3 A new model of economic development

The analysis of China's economic development applies the East Asian Developmental State Model as a benchmark model. The chapter contains the following cluster:

- Exploration of whether the conditions set by the East Asian Developmental State Model were present in China at the beginning of its economic reforms in the late 1970s.
- Analysis of China's development approach, and the measures used to transform its economic system and advance economic growth, with regard to the criteria of the East Asian Developmental State Model.
- Elaboration of whether China has adopted or adapted the measures of the East Asian developmental states.

3.1 Applicability of the East Asian Developmental State Model to China

China has been attempting to transform its economic system from a planned to a market economy since 1978. As in the East Asian developmental states, China's development strategy has been characterized by state-guided development. In 1997, the World Bank Development Report stated that "the state is central to economic and social development, not as a direct provider of growth but as a partner, catalyst and facilitator". For decades, China has been the fastest growing present-day late-developing country. China might have learned from the positive experiences of the East Asian developmental states and adopted their development model, or followed a different, "new" development path and created a distinct Chinese model of economic transformation. Whether the conditions of the East Asian Developmental State Model were present in China on the eve of economic reform is analyzed in the following section.

3.1.1 Conditions of the Chinese economic development approach

The East Asian Developmental State Model defined two criteria as conditional for a country to apply the model's measures necessary for state-led economic growth. The criteria are strong state and weak society (authoritarianism) as well as economic backwardness and developmental commitment. The following analysis concentrates on each criterion, highlighting China's political, societal, economic and industrial situation on the eve of economic reform.

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(1) **Strong state and weak society (authoritarianism):**

The structure of power in the Chinese system prior to 1978 can be characterized as authoritarian. Authoritarianism in a Chinese context means the retention of ultimate, unlimited authority by the central party state.286 Some scholars even regard the Chinese system prior to 1978 as totalitarian, because the influence of the bureaucracy encompassed culture, religion and various aspects of family life such as the number of children.287 In addition, the power of the bureaucracy was totalitarian, as it permeated the whole society and influenced every citizen. Account was kept of every resident and employee by the state apparatus, party branches, mass organizations, and police authorities of each locality and place of work.288

The Chinese Communist Party (CCP) dominated the political system, which was formally organized on Marxist-Leninist principles. Top leaders, among them Mao Zedong289, wielded enormous power and “ruled by law” (law as an instrument of government) as no institutional checks existed to guard against the exercise and abuse of this power. Although China had a constitution, its bureaucracy was not subordinate to any stable legal system. Laws were formally passed by parliament (the National People’s Congress), but in practice the party organization and the party apparatus decided what the law should stipulate.290

The public security apparatus maintained social order through the threat and use of force. After the land reform in the late 1940s and the early 1950s, the strong landlord class had been wiped out, labor unions were restricted, and the military was tightly controlled by party and senior leaders. Thus, at the outset of reform, senior leaders did not foresee an imminent (internal) threat from strong interest groups, as society at large was weak.291 No encompassing organizations had yet emerged, which could represent and “deliver” their membership in a comprehensive transition bargain with a reform government.292

The strong Leninist party-state has remained largely intact in the reform era, and the Chinese central government has had the power to introduce economic programs, to vary the speed and the sequence of reform, and to make corrections or even reverse its policy if necessary. Altogether, bureaucratic authoritarian institutions in China

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287 For further information on totalitarianism refer to Arendt (1951) and Brzezinski and Friedrich (1965).
288 Refer to Kornai (1992a), p. 47.
289 Mao Zedong (26.12.1893 – 09.08.1976) was the chairman of the Politburo of the CCP from 1943 and the chairman of the Central Committee of the CCP from 1945 until his death in 1976. Under his leadership, the CCP became the ruling party of mainland China as the result of its victory in the Chinese Civil War. On 01.10.1949, Mao declared the formation of the People’s Republic of China.
290 Refer to Kornai (1992a), pp. 46-47.
292 Refer to Kornai (1992a), p. 4.
have had the power to process and implement economic policies like governments in the developmental states.293

(2) Economic backwardness and developmental commitment:

For the first 30 years of the People’s Republic of China, the government practiced an economically isolated, planned economy system adhering to Marxist economic principles.294 Markets and private ownership of productive assets were eliminated, and replaced by non-market, bureaucratic allocation through annual and five-year plans.295 The CCP and the central government relied on political controls and managed all dimensions of production and distribution. In consequence, apart from the existence of a few rural markets, the market as a coordinating mechanism of production and distribution was virtually nonexistent on the eve of economic reform in 1978.296

In addition, fiscal revenues and expenditure were centralized in the Chinese state bureaucracy. Profits and taxes collected by local governments were handed over to the central government.297 The expenditure of local governments depended less on local revenue-generating efforts, and more on bargaining with higher authorities for budgetary slack. Local governments would not hesitate to bail out unprofitable enterprises because shortfalls in one year became the rationale for bargaining for larger allocations the next year.298 This cycle gave rise to the classic soft budget constraint syndrome.299 On the macro-level, soft budget constraints led to overinvestment and shortages; on the firm level, they caused ex ante and ex post inefficiency.300

294 The economic isolation that results from its self-sufficiency approach was furthermore completed by China’s scientific and cultural isolation. Refer to Kornai (1992a), p. 18ff and p. 335 and Editorial Board of the Progress of China Industry Modernization (1999), p. 139.
295 For a detailed analysis of the causes of poor plan performance refer to Killic (1976), p. 164. For further information on development planning refer to Dobb (1960) and Griffin and Enos (1970).
298 For further information refer to Walder (1995).
299 Kornai saw this as an incurable disease inflicting SOEs because the state, as the owner, also has objectives (e.g., maintaining employment and political stability) other than financial performance. Refer to Kornai (1992a), pp. 489–497.
300 Bailing out poor-performance firms ex post means that the mechanism of “constructive destruction” is not at work. Furthermore, because unprofitable companies expect government bailouts, firm managers have little incentive to improve productivity and efficiency. Refer to Peng (2001), p. 1343.
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The deficiencies in the system had the result that China's economic development was retarded by low micro-economic efficiency. The central government did not achieve its intended goal of accelerating development, and could not overcome the country's economic backwardness.

Also, China's Great Leap Forward Strategy had left it with poor overall economic performance. Essentially, the ineffectiveness of the socialist centrally-planned economy limited China's growth before the reform in 1978.

At the late 1970s, the planning system had been practiced in China for three decades. Market mechanisms adopted in neighboring economies, such as Japan and the four little dragons, had brought them double-digit annual growth for decades. Particularly, the sharp contrast in performance between mainland China and Taiwan, between North and South Korea, and between East and West Germany confirmed the superiority of the market mechanism over the planning system.

The backwardness of China's industries, in comparison with some of its East Asian counterparts, the inefficiencies of the centrally planned economy, agricultural stagnation and the need to accelerate growth and provide jobs to reduce widespread poverty, propelled the reformers among the senior members of the CCP in the early 1980s.

The Third Plenary Session of the 11th CCP Central Committee, held in December 1978, decided to shift the focus of the party's work from "class struggle to economic development". It started the socialist modernization drive and set the reform and opening-up policy. It thereby rejected the Maoist model of development (heavy industry-oriented development; leap forward development strategy). This allowed a shift of ideology within the CCP and initiated economic reforms. The accepted

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301 Refer to Lin et al. (1996), p. 60.
302 The Great Leap Forward was the name given to the Second Five Year Plan which was scheduled to run from 1958-1963, though the name is now generally limited to the first three years of this period. Chairman Mao Zedong started the Great Leap Forward in 1957 to rapidly advance the country's economic development and transform China into a leading industrial power. Mao's plan was to massively increase both agricultural and industrial production. Peasants had already started farming the land co-operatively in the 1950s. During the Great Leap Forward, they joined large communes consisting of thousands of people. Large-scale irrigation schemes were undertaken to improve agricultural productivity. Mao furthermore pushed for the construction of steel plants across the country. With local governments' rush to recruit labor for work in steel production, agricultural tasks were neglected, leading to a widespread famine in the years 1959-61. The government also plunged the country into debt by increasing spending on the development of heavy industry.
306 Refer to Editorial Board of the Progress of China Industry Modernization (1999), p. 36.
ideology at the beginning of reform was the idea of "planning as a principle and market as a supplementary part". Chinese leaders envisioned accelerating economic transformation under strong state leadership, as their East Asian counterparts had done. Rather than accept the division of labor dictated by comparative advantage, China sought to develop industrial sectors and firms that would foster entrepreneurial activity and create positive spillovers in the economy as a whole.

Altogether, China, like the East Asian developmental states, had similar conditions when it started its reform policy and maintained these throughout the reform period. Similar to the East Asian developmental states, China has been an authoritarian state. The CCP has solely reigned and tightly controlled and suppressed all political demands. This has hindered the establishment of a strong civil society. In 1978, China was an economically backward country, a so-called "late developer", with a distorted industrial structure and an inward-looking economy. Furthermore, the Chinese bureaucracy, similar to that of the East Asian developmental states, has continuously committed itself to economic growth and transformation. The conditions of the developmental state model are thus fulfilled.

3.1.2 Characteristics that distinguish China from the developmental states

Despite the similarities between China and the East Asian developmental states, there are at least three characteristics that differentiate China from its East Asian neighbors:

- Geographical vastness: Not only is China's territory more than eighteen times larger than that of the four little dragons and Japan combined, its population (1.3 billion) is also almost six times greater. Due to its size, the central government had already decentralized decision-making to local governments during the Great Leap Forward. As many of these firms obtained most of their inputs from, and also produced for, their jurisdictions, Mao decentralized

308 For understanding the Chinese reform process, it is important to note that according to the self-conception of the central leadership, China is no transformation country like the Central and East European Countries, but rather a developing country. Accordingly, the transformation experiences of the Central and East European countries have had less impact on China's economic policy than the development path of its successful East Asian neighbors.
309 Refer to Thun (2006), p. 3.
311 Mao implemented decentralization, because the central government in Beijing did not have the information needed to centrally control an industrial sector that included 30,000 large and medium-size firms and nearly 150,000 small firms at that time. Refer to Qian and Weingast (1996b), p. 11.
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decision-making to the individual provinces, counties and villages. Although in the early 1960s, after the failure of the Great Leap Forward, the central government aimed to recentralize some controls, much planning and control activity remained at the provincial level. The Cultural Revolution almost paralyzed the central government, and again strengthened decentralization tendencies. The rural small-scale industry program in the 1970s also devolved further industrial planning rights and control to the county and commune levels. Along with decentralization, the political system has been disaggregated into several constituent levels. Accordingly, China has a multilevel political system with five major territorial levels: first, the central government, which covers the entire country; second, 22 provinces and five autonomous regions and four centrally administrative municipalities (administratively, they have province-level status); third, 333 cities and prefectures; fourth, 2,816 counties; and fifth, 44,016 township level units. The townships are themselves divided into villages or neighborhoods and communities.

- **Communist legacy:** Unlike the East Asian developmental states, China's economic and political transition process has been carried out under a communist leadership. The CCP came to power in 1949 intent on eradicating private ownership. Economic reform has thus been guided by the legacies of the Mao era and its set of ideological socialist political and economic norms like egalitarianism, Stalinist bureaucracy and a centrally-planned economy. These Maoist ideological legacies have imposed constraints upon the transitional process in the post-Mao reform period.

- **International environment:** The Cold War provided an unusually benevolent context for the East Asian states (and not for China in the 1980s). As part of its effort to contain the Soviet Union, the USA donated extensive foreign aid to its allies in East Asia. The East Asian states could hence focus solely on economic development. Moreover, the USA unilaterally opened its markets to goods from East Asia and granted them protection from security threats. At that time, the USA did not perceive the rapid rise of Japan, Korea and Taiwan as a threat to its economic supremacy. It was even the explicit objective of the United States' (US') strategy in the decades following World War II.

These characteristics do not debilitate the conditions a transforming country has to fulfill for application of the East Asian Developmental State Model. The following analysis on China hence concentrates on the measures of the East Asian Developmental State Model.

312 This type of decentralized planning began around 1957.
314 China considers Taiwan its 23rd province.
317 Refer to Thun (2006), pp. 4-5.
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Developmental State Model. Accordingly, the various factors (institutional setting and policy indicators) of the model are analyzed with respect to China:

- **Bureaucracy**: depoliticized bureaucracy; meritocratic recruitment and minimal rent-seeking; pilot agency; coherent state apparatus.
- **State**: industrial policy; promotion of selected sectors; marginal foreign participation; export-oriented industrialization.
- **Financial system**: state-dominated, bank- and credit-based financial system; government influence and firm-level allocation of credit.
- **Government-business relations**: institutionalized cooperation; regular information exchange between bureaucrats and business leaders.

From the analysis of the four categories of the East Asian Developmental State Model, one can infer whether the Chinese central government has been committed to emulate the developmental state model, which was capitalist in nature, and originated primarily in small countries.

### 3.2 Bureaucracy

In economic literature, bureaucratic organization and performance are typically addressed by using a principal-agent model. Its origins can be found in the new economics of organization as a theoretical construct devised to examine relations within the firm.\(^{318}\) Since then, the principal-agent model has become the dominant framework for examining the difficulties that arise from contracting.\(^{319}\) Agency relationships are created when the principal enters into a contractual agreement with an agent, and delegates to the latter responsibility for carrying out a function or set of tasks on the principal's behalf.\(^{320}\) The principal delegates responsibility to the agent in order to economize on transaction costs, and thus pursue its goals that would otherwise be too costly.\(^{321}\) Governments (the principal) delegate authority to the public administration, subnational jurisdictions, and private actors (the agents) in

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\(^{318}\) For further information refer to Moe (1984). For a number of applications refer to Alt and Shepsle (1990) and Brobak and Nye (1997).

\(^{319}\) Refer to Eisenhardt (1989a,b), Grossman and Hart (1983) and Jensen and Meckling (1976).

\(^{320}\) The principal can be any individual or organization. In the classic representation, the principal is the shareholder of a company that contracts an executive to manage the business on a day-to-day basis.

\(^{321}\) As suggested by Coase and developed by Williamson, the organization of hierarchies may minimize transaction costs. Coase (1937, 1960) introduced the concept of transaction costs to explain the size of firms and suggests that well-defined property rights could overcome the problems of externalities. Williamson (1975, 1985) suggests that transaction costs include both the direct costs of the transaction and the possible opportunity costs of inferior governance decisions. North (1981) explains the political conditions that give rise to efficient property rights favorable to economic growth.
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order to exploit specialization advantages and cope with the complexity of structural reforms.\textsuperscript{322} Delegation, however, might create principal-agent problems that arise from the asymmetric distribution of information that favors the agent, including adverse selection and moral hazard.\textsuperscript{323} Delegation bears subsequently the risk that the agent does not act in the interest of the principal (the government) and pursues its own interests.\textsuperscript{324} In consequence, governments need to implement systematic control over public officials, policy and institutional reforms in order to ensure successful economic transformation.\textsuperscript{325} As in the East Asian developmental states, organizations might design appointment and promotion rules to deal with these problems.

3.2.1 Bureaucratic organizational structure

In the Chinese system, every office usually has a bureaucratic rank assigned to it.\textsuperscript{326} One territorial level of government contains several bureaucratic ranks within its organs.\textsuperscript{327} The top of the political hierarchy consists of the Politburo and the State Council. The Politburo is the supreme decision-making body which makes all major strategic decisions. The State Council translates those into concrete policies. Commissions and ministries are below the State Council.\textsuperscript{328} Commissions are one step down and ministries are another step down. Bureaus within ministries are yet another step down and so forth. Provincial governments are the same bureaucratic rank as their ministerial counterparts.\textsuperscript{329}

While the commissions have responsibility for the entire national economy, ministries are accountable for particular sectors or regions.\textsuperscript{330} Ministries are therefore organized by sector (e.g. agriculture, coal, machinery) or function (education, culture, public security).\textsuperscript{331} Although each ministry's actual influence varies not only with the

\textsuperscript{322} Refer to Ahrens and Mengeringhaus (2006), p. 79.

\textsuperscript{323} For further information refer to Kiewiet and McCubbins (1991), Holmstrom (1979), Pollack (1997) and Ross (1973).

\textsuperscript{324} Economists have focused on incentive structures that discourage opportunistic behavior on the part of the agent. The agent might exploit the principal's costs of measuring the agent's performance and act contrary to the preferences of the principal. Contractual restrictions on the agent's operational purview or monitoring the agent are possibilities, but can be costly. Their effectiveness is limited by the extent to which the agent's actions can be observed. Refer to Doleys (2000).

\textsuperscript{325} Refer to Ahrens and Mengeringhaus (2006), p. 79.


\textsuperscript{327} Here, government also applies to the CCP's governing structure.

\textsuperscript{328} The CCP's Politburo ranks higher than the State Council. Refer to Huang (2002b), p. 66.


\textsuperscript{331} Ministries are expected to articulate the interests of their particular sector. When ministers or vice-ministers are called together to discuss a policy proposal, they are expected to represent the perspective of their particular ministries. Refer to Shirk (1992), pp. 69-70 and Shirk (1993), p. 93.
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prestige of its minister, but also with its function, its control over subordinate enterprises and its financial contribution, the formal status of each ministry is the same. According to the commissions' higher rank they give instructions to ministries, however, only within their respective spheres of competence. Commissions take a more comprehensive view of policy approaches than do the narrowly focused line ministries. Commissions thus have to equilibrate the ministries' competing efforts in favor of the overall national situation.\footnote{332}

In correspondence to the administrative structure, industrial policies are level by level filtered down through plans. Accordingly, the central government assigns local governments to draw up their own plans on the basis of national plans and appropriate to local conditions. The governments' duties at the local level, however, are always to be performed on behalf of the central government. Units of the same rank cannot issue binding orders to each other. Accordingly, ministries cannot issue binding orders to provinces, even though on an organizational chart it appears that the ministries sit above the provinces.\footnote{333} Consequently, consensus-building is often needed in order to operate effectively, and negotiations aimed to find agreements have become a core feature of the Chinese system.\footnote{334}

Assuming that staff numbers are correlated with administrative functions, the central government is unusually small in China: the central ministries and agencies account for only about 2 million employees, or 6 percent, of the nearly 33 million in total public employment.\footnote{335} The rest - 31 million of them - are employed in sub-national governments and institutions (refer to Figure 7). The central government is too small to be able to exert detailed control over the huge number of subordinates. The structure of administration in China puts burdens on the core-ministries and state agencies at the central level which add up to about 50,000 employees just after the 1998 downsizing campaign. Besides running the central government businesses, the central ministries and state agencies must manage the services provided by central public service units that have nearly 2 million employees, and provide a management framework for the provision of these services at the sub-national levels by some 23 million employees.\footnote{336}

\footnote{333} The same rule means that ministries cannot issue binding orders to other ministries, provinces cannot issue binding orders to other provinces and so forth. Refer to Lieberthal (1997), p. 3.
\footnote{334} Refer to Edin (2000), p. 86.
\footnote{336} The decentralized administrative structure is also split up into core governments and public service units. Public service units are publicly owned institutions. They provide a variety of services such as education and health. They are subordinate to the government and account for about 30 percent of budgetary expenditures. Refer to OECD (2006a), p. 26.
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Figure 7: The distribution of public employment.

Note: Number of employees in brackets.

Embedded within Chinese organizations and missing from the formal organizational structure charts are the personal ties that interconnect different agencies. In China, interpersonal connections are called guanxi. Virtually every Chinese person is connected to at least one guanxi network, arising from family connections, common geographical origin, joint experience (school or military service ties) or shared loyalty toward the same higher-ranking bureaucrat.

Walder (1986) notes that “the concept is by no means culturally unique.” Personal connections are particularly important in countries without a stable legal and regulatory environment. In China, guanxi networks particularly function as substitutes for formal institutional regulations. Particularly businessmen cultivate personal connections to substitute for a reliable government and an established rule of law. Guanxi networks can be seen as clubs that may lower transaction costs for their members (in the form of contact, and especially control costs) in China’s institutionally disorderly environment. Thus, guanxi networks guarantee their members the enforceability of available property rights. Guanxi limits the state’s

Moreover, at the top, in many respects power is vested more in individuals than in specific institutions. Refer to Lieberthal and Oksenberg (1988), p. 63.

The Chinese guanxi networks can be understood as institutions that arose centuries ago to secure trade relations in an environment that was only insufficiently covered by the formal legal system. For further information refer to Carr and Landa (1983) and Posner (1980).

Refer to Walder (1986), p. 179.

Some form of guanxi exists in every society, but it has different manifestations in different societies. Refer to Liu and Dicken (2006), pp. 1237-1238.


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capacity for autonomous action, and interpenetrates the state and society, especially at the lower levels of the Chinese state.\(^{343}\) Politically ambitious bureaucrats try to place people with whom they have *guanxi* in other agencies to extend their influence. Bureaucrats initiate contacts across bureaucratic boundaries through someone with whom they have *guanxi*. The person serves as the entrée into another organization, and acts as the guarantor of one’s merit and seriousness.\(^{344}\)

3.2.2 The civil service system

Since the 1980s, the term “civil servant” has been used to describe China’s administrative officers in governmental organizations, known as “state cadres”. Civil servants are those employed by the state (at central, regional and local level) who manage social public goods, exercise administrative power, and carry out public functions on behalf of the state.\(^{345}\) Employees of legislative bodies are included in government personnel.\(^{346}\)

3.2.2.1 Depolitization of civil servants?

An important determinant of China’s civil service system has been the political environment in which it is embedded. The relationship between party and government can also be described as a principal-agent relationship in which the party has the function of the principal and government agencies represent diverse agents.\(^{347}\) Although separating party and state functions was one motivation of the reform, the leadership rejected the concept of a politically neutral civil service from the beginning.\(^{348}\) Instead, according to the “Provisional Regulations for State Civil

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\(^{343}\) Refer to Nee (2000), pp. 34-35.


\(^{345}\) Refer to Cooke (2003), p. 382.

\(^{346}\) Employees of state enterprises and state institutions (including educational, research, sports, health and cultural institutions) are not civil servants. Refer to Chew (1990), p. 773.


