

# Research on the path of effective management of participation in joint-venture railway companies by China railway group

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## Abstract

**Purpose** – Following the regional restructuring, the number of joint-venture railway companies in which the Group participates has significantly increased. This paper aims to explore the challenges faced by China Railway Group in managing participation in joint-venture railway companies. The study seeks to propose specific approaches to ensure the effective management of these companies, thereby maximizing the benefits of the regional restructuring and supporting the development of a strong transportation country and a modern infrastructure system.

**Design/methodology/approach** – Based on the change in the shareholding relationship between China Railway Group and the joint-venture railway companies, and considering the current situation of the regional restructuring of these companies, as well as the insights from existing literature and typical case studies, this paper proposes some specific paths for effective management of joint-stock railway companies which China Railway Group participated in.

**Findings** – The problems in participation management are the unclear dual leadership role of the party committee, the lack of discourse power, the lack of synergy between shareholders, the increasing risk of sustainable operation of the loss-making companies and the role of dispatched personnel is not fully played. Based on the theories, combined with the existing research and practical cases, the paper proposed specific approaches, such as perfecting top-level system design, maintaining the discourse power, carrying out differentiated management, arranging personnel rationally, arranging shareholders synergy, and innovating methods to provide references for China Railway Group's subsequent management of joint venture railway companies.

**Originality/value** – This paper contributes to the existing literature by providing a comprehensive analysis of the challenges faced by China Railway Group in managing participation in joint-venture railway companies following the regional restructuring. The study offers novel insights and practical recommendations for addressing these challenges. The findings can serve as valuable references for China Railway Group's subsequent management of joint-venture railway companies which participated in, as well as for other state-owned enterprises facing similar challenges in managing their joint ventures.

**Keywords** China railway group, Joint venture railway companies, Participated relationship, Effective management

**Paper type** Research paper



## 1. Introduction

The report of the 20th National Congress of the Communist Party of China emphasized the importance of building a modern industrial system, focusing on the real economy, promoting new industrialization, and accelerating the establishment of a robust transportation network. It also highlighted the need to optimize infrastructure layout, structure, function, and system integration to create a modern infrastructure system. As a strategic, leading, and essential national infrastructure, railways serve as the main artery of the national economy and play a vital role in economic and social development. In December 2016, the China Railway Corporation initiated discussions with eight provinces and regions to promote railway construction and development. The corporation proposed the regional restructuring of joint-venture railways under the “1 + N” model, aiming to accelerate the restructuring of joint-venture railway companies, improve their operational conditions, and foster healthy development. Comprehensive promotion of hierarchical railway construction is crucial, with the China Railway Corporation primarily responsible for constructing road networks and trunk line projects. At the same time, local governments focus on intercity and branch railways. Railway departments provide operational and technical services for local projects, leveraging the advantages of both sides to achieve mutual benefit and win-win outcomes. Since 2017, under the policy guidance of “classified investment construction and hierarchical management,” the China Railway Corporation has launched two joint venture railway reforms: trunk branch equity replacement and the “one province, one company” approach. The primary goal is to restructure regional joint-venture railway companies, gradually realizing local holding, with trunk line equity concentrated in China Railway Group and branch equity locally. This practice of regional restructuring has been fully implemented. The National Railway Group has earnestly implemented the decisions and deployments of the Party Central Committee and the State Council. Close cooperation with local governments has steadily advanced railway construction development, reorganized regional joint-venture railway companies, and concentrated national railway capital in the trunk road network. These efforts have continuously improved the scale and quality of the road network, enhanced transport service capabilities, and provided reliable support for promoting local economic and social development.

