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#### **Article**

West meets east: Understanding managerial incentives in Chinese SOEs

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# West meets east: Understanding managerial incentives in Chinese SOEs



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#### ABSTRACT

State-owned enterprises (SOE) are essentially extensions of the government and are therefore responsible for multi-task objectives. The incentive system for SOE managers consists of both monetary compensation and promotion within the bureaucratic system. Political promotion is key to understanding the incentives of SOE managers. In the reform and opening up era, SOEs have been reformed and exposed to political and market forces. The design of incentive systems for SOE managers has thus become complicated and challenging. Our study provides important implications for this key issue of SOE reform. © 2019 Sun Yat-sen University. Production and hosting by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

SOEs play a vital role in China's economic and political system and serve as an important material and political foundation for the development of the Communist Party of China and the country. Improving SOEs' operating performance and strengthening party control over them are always important aspects of the government's economic work. This article discusses the nature of SOEs and then uses the incentive theory for firms developed in Western literature to analyze and summarize the basic characteristics of the managerial incentive system in Chinese SOEs. Specifically, we discuss the strengths and weaknesses of this incentive system by combining empirical findings on CEO incentives in Chinese SOEs. Finally, this article discusses potential improvements to SOE managerial incentives in the future.

#### 1. Multi-tasks of SOEs and top-down administration

Before the reform and opening up, China's economic system consisted entirely of a state-owned economy. The reform and opening up led to increased market power and diversified property rights. SOEs, private enter-

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prises, and foreign-funded enterprises coexist in the market and compete with each other. In contrast to non-state-owned enterprises, SOEs typically have multiple goals beyond profitability—that is, obvious multitasking characteristics. Early discussions of the objectives of Chinese SOEs focused on their social stability function (Bai et al., 2000; 2006).

Views of SOEs suggest that during this transition period, because the security system to maintain social stability is still underdeveloped, the state needs enterprises to provide employment to maintain social stability, which will adversely affect business efficiency. Because non-state-owned enterprises do not have incentives to provide social stability, the state needs to maintain a certain number of SOEs to hire more employees and promote social stability, which places a policy burden on SOEs (Lin et al., 1998).

In the past 40 years since the implementation of market-oriented reforms in China, the national economy has grown rapidly, and underground market institutions have been established. Given the social stability objectives of SOEs, the importance of SOEs should gradually decline. However, based on the declarations of the Central Committee of the Communist Party of China and the State Council, the role and status of SOEs have not been diminished. Within China's socialist economic system, SOEs are responsible not only for strengthening social stability but also for promoting social development. In 2016, at the National Conference on the Construction of State-Owned Enterprises, President Xi Jinping stated:

State-owned enterprises are an important material and political foundation for socialism with Chinese characteristics, and an important pillar and power for our party to govern and rejuvenate the country. Since the founding of the People's Republic, especially since the reform and opening up, the development of SOEs has made great achievements. China's SOEs have made historic contributions to economic and social development, scientific and technological progress, national defense construction, and improvement of people's livelihood. It is of great merits and dedication.

Moreover, if SOEs only undertake social stability functions (such as employing a large number of excess employees), their business performance will undoubtedly be negatively affected. However, since the beginning of this century, the operating performance of SOEs has improved significantly. For example, according to the "Statistical Communiqué of the National Economic and Social Development of the People's Republic of China in 2017," state-owned holding companies had an income of 1,665.1 billion yuan in 2017, an increase of 45.1% over the previous year, and their growth rate ranked first among various economic activities. Thus, SOEs not only undertake the policy burden of social stability but also the functions of policy implementation and innovation to promote social development. In other words, SOEs are an important force for the government to promote economic and social development. They are "the vanguard of the implementation of the new development concept, the vanguard of innovation-driven development, and the vanguard of the implementation of the national major strategy." With the development of society and the economic aggregate, SOEs themselves have also made considerable progress.<sup>2</sup> In undertaking the policy burden of promoting social stability and social development, Chinese SOEs also enjoy policy dividends. As organizations controlled by different levels of government, SOEs need to enforce and implement various government economic and social policies, such as taking on leadership roles in industrial or economic affairs, addressing income inequality, and building the community environment. Such undertakings make up the social mission of SOEs.

But why must SOEs undertake such missions? Cannot the functions of social security and social development be realized through other mechanisms such as public finance and market transactions? The factors underlying this problem are complex and beyond the scope of this article. A preliminary answer in this article is that China has delegated some decision rights to government officials at all levels to encourage them to adopt discretionary and flexible measures to promote economic and social development within their jurisdictions. However, governments at all levels must strictly comply with policies and laws (such as the Budget Law), which limits the ability of government officials at all levels to use public finances to promote local economic and social policies. In addition, governments at all levels can put little pressure on non-state-owned enterprises to pursue social goals. Non-state-owned enterprises that exclusively pursue profitability are not

<sup>&</sup>lt;sup>1</sup> When Xi Jinping visited China Aluminum Corporation in 2017, he proposed that SOEs should be the vanguards of implementing new development concepts, of innovation-driven development, and of implementing major national strategy.

