

## Regulation of the Unified Scheduling Authority in the Reform of Chinese Railways: Consideration Under the Background of Functions Separation in Chinese Railways Market

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### Abstract

The foundations of the marketization reform in railways market are the diversification of market entities and the normalization of market order. The reform in 2013, where government function was separated from the business function, eliminated the obstacles derived from mixed organizational functions for the normalization of market order. However, even though the business function has been transferred to China Railway Corporation, Government should take on the responsibility of regulating the unified scheduling authority which shows both public and private business features governed by CRC for the sake of public interest. The Unified scheduling power, on which railway corporations' lives depend, should be regulated by rules from both market and government and supervised by the public, in order to avoid the abuse of power, to reduce the possibility of corruption and to lay the foundation for a better development of China's railway market.

**Key words:** Separation of functions; Unified scheduling; Capacity allocation; Track usage

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### INTRODUCTION

In January 2004, the State Council of China officially

published a development plan named "Medium and long-term plan of railway network" which planned that Chinese railway network would have reached more than 120 thousand kilometers by the year of 2020, and Chinese railway construction entered into a fast-developing period since then. From the data collected by the National Railway Administration of China (hereinafter referred to NRA), the national investment in railway infrastructure has escalated steadily from 52.9 billion RMB (approximately 8.45 billion U.S. dollar) in 2003 to 797.5 billion RMB (approximately 127.4 billion U.S. dollar) in 2010 and the number grew by over 13 times. The total investment in railway infrastructure in 2013, in comparison to the amount of 2010, declined to 532.7 billion RMB (approximately 85.1 billion U.S. dollar), but it still showed a great leap forward from the year of 2003.

The Figure 1 shown below could well illustrate the trend of the investment and construction of railway network from 2003 to 2013. Furthermore it also shows about the contrast between the total investment and the investment made by Chinese central government<sup>1</sup>.

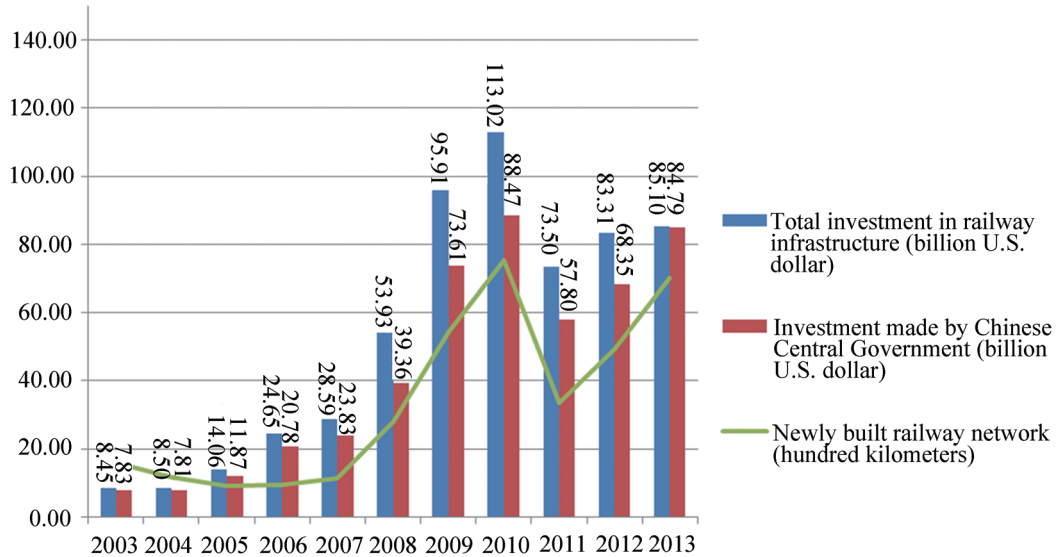
Conspicuously contrasting with the escalating need of investment and the demanding task of construction, the condition of assets held by National Railways is not promising. According to news reports, the total asset of former Ministry of Railways<sup>2</sup> was 4.3trillion RMB (approximately 690 billion U.S. dollar) at the end of

<sup>1</sup> Data was collected on the official website of National Railway Administration. See <http://www.nra.gov.cn/fwyd/zlzx/hytj/> (last visited Nov. 27, 2014). The diagram was designed and made by the author according to the data offered on the website. However, it should be noted that the data of 2013 was not complete and the number 84.79 billion dollar shown under the investment made by Chinese central government was actually investment made by central government and joint ventures.