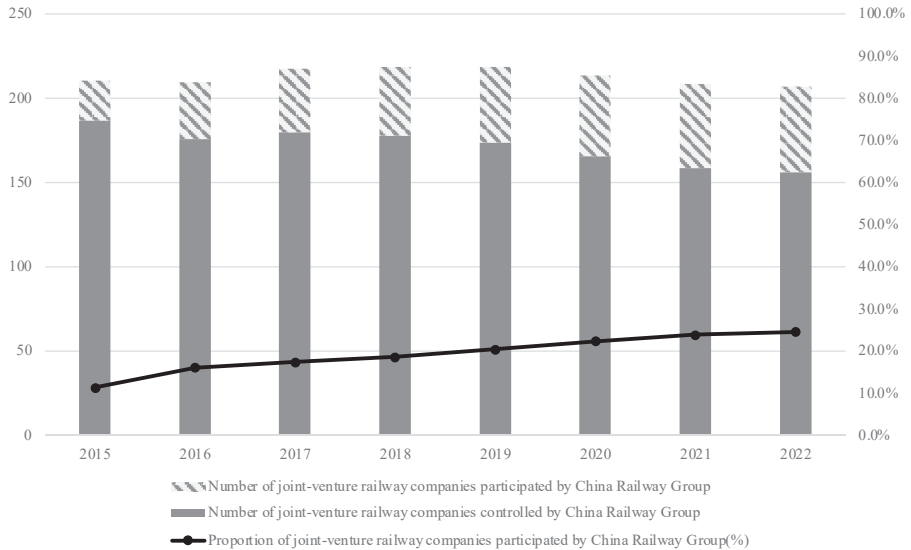
The management of state-owned enterprises' share participation is highly structured in practice. To standardize this management, the State-owned Assets Supervision and Administration Commission of the State Council issued the Interim Measures for the Management of State-owned Enterprises' Share Participation (No. 41 [2023]). These measures define “share participation as equity investment where state-owned enterprises hold no more than 50% of the shares and lack actual control”, and detailed provisions have been made on the investment management, operation management, exit management, and supervision and accountability of state-owned enterprises' equity participation, indicating a significant shift in national policy towards emphasizing the management of participation in joint-venture enterprises. Following the regional restructuring of joint-venture railway companies, some previously controlled by China Railway Group have transitioned to local control, making China Railway Group a less influential participant despite its common involvement. Consequently, issues such as reduced influence, poor cooperation with local controlling shareholders, and operational difficulties have emerged. This paper addresses these issues by analyzing the current trends in China Railway Group's participation in joint-venture railway companies and proposing strategies for effective management based on literature, case studies, and relevant theories. The findings will guide China Railway Group in enhancing its management of participation in joint-venture railway companies.

## 2. The present situation and management problems of China Railway Group's participation in joint venture railway companies

### 2.1 The present situation of China Railway Group's participation in joint-venture railway companies

After the regional restructuring of provincial joint-venture railway companies, China Railway Group's shareholding in these companies can be categorized into two scenarios: transition from controlling to participation and maintaining the participation relationship. According to statistics (Figure 1), in 2015, there were 211 joint-venture railway companies in China, with China Railway Group controlling 187 of them and participating in 24, accounting for only 11.4% of the total. By the end of 2022, the number of joint-venture railway companies had decreased to 207, with China Railway Group controlling 156 and participating in 51, representing 24.6% of the total. The regional restructuring is a major factor contributing to the increase in the number of joint-venture railway companies in which China Railway is participating.

In 2021, the total assets of joint-venture companies were 1,177.8 billion yuan, which China Railway Group operated, while the total investment in joint-venture companies under construction was 423.7 billion yuan. By 2022, the total assets of operating joint-venture companies had increased by nearly 25% to 1,466 billion yuan, demonstrating significant growth within just one year. Meanwhile, the total investment in joint-venture companies under construction remained consistently high at 417.8 billion yuan, reflecting ongoing robust investment. The substantial increase in the assets of joint-venture railway companies operated by China Railway Group highlights its expanding presence in the sector.



