**Research Article**

**Study on Cost Accounting and Control of Environmental Pollution Loss in Guangdong Province**

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Environmental problems have become a major factor affecting the world’s economic development. In order to reduce environmental pollution and improve environmental quality. This paper takes Guangdong Province as the research object, adopts the basic principles of human capital method and medical cost usage environmental pollution loss cost, incorporates environmental factors into the national economic accounting system, establishes the green GDP cost accounting method, and develops the environmental pollution economic loss accounting index; it adopts the environmental pollution economic loss accounting method, counts the number of affected objects within the scope of environmental pollution, so as to establish a comprehensive environmental economic accounting system, incorporating environmental factors into the economic system; the economic losses calculated in accordance with the established environmental pollution accounting procedures, converting tangible losses into monetary losses and counting the environmental pollution costs caused by the economy of Guangdong Province, analyzing the root causes of the deficiencies and problems in environmental damage cost control in Guangdong Province, and proposing methods to effectively control the costs of air, water, solid waste, and polluted environment. The results of the study provide a new direction and basis for future industrial pollution control in Guangdong Province and take into account both social and economic benefits.

1. Introduction

With the continuous development of the economy, the problem of environmental pollution has gradually become a hot issue in the world. Industrial pollution and life-type pollution for the global environment have become a bottleneck hindering sustainable economic and social development [1]. GDP is an important indicator for the government to implement macromeasurement and diagnosis of national economic operation and also a unified standard to measure the degree of economic development of a country [2]. However, conventional GDP ignores the economic costs of reduced environmental quality and the enormous economic value of natural and ecological resources. It cannot reflect the actual situation of economic development. With the concept of environmentally sustainable development, environmental factors have been incorporated into the national economic accounting system. Green GDP, which is the GDP after deducting the cost of economic losses from environmental pollution and the cost of natural resource consumption, is an important indicator to describe environmentally sustainable development [3]. The more the economy grows, the more prominent the environmental problems become. The sustainable development of the economy and environment has attracted more and more people’s attention. A city is a complex artificial ecosystem composed of society-economy environment. Economic, social, and environmental development are interdependent and interact [4]. The development of the social environment must meet the economy and people’s living needs and must also protect the environment. The environment is the natural basis of social and economic
development, so the essence of environmental problems is still economic development [5]. If economic development is achieved at the cost of environmental pollution, the development will ultimately limit production and economic development. The Megalopolis is at an advanced stage of urbanization development. The concentrated population and high level of economic development play an important role in urban economic development [6].

In order to reduce environmental pollution and improve environmental quality, some scholars proposed quantitative and qualitative methods to analyze the influencing factors and driving factors of environmental pollution, and analyze the influence cause and mechanism of each factor on environmental pollution. The common quantitative analysis methods include the path analysis method and classification matrix weighting method. At the same time, each influencing factor is in mutual influence and in constant change, which increases the difficulty of environmental pollution impact analysis. Some scholars believed that the sustainable development of enterprises cannot be separated from the management and control of environmental costs, which clearly indicates that this action can effectively reduce the waste discharge in the production process of enterprises [7]. The other scholars used the combination of life cycle theory and logistics cost accounting method in the research to determine the related costs and environmental burden of production [8]. Some researchers studied the control of environmental cost in the mode of ecological, economic development, took the strategic level as the entry point to provide the theoretical basis for environmental cost control, and introduced in detail the mechanism of the environmental total cost, control, and damage cost, and action-based costing [9]. The other researchers used the virtual treatment cost method to quantitatively assess the environmental damage cost of air pollution and water pollution, and the virtual treatment cost method can ensure rigor and integrity [10]. Based on the environmental Kuzlitz curve theory, many scholars studied the threshold effect of the impact of urban population size on environmental pollution, and population growth will not aggravate urban environmental pollution [11, 12]. Green GDP accounting is a pioneering work, and China is still in the exploration stage of basic theory and practice.

Guangdong, as a developed industrial area in China, is naturally accompanied by a series of environmental pollution problems, especially the light textile, daily chemical industry, and other serious pollution industries outstanding. The process of these industrial enterprises relies on large amounts of water, and the water pollution is particularly serious. In addition, the environmental protection awareness of enterprises was too poor [13, 14]. Because Guangdong province is a rainy area in the south and rich in water resources, the pollution is easy to spread and is not easy to completely control. It has a long coastline, many ports, and great potential in salt resources, oil and gas resources, and aquaculture, but it is not developed enough at present. The sewage, produced by industrial enterprises, flowed into the sea, making the frequent occurrence of red tides in seawater. Due to the acceleration of the process of industrialization and the increase of people’s material consumption, the waste was discharged into the air, leading to the air quality getting worse and aspects of human life. Most enterprises are terminal management [15]. With the economic development, human’s requirements on the environment and the acceleration of the industrialization process, the limitation of the end treatment is increasingly revealed. Therefore, solving pollution problems needs to implement the whole process control to reduce the generation of pollution. Enterprises should consciously apply preventive environmental protection strategies in the production process. In essence, this strategy is aimed at the production process and products, which can help to reduce or eliminate the damage of the production process to human life and the environment and can also meet the needs of people’s survival, and maximize the expansion of social and economic benefits [16]. Therefore, the selection of scientific and reasonable calculation methods and models, the basic situation and composition of scientific accounting, and the exploration of the size and mechanism of each environmental pollution influencing factor will help to reduce environmental pollution, improve environmental quality, and provide support for the government to formulate effective environmental pollution control policies. The model in this paper is simple and convenient for calculation.