<sup>2</sup> Before the reform in 2013, all the national railway infrastructures were constructed, owned and operated by former Ministry of Railways, the business function of which was transferred to the newly created China Railway Corporation in the institutional reform.

the third quarter of 2012, and the debt was 2.66 trillion RMB (approximately 425 billion U.S. dollar). With the dangerously high debt asset ratio of 61.81%, this figure tended to be even higher (Li & Meng, 2013), The diagram explicitly shows that even though the investment made by Chinese Central Government has dominated in the

total investment all these years, the demand for local<sup>3</sup> and private investment has been increasing all along. Therefore, the normalization of Chinese railway market should be the key to the further openness of the market and a prerequisite to abstract private and local investors.



**Figure 1**  
**Total Investment in Railway Infrastructure, Investment Made by Chinese Central Government and Newly built Railway Networks from 2003 to 2013.**

In 2013, “Plan for the Institutional Restructuring of the State Council and Transformation of Functions Thereof”<sup>4</sup> officially raised the concept of “functions separation” in the railway market and eliminated the Ministry of Railways which enjoyed both public function, as the regulator, and private function, as the biggest railway holding and operating company of China. Instead, China Railway Corporation (hereinafter referred to CRC) was found to assume the private function of the former Ministry of Railways and the above mentioned NRA was created to assume the public function thereof. Such reform set the organizational foundation for further marketization reform in the railway market; however, private investors still face many obstacles and scruples entering into this market. Profit is the direct aim of private capital, and railway market is not a perfect playground for private investors because railway market bears the public obligation for transportation and additional regulations would be in place as a supplement to market rules. Meanwhile, the threshold to invest in railway market is relatively very high due to the high-cost construction of

railway infrastructure and the investment return period could be long, especially in the less-developed area like the north-west part of China where transportation can hardly be a profit-making business. Furthermore, even though public and private sectors were officially separated in the sense of organizations, the leftover traditions of policy orientation and lack of transparency still deeply affect the railway market and keep most investors at bay. Therefore, after the organizational separation, it is very necessary to clarify and standardize all the regulative authorities among which there is a unified scheduling authority worthy of special notice. The unified scheduling authority was formerly owned by the Ministry of Railways and was assumed by the CRC in 2013.

The Unified Scheduling Authority is to coordinate the transportation capacity according to the demand for transportation and to apply transportation capacity into use. Such power could be very decisive with regarding to the productivity of railway companies, because all railways which are connected to the national railways are subjected to this scheduling authority and no train is allowed to operate without the permission and scheduled plan made by the authority. However, there is no normative rule or clear substantive standard to regulate this scheduling authority of such great importance, which has profoundly impeded the further marketization reform of the railway market. Therefore, this article is going to discuss about a proper way to regulate the Unified

<sup>3</sup> The term “local” hereinafter refers to something from local governments. Therefore, local investment means investment from local governments and local railway companies mean railway companies owned and operated by local governments.

<sup>4</sup> See Plan for the Institutional Restructuring of the State Council and Transformation of Functions Thereof. Retrieved from [http://www.npc.gov.cn/wxzl/gongbao/2013-07/18/content\\_1810943.htm](http://www.npc.gov.cn/wxzl/gongbao/2013-07/18/content_1810943.htm)

Scheduling Authority, based on a close examination of the essence of the authority and a comparative study of foreign experiences, in order to normalize the railway market, to mitigate policy risk, to prevent corruption and eventually, to abstract private investors.

## 1. THE UNIFIED SCHEDULING AUTHORITY IN CHINA

### 1.1 The Essence of the Unified Scheduling Authority and Its Justification

As mentioned above, the Unified Scheduling Authority is to coordinate the transportation capacity according to the demand for transportation and to apply transportation capacity into use on national railways. The content of the authority mainly involves two parts, namely scheduling and commanding. However, commanding is not an issue of this article because it is more of a technical issue that how to dispatch trains and make them comply with the schedule made by the authority. This article mainly focuses on scheduling power of the authority which could apply transportation capacity into use and decide which trains can run on national railways at what time. Such issue is an institutional one that different countries choose different systems according to their railway market tradition, railway infrastructure operation and so forth. Which scheduling system should we employ in China and how should we supervise and regulate such power is the main issue of this article.