**Figure 1.** Changes in the number of joint-venture railway companies participated by China Railway Group

Source(s): Authors' own work

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## 2.2 *The management problems of China Railway Group's participation in joint venture railway companies*

Through on-site visits and questionnaires, this study identifies the following major issues in the management of participation in joint-venture railway companies by China Railway Group:

(1) The dual leadership role of the Party committee is not clear

Under normal circumstances, the Party Committee of a joint-venture railway company operates under the dual leadership of the Party Committee of China Railway Group and the provincial Party Committee. Major decisions made by the Party Committee of the joint-venture railway company, particularly those affecting the interests of China Railway Group, should be reported to the Party Committee of China Railway Group. However, in practice, few matters are reported, leading to the ineffective performance of the Party Committee's dual leadership role.

(2) China Railway Group lacks discourse power in the joint venture railway companies

According to the current rules of procedure under the Company Law, only three matters—amendment of articles of association, change of registered capital, and merger or division of the company—require approval by more than two-thirds of the voting rights. All other matters become effective with approval by more than half of the voting rights. Similarly, all board resolutions are valid if passed by more than half of the board members. Consequently, when China Railway Group holds only a minority share in joint-venture railway companies, its influence over many companies is limited. Even if China Railway Group objects to a proposal, its low shareholding ratio prevents it from effectively influencing the decision. However, the actual implementation of approved resolutions often requires final consent from China Railway Group, leaving many resolutions “pending.”

(3) Insufficient coordination between China Railway Group and local shareholders

Following the regional restructuring, China Railway Group, provincial authorities, and other shareholders may have differing opinions on the operation of joint-venture railway companies. Therefore, it is crucial to fully respect the reasonable intentions of all parties and effectively safeguard the rights of all shareholders. This approach helps to prevent poor management of joint-venture railway companies arising from communication and cooperation issues and mitigates the potential loss of state-owned assets.

(4) The increased sustainable operation risk of some joint-venture railway companies

The follow-up operation of China Railway Group's loss-making joint-venture railway companies requires careful attention. After restructuring regional joint-venture railway companies, some companies, originally controlled by China Railway Group, became participated in and experienced increasing losses. If this issue is not addressed, it could significantly impact railway operations and even affect people's lives. Therefore, joint-venture railway companies, local controlling shareholders, and China Railway Group should collaborate to improve the companies' operating conditions and turn losses into profits as soon as possible.

(5) Ambiguous role of China Railway Group's dispatched personnel

Following the regional restructuring of joint-venture railway companies, China Railway Group has faced challenges in advancing key issues within the company. This difficulty may arise from the insufficient attention and commitment of the personnel dispatched by China Railway Group, leading to inadequate performance of their duties. Consequently, China

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Railway Group struggles to fulfill its responsibilities as a significant shareholder. There is a need to enhance the current dispatched personnel in terms of their ideological commitment, personal qualities, and abilities.

### 3. Literature and typical cases of effective management of participated companies

#### 3.1 Literature review

Existing research primarily concentrates on the effective management of participated state-owned enterprises, with a focus on system design, personnel arrangement, supervision and management, and innovative strategies.

In terms of system design, a differentiated management strategy should be implemented for managing shareholding companies. Based on comprehensive economic benefits, investment scale, and business connections with the holding company, shareholding enterprises can be categorized into core shareholding enterprises and general shareholding enterprises (Liu, 2023). The shareholding ratio of state-owned capital investments should not be arbitrarily determined. If the shareholding ratio falls below one-third, allowing the controlling shareholder to obtain two-thirds of the equity, the controlling party gains not only control rights but also absolute decision-making power. This scenario can result in state-owned enterprises losing their basic right to influence the company's management. Therefore, in addition to securing regular shareholder rights, efforts should be made to obtain participation rights in major business management decisions, such as related party transactions, large fund usage, profit distribution, and a "one-vote veto" on significant issues (Liu *et al.*, 2021). Simultaneously, moderate management is essential to avoid excessive interference in the operations and management of participation in joint-venture companies, which can lead to increased costs and potential legal issues.