\(^{348}\) In Deng’s speech “On the Reform System of Party and State Leadership” in August 1980, he stressed that it was time “for us to distinguish between the responsibilities of the party and those of the government and to stop substituting the former for the latter. [...] This will [...] promote a better exercise of government functions and powers”. Deng (1984), p. 303. In 1986, Deng Xiaoping made the separation of work of party and government the core of his political reform. Although separation was promoted in order to improve the quality of decision-making by putting the government on a longer leash, authority of the party over the government was never questioned. In the same light can Zhao Ziyang’s approach at the Thirteenth Party Congress be seen: Even while he urged greater autonomy for government, he emphasized that the CCP Central Committee would retain its leadership over the government in political principles and in major policy decisions and would continue to appoint leading cadres for central state organs. Refer to Shirk (1993), pp. 62-63.
Servants" of 1993, civil servants are required to adhere to Marxist ideology, support socialism and accept the party's leadership.\textsuperscript{349}

The CCP has always been the source of both civil service empowerments and control. According to Chan (2007), the 2005 Civil Service Law affirms the principle of party control of cadres. The 2005 Civil Service Law reconfirms that the CCP holds a tight control over leadership change and management at various levels.\textsuperscript{350} According to Article 4 of the Civil Service Law, the civil service system shall follow the basic premises of the primary stage of socialism; follow the party's line, guiding principles, and policies concerning cadres; and adhere to the principle of party control of cadres.\textsuperscript{351} The article in effect provides party committees and their organizational departments at various levels with the legal authority to manage cadres.\textsuperscript{352}

The party's authority over the government is based primarily on \textit{nomenklatura} power: The central government, specifically CCP organs, appoints almost all of the leading positions in government and administration institutions, among them the top provincial officials.\textsuperscript{353} This \textit{nomenklatura} system is an instrument of party control.\textsuperscript{354} It is therefore assured that government institutions principally follow party instructions when making decisions.\textsuperscript{355} The percentage of cadres in the rank of ministers and deputy ministers that were CCP members in 1990 (97.3 percent) reveals the unity of party, state and civil service.\textsuperscript{356} The Chinese bureaucracy has thus not been depoliticized as the bureaucracy in the East Asian developmental states.

\subsection*{3.2.2.2 Meritocratic recruitment}

Public sector reforms have been considered by researchers and practitioners of economic development as one of the major factors contributing to successful economic development. Public sector reforms refer not only to market liberalization...
and privatization, but also to reforms of the civil service system. For developing countries, public sector reforms are especially important, because the reforms need to emphasize efforts to promote professional values and norms on the one hand, and to reduce bureaucratic corruption and political influence on the other.357

As Evans and Rauch (2000) elaborate, making entry to the bureaucracy conditional on passing a civil service exam or attainment of a university degree, and paying salaries comparable to those for private positions requiring similar skills and responsibility, should produce a capable pool of officials. The stability provided by internal promotion allows the formation of stronger ties among them. This improves communication, and therefore effectiveness. When officials enter the bureaucracy on the basis of merit, performance is likely to be a valued attribute among them. The long-term career rewards generated by a system of internal promotion should reinforce adherence to codified rules of behavior. Ideally, a sense of commitment to corporate goals and "esprit de corps" develops.358

The Chinese transformation path has been characterized by strong economic growth under one-party monopoly.359 For the time being, political liberalization toward representative democracy and the "rule of law" have been limited. Despite the deficiencies of political liberalization, China has benefited from a transformation of its bureaucratic system. Since the start of economic reform, administrative reform in the form of rebuilding and modernizing China's bureaucracy has been the government's priority. In 1979, Deng promulgated:

"If we want to do our work according to economic law, we should train people to act accordingly. [...] We have 18 million cadres but lack technical cadres, technicians, managerial staff, and other professionals."360

When China entered the post-Mao reform period, procedures for recruitment, promotion and appraisal were vague, administrative proficiency low and the leadership aged throughout all ranks.361 The bureaucracy's scant expertise became an obstacle to continued development along economic reforms in the late 1970s and 1980s. The government's ability to spur economic growth was decelerating and administrative corruption growing.362 In order to promote the process of economic

357 For further information on the civil service system and its reforms refer to Burns (1989a, 1993); Cabestan (1992), Aufrecht and Li (1995), Liou (1997).
359 Refer to Li (1998), p. 393.
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reform, the professionalization of the Chinese bureaucracy became essential. In 1980, major changes in the Chinese bureaucracy were initiated.

While at the time of the Cultural Revolution political loyalty to the CCP and appropriate social class background were more important than expertise (borrowed from the Soviet Union in the 1950s), this changed dramatically in the post-Mao reforms. Political loyalty was emphasized, but it acquired adherence to the party's reform policies. Unqualified party officials in the government administration were retired, and political qualities and activities diminished as recruitment criteria. New selection criteria of the bureaucracy emphasized not only competence, such as educational credentials, but also age.

As a result of Deng's retirement policy, the leadership structure in various institutions and different ranks changed. While in 1980, only 36.2 percent of the leadership cadres in the rank of ministers and deputy ministers had an academic degree, ten years later, 87.7 percent had one. In the same period, the average age dropped from 64 to 57. In 1994, according to a national survey of 55,509 interviewed civil servants, civil servants from office staff to division chiefs had attended school for more than 11 years. Moreover, while the average age of division chiefs was 51 years in 1994, it was 57 in 1990 and 63 in 1980 (refer to Table 2).

Table 2: Basic conditions of civil servants, 1994.

<table>
<thead>
<tr>
<th></th>
<th>Number of interviewed civil servants</th>
<th>Average wage (RMB)</th>
<th>Average years of education (year)</th>
<th>Average age (year)</th>
<th>Average seniority (year)</th>
<th>Average post-holding (year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>55,509</td>
<td>5,823</td>
<td>11.8</td>
<td>42.0</td>
<td>19.7</td>
<td>4.9</td>
</tr>
<tr>
<td>Division Chief</td>
<td>374</td>
<td>8,263</td>
<td>12.7</td>
<td>50.8</td>
<td>32.0</td>
<td>4.9</td>
</tr>
<tr>
<td>Section Chief</td>
<td>15,239</td>
<td>6,452</td>
<td>11.8</td>
<td>48.6</td>
<td>26.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Office Staff</td>
<td>36,895</td>
<td>5,338</td>
<td>11.8</td>
<td>35.0</td>
<td>14.3</td>
<td>5.9</td>
</tr>
</tbody>
</table>


363 Qualified personnel was needed to e.g. make decisions about technology transfer and absorption, the expansion of foreign trade etc.


365 Refer to Zhou (2001), p. 1042. Also refer to Deng (1979), "Some Comments on Economic Work", Internet Edition, and Deng (1992), "Excerpts From Talks Given in Wuchang, Shenzhen, Zhuhai and Shanghai", Internet Edition, both reviewed 19.03.2006. This effort parallels those of Bismarkian Germany and Meiji Japan in the late nineteenth century, or Taiwan and Korea in the 1950s, in which a key point of the modernisation drive was the creation of a professional government administration which was responsible to an unelected executive authority rather than to an elected parliament. Refer to Nolan (1993a), p. 77.

366 Leadership cadres are e.g. leading officials of country leadership level and above in organs of the CCP, the People's Congresses, the People's Governments, the Political Consultative Conference, the judicial organs, the All-China Federation of Trade Unions, the Communist Youth League, the All-China Women's Federation, as well as other state-controlled associations. Refer to Heilmann and Kirchberger (2000), p. 12 and Li (1998), p. 394.


The government officials' education, age and expertise further improved under Zhu Rongji's leadership. In 1998, 99.1% of the leadership cadres (in the rank of ministers and deputy ministers) had a college-level education. The average age of bureaucrats dropped further and bureaucrats shifted from revolutionary cadres to party technocrats (study field: engineering and natural sciences) whose representation rose dramatically in all high-level leadership categories. Among ministers, provincial secretaries and governors as well as among central committee full members, more than 50 percent of the members were technocrats in 1997 (compared with less than 2 percent in 1982). Provincial governors had the largest share of technocrats in 1997 (77 percent) (refer to Table 3). The younger and better educated leaders were generally more supportive of reforms, more adaptable, and more pragmatic.

Table 3: Technocrats’ representation in high-level leadership, 1982-1997.

<table>
<thead>
<tr>
<th>Year</th>
<th>Ministers</th>
<th>Provincial Secretaries</th>
<th>Provincial Governors</th>
<th>Central Committee Full Members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>1982</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1987</td>
<td>17</td>
<td>45</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>1997</td>
<td>28</td>
<td>70</td>
<td>23</td>
<td>74</td>
</tr>
</tbody>
</table>


In October 1993, the central government adopted the “Provisional Regulations on State Functionaries” (inaugurated in March 1994). The central government officially defined civil servants as those 5.3 million cadres or administrators, managers and professionals who worked for government agencies. The 1993 act intended to provide substantive advancement of routines, rationality and professionalism in the Chinese civil service. Chapter 1 articulated the intent of the Provisional Regulations:

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Refer to Heilmann (2002), pp. 96-97.
The elite transformation from revolutionary veterans to technocrats during the post-Mao era has been the largest peaceful elite turnover in Chinese history. It is even the most massive, rapid change of elites within any regime in human history. Refer to Li (2001), p. 41. For further information refer to Fewsmith (2001a,b,c), Lee (1991), p. 268 and Lieberthal (1995), p. 236.
Among these were not only graduate students from China's prestigious universities, but also returned students from the Soviet Union, Eastern Europe and from the USA and other Western countries. Refer to Xia (2000), p. 82.
Refer to Li (2001), p. 41.
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"To facilitate the scientific management of state functionaries, ensure honesty and enhance administrative efficiency", "to the purpose of hiring people [...] to the principle of openness, equality, competition and selecting the best"; and "that state functionaries perform their duties according to the law and be protected by the law".376

The Provisional Regulations promulgated entry through open, competitive examinations and the civil service to be managed according to law. The regulations set forth strict and rule-governed performance guidelines with respect to appropriate conduct. The reform successfully attained its objective of regularizing performance reviews: over 96 percent of the civil servants underwent annual performance appraisals between 1994 and 1998.377 The Provisional Regulations furthermore enforced public announcement of openings, reliance on scores in civil service examinations to recruit candidates, competitive examinations in routine promotions, and monitoring by the personnel department. All procedures were institutionalized at all levels of the national bureaucracy.378 Yet, the selection of civil servants continued to be based on talent and virtue in terms of political and ideological values ("hiring people with both political integrity and ability"379), because the Provisional Regulations promulgated that the party and the state formed a single, integrated authority to which civil servants were politically responsive. No distinction was made between politicians and civil servants. Elected senior officials such as the Premier, Vice Premiers, State Councillors, Ministers and provincial Governors were also counted as civil servants.380 Therefore, the civil service was still politicized to the extent that political loyalty was a criterion for selection.

The open selection of leading cadres was introduced gradually from coastal to inland areas, from local to central government departments and from section to department levels. Aspects of the open selection are open posts and requirements as well as open examination and public promulgation of results. Among commissions and ministries, examinations decide on the recruitment of new personnel.381 From 1994

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376 See Article 1, 2 and 4 of the Provisional Regulations on State Functionaries. Refer to Tsao and Worthley (1995), p. 170 and Tong et al. (1999), p. 197.
377 Refer to Chou (2005), pp. 45-46.
378 Refer to Nee and Opper (2007), p. 98.
381 The Ministry of Personnel for reference held a recruitment examination for 22 central level ministries and public corporations, including the Ministry of Agriculture and the State Statistics Bureau in March 1991. These administrative organs selected 280 from about 10,000 candidates. By late 1990, 35 ministries or commissions of the State Council staffed 70 percent of their vacant positions through examination. Moreover, until 1993, 61 ministries or commissions and their subordinated organizations of the State Council, and 29 provinces, regions and municipalities recruited 67,000 state civil service cadres out of 440,000 plus applicants through recruitment with examinations. Refer to Liu (2001), p. 131.
until 2003, China employed more than 700,000 civil servants from 2.4 million candidates through the annual civil service examinations.\(^{382}\) Party and government institutions have also taken competition as the main form for the promotion of cadres since 1998. In 2002, about 180,000 government officials were promoted and filled posts via competition, making up 59.8 percent of the total cadres promoted in that year.\(^{383}\)

Salaries are one component of attracting the best skilled to jobs in the state sector. In the East Asian developmental states, the positions of bureaucrats were the best paid compared with the ones in the business sector. In China, the well-educated had several job opportunities due to the country's integration with the global economy. Lower-paid government jobs were no longer the most attractive.\(^{384}\) While government administrative cadres were the highest paid of all occupation groups in the mid-1950s, jobs in the private sector (particularly those that require higher education such as a master degree) had become better paid than jobs in government organs until 1994.\(^{385}\) According to survey results published in the China Statistical Yearbook (1996), among 8,050 interviewees at the rank of division chief, the average monthly wage in enterprises was Renminbi (RMB) 8,718 and in government organs RMB 8,283 in 1994. The wage difference between enterprises and government organizations becomes clear when grouped according to educational background: the interviewed persons who had a master degree (n=258) stated to earn RMB 9,538 in an enterprise, and RMB 6,138 in a government organ. The same applies to section chiefs and office staff, as well as to bachelor and college graduates (refer to Table 4). However, civil servants enjoy insurance and welfare benefits in addition to their salary. The state implements a labor insurance system to provide material aid to civil servants who have temporarily or permanently lost the ability to work. Civil servants are also granted benefits in free medical service, pay during sickness and maternity leave, home-visiting holiday and welfare subsidies, as well as pension and compensation payment.\(^{386}\) Furthermore, secure permanent employment by the state as well as high social status serve as incentives for a career within the civil service.\(^{387}\) Accordingly, the state has been able to employ well educated civil servants, despite lower remuneration.

\(^{382}\) Alone in Jiangxi Province, more than 600 people nationwide applied to participate in an open recruitment examination for the posts of 13 deputy directors of various provincial government departments, and 114 of them applied for the post of the deputy director of the provincial party committee's policy research office in 1999. Refer to Mu (2001), pp. 20-21 and People's Daily (2003), "Exam-based Civil Service Prevails in China", Internet Edition, reviewed 03.10.2006.


\(^{385}\) This is based on net income of fixed salaries.


Moreover, in the Chinese bureaucratic system, the duration of a bureaucrat’s tenure has been reduced. Rotation and turnovers are indirect mechanisms that serve the functions of simultaneously overcoming information imperfections and maintaining controls in the country’s large and complex political system. Educated and well-trained civil servants combined with rule-governed performance guidelines such as public announcements of open positions, annual performance reviews and competitive examinations (affirmed by the Civil Service Law of 2005) have gradually improved the transparency and predictability of regulations and helped the implementation of economic reform.

**Table 4: Monthly wage levels in enterprises and government organizations, 1994.**

<table>
<thead>
<tr>
<th>Grouped by post</th>
<th>Number of civil servants interviewed</th>
<th>Average wage (RMB)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enterprises</td>
<td>Government Organs</td>
</tr>
<tr>
<td>Division Chief</td>
<td>4,676</td>
<td>3,374</td>
</tr>
<tr>
<td>Section Chief</td>
<td>18,105</td>
<td>15,239</td>
</tr>
<tr>
<td>Office Staff</td>
<td>45,131</td>
<td>36,895</td>
</tr>
<tr>
<td>Grouped by educational background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master</td>
<td>105</td>
<td>153</td>
</tr>
<tr>
<td>Bachelor</td>
<td>6,011</td>
<td>5,293</td>
</tr>
<tr>
<td>College Graduates</td>
<td>17,213</td>
<td>19,197</td>
</tr>
</tbody>
</table>


Notwithstanding national reform measures, the quality of the Chinese civil service is characterized by a high degree of geographical heterogeneity. The development between provinces, autonomous regions and municipalities is uneven. In the center and in the richer coastal areas, civil servants are usually selected by meritocratic recruitment, rewards are linked to their performance, and corruption is controlled and pursued by the judiciary. In the 2006 World Competitiveness Yearbook, the IMD ranked Zhejiang province 17th out of 61 countries and economic regions worldwide with regard to bureaucratic efficiency - ahead of China’s overall average (rank 35). In the less developed hinterland, however, not only position and organization determine political power, but also prestige and seniority, as well as loyalty of protégés and clever political manipulation. Thus, formal power of meritocratic party- or ministry-positions is often undermined by informal hierarchies of influence.

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389 Refer to Nee and Opper (2007), pp. 97-98.

390 Refer to IMD World Competitiveness Yearbook (2006), Survey question 2.3.15 ("Does bureaucracy hinder/not hinder business activity?"), p. 376.

As the civil service sometimes operates as an "employer of last resort", such provinces exhibit relatively high levels of indiscipline and corruption among its bureaucrats.\textsuperscript{392}

To sum up, unlike the East Asian developmental states, there is no separation between the CCP and the state, and furthermore no separation between the state and the bureaucracy, as civil servants are usually party cadres. On the basis of the \textit{nomenklatura} system, important bureaucratic positions are filled by CCP members that exert a control system over all levels. Thus, clear depolitzation as in the East Asian developmental states cannot be found in China. The roles of politicians and bureaucrats have been fused. Similar to the East Asian developmental states, in the reform period, the average age of civil servants has been reduced and the average years of education increased through meritocratic recruitment. This new group of officials was eager and able to steer economic reforms.\textsuperscript{393} This resembles the practices of the East Asian developmental states, where the elite bureaucrats were graduates of the top universities. However, party- or ministry-positions are still often filled according to network and loyalty systems.

3.2.3 A Chinese pilot agency?

Developmental statists attribute the success of governments in achieving economic growth and industrial transformation to the quality of the bureaucracy in general, and to the developmental states' powerful and autonomous pilot agencies in particular. The most powerful was the Japanese MITI, which served Korea and Taiwan as a benchmark model. The developmental states' pilot agencies had the overall responsibility of managing industry, including planning and financing, as well as domestic and foreign trade. There were no industrial ministries and industrial bureaus.\textsuperscript{394} In the East Asian developmental states, top-down industrial planning was pursued with a high degree of independence of the elite bureaucrats to realize

\textsuperscript{392} While the importance of \textit{school and blood ties} diminishes gradually, school and blood ties were important aspects of the recruitment and promotion of civilian and military elites during the reform era. Qinghua University could be regarded as China's leading engineering school and was known as the "cradle of technocrats": Graduates of Qinghua University occupied a significant portion of top party and state leadership posts. Li (2001) contends \textit{"belonging to an elite university network is even far more essential for politicians than having an elite university degree"}. Not only school ties, but also blood ties (e.g. being the child of a high-ranking official) were important for the career advancement of elite cadres: The children or relatives of veteran elite cadres of the CCP and the army are called "party princelings". They usually graduate from elite universities and are part of a tight network of other princelings of these universities. They advanced quickly with the help of their parents or their parents' comrades in arms. As during the nineties, many princelings had political or economic leading positions in the coastal areas, political resistance to the careers of the princelings became manifested. Refer to Li (2001), p. 16 ff and p. 82 ff and Heilmann (2002), pp. 59-60. Also refer to OECD (2006a), p. 28.

\textsuperscript{393} Refer to Shirk (1993), p. 64.

\textsuperscript{394} Refer to Unger and Chan (1995), p. 42.
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industrial policy. Unlike the East Asian developmental states, in its strategic approach to economic development and interaction with the business sector, China's central government relies on various agencies.

3.2.3.1 The State Planning Commission and its successors

Among the various commissions, it was the State Planning Commission which came closest to an East Asian pilot agency in the reform period. The “Outline of State Industrial Policies for the 1990s” confirmed the planning institutions of the Mao era in office. The outline prescribed that national industrial policy is decided by the State Council and that the State Planning Commission was the government agency responsible for the promulgation and harmonization of national industrial policies (five-year and annual plans). On the basis of the “Outline of State Industrial Policies”, the State Planning Commission promulgated a series of industrial policies for different sectors. It approached its task from a long-term, strategic and comprehensive viewpoint which meshed with the state's long-term interests. It concentrated solely on macro-economic coordination instead of micro-managing the economy and specific industries. The State Planning Commission was mainly responsible for general overseeing and forecasting long-term policies for the national economy. The implementation of various industrial policies was carried out by the administrative agencies of different industries. The government agencies responsible for economic management had to coordinate with the State Planning Commission before adopting any important policy measures which would influence industrial development.

The State Planning Commission also guided and organized the production and distribution of commodities. It controlled the production level and allocation of goods which were considered crucial for national economic growth (such as petroleum, electricity, cement and steel). Through its control of bank credits and prices it could influence material supplies, and thus the growth rate of industrial sectors. The State Planning Commission provided financing for domestic projects according to its national industrial plan, and the Construction Bank released investment funds accordingly. The State Planning Commission, however, was not primarily responsible for assuring that the government in fact had sufficient funds or supplies to cover the cost of the projects in the plan. These tasks fell instead to the Material Supply Bureau and the Ministry of Finance. The latter did not always agree with the State Planning

395 Refer to Lieberthal and Oksenberg (1988), p. 64.
397 Refer to Lieberthal and Oksenberg (1988), p. 64.
398 Refer to Xia (2000), p. 86.
399 Economic management includes planning, public financing, central banking, taxation, international and domestic trade, tariff, securities market regulation, administration of industry and commerce as well as state-owned asset management.
Commission over investment levels. Meetings between these two ministries to coordinate their decisions were often needed.\textsuperscript{400}

The State Planning Commission also played a crucial role in selecting which of the numerous proposed capital construction projects were accepted and acted upon. In considering new investments, the State Planning Commission determined not only the size of investment funds but also their overall geographical and sectoral distributions. It also decided on major JVs and key projects in the economy. As a supra-ministerial body, it directed the activities of a range of ministries and other bodies in bringing new projects to fruition.\textsuperscript{401}

In the energy sector,\textsuperscript{402} the State Planning Commission formulated mid-term and long-term energy plans that included construction, production and conservation; it decided which projects to construct, conducted appropriate technical and other feasibility studies and determined the project’s size, its speed of development and the year in which each effort should begin; and it coordinated the actual construction of energy-related projects. The planning effort itself required that the State Planning Commission forecast future energy supplies and demands, both sectorally and geographically. The Ministry of Coal Industry and the Ministry of Water Resources and Electric Power planned the development of their sectors separately. However, since most of China's electricity was generated in coal-fired thermal plants, the development of both sectors had to be closely coordinated, based on the future need for electricity. The State Planning Commission performed this task of coordination.\textsuperscript{403}

The State Planning Commission relied on the line ministries and the provincial bodies to generate most requests for new projects, and to buttress those requests. These requests were part of the plans that each of the four energy-sector line ministries (Ministry of Coal Industry, Ministry of Petroleum Industry, Ministry of Water Resources and Electric Power, and Ministry of Nuclear Industry) and the provinces submitted to the State Planning Commission. The plans were supposed to be based on the broad guidelines for long-term development promulgated by the State Planning Commission. However, most of the times requests exceeded the country’s capacities for new construction. Thus, the State Planning Commission had to determine which proposals were desirable and both technically and economically feasible.\textsuperscript{404} The State Planning Commission finally drew upon an overall balance based on repeated consultations with the ministries and provinces in the process of

\textsuperscript{400} Refer to Lieberthal and Oksenberg (1988), p. 64 and pp. 69-70.
\textsuperscript{401} Refer to Wang and Fewsmith (1995), p. 61 ff.
\textsuperscript{402} The energy sector is taken as an example to illustrate the functions of the State Planning Commission. It is representative for other sectors.
\textsuperscript{403} Refer to Lieberthal and Oksenberg (1988), pp. 64-66.
\textsuperscript{404} Ibidem, pp. 67-68.
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turning their aspirations into a national plan.\textsuperscript{405} When the draft of the final plan was completed, it was sent to the State Council for approval.\textsuperscript{406}

After the Ninth National People's Congress in March 1998, along with the restructuring of government, which included a radical retrenchment of government organizations and employees both at the central and local levels,\textsuperscript{407} the State Planning Commission (which was always resistant to marketization)\textsuperscript{408} was renamed State Development Planning Commission.\textsuperscript{409} The commission's new name indicates the weakened function of state planning and the increased importance of state-coordinated development along economic structural reform. The State Development Planning Commission's members often included the ministers from the Ministry of Finance, the Ministry of Labor, the State Commission of Science, the President of the People's Bank of China and the directors of the State Bureau of Statistics and the State Bureau of Prices. It issued directives to the ministries and provinces and was the most powerful and most comprehensive Chinese economic policy-making organ of its time like its predecessor the State Planning Commission.\textsuperscript{410} Even during the process of marketization it did not lose its relevance to the Chinese national economy.