It can be justified that such powerful unified scheduling authority exists in Chinese railway market. There are mainly three functions the authority could serve. Firstly, different companies sharing the same railway infrastructures are very common in the market and when sharing exists, coordination and scheduling become necessary to mitigate conflicts and apply capacity rationally (Sun, 1999). Secondly, in the railway market, which is atypical natural monopoly market, all the services offered by one company could cost much less than the same amount of services offered by multiple companies (Richard, 1969). Therefore, unified scheduling can help to realize such feature of natural monopoly market by strengthening the coordination between companies and to reduce the marginal cost of transportation service by raising the utilization efficiency of the infrastructure. Thirdly, China has a vast territory with very long and complicated national railway networks which are currently run by 18 national railway companies which are directly owned by the CRC and divided by geographic domain. However, limited by their domain, 18 companies cannot solve all the coordination problems on their own especially when scheduling a train path covering railways run by multiple national companies, namely cross-track operation. Therefore, a nationally unified scheduling authority should be created to coordinate between all the

national companies especially in the cases of cross-track usage and operations.

The problems and contradictions about Unified Scheduling Authority arise here in the cases of cross-track usage and operations. Many countries once suffered or is suffering from similar problems as that in China; however, from the perspective of terminology, different terms are employed by scholars of different countries like track access/track right, capacity allocation or time path allocation. As a matter of fact, the terminological distinctions reflect different systems of market regulation in railway markets. The existence of unified scheduling authority suggests a less developed market with highly control and plan, while, track access or capacity allocation could arise from market-oriented negotiation between equal autonomous parties which is exactly the trend and direction of Chinese railway market.

### 1.2 The Necessity to Regulate the Unified Scheduling Authority

The necessity to put the Unified Scheduling Authority into the cage of institution can firstly be reflected by its importance. The commanding and scheduling authority of the CRC and its affiliated 18 national railway companies can have a decisive effect on the capacity allocation and train dispatch of transportation companies. Without being scheduled and involved in the timetable, no companies could have any productivity or make any value out of the national railways, no matter how large the expected transportation capacity is. In other words, the life and death of transportation companies literally depend on the scheduling authority. Therefore, only when the scheduling authority is rationally regulated and fully supervised, could the transportation companies and potential investors feel safe to enter into this field.

Secondly, Power without proper balance leads to corruption and so does the unified scheduling authority. Rent-seeking possibility created by the authority could be enormous given the current situation of undeveloped railway market which would result in serious problems of inefficiency, wasting of transportation resources and corruption. Therefore, rational regulation, like information disclosure and proper remedy channels, could place more weights in controlling rent-seeking behaviors.

Thirdly, China has not initiated its efforts to separate the network and operation of railway companies. Together with the CRC and its affiliated 18 national railway companies, most local railway companies (owned by local governments) and private railway companies are comprehensive railway companies which own and operate all the necessary equipment and technology for railway transportation business, including railway infrastructure, locomotive, carriages, and technicians and so on. In other words, such railway companies are doing business in both railway network operation and passenger/freight transport services. Therefore, within the same domain, competition

exists among all the comprehensive companies theoretically. However, because of the market dominated position of national railway networks, the CRC and its affiliated 18 national railway companies, which own the scheduling power, perform both the players and referees in Chinese railway market. Such arrangement violates the basic natural fairness that No man can be judge in his own cause. Even though the current pattern of Chinese railway may not be changed in a short time, proper regulation and balance scheme would function to keep the railway transportation business a fair game.

This article logically starts from this point where we understand the direction of Chinese railway market and the problems of lack of regulation about the Unified Scheduling Authority, and try to learn something from other countries with advanced experience in marketization of railway markets.

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## 2. A COMPARATIVE STUDY ON FOREIGN RAILWAYS: THE SCHEDULING AND ITS SUPERVISION

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### 2.1 Railway Scheduling Mode under the Separation of the Network and Operation in Europe

Under the lead of European Union, European countries initiate their systematic reform of railway market in the 1990s. Before the reform, countries in Europe usually employed large state-owned companies dominating the railway markets which would cover both infrastructure construction and passenger/freight transportation services because of the demand of war and the economic development, such as national railway in Sweden (S.J.), State-owned railway in France (SNCF) and Railway Company of W. Germany (Deutsche Bundesbahn). As the EU integrative development went on, the EU issued a series of directives since 1991 to push forward the railway market reform. Directive 91/440/EEC initially raised the separation of network and operation (or otherwise called vertical separation) as the principle and direction of railway market reform which required independent accounting arrangement between infrastructure ownership and transport service. Moreover, the Directive also requested that governments should quit from intervening the daily operation and budget of railway companies, namely privatization<sup>5</sup>. As shown above, Directive 91/440/EEC set an institutional foundation for the further reform of railway market.