The effectiveness of state-owned enterprises' supervision and management of participation enterprises is closely related to the quality of management personnel selected by investment enterprises. Therefore, in terms of personnel arrangement, state-owned enterprises should appoint management talents with high ideological awareness, professional ability, a strong sense of responsibility, and the courage to take responsibility as shareholder representatives, directors, supervisors, and senior executives. These individuals should be rotated regularly (Dai, 2021). According to the cooperation agreement and articles of association, the board of directors and supervisors should be established in line with the shareholding ratio. Directors, supervisors, and financial leaders should be appointed as property rights representatives to participate in major decision-making processes, play a supervisory role, control financial risks, effectively exercise shareholders' rights, and avoid the situation of "only investing but no managing" (Mao, 2022).

In the supervision and management of participation companies, a combination of internal and external supervision with routine and comprehensive oversight is essential. Firstly, it is crucial to leverage the roles of directors, supervisors, and senior executives while integrating internal supervision and external audits (Zhang, 2021). Strengthening internal audit supervision is vital to avoid management risks. This involves incorporating enterprise share participation into internal control management, bringing it within the scope of internal audits, and establishing a standardized and effective internal control system guided by risk management and focused on compliance management supervision (Qiu, 2022). Additionally, introducing third-party organizations to conduct targeted and professional project investment audits on participation in joint-venture companies can enhance oversight. This approach maximizes the linkage between internal supervision and external audits (Mao, 2022).

State-owned enterprises can also manage participation in joint-venture companies through innovative approaches. For instance, establishing a data information-sharing process can facilitate daily supervision (Mao, 2022). By requiring equity representatives to promptly upload information regarding major decisions, important matters, and the financial status of participating enterprises to the investment management data platform, China Railway Group can efficiently monitor the business activities of these companies and ensure dynamic management of equity participation. Additionally, Tian and Ding (2022) proposed that a comprehensive evaluation of the operating processes and performance of shareholding companies can be achieved by designing an “evaluation index system for the participated shareholding management of state-owned enterprises.”

### 3.2 Typical cases

Effective management of participation in joint-venture companies is a significant domestic and international topic, providing valuable references for China Railway Group in managing participation in joint-venture railway companies. This paper examines several typical enterprises, both at home and abroad, that successfully manage participating shareholding companies. For instance, Singapore’s Temasek Holdings, a state-controlled asset management company, has extensive experience managing shareholding companies. China Chengtong, a state-owned capital operation company, oversees numerous shareholding enterprises, and its management practices offer strong reference points for China Railway Group, which is currently transforming its shareholding structure. Similarly, China Merchants Group, a prominent central enterprise akin to China Railway Group, manages numerous participating shareholding companies. Based on in-depth research on these case enterprises, this paper identifies the following key management experiences for relevant shareholding companies:

- (1) *Temasek holdings*: Established in Singapore, Temasek Holdings is a state-owned enterprise fully funded and owned by the Singapore government under the jurisdiction of the Singapore Ministry of Finance. Its primary task is to oversee the Singapore government’s investments in various state-owned enterprises and manage all government-linked companies (GLCs) in Singapore, also known as “Temasek joint enterprises”. Temasek operates under a three-tier holding structure comprising the Singapore government, Temasek Holdings, and the GLCs. As an independent legal entity, Temasek enjoys full autonomy and complete independence in its institutional setup. Its affiliated participation in joint-venture enterprises also possesses full independent management rights (Heaney, Li, & Valencia, 2011). These enterprises’ sustained and stable development is ensured through talent incentives and ownership restraint mechanisms.
- (2) *China Chengtong*: Chengtong Group, established in 1992, was officially recognized as a state-owned capital operation company by the State-owned Assets Supervision and Administration Commission of the State Council in 2016. As a bridge between the government and state-owned enterprises, Chengtong Group facilitates value management and strategic adjustment of state-owned industries through capital operations. To achieve capital appreciation, Chengtong Group invests in numerous enterprises through equity participation. The management authority of joint-stock companies is determined by the proportion of capital contribution, with property rights representatives selected to participate in decision-making and management. By auditing and supervising the financial statements and division of labor within joint-stock companies, Chengtong Group aims to enhance corporate governance and ensure the preservation and appreciation of assets. This approach allows for the rational distribution of state-owned capital and maximizes the operational efficiency of state-owned capital while aligning with state objectives.