Despite its influence, the State Development Planning Commission's power was limited and its macro-economic control restricted. Hence, it never reached the status

\textsuperscript{405} Coordination and construction was a critical task because all ministries have the same rank and therefore do not have formal leverage over each other. It requires either the State Council itself or a commission, which is higher than a ministry, to make various ministries and provinces (which have the same bureaucratic rank) coordinate their efforts.

\textsuperscript{406} In general, the State Council in turn submits it to the National People's Congress for examination and approval. This gives the plan a legal character.

\textsuperscript{407} In March 1998, the number of ministries was cut from from 40 to 29 in order to concentrate "power" in a few agencies with broad authority. Moreover, in order to turn SOEs into independent legal entities, with operation mostly in the hands of professional managers, many of the ministries that managed industries were abolished. The abolished functions of the former ministries were overseen by the State Economics and Trade Commission. Refer to Lan (1999), p. 30, Unger and Chan (1995), p. 42 and Zhu (2003), p. 157.

\textsuperscript{408} The State Planning Commission was established in 1952, according to the Soviet model of the centrally planned economy. Planning theory, planning methods, planning content and planning organizations were all copied; even the planning tables were imported from the Soviet Union. As the organization charged with overall control of the planned economy, the State Planning Commission had a strong institutional interest in resisting, deflecting, and enervating the market-oriented reform policies put forth by reform-minded leaders. Refer to Wang and Fewsmith (1995), p. 52.


\textsuperscript{410} Often, the State Development Planning Commission was referred to as "the Little State Council". Refer to Wang and Fewsmith (1995), p. 52.
of a pilot agency like the MITI in Japan. The State Development Planning Commission had to consult with the Ministry of Finance over the annual budget plans and long-term financial balances and with the Ministry of Foreign Trade and Economic Cooperation for the foreign trade balance. In addition, in order to determine the national industrial plan, the State Development Planning Commission had to coordinate closely with the State Economics and Trade Commission, which traditionally served as a counterweight to the State Development Planning Commission. The State Economics and Trade Commission was concerned less with long-term planning and more with coordinating day-to-day enterprise operations. The State Development Planning Commission’s responsibility was furthermore restricted as it had to pass on large-scale projects to the State Council for decision. In addition, China’s decentralized economic management limited the State Development Planning Commission’s power. Due to the system of bottom-up planning, the State Development Planning Commission simply aggregated requests from different ministries. Furthermore, the projects that were below a certain scale could be initiated by the line ministries or local governments without item approval by the State Development Planning Commission. Thus, the State Development Planning Commission was only one part of a large web of organizational relationships.

In 2003, the State Development Planning Commission was transformed into the NDRC. With the new name, the State Council eliminated the word “planning”, which indicates a further renunciation of planning mechanisms in favor of market mechanisms. The NDRC took over the major functions of its predecessor, and was assigned new responsibilities along with overall government reorganization.

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411 Refer to Huang (2002a), p. 553.
412 The Ministry of Foreign Trade and Cooperation was the Ministry of Economic Relations and Trade before 1993. The Ministry of Economic Relations and Trade was established in March 1982.
413 Refer to Lieberthal and Oksenberg (1988), pp. 64-65.
414 The State Economics and Trade Commission was the “final incarnation” of a body that has existed throughout most of the reform period (indeed, throughout much of the history of the People’s Republic of China), namely, the State Economic Commission. The State Economic Commission pleaded for expanded enterprise rights and autonomy, and thus became a force in favor of industrial reforms during the 1980s. The State Economic Commission was merged with the State Planning Commission, but subsequently separated again under a variety of different names, including the State Economics and Trade Commission in the late 1990s. Refer to Naughton (2003a), p. 4.
3.2.3.2 Streamlined government structure

In March 2003, following the 10th National People’s Congress, China restructured its key economic ministries. The State Council scrapped the approval formalities on more than 1,000 items since China’s entry into the WTO and thus loosened its grip on the economy. Unlike the reform of 1998, which mainly focused on downsizing, the reform of 2003 (refer to Figure 8) intended to reduce the overlap of the government departments’ responsibilities, strengthen the coordination between them, and define the scope of their duties.

Figure 8: The restructuring of government in 2003.

The three most important reorganizations (illustrated in Figure 8), that aimed to increase the government’s efficiency in line with the market system and China’s WTO accession, are:


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417 Refer to Fan and Zhang (2003), pp. 28-29.
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- **Bundling different functions in the NDRC:** The NDRC took on the duties of the State Council Office for Economic Restructuring and some functions of the State Economics and Trade Commission and the Ministry of Foreign Trade and Economic Cooperation.\(^{418}\) The NDRC is the macro-economic regulatory department under the State Council. It reports on the national economy and social development to the National People’s Congress and guides the overall economic system restructuring. The NDRC was established in order to improve macroeconomic control by merging the functions of development and reform. It has the sole authority for the planning and implementation of industrial policy in order to accelerate the move from interventionist to vision-based industrial policy.\(^{419}\)

- **Creation of the State-owned Assets Supervision and Administration Commission (SASAC):** According to the “Interim Regulations on Supervision and Management of State-owned Assets of Enterprises” (2003), the SASAC was created as a special ministerial level institution directly under the State Council.\(^{420}\) Its establishment represented a departure from the previous situation, where multiple government ministries and other bureaucratic entities had a say in state-owned enterprises’ (SOEs) daily operations.\(^{421}\) SASAC is responsible for the micro-economic coordination and regulation of the big domestic state-owned companies.\(^{422}\)

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\(^{419}\) Refer to Ken’ichi (2003), p. 2.


\(^{421}\) The Ministry of Finance was responsible for the administration of capital, for example, the definition and registration of property rights of state assets and the supervision of state asset evaluations and transactions, along with the supervision of revenue collection. The Special Inspector’s Commission was responsible for financial auditing. The State Economics and Trade Commission and the State Development Planning Commission were responsible for the supervision and control of enterprises’ business activities, including financing, investment, the sale of assets and internal restructuring. Refer to Tenev et al. (2002), p. 27 and Fernandez-Stembridge and Huchet (2006), p. 32-33 and Taube (2005), p. 4.

\(^{422}\) Its task is to separate the government’s functions as investor and owner of state assets from its function as the public manager of society as a whole. In particular, SASAC was created as an instrument to address the problems of debt-ridden SOEs, which by then represented almost 200,000 companies worth about RMB 10 trillion. As of mid-2006, it oversaw a portfolio of 165 of the biggest and centrally controlled SOEs – including those involved in critical sectors of the economy such as telecommunications, civil aviation, oil, steel and auto manufacturers – with combined assets of about RMB 6 trillion. The overseeing of all remaining SOEs was left to local state-asset organizations. Refer to SASAC (2003), “China State-owned Assets Management System Reform Entering New Stage”, Internet Edition, reviewed 23.03.2006. For further information refer to Fernandez-Stembridge and Huchet (2006), p. 33 and Xinhuanet (2006), “Rule will require SOEs to submit dividends to government”, Internet Edition, reviewed 03.10.2006.
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- **Establishment of the Ministry of Commerce**: Some of the functions of the State Economics and Trade Commission\(^{423}\) and the Ministry of Foreign Trade and Economic Cooperation were combined in a new agency, the Ministry of Commerce.\(^{424}\) In addition, functions of the former State Development Planning Commission were integrated. After China's entry into the WTO, some of the functions of the Ministry of Foreign Trade and Economic Cooperation have become less important or even futile. The Ministry of Commerce was established to reduce the overlap of responsibilities between the departments that used to oversee foreign and domestic trade regulations, and thus to increase administrative efficiency. For instance, the State Economics and Trade Commission originally determined whether foreign imports had harmed domestic firms, and the Ministry of Foreign Trade and Economic Cooperation determined whether anti-dumping or safeguarding measures would be implemented. These two functions relevant to China's WTO accession were to be combined into one ministry.\(^{425}\) The Ministry of Commerce shares its responsibility for FDI-related policies with the NDRC.

The assignment of tasks to various commissions and ministries shows that China has no pilot agency in the sense of the Japanese MITI. Although each ministry and commission is responsible for a special sector, they have to work closely together. Economic policy-making, and particularly the implementation of industrial policies, is organized along different central level commissions and ministries, and along central and local-level state institutions.\(^{426}\) The developmental states were far more centralized, and policy functions were entirely carried out by the elite bureaucracy of the pilot agency. Although the State Planning Commission and its successors can be regarded as the most influential superministry throughout the reform period, authority has been fragmented by function, territory and rank.\(^{427}\)

New policy initiatives affect various bureaucratic officials with vaguely defined and sometimes overlapping jurisdictions, conflicting interests, and complex, distinct structures of authority.\(^{428}\) In addition, the decentralized structure of the Chinese bureaucracy has intensified the need for coordination among bureaucratic agencies in Beijing.\(^{429}\) A number of functions of an East Asian pilot agency are performed by

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\(^{423}\) As the industrial ministries were abolished in 1998, the State Economics and Trade Commission took over most of their remaining functions. Refer to Naughton (2003a), p. 4.


\(^{425}\) Refer to Fan and Zhang (2003), p. 30.

\(^{426}\) In a system with multiple principals, monitoring costs are likely higher, because of co-ordination costs. Refer to Kassim and Menon (2003), p. 124. Also refer to McCubbins et al. (1989).

\(^{427}\) Refer to Lieberthal (1997), p. 4.


\(^{429}\) Refer to Shirk (1985), pp. 216-217.
local leaders at each level of government.\textsuperscript{430} According to Singh (1992), policy-making institutions are fragmented and proliferation of independent policies at the various levels of government is common.\textsuperscript{431} This questions the capacity of the central state and its autonomy to implement a coherent economic reform policy during its transition.

The fragmented structure of authority means that it is often necessary to achieve consensus among several bureaucratic bodies.\textsuperscript{432} If policies are to move forward, all involved agencies have to be consulted and supportive.\textsuperscript{433} In the telecom sector, to give an example, at least ten organizations (including the Ministry of Information Industry and the Ministry of State Security) retain a regulatory stake regarding telecom decisions.\textsuperscript{434} Key decisions are therefore often the result of a series of reinforcing compromises made in a number of loosely co-ordinated decision-making bodies over a long period.\textsuperscript{435} The consequence is that any major project or policy requires a gradual and protracted process of consensus and alliance building among competing bureaucracies at each level to gain support both vertically and horizontally in the bureaucratic system.

3.3 State

Johnson (1987) contends that industrial policy can be distinguished from general economic policy by "its penetration to the micro-level, meaning government attempts to influence economic sectors [...] , whole industries [...] and individual enterprises within industries".\textsuperscript{436} Industrial strategists maintain that industrial policy and selective state intervention ("picking winners") is necessary to enable industries in developing countries to gain dynamic efficiency in the sense of achieving international competitiveness within a reasonable period of time. International competitiveness is achieved when these industries can compete in international markets without state support. Successful state intervention promotes infant industries and rationalizes industries that encounter difficulties in competing. The role of government is to improve the technological capability of firms by moving them down their learning curve.\textsuperscript{437}

\textsuperscript{430} This is further elaborated in Chapter 3.3.2.
\textsuperscript{431} Refer to Singh (1992), p. 101.
\textsuperscript{433} For further information refer to Zhao (1995).
\textsuperscript{434} Refer to Pearson (2006), p. 18.
\textsuperscript{435} For further information refer to Lieberthal and Oksenberg (1988).
\textsuperscript{436} Refer to Johnson (1987), p. 159.
\textsuperscript{437} For further information refer to Pack and Westphal (1986) and Poulson (1994), p. 388 ff.
3.3.1 Industrial policy

Like the East Asian developmental states, the Chinese government applies industrial policy to promote economic development by readjusting the industrial structure and the product mix and helping to improve the competitive standing of Chinese firms. Industrial policy - measures that favor one or more industries (or firms) over others - can take a range of forms, such as export subsidies and preferential loans. The positive example of the East Asian developmental states and their execution of industrial policy in the form of selective state intervention have influenced China's industrial policy-making. The Chinese government has instrumentalized industrial policy (which was close to planning in the command economy) in order to maintain extensive competencies of economic planning and intervention, at least temporarily. In consequence, not only has change of demand been responsible for structural transformation, but also economic policy measures of the CCP. Direct intervention in the market mechanism, and also the time and sequence of the reform process, have influenced structural adjustment processes.

Chinese leaders' commitment to economic openness in combination with strong state intervention has continued throughout the reform period. Central authorities still continue to issue five-year and single-year plans which cover strategically important aspects of the Chinese economy. With these policies, the central government aims to develop industry, guide foreign investment and foreign trade, and establish large enterprise groups. The first explicit and detailed official guideline for a national industrial policy was the "Decision on the Gist of Current Industrial Policy" that the State Council issued in 1989. The decision testifies the central government's ambitions to guide the process of modernization and correction of China's industry structure. The Eighth Five-Year Plan (1991-1995) also confirmed the central role of industrial policy for economic development. The plan contends:

"[Industrial] planning plays the major role in setting targets for economic growth, controlling total supply and demand, readjusting economic structure and geographical distribution of major sectors of the economy, and controlling other important economic activities. [...] Most production activities and operations in enterprises, ordinary technological upgrading and small-scale construction projects are to be regulated by market forces."

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438 Refer to Rosen (1992), p. 79.
439 Refer to Opper (1999), p. 69.
The scope and role of planning substantially changed during the reform era. In the Eighth Five-Year Plan, the central government confirmed its ambition to combine "the planned economy with market regulation" and gradually replace mandatory plans of the Mao era by guidance plans.443 The central government used "economic, administrative and legal means, especially price control, taxation, interest rates and exchange rates" to promote economic development.444 The state's responsibility to govern resource allocation by economic-political interventions arises from the central government's mistrust of the functioning of markets. Its intervention aims to induce changes of the production structure necessary for economic transformation. The CCP's and the central government's legitimacy are thus based on the assumption that government intervention in the form of industrial policy is a necessary precondition for economic transformation. The CCP's legitimation of power could thus be retained and even strengthened.445

In 1993, after Deng's "Southern Inspection Tour",446 the National People's Congress issued an amendment to the Constitution of the People's Republic of China, promulgating the "socialist market economy".447 The emphasis of the "Decision of the CCP Central Committee on Some Issues Concerning the Establishment of a Socialist Market Economic Structure" 448 was on the changing role of the government from a central planning and controlling function for a planned economy to a supporting role for a market economy, but without losing its function as a regulator.449

With the promulgation of the socialist market economy, the central leaders emphasized their intention to transform the economic system by an unprecedented path of development, and promulgated a new version of the market economy,

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443 Ibidem, p. XVII.
444 Ibidem, p. XVI.
446 Along his tour Deng recommended that China should learn from the Asian four little dragons and proceed in its transformation path. Refer to Deng (1992), "Excerpts From Talks Given in Wuchang, Shenzhen, Zhuhai and Shanghai", Internet Edition, reviewed 19.03.2006.
447 Refer to National People's Congress, "Constitution of the People's Republic of China", Amendment Two, Approved on 29.03.1993 by the 8th NPC at its 1st Session. In his political report to the congress, Jiang Zemin, General Secretary of the CCP, stated that "the objective of the reform of the economic structure will be to establish a socialist market economy that will further liberate and expand the productive forces." Beijing Review (1992), "Party Congress Introduces Market Economy", p. 6.
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namely a "socialist" one. The socialist market economy incorporates aspects of a planned economy as well as market regulations which correspond to the East Asian developmental states (market regulations under the rule of a strong state). The State Council confirmed in 1993, that "state planning" was "an essential means of macro-control" in order to "optimize the economic structure". In a country that detaches itself from socialism, state intervention is needed in order to build new, capitalist institutions and regulations and abandon the central planning institutions of the pre-reform era. The state's economic policies intended to shape the macro incentive structure that firms in the economy face.

With the "Outline of State Industrial Policies for the 1990s", which was promulgated by the State Council in 1994, the central government confirmed that industrial policy remains an important instrument of economic policy:

"The formulation of industrial policies is to work as one of the important means of the state in its strive to strengthen and improve macro-economic control, effectively adjust and optimize the industrial structure, improve the quality of industries and promote a sustainable, fast and healthy development of the national economy [...]"

Unlike industrial policy in the 1980s and early 1990s, which lacked clear prioritization of industries (the 1989 Decision specified solely in the category "encouraged production" more than 200 products without order of priority), the 1994 Outline of State Industrial Policies focused on priority industries and key enterprises. Similar to the East Asian developmental states, the outline emphasized to accelerate the development of "pillar industries" which were to promote national economic

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450 A major shift in ideology underpins the reforms, with the CCP moving from a dogmatic emphasis on the Maoist version of Marxism-Leninism to a pragmatic, market-oriented approach with its emphasis on "establishing a unified and open market system". Although the rhetoric on socialism and the dominance of the public sector have been retained, the staunch anti-market, anti-private initiative, anti-private gain focus has been removed. Since then property reforms in the state-sector have accelerated. Moreover, the central government emphasized that in the socialist market economy prices are set by the marketplace and public ownership dominates but coexists with private ownership. Indeed, in 1992, the government freed the prices of 600 industrial producer goods. Refer to National People's Congress (1982), "Constitution of the People's Republic of China", Article 6, Internet Edition, reviewed 11.09.2006 and Chinese Government (2005), "Economic System", Internet Edition, reviewed 28.03.2006. For further information refer to Montionola and Weingast (1995), p. 52, Qin (2004), p. 872 and Yusuf et al. (2006), p. 70.


452 Refer to Nee and Opper (2007), p. 93.


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development. These include the machinery industry, the electronic industry, petroleum processing and the raw chemical materials industry, the auto industry and the construction industry. Growth of the pillar industries was promoted through government funds and preferential access to resources and materials. The central government allowed large enterprise groups to directly raise funds abroad. Products of the pillar industries were declared as "infant industrial products" and protected from international competition through quotas and tariffs. The central government moreover declared it would open part of the domestic market so that companies in the pillar industries were able to import needed technology and equipment. In this regard, the central government used the same policy instruments to promote selected industries with the aim of increasing their international competitiveness.

In order to strengthen market mechanisms, in the Ninth Five-Year Plan (1996-2000), the central government replaced guidance plans, that included enterprise-specific requirements, by indicative plans, that set general goals and suggestions. In the plan, the CCP completely gave up formulating detailed planning targets, but provided an overview of the expected developments of particular sectors and businesses. Already in 1993, the proportion of the mandatory industrial production plan in total industrial output value, under the charge of the State Planning Commission, dropped from 12 percent to 7 percent. Since then, plans have mostly formulated development goals and informed economic agents on economic developments that have been envisioned by the CCP and the central government. Nonetheless, through five-year plans, the central government continues to exert impact on the top management of China's leading enterprises.

In its "Report on the Outline of the Tenth Five-Year Plan for National Economic and Social Development (2001-2005)", the Chinese government confirmed its support for the declared pillar industries. Unlike former five-year plans, in the Tenth Five-Year Plan the government no longer supervised all matters, but focused its attention on

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456 Ibidem, Chapter IV.
457 State promotion of selected sectors is further elaborated in Chapter 3.3.3.
459 Refer to Kennedy (2005), p. 47.
460 Also materials distributed under the unified state plan decreased from prereform figures of 256 kinds to 19 kinds. State planning control was manifested mainly in the examination and approval of investment projects, the use of foreign exchange as well as the planned distribution of bank loans. Refer to Su (1993), p. 110.
461 Refer to Taube (2005), p. 3.
A new model of economic development working out development strategies and plans. The Tenth Five-Year Plan became simpler and shorter. The number of indices of the Tenth Five-Year Plan was reduced to 39 from 105 in the Ninth Five-Year Plan, and with only 1,500 characters devoted to industry. The Tenth Five-Year Plan stressed market requirements, and attached greater importance to the efficiency of economic development. The Tenth Five-year Plan did not include any directives, but relied on indicative planning and indirect means of control and regulation.

In the context of the Eleventh Five-Year Plan, NDRC stated that the government’s “general guidance and coordination of reform” will persist, and even be strengthened, throughout the next five years. The new economic plan includes more than just the general outline of economic development goals. The plan for the period 2006-2010 is much more flexible than the directives issued in former periods. The promulgation of the Eleventh Five-Year Plan indicates that, despite the expansion of free market mechanisms - completion of price reform in 2003, domination of the private sector (about two thirds of China’s GDP) and the prevalence of foreign-funded enterprises (FFE) which contribute about one third to China’s gross industrial output - the state’s influence on the market through industrial policy is still prevalent.