<sup>&</sup>lt;sup>2</sup> According to the 2017 China Statistical Yearbook, the total profit of SOEs in 1998 was 52.514 billion yuan. In 2016, it reached 12,324.34 billion yuan, an increase of 23.46 times, and the GDP growth during the same period increased 8.73 times.

motivated to undertake unprofitable or highly uncertain projects. If the government forces non-state enterprises to undertake government policy tasks, it will lead to high transaction costs between governments and market players, and would be inconsistent with the trend of market-oriented reforms. By letting SOEs implement the economic and social policies of all levels of government, the transaction costs are internalized to some extent, which is conducive to the implementation of the ideas and policies of government officials. In this sense, SOEs can be regarded as extensions of government that manifest as downstream organizations in the bureaucratic hierarchy. SOEs are accountable and report to higher-level governments, and SOE managers are responsible to officers in charge, which contrasts sharply with the typical "shareholders meeting—board of directors—manager team" Anglo-American corporate governance structure. Thus, in terms of corporate governance mechanisms and characteristics, SOEs and non-state-owned enterprises are inevitably very different.

Importantly, the multi-task characteristics of SOEs that are accountable to higher levels of government also require their pursuit of profit targets. Only profitable companies can survive in the market, and SOEs that cannot achieve profitability will increase the serious financial burden on high-level government and therefore fail to fulfill to carry out the economic and social policies assigned to them. Once an SOE has suffered losses, high-level government may restructure it (Wang et al., 2001). SOE managers may also face hard budget constraints. However, because SOEs have government support, they have certain competitive advantages when competing with non-state-owned enterprises, especially when undertaking government-issued business (such as infrastructure construction projects). Thus, in theory, SOEs should try to avoid losses, but they cannot purely emphasize profit maximization. This is a dilemma that non-state-owned enterprises do not face.

#### 2. Careers of SOE managers in a locked market

Because SOEs are government affiliates, SOEs and government administrative agencies are integrated as units within the system, which shapes the careers of SOE managers within a locked market. Changes in administrative levels and work units are the two main factors that of the careers of SOE managers. The work units of SOE managers can only switch between SOEs, or between SOEs and government administrative agencies (see Fig. 1). In addition, similar to government officials, in most cases, SOE managers also have administrative levels. To a large extent, the career ceiling of an SOE manager is determined by his administrative level and the size of the unit in which he served.

China's bureaucracy has been exposed to relatively less market risk because it resists brutal shocks from external markets and enhances utility for risk-averse individuals. In addition, the bureaucracy requires individuals to follow discipline in their work (Weber, 1968). This system has a special self-selection pattern:

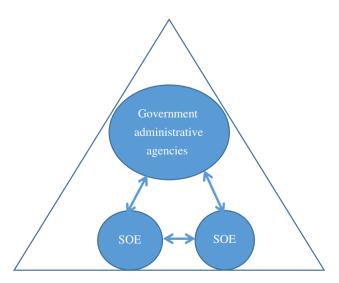


Fig. 1. Career of an SOE manager in a closed system.

individuals who are more risk-averse and more disciplined are more likely to choose the path of development within the system.

If an SOE manager wants to leave the system and seek professional development outside it (commonly known as "xia hai"), he will face high switching costs, including the abandonment of a series of hidden benefits attached to the system. In addition, the higher the administrative level of SOE managers, the higher the switching costs (Chen et al., 2018). This high cost of switching job markets leads most SOE managers to spend their entire careers in the locked market.

# 3. Performance evaluation of SOE managers

Generally speaking, there are two kinds of performance evaluations for managers, objective and subjective. Objective evaluation seeks an objective indicator of sufficient information to reflect talents and efforts (Holmstrom, 1979). If this objective and effective indicator cannot be found or the objective indicator selected is too noisy, the objective evaluation should not be emphasized too heavily, and subjective evaluation should be used.

When a manager faces multiple tasks with different performance indicators for evaluation, it is easy to induce managers to act discretionarily to maximize their own interests, as these different dimensions of indicators may conflict with each other, or the objective performance measures may not be consistent (Holmstrom and Milgrom, 1990; Baker, 1992). It is clearly not what the principal expects. In this case, the manager's performance evaluation should be more subjective.

