<tr>
<td>Early 1990s:</td>
<td>Grain prices decontrolled.</td>
</tr>
<tr>
<td>From 1992:</td>
<td>greater autonomy for state enterprises.</td>
</tr>
<tr>
<td>1994:</td>
<td>labor law enacted.</td>
</tr>
<tr>
<td>1995:</td>
<td>90,000 small SOEs transferred to private sector. “Grasp the large, release the small”.</td>
</tr>
<tr>
<td>1995:</td>
<td>Contract period for private plots extended from 15 to 30 years.</td>
</tr>
<tr>
<td>1996:</td>
<td>External tariffs reduced by one third.</td>
</tr>
<tr>
<td>1996:</td>
<td>Currency fully convertible for current account transactions.</td>
</tr>
<tr>
<td>1997:</td>
<td>Plan to restructure state-enterprises.</td>
</tr>
</tbody>
</table>
Appendix Sources