Overall, according to Taube (2005), the central government sees itself as the strategic mastermind of national (economic) development, although at the same time upholding the premise that market forces should be the dominant coordination mechanism for day-to-day business interaction. The central government is still not

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464 Refer to Ken’ichi (2003), p. 2.
467 Refer to Taube (2005), p. 3.
468 In 2003, price reform was nearly completed, leaving only a few strategic goods in the control of state agencies.
469 Precise measurement of the size of the private sector is difficult. Defining as private all companies that are controlled neither by state nor collective shareholders suggests that the private sector was responsible for 57 percent of the value-added produced by the non-farm business sector in 2003. Refer to OECD (2005), “Economic Survey of China 2005: Improving the productivity of the business sector”, Internet Edition, reviewed 02.01.2007.
470 Refer to Taube (2005), p. 3.
abandoning its function of formulating economic targets, and does not leave the development of the economy to market forces, because in China - even more than in the East Asian developmental states - economic growth is the basis of state power. China's transition strategy safeguards the power and privileges of the political elite, and implements wide-ranging economic reforms that both reduce the scope of state managerial controls over production and distribution and expand the role of the market as a mechanism to motivate and guide economic growth at the same time.⁴⁷¹ The central government follows the East Asian industrial policy approach of guiding the market and active state intervention through industrial policy in order to enhance economic development.

Before analyzing more recent industrial policy implementation and focusing on the criteria of the East Asian Developmental State Model such as promotion of selected sectors, usage of foreign investment and trade policy, specific Chinese institutional innovations have to be highlighted. Fiscal federalism and collective ownership at the local level have particularly shaped industrial policy-making and have influenced the country's economic transformation since the early reform years.

### 3.3.2 Institutional reforms – drivers of and obstacles to economic growth

As the previous analysis indicates, in the 1980s, the relative scope of market institutions in coordinating the economy expanded, and the property rights structure changed. An incremental shift from a redistributive to a regulatory state happened gradually. These changes are key factors explaining the rapid growth of hybrid governance structures and private enterprises. These structural changes in combination with local bureaucrats' fiscal incentives resulted in economic performance improvements and subsequently economic growth.⁴⁷²

#### 3.3.2.1 Fiscal federalism

Qian and Roland (1998) contend that two mechanisms may particularly constrain predatory political interference in the economy.⁴⁷³ First, under the assumption of factor mobility, fiscal decentralization can prompt more efficient provisions of local public goods if individuals can freely move across localities.⁴⁷⁴ Competition between localities thus increases opportunity costs of bailouts and any activities leading to inferior enterprise performance. Second, in a federal system, local governments

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⁴⁷¹ Refer to Nee and Opper (2007), p. 95.
⁴⁷² For further information refer to Nee (1989) and Nee and Su (1990).
⁴⁷³ For further information refer to Qian and Roland (1998).
⁴⁷⁴ Tiebout argues that in a system with fiscal decentralization and interjurisdictional competition, citizens can "vote with their feet" by moving to the locality that provides their optimal bundle of public goods and taxes. For further information refer to Tiebout (1956) and Bardhan (2002).
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compete in building a business environment favorable to private capital. Only local
governments that manage to provide a hospitable business environment will attract
the resources needed to enhance economic growth. This may harden budget
constraints of jurisdictions and provide incentives for efficiency-oriented local
activities. In a federalist system, interjurisdictional competition may consequently
constrain discretionary authority, predatory behavior, and rent-seeking.475

Fiscal decentralization may, however, also cause allocative inefficiency. According to
Riker (1964), the central design problem of federalism is how to create institutions
that grant the central government enough authority to provide central goods and
police subunits, but not so much that it usurps all public authority.476 The two
dilemmas are difficult to solve because institutional mechanisms designed to mitigate
one might exacerbate the other. To control subnational governments, the federal
government must have the power to punish them. This power, however, allows a
non-benevolent federal government to abuse states. Sustaining federalism therefore
requires a careful balance between the two dilemmas. The central government must
have sufficient power to prevent states from free-riding; yet not be so powerful as to
be able to overawe them.477

In China, the most important of the fiscal reforms was the tax responsibility system.
By the mid-1980s, provinces, municipalities, prefectures, counties and townships
were subject to a bottom-up revenue-sharing system. The central state and each of
its provinces signed fiscal contracts to formalize revenue sharing. In the same
manner, each province and its prefectures, each prefecture and its counties, and
each county and its townships signed respective fiscal contracts.478 Only certain
taxes such as taxes on state and collective industries were subject to share
contracts, and collected by localities, as they constituted the core of the locality's
"within-budget revenues". The other major items that made up the within-budget
revenues included agricultural tax and profits from state-run enterprises within the
locality. Most of the other revenues that a locality collected were considered as
"extrabudgetary revenues" which were not subject to revenue sharing.479 As Figure 9
shows, the extrabudgetary revenue of local governments increased from RMB 3.1

476 For an elaboration on his general theory of federalism refer to Riker (1964).
477 De Figueiredo and Weingast argue that the center and the states must have incentives to fulfill
their obligations within the limits of federal bargains. For further elaboration on self-enforcing
federalism refer to de Figueiredo and Weingast (2005).
478 Not all areas have instituted the tax responsibility system to the township. Some places used an
overall ratio, such as 70:30, where the locality kept 70 percent and 30 percent was sent to the
next higher level. In other cases the locality payed a set quota to the next higher level, but once
that quota was met, the locality retained all or at least the bulk of the remaining tax revenues.
479 In addition, there were some taxes designated as "central taxes". These were not subject to
revenue sharing. Central taxes were the sole property of the central state. Localities collected but
received nothing from central taxes. Refer to Oi (1992), p. 104.
Due to the tax responsibility system, localities became independent fiscal entities that had both responsibility for local expenditures and the unprecedented right to use the revenue they retained.\textsuperscript{480} As tax revenue is positively correlated with firm performance, local bureaucrats started to support the growth and profitability of their locality's enterprises.\textsuperscript{481} Fiscal decentralization gave local governments the incentive to choose the policy that appeared to be the most successful according to local characteristics.\textsuperscript{482} In order to attract private investors and entrepreneurs, localities offered indirect incentives that did not interfere with the market mechanism. They provided enterprises within their locality well developed infrastructure and services, and the reduction of county-level tax and local fees.\textsuperscript{483} Additionally, local governments attempted to have efficient and timely bureaucratic procedures in order to achieve and enhance local competitiveness. In this way, local authorities attracted inward investment from abroad and promoted the sale of their localities' goods in international markets.\textsuperscript{484}

\textsuperscript{480} Ibidem, p. 103.

\textsuperscript{481} Previously, the central government took away all the locally generated revenue. In consequence, the local government did not have any incentive to support productive local businesses because it could not benefit from their efforts. Conversely, if local governments' expenditures are closely linked to the revenue they generate, the local governments will more likely support productive local businesses as they benefit directly from their efforts. Refer to Qian (2003), pp. 27-30 and Nee and Opper (2007), p. 101. For a useful summary of the evolution of fiscal policies and variations in the formal system, refer to Oksenberg and Tong (1991), Tong (1989) and Wong (1991, 1992).

\textsuperscript{482} Refer to Thun (2006), pp. 16-17.

\textsuperscript{483} Refer to Nee et al. (2005), p. 31 and Edin (2000), pp. 105-106.

\textsuperscript{484} Refer to Nolan (1995b), p. 178.
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On January 1, 1994, the central government introduced major tax and fiscal reforms. The reform included a clear distinction between national and local taxes, and established a national tax bureau and local tax bureaus, each responsible for its own tax collection. The reform also set up fixed rules between the national government and local governments. It included the introduction of an indirect value-added tax which has to be shared by the national and local government at a fixed ratio of 75:25 in order to assure adequate revenues for the central government. With the adoption of the new reform, local governments can hardly extract tax revenues at the expense of the central government (refer to Figure 10).

Figure 10 shows that while in 1993, local government revenue was 78 percent of total government revenue, it decreased to 43 percent in 1994 and remained stable since then. Also the extrabudgetary revenue of local governments decreased to RMB 11.6 billion in 1997 (compared with RMB 14 billion in 1994). Due to decreasing extrabudgetary revenues and increasing financial responsibilities, local governments have had incentives to promote economic growth and local revenue by facilitating market-oriented economic activities.

Figure 10: Revenue ratio of central and local governments, 1978-2006.

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<th>Year</th>
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With the tax and fiscal reforms, the central government aimed to establish a system that was more aligned to international best practices. Refer to Qian (2003), p. 40.

Previously, China did not have a national tax bureau, and there was no such a need because all taxes were collected by local governments and shared with the central government. Refer to Qian (2003), pp. 40-41.


Altogether, fiscal federalism has constituted a key institutional innovation. Fiscal federalism has affected the pervasiveness of soft budget constraints. While Walder (1995) assumes that fiscal federalism has hardened local governments’ budget constraints, Nee et al. (2007) contend that fiscal federalism creates incentives for interjurisdictional competition that will eventually bring about a hardening of budget constraints at the firm level.\footnote{According to Nee et al., governments themselves have by definition soft budget constraints as there is always a bailout guarantee through higher level governments, extra-budgetary fees, tax increases and public debt. For further information refer to Nee et al. (2007), p. 41ff.} Most of all, revenue-sharing arrangements stimulated enthusiasm on the part of local governments to support and pursue market-oriented economic development. Local governments' financial independence has stimulated revenue-generating reforms.\footnote{Refer to Nee and Opper (2007), p. 101 and Nee (1992), p. 5.} It is moreover important not to obscure the enduring influence of the central government over local policy. Provincial autonomy is at the bequest of the central government rather than a legal right as in a federal structure.\footnote{Refer to Thun (2006), p. 35.}

3.3.2.2 Collective ownership

According to the asserters of New Institutional Economics, the main condition for an efficient market economy is not only “getting prices right”, but also “getting property rights right” and “getting institutions right”.\footnote{For further information refer to Coase (1992), North (1997) and Williamson (1994).} As North (1997) pointed out, political institutions can play an important role in reducing transaction costs by improving the security of property rights and the enforcement of contracts.\footnote{Refer to North (1997), p. 150 and Coase (1992).} The transition economy is featured by weak market structures, poorly specified property rights,\footnote{For further information refer to Demsetz (1967).} and institutional uncertainty. In a partially reformed system, hybrid government forms savor a transaction cost advantage for collective firms, because (local) governments may assist collective enterprises to secure reliable access to factor resources they need, serve as intermediaries in critical negotiations with banks for access to credit, fix local prices on key commodities, and approve and coordinate the investment of extrabudgetary funds. A continuing shift from redistribution to markets and secure property rights, however, induces change in the comparative costs of governance.\footnote{Refer to Nee (1992), p. 4.} Market institutions become more dominant in the transition economy, and the institutional foundation of a market economy is incrementally constructed. This results in a relative increase in the cost of hybrid governance structures, and a decrease of transaction cost advantages for collective firms. Private companies are the beneficiaries of transition to market structures.\footnote{Refer to North (1990) and Williamson (1991).}
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In the early reform period, the central government encouraged the foundation of rural township and village enterprises (TVEs), which are the successors of collectively-owned industrial enterprises in people's communes. TVEs are best characterized as community enterprises with a governance structure in which the community government has control. The central government envisioned that these collective enterprises would facilitate structural employment changes and absorb the rapidly increasing supply of workers.

TVEs rapidly developed into an efficient and indispensable part of the Chinese economy due to the following reasons. First, the central government issued regulations that were less hostile to TVEs than to private enterprises. Already in 1978, the central government declared that commune brigade enterprises were to strive for greater development, and encouraged provincial, city and county governments to grant these particular enterprises tax breaks. In comparison, the central government did not allow private enterprises to operate until 1981, and limited their hiring of employees to no more than eight per enterprise.

Second, TVEs' success can be traced to the incentive structure they faced. The social-economic development of rural townships and villages depended heavily on the economic success of local industrial enterprises, as up to 95 percent of local revenues stemmed from TVEs. Increasing revenues accrued to the local governments directly. Bureaucrats' interest was no longer solely in pleasing a bureaucratic superior, but in enhancing the prosperous growth of TVEs. Local cadres hence had a strong motivation to follow economic principals. The rise of TVEs was related closely to the underdevelopment of input markets. Local governments contributed critical inputs to the growth of TVEs such as land and credit where factor markets were underdeveloped and prices of inputs were tightly controlled. Furthermore, as TVEs had less or no access to soft credits in comparison to SOEs, they worked relatively autonomously within a basically competitive environment and under hard budget constraints. Through the introduction of payment schemes and management responsibility contracts, TVE managers were also presented with personal incentives to promote the growth of TVEs.

The incentive structures constituted coalitions between local bureaucrats and entrepreneurs which Oi (1992) calls "local corporatism." While bureaucrats contributed bureaucratic connections, enterprise managers provided business ideas and managerial skills. Thus, both parties had become indispensable for the success of TVEs.

497 Refer to Opper (2001), p. 207.
498 Refer to Che and Qian (1998), pp.10-11.
499 This restriction was removed in 1984. Refer to Che and Qian (1998), p. 11.
500 Refer to Opper (2001), p. 207.
502 For further information on why TVEs face harder budget constraints refer to Che and Qian (1998), p. 17 ff.
503 For further information refer to Oi (1992).
of new businesses in the half-reformed Chinese economy.\textsuperscript{504} They were de facto shareholders rather than short-term bribe-takers. Bureaucrats became pro-reform in principle, having incentives to lobby higher-level agencies for reduced regulations on behalf of local entrepreneurs.\textsuperscript{505}

The development of China's TVEs was yet not uniform across regions. Jin and Qian (1998) find empirical evidence that the development of TVEs is negatively correlated with the locality's market development.\textsuperscript{506} In the early reform years, TVEs were hence successful in localities with weak market structures, poorly specified property rights and institutional uncertainty. Local corporatism may reduce transaction costs when the institutional arrangements underpinning markets are weak and redistributive institutions still subordinate to market forces. As marketization has proceeded in the reform period, localities with high growth rates have been the ones that have economized on transaction costs by reducing bureaucratic interference in economic decisions of the enterprise. In the absence of contractual law hardened by routine compliance and enforcement, marketized enterprises need political allies who provide the backing and resources needed by entrepreneurs to compete effectively.\textsuperscript{507}

TVEs were being privatized throughout the 1990s, as recessionary conditions in the domestic economy drove many collective enterprises to orient production even more to the world economy.\textsuperscript{508} In addition, in the late 1990s, private ownership of enterprises gained legitimacy. The Constitutional Amendment of 1999 regarded the private sector as "an important component" of the economy.\textsuperscript{509} Consequently, the benefit of TVEs in terms of more secure property rights decreased, and local governments transformed more and more TVEs into individual shareholdings.\textsuperscript{510} As

\textsuperscript{504} Although most studies have focused on those new businesses established by local governments, in fact, many central-government agencies have also established their own business ventures. Refer to Li (1998), p. 395.

\textsuperscript{505} One negative effect of having bureaucrats sponsor businesses is that it increases their appetite for bureaucratic power. In the Chinese context, the economic and bureaucratic competition among regions seems to have kept this tendency in check. Refer to Li (1998), p. 395.

\textsuperscript{506} For further information refer to Jin and Qian (1998).

\textsuperscript{507} Refer to Nee (1992), p. 4 and p. 23.

\textsuperscript{508} Refer to Qian (2003), p. 40 and Nee (1992), p. 15.

\textsuperscript{509} However, the term privatization is avoided by the Chinese leadership, and SOEs are still a major pillar of the Chinese economy. In 2005, the Ministry of Commerce promulgated that the Chinese economic reform is carried out "from exclusively public ownership to the pattern with the public sector remaining dominant and diverse sectors of the economy developing side by side": Refer to National People's Congress, "Constitution of the People's Republic of China", Amendment Three, Approved on 15.03.1999 by the NPC at its 2\textsuperscript{nd} Session and Ministry of Commerce (2005), "Chinese Government's Administrative Mode Transformation", Internet Edition, reviewed 23.03.2006. For further information refer to Chinese Government (2005), "Economic System", Internet Edition, reviewed 28.03.2006.

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the economy became increasingly marketized and both product and labor market competition intensified in the 1990s, the profitability of many TVEs deteriorated, while private enterprises started to boom in the same location. In this regard, while the share of collective firms in national industrial output had increased from 22 to 39 percent between 1978 and 1996, it decreased from 38 percent to 3 percent between 1997 and 2006. While other enterprises such as private enterprises, FFEs and JVs were non-existent at the beginning of reform, they accounted for almost 87 percent of gross industrial output value in 2006 (refer to Figure 11). However, particularly in inland regions, local governments still frequently oppose market reform, harass private businesses and practice protectionist measures which result in economic autarky.

To sum up, while the East Asian developmental states were committed to private property, growth at the local level in China was driven by collectively owned TVEs in the early reform period. State officials at the township level became entrepreneurs promoting the growth of their localities' TVEs, and securing a sound business environment within their jurisdictions.

Figure 11: Share of gross industrial output value by type of firm ownership, 1978-2006.


511 The potential social gains from privatization do not automatically lead to privatization unless the local governments have the incentives to do so. The significant benefits of TVE ownership to local governments are the tax revenues they extract from TVEs. After privatization, the township and village governments were able to keep all the privatization revenue. They were also able to continue to levy fees on local private firms, usually 1.5 percent of total sales. This "local tax" did not have to be shared with the higher level government. Township and village governments usually payed a fixed amount instead. Therefore, local governments supported, rather than opposed, privatization out of their own interests. Refer to Qian (2003), p. 40.

512 Refer to Nee (1992), p. 16.

513 The category "Others" includes Cooperative Enterprises, Joint Ownership Enterprises, Limited Liability Corporations, Share Holding Enterprises, Enterprises with Foreign Funds From Hong Kong, Macao and Taiwan, and FFEs.
3.3.2.3 Corruption

Klitgaard (1988) stated that three structural dimensions of a government institution are most critical in creating opportunities for corruption: the monopoly power of officials; the degree of discretion that officials are permitted to exercise; and the lack of accountability and the transparency in an institution.\(^{514}\) China's decentralization process has triggered an increase in all three aspects. While the degree of discretion of local officials has increased to the extent of forming monopolized powers, accountability and transparency of exercising these powers have not been established.

Decentralization transferred power from the central government to the localities. Under economic and political pressures, officials at subnational levels no longer behave simply as state agents within the official budgetary boundaries, but assume the role of local economic principals. Local authorities enjoy extensive administrative and economic discretion in carrying out government policies. They control business licensing, resource distribution, administrative budgeting and local taxation, as well as trade and investment in their jurisdiction. In consequence, local officials have more opportunities to use and abuse their power. The surge of local bureaucrats' self-interests has transformed local officials from mere state agents into local economic principals with entrepreneurial and sometimes predatory behavior. Such a structure of governance provides enough room for local officials to render favorable treatment to special interests in exchange for personal gain.\(^{515}\)

Based on statistics supplied by the CCP's Central Discipline and Inspection Commission, on average 130,000 - 190,000 party members have been punished and disciplined each year for various types of misdeeds and crimes since the early 1980s. The Central Discipline and Inspection Commission's data show that 16 percent of the CCP members disciplined and punished in 2006 engaged in economically corrupt activities. From October 1997 to September 2002, 28,996 cadres at the county and division levels as well as 2,422 officials at the department and bureau levels were prosecuted for corruption.\(^{516}\) Land-related corruption is particularly widespread.\(^{517}\) One case of a high-ranking official was Tian Fengshan, China's former minister of land and resources, who was sentenced on charges of job-related crimes to life imprisonment in late December 2005. His sentence makes it the mainland's highest level corruption conviction between 2001 and 2005. Tian was charged with accepting more than RMB 4.4 million in bribes between 1995 and 2003, when he served first as the governor of Heilongjiang province and then as a cabinet

\(^{514}\) For further information refer to Klitgaard (1988).

\(^{515}\) Refer to Gong (2006), p. 89.


\(^{517}\) For a detailed elaboration on land-related corruption refer to Gong (2006), p. 89.
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Altogether, Pei (2007) estimates that illicit activities such as bribery, kickbacks, theft, and misspending of public funds cost at least 3 percent of GDP. Overall, state capacity and autonomy which can be translated into coherent policy implementation has often been disrupted by the widespread corruption of civil servants at all levels. Corruption arises from the indistinct separation of rights and powers between the state, regulatory institutions and economic agents. By exploiting their political power of controlling licenses, franchises and cheap materials which had state-controlled prices, government officials favored their own companies, or took bribes from other entrepreneurs who were then granted privileges such as cheap resources.

Even after almost 30 years of reform, the CCP remains severely imbued with corruption that critically impedes its efforts to implement a consistent and effective industrial policy. As long as the close connection between the state, regulatory institutions and economic agents benefits its members, regulators’ incentives to detect corruption are scant and state-led anti-corruption campaigns will be a short-term priority of a rational government.

3.3.2.4 Local protectionism

Not only were local officials’ salaries affected by local growth, but also their individual career paths. As local officials’ performance is assessed less by their compliance with the central government and more by local economic output, revenue growth and improvement in living standards, local governments have become eager to improve their jurisdiction’s financial well-being. Consequently, many localities have adopted protectionist measures such as trade barriers against one another. This resulted in the so-called “dukedom economies” phenomenon. Provinces, autonomous regions and municipalities (Beijing, Tianjin and Shanghai) were “big dukedoms”, prefectures and cities were “middle dukedoms” and counties were “small dukedoms”. China’s economy had become a “ducal economy” which intensified regional disparity.