Directive 2001/12/EC, 2001/13/EC and 2001/14/EC afterwards raised several new requirements which,

together with directive 91/440/EEC, constituted a railway reform package plan for the EU Countries. To further ensure a fair compete market environment, directive 2001/12/EC mandated that the track right allocation and access fee collection must be physically divided from the transport service providers. In other words, players can no longer act like referees<sup>6</sup>. Directive 2001/14/EC afterwards made several detailed rules of track right allocation and access fee collection for railway infrastructure managers, among which Provision 4 of Chapter 2 provided that in cases that infrastructure managers are affiliated to transport companies, all the administrative powers authorized to the managers in the directive, except for fee collection, must be delegated to independent third parties, which includes the power to allocate railway track access. Furthermore, Provision 30 there of regulates the supervision body and rules related to our issue include: (a) the supervision body must be independent from any infrastructure manger; (b) the supervision body should take and deal with complaints from track access applicants about fees and access allocation; and (c) the supervision body shall have authority to keep an eye on the activities, like negotiations, between infrastructure managers and track users. Meanwhile, right to litigation must be ensured when any party is unsettled by action of the supervision body<sup>7</sup>.

EU Member States basically followed the requirements and timetable of the EU directives during the reform process of railway markets. Take Germany as an example, national railway Deutsche Reichsbahn from E. Germany and national railway Deutsche Bundesbahn from W. Germany merged into one huge state-owned institution called BEV which enjoyed both public and private functions in 1993. Functions of BEV were separated in 1994 when the private business functions, including infrastructure management and transport service provision, were undertaken by DB AG, a market enterprise, and public function of supervision was transferred to the federal railway bureau (EBA). In 1999, Germany completed the separation of network and operation, and DB AG was divided according to business scope, namely DB Reise & Touristic AG responsible for long distance passenger transport, DB Regio AG responsible for short distance passenger transport, DB Cargo AG responsible for freight transport and DB Netz AG responsible for infrastructure management. The infrastructure manager DB Netz AG may allocate track access and collect track usage fee through equal negotiation with the track users. The supervision body EBA is only a supervisor on

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<sup>5</sup> Detailed provisions are available at EU Directive 91/440/EEC, Retrieved from <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31991L0440>.

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<sup>6</sup> Detailed provisions are available at EU Directive 2001/12/EC, Retrieved from <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0012:EN:HTML>.

<sup>7</sup> Detailed provisions are available at EU Directive 2001/14/EC, Retrieved from <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0014:EN:HTML>.

technical problems and safety with an authority to deal with the disputes between the infrastructure manager and the users. However, EBA does not enjoy any authority to intervene in detailed business like usage price decision or track access allocation, and there is an anti-monopoly authority in Germany which is in charge of cases that the infrastructure manager discriminates among the users (Luger, 2008).

Besides Germany, countries like France and Sweden also followed the path of EU directives and have very similar railway market reform as that in Germany which can be roughly summarized into two main steps. The first step is to make railway companies independent from the governments and to distract private business function from public regulative function. The second step is the realization of network and operation separation which is aimed to further improve the market-oriented situation and normalize the competitive rules. As to the track usage allocation and usage fee setting, bilateral methods, like equal negotiation between the manager and the users, are employed, rather than unilateral decision made by any authority.

## 2.2 From ICC to STB: The Transition of the U.S. Railway Regulation

The earliest railway in the U.S. was Baltimore-Ohio railway, opened in 1830 with 21 kilometers in total. As the vast development of railway market, the regulative policy thereof experienced several transitions. At the beginning, interstate Commerce Act was passed in 1887 to stabilize the railway transport prices, to normalize the railway market and to stop the northerly competition. The Act also created the first U.S. independent agency in the history, namely the Interstate Commerce Commission (hereinafter referred to ICC)<sup>8</sup>. However, facing with the fierce competition from booming markets of road transportation, shipping and air transportation, the railway market in the U.S. experienced huge recession under the strict regulation of ICC and many railway companies were bankrupt back then. In 1980, Staggers Rail Act was passed by the congress in order to re-boom the railway market through deregulation and railway companies, to some extent, regained their right to autonomy. ICC met with its termination in 1995 and the Surface Transportation Board (hereinafter referred to STB) was created instead to further carry on the policy of deregulation in railway market.