It should be pointed out that the multi-tasks of SOE managers do not necessarily conflict with the use of objective evaluation indicators. For example, the complexity and diversity of the tasks of a company's CEO cannot be denied, but there are still objective evaluation indicators, such as stock returns and accounting performance in the CEO's incentive contracts. Indeed, the company's stock returns and accounting performance indicators can better summarize the CEO's efforts on multiple tasks. In other words, although the CEO undertakes multiple tasks, these tasks are linked to the company's market value and economic performance, which are evaluated using objective criteria (Prendergast, 1999).

However, the characteristics of the tasks faced by SOE managers are highly complex, which makes the performance evaluation of SOE managers difficult. Because SOEs promote social security and social development, they are an important force for governments at all levels in implementing economic and social policies. The tasks faced by SOE managers are diversified and heterogeneous, and include government project investment, counterpart poverty alleviation, and projects on the State-owned Assets Supervision and Administration Commission (SASAC) reform task list. These tasks cannot be aggregated simply through stock returns or accounting performance indicators. As a result, performance evaluations of the SOE managers must be based on the weighted average of multi-dimensional indicators and then subjectively rated based on the weighted average. Table 1 provides an example of the assessment of a major SOE of a province.

Du et al. (2012) explain in detail how the SASAC assesses the central SOEs. Specifically, the SASAC works with subordinate SOEs to determine the target operating results for the next year in the fourth quarter of each year. In general, SOEs first propose their own business performance targets, and then the two parties

Table 1	
Assessment plans of a major SOE by t	the SASAC of a province in 2017.

Indicator	Score	Assessment items	Weight	Target value
Fundamental	70	Completion of Government project investment (unit: 100 million yuan)	20%	X1
		Net profit attributable to the parent company (unit: 10,000 yuan)	30%	X2
		Economic value added (unit: 10,000 yuan)	30%	X3
		Financial performance evaluation	20%	
Comprehensive	30	Provincial State Assets reform task list	50%	
		Provincial State Assets innovation task list	30%	
		Provincial SASAC risk control checklist	20%	

Note: Financial performance is evaluated by the provincial SASAC at the end of the year, and the comprehensive industry annual standard is benchmarked.

determine the final business performance target and sign a business responsibility contract through consultation and negotiation at the end of March in the second year. Each April, the CFO of the SOE prepares relevant statements on the completion of the operational indicators based on the reviewed financial report of the previous year and compares them with the previously determined business performance targets, and then submits them to the SASAC for review and evaluation. The SASAC uses the SOEs' performance reports to calculate their performance scores and then independently adjusts them according to the specific conditions of the SOEs (such as whether there are security incidents, etc.). Finally, the SASAC assigns a five-level rating (A-E) to SOEs based on the final performance scores of each SOE and score interval. Generally, SOE managers at and above C are qualified, while D and E mean that SOE managers are incompetent. Fig. 2 shows the evaluation ratings of 152 central SOEs from 2005 to 2007.

The literature shows that when managers face multi-tasking, subjective performance evaluation is more comprehensive than objective performance evaluation. However, subjective evaluation has a number of short-comings. First, subjective evaluation results are difficult to verify externally, so they are susceptible to various non-performance factors, which mitigates their credibility. For example, subordinates may waste resources to maintain good relationships with their superiors to obtain good evaluation results (e.g., Milgrom, 1988). Du et al. (2012) find that the political relevance of SOE CFOs and the geographic proximity of SOEs and SASAC are positively correlated with the level of subjective evaluation. Thus, SASAC's evaluations of SOEs may be affected by non-performance factors.

Second, subjective evaluation is prone to problems such as centralization bias and benevolent bias, and often does not distinguish well between good performance and poor performance (e.g., Landy and Farr, 1980). In addition, the results of subjective performance evaluations should not be weighted too heavily for high-power manager incentive contracts. Because the results of subjective performance evaluation cannot be verified, if the economic consequences of a subjective evaluation are particularly important, it is highly likely to distort the agent's actions (Milkovich and Wigdor, 1983). The results of the subjective evaluation should be mainly used to examine the manager's talents and efforts over the long term and to help the manager develop his or her career rather than immediately link subjective evaluation results with explicit incentive contracts.

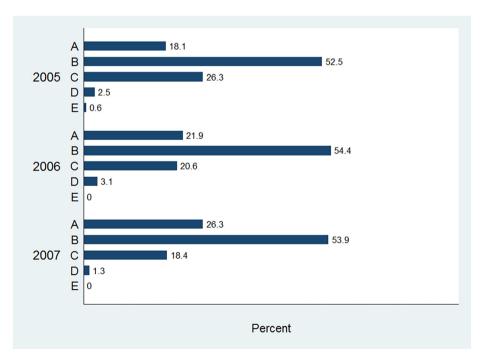


Fig. 2. Evaluation ratings of 152 central SOEs from 2005 to 2007 (Source: Du et al. (2012)).