Although Article 7 of the 1993 “Countering Unfair Competition Law of the People’s Republic of China” prohibits local governments from utilizing administrative means to

520 Refer to Xia (2000), p. 95.
521 Refer to Opper (2005a), p. 201 and p. 213.
522 Refer to Gong (2006), p. 93.
524 Furthermore, Zheng describes the consequences of decentralization as “a centralized empire breaking up into many small kingdoms”. Refer to Zheng (1997), p. 30 and p. 129.
erect trade barriers, local governments use various measures to protect and support companies within their jurisdiction. Under the name of assistance to the local economy, local governments seek to cover trade barriers. Some regions set up barriers to limit the entry of similar commodities from outside through administrative economic and even legislative means, and thus protect local industry and stimulate market demand. These include approved import bans, discriminatory product and health certification standards, tariffs and dumping charges, the confiscations of profits earned from marketing foreign-provincial goods, as well as subsidies to local commercial units for buying locally produced products aimed at curtailing competition with home-province products and sustaining employment and the survival of uncompetitive local enterprises. Other regions fight “price wars” with other localities over similar products, and encourage local residents to buy local products only. Protectionism has occurred most often in the markets of high profit-margin manufacturing goods (such as autos, tobacco products, and alcohol) and raw materials in short supply (such as cotton, silkworm cocoons, tobacco and aluminum). In 2001, the World Bank reported that a bottle of Beijing’s Yanjing beer that costs the equivalent of 18 cents in the capital, costs USD 1 in Sichuan province because of provincial fees and taxes.

The imperfect policing of the common market allows local governments to insulate themselves from competition by erecting trade barriers. This has resulted in small production units with inefficient scales of production. Similar conclusions can be drawn regarding sectoral and geographic specialization and rationalization in the industrial sector. The consequence is that regions do not specialize according to their comparative advantages, but push strongly into similar industries and product groups. This results in a convergence of industrial production across different regions. A “repetitive and duplicative” economic structure has emerged. The local authorities’ attempts to first capture and then protect these rents has led to the creation of further distortions.

China thus appears as a collection of separate regional economies protected by barriers rather than a single market. Domestic trade protection pursues a dual objective of socio-economic stability preservation and fiscal revenue maximization. If economic reforms favor the reduction of internal barriers through the reduction of the public sector and the search for productivity gains, their disrupting effects put in movement destabilizing forces that impede domestic trade integration. The

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527 For detailed information on the “silkworm cocoon war” refer to Young (2000), pp. 1092-1093.


531 The disrupting effects may be layoffs, losses of inefficient SOEs, declining profits etc.
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Chinese central government faces challenges to comply with WTO rules and promote domestic market integration. It has to strike a balance between economic reforms and inherent adjustment costs and to limit local governments' economic interventionism.\(^{532}\)

In conclusion, while the incentive structure transformed local bureaucrats from mere state agents into local economic principals promoting market-driven growth, predatory behavior in the form of corruption and protectionism also increased.\(^{533}\) Bureaucrats' rent-seeking activities bear internal tensions and weaknesses, and diminish the central government's overall coherence. Thus, the emergence of a strong, bureaucratic state could not be established. In this respect, the Chinese bureaucracy lacks the intense commitment to national development which its neighbors in East Asia had.\(^{534}\) Containing rent-seeking is a key issue for the success of state and economic transformation in China.\(^{535}\) To control rent-seeking behavior, a government needs to reduce its regulatory interventions to the minimum necessary to achieve important national goals. Where regulatory and tax interventions are necessary, discretionary authority on the part of government officials must be kept to a minimum. An activist industrial policy (including a variety of licenses, government control over critical imports, and government-directed loans at subsidized rates to enforce government industrial policy initiatives) is the antithesis of an effort to reduce rent-seeking behavior.\(^{536}\) Altogether, although localism leads often to protectionism and "solos" of localities, local governments have actively enhanced the economic growth and transformation of their jurisdictions and thus of China.

### 3.3.3 Promotion of selected sectors, companies and projects

In the East Asian developmental states, only selected "upstream" industries and enterprises were targeted for preferential treatment such as protection, allocation of scarce production inputs and bureaucratic support. Similar to the East Asian developmental states, China has relied on different types of industrial policy tools to promote selected industries and enterprises during its reform: central government planning, empowering key industries with direct financing, preferential interest and tax rates, direct subsidies and a favorable supply of energy, raw materials, transportation facilities and funds for target industries, infant industry (trade) protection as well as pricing policies (state price controls over power and water supply) and administrative means (issuing direct orders to close down or merge

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\(^{532}\) Refer to Poncet (2005), p. 426.

\(^{533}\) Refer to Gong (2006), p. 98.


\(^{535}\) Refer to Zhu (2003), p. 158.

\(^{536}\) Refer to Perkins (2001), p. 8.
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SOEs). The relative importance of these instruments changed over the years as the whole economy moved towards a more open and market-oriented system. Some of the policy instruments had to be abandoned gradually. According to the terms of the GATT and WTO agreements, China decided to dismantle various protectionist mechanisms favoring domestic industries and products over foreign. Even after China’s WTO accession, however, central and local governments have applied most of the industrial policy tools the East Asian developmental states used to support domestic companies and enhance the country’s economic transformation. According to WTO law, member countries can continue to support R&D projects. Direct financial subsidies for R&D expenditure on specified science and technology (S&T) projects have thus become an essential instrument of industrial policy.

3.3.3.1 Industrial policy targeting S&T

As promulgated in the five-year plans, the central government attempts to establish and promote companies and technology-intensive products that are internationally competitive. The central government has directed its focus towards S&T since the 1980s, when it recognized the mutual interdependency of economic, scientific and technological development. Since then, it has reiterated that S&T is the centerpiece of China’s economic modernization strategy. The central government’s “Report on the Outline of the Tenth Five-Year Plan for National Economic and Social Development (2001-2005)” focused on the expansion of technology and high-tech industries and the manufacturing of information technology products. Thus, China was to “catch up with its neighbors” and accelerate its development “under the guidance of industrial policies”.

China’s national technology policy comprises a set of mutually complementary S&T programs with the strategic aim of improving China’s competitiveness in S&T. Since 1987, S&T programs have received direct central government finance for R&D in priority sectors (such as space, laser and computing). They focus on applied

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539 Refer to Weiss (2003), p. 245.


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research and medium-term results. In the early reform period, central leaders realized that China's severe limits in R&D funding made it necessary to concentrate them on selected areas. Based on arguments of market failure and economies of scale, strengthened by a high level of uncertainty and the length of R&D cycles, central leaders assumed that this goal could be achieved better via planning than through market-means. They reaffirmed the necessity for state support of key programs which had to be provided at the central level, as local and provincial governments pushed too strongly for short-term profits.543

The individual programs follow a set of distinct core objectives and support close science-business interface to secure innovation activities with good prospects for productivity growth. Thus, the central government intends to maximize the commercialization of R&D output. The planning institutions gradually adjust national priorities and targeted research goals in response to the changing overall state development goals. The State Science and Technology Commission is the major institution in charge of formulating national S&T plans. In this regard, China's technology policy essentially relies on central planning and resource allocation, which is in line with its socialist planning tradition.544

The "Key Technologies Research and Development Program", the "863 (National High-tech Research and Development) Program" and the "973 Program" as well as the "Spark" and the "Torch" programs form the main body of state programs for S&T. First started in 1982, the "Key Technologies R&D Program" is a critical component of the five-year plans for the national economic and social development. Its strategic objectives are to promote the modernization of traditional industries and the optimization of industrial structures of national priority sectors. Its major aims are to carry out study and research on key S&T issues based on the principle of S&T pioneering.545 In this regard, priority is on the research-business interface and the support of joint projects between universities, research institutes and enterprises. The core principle of the program is to concentrate efforts and the nation's resources in personnel, as well as establish the firm as the major venue of innovative activities. Therefore, in line with the program, the central government provides advanced applicable new technologies, materials, techniques and equipment in order to speed up the national modernization process in priority industries.546

Approved by the State Council in 1986, the "Spark Program" is the nation's first guided development program designed to develop the rural economy through S&T, and thus spur the development of TVEs.547 One of its long-term development objectives is to move the rural economy in the direction of relying on scientific and

546 Refer to Opper (2005b), p. 44.
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A new model of economic development and on the improved labor performance of TVEs. Its priority is to develop regional pillar industries in rural areas. Projects listed in the program are entitled to favorable bank loans and preferential taxation policies.

The "863 Program" was created in 1987. Its focus is on seven key R&D-intensive fields — automation, biotechnology, energy, information technology, lasers, new materials and space technology — and intends to accelerate development and maximize the results obtained from pooling together all national resources. The 863 Plan is a large and complex project which brings together specialists in many fields on cross-disciplinary projects such as computer integrated manufacturing systems in order to reduce the technology gap between China and foreign countries. The financial support required for the program comes mainly from special government appropriations. Although the program has been politically relevant, scientists have maintained most of the decision-making process governed by technical criteria and also make most financial decisions. Politicians granted them a large share of effective autonomy, "insulation" and real power, in a manner similar to that of planners in the developmental states of East Asia.

The "Torch Program" grew out of a 1988 State Council Decision to accelerate the development of high tech manufacturing technology. The Torch program directs the development of high and new technology industries, focusing mainly on the electronics sector. The program promotes commercialization through venture investment by universities, the transfer of research results from universities and the Chinese Academy of Sciences, and the dual employment of professors and researchers. This has led to many ventures launched from universities. The Torch program aims to create a beneficial innovation environment and promote the industrialization and commercialization of high and new technology products. The creation of High and Emerging Technology Industry Development Zones - with the aim of applying R&D to production and commercialization — also represents a major thrust of the Torch Program. New product projects listed in the program are entitled to priority in receiving bank loans and preferential taxation policies over a specified period of time. With the support of the Torch program, some of the former small firms have grown into large industrial groups, such as Lenovo Computers. Since 1996, Lenovo has become the largest Chinese IT company and occupied first place in China's PC sales market. With its 2005 acquisition of IBM's PC business, Lenovo has become the world's third largest PC firm in terms of sales.

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The Chinese central leaders were well aware of the risk of misallocation of state-guided R&D acquisitions due to the risk of selection and collusion. In order to reduce misallocation, the central government promulgated the “Decision on the Reform of the Science and Technology Management System” in 1985. The decision called for decentralization and a reduction of government competencies in the choice and selection of research properties. It encouraged breaking the close links between government and R&D facilities and emphasized the necessity of intensive competition in the field of R&D policy. The procedure of planned allocation of S&T funds was replaced by public competitions. Furthermore, the potential for the commercialization of S&T output emerged as a major criterion for funding decisions. Overall, market mechanisms were to be substituted for administrative ones in the S&T system.

The 1995 “Decision on Accelerating S&T Development” accepted that the development of applied technologies should be left to the market; however, at the same time, called for the strengthening of government leadership in basic technology research. According to the decision, China has to rely on S&T to solve problems such as inefficient industrial structure, technological backwardness, and low labor productivity. With the decision, the central government granted scientific research institutes full autonomy in choosing R&D projects, and encouraged them to form JVs with domestic and foreign partners. Moreover, the decision pointed out that the government would encourage non-state companies as it acknowledged their importance in the high-tech field. The state’s leadership role was undisputed throughout the reform period and reconfirmed in the 2006 “Report on the Work of the Government” which promulgated that the state “will improve the mechanisms for encouraging independent innovation and adopt fiscal, tax, banking and government procurement policies that support enterprise innovation”.

Altogether, during the reform period, the central government has emphasized increasingly the role of technology in promoting economic development, and shifted its goals and priorities in a more ambitious direction. The national S&T development programs are intended to guide the S&T sector by providing incentives for innovation and entrepreneurship. The central leaders have focused on the establishment of the foundations of a national S&T system capable of realizing scientific and technological development.

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554 The risk of resource misallocation may be even more pronounced in non-democratic regimes that are characterized to a larger extent by objectives of prestige with a strong signaling effect to the international community.
555 Refer to Opper (2005b), p. 44.
556 Ibidem.
558 Refer to Naughton and Segal (2001), p. 11.
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A new model of economic development could be seen in technological breakthroughs in frontier, high-technology fields. The new strategy is founded on a more mature understanding of the S&T apparatus as a means to improve the overall national system of innovation. The central government emphasized the professionalization of research activities and the enhancement of the economic and social role of innovators. Resources are to be concentrated on a limited set of targets under the highest policy direction, and horizontal international research cooperation with public and private foreign partners is actively promoted.\textsuperscript{561}

3.3.3.2 State effort to increase China's R&D capabilities

Along with S&T programs, the state has extended its expenditure on R&D and promoted science parks and R&D projects. These measures have increasingly become an instrument of industrial policy.

In the fields of top-level technology and research, China's S&T policy accords priority to centrally coordinated, state-sponsored, targeted R&D programs.\textsuperscript{562} The 1995 "Decision on Accelerating S&T Development" set a quantitative target: gross expenditure on R&D was set to reach 1.5 percent of GDP by the year 2000.\textsuperscript{563} This policy line was confirmed at the 15th Party Congress in 1997 and at the National People's Congress meetings in 1999. Although this goal could not be reached, between 1999 and 2006, annual R&D expenditures increased from 0.8 percent of GDP to 1.4 percent of GDP. Expenditure for Innovation Funds, as well as Science and Technology Promotion Funds more than doubled between 1999 (RMB 76.6 billion) and 2006 (RMB 174.5 billion) (refer to Table 5).\textsuperscript{564} The majority of funding for S&T activities accrues in the business sector (as of 2006, funds raised by enterprises: 66 percent; government funds: 22 percent; loans from finance institutions: 12 percent).\textsuperscript{565} In an international context, China ranked six after the USA, Japan, Germany, the UK and France with regard to total expenditure on R&D.

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\textsuperscript{561} Refer to Suttmeier and Cao (1999), "China faces the new industrial revolution", Internet Edition, reviewed 05.01.2007.

\textsuperscript{562} Despite the increase of enterprise-financed R&D along China's move towards a market economy (1999: 51 percent, 2006: 66 percent), in 2006, 22 percent of the funding for S&T activities was from the state. Calculation based on data from China Statistical Yearbook (2004, 2007).


\textsuperscript{564} In 2006, government expenditure on Science and Technology Promotion Funds was though less than for supporting rural production (Science and Technology Promotion Funds: RMB 174.5 billion, expenditure for supporting rural production: RMB 216.1 billion). Refer to China Statistical Yearbook (2007).

\textsuperscript{565} Refer to China Statistical Yearbook (2007).
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in 2005. The proportion of scientists and engineers in national S&T population also increased between 1999 and 2006 from 55 percent to 68 percent (refer to Table 5).

Table 5: National S&T financing, personnel and output indicators, 1999-2006.

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross domestic expenditure on R&amp;D (RMB billion)</td>
<td>67.9</td>
<td>89.6</td>
<td>104.3</td>
<td>128.8</td>
<td>154.0</td>
<td>196.6</td>
<td>245.0</td>
<td>300.3</td>
</tr>
<tr>
<td>Gross domestic expenditure on R&amp;D as percentage of GDP</td>
<td>0.8</td>
<td>0.9</td>
<td>1.0</td>
<td>1.1</td>
<td>1.1</td>
<td>1.2</td>
<td>1.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Innovation funds and science and technology promotion funds (RMB billion)</td>
<td>76.6</td>
<td>86.5</td>
<td>99.2</td>
<td>96.8</td>
<td>109.3</td>
<td>124.4</td>
<td>149.5</td>
<td>174.5</td>
</tr>
<tr>
<td>Personnel engaged in S&amp;T activities (million persons)</td>
<td>2.9</td>
<td>3.2</td>
<td>3.1</td>
<td>3.2</td>
<td>3.3</td>
<td>3.5</td>
<td>3.8</td>
<td>4.1</td>
</tr>
<tr>
<td>Scientists and engineers (million persons)</td>
<td>1.6</td>
<td>2.0</td>
<td>2.1</td>
<td>2.2</td>
<td>2.3</td>
<td>2.3</td>
<td>2.6</td>
<td>2.8</td>
</tr>
<tr>
<td>Number of patent applications</td>
<td>134,239</td>
<td>170,682</td>
<td>203,573</td>
<td>252,631</td>
<td>308,487</td>
<td>353,807</td>
<td>476,264</td>
<td>573,178</td>
</tr>
<tr>
<td>Number of patent applications certified</td>
<td>100,156</td>
<td>105,345</td>
<td>114,251</td>
<td>132,399</td>
<td>182,226</td>
<td>190,236</td>
<td>214,003</td>
<td>268,002</td>
</tr>
</tbody>
</table>


In 2006, the NDRC stated to “further strengthen guidance through programs and policy” in order to support the independent innovation capability of domestic companies and enforce the S&T progress. The central government grants incentives such as the provision of tax reductions in order to stimulate R&D activities of enterprises. Already in 2004, the State Administration of Taxation promulgated that enterprises with foreign investment are granted tax reliefs for technology-intensive or knowledge-intensive projects that include products defined in the “Catalogue of High and New Technological Products” (promulgated in 2000). A condition of the tax relief is that the products must exceed 50 percent of the total income from yearly sales.

National S&T output indicators show that between 1999 and 2006, the number of patent applications tripled and those actually certified doubled (in 1999, 100,156

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566 Refer to IMD World Competitiveness Yearbook (2007), “Total Expenditure on R&D”, Table 4.3.01, p. 429.
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patent applications were certified; the number increased to 268,002 certified patent applications until 2006) (refer to Table 5). Direct causal links between technology policies and innovation performance are hard to establish, however. It is not possible to infer from the numbers whether the increase of patent applications is the result of increased inputs or improved performance.

As Chinese planners have recognized the limits of targeted industrial policies, S&T reforms of the 1980s and 1990s aimed to introduce markets and promote entrepreneurialism.\textsuperscript{570} With the aim of modernizing S&T, China combined science parks and national R&D projects to nurture the rise of high-tech firms. The Beijing municipal government established "China's Silicon Valley", the Haidian Science Park in 1988. The science park developed into a leading-edge R&D testing zone. It boasts more than 6,000 new high-tech enterprises with a combined staff of over 100,000. 70 enterprises whose sales exceed RMB 100 million and eight whose sales exceed RMB 1 billion are located in the Haidian Science Park. The number of R&D projects undertaken between 1992 and 1996 totaled 11,152.\textsuperscript{571}

In the science parks, the government allocated resources to strategic sectors by adopting certain institutional devices. Targeted industries were granted low-cost loans from state banks with below-market interest rates and tax breaks. In order to promote national R&D projects, the State Planning Commission announced a policy to build approximately 100 national key laboratories and "S&T enterprises" in selected fields of basic science. These enterprises were spun off by national, provincial or city governments to commercialize the knowledge of public labs. Although S&T enterprises are nominally independent, the government obliged them to meet certain requirements in exchange for granting them a special legal status. These requirements were similar to reciprocal control mechanisms: they included a percentage of technology personnel, a percentage of sales contributed by new products, a percentage of products exported, the allocation of retained earnings, etc.\textsuperscript{572} Thus, even in the high-tech phase of industrial development, the state retained its condition-based form of subsidy allocation, as in the East Asian developmental states.

Overall, the selective promotion of targeted industries has become a general feature of developmental states and one criterion of their success.\textsuperscript{573} The central government has also supported selected industrial sectors, enterprises and projects. China's centralized, planned S&T strategy, carried out through administrative, albeit flexible instruments such as long-term programs and priority projects, resembles that of other Asian developmental states. Preferential policies have become an integral part of

\textsuperscript{570} Refer to Feigenbaum (1999), p. 123.
\textsuperscript{572} Refer to Amsden and Hikino (2000), pp. 111-112.
\textsuperscript{573} Refer to Evans (1995), p. 58.
state intervention, and are designed to influence firms’ business decisions. Selectivity of industrial policy focused on “upstream industries” (such as S&T projects) and on special geographical areas (special zones). The central government introduced particular S&T programs that indicate China’s ambitions to catch-up with technologically and economically more advanced states. Central authorities granted high-tech projects special support such as tax incentives.\textsuperscript{574} Hence, selective state intervention in China resembles the policies of the developmental states.

