Successful Metamorphosis or Not?
—A Case Study of the Bankruptcy Reorganization of Northeast Special Steel

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Abstract
On October 10, 2016, Fushun Special Steel issued a notice announcing that its controlling shareholder, Northeast Special Steel, entered the bankruptcy reorganization process due to nine consecutive defaults and nearly 5.8 billion RMB in liabilities. Bankruptcy reorganization can help solve the debt problems faced by such inefficient zombie firms, and restore their ability of sustainable operation and profitability. However, since reorganization effects only a change in debt structure and of stakeholder composition, whether the newborn entity has the ability to manage and operate the firm is critical. Therefore, the reorganization can only solve the institutional problems but not the managerial problems; that is, institutional reorganization cannot be automatically converted into behavioral change. Thus, when analyzing the implementation process of reorganization from the perspective of firm management, several questions arise: who should take control in the process of reorganization? How should the organizational structure of the restructuring firm be reorganized? How to reconfigure the internal human resources of the firm? Whether the former industry leader can properly handle these problems in the reorganization process is worthy of further discussion.

Keywords
Bankruptcy Reorganization, Organizational Restructuring, Firm Control, Firm Development

1. Introduction
On October 10, 2016, Fushun Special Steel announced that its controlling shareholder, Northeast Special Steel (Northeast Special Steel Group Co., Ltd., established in 1905) has formally entered the bankruptcy reorganization process,
due to irredeemable bonds, nine consecutive substantial defaults, nearly 5.8 billion RMB in liabilities, and its creditors’ disagreement with the “debt-to-equity swap”. The entities subject to bankruptcy reorganization include Northeast Special Steel Group and its two subsidiaries, Dalian Special Steel Co., Ltd. and Dalian High Alloy Rod and Wire Co., Ltd.. Northeast Special Steel is a state-owned large-scale special steel production firm, as well as a leading firm in China’s special steel industry. In history, it has created many firsts: it produced China’s first furnace stainless steel, first furnace high-strength steel and first ultra-high-strength steel; it provided important raw materials for the development of China’s first spacecraft, first artificial satellite, and first missile. Northeast Special Steel has developed and supplied a large number of new special steel materials for the development of China’s nuclear power and wind power industry, high-speed rail, domestic automobile production, and the renewal of oil extraction equipment. At the same time, Northeast Special Steel has been responsible for more than half of the research projects on China’s development of new ferrous metallurgy materials.

Although the reorganization system is considered by many researchers as an effective means to save the “zombie firm” in distress, and a helpful solution to their debt problem, reorganization is only one of the many important aspects of firm management. Therefore, it still may not work, possibly because other management problems or process problems are ignored, even though firm structure is reorganized. In reality, the implementation of the reorganization must happen in the various links, institutions or departments of firm management. The process of bankruptcy reorganization involves all the levels and all the management chains, from top to bottom, from the strategic layer to the executive layer, from the organizational structure to human resources management. If these problems are not properly handled during the integration process, integration problems may occur easily in aspects such as business operations, firm organization, firm culture, and management flow.

The purpose of this paper is to demonstrate that reorganization can only solve institutional problems but not management problems. Since reorganization effects only a change in the debt structure and stakeholder composition of the firm, it is critical that the new entity has the ability to manage and operate the firm, that is, the institutional change cannot be automatically converted into management behavior. Who should take control of the new entity? How should the organizational structure of the restructuring firm be reorganized? How to reconfigure the internal labor resources of the firm? Excessive levels in the property right structure and the hierarchical management system will lead to an overlong management chain, and the resulting difficulty in decision-making will greatly reduce the efficiency of firm restructuring. Therefore, it is necessary to bring attention and discussion to the micro perspective of firm management and operation.

The article is organized as follows. In Section 2, we take a look at the current
status of the bankruptcy reorganization from a literature view prospective. With this brief background in mind, Section 3 analyses the problem concerns of the scrambling of firm’s control system over the reorganization. Section 4 introduces the problems concern of organizational restructuring and human resources reconfiguration. Finally, Section 5 presents our conclusions.

