

Review of Green Accounting Research based on China's Coal Industry

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Abstract

Green accounting mainly calculates the consumption of natural resources. It is a sustainable accounting theory and system. It emphasizes the use of scientific economic accounting theories and methods to carry out scientific measurement. The entire process of green accounting is to analyze and study the impact of production activities on the natural environment. As an important approach, all production and business entities must attach importance to environmental protection and promote the harmonious development of social production and environmental protection. Green accounting can provide decision-making basis for enterprise decision makers, and then realize reasonable allocation of resources, reduce unnecessary waste, and reduce pollution and damage to the environment. This article first explains the connotation of green accounting, analyzes the basic theoretical construction of green accounting and its differences from traditional accounting, and presents the current problems and improvement measures of green accounting.

Keywords

green accounting; theoretical review; domestic and foreign research; research analysis.

1. Introduction

The report of the 19th CPC National Congress and green accounting are closely related. General Secretary Xi Jinping pointed out in the report of the 19th National Congress of the CPC that China's economy has shifted from a high-speed growth stage to a high-quality development stage, and we must adhere to new development concepts. Development is the foundation and key to solving all problems in China. It must be green development, and we must unswervingly implement the development concepts of innovation, coordination, greenness, openness, and sharing. To promote green development, we must accelerate the establishment of green production, and establish a sound economic system for the development of a green and low-carbon cycle, so that companies recognize the importance of environmental protection, enable enterprises to achieve environmental protection while developing, develop green finance, implement green accounting, and continuously improve the quality of enterprises' products and services, and improve business efficiency.

2. Status and Progress of Green Accounting Research at Home and Abroad

2.1. Status and Progress of Foreign Green Accounting Research

2.1.1. Coordinated and Unified Development

Britt (2010) considers the company's long-term strategy in the future, introduces the concept of sustainability accounting, and integrates the idea of harmony between man and nature into the business process of the company. Through expansion, environmental accounting extends to the fields of environmental governance and social responsibility. Through the problems

reflected by environmental information, operators can continuously improve their environmental accounting systems.

2.1.2. Performance of External Conditions

Kijima (2010) defines a standard model for granting licenses. Levying environmental taxes is also an important aspect of studying environmental issues. Iman (2012) argues that internalization of external costs is an important means of governing the environment. Davis (2015) pointed out that the imposition of environmental taxes can to some extent control environmental pollution problems. Comprehensive analysis, from the perspective of external conditions, the goal of environmental accounting is to solve the environmental problems caused by pollution caused by enterprises. It originates from the economic activities of enterprises and will affect the efficiency of enterprises.

2.1.3. Information Disclosure

Clarkson (2008) believes that enterprises should make information disclosure based on real operating performance and environmental performance, and communicate the overall information of the enterprise to all stakeholders. Maltby (2004) pointed out that based on the realization of social responsibility and its own value, enterprises should take the initiative to undertake environmental information disclosure. In all aspects, political factors play an important role in guiding environmental information disclosure.

2.1.4. Cost Control Development

Beer and Friend (2006) pointed out that environmental cost control is the most critical part of environmental accounting, and discussed the classification of constituent factors. Herbohn (2007) pointed out that the lack of uniform measurement standards and methods hinders the cost control of environmental accounting. Mylonakis and Tahinakis (2006) established a CBA model to control costs.

2.1.5. Scientific Behavior Management

Ball (2007) proposed to integrate environmental objective management into the organizational structure of the enterprise and deepen people's understanding of environmental issues. He also pointed out the shortcomings of the organizational structure of the company in conjunction with related cases, and integrating environmental objective management into the organizational structure of the enterprise can play a positive role in promoting the decision-making of environmental management and the disclosure of environmental information.

2.2. Status and Progress of Domestic Green Accounting Research

China's research on green accounting began in the early 1990s. In recent years, the theoretical research and practical work of green accounting system have achieved certain results. In 1992, Ge Jiayu and Li Ruoshan introduced western green accounting theory into the country, pointing out that green accounting theory will become a trend to improve traditional accounting theory. In March 2001, the "Green Accounting Committee" was established. It is worth emphasizing that the Accounting Standards for Business Enterprises No. 4 --- Fixed Assets and the Accounting Standards for Business Enterprises No. 13-issued by the Ministry of Finance in 2006 may Matters "and" Accounting Standards for Business Enterprises No. 27-Oil and Gas Exploitation "stipulates relevant green accounting provisions such as asset disposal and land pollution remediation. Some information disclosure clauses related to green accounting have shown that the government administration of our country has begun to pay attention to green accounting.

3. Overview of Green Accounting and Comparison with Traditional Accounting

3.1. The Concept of Green Accounting

Environmental accounting, also known as green accounting, is the product of sustainable development and management, and is the inheritance and improvement of traditional accounting. It uses currency as the main unit of measurement, accounting elements such as environmental assets, environmental costs, and environmental benefits as its accounting content. It also measures and records the costs of environmental pollution, environmental prevention, and environmental development based on relevant laws and regulations. The benefit of maintenance and development is a new discipline that measures and reports the benefits reasonably, so as to comprehensively evaluate the impact of environmental performance and environmental activities on corporate financial results.