As the above measures and indicators demonstrate, China has made impressive gains in some key scientific and technological areas. Overall, the trend line is positive. Nevertheless, when compared to world standards, China’s achievements and high-tech capabilities do not yet match those of industrialized nations, and it is likely to be some time before they do.\textsuperscript{575}

### 3.3.4 Foreign participation

According to Dunning (1993), multinational firms generally have firm-specific advantages that might be related to their large endowments of intangible assets, such as superior technologies, patents, trade secrets, brand names, management techniques, and marketing strategies.\textsuperscript{576} Once a multinational enterprise has set up a subsidiary, some of these advantages may not be totally internalized but spill over to domestic firms. FDI can therefore advance economic growth in the host economy through global technology transfers (including product, process, and distribution technology, as well as management and marketing skills). The means through which technology is transferred between MNCs and the host countries include explicit transfers, such as contracts, and implicit transfers, including “learning by doing” and the transmission of skills from foreign skilled labor to domestic employees working in the same factory.\textsuperscript{577} FDI in the form of JVs functions particularly as a vehicle by which “tacit knowledge” is transferred from the foreign to the domestic partner.\textsuperscript{578} FDI is hence thought to allow developing countries to “catch up” in the growth process by

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{575} Refer to Walsh (2003), p. 69.
\item \textsuperscript{576} For further information refer to Dunning (1993).
\item \textsuperscript{577} Saggi notes in the World Bank Research Observer that there are three potential channels of spillovers: demonstration effects (where firms adopt technologies through imitation or reverse engineering), labor migration (workers move to other firms and carry their knowledge with them), and vertical linkages (otherwise known as backward and forward linkages). The idea of vertical linkages rests on the concept that a foreign investment in one industry can indirectly produce benefits in other related industries. For example, suppliers of auto parts and components may benefit from having a new source of demand for their product if there is FDI into a manufacturer. This would be an example of a “backward” linkage. For further information refer to Saggi (2002), Blomström and Kokko (1998), p. 1 and Crespo and Fontoura (2007), p. 410. Also refer to Rodríguez-Clare (1996), Nelson and Winter (1982) and Knell and Radosevic (2000).
\item \textsuperscript{578} For further information refer to Polanyi (1967).
\end{itemize}
\end{footnotesize}
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closing the technology gap through imitation and the adoption of established
technologies. Along with the technology transfer, proponents expect that FDI will
cause integration into the world economy, backward and forward linkages to related
industries (spillovers), human capital-formation, and surges in domestic innovation.
Furthermore, FDI is considered by many to be a strong contributor to economic
growth and industrial development because it provides financing for worthy
projects.\textsuperscript{579} A World Bank study, however, notes that foreign investment does not
necessarily stimulate new economic development. The absorption of outside
technology is dependent upon the development of domestic technological capabilities
and the government’s “macroorganizational strategy”.\textsuperscript{580}

\subsection*{3.3.4.1 Substantial reliance on FDI}

FDI is an important component of China’s development strategy. The government
hopes that FDI boosts economic growth and raises domestic investment.\textsuperscript{581} From the
beginning of the reform process, the central leaders, above all Deng Xiaoping,
expressed the need to accelerate the pace of technology import as a key instrument
of reform.\textsuperscript{582} Deng was of the opinion that China’s socialist economic base was big
enough to absorb billions of foreign funds without “shaking” the “socialist economic
base”.\textsuperscript{583} In contrast to Maoist hostility to foreign capital,\textsuperscript{584} the reform government
assured foreign investors the good investment environment.\textsuperscript{585} The main purpose of
the central government in attracting foreign investment was not to supplement
domestic savings, since the savings rate was high throughout the reform period.\textsuperscript{586}
The central government envisioned that FDI would accelerate productivity growth
and the competitiveness of domestic industries through indirect spillover effects and

\textsuperscript{579} For further information refer to OECD (2002).
\textsuperscript{580} For further information refer to Saggi (2002), Gabriele (2001), Internet Edition, reviewed
01.05.2007 and Young and Lan (1997).
\textsuperscript{581} Also refer to Borensztein et. al. (1998) and Bosworth and Collins (1999).
\textsuperscript{582} Refer to Deng (1978), “Speech at the opening ceremony of the national conference on science”,
\textsuperscript{583} Refer to Deng (1984) “Building a Socialism with a Specifically Chinese Character”, Internet
\textsuperscript{584} No foreign investment was permitted from 1949 to the late 1970s. Refer to Nolan (1995b), p. 184.
\textsuperscript{585} Refer to Deng (1979), “Some Comments on Economic Work”, Internet Edition, reviewed
19.03.2006.
\textsuperscript{586} China’s national savings increased from 30 percent of Gross National Product in 1980 to around
35 percent in 1991. China’s savings ratio increased even further as it is expected to rise to 50.5
percent in 2005.
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knowledge transfers.\textsuperscript{587} It was furthermore an "important content of China's fundamental principle of opening up to the outside world".\textsuperscript{588}

FDI in China has grown rapidly since 1978, especially in the 1990s. FDI inflow to China increased from USD 0.1 billion in 1980 to USD 69.5 billion in 2006.\textsuperscript{589} In 2003, China overtook the USA as the biggest recipient of FDI. Moreover, China hosts the largest number of foreign affiliates, accounting for one third of all foreign affiliates of transnational corporations worldwide. In 2004, around 24 million workers (3 percent of total employment in China) were employed in foreign affiliates in China compared to less than 5 million in 1991.\textsuperscript{590}

A useful measure to analyze China's dependency on foreign investment is FDI in relation to the economic size of the host country. The role FDI plays in the Chinese economy can be illustrated by benchmarking China against other economies. China's inward FDI stock as a percentage of GDP has exceeded that of Taiwan, Korea and Japan since the mid-1990s. In 2000, FDI accounted for 18 percent of GDP in China, 7 percent of GDP in Korea, 5 percent of GDP in Taiwan and 1 percent of GDP in Japan. The difference between China and Taiwan in particular has yet been shrinking since 2000. In 2006, the inward FDI stock as a percentage of GDP decelerated to 11 percent in China (compared with 14 percent in Taiwan) (refer to Figure 12).\textsuperscript{591} Credit tightening measures initiated by the central government, slower profit growth (due to the central government's macro-regulation measures to cool down the economy) and modest growth in machinery and equipment imports have slowed FDI to a more sustainable pace.\textsuperscript{592}

\textsuperscript{587} In particular, the transfer of management skills and technology were promulgated by Deng in 1992 during his Southern Tour. Refer to Deng (1992), "Excerpts From Talks Given in Wuchang, Shenzhen, Zhuhai and Shanghai", Internet Edition, reviewed 19.03.2006.

\textsuperscript{588} Refer to Ministry of Commerce (n.d.), "China's Absorption of Foreign Investment", Internet Edition, reviewed 17.04.2006. Deng stressed the benefit of foreign investments to China: "The government [will] levy taxes on [FFE]s, workers get wages from them, and we learn technology and managerial skills. In addition, we can get information from them that will help us open more markets." Refer to Deng (1992), "Excerpts From Talks Given in Wuchang, Shenzhen, Zhuhai and Shanghai", Internet Edition, reviewed 19.03.2006.

\textsuperscript{589} Refer to UNCTAD (2007), p. 267.

\textsuperscript{590} In Japan, though, only 430,900 workers (0.8 percent of total employment in Japan) were employed in foreign affiliates in 2004. Ibidem, pp. 10-12.

\textsuperscript{591} However, the inward FDI stock as a percentage of GDP was "only" 8.0 percent in Korea and 2.5 percent in Japan in the same year.

Further opposing the development approach of the East Asian developmental states, China's attraction of foreign investments included not only technical progress in the narrow sense of importing modern equipment for manufacturing plants. Instead, the Chinese central government envisioned raising the R&D capacity of domestic firms through technology transfer from FFEs to domestic enterprises. Among the FFEs are mainly three types of entry mode:

- **Equity Joint Ventures**: The "Law of the People's Republic of China on Sino-Foreign Equity Joint Ventures" was promulgated in July 1979.\(^{593}\) An Equity JV is a limited liability firm incorporated and registered in China. Capital is contributed from both the foreign and local partners, who hold shared equities. It is treated as a distinct legal business entity subject in all aspects to Chinese laws and administrative procedures. Both partners are responsible for costs and divide profits in negotiated proportions.

- **Contractual Joint Ventures**: Contractual JVs are arrangements whereby Chinese and foreign partners cooperate in certain joint project activities according to the terms and conditions stipulated in a venture contract. Contractual JVs are used mostly for lower-value-added export-processing operations. The "Law of the People's Republic of China on Chinese-Foreign Contractual Joint Ventures" was promulgated in April 1988.\(^{594}\) According to the

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Contractual JV law, the Chinese and the foreign parties have to specify all issues covered in the cooperative enterprise contracts (the cooperation conditions, the distribution of the profits or products, the share of risks and losses, the method of management, the ownership of the properties of the enterprises when the cooperation ceases etc.).

- **Wholly Foreign-Owned Enterprises:** In the early reform years, the Wholly Foreign-Owned Enterprise (WFOE) mode was not permitted except for policy experiments within the Special Economic Zones. Expansion of this mode to other areas occurred only in the late 1980s, when the “Law of the People’s Republic of China on Wholly Foreign-Owned Enterprises” was promulgated in April 1986. The WFOE law stipulated that China would allow foreign investors to establish foreign capital enterprises in the country. The law specifically prohibits the state from nationalizing or expropriating WFOEs. The law considers a WFOE as a limited liability company established in China with capital contributed exclusively by foreign investors. WFOEs paid higher taxes than JVs until the Unified Tax Law was passed in 1991, which treated all forms of FDI equally for tax purposes.

The central government considers Equity JVs to be the preferred mode of FDI. The central government hopes that foreign management skills are transferred from the foreign to the Chinese partner. Almost all foreign investment enterprises are linked to a wide network of domestic suppliers, upon whom new standards of product quality, production methods and business concepts are imposed. The Equity JV mode also has certain advantages from the investor’s point of view, as foreign investors entering a country with different cultural, political, and economic systems from their own are likely to seek cooperative arrangements with local firms. In transition economies, where requirements for adaptation and information are greater due to market imperfections, the appropriateness of Equity JVs is further reinforced. The most commonly cited motives for selecting the Equity JV mode include the opportunity to gain rapid market entry, exploit economies of scale, obtain local know-how and vital raw materials, spread business risks, and meet host government demands.

595 For further information on the different forms of investment in China refer to Wang (1997).
598 For further information on JVs in China refer to Pearson (1991).
599 For further information on international operations of MNCs refer to Dunning (1993).
600 For further information on Equity JVs refer to Beamish and Banks (1987).
As economic transition proceeds, China has increasingly become integrated into the global economy, and institutional uncertainties have receded gradually. MNCs have also gained business experience in the Chinese economy. Foreign entry modes therefore have evolved from an initial focus on risk-averse JVs to WFOEs, since those enjoy greater flexibility and independence in their business operations. Moreover, the foreign investors can more easily protect proprietary company information in a WFOE if the intellectual property rights system is not well established. In 1994, 74 percent of FDIs were from JVs (49 percent of FDIs were from Equity JVs; 25 percent of FDIs were from Contractual JVs) and only 27 percent of FDIs were from WFOEs. By 2006, the proportion had reversed, as 78 percent of FDIs were from WFOEs and 21 percent of FDIs from JVs (17 percent of FDIs were from Equity JVs; 4 percent of FDIs were from Contractual JVs) (refer to Figure 13).

![Figure 13: Share of contractual amount of FDI by type of firm ownership, 1994-2006.](image)

Source: China External Economic Statistical Yearbook (2005) and various years of China Statistical Yearbook. Note: The category "Other" includes foreign investments such as Cooperative Development.

The business activities of WFOEs are restricted and controlled by the state. WFOE investors need direct approval from the central government to make investments in public utilities, transportation, real estate, trusts, and leasing. As WFOEs are still prohibited from operating in such sectors as (life) insurance, media and telecommunications, foreign investors have no choice but to operate in JVs.

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601 For further information on FDIs during the reform era and the process of JV partner-selection in China refer to Fu (2000) and Luo (1998).

Altogether, China's FDI policy in the reform period contrasted with that pursued by the East Asian developmental states during comparable phases in their economic growth. The East Asian states severely limited FDIs during their reform years, while Chinese central and local level bureaucrats have actively attracted them. Moreover, foreign investors have mainly operated in JVs as envisioned by central government policies on foreign investment.

### 3.3.4.2 State guidance of FDI

The central government's guidance of FDI has been twofold. It has issued different policies to inform state agents on the national FDI approach, and controlled inflowing investments through approval processes.

From the mid 1990s, government policies began to focus on linking FDI promotion to domestic industrial objectives. At the beginning of 1993, China planned a series of measures to attract foreign investment in the areas of finance, communications, information technology, farm products processing, urban infrastructure and housing renovation. After the central government had promulgated specific pillar industries in 1994, its policy toward FDI has become more specific. In 1995, the State Development and Planning Commission, the State Economics and Trade Commission and the Ministry of Foreign Trade and Economic Cooperation jointly promulgated the “Interim Provisions on Guiding the Orientation of Foreign Investment” and the attached “Catalogue for the Guidance of Foreign Investment Industries”. The two documents aimed to increase the clarity and precision of FDI policy. The Foreign Investment Catalogue generally lists specific industries and economic activities in which foreign investment is “encouraged”, “restricted” or “prohibited”. Projects not included in the Foreign Investment Catalogue are considered “permitted”. Among the encouraged investments are new and high technology products and projects that strengthen the competing capability of products in international markets. Among the restricted foreign investments are projects that adopt “out-of-date technologies”. With this regulation, “sunrise industries” are promoted while “sunset industries” are restricted like in the East Asian developmental states. The central government ensured that foreign investment was compatible with government industrial policies, and that the Chinese state would...
retain control in the pillar industries. In the "restricted" categories, for instance, the equity stake of the foreign partner was limited and in the "prohibited" categories it was even barred completely. Since then, the guidelines have been embodied in a large number of laws and regulations promulgated by the Ministry of Foreign Trade and Economic Cooperation (since 2003 by the Ministry of Commerce) and other government agencies. They are updated regularly reflecting the latest economic developments, policy re-orientations and priorities.

In 1997, the Foreign Investment Catalogue was revised in accordance with the national industrial policy which aimed to adjust China's industrial structure and attract advanced technology. Accordingly, the scope of the encouraged projects broadened. The revised catalogue highlighted the policy to encourage FDI in the central and western regions and particularly aimed to promote export-oriented FDI projects. The central government assumed that foreign investors would channel capital into industries that had the potential to compete internationally. The global linkages of MNCs would then facilitate their access to foreign markets and teach domestic companies about channels of distribution. Projects that fell into the category of "permitted investments", but export all their products directly, were "deemed as encouraged projects".

In 2002, the newly promulgated "Provisions on Guiding the Orientation of Foreign Investment" replaced the previous "Interim Provisions", and a new catalogue of industrial guidance for FDI was issued. While the number of "encouraged" categories increased from 186 to 262, the number of "restricted" categories decreased from 112 to 75. The central government permitted foreign entry to utility industries. This revision reflected the promises China had made for its WTO accession: the further opening up of service industries which includes financial services, tourism, telecommunications, transportation, accountancy, law services etc.

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609 Since 2005, the central government has categorized industries no longer into four, but three types (encouraged, restricted and those to be eliminated) and thus reduced the complexity of FDI regulation. For further information refer to the "Decision of the State Council on Implementing the Interim Regulation on Promoting the Adjustment of Industrial Structure" and NDRC's "Guiding Catalogue for the Adjustment of Industrial Structure". Refer to NDRC (2005), "Major Measures to Promote the Adjustment of Industrial Structure", Internet Edition, reviewed 18.12.2006.
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The Ministry of Science and Technology and the Ministry of Commerce jointly promulgated the “Catalogue of Encouraged Hi-tech Products for Foreign Investment” in 2003.\(^{614}\) Thus, they emphasized the central government’s focus on developing the nation’s high-tech capacities. The catalogue listed 917 high-technology products within 11 categories in accordance with technological domain, including information technology, software, aerospace, optical electronics, biological medicine and medical instruments, new materials, new energy, environment protection, geological instruments, nuclear and modern agriculture. The catalogue stipulated 721 items that should be developed imperatively in terms of technology and equipment, and identified 196 items which showed a big gap between China and abroad, as well as requirements of national security and environmental protection.\(^{615}\) The central government hoped to attract advanced applicable technologies from abroad and strengthen the abilities of internal assimilation and independent innovation. The catalogue aimed to advise provinces, municipalities, autonomous regions and departments to encourage foreign investment in high-tech industry, to accelerate the pace in introducing advanced technologies from abroad, to strengthen the abilities of internal assimilation and independent innovation, and further improve the quality and level of foreign investment in the promulgated categories.

Overall, state guidance of foreign investments to preferred sectors reveals the strategic approach of using investment as a means of economic development. The analysis of the various policy documents regulating foreign investment shows that restrictions have been reduced gradually in line with proceeding economic reform, and government attention has been focused increasingly on high-tech FDIs.

In addition to the policies guiding inflowing investment, the central government has exerted strong influence on the landscape of foreign investment through its approval function of large-scale investment projects. In its 2004 “Interim Measures for the Administration of Examining and Approving Foreign Investment Projects”, the NDRC promulgated the approval system of foreign investments in China. Depending on the investment sum, either the NDRC, the State Council or regional development and reform departments are responsible for the examination and approval of foreign investments (refer to Table 6):

- \textit{Regional and county authorities} are authorized to approve “encouraged” projects with investment under USD 30 million and “permitted” projects under USD 10 million. They may authorize “encouraged” and “permitted” projects


\(^{615}\) Ibidem.
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within municipal level development zones valued at USD 30 million or less. The localities' autonomy has simplified the approval procedures.

- **Provincial and municipal governments** can approve "encouraged" and "permitted" projects with investments under USD 100 million, and "restricted" projects with investments under 50 million.

- **The NDRC** has to approve "encouraged" and "permitted" investment projects exceeding an investment volume of USD 100 million.

- Approval from both the **NDRC and the State Council** is necessary for "encouraged" and "permitted" investment projects exceeding an investment volume of USD 500 million. The **NDRC and the State Council** have to approve FDI projects with an investment volume higher than USD 50 million for "restricted" projects.

**Table 6: Approval of foreign investment projects, 2004.**

<table>
<thead>
<tr>
<th>Industry type</th>
<th>Size of project (including profit) (USD)</th>
<th>Type of approval required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encouraged</td>
<td>up to 30 million</td>
<td>Regional and county level authorities</td>
</tr>
<tr>
<td>Permitted</td>
<td>up to 10 million</td>
<td>Regional and county level authorities</td>
</tr>
<tr>
<td>Encouraged/Permitted</td>
<td>up to 100 million</td>
<td>Provincial level development and reform commission</td>
</tr>
<tr>
<td></td>
<td>over 100 million</td>
<td>NDRC</td>
</tr>
<tr>
<td></td>
<td>over 500 million</td>
<td>NDRC and State Council</td>
</tr>
<tr>
<td>Restricted</td>
<td>up to 50 million</td>
<td>Provincial level development and reform commission</td>
</tr>
<tr>
<td></td>
<td>over 50 million</td>
<td>NDRC and State Council</td>
</tr>
</tbody>
</table>


In conclusion, since opening up in 1978, China has extensively absorbed foreign investment. The experience of other East Asian states influenced Chinese decision-makers. The East Asian developmental states strictly controlled the amount of inflowing capital in order to keep a "healthy balance" and not become subservient to it. Similar to its East Asian counterparts, the government in China has been controlling all inflowing capital. The central government's guidance of FDI can be

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617 Refer to Panagariya (2003), p. 5.

618 Refer to Johnson (1987), p. 163.
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seen as one important industrial policy instrument that the developmental states also utilized. FDI-guidance was in line with the central leadership's economic and social development planning.

Unlike the East Asian developmental states that have not only controlled, but also systematically excluded FDI, China has attempted to attract FDI in order to quickly catch up technologically. So that foreign companies cannot dominate the domestic market, the Chinese foreign investment scheme forces foreign companies eager to set up businesses in certain sectors to form JVs with domestic companies. With the JV regulations, the central government aims to develop domestic companies through spillovers from foreign to domestic partners, and thus advance the nation's technological catch-up.

3.3.5 Export-oriented industrialization

China's development strategy at the central level has not focused exclusively on FDI-led growth, but also on export-led growth. Throughout the reform period, Chinese products have been exported, and companies such as Lenovo, TCL and Huawei have proved to be internationally competitive.

Krueger (1980) contends that growth performance has been more satisfactory under export promotion strategies (intended as a general bias toward exports, and not as a package of specific measures to encourage selective exports of particular items, themselves induced by a bias toward import substitution) than under import-substitution strategies. Import substitution raises returns on the protected sector relative to the unprotected sectors, and thus creates rent in the economy and invites rent-seeking activities. High import restrictions make the domestic production of importable products artificially more profitable relative to other products, typically those in the traditional sectors. Socialized credit risks and budgetary subsidies make financial resources cheaper to firms than otherwise would be the case. These rents attract new entrants to the industry. The actual number of new entrants depends both on the size of the rents and the average size of the initial firms and their size of distribution. All else being equal, if an industry is populated with small firms, and if no firm enjoys a significant first-mover's advantage over others, the entries will be numerous.

620 For further information refer to Krueger (1974).
621 Refer to Huang (2002a), p. 549.
622 In Thailand, the degree of import substitution policies was directly correlated with the number of auto plants. Between 1960 and 1978, the tariff rate on auto imports increased from 60 percent to 150 percent and the number of auto plants rose from 8 to 22 during the same period. Similar correlations can be found in Latin America. Refer to Kesavatana (1989) and Shapiro (1993).
3.3.5.1 Export promotion and import substitution

China was not a major trading nation before economic reform started in 1978. It mostly traded primary products with other developing nations. In the years after 1978, China gradually started its re-integration into the global economy. The process of international economic integration marked a fundamental ideological shift. Similar to the export strategy of China's East Asian neighbors, in 1979, Deng called for exports even if they had to be subsidized at the beginning.

China followed East Asia's example as a manufacturing export champion, moving the country towards a high level of participation in the world economy. Along China's reform path, virtually the entire eastern coast of China has exhibited an export-oriented economy. While in 1980, the sum of total trade was USD 38.1 billion, in 2006, Chinese exports amounted to USD 969 billion and imports to USD 792 billion. In 2006, China's export proportion in GDP was 37 percent (compared with 6 percent in 1980) (refer to Figure 14).

Figure 14: Foreign trade, 1978-2006.

While the Chinese government encouraged exports, it simultaneously maintained import controls which included state allocation of foreign exchange and a wide array of quantitative restrictions. The central government gave priority to those products which it assumed would most rapidly raise China's labor productivity. For central

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626 Refer to Vogel (1989).
level bureaucrats, it was apparent that a command economy which was economically and especially technically backward could not compete in open competition on world markets.\textsuperscript{628} China's almost entire industrial sector was in the stage of an "infant industry", or specialized in the manufacturing of sunset products. It needed economic restructuring in order to become internationally competitive. Access to the Chinese market remained restricted throughout the reform period. Restrictions (such as import tariffs and quotas) were imposed on sectors where inefficient national producers in the state sector were vulnerable to international competition (e.g. the auto sector).\textsuperscript{629}

3.3.5.2 Sectoral targeting of exports

The most important instruments of export targeting were production networks for exports (PNEs) and higher exchange retention rights to targeted sectors. The Seventh Five-Year Plan (1986-90) provided for the creation of PNEs. In the PNEs, the leading factories within the targeted sector were granted tax relieves, subsidies for technological upgrading, guaranteed supplies of raw materials and power, preferential access to transportation, and attractive purchase prices for their goods. The first industry group to benefit from this scheme was machinery and electronic goods. PNEs have also been created in light industrial products and textiles, as well as farm and sideline products.\textsuperscript{630} Furthermore, the foreign exchange retention system (practiced since 1979) allowed selected exporting enterprises to retain a large share of foreign earnings.\textsuperscript{631} Foreign exchange was needed to "introduce technology from outside, import essential facilities and raw materials and repay the principal and interest of foreign loans."\textsuperscript{632} The capacity to earn foreign exchange mirrored the degree to which China had opened to the outside world. This in turn affected the scale and pace of domestic economic development.\textsuperscript{633}

Particularly tax relief is a common practice adopted in international trade. The central government repaid a certain proportion of the consumption taxes and value-added tax to the enterprises, and thus reimbursed them for the taxes they had to pay on

\textsuperscript{628} At that time, China had not established a structure of modern firms, nor completed domestic price reform, nor entirely dismantled its material balance planning system, nor reformed its social security system. Refer to Nolan (1995b), p. 190.

\textsuperscript{629} Refer to Breslin (1999), p. 1188.

\textsuperscript{630} Refer to Panagariya (2003), p. 3.


exported goods. Firms that were exporting were, moreover, granted a rebate on industrial and commercial taxes and preferential access to imported technology, and received credit at low interest rates for technical upgrading.