2. Literature Review

The analysis of the debt crisis in state-owned firms began in the early 1980s with the reform of the fiscal and taxation systems. At that time, the funding sources of state-owned firms were changed from direct grants to bank loans, and the government would no longer directly invest in state-owned firms, as a result of which, bank loans became the sole funding sources for state-owned firms. Therefore, Tang (1992) believes that under this system, the debt crisis faced by state-owned firms is quite understandable [1], and solving the debt crisis of state-owned firms should start with the improvement of institutional mechanisms. Li (1996) believes that the debt crisis of state-owned firms is a major obstacle to the deepening of firm reform and banking reform due to the high implicit social cost, and has become a major problem in the current Chinese economy. Therefore, the solution should be found in China’s economic system [2]. Zhang (1996) analyzes the institutional causes for the debt problem from the perspective of the asset-liability ratio and financing system of state-owned firms, and concludes it is necessary to carry out reforms to optimize the asset structure as a means to solve the debt problem. He believes that firm restructuring is the most important part in the whole clean-up process of distressed debt, and it is also the core part that determines the success or failure of this reform [3].

With regard to the bankruptcy reorganization system, China passed the new Firm Bankruptcy Law in 2006, which not only regulates the bankruptcy procedures of firms, but more importantly, constructs creatively the legal system for firm restructuring. This legal system not only follows the modern enterprise practices and international standards, but also conforms to China’s specific national conditions and is conducive to achieving a virtuous circle of the market ecology [4]. Xu (1994) points out that firm restructuring is a legal act that firms in financial crisis are re-consolidated and resurrected in accordance with legal procedures (ruled by the court) [5]. Zhu (2016) believes that, with the bankruptcy reorganization system, a firm can reorganize and clean up debts by means of negotiation or forced adoption of reorganization plans by relevant stakeholders, and adjust the structures of its ownership, management and assets, in order to get rid of the various difficulties, restore their profitability and continue their business operations [6]. Therefore, bankruptcy reorganization is a series of restructuring activities concerning the asset, debt, operation, organization and other aspects of the firms for the purpose of firm revival.

Bankruptcy reorganization is considered by many researchers an effective means to save the “zombie firms” in trouble. Xu (1995) believes that the reor-
ganization of state-owned firms will inevitably lead to divestiture, diversion of firm personnel, debt restructuring, merger, and the restructuring and adjustment of production technologies, among which the debt restructuring is the core content of firm reorganization. Debt restructuring can usually take the form of “debt-to-equity swap”, that is, debt is directly converted to firm equity, thus the creditor’s credit becomes the equity of shareholders (owners). Other forms it may take include changes in creditor’s rights and the conversion of bank claims and equity. Luan (2011) finds empirically from the perspective of accounting treatment that, if firms go with the bankruptcy reorganization procedure and obtain actual gains from debt restructuring, as a result of which they truly recover their vitality and are able to continue their operation normally, contribution will be made to the welfare of the society as a whole [7]. Chen (2016) discussed the issue of “debt-to-equity swap” in the current bankruptcy reorganization procedure from the perspective of deleveraging. As a policy measure that can help firms to recover in crisis while preventing financial risks, “debt-to-equity swap” takes into account the interests of banks, firms, shareholders, etc., and the original debtor-creditor relationship are converted to an investee-investor relationship (debt are repaid by investment dividends and share withdrawal can happen). However, this process is prone to moral hazard. Thus the restructuring may fall short to its expected goal, and the “debt-to-equity swap” may become essentially a palliative measure to delay the outbreak of risk [8].

Regarding the system and mechanism construction of bankruptcy reorganization, Liang (2007) considers the bankruptcy system as an incentive mechanism encouraging contract fulfillment that help maintaining a healthy ecology in credit market. Bankruptcy reorganization subjects the behavior of market entities to institutional incentives and constraints, which is conducive to the optimization of market mechanism [9]. Gong (2012) uses a game-theoretic approach to analyze the selection mechanism in the bankruptcy and reorganization of public companies with financial difficulties. It is believed that in the Chinese market for corporate control, public companies have a first-in advantage in the formulation of reorganization plans and the administrative approval of reorganization projects, and inequality in profit distribution widely exists, as a result of which further strengthening of the system construction is demanded [10]. Zhu (2016) implements a Logit model on 2443 public companies during the period of 2012-2014 to analyze the formation factors of Chinese zombie firms, and compares between debt restructuring and bankruptcy reorganization. The paper finds that the high-debt zombie firms perform well under debt restructuring, while for the zombie firms with efficiency problems, bankruptcy reorganization or bankruptcy liquidation should be adopted. Xiong (2016) [11] summarizes the practices of the United States and Japan in dealing with zombie companies, and analyzes comparatively the practices of China (including merger and acquisition, custody management, development support, and, bankruptcy and exit). It con-
cludes that China should start to work from three aspects: the establishment of bankruptcy courts, third-party institutions, and a well-functioning exit mechanism.