Table 2 Descriptive statistics of the cash compensation of central SOEs' chairmen (deputy ministerial level) in 2016.

Statistics	Chairman's cash compensation (unit: yuan)
Mean	738,300
Median	751,200
Min.	535,000
Max.	125,7,500
Std.	132,000

Note: The data come from the website of the SASAC of the State Council. In 2016, 104 central SOEs disclosed the compensation data for their chairmen. We excluded 23 samples for which the chairman had not yet been appointed or for which the chairman did not serve for the whole year in 2016, resulting in 81 samples.

# 4. Features of the incentive system for SOE managers

SOEs are subject to the government, and SOEs managers undertake multi-tasks and are accountable to high levels of governments. As their careers are in a locked system, the incentive system for SOE managers has unique features, including bureaucratic monetary compensation, promotion within the system, incentives for control, and delayed payments.

#### 4.1. Bureaucratic monetary compensation

Compared with managers of non-state-owned enterprises, the monetary compensation of SOE managers is rather low. The salary differential among SOE managers is small, which reflects bureaucratic salary characteristics. Table 2 shows the salaries of 81 central SOEs in 2016 (administrative level: deputy ministerial level). The annual average monetary salary of the chairman of the central SOEs is 738,300 yuan, the median is 751,200 yuan, the minimum is 535,500 yuan, the maximum is 1,257,500 yuan, and the standard deviation is 132,000 yuan. Given that most of the central SOEs are large-scale firms, the monetary compensation of their managers is quite low compared to managers of non-state-owned enterprises of similar size. The standard deviation of the monetary compensation of SOE managers is also very small, which indicates that the monetary compensation contract is unlikely to be effective in providing incentives.

Why do SOE managers' salaries have bureaucratized monetary compensation characteristics? The reasons are complex. First, as mentioned earlier, an SOE manager is a quasi-official officer who is both the enterprise manager and an administrative official. This duality is determined by the party's organizational department according to work needs. For a manager registered with the party's organizational department—a "bureaucratic manager" or "official manager"—monetary compensation is naturally determined with reference to the administrative bureaucratic compensation system.

Second, SOEs undertake multiple tasks beyond profitability, which lack comprehensive indicators to evaluate the talents and efforts of managers, which makes it difficult to implement pay-for-performance compensation contracts. In theory, it is possible to aggregate multiple task performance indicators into one comprehensive indicator and then link this comprehensive indicator with manager compensation. However, because of the complexity of the performance indicators of multiple tasks and the variation in information content and the noise of performance indicators of different tasks, a manager may miss certain tasks. Therefore, in a multi-tasking situation, manager monetary compensation should not exclusively rely on strict performance indicators.

<sup>&</sup>lt;sup>3</sup> Taking Longhu Real Estate, a large private real estate enterprise, as an example, the cash compensation of Wu Yajun, the chairman of the company, was 10.09 million yuan in 2016, and the cash compensation of CEO Shao Mingxiao was 15.10 million yuan (excluding an equity incentive of 12.55 million yuan).

<sup>&</sup>lt;sup>4</sup> According to the information disclosed by the SASAC, if the head of the central SOE needs to work overseas, an additional RMB 350,000 in monetary subsidies will be issued each year. After this addition, the salary gaps between the central SOEs will be smaller.

SOEs' non-profit tasks will affect their accounting performance because they have access to the preferential policies and investment opportunities brought by government support. Accounting performance is thus less applicable for measuring managerial talent and effort. Therefore, accounting performance alone is not suitable for determining managerial compensation.

Based on data from Chinese listed companies, Firth et al. (2006) find that there is no statistically positive association between managerial compensation and corporate performance in a listed company with a state agency as the major shareholder. Liu et al. (2007) find that the more the government intervenes in enterprises, the less accounting performance is used in compensation contracts for SOE manager, and the weaker the relationship is between manager compensation and accounting performance.<sup>5</sup> The empirical evidence documented is consistent with the above theoretical predictions.

The degree of managers' risk aversion also affects the design of compensation contracts. Holmstrom and Milgrom (1987) point out that the higher the agent's risk aversion, the less explicit the incentive level should be. If a manager who chooses to spend his or her career in the system has a higher degree of risk aversion, his or her compensation contract will be characterized by bureaucratization.