In 1994, direct subsidies for exports were largely abolished due to escalating international pressure and China's ambitions to enter the WTO. Under the transition review mechanism provided in China's Protocol of Accession, the European Community, Japan and the USA urged the country to cut its subsidies as required by the Subsidies Agreement. The 2001 WTO Protocol finally required China to eliminate all export subsidies within the scope of the "Agreement on Subsidies and Countervailing Measures" (SCM Agreement) upon accession. Under the SCM Agreement, developing country members have at least eight years, and transition economy members seven years, after WTO accession to phase out export subsidies. China's commitment to eliminate all export subsidies upon accession wiped out any transitional periods that were available to other accession countries under the SCM Agreement. However, the central government still grants export subsidies for various product exports such as complete sets of equipment, high-tech products and mechanical and electronic products. Indirect subsidies for exports are low cost energy and inputs, preferential bank loans, and tax incentives.

- The Export-Import Bank of China offers an "Export Seller's Credit". All the bank's capital comes from the government's fiscal allocation and is provided for the purpose of lending government support by observing the state industrial, foreign trade, financial and fiscal policies. The loans that the bank provides to the exporter have usually a long maturity and preferential interest rates.

636 Refer to WTO (1994), "General Agreement on Tariffs and Trade 1994", Internet Edition, reviewed 27.11.2006. Moreover, the average tariff rate was reduced from 43 percent to about 17 percent and further reductions were promised. Refer to Zhu (2003), p. 155.
642 Ibidem.
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- In pursuit of a central government goal to increase semiconductor output from USD 2 billion in 2000 to USD 24 billion by 2010, China applied discriminatory rates for value-added taxes on circuit chips. While China subjected all semiconductors to a value-added tax, domestic producers—whether wholly Chinese-owned or foreign-invested—received a value-added tax rebate for circuit chips designed and fabricated in the country, which made the effective value-added tax rate only 3 percent. The full 17 percent rate was only imposed on imported semiconductors.  

Altogether, even after WTO accession, central and local governments use industrial policy measures to promote exports or hinder imports in order to favor domestic over foreign industries. For these, Wade (2003) uses the expression “below-the-radar” industrial policy measures.

3.3.5.3 The central government's devaluation policy to promote exports

The Chinese actively emulated Taiwan’s and Korea’s devaluation policy to encourage the growth of exports in the interests of development. Like the East Asian developmental states, the Chinese government devalued the RMB during 1981-1994 as an attempt to cut imports and stimulate exports. After a prolonged phase of gradual nominal depreciations starting in 1980, the RMB was devalued in January 1994 from 5.81 to 8.70 to the USD (refer to Figure 15). This improved price competition of domestically produced products. In the same year, the export growth rate was 31 percent. Relative to the cost of exports from other states in Southeast Asia following export-led growth strategies, this move increased the relative competitiveness of Chinese exports. China adopted current account convertibility in 1996, and the RMB traded in a narrow band of RMB 8.19 to the USD until late 2005. Being fixed against the USD for a decade in July 2005, central authorities dropped the peg to the USD in favor of a managed float against an unspecified basket of currencies. The RMB’s base exchange rate against the USD rose from

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646 Major devaluations were: 14 percent in 1986, 21 percent in 1989 and 9.6 percent in 1990.
647 In comparison, the export growth rate was 8 percent in 1993. Calculation based on data from the China Statistical Yearbook (2007).
649 The main components of the reference currency basket consisted of the currencies of China’s major trading partners, including the US dollar, the euro, the yen and the Korean won. The Singapore dollar, the British pound, the Malaysian ringgit, the Russian rouble, the Australian dollar, the Thai baht and the Canadian dollar are also in the basket. However, the government has not announced the weights of the currency basket index.
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RMB 8.28 to RMB 8.11, an appreciation of 2.1 percent. The authorities kept the existing trading bands of 0.3 percent on either side of a central rate against the USD (with the closing rate of the previous day becoming the central rate of the next day). The RMB is still assumed to be undervalued by more than 20 percent. American critics accuse Beijing of keeping the value of the RMB at an artificially low level.\(^{650}\) In order to prevent the economy from overheating, in March 2007, China’s central bank raised the prime rate to its highest level for eight years. The export boom is hence expected to slow down.\(^{651}\)

\textbf{Figure 15: Development of exchange rate RMB/USD, 1985-2006.}

\begin{center}
\begin{tikzpicture}
\begin{axis}[
    title={RMB/USD Development, 1985-2006},
    xlabel={Year},
    ylabel={RMB/USD},
    xmin=1985, xmax=2006,
    ymin=0, ymax=10,
    ytick={0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10},
    yticklabels={0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10},
]
\addplot[mark=diamond*] table [x expr={
    \thisrow{year}-1985
}, y={value}]
{data.csv};
\end{axis}
\end{tikzpicture}
\end{center}


Altogether, China’s instrumental attitude towards international trade, and the pace of growth of Chinese exports, have a lot in common with that of the East Asian developmental states. The government introduced several export incentive programs for selected industrial sectors with the aim of enhancing competition and receiving foreign exchange earnings as well as management and technology know-how. Simultaneously, imports were tightly controlled by a wide variety of quantitative controls. Import substitution has protected specific infant industrial sectors from international competition. This makes an emulation of the developmental states' policy approach obvious. Due to the complexity of the economic system during the transition, and the characteristics of international integration, China had to choose different policy tools from those previously adopted by Japan, Korea and Taiwan.\(^{652}\) Overall, the pattern of exports and imports is determined more by administrative decisions than by incentives at the level of the individual enterprise.


\(^{652}\) Refer to Zhang and Long (1997), p. 266.
3.3.5.4 Export-FDI nexus in Special Economic Zones

Already in 1979, the Central Committee established four Special Economic Zones as a particular type of export-processing zones. The first Special Economic Zones were opened in Guangdong and Fujian (Shenzhen, Xiamen, Zhuhai and Shantou) in 1979 and 1980. In this way, they could experiment with the norms of a market economy. According to the gradual development strategy, most of China’s economic reform measures were not applied simultaneously throughout the entire country. Experiments with a variety of innovations were conducted within selected, limited geographic areas and left a great deal of leeway to localities. Not before the experiment proved to be successful, the reform was introduced to the rest of the nation. Gradualism in China was not so much the result of a particular theory of reform as of political deadlock and compromises within the CCP.

As a means to attract FDIs and upgrade the international competitiveness of domestic firms, the central government offered foreign companies preferential tax rates according to the 1986 “Provisions of the State Council on the Encouragement of Foreign Investment”. Tax reductions available to FFEs are higher in the economic zones than those available under the national tax legislation. Table 7 shows that in the Special Economic Zones and National Development Zones, productive foreign enterprises are granted a reduced income tax rate of 15 percent instead of the normal 30 percent. Technology-intensive projects of non-productive enterprises, as well as energy and transportation projects, are rewarded with an income tax rate of 15 percent in all Special Economic Zones and National Development Zones. Especially export enterprises have to pay a reduced income tax rate of 10 percent within Special Economic Zones and National Development Zones (compared with 15 percent outside these zones). Tax holidays of up to five years are available for companies in the special zones, depending on the amount of investment, the nature of the technology, and the duration of the project. Imported inputs used in exports or sold within the Special Economic Zones are free of indirect taxes such as import duty. Further measures to stimulate FDI are advantages in

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653 Refer to Editorial Board of the Progress of China Industry Modernization (1999), p. 42.
656 Refer to Woo (1999), p. 123.
658 The tax rate for energy and transportation projects is 15 percent outside the development zones.
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manufacturing location, such as reduced land-use fees, priority in obtaining utilities, transport and communication facilities.\textsuperscript{659} Accordingly, the main reasons for companies to locate in the special zones are particular policies and preferential treatment as well as flexible measures in carrying out foreign economic activities.

Table 7: Income tax rates concerning foreign enterprises in development zones, 2006.

<table>
<thead>
<tr>
<th>Enterprises</th>
<th>Income tax rate</th>
<th>State Regulations</th>
<th>Special Economic Zones</th>
<th>National Development Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Productive enterprises</td>
<td>30%</td>
<td>15%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>2. Non-productive enterprises</td>
<td>30%</td>
<td>15%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Knowledge-intensive and technology-intensive projects and technology development centers; projects with a long investment rewarding period</td>
<td>30%</td>
<td>15%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Projects concerning energy, transportation, port or projections engorged by the governments</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Export-oriented enterprises if the export value of the year equals or exceeds 70 percent of the output value of the same year after the exemption-reduction period is over</td>
<td>15%</td>
<td>10%</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>


Meanwhile, each province has established Special Economic Zones and National Development Zones in which enterprises can profit from low tax rates, particularly for high-tech and export-oriented enterprises. With the central and local governments' policy approach of attracting foreign investment to special zones, China has attracted about 400 of the World Top 500 transnational corporations to Economic and Technological Development Zones.\textsuperscript{661} Investment from foreign companies resulted in


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a heated competition between provinces and localities. Localities have often ignored instructions from the central government, and strived to offer incentives to gain new investments or lure existing investments away from other parts of China.\(^\text{662}\)

Various tax incentives for foreign enterprises have been widely criticized for lack of harmony as well as the resulting discrimination against domestic enterprises. In consequence, China has started to transform its tax system. The two parallel income tax laws for domestic and foreign enterprises\(^\text{663}\) (irrespective of whether the company is located in a development zone or not) are abolished. Under the tax law, the actual income tax rate for a foreign invested company can be as low as 15 percent (as opposed to 33 percent for domestic enterprises).\(^\text{664}\) In January 2007, the Chinese State Administration of Taxation announced to adopt uniform corporate income tax rates (25 percent) for both domestic and foreign companies effective as of January 2008. The new law creates a level playing field for domestic and foreign enterprises.\(^\text{665}\) Apart from increased income tax, foreign companies will no longer enjoy some other tax incentives, including pre-tax reduction and tax rebate for re-investment. With the new tax law, Beijing replies to WTO demands of equal tax treatment and confirms its aim to particularly attract high-tech investments. From 2008 onwards, a preferential tax rate of 15 percent will only be granted to companies operating in specific industry sectors, such as high-tech, as well as energy efficiency, and environmental protection. Some MNCs have already adapted their business plans to the policy change. General Electric China has announced it will invest USD 50 million in its Shanghai-based technology center for products serving environmental protection, including more efficient airplane engines and wind power generators, seawater desalination technology, and energy-saving bulbs.\(^\text{666}\)


\(^{663}\) The Interim Regulations on Enterprise Income Tax, effective 01.01.1994 which is applicable to domestic enterprises, and the Income Tax Law for Foreign Invested Enterprises and Foreign Enterprises, effective 01.07.1991, which is applicable to foreign invested enterprises and foreign enterprises.

\(^{664}\) Moreover, a foreign investor may be entitled to a tax reduction or exemption for dividend distributions. Another distinct advantage for foreign invested companies is that a foreign invested company can make a full deduction of salary and benefit expenses, while a domestic company may only deduct a specific portion of salary payments.


Nevertheless, from the close link between FDI and export promotion since the 1980s, the question arises as to whether Chinese exports are driven by domestic or foreign companies? The breakdown of China's exports according to type of producing firm puts China's economic rise in perspective. Statistics indicate that from 1990 until 2006, exports from FFEs in China rose more quickly than did national gross exports (refer to Figure 16). The central government's incentives as well as China's competitive advantage of cheap labor have stimulated FFEs' export activities. While FFEs accounted for only 20 percent of Taiwan's manufactured exports in the mid-1970s, and only 25 percent of Korea's manufactured exports between 1974 and 1978, FFEs accounted for 58 percent of China's exports in 2006. Exports from these businesses boost China's overall exports.

Figure 16: Exports of FFEs, 1980-2006.

FFEs have furthermore catalyzed the boom in exports of particularly (high) tech-oriented goods. Establishing export bases for new and high-tech products in selected high-tech industrial development zones is an important part of the government's plan for developing trade through S&T. The Pearl River Delta, Yangtze River Delta and the Beijing-Tianjin region have the greatest concentration of such export bases. Consequently, export volumes of new and high-tech products from

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these areas account for over 80 percent of the national total.\textsuperscript{670} The share of national exports of high-tech products increased from 4.0 percent in 1991 to 28.6 percent in 2005. The CAGR of high-tech product exports was 15.1 percent between 1991 and 2005.\textsuperscript{671} Also, the share of high-tech products in manufactured imports was 30.0 percent in 2005. In the same year, the share of high-tech exports in industrial manufactured exports was 30.6 percent (the share of high-tech imports in industrial manufactured imports was 38.5 percent) (refer to Table 8). 81 percent of high-tech exports were information technology and telecommunication products and 11 percent of high-tech exports were electronic products in that year.\textsuperscript{672}

\textbf{Table 8: National imports and exports of high-tech products, 1991-2005.}

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports of high-tech products (USD billion)</th>
<th>Share in total exports (%)</th>
<th>Share in industrial manufactured exports (%)</th>
<th>Imports of high-tech products (USD billion)</th>
<th>Share in total imports (%)</th>
<th>Share in industrial manufactured imports (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>2.9</td>
<td>4.0</td>
<td>5.2</td>
<td>9.4</td>
<td>14.8</td>
<td>17.4</td>
</tr>
<tr>
<td>1993</td>
<td>4.7</td>
<td>5.1</td>
<td>6.2</td>
<td>15.9</td>
<td>15.3</td>
<td>17.7</td>
</tr>
<tr>
<td>1995</td>
<td>10.1</td>
<td>6.8</td>
<td>7.9</td>
<td>21.8</td>
<td>16.5</td>
<td>20.3</td>
</tr>
<tr>
<td>1997</td>
<td>9.7</td>
<td>5.3</td>
<td>6.1</td>
<td>19.8</td>
<td>13.9</td>
<td>17.4</td>
</tr>
<tr>
<td>1999</td>
<td>24.7</td>
<td>12.7</td>
<td>14.1</td>
<td>37.6</td>
<td>22.7</td>
<td>27.1</td>
</tr>
<tr>
<td>2001</td>
<td>46.5</td>
<td>17.5</td>
<td>19.4</td>
<td>64.1</td>
<td>26.3</td>
<td>32.4</td>
</tr>
<tr>
<td>2003</td>
<td>110.3</td>
<td>25.2</td>
<td>27.3</td>
<td>119.3</td>
<td>28.9</td>
<td>35.1</td>
</tr>
<tr>
<td>2005</td>
<td>218.3</td>
<td>28.6</td>
<td>30.6</td>
<td>197.7</td>
<td>30.0</td>
<td>38.5</td>
</tr>
</tbody>
</table>


The main reason for the rapid increase of high-tech exports is that the final production stage has been transferred to China from industrialized economies, while the actual Chinese value added is still estimated to be relatively low. As a result, the subsidiaries of MNCs still account for the bulk – nearly 90 percent – of total Chinese high-tech exports.\textsuperscript{673} The European Central Bank expects, however, that over the medium term, China will climb the technology ladder rather quickly, aided partly by the dissemination of technology and management skills due to FDI. The enhanced technological capability of Chinese products can be seen from the angle of the product composition of the euro area’s imports from China. More sophisticated goods from China, such as office machinery and telecommunications equipment, have experienced a large increase in euro area’s imports over the past five years, even

\textsuperscript{673} Refer to European Central Bank (2005), "The next dimension for EU-China relations", Internet Edition, reviewed 26.02.2007.
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though traditional and more labor-intensive goods – such as handbags, clothing and footwear products – remain the main import items.\textsuperscript{674}

Overall, China has encouraged multinational affiliates to enter China through FDI. Tax incentives have encouraged foreign investors to export a large share of sales. The analysis showed that about 60 percent of China’s manufactured exports are generated by foreign-owned firms. Tax reductions of FFES have, however, put domestic enterprises at a disadvantage. The new income tax law indicates China’s ambitions to slow the pace of foreign investment inflow, and establish a level playing-field for foreign and domestic companies in China. At the same time, the new income tax law stipulates that central bureaucrats increasingly focus on the country’s high-tech development. While the central government’s focus was the inflow of a broad spectrum of FDI in the early reform period, FDI attraction has become more selective and targeted to high-tech investments since the 1990s. This parallels the nation’s industrial policy approach via its five year plans.

3.4 Financial system

In the East Asian developmental states, the financial system was a key instrument of industrial policy-making. The advocates of a bank- and credit-based financial system bring forward three arguments. First, in a bank-based system, enterprises depend heavily on banks for finance, and less on a broad public of shareholders. Hence, the long-term growth preferences of government officials and bank executives have more weight, and investment decisions are more insulated from the public’s preferences. The economy’s investment decisions, therefore, should be guided by long-term growth expectations. In a capital market-based system, alternatively, the public usually allocates potential savings to more short-term productive investment, financial speculation or consumption.\textsuperscript{675} Second, a bank-based financial system gives the government a powerful mechanism for encouraging firms to enter specific sectors.\textsuperscript{676} The state has many tools at its disposal, in order to direct investment decisions. In the developmental states, governments often provided guarantees for loans and consequently influenced the availability and cost of bank loans and the relaxation of antitrust bans.\textsuperscript{677} The state was hence in a position to “\textit{maximize induced decision-making}”.\textsuperscript{678} Third, the state’s control over the financial system, and thus over the allocation of credit to highly leveraged firms, can be used to make

\textsuperscript{674} Ibidem.
\textsuperscript{675} Refer to Wade (1990), pp. 364-365.
\textsuperscript{677} The Korean government is paramount in this respect as it acted as a guarantor for foreign credit which has financed its long-term investments. Refer to Amsden (1989), p. 945.
\textsuperscript{678} Refer to Johnson (1982), p. 236.
business leaders support the government’s objectives and the implementation of the industrial strategy.\textsuperscript{679}

In the East Asian developmental states, under the direction of an industrial bureaucracy that was to a certain extent isolated from societal pressures, the government-controlled financial system channeled investment capital to alleged strategic sectors. Individuals, with no choice but to make their deposits in the closed financial system, ended up subsidizing large firms that received preferential credit.\textsuperscript{680}

China also made use of the financial system as an industrial policy instrument. Deng stated in 1979: \textit{“Some […] projects can bring us quick profits, therefore, the finance departments and banks should support them”}.\textsuperscript{681} The pursuit of a socialist market economy has increased the need for reliance on the banking sector as the central government’s major tool for macroeconomic control, following the decline of the state sector.\textsuperscript{682}

3.4.1 Government influence over the financial system

The financial sector consists of two regulatory institutions (the People’s Bank of China, which is the central bank, and the China Banking Regulatory Commission) as well as banking and non-bank financial institutions (refer to Figure 17). Although the role of other segments of the financial system like stock and bond markets has been growing in importance since the 1990s, the domestic banking system is still the main channel of financial intermediation. In comparison with other countries, China still depends on bank financing. In 2004, bank credit (of deposit-taking commercial banks) to the private sector accounted for 141 percent of GDP in China, compared with 46 percent of GDP in the USA. In the same year, stock market capitalization in China accounted for 27 percent of GDP compared with 138 percent of GDP in the USA.\textsuperscript{683}

\textsuperscript{679} Obviously, this practice might easily be abused, if it becomes common to allocate credit for “loyalty” rather than for economic performance. Only sparing but well-publicized use may obtain the political gains without the legitimacy costs. Refer to Wade (1990), pp. 365-366.

\textsuperscript{680} Refer to Thun (2006), p. 56.


\textsuperscript{682} Enterprization of state commercial banks was therefore viewed as a constrained policy move and an entrenched version of the shareholding reform of SOEs. Refer to Leung and Mok (2000), p. 52.

\textsuperscript{683} Refer to Belaisch and Zanello (2006), p. 19.
Figure 17: Structure of the Chinese financial system.

Commercial banks, comprising four state-owned commercial banks, joint-stock commercial banks, city and rural commercial banks and foreign banks, dominate the financial sector. The top three types of banking institutions in terms of assets share were large state-owned commercial banks, joint-stock commercial banks and rural cooperative financial institutions. These institutions, respectively had assets accounting for 55 percent, 12 percent and 10 percent of the total assets of the banking sector in 2006. The assets share of the state-owned commercial banks has been declining over the years, with a decrease of 2.9 percentage points from 2003 and 0.9 percentage points from 2005. Meanwhile, assets share for the joint-stock commercial banks has been rising, with an increase of 1.7 and 0.5 percentage points from 2003 and 2005, respectively.\(^{684}\) Institutional investors, notably insurance

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companies, securities investment funds and, particularly, pension funds, are in an early stage of development although they are growing rapidly. Financial instruments for long-term savings and for managing liquidity and risk are quite limited compared with more advanced economies.\textsuperscript{685} China is hence heavily reliant on its banking system for financial intermediation, like its counterparts in East Asia.

The bank-dominated financial system has been under tight government control during the reform period. The People's Bank of China, in particular, has served the central government's policy interests. In 1983, the State Council announced the transformation of the People's Bank of China into a central bank, in order to complete the two-tier banking system by removing commercial lending activities from the People's Bank of China, and transferring them to the four state-owned commercial banks.\textsuperscript{686} To achieve the government's annual money supply target, the People's Bank of China carried out national credit planning, and imposed an overall credit ceiling on all banks and financial institutions.\textsuperscript{687} The People's Bank of China, however, is no independent central bank as known in industrialized countries. As it is ultimately overseen by the State Council, it operates under direct state supervision, and incorporates the state's policy goals in its monetary policy. This was manifested in December 2003, when the Standing Committee of the People's Congress adopted the "Law of the People's Republic of China on the People's Bank of China". Article 2 promulgates that the People's Bank of China has to perform functions assigned by the State Council.\textsuperscript{688} Moreover, the State Council appoints or removes the bank's governor and deputy governors. The governor and the deputy governors of the People's Bank of China are nominated by the Premier of the State Council. The National People's Congress decides on their nomination.\textsuperscript{689} Accordingly, the institutional design of the People's Bank of China, either its position under the State Council in the organization chart or the selection of its governors, is clearly linked to

\textsuperscript{685} Refer to OECD (2006b), p. 68.

\textsuperscript{686} The introduction of a two-tier banking system in 1979 was the first milestone in the modernization of the Chinese financial system. The government removed the monopolistic position of the People's Bank of China by establishing the Agricultural Bank of China, Bank of China and the China Construction Bank. The Agricultural Bank of China's objective was to foster rural banking business. It also took the supervisory authority of a network of rural credit cooperatives that provided small-scale rural banking. The Bank of China was responsible for foreign currency transactions, while the China Construction Bank focused on the construction sector. Refer to Garcia-Herrero and Santabarbara (2004), pp. 12-13, Internet Edition, reviewed 13.05.2006.