In the U.S. railway market, even though railway transport companies usually have their own track and infrastructures, with the limitation of the network domain, it is very common for the transport companies to use track owned by other companies, which is called “joint

traffic arrangement” in the US and is very similar to the situation in China that local and private companies need to be scheduled on national railways. For example, the Amtrak, a passenger transport company, operates its transport business on the scale of 33796 kilometers, while its railway network only reaches about 1000 kilometers and thus the Amtrak need to rent railways from other companies to meet its demand<sup>9</sup>. In such cases, all the related matters, like track use fee and timetable scheduling, would be decided through bilateral negotiations.

Unlike the EU railway reform, the U.S. does not insist on the vertical separation. As shown above, the EU way of reform insists that the vertical separation could help to normalize the market order and prevent discrimination. However, the U.S. chooses another way to keep the market in order which is competition. A fully competitive market is the key to ensure fairness in the U.S. railway market rather than strict regulation. The competitions may be generated from both inside and outside the railway market. Inside the market, parallel railways owned by different track managers commonly exist between major cities and the track users may choose between them according to price, quality and some other conditions. Competitions from outside the market impact the railway business even harder by offering potential shippers and passengers with more and more efficient means of transport, like road transport and air transport. In contrast, Chinese railway market does not enjoy such efficient competition because of the existence of the conspicuous monopoly of national railway and the country’s dependency on railway transport.

Competition has shown great effect in balancing the market; however, it may never replace the supervision from the public sector. From ICC to STB, the regulative policies and rules in the U.S. railway market experienced several transitions and the regulative authority continually adjusted its position and strategies to serve the development of the market.

From the foundation of ICC in 1887 to the born of Staggers Rail Act in 1980, the regulation of railway market was rather strict and ICC enjoyed a great deal of powers to supervise the market activities, especially joint traffic activities. For example, Interstate Commerce Act authorized ICC to address inquiries to railway companies for any management and business related questions and to request any necessary and complete information from railway companies about fares, transactions and agreements and so on<sup>10</sup>. Meanwhile, companies were required to file their schedule of rates, fares, charges and all contracts,

<sup>8</sup> Detailed background of the “Interstate Commerce Act” is available at the website of U.S. Archives, retrieved from <http://www.ourdocuments.gov/doc.php?flash=true&doc=49>.

<sup>9</sup> Data was collected from the website of NRA, retrieved from [http://www.nra.gov.cn/fwyd/zlzx/jwtlxx/jytddt/201309/t20130917\\_2583.htm](http://www.nra.gov.cn/fwyd/zlzx/jwtlxx/jytddt/201309/t20130917_2583.htm).

<sup>10</sup> See Interstate Commerce Act, Sec. 12

agreements, or arrangements about joint traffic to ICC<sup>11</sup>. Furthermore, Transportation Act of 1920 authorized ICC to limit the railway transport fare prices in certain scope, so that the rate of return of railway companies can be kept around 6% (Luger, 2008). Under such strict and restrictive regulation implemented by powerful ICC, it is safe to say that the autonomy of railway companies back then was greatly compromised. ICC's pre-approval was required for many business activities, including the track use agreement or joint traffic arrangement between railway companies. Highly restrictive regulation resulted in repressed business activities. During that time, the number of track agreements approved by ICC was no more than 25 each year and the involved track covered less than 400 miles (approximately 644 kilometers) (Conant, 1963). As a matter of fact, joint traffic arrangement or infrastructure rent arrangement between railway companies should be encouraged, rather than repressed, because such arrangement can efficiently raise the utilization of existing network and reduce the cost of parallel railway construction.

The deterioration of railway market made the U.S. government realize that highly restrictive regulation hindered the development of railway market. As a response, Staggers Rail Act was passed in 1980 which initiated the era of deregulation. Generally speaking, ICC was deprived of powers to intervene in detailed management and business of railway companies like fixating fares and joint traffic arrangement. ICC had no place to intervene as long as agreements were reached through negotiation among all the involved parties (Luger, 2008). After Staggers Rail Act, remained authorities of ICC can be summarized into two aspects, namely (a) to ensure rate reasonableness; and (b) to maintain fair competitive access and prevent discrimination in the market (Cunningham & Jenkins, 1997). Furthermore, both of the remained authorities were kept at a very modest level. For example, companies are free to choose their own partners for joint traffic arrangement and ICC cannot intervene as long as no deliberate discrimination is shown in the deal. Moreover, no company has been punished by ICC because of such discriminative action ever since Staggers Rail Act was passed (Cunningham & Jenkins, 1997).