#### 4.2. Political promotion

Political promotion is key to understanding the incentive mechanism of SOE managers. Promotion has always played an important role in organizational incentives. Lazear and Rosen (1981) and subsequent studies use tournament theory to analyze the incentive effects of position promotion in organizations. In an organization, many employees (agents) compete for the same position, and employees' compensation is linked to the positions. For positions at the same level, the salary is relatively fixed and the gap is not large. The higher the position level, the greater the corresponding return, and thus it provides agents with incentives for upward promotion. Only winners can qualify for the next round (higher level) of competition, and this option effect provides further incentives for agents. When selecting candidates to participate in the competition, the principal pays attention to their talents and efforts. Because only one candidate can win in a position, the principal only needs to select the best of the limited candidates, which reduces the cost of assessment for candidates. Moreover, the cost of negotiation between the principal and the agent in the compensation contract is reduced because of the specific position and fixed salary. In addition, the principal is unlikely to pick the winner based on the agents' short-term performance, which also eases the agents' short-termism. Because only one of the candidates wins, this also eliminates problems of kindness deviation and center deviation that are common in subjective evaluation. Moreover, once a candidate is successfully promoted to a higher position, he has more resources to control, and thus the consequences of decision-making are more serious. Therefore, if an incompetent candidate is promoted, the interests of the superior (principal) will be damaged. This potentially constrains the rent-seeking issue in position promotion. For the above reasons, position-based promotion incentives play a highly important role in organization governance.

However, once an agent is promoted to the highest position in the enterprise, the incentive effect of promotion will be significantly weakened because there is no further room for improvement. Therefore, monetary compensation and equity incentives are the main incentives for CEOs of non-state-owned enterprises. Correspondingly, foreign literature on CEO incentives rarely discusses the incentive mechanism for promotion. Unlike non-state-owned enterprises, SOE managers seek political promotion in the government system. Table 3 lists the administrative rankings of Chinese officials, from the lowest level (Quasi Town/Section) to the highest (Full State), a total of 10 levels. Among them, officials at the Quasi Department level and above belong to the ranks of "senior cadres." The persons responsible for central and local SOEs are managed by the party's various organizational departments with reference to the corresponding administrative ranking. For example, the administrative ranking of the heads of central SOEs (the chairman and general manager) is generally Quasi Province/Ministry, the administrative level of the heads of provincial SOEs is generally Department, the administrative level of the heads of SOEs in prefecture-level cities is generally County/Division, and

<sup>&</sup>lt;sup>5</sup> In theory, if there is a positive correlation between the political indicators undertaken by SOEs and economic performance, the existence of political tasks does not necessarily weaken (or even strengthen) the sensitivity of managerial compensation to accounting performance. We thank Professor Ye Kangtao for pointing this out.

Administrative levels of Chinese Officials.				
Rank order	Political rank	Multi-level SOEs		
1	Full State			
2	Quasi State			
3	Province/Ministry			
4	Quasi Province/Ministry	Central SOEs		
5	Department	Provincial SOEs		
6	Quasi Department			
7	County/Division	City SOEs		
8	Quasi County/Division			
9	Town/Section	County SOEs		
10	Quasi Town/Section	•		

Table 3
Administrative levels of Chinese officials

so on. Therefore, SOE managers have a great deal of room for future promotion, which can motivate their actions.

In addition, as shown in Fig. 1, because SOE managers can move between different units within the system and the social status and influence of different units vary, the rotation of managers between different units can also be seen as a form of reward or punishment even if their administrative level is unchanged. For example, when a small SOE manager is transferred to a large SOE unit, it can be considered a political promotion.

In general, SOE administrators (State Council SASAC or local SASAC) are responsible for the assessment of SOE managers, and organizational departments at all levels of the CPC (such as the Organization Department of the CPC Central Committee) are responsible for the selection and promotion of SOE managers. Thus, the appraisal organization and selection institution are separate, which ensures a certain degree of independence in the manager selection process. In the selection of a specific manager (cadre), the organization department needs to conduct surveys and vote to ensure fair evaluations (opinion poll) of the candidates. The results of the evaluations by surveys and voting are important reference indicators for choosing a manager. Candidates with poor public opinion responses are not competitive. To a certain extent, the assessment of candidates brings together private information about candidates' conduct and abilities. It has functions similar to market (decentralized) decision-making, which enhances objectivity in the selection process.

#### 4.3. Control as an incentive mechanism

For business managers, control of the position is an important source of incentives. In reality, the social and political influence of individuals often depends on the resources that they control, not the resources that they own (Morck et al., 2005). The psychological achievement, respect, and social status that accompany the control rights enhance the individual's utility.