\textsuperscript{687} The national credit plan matched annual fund usage (loans) with fund sources (deposits) and decided the volume of new currency issued to balance the gap between loans and deposits. The central allocation of credit quotas was supplemented by the People's Bank of China's mandatory control of the deposit and lending interest rates to ensure the fulfillment of credit plan goals. Refer to Lu (2006), p. 6.


\textsuperscript{689} Ibidm, Article 10.
the state and its industrial policy goals. In order to achieve a clear distinction between monetary policy and bank supervision objectives, in late 2003, China amended the "Law of the People's Republic of China on Banking Regulation and Supervision" to establish the China Banking Regulatory Commission to supervise the banking industry. The China Banking Regulatory Commission should take over the supervisory and regulatory responsibilities for banks from the People's Bank of China. This would allow the People's Bank of China to focus on monetary policy, including an increased reliance on market-oriented instruments. The China Banking Regulatory Commission is also, however, no independent institution. It is overseen by the State Council as is the People's Bank of China.

In the first two decades of the reform era, the big four Chinese state-owned commercial banks (Agricultural Bank of China, Bank of China, China Construction Bank, Industrial and Commercial Bank of China) were also state-owned and largely insulated from market forces. They were used as a vehicle for macroeconomic control, and hence subject to strict interest rate control and credit quotas. The four state-owned banks were required to support government objectives ranging from the expansion of priority sectors to underwriting loss-making SOEs rather than lending according to commercial bank decisions. These administratively allocated funds are referred to as "policy loans", and can be regarded as directed credit programs. Policy loans accounted for about 35 percent of total loans made by state banks in the first half of the 1990s. Policy loans are well known for their poor returns and high risks, compared with commercial loans.

With the introduction of a socialist market economic system in 1992, reforms accelerated in the banking and financial sector. The Chinese authorities created three so-called policy banks (Agricultural Development Bank of China, China Development Bank and Export-Import Bank of China) in 1994. The policy banks are "banks whose sole function is to make low-interest loans for state projects." The policy banks took over the state-owned banks' state-directed lending role and

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691 Refer to Leung and Mok (2000), p. 45.


694 The overhaul of the banking system had at least three major aims: first, commercialize the four state-owned banks by separating commercial from policy lending; second, nourish a more diverse and competitive banking sector by allowing more commercial banks to enter the market; third, develop the People's Bank of China into an independent modern central bank with tasks such as regulating the national financial market and maintaining macroeconomic stability. Refer to Kwong and Lee (2005), p. 11 and Chinese Government (2006), "Reform of Financial System", Internet Edition, reviewed 28.03.2006.

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freed the big four from policy lending. They were to grant policy loans in accordance with state industrial policy and national plans. The capital sources of the policy banks were mainly government budgetary funds, social insurance, and postal and investment funds from a shrinking public sector.\(^{696}\)

The Commercial Bank Law, promulgated in 1995, reconfirmed that the state-owned commercial banks should function as independent commercial banks, and that their credit policy should be independent of state involvement.\(^{697}\) At the same time, however, the Commercial Bank Law stated that "A commercial bank should issue loans [...] under the guidance of the industrial policies of the state."\(^{698}\) In addition, according to the 1995 Law, the supervisory boards of the state-owned commercial banks should consist of representatives of the People's Bank of China and relevant government departments.\(^{699}\) These regulations contravened the official claim of the independent lending authority of state-owned commercial banks.

Altogether, Chinese banks have played a crucial role in the country's economic growth. Throughout the reform period, the state's influence over the banking system has been extensive. The institutional design of the financial system, as well as administrative and legal regulations, emphasize the financial sector's role as an industrial policy instrument. As in the East Asian developmental states, the organization of the financial system has enabled government-directed bank lending.

3.4.2 Sectoral and firm-level allocation of credit

After 1998, in the wake of the East Asian financial crisis, the People's Bank of China abolished loan quota control over the four state-owned commercial banks, and increased flexibility in the use of interest rates as a tool to allocate bank credit.\(^{700}\) However, the state's control over the financial sector was not loosened, as the commercial banks are still not independent in their loan decisions.\(^{701}\) Despite legal


\(^{697}\) Refer to Nee et al. (2007), p. 39.


\(^{699}\) Ibidem, Chapter II, Article 18. Since the establishment of the China Banking Regulatory Commission, the supervisory board of the state-owned commercial banks has been under the direction of the China Banking Regulatory Commission which is furthermore under the State Council.

\(^{700}\) Banks were allowed to offer loans according to risk premiums at rates of up to 20 percent above, or not less than 10 percent below, the official lending rates. Refer to Leung and Mok (2000), p. 51.

\(^{701}\) Evidence is provided by Leung and Mok (2000) that analyzed the commercialization of banks in China and Zhu (1999) that contends that "China's financial sector has always been under the strong grip of the state". Refer to Zhu (1999), p. 537.
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reform of the banking sector to promote banks' formal autonomy in lending decisions, political intervention is prevalent.  

The empirical analysis of Nee and Opper (2007) highlights the sectoral distribution of government assistance in loan applications. Their results show that political ties are used as instruments to allocate scarce capital into preferred industrial sectors. Government assistance in loan applications is particularly common in high-tech sectors such as biotechnology and electronics which are in focus of the current industrial policy and technology programs (refer to Figure 18).  

Figure 18: Sectoral distribution of government assistance in loan applications, 2003.


Unlike the East Asian developmental states, state-owned commercial banks provided SOEs with lending priority over non-state enterprises even after 1998, when mandatory policy lending was abolished. In 2006, private firms and individuals only received 3.1 percent of the short-term loans of China's state commercial banks. National banks allocated 7.1 percent of total short-term loans to state-owned township enterprises. Banks only allocated 2.1 percent of total short-term loans to enterprises with foreign funds (refer to Table 9).

704 While the four state-owned commercial banks are particularly heavily concentrated in lending to SOEs, joint stock and city commercial banks are more oriented toward non-state enterprises. The capital markets are even more the preserve of SOEs: nearly all of the currently listed companies were state controlled at the time of their initial public offering; and non-state enterprises are also virtually absent from the corporate bond market. Refer to OECD (2006b), p. 68.
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The empirical tests of Park and Sehrt (2001) indicate that there is an inverse relationship between the rate of financial intermediation and the level of economic development among Chinese provinces. In less developed regions, political factors rather than economic fundamentals play an important role in lending decisions. Accordingly, provinces with higher intermediation rates have tended to be those with greater SOE output relative to GDP, and with less profitable SOEs. Fast growing, rich coastal provinces such as Zhejiang, Jiangsu, Fujian, and Shandong, had the lowest state bank intermediation rates from 1991 to 1997.\(^{706}\)

Table 9: Credit funds balance sheet of financial institutions (funds usage), 2006.\(^{706}\)

<table>
<thead>
<tr>
<th>Item</th>
<th>2006</th>
<th>Percentage of total short-term loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds Usage (RMB billion)</td>
<td>36,523</td>
<td></td>
</tr>
<tr>
<td>Total Loans</td>
<td>22,535</td>
<td></td>
</tr>
<tr>
<td>Short-term Loans</td>
<td>9,853</td>
<td></td>
</tr>
<tr>
<td>Loans to Industrial Sector</td>
<td>2,865</td>
<td>32.8</td>
</tr>
<tr>
<td>Loans to Commercial Sector</td>
<td>1,667</td>
<td>19.1</td>
</tr>
<tr>
<td>Loans to Construction Sector</td>
<td>361</td>
<td>4.1</td>
</tr>
<tr>
<td>Loans to Agricultural Sector</td>
<td>1,321</td>
<td>15.1</td>
</tr>
<tr>
<td>Loans to Township Enterprises</td>
<td>622</td>
<td>7.1</td>
</tr>
<tr>
<td>Loans to Private Enterprises and Individuals</td>
<td>267</td>
<td>3.1</td>
</tr>
<tr>
<td>Loans to Enterprises with Foreign Funds</td>
<td>183</td>
<td>2.1</td>
</tr>
<tr>
<td>Other Short-term Loans</td>
<td>2,566</td>
<td>29.3</td>
</tr>
<tr>
<td>Medium-term &amp; Long-term Loans</td>
<td>10,855</td>
<td></td>
</tr>
<tr>
<td>Credit Loans</td>
<td>252</td>
<td></td>
</tr>
<tr>
<td>Other Loans</td>
<td>1,774</td>
<td></td>
</tr>
</tbody>
</table>


3.4.3 Fragility of the Chinese financial system

During the reform period, SOEs have operated in a soft budget system in which they were entitled to receive credits from state-owned banks.\(^{707}\) State-owned banks mainly allocated credits to SOEs according to the state’s targets, irrespective of their ability to repay them. The government has continuously poured subsidies into unprofitable SOEs in order to prevent them from bankruptcy and secure employment and overall political stability. In 2006, RMB 18 billion of subsidies were allocated to loss-making enterprises.\(^{708}\) Hard budget constraints like commercial credit discipline

\(^{706}\) Refer to Park and Sehrt (2001), p. 626.

\(^{707}\) Due to rounding errors, percentage numbers add up to 113 percent.

\(^{708}\) For further information on soft budget constraints in state- or collectively-owned companies refer to Kornai (1992a,b).
from the financial sector or the implementation of bankruptcy proceedings on SOEs have progressed, but are not systematically applied to all SOEs.\footnote{The “Law of the People’s Republic of China on Enterprise Bankruptcy” was adopted in 1986. In 2003, the “Law on Enterprise Bankruptcy” was reviewed. Refer to Ministry of Commerce (2003), “Law on Enterprise Bankruptcy”, Internet Edition, reviewed 17.07.2006. In June 2007, a new bankruptcy law for all sorts of enterprises became effective. The law has taken a great leap forward in bringing the bankruptcy regime in China in line with international practice. It introduces the concept of an independent administrator, e.g. a professional organization (such as an accounting firm) or individual charged with managing the subject enterprise’s affairs and overseeing the administration. This is very different from current practice in China where the bankruptcy process is under the control of a liquidation committee comprising mainly government officials and related parties. Refer to China.org (2006), “Law of the People’s Republic of China on Enterprise Bankruptcy”, Internet Edition, reviewed 25.10.2007.}

Subsidies in the form of state-directed lending to SOEs (rather than to profitable quasi-private or local private enterprises) either due to upper-level instructed policy loans or due to personal connections, have led to an accumulation of non-performing loans (NPLs).\footnote{For a detailed, yet older analysis on China’s NPLs, refer to Lardy (1998), pp. 115-124.} Banks did not sufficiently verify enterprises’ profitability, and the pricing of risk remained undifferentiated when making lending decisions. Therefore, except for some of the bigger banks, the financial quality of most Chinese banks remained poor, with low earnings, inadequate capital, and high levels of NPLs.\footnote{Refer to OECD (2006b), p. 67.}

In 1999, the central government created four asset management companies – Xinda, Huarong, Great Wall, and Orient – to buy and manage bad loans from the big four banks and China Development Bank. Each of the four asset management companies paired up with one of the big four state-owned commercial banks.\footnote{Refer to China Daily (2001), “Tenth Five Year Plan of Banking Industry and its Development” (Yearbook of China Financial Market), Internet Edition, reviewed 28.03.2006.} NPL purchases by the asset management companies were intended to help recapitalize the state banks and accelerate SOE reform. By the end of 2000, the four companies finished isolating and acquiring bad debts of state-owned commercial banks successively with a total amount of RMB 1,394 billion. Also, state capital injections into the capital base of state-owned commercial banks together with sales of NPLs to asset management companies (financed in part by the central bank) should restore the financial solvency of these banks.

Even after the transfer of NPLs to the asset management companies, the big four banks have bad loans on their books, as progress made by the asset management companies has been slow.\footnote{From 1994 to 2002, RMB 199.54 billion were allocated to write-off NPLs of more than 3,000 bankrupt SOEs. In 1998, the government issued a special treasury bond of RMB 280 billion to boost the capital adequacy ratio of the four state banks. In fact, capital injection has been used in Japan and Korea, paid in cash or with bonds and stocks. Refer to Li (2003), “Continuously adjusting the layout and structure of China’s state economy, propelling Chinese SOEs to participate in international competition and cooperation”, Internet Edition, reviewed 10.09.2006. Also refer to Qin (2004), p. 879 and Chen (2003), p. 323.} At the end of 2006, the share of outstanding loans in total loans (NPL ratio) was 7.1 percent compared with 17.8 percent in 2003 (refer to...}
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Figure 19. In fact, the substantial decrease of the NPL ratio after 2004 can almost entirely be explained by the transfers of NPLs to asset management companies as part of their restructuring and the infusion of USD 45 billion by the People's Bank of China.

Figure 19: Total NPLs and NPL ratio of major state-owned and joint-stock commercial banks, 2003-2006.


In conclusion, the Chinese financial system is bank- and credit based like that of the East Asian developmental states. Most financing is regulated by banks' credits. Like the East Asian developmental states, the central government has actively directed and controlled the allocation of credit, and used the financial system as an industrial policy instrument to support selected key industries. In this sense, it has successfully supported loan applications for biotechnology projects.

At the same time, however, China failed to instruct hard budget constraints on SOEs, and the banking system allocates credit to value-destroying SOEs, not to the private sector, as was the case in the East Asian developmental states. While in the industrial sector non-state enterprises have been the driving force of growth, the financial sector has always been under the close supervision of the state (State Council, Ministry of Finance). The privatization trend observed in most of the real economy has been virtually absent in the financial sector. The management of the banks has remained subject to close state control. Thus, state-owned commercial banks cannot make lending decisions in full autonomy from government interest.

In 2006, the pilot banks had only few NPLs left on their balance sheets (Bank of China: 4.0 percent, China Construction Bank: 3.3 percent and Industrial and Commercial Bank of China: 3.8 percent). However, the Agricultural Bank of China had still 23 percent of NPLs. Refer to respective banks 2006 annual reports, Internet Edition, reviewed 22.08.2007.


Refer to OECD (2006b), pp. 67-68.
They are often forced to bail out loss-making SOEs because credits not only fulfil industrial, but also social policy goals (credits hinder state companies from insolvency and thus safeguard employment). State banks lack the power to force payment in the case of default or delinquency. In return, profitability cannot be used as a performance indicator, as in the East Asian developmental states.

The rethinking of the East Asian financial crisis, and the recognition of the cumulating problems in its own financial system, led China to pursue economic and financial reforms. Key areas of progress are improvements in the supervisory regime, including the establishment of the China Banking Regulatory Commission, the ongoing opening of the market to foreign financial institutions, expanded flexibility in setting lending interest rates, and the measures aimed at strengthening and modernizing state-owned commercial banks.  

### 3.5 Government-business relations

The East Asian developmental states relied on an institutionalized state-business partnership. Extensive cooperation and information-sharing between government and business enabled the developmental states to pick priority sectors in anticipation of future profit. In China, information is shared formally, as well as informally, between the state and the business sector. The frameworks typically used to describe the interaction between government and society (pluralism, societal corporatism, state corporatism, clientelism and monism) fail to fully grasp important aspects of government-business relations in China.  

Organizational policy has aimed to determine the shape of the party-state's institutions, and define their relationships with the business sector. Since 1989, chambers of commerce and trade associations have been built in every part of the country and in every sector of the economy. The move to a market regulatory regime has led firms to have an interest in policy influence (and give government a reason to listen). Business associations then try to influence the formulation of public policy in terms of their member firms.

Usually, before the central government adopts new policies, government and business (business associations or individual companies) exchange information on a regular base. Kennedy (2005) contends from interviews with officials in the people's congresses, the State Council, industrial ministries and local governments, that it is common practice to obtain the opinions of industry as part of their attempts to

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718 In his analysis on business lobbying in China, Kennedy (2005) elaborates on these different frameworks.
719 Associations' functions have gained importance after China's accession to the WTO as Chinese companies need to better coordinate their activities to respond to more intense global competition.
720 Refer to Kennedy (2005), p. 28.
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regulate the economy. Such exchanges of opinions are initiated by both sides. They occur during the consideration of specific laws and regulations, and as part of the process of regulatory oversight, which then might prompt a new policy initiative. One way for information exchange between the government and the business sector is the organization of formal hearings, where ministries at the national and regional levels obtain industry's opinions. Consultations regarding commercial work, legislative regulations and other political questions of regularization, are held frequently. Participants are not only the leading CCP members, but also invited representatives from affected state organs, economic and social sectors and officially registered associations. In March 2006, the Ministry of Commerce held a symposium with 18 industry associations. The Ministry of Commerce especially heard suggestions of the associations in the process of applying trade remedy measures, maintaining security of domestic industries, responding to trade frictions and launching multi-lateral negotiations.

Besides formalized information exchange at hearings and through business associations, there are indirect routes of contact between the Chinese state and businesses operating in China. The most prominent alternative to associations is direct interaction between the government officials and firms.

Nee (1989) and Bian and Logan (1996) contend that the importance of (political) connections for business success is negatively correlated with the degree of economic liberalization and marketization. Although during the 1990s, guidance plans were replaced by indicative plans and the importance of planning dropped, the Mao era had left a legacy that stressed direct interaction between government and business. The legitimacy of direct interaction between SOEs and government has extended to domestic and foreign private firms. Entrepreneurs often articulate their interests privately, and thus informally, to policy-makers with whom they have guanxi. The government-business relationship in China, however, goes far beyond informal information sharing. Due to strong state intervention in business activities, government and businesses are closely intertwined. This nexus is founded on bilateral alliances between local governments on the provincial, city or county level, and local business. In heavily state-regulated industrial sectors and regions, local government organizations are still in a position to control the access of local firms to important inputs and licenses, as long as strong macro-economic institutions that protect a market system based on fair competition are absent. Entrepreneurs thus cultivate personal connections with powerful government bureaucrats to gain access

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721 Ibidem, pp. 48-49.
725 Refer to Taube (2005), p. 5.
to resources and protect their firms from predatory interventions.\textsuperscript{726} As cadres are evaluated by central government and party organizations according to their ability to promote economic development, create new jobs, etc. in their localities, they also rely on strong business partners. As a consequence, there exists a strong interdependency between local government and businesses.\textsuperscript{727} Moreover, as market-oriented reforms represent a challenge to bureaucrats' ability to directly determine economic outcomes, government officials have run government-created associations so that associations will not usurp the bureaucracy's original powers. In this way, bureaucrats aim to continue the planning-era practice of direct interaction with businesses.\textsuperscript{728} Especially if entrepreneurs depend on government contracts for their business, strong political ties with government officials is often the decisive factor in business success. The firm's economic performance then becomes dependent on its relations with state representatives, and the extent and quality of government involvement within the firm.\textsuperscript{729}

Taube (2005) conceives that politics and the business sector in several cases even form an "integrated organization".\textsuperscript{730} Local governments have developed organizational characteristics in many ways like those of industrial firms.\textsuperscript{731} Many provinces and municipalities experienced government-led economic growth based on "local state corporatism", where officials acted as the equivalent of a board of directors, or sometimes more directly as chief executive officers, in a corporation.\textsuperscript{732}

Also the central government and its agencies frequently function like "China Inc.".\textsuperscript{733} Even without detailed plan directives, the central government is involved in the proactive design of industry structure and the opening of development paths for its "national champions". The case of CNOOC's bid for the American oil corporation Unocal, which was aborted due to strong political resistance in the USA in August 2005, provides an example of the merger between political interests and individual business strategies. Political interests may even dominate the latter. CNOOC would never have been able to raise the USD 18.5 billion it was bidding for the US company. As the deal would have fitted in the government's policy to improve the nation's access to natural resources, it offered to provide CNOOC the necessary financing by means of loans guaranteed by the state.\textsuperscript{734}


\textsuperscript{727} Refer to Taube (2005), p. 5.

\textsuperscript{728} Refer to Kennedy (2005), p. 47.

\textsuperscript{729} Refer to Nee and Opper (2007), pp. 106-108. For further information refer to Findlay (1999).

\textsuperscript{730} Refer to Taube (2005), p. 4.

\textsuperscript{731} For further information refer to Walder (1995).

\textsuperscript{732} For further information refer to Oi (1992).

\textsuperscript{733} Refer to Taube (2005), pp. 4-5.

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State and business, mostly at the local level, and sometimes even at the central level, are closely entangled, and a clear separation between bureaucracy and firms can often not be found. The local party cadre is at the same time responsible for the provision of investment for a risky business plan, and the management of the established enterprise, in one jurisdiction. Institutionalized information-sharing in business associations is thus not necessary.

Altogether, relations between the government and private businesses are different from the East Asian developmental states. Regardless of China's great advances in its technical capabilities and successful industrial policy, the Chinese bureaucracy never succeeded in truly separating from the operations of the leading enterprises. Accordingly, active information sharing of (private) businesses with the state was only in particular cases institutionalized, as in the developmental states. Resulting from the legitimacy of direct interaction between SOEs and government bureaucrats, informal lobbying through guanxi networks between government officials and businessmen (of SOEs, private and foreign companies) have been prevalent throughout the reform period. Whether the government has thus only received information on "sunrise" industries and business needs as in the developmental states, or has also been captured by business interests due to its close involvement in business activities, remains debatable.

3.6 Conclusion

During the reform, China gradually abandoned central planning and import substitution and moved from state dominance toward a Chinese model of state-guidance (refer to Figure 20). China has chosen a modified path of the developmental state approach. It has not only adopted and emulated previous strategies of the East Asian developmental states, but also adapted its path to its special characteristics.

Unlike the East Asian developmental states, China's industrial policy focused not only on exports, but also on FDI (export-FDI nexus). Furthermore, the rethinking of the East Asian financial crisis and thus the recognition of the cumulating problems in its own financial system led China to pursue further economic and financial reforms to build up market-supporting institutions largely based upon market-centered capitalism. In addition, particularly the local states in China resemble the East Asian developmental states. They are responsible for local prosperity, because they are empowered to carry out development, realigning revenue distribution between the central authorities and localities. These aspects demonstrate a revision of the previously most influential Japanese and Korean model.

In this context, *adoption* implies emulation of the criteria of the East Asian developmental state; *adaptation* means variation of the criteria of the East Asian developmental states, and adjustment to China's special characteristics. An adjustment of the East Asian Model has been assumed previously when analyzing the special characteristics of China.
Figure 20: The Chinese model of state-guidance.

Source: Own illustration.