3. The Control over Reorganization

When bankruptcy reorganization occurs, the first issue faced by the firm is the competition for corporate control. Although bankruptcy reorganization is an important integrating form of firm development and upgrade, which is responsible for a series of important missions such as opening up new business, optimizing firm resources, and helping firms to get out of the predicament, the reorganization process involves many stakeholders: restructuring companies, shareholders, creditors, bankruptcy administrators, courts, and local governments. The competition for corporate control is essentially a game played between shareholders and creditors. Shareholders want to retain control of the company in order to retain their rights, while creditors want to implement creditor autonomy to maximize their financial interests. In this case, both sides of the game want to choose an action that is more favorable to their side, that is, they want the control rights to remain in their own hands. However, the reality is usually that neither the partial optimality nor the Pareto optimality can be achieved.

Therefore, in the reorganization process, the choices faced by shareholders and creditors can only be sub-optimal choices under the leadership of the judiciary administration [12], that is, the control rights gradually shifted from the hands of shareholders to the hands of creditors. From the perspective of managerial decision-making, according to Herbert Simon’s point of view [13], the essence of management is decision-making, and the difficulty level of management depends on the degree that the decision-making is programmed. Decision-making for the more common, fixed and conventional problems are called programmed decision-making. Conversely, decision-making for infrequent, exceptional and unstructured problems are called non-programmed decision-making. When the creditor, who is the owner of the input asset, has at the same time control over the firm, the managerial decision-making faced by them is largely non-programmed decision-making. Due to the lack of specific professional knowledge, auxiliary skills and relevant experience in business management and operation, invalid decision-making, lengthy management flow, rigid management system, backwardness in operation and product development, or other inefficiencies and financial losses caused by the lack of sensitivity to the industry market may occur in the actual enterprise management.

On the other hand, the cause of the bankruptcy of Northeast Special Steel was originally the financial distress brought by debt defaults. In this case, to get rid of the financial problems, the primary issue is to restore the broken capital chain, accelerate the cash flow to reduce the asset-liability ratio and relieve the debt burden. For some creditors, it is easy for them to ignore the importance of reor-
ganization activities from the perspective of scientific management and decision-making within the firm. Instead, they often choose to reduce the asset-liability ratio by direct capital investment. This short-sighted behavior of reducing the ratio by increasing the value of the denominator is just a temporary solution, which not only wastes the capital, but also brings no benefits to the firm’s efficiency for its management and reorganization.

In order to solve the above-mentioned problems concerning the reorganization of ownership and corporate control, in the process of bankruptcy reorganization, Northeast Special Steel should absorb the advanced knowledge and experience of firm management, take the measure of ownership-control separation, and find talents with excellent managerial decision-making ability to operate the firm. According to Burley and Means (1932), ownership-control separation refers to the separation of capital ownership (the investors own the invested assets) and the capital operation rights (the assets are entrusted by the investors to the managers to operate) [14]. That is to say, the capital owner and the manager are not the same person, and the assets owned by the owner are not personally managed by the owner, but entrusted to others for the managerial operation. With the separation of ownership and management rights, firms can achieve management specialization and capital agglomeration at the same time. The organizational form of modern enterprises not only allows professional managers to exert their professional expertise, but also allows shareholders to use the insurance mechanism of the capital market to spread risk.

Zombie firms like Northeast Special Steel that have lost its viability must pay attention to the issue of the corporate control arrangement, and implement the separation of ownership and control rights (or agency rights). They should employ, with scientific evaluation, professional directors and managers with relevant experience to enter the reorganized firm, according to the requirements of modern managerial organization, and improve the professionalism of management. As Jensen and McLean (1976) point out, good arrangements of corporate control rights and governance mechanisms can restrain managers’ pursuit of invalid strategies and encourage managers to choose investment projects with maximized return, improve management efficiency, and reduce agency costs [15]. A reasonable agency model should be a contractual relationship between the principal and the agent. The principal hires the agent by signing a contract with the agent and gives the agent certain decision-making power. The agent manages the firm as the representative of the principal.

4. Organizational Restructuring and Human Resources Reconfiguration

As state-owned firms undertake many policy objectives and social functions such as, stabilizing social employment and increasing employment opportunities, maintaining social stability, promoting social equity, realizing national development strategies, and improving social welfare and security, this series of
burdens has led the human resources management in state-owned firms to take on the “social person” hypothesis, rather than the “economic man” hypothesis of private interest pursuit. Therefore, after participating in the market, obvious incompatibility is likely to occur, and it is difficult to achieve competitive advantages compared to private firms in the market competition. Private firms, assuming sole responsibility for their profits or losses, always focus on economic profit and guide their HR management practices with cost control and efficiency priority principles. Therefore, agency theory considers state ownership the biggest obstacle to the smooth operation of the market economy.