In China, the government plays an important role in economic and social life. A large number of economic and social resources (such as education, medical care, etc.) are allocated by public power rather than market mechanisms, which further enhances the return of power within the system. SOE managers can obtain not only useful information from closed networks, but also the attention of other members of the network when dealing with personal matters such as personal and family friends (such as children's education, job opportunities, medical resources, etc.). Managers can also inject information and resources into a closed network, which are important bargaining chips in their relationship networks. The ability of an individual to obtain returns from the system is closely related to his or her position (control), which contributes to the incentive to "preserve a seat" and thus provides a source of motivation for actions. <sup>6</sup>

<sup>&</sup>lt;sup>6</sup> Professor Kangtao Ye provided a wonderful exposition of the incentives and effects of resource control on SOE managers when discussing this article in the 10th Anniversary Symposium of *China Journal of Accounting Research*. Incentives include the retention of SOEs' profits, the provision of more capital, and appointments to positions that control more resources. For the government, compared with administrative promotion, the resources granted to SOE managers are considerable, so managers' enthusiasm can be more fully mobilized.

#### 4.4. Deferred compensation

SOE managers, especially high-level cadre managers, typically have deferred compensation. Deferred compensation is the redistribution of employee compensation across the career life cycle. The employee receives low compensation when young, but high compensation when old. A number of literatures have discussed the role of deferred compensation organizational incentives (Salop and Salop, 1976; Lazear, 1981). Under the deferred payment system, older employees are more motivated to work harder (because they receive more than the market compensation), while younger employees work hard based on future compensation expectations. Moreover, if it takes long time to observe the agent's talents and efforts, the deferred compensation is better than the instant compensation. In addition, deferred compensations are also more helpful in retaining employees.

SOE cadre managers' deferred compensation is mainly reflected in post-retirement benefits, including higher retirement wages and better medical conditions than general employees receive. The post-retirement benefits of cadre managers are also closely related to their administrative level, which further strengthens the incentive effect of administrative promotion.

# 5. Consequences of the incentive system for SOE managers

From the previous discussion, the incentives for SOE cadre managers have the obvious characteristics of low monetary compensation and strong administrative promotion incentives. What are the economic and political consequences of these managerial incentives? We discuss the positive and negative effects.

# 5.1. Positive effects of the incentive system for SOE managers

As mentioned, SOEs are an extension of the government, safeguarding social stability and promoting social development. For them to effectively achieve these goals, the government must ensure that its economic and social policies can be implemented in SOEs, and thus the government must maintain control of SOEs. An important way that the government ensures this control is by appointing and dismissing heads (party management cadres) of SOEs. Further, SOE managers' motivation to work hard with less monetary compensation can be strengthened by establishing multiple levels of executive positions and allowing SOE managers to move within the system. Thus, the government can use fewer management resources to control a large number of SOEs, which is key to the implementation of party and government economic and social policies.<sup>7</sup>

This incentive system also helps to reduce the inclination of SOE managers to take excessive risks. Chen et al. (2018) believe that SOE managers in a closed system enjoy non-transferable benefits: the higher the administrative level of the manager, the greater the non-transferable interest, so the cost of getting out of the system is high. Therefore, for career and benefit considerations, cadre managers tend to be conservative and avoid risks when running a business. Using data for state-owned listed companies from 2005 to 2012, Chen et al. (2018) find that the administrative level of SOE managers is negatively correlated with the company's stock price crash risk. Because SOEs operate using resources owned by the people, the risk of agent asset abuse is particularly serious. It is essential to reduce the excessive risk exposure of managers through various means, such as the administrative level system.

<sup>&</sup>lt;sup>7</sup> The literature on the promotion of SOE managers finds that the poor performance of SOEs is likely to lead to the demotion of managers, but that good performance has a weak relationship with manager promotion (Liu and Xiao, 2015). The social responsibility and policy burden of SOEs can help managers obtain promotions (Liu and Xiao, 2015; Zhang et al., 2015). This shows that adopting an incentive mechanism for administrative promotion will help SOEs implement the government's economic and social policies. First, if the company's performance is sufficiently bad, the company will not be able to implement the government's economic and social policies and will place a heavy financial burden on the government (such as the consumption of a large amount of government subsidies). Managers of poorly performing companies will be punished. Second, the company assumes more social responsibility and policy tasks, and it helps implement the government's economic and social policies, so company managers are more likely to receive government rewards. Third, if the government pays too much attention to the profitability of SOEs, it is likely to lead to suspicions of "competing with the people" and will weaken the incentives for SOEs to assume social and policy burdens (because doing so will weaken the performance of enterprises). Therefore, SOE managers will not be promoted just because of their excellent performance. In terms of the evidence observed above, the administrative promotion of SOE managers generally matches the tasks and missions undertaken by SOEs.

The incentive system for SOE managers also helps to avoid over-emphasizing "pay for performance" earnings management (e.g., Cheng and Warfield, 2005; Bergstresser and Philippon, 2006), managerial myopia (Edmans et al., 2017), and other opportunistic behaviors. However, an incentive system with administrative promotion as the core will experience a series of serious problems, which we discuss below.