"ICC Termination Act of 1995" marked the end of ICC and all of its remained duties were undertaken by STB<sup>12</sup>. Specifically, STB still has its duty to prevent monopoly and to promote competition in the market. Moreover, STB maintains several approval authorities including the corporate merger and dissolution.

Above all, the whole ideas of the U.S. reform became quite clear. The first principle is to promote and ensure fair and complete competition. The second principle is that the supervision body is only responsible for those

problems that market itself cannot solve, like monopoly problem and discrimination.

### 3. SUGGESTIONS TO REGULATE THE SCHEDULING AUTHORITY UNDER THE REFORM OF FUNCTIONS SEPARATION OF CHINESE RAILWAYS

As shown above, the unified scheduling authority cannot be treated merely as business act of CRC and leave it solely to the market, because the public function of the authority, if being abused, would cause substantial harm to other railway companies and the public interest. China has just initiated its effort to shape market order of Chinese railways and unified scheduling authority which enjoys both public and private characters should be rationally regulated and normalized, or it would impede the whole process of marketization.

#### 3.1 Retrospect on Foreign Experience: A Mirror for Chinese Railway Reform

The independence of railway market from the government and marketization of competition have been two main paths employed by above foreign examples. However, with respect to the track usage matter on this issue or joint traffic in the U.S. context, differences exist among countries.

Following the direction of vertical separation, EU Member States separated the track managers with transport service providers to keep the market in order. Even if complete formal separation is not available for some companies, independent third party would be invited to ensure substantive fairness and basic separation of the track manage department and transport service department would be achieved at least within the company. Therefore, players are no longer the referees which constitute the foundation of fairness in the market. Meanwhile, as supplement to market, supervision body would be authorized to oversee the track usage arrangements and other related activities in order to prevent discrimination and ensure fair competition.

Even though the U.S. did not employ the vertical separation mode, market competition is the key to normalize business activities like joint traffic arrangement. Through the U.S. reform of deregulation, autonomy was given back to companies to choose partners and decide prices, and STB only reserves modest authority to step up when autonomy or market fails. However, loose regulative environment is not the characteristic of all the countries which did not employ the vertical separation mode. Japan, on the other hand, has relatively strict regulative policy in its railway market and many business activities, like track usage arrangement, need pre-approval from the supervision body, because it cannot reach the competitive level of the U.S. railway market. In Japan,

<sup>11</sup> See Interstate Commerce Act, Sec. 6

<sup>12</sup> 49 U.S.C. § 702 (2009)

passenger transport business dominates their railway market and each company has its own geographic domain where competition from parallel network rarely exists. Moreover, because of its domestic mountainous landform, road transportation cannot constitute serious impact on the railway transport business (Luger, 2008). Therefore, there is no good or bad regulative strategy per se and regulative intensity should match with competitive situation of the domestic railway market.

Back to China, Chinese railway market currently has no timetable to initiate vertical separation like that in Germany, but the independence requirement of infrastructure management and transport service sets a feasible example for Chinese further reform. Meanwhile, the competitive degree of Chinese railway market has not been fully developed as that in the U.S. and therefore, relatively strict regulation should be inflicted to keep the market in order and prevent CRC and its 18 affiliated railway companies from abusing their dominated positions. Moreover, strong policy should also be employed to further promote competition.

### **3.2 Fitting into the Market: To Normalize the Unified Scheduling Authority**

As the unified scheduling authority, CRC also undertakes the biggest part of transport services of China which has already covered 978.4 million kilometers. As shown above, players equipped with referees' authority would break the balance of market competition. Therefore, following steps should be employed to normalize the unified scheduling authority.

Firstly, based on fair and stable market order, competition should be further promoted. The core purpose of marketization is to promote competition and market can function well to distribute resources and to offer rational prices, only when the market is fully competitive. Even though Chinese railway market faces fierce competition from outside the market, like road and air transportation, it is still irreplaceable and competition inside the market rarely exists for national railway companies. To promote market competition, Russian railway supervision department was inflicted with quantized duties and tasks to promote competition, which required 50% of the freight transport capacity to be operated by private companies (Luger, 2008). Similar policy could be employed by China as well and substantial amount shares of private capital should be ensured in the market as the foundation of further marketization.

