Research on the Policy Effect of Promoting the Market Oriented Reform of China's Energy Industry

-- Based on the Coal Industry Analysis-1998-2018

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Abstract

Since 1998, China's coal industry has begun to market transformation. In this process, the government policy regulation has played a crucial role. This paper collected 237 policies of the coal industry issued by the central government from 1998 to 2018, and made quantitative analysis on the effectiveness of relevant policies in the document from four aspects: document subject and policy action object. The analysis results found that the policy issuance of the coal industry showed significant stage characteristics, the continuity and stability gradually emerged after 2010; the policy object did not pay attention to the whole industry chain, especially the coal chemical industry and clean processing. Aiming to the characteristics and existing problems of the coal industry, this paper proposes corresponding policy suggestions.

Keywords

Coal Industry; Quantitative Analysis of Literature; Market-oriented Reform; The Whole Industrial Chain.

1. Introduction

In 1998, the State Council reformed the coal management system, delegated all the state-owned key coal mines directly managed by the former Ministry of Coal Industry to lower levels, Market-oriented reform began, and coal production began to reverse the situation of total losses. In 2005, the State Council issued the Opinions on Promoting the Healthy Development of the Coal Industry, and the pace of marketization reform of the coal industry was further accelerated. Since 2006, China's coal capacity has entered a period of mass expansion. From 2006-2015, about 3.2 billion tons were added, and the problem of coal overcapacity has become increasingly prominent. In 2016, the State Council promulgated the Opinions of the State Council on Reducing Excessive Capacity and Getting rid of Poverty. The coal supply-side reform began to start, and the Market-oriented structural adjustment was further deepened. By 2018, coal in reducing excess capacity was 690 million tons and achieved 87% of the target of overcapacity reduction of 800 million tons. From the above analysis, we can see that the government's policy regulation runs through the whole process of coal marketization reform, and plays a decisive role in every key node.

The coal industry in the policy regulation has a serious adverse impact on the stable development of the national economy. Therefore, in the process of market reform in the coal industry, how effective is the policy? Is the directivity of the policy been achieved? Is the choice and collocation of policy tools optimal? These questions all require us to give specific answers. In order to answer the above series of important questions, the traditional policy analysis method cannot get an accurate answer. We must use the latest policy literature quantitative analysis tools for quantitative analysis of large sample size and semi-structured policy documents. However, domestic research in this field has just started.

Therefore, this paper selects 237 policy documents issued in the market reform in 20 years, introduce quantitative analysis method, convert policy text into data information, study the development of Chinese coal industry, analyze the problems of policy selection and collocation, and provide reference suggestions for future policy optimization to promote the high-quality development of coal industry.

2. Review of Related Studies

At present, most of the research results on policy issues in the coal industry are mostly in the traditional qualitative research and case studies. In general, the development of Chinese coal industry: the contradiction between market mechanism and government regulation and the division of interests of coal-power linkage mechanism[1-2]; The Contradiction between China's Coal Industry Development and the Intensive Environmental Protection Policy[3]; Cost constraints of coal cleaning and utilization[4]; Central-local income distribution of coal mining[5]Blind development of coal chemical industry and the efficiency of subsidy policy[6]. Based on the many problems existing in the development of the coal industry, the existing policy suggestions should start from the following aspects: for the contradiction between market mechanism and government regulation and the interests of coal and electricity linkage mechanism, the government top-down guidance, promotion and regulation cannot be ignored, especially in the assessment of coal and electricity project investment risk, power access norms and standards and other public service role are irreplaceable [1,7] Considering the contradiction between coal industry development and environmental protection policy, coal pit power generation and western coal supply to the east[8] For the central-local income distribution of coal mining, the collection, management and use of coal mining from the system level[5]For the blind development and subsidy policy efficiency of coal chemical industry, the study believes that the project scale, ignores the refinement and advanced development of its product chain, and pays attention to coordinate and solve the production ratio of basic coal chemical products, bulk chemicals and fine chemical products[9].

The government plays an important role in industrial planning and management and the process of marketization in China's coal industry. However, the present research results still lack of systematic research on the policy characteristics and historical reform logic, and lack of standardized empirical research on the mechanism and effect of China's coal industry policy tools on the industrial life cycle. Therefore, it is necessary to scientifically discuss the policies in the theory and practice of conducting the quantitative policy literature analysis on the potential problems of China's coal industry policy marketization reform path.