## 5.2. Problems caused by the incentive system of SOE managers

Cadre managers face extremely fierce competition for administrative promotion. The higher the administrative level, the more intense the competition. Moreover, there is usually a limit on the age of a candidate promoted. For example, most candidates promoted to the County/Division level for the first time are less than 50 years old, while those promoted to the Department level for the first time are typically no more than 55 years old. The brutal competition and age limits require cadre managers to assess their future promotion prospects during their tenure. When a manager feels no hope of promotion, the incentive effect of administrative promotion is greatly weakened. With meager cash compensation, such a cadre manager may have the incentive to chase wealth, which can lead to corruption.

Second, a long-standing problem in China's cadre management system is that cadre managers can be promoted but rarely dismissed. That is, there is no specific stipulation on the terms of cadre managers. Many have worked in fixed positions for a long time, which has lowered the promotion prospects of middle and lower managers. It also reduces incentives for incumbent cadre managers, especially when their promotion prospects are slim. The literature suggests that incompetent managers retained in their positions are among the most serious agency problems (Jensen, 1993; Shleifer and Vishny, 1989). When a group of mediocre cadre managers occupy important positions, organizational efficiency and even the entire state-owned economic system may be seriously damaged. 9

In addition, because superior officials decide whether to promote a cadre manager, SOE managers prefer to take actions that can attract the attention of their superiors. Zheng et al. (2012) conduct a case study of a large provincial SOE and find that SOE executives have a strong incentive to build image projects to achieve political promotion, including public welfare donations and media promotion reports to enhance the personal image of a company or executive in the short term. SOE managers are often too eager to pursue actions that are observable by their superiors, which frequently leads to resource mismatches and reduces resource allocation efficiency.

As mentioned, SOE managers seek career development throughout the system (rather than within a company). SOE managers are often transferred to other units within the system because of the arrangement of the superior organization, which results in a large degree of uncertainty in their term within a particular enterprise. This uncertainty disincentivizes managers from acting in the interests of the long-term development of the company, which leads to short-termism issues.<sup>10</sup>

# 6. Evolution of the incentive system for SOE managers

In the 40 years of reform and opening up, market forces have played an increasingly important role in resource allocation and have profoundly affected the governance of SOEs. The growing numbers of private enterprises, foreign-owned enterprises and multinational corporations present SOEs with more intense market competition. Companies with continuous losses cannot survive in the market; in a competitive market, SOEs must establish governance systems that adapt to market forces and market signals. SOEs must simultaneously

<sup>&</sup>lt;sup>8</sup> Chen et al. (2009) conduct a study of local state-owned listed companies and find that the existence of executive compensation regulation is positively related to the probability of executive corruption; Xu and Liu (2013) further support this finding. Wan and Chen (2010) document that when SOE executives face retirement, they are more likely to suffer occupational occupation.

<sup>&</sup>lt;sup>9</sup> In the market competition environment, the empirical shows (Liu and Xiao, 2015) that the performance of SOEs is negatively correlated with the executives turnover, that is, the executives is demoted due to poor performances. This means that SOE cadre managers face hard constraints on performance to a certain extent, and stronger market forces will tighten such constraints.

<sup>&</sup>lt;sup>10</sup> Professor Ye Kangtao believes that administrative promotion is a high-cost incentive mechanism. High-level positions are scarce and therefore prone to insufficient incentives. According to the Peter Principle, executive promotion can easily lead to entrepreneurial mismatches. We agree that more theoretical and empirical research is needed on the interpretation and consequences of the promotion incentives for state-owned enterprise managers.

promote social stability and development; thus, they have mixed market and administration goals. From the market perspective, SOEs must improve operational efficiency and enhance their vitality. From a political point of view, the government needs to strengthen control over SOEs so that they implement relevant government policies. Strengthening control and improving efficiency are the dual goals to be achieved in SOE reform. Mixed incentives have been developed to meet these goals.

First, the management of SOE managers has been reformed. Not all managers are treated as cadres, and non-cadre managers are allowed to adopt market-oriented incentives, such as higher monetary compensation, stronger pay for performance, and equity incentives. Through the establishment of a multi-layer ownership structure (equity pyramid), market forces can play a greater role in SOE operation and governance. Generally, SASAC is at the top of the equity pyramid of SOEs. When there are two or more layers in the equity relationship between an SOE and SASAC, the SOE manager (if the manager does not serve in the upper-level enterprise) is generally not managed as a cadre. This manager's assessment and compensation are mainly determined internally by the SOE. At this point, the selection and incentives of these managers will be more market-oriented. For example, Fan et al. (2013) provide theoretical explanations and evidence that the pyramid structure can isolate administrative interventions from the government, reduce political costs, and improve the efficiency of SOEs and the level of management specialization. Zhou and Xin (2017) document that when state-owned listed companies are at the bottom of the pyramid structure, the stronger the correlation is between manager compensation and accounting performance, the more likely managers are to be replaced because of poor accounting performance. Other studies find that the stronger the market power faced by SOEs, the more market-oriented managers' incentives are Ke et al. (2012), Hu et al. (2013).