Compared with private firms, state-owned firms have different characteristics in their HR management, such as politicization tendency and bureaucratic mode of thinking, disregard for HR management, scarce HR input, personnel redundancy, serious talent loss, lack of professional skills in management and production, and the focus on using administrative power to manage the employees. If the reorganization process does not treat these issues correctly, problems like organizational redundancy, over-complicated management chain, and over-staffing, may still surface, which are not helpful for the bankruptcy reorganization.

One problem concerns the practices of HR management in state-owned firms. Due to the bureaucratic mode of thinking in state-owned firms, they tend to recruit highly educated and high-graded talents, with particular emphasis on political and ideological identity. In state-owned firms, some new employees are often directly recommended by firm leaders. Therefore, these state-owned firms cannot emphasize like private firms the practicality of personnel recruitment, and acquire high-skilled and experienced employees at a lower cost, to maximize efficiency and minimize cost. In terms of training, state-owned firms prefer ideological education to practical skill and knowledge training. Most state-owned firms’ investment in human capital is only symbolic in the forms of training fees or project support, while the actual HR enhancement activity often takes the form of learn-by-visiting from other successful firms, which usually ends up with either a pure formality or a mechanical copy, regardless of the specific circumstances of the firm itself. In terms of performance appraisal, there are lacks both in effective incentive mechanism, and, scientific supervision and evaluation, of the managers. Sometimes too much emphasis is placed on the leaders’ subjective evaluation, while objective, specific, scientifically quantified performance standards are often absent.

Another problem concerns the difficulties brought about by the organizational restructuring. The change of the corporate governance structure after the bankruptcy reorganization will inevitably lead to the adjustment of the organizational structure, the same goes for any possible transformation of firm strategy and operation. More importantly, before the reorganization, such firms themselves already have many organizational and structural problems, such as the rigidity of the leadership system, the unreasonable distribution of deci-
sion-making power and executive power, and the uneven distribution of responsibility among different departments. These problems also accelerate the arrival of bankruptcy reorganization to a certain extent. In fact, there are many problems that have been accumulated over the years before the bankruptcy reorganization. For example, unclear organizational definition which leads to confounded treatment between operational activities and investment activities; bloated organizational structure and slow organizational flow caused by the overlarge scale of the firm; lack of communication and coordination among departments; blocked information and knowledge transfer among a firm’s various subordinates; non-corresponding relationship between power and responsibility. The backward organizational structure and system cannot adapt to the transformation of corporate strategy or business, and cannot help the firms to cope with fierce market competition, which will greatly reduce the efficiency of the internal operations.

In response to the first problem, the reorganizing firm should reconsider and position the function and importance of the role of the HR department. On the basis of this, the firm should increase its human capital development and investment, supervise and motivate its employees (who should already acquire the necessary knowledge and skills required for their jobs), and stimulates the overall vitality of the organization. Some firms do not pay attention to the importance of HR in firm management, and some firms even confuse HR with the administrative department. Therefore, it is necessary for the firm to recognize the HR department as also one of the key instruments to gain competitive advantage. Excellent HR management can not only help firms reduce the labor cost greatly, but also promote the establishment of learning-oriented organizations, which would improve the efficiency of organizational operations, and reduce the risk of operational failure.

The reorganizing firm must reconfigure human resources in accordance with the laws and principles of market economy. Personnel recruitment and equipment should pay attention to the demand-oriented mechanism cultivation and the demand-based personnel configuration, adhere to the efficiency-prioritized human resource allocation principle, avoid administrative intervention, and oppose cronyism. In order to adapt to the ever-changing external market environment, it is also necessary to maintain the dynamics and sensitivity of HR practices and eliminate ineffective HR management. Firms must get rid of the defects of the state-owned system and enter the market as competitive entities with independent developmental capability. From the top management to the production workshop, they should staff themselves according to their needs for business operations, with the goal of cost reduction and operational efficiency improvement, and should not take the fulfillment of social functions such as employment promotion and social security as their main consideration. The effectiveness of the performance appraisal and managerial ability evaluation of senior management personnel is the key to ensuring the quality of HR deci-
sion-making.