3. Analysis and Quantitative Analysis of Coal Industry Policy

This paper has collected 237 coal industry policies issued by the Standing Committee of the NPC, the State Council and various ministries and commissions until December 31,2018. The principles of policy collection are: one is directly related to the coal industry, including upstream mining industry, downstream processing industry, coal power industry and coal chemical industry; second, the types of policy documents include laws and regulations, government planning, departmental opinions, interim measures, notices and announcements, etc.

3.1. Analysis of Policy Issue

Under the current management system in China, the policy documents issued by different administrative entities have significant effectiveness differences. Therefore, the coal industry policy analysis should not only from the quantity, but also from in-depth discussion from the main subject of the document. This article divides the 237 policy documents of the coal industry

from 2998-2018 according to the effectiveness of the document: the legal documents (3) designated by the Standing Committee of the National People's Congress (NPC), the administrative regulations (15) promulgated by the State Council, and the departmental rules (219) formulated by the subordinate departments of the State Council according to their respective scope of functions and powers. This shows that at present, China has formed a series of policy documents system for the coal industry from the People's Congress, the regulations of the State Council to the rules and regulations of the competent ministries and commissions.

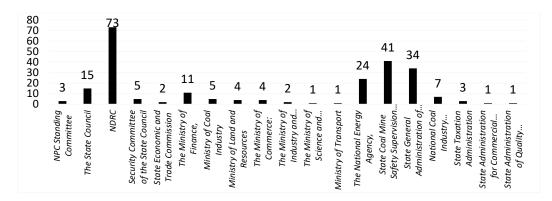


Figure 1. Schematic Map of Distribution of National Coal Industry Policy Release 1998-2018

As can be seen from Figure 1, the policy release body of the national coal industry involves 19 departments, among which the National Development and Reform Commission, the National Energy Administration, the State Administration of Work Safety and the National Coal Mine Safety Bureau are the four most issued government departments. This shows that over the past two years, the government policy focus on the coal industry has focused on investment and production safety.

Before 2003, the State Coal Industry Administration, affiliated to the State Economic and Trade Commission, was both the competent department of the coal industry and the coal industry(In 1999, the State Council set up the State Coal Mine Safety Administration, an agency and two brands with the State Coal Industry Administration.). The situation of "both athlete and referee" was the main reason for the disorderly mining of the coal industry during this period. In 2005, the State Council separated the State Administration of Coal Mine Safety and merged with the State Administration of Work Safety to form the State Administration of Work Safety, which is directly under the leadership of the State Council and independently supervises the coal industry. After the establishment of the State Administration for Work Safety, 41 policies have been successively issued to supervise and standardize the development of the coal industry, gradually improving the supervision system of China's coal industry, and the frequency of large and large coal safety accidents has significantly decreased. (The State Administration for Work Safety is the organ directly under the State Council for comprehensive supervision and administration of production safety and coal mine safety supervision. The State Work Safety Supervision Administration and the State Coal Mine Safety Supervision Bureau, an agency, two brands, involving the work of coal mine safety supervision, in the name of the State Coal Mine Safety Supervision Bureau implementation.).

3.2. Policy Object Analysis

Since the unified policy clause may involve several policy objects, this article carries out frequency statistical analysis for the unified policy clause involving different action objects. The results are shown in Figure. 2

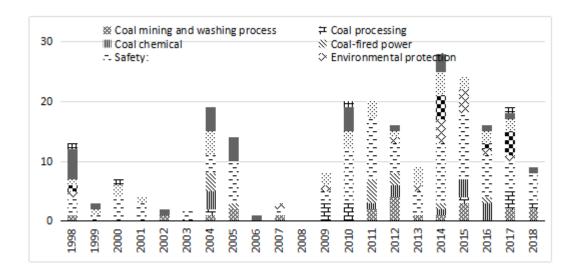


Figure 2. Time Distribution Map of Policy Action Objects in the Coal Industry

As can be seen from Figure 2, the policy focus of coal industry mainly focuses on coal production safety, technological innovation and coal and electricity linkage, and the number of relevant policy terms accounts for 45.4% of the total; the policy terms of employment in coal chemical and coal industries are relatively small, accounting for only 3.6% and 1.7%.