Second, different SOEs have different responsibilities, roles, and goals in economic and social development. Therefore, different management and evaluation models are needed. For example, SOEs in competitive industries should allow market forces to play a leading role in business management and governance, while SOEs related to people's livelihoods and public services should emphasize administrative power. In 2015, SOEs began to implement classified reform and supervision policies, and SOEs were classified as public welfare or commercial. The evaluation indicators and incentive contracts differ for different types of SOE.

Third, the Chinese government increased promotion incentives and discipline on cadre managers to decrease manager shirking. Age thresholds for managerial promotion are no longer emphasized, and a clear cadre manager tenure system is being implemented. For example, in general, if the chairman and general manager have served in the same positions for 9 years and can still serve for at least 3 more years, they should change posts. An exit mechanism is being put in place to solve the problem of mediocre cadre managers who "can go up but can't go down." <sup>11</sup>

The locked market of SOE cadre managers may open in the future. First, promoting SOE cadre managers will emphasize the market-based selection and employment mechanism, which may not promote candidates completely in accordance with the current administrative level. Second, the administrative ranking of cadre managers may no longer be a lifelong system, and cadre managers will be able to explore channels to become professional managers. Managers will be able to give up the cadre identity to follow the principles of marketization and to receive market-based compensation within the company or in joint ventures established by the company.

In short, with the mixed organization of the government and market, the design of incentive contracts for SOE managers is complex. Such design must focus on the dual goals of enhancing control and improving managerial efficiency. The government needs to develop effective operational plans through the exploration and summarization of the reform of SOEs. It is also necessary to further promote the ongoing reform of the SOE incentive system. Most importantly, it is necessary to further promote the change in the incentive system of the government (including officials) itself so that it truly fulfills the role of qualified supervisor.

# 7. Conclusion

When examining the governance characteristics of Chinese SOEs, we must first understand the nature of SOEs and the logic of their existence. We must answer the question of why China needs SOEs. We believe

 $<sup>^{11}</sup>$  Refer to the "Regulations on the Management of Central Enterprises Leaders" revised in 2018.

that in the process of state governance, because of historical factors, ideology, transaction costs, and other factors, some businesses cannot be managed in a completely market-oriented manner, nor can they be completely managed through administrative orders. The form of organization must adapt to the specific institutional environment (Williamson, 1985). As hybrid organizations that combine government and market forces, SOEs may have adapted to the Chinese political and economic institutional environment. This article summarizes and comments on the main characteristics, economic consequences, and evolution of the incentive system of SOE managers.

SOEs serve as extensions of the government, which profoundly affects the selection, evaluation, and remuneration of SOE managers. The incentive system for SOE cadre managers features bureaucratic monetary compensation, political promotion within the system, and incentives for control and delayed compensation. Administrative promotion is key to understanding the incentives for SOE cadre managers. This kind of incentive system with political promotion at the core enables the government to control the SOEs with minimal management resources and to promote social stability and social development. However, it often impairs the efficiency and innovation of SOEs. The reform of SOEs further strengthens the government's control over SOEs and stimulates the growth of business operations. Although this poses a great challenge to the design and implementation of incentive contracts for SOE managers, it is promising for finding an effective manager incentive system suitable for the Chinese institutional environment through continuous reform and exploration, which may include increasing the number of SOEs listed in the stock market, setting up a multilevel pyramid structure, reforming SOEs, and managing managerial markets.

The introduction of the system in this paper has implications for academic research in the field of SOE governance. A large number of studies directly compare SOEs with non-state-owned enterprises to provide policy implications. However, if the nature and mission of SOEs are significantly different from those of non-state-owned enterprises, comparisons based on certain indicators (such as operation performance, investment efficiency, innovation activities, etc.) do not make sense. Second, as mixed administration and market organizations, SOEs are highly heterogeneous. Some SOEs play political leadership roles in the local economy, while others are more market-oriented. An in-depth study of the governance of SOEs by exploring their features is necessary. Third, in exploring the incentive mechanism for SOE managers, researchers need to explore the nature of SOEs given their institutional environment instead of replicating the approach of Western literature using Chinese data.

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