- (3) *China merchants*: Since being identified as a pilot enterprise for state-owned capital investment companies, China Merchants has established a systematic mixed ownership structure at the group headquarters, listed companies, and significant shareholding companies levels. Currently, China Merchants holds shares in 36 listed companies. In practice, it exercises its rights through the board of directors, encouraging shareholding companies to maintain equity checks and balances without interfering in daily operations. It actively promotes the optimization of governance structures within these companies, widely implements market-oriented selection and employment mechanisms, and employs differentiated supervision—either strategic-oriented or financial-oriented—depending on the company’s focus. This rich experience in shareholding management has effectively enhanced the investment and operational efficiency of state-owned capital.

Table 1 summarizes the literature and typical cases in the effective management of joint-venture companies.

#### 4. The specific paths for the effective management of participation in joint-venture railway companies by China Railway Group

Based on the above literature and case analysis, combined with the actual operational situation of China Railway Group and various joint-venture railway companies, this paper proposes the following specific paths for the effective management of joint-venture railway companies:

- (1) Improve the top-level system design

To achieve effective management of joint-venture companies within China Railway Group, the top-level system design must prioritize the leading and political core role of the Party organization. This ensures the implementation of party and state policies and major arrangements. Additionally, China Railway Group can engage in discussions with the shareholders of the participating joint-venture railway company to formulate the company’s articles of association, ensuring that the legitimate rights and interests of all parties are safeguarded (Chen, 2021). Once the articles of association are completed, all parties must strictly abide by them and refrain from shirking their responsibilities. This adherence is crucial to ensure the legal management and compliant operation of the joint venture railway company.

- (2) Maintain moderate discourse power

China Railway Group should ensure its one-vote veto power on major issues related to the integrity of the national railway network. According to stakeholder theory, enterprise

Literature review	Typical cases	China Chengtong	China Merchants
System design	Ensure autonomy	Clearly management authority	Mixed ownership structure
Personnel arrangement	–	Property rights representatives	–
Supervision and management	Ownership restraint mechanism	Audit supervision	Differentiated supervision
Innovative strategies	Talent incentives	–	Market-oriented selection and employment mechanisms

**Table 1.** Summary of literature review and typical cases

**Source(s):** Authors own work

management must comprehensively balance the interests of all stakeholders to ensure sustainable development (Jiang, 2020; Bridoux & Stoelhorst, 2014). Following national guidelines, China Railway Group must consider the overall situation of national railway transportation and safeguard the basic interests of the entire population. Therefore, as a shareholder, China Railway Group needs to secure its one-vote veto power on matters affecting the unified dispatching and command of railway transportation and the overall allocation of road network transportation resources. Moreover, it should fully leverage its role to lead the joint venture railway company in formulating the articles of association, rules of procedure, and other institutional documents that guide the distribution of rights and obligations among shareholders.

### (3) Implement differentiated management

Different management methods should be employed for joint-stock railway companies that participated with different characteristics. China Railway Group can categorize these companies into core joint-venture companies and general joint-venture companies based on their shareholding ratio, economic benefits, and dependency on China Railway Group (Song & Ji, 2018). While granting full operational autonomy to joint-venture railway companies, China Railway Group can focus on sustainable development and coordination with its own strategy for joint-venture railway companies in which it holds core participation. Simultaneously, the Group should ensure that it maintains its decision-making power on major issues in activities such as revision of articles of association, investment activities, loan guarantees, and important related party transactions. Conversely, for general joint venture railway companies, the focus can be on maintaining the right to speak and ensuring a satisfactory return on investment.