From the analysis of time distribution, the overall trend, the policy focus is extended to the coal technology innovation, coal consumption and clean coal production. Before 2010, the policy was not involved in coal technology innovation and deep processing; since 2010, the policy focus expanded: on the one hand, policies for coal processing, coal chemical industry, reflecting the full recognition of coal processing capacity is an important direction of industrial upgrading; on the other hand, relevant policies on coal technology innovation and coal consumption, indicating that the government began to stimulate industrial development from the demand side.

4. Research Conclusion

China's market reform of the coal industry has been carried out for 20 years, during which it has experienced repeated times. Through the analysis of policy content, we can have a glimpse of the policy effectiveness of the Market-oriented reform:

- (1) Analysis of the policy body shows that the coal industry published many departments, in the process of 20 years of market reform, the coal industry authorities and regulators for many times, in a long period of time, supervision into one, which leads to the coal industry in multiple cross management, lack of effective coordination and communication, easy to cause management functions unclear, related policies are also prone to uncoordinated or even mutual constraints, the overall planning and obvious shortage between policies.
- (2) From the analysis of the role object of policies, it can be found that the coverage of the coal industry policy has gradually expanded in recent years, but the targeted policy design for the whole industrial chain and the whole life cycle of the coal industry is insufficient. Through the empirical observation of developed countries, we can be seen that industrial policy needs comprehensive, whole process and whole link coverage. However, among the main concerned objects of China's coal policy, there are few policies on coal deep processing, coal chemical industry and other industrial chain links, which leads to the insufficient superposition effect between policies in various industrial links and reduces the effect of policy implementation.

5. Policy Recommendations

Based on the analysis of the path and problems of coal industry, this paper puts forward the following policy suggestions:

First, focus on strengthening the pertinence, stability and continuity of policies. In the future of coal industry policy process, according to the characteristics of the coal industry, industrial life cycle characteristics and industrial chain development to formulate targeted industrial policy, considering the ecological environment protection, supply side structural reform and technological innovation related policy coordination, and further strengthen the policy consistency between coal production, coal management and coal consumption policies.

Second, we will standardize and make effective use of fiscal subsidies and tax incentives to promote the extension of the coal industry chain to be refined and advanced. The domestic coal chemical industry is still in the growth period and cultivation period, and the state should reduce and exempt from the consumption tax of coal chemical industry demonstration projects. Different preferential tax policies will be given to major coal chemical industry construction projects. For major scientific research projects of key generic technologies, it is suggested to be included in the guidelines of the national science and technology development plan and give certain financial subsidies.

References

- [1] Liu Pingkuo, Tan Zhongfu. How to achieve stable matching and scale linkage [J]. China Management Science, 2017 (1): 106-116.
- [2] Wang Yujia. Energy relationship and price status under supply-side reform -- Take coal power industry chain for example [J],2018(7):26-33.
- [3] Jiao jiao, Zhao Guohao, Zhang Baojian. Research on System Based MoModel [J]. Economic Questions, 2018 (3): 79-84.
- [4] Hao Jiming, Wang Jinnan, Jiang Hongqiang, Liu Nianlei. National Industrial Development Strategy Strategy under the constraints of Environmental Bearing Capacity [J]. State Engineering Science, 2017 (4): 20-26.
- [5] Zhang Bo, Liu Lu. Coal mining income sharing: basis, connotation and system design [J]. Economic and Social System Comparison, 2017 (2):65-76.
- [6] Zhang Hongyu, Zhou Li, Zhang Xiliang. Review of the Current Status and Policy of China's Modern Coal Chemical Industry [J]. Modern Chemical Industry, 2018 (5): 1-5.
- [7] Tan Zhongfu, Liu Pingkuo. Transaction Cost, governance cost and boundary selection: The Game of Coal and Power Trading in System Change [J]. Hua Eastern Economic Management, 2015 (1): 73-80.
- [8] Zhou Yanzhe. Route Dependency Analysis of China's Coal Industry Policy Development [J], China Mining, 2015 (10): 20-25.
- [9] Hu Qianlin. Fine Development of Modern Coal Chemical Industry [J]. Technology Guide, 2016 (17): 42-47.