3.2. Differences between Green Accounting and Traditional Accounting

3.2.1. Accounting Entity

The accounting subject of environmental accounting refers to the specific spatial scope of accounting work, and is not limited to this level of meaning. Therefore, the subject of environmental accounting extends to enterprises and other economic organizations with legal personality, government and other non-legal person NGO.

3.2.2. Continuing Operations

The continuous operation of environmental accounting means that under normal circumstances, the production and operation activities of the accounting entity will continue to operate indefinitely in accordance with the established operating principles and predetermined business objectives. Continuing operations as a prerequisite for sustainable development.

3.2.3. Currency Measurement

Due to the existence of both commercial and non-commercial forms of environmental resources, it is not only difficult to measure the indicators of environmental conditions such as forest coverage, grassland quality, air quality improvement, and the intensity and frequency of sandstorms, and it cannot explain the problem. It can be seen that in addition to accounting and monitoring environmental activities that can be measured in currencies, environmental accounting also needs to calculate and monitor economic activities that are related to environmental activities but cannot be measured in currencies.

3.2.4. Different Degrees of System Perfection

The traditional accounting theory system is standardized and unified, and the system is relatively mature, forming a universal accounting standard and a unified accounting model. The history of environmental accounting has only been developed for more than 30 years, and countries in the basic theory have not reached consensus, which is not conducive to further research on environmental accounting. Therefore, it is very important to establish a scientific basic environmental accounting theory system.

4. Statistics and Analysis of Green Accounting Disclosure in Coal Industry

For high pollution industries, our group conducted the following statistics on green accounting in the coal industry:

Table 1. Monetary green information disclosure of coal companies

Details of Green Information Disclosure	Resource compensation fee	Environmental investment	Sewage charges	Greening fee	Environmental penalty	Environmental subsidies
Number of companies disclosed	18	14	8	10	1	8
Disclosure percentage	90%	70%	40%	50%	5%	40%

Table 2. Non-monetary green information disclosure of coal companies

Details of Green Information Disclosure	Environmental certification honor	Environmental expenditure standards	Environmental plan	Market policy and environment
Number of companies disclosed	3	18	13	15
Disclosure percentage	15%	90%	65%	75%

According to our statistical data, the main problems in the coal industry are analyzed as follows:

4.1. Green Information Disclosure Issues are not Disclosed in Time

According to the regulations of the Shanghai Stock Exchange, a listed company shall issue an interim report within two days when an event that may have a significant impact on the stock price occurs. However, the environment itself has hidden, lagging, cumulative, irreversible and other characteristics, leading to the occurrence of environmental problems when the pollution has reached a very serious time, and the lag of the announcement has become unavoidable.

4.2. Subjectivity of Disclosure

The disclosure of green accounting information by Chinese coal companies is not comprehensive enough. Because of the subjectivity and autonomy of green accounting disclosure, most companies will choose information that is beneficial to them, but will not disclose information that is unfavorable to them.

4.3. Disclosure Methods Non-monetary

As an information management system, one of the basic principles of accounting is monetary measurement. However, many companies today disclose green information in non-monetary forms. The basic currency form often appears in the schedule in the notes to the statement, while the non-monetary form is descriptive rather than quantitative, which is not intuitive and measurable.

5. Suggestions for Improving Green Accounting

5.1. Strengthening Theoretical Research

For the emerging subject area of green accounting, to strengthen theoretical research and provide high-quality theoretical research, on the one hand, we must pay attention to the translation and reference of foreign theoretical research, and combine theoretical research and discussion with practical practice. On the other hand, we must pay attention to the intersection and combination between disciplines and industries, and adhere to the principle of mutual penetration in the two theories of accounting and environmental protection.

5.2. Increase Policy Support

When formulating policies for green accounting, the state should adhere to "green" as the main body, actively promote the implementation of environmental protection and resource conservation, and make certain changes and additions to the accounting unsuitable environmental protection and resource conservation. Make the policy closer to the "green accounting" ontology.

5.3. Establishing Green Accounting Awareness

In the development of green accounting, strengthening the survey of public feedback and paying attention to the working and living feelings of accountants is an important part of implementing the development of green accounting. It is only to keep the practitioners of green accounting full of enthusiasm, so as to promote this industry and discipline into a healthy development model and continue to contribute to social development.

5.4. Improve the Information Disclosure Method of Green Accounting

The measurement of green accounting should be included in the corresponding accounting regulations, and the measurement method of green accounting should be determined in the form of laws and regulations in order to have a legal basis. During the establishment and implementation of the green accounting measurement system, a step-by-step method must be adopted, and some specific methods such as textual expression can be adopted, that is, effective information disclosure in the notes to the accounting statements.

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