### (4) Reasonable arrangement of personnel

The appointment of directors, supervisors, senior managers, and middle managers is a critical starting point for China Railway Group to ensure informed operation and effective management of joint-venture companies. It also serves as a key method for China Railway Group to participate effectively in the governance of joint-venture railway companies and protect its rights and interests. In the context of shareholding relationship changes due to regional restructuring, the principal-agent relationship can be approximated as changing from “all people-China Railway Group” to “all people-joint-venture railway companies” (Shao & Fan, 2013). If the appointed personnel do not perform their duties effectively, it will harm the interests of the public. Therefore, it is essential to enhance the management of selected personnel by establishing and improving systems for selection, training, performance evaluation, feedback, assessment, rewards, supervision, and rotation. This ensures the appointed personnel possess the necessary professional qualifications and performance capabilities.

### (5) Promote shareholder synergy

According to the theory of collaborative governance, only through the coordination and cooperation among multiple entities can a situation of interdependence and risk-sharing be formed, thereby promoting the realization of public interests (Zhang, 2023; Ansell & Gash, 2008). Therefore, to maximize the effectiveness of regional restructuring of joint-venture railway companies, it is crucial to first foster strategic coordination among shareholders. As a shareholder, China Railway Group needs to provide macro-level guidance to the controlling party and secure the support of the provincial party committee. Secondly, it is essential to promote business collaboration among shareholders. China Railway Group should offer guidance to all joint-venture railway companies and other shareholders in their business

operations while actively seeking opportunities for business cooperation with local shareholders, enabling all shareholders to leverage their resource advantages fully. Additionally, enhancing communication and cooperation between shareholders is vital. Strengthening the communication between China Railway Group and local shareholders, optimizing the communication mechanism, and promoting mutual understanding and support for developing joint venture railway companies and critical decisions are necessary.

(6) Innovative management approaches

Firstly, based on resource-based theory, human resources, as a unique resource within enterprises, have a decisive impact on their competitiveness (Yang, 2010; Gerhart & Feng, 2021; Wright, Dunford & Snell, 2001). China Railway Group can establish specialized institutions to train relevant talents or implement a market-oriented mechanism for selecting and employing personnel to create core human resource advantages in managing joint-venture companies. Secondly, an “evaluation index system of China Railway Group’s participation in joint-stock companies” should be established to comprehensively evaluate all joint-venture railway companies regarding system norms, scientific decision-making, effective management, and performance realization. Thirdly, combining internal supervision with external audits and introducing third-party institutions to carry out special audits on different joint-venture companies’ projects can help realize internal and external linkage supervision. Additionally, building an information-sharing platform can reduce information asymmetry. By requiring joint-venture railway companies to regularly publish information on major matters related to their operations, business development, and financial situation on the information-sharing platform, China Railway Group can timely and conveniently monitor the business dynamics of joint-venture companies and adjust guidelines accordingly.

## 5. Conclusions

The regional restructuring of joint-venture railway companies not only promoted the concentration of state-owned railway capital to the trunk road network but also provided reliable support for promoting local economic and social development. Effective management of joint-venture railway companies is an important part of building a strong transportation country and a modern infrastructure system. When China Railway Group manages the joint-venture railway companies with shares, it should pay attention to the problems that the dual leadership role of the Party Committee is not obviously brought into play, whether the discourse power of all joint-venture railway companies is maintained, the coordination between itself and local shareholders is insufficient, and the follow-up operation of loss-making joint-venture railway companies and the role of dispatched personnel are not brought into play. Therefore, based on the experience summary of existing literature and typical cases, this paper puts forward the specific paths for effective management of joint-venture railway companies as follows: (1) Perfecting the top-level system design of party leadership and improve the company articles of association; (2) Maintaining a moderate right to speak based on balancing the interests of other shareholders such as China Railway Group, the joint-venture railway companies, and the provincial party committee; (3) Based on the resource dependence theory, implementing differentiated management for different joint-venture railway companies; (4) Grounded in the new principal-agent relationship, reasonably arranging personnel; (5) Promoting cooperative governance among shareholders, amplifying the synergistic effect; (6) Introducing innovative management approaches such as attaching importance to personnel training and selection and establishing the advantages of human resources; designing a new index system; realizing internal and external linkage supervision; building an information-sharing platform.

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