That is to say, the reorganizing firm needs to reconfigure the internal labor resources, and the principle of the reconfiguration must conform to the laws of the market economy. For a large-scale state-owned firm like Northeast Special Steel, the re- allocation of internal labor resources requires a certain extent of staff diversion or streamlining, that is, the dismissal of redundant employees with low efficiency, the reservation of skilled employees with relevant knowledge and growing potential, or the disruption of existing staff arrangement for reorganization. In a similar case, Fushun Aluminum embarked on a reorganization project in 2006 to get over the financial distress. In the short-term, or more specifically, one year after the reorganization, operation efficiency improved continuously, while the staff size shrank gradually. This implies that the measures of staff reorganization Fushun Aluminum took in order to reduce labor cost and improve organizational efficiency are effective.

It should be noted that the aim of staff diversion and streamlining is not to simply reduce the staff size, but to rearrange and reorganize the personnel structure based on ability measurement, performance appraisal and job analysis. Specifically, inappropriately positioned employees who are still in possession of relevant knowledge and skills should be assigned to suitable positions; for those employees in lack of vitality and enthusiasm, appropriate incentive policies are implemented; and for those who are unable to adapt to the needs of the position, dismissal should be considered. As to some key positions, when several employees are available with comparable capability, the method of competitive recruitment can be considered. On the one hand, the competitive recruitment is an internal recruitment, which can mobilize the enthusiasm and participation of employees. On the other hand, the competitive recruitment is openly held, thus the principle of equal competition can be guaranteed, which will help to enhance the organizational cohesiveness and create convenience for post-reorganization convergence of corporate culture.

For the second problem, the enterprise organizational structure reflects essentially the division of labor and cooperation between the members of the organization [16]. In order to form an effective and flexible organizational structure, and to archive consistency between the objective of the organization and the objective of the firm, the firm needs to make necessary adjustments to the organizational structure. The reorganization of the firm’s organizational structure is not simply a random or even disorderly rearrangement, but a rearrangement of its elements, resources, and personnel according to certain organizational purposes. It involves the organizational function, the organizational level, the decision-making power, the management scope, the inter-departmental communicating flexibility, and the close correspondence between rights and responsibilities within the organization. These factors play a pivotal role in the operational activities of the firm.

Because the organizational structure of the reorganizing firm is often charac-
terized by redundancy, rigidity, and occlusion, it is still necessary to take the market-centered principle in the process of organizational restructuring, and give full play to the fundamental role of competition mechanism in adjusting the organizational structure and optimizing the allocation of resources. It is necessary to reorganize the firm leadership structure in a timely manner, optimize the setting-up process of the organizational structure according to the functions and the purpose of the organization. To avoid overstaffing, it requires, firstly, a clear definition of the functions of each organizational level and department, an accurate determination of the number and standards of the jobs and positions, and the ensuring of the close correspondence between rights and responsibilities. The organizational structure should not be too rigid, otherwise there would be a lack of communication between the departments, and, inefficiency in the management chain. The firm should formulate a feasible and reasonable organizational adjustment plan, and at the same time adhere to the step-by-step adjustment strategy. If the organizational structure is completely reorganized all-at-once, it is difficult for the firm to adapt to this change immediately with the current business conditions and the skill structure of the employees.

5. Conclusions

It is very important for firms to construct new management entities and operating mechanisms in the process of reorganization. In terms of the arrangement of control rights, the treatment of the problems of large state-owned firms like Northeast Special Steel that have lost their survival ability, attention must be paid to the issue of control rights arrangements, and the separation of ownership and control (or agency rights). According to the requirements of corporate governance structure, scientific evaluation and recruitment of professional directors and professional managers with relevant experience should be carried out, to improve the degree of managerial specialization.

In terms of the reconfiguration of human resources, the reorganizing firm must proceed in accordance with the laws and principles of market economy. It should increase its human capital development and investment, establish a demand-oriented recruitment mechanism, adhere to the efficiency-prioritized human resource allocation principle, and avoid administrative intervention and cronyism. The internal human resource management should be based on objective assessment and measurement of the employees’ abilities and skills, and different adjustment methods should be adopted for different employees and positions to achieve demand-based recruitment.

In terms of organizational restructuring, it is still necessary to take the market-centered principle in the restructuring process, give full play to the fundamental role of competition mechanism in adjusting the organizational structure and optimizing the allocation of resources, and rearrange the elements, resources and personnel within the organization according to certain organizational purposes, in order to create a more efficient and flexible organization,
and, to make the goals of the organization and the firm more consistent with each other. The firm should acquire a better grasp of the functional definition and the hierarchical division, the arrangement of the decision-making power, the management scope, the inter-departmental communicating flexibility, and the close correspondence between rights and responsibilities within the organization.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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