Secondly, internal business procedures should be clearly elaborated and strictly kept. Within CRC and its affiliates, infrastructure management department should be independent from transport service department. Business activities between above departments should be recorded in detail and the realization of accounts separation is prerequisite for supervision from NRA. Unified scheduling authority should be conducted by

the infrastructure management department through normalized protocol and all the market entities, including the transport service department within the CRC, should be treated fairly. Moreover, all the protocols and information of business activities should be made to public in appropriate ways so that CRC and its affiliates can be put under the public supervision. After all, Sunshine is the best antiseptic.

Thirdly, dispute resolution mechanism should be built. Efficient dispute resolution can not only resolve disputes, but also serve as a covert supervisory mechanism which may expose management defects. Two channels should be constructed for dispute resolution with respect to the unified scheduling authority. On one hand, the jurisdiction of courts should be ensured over any dispute aroused by the alleged abuse of the unified scheduling authority, because the essence of the authority is a business conduct between equal parties through contracts and it should fall under the protection of civil law. On the other hand, railway supervision body like NRA can also hear complaints from business entities regarding conducts of the unified scheduling authority which may serve as reasons and evidence for further administrative decisions.

### **3.3 The Promotion of Rational Supervision**

The basic principle of supervision should be set that government only intervenes when the market fails. In railway market, government supervision should take a modest attitude when effective competition duly works. However, the exercise of unified scheduling authority is currently beyond the capacity of market competition because the dominated position of national railway networks which enjoy high dependence of local and private railway companies. Moreover, as shown above, discrimination and abuse of scheduling authority can widely exist in the market. Therefore, government should take its responsibility to protect public and the third parties' interests in cases regarding the exercise of unified scheduling authority. Specifically, CRC and its affiliates should be ordered to file their conduct code, contracts and other paper work regarding the infrastructure management with NRA which reserves the authority to review the validity and legality of all the activities. Moreover, NRA shall hear complaints and reports from business entities about wrongful conducts of CRC and its affiliates and if the wrongful conduct is verified to be true, NRA shall have the authority to inflict administrative penalty.

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## **CONCLUSION**

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Market-oriented reform of the railway industry is based on the introduction of diversified market players and the promotion of competition in the market. Organizational reform of separation between government and enterprises has provided a solid foundation to regulate the market order and to promote market competition. However,

while the business functions of the former Ministry of Railways were undertaken by CRC, it does not mean that the government can dodge the responsibility to protect the public interest. Regulation and supervision should be in place where CRC and its affiliates act to affect public and third parties' interest of which the unified scheduling authority sets a typical example. Based on the reference to the experience of foreign railway market reforms, the principle can be easily summarized that government forces shall be modest in the market and act as supplement when the market fails. Although the competition mechanism of Chinese railway market is not completed, and effective competition is inadequate, the railway companies still face a great deal of challenges due to the huge impact of other modes of transports like roads and air transport. With respect to the supervision of unified scheduling authority, the internal separate pattern of infrastructure management department and transport service department should firstly be ensured and strict conduct code shall be set and followed doing business between departments. Business decisions and arrangements shall be reached in the market through equal negotiations between business entities and the infrastructure management department of CRC and its affiliates shall treat all the track users without prejudice. When it comes to the public and third parties' interest,

like circumstances of discrimination and exclusion of competition, the government shall step up and intervene in the activities. As a power concerning the survival of railway companies, the unified scheduling authority shall be rationally regulated from both the market and the government in order to effectively avoid abuse and reduce the space of rent-seeking, so that a solid foundation could be set to attract local and private investment and to further develop the railway market.

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## REFERENCES

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- Conant, M. (1963). Railroad functional mergers: pooling and track agreement. *Minnesota Law Review*, 47, 769.
- Cunningham, P. A., & Jenkins, R. M. III (1997). Railing at "Open Access". *Regulation*, 20, 42.
- Li, F., & Meng, F. Y. (2013, March 4). Railway market set private capital in a dilemma. *China Urban-Rural Financial News*, p. A7.
- Luger, K. (2008). *Chinese Railways*. Heidelberg, Germany: Physica-Verlag.
- Posner, R. A. (1969). Natural monopoly and its regulation. *Stanford Law Review*, 21, 548.
- Sun, L. (1999). A discuss on the legislation of unified scheduling authority. *Railway Transportation and Economic*, 2, 10-11.