2. Materials and Methods

Guangdong is located in the hills south of the Yangtze River, and the landform is undulating, belongs to the acid red soil, and the soil covers the hillside. Forests are very rich, but after repeated and long-term comprehensive deforestation, the original vegetation is cut down by human beings. The land is developed as industrial zones or commercial buildings; vegetation coverage decreases, so soil erosion caused by soil erosion is particularly serious, although it has a unique advantage as the industrially developed area.

2.1. Basic Theory. The human capital method is common to calculate the economic loss of health due to premature death caused by environmental pollution. It is composed of human knowledge, technical level, health level, and other aspects. In human capital law, the individual is regarded as a unit of economic capital, and the labor value of the individual’s shortened life due to environmental pollution is equal to the individual’s future earnings. The revised human capital law regards annual per capita GDP as the contribution of individuals to society and examines human capital from the perspective of the whole society [17]. The revised human capital method replaces individual income with GDP per capita in the base year, calculated as follows:

$$H = GDP \times \sum_{i=1}^{n} \alpha_i y_i$$

where $H$ is the revised human capital; $GDP$ is per capita GDP in the base year; $\alpha$ is per capita GDP growth rate; $y$ is the social discount rate, which is 8% in this paper according to relevant studies.
Medical expenses were used to assess the damage to human health caused by environmental pollution and the economic losses caused by the temporary loss of working ability. The cost of the disease usually includes medical expenses, hospitalization costs, and the daily economic losses of the patient and bedridden patients. This method does not account for the economic loss of suffering caused by illness, which is also an underestimate of the economic loss of health [18]. The market value refers to the change in product profit in a region or region due to environmental pollution. Firstly, environmental quality is regarded as a factor of production. Then, the productivity and production cost of products will change due to environmental pollution. Finally, the market price of products is used to calculate the resulting changes in product profits and to estimate the economic losses caused by environmental pollution. The recovery expenses mainly include the loss of replacement, maintenance, transformation, and downtime loss. Protection cost refers to relevant economic costs paid by people to reduce and eliminate the negative effects of environmental pollution, to reveal the relevant economic losses caused by environmental pollution.

2.2. The Accounting Indicators of Environmental Pollution Economic Loss. According to the type of environmental pollution, it is divided into air, water, and solid waste pollution. Each type of pollution is considered in terms of human health indicators. Each index involves a number of accounting items. Table 1 is the economic loss accounting index system of environmental pollution established in this paper.

2.3. The Accounting Method of Environmental Pollution Economic Loss. Air pollutants can be mainly divided into natural pollutants and man-made pollutants. Man-made pollutants often cause public hazards, which mainly come from fuel combustion and large-scale industrial and mining enterprises. Sulfur dioxide, soot, dust, and nitrogen oxide are considered as the main pollutants in industry. The calculation method of sulfur dioxide virtual governance cost is shown in the following:

$$E_{so2} = R_R \times H \times P + R_1 \times H_1 \times P,$$

(2)

where $E_{so2}$ is the virtual governance cost of sulfur dioxide; $R_R$ is the emission of sulfur dioxide during combustion; $H$ is unit treatment cost of sulfur dioxide in the combustion process; $P$ is the virtual removal rate of sulfur dioxide; $R_1$ is the emission of sulfur dioxide during the process; $H_1$ is unit treatment cost of sulfur dioxide in the process; The virtual removal rate of SO2 was 90%.

The virtual management cost of soot, dust, and nitrogen oxide is calculated through the following:

$$E_f = R_f \times H_f \times P_f,$$

(3)

where $E_f$ is the virtual treatment cost of soot, dust, and nitrogen oxide. $R_f$ is the emission of soot, dust, and nitrogen oxide; $H_f$ is the unit treatment cost of soot, dust, and nitrogen oxide; $P_f$ is the virtual removal rate of soot, dust, and nitrogen oxide. The virtual removal rate of nitrogen oxide was 90%, and that of dust and dust was 97%.

The virtual treatment cost of industrial air pollution is the sum of the virtual treatment cost of sulfur dioxide, dust, dust, and nitrogen oxide, as shown in Table 2.

The economic loss of human health caused by air pollution is generally divided into three parts: The number of premature deaths (P1) and economic losses (E1) caused by air pollution; the number of hospitalizations (P2) and economic losses (E2) caused by air pollution; the number of chronic bronchitis morbidity and disability (P3) and economic losses (E3) caused by air pollution; therefore, the economic losses of human health caused by air pollution are as follows:

$$E = E_1 + E_2 + E_3.$$  

(4)

The revised human capital method is adopted to calculate the economic loss $E_1$ of premature death caused by air pollution. $E_1$ is calculated by the following:

$$E_1 = 10^{-5} \times \frac{R - 1}{R} \times f_P \times H \times P,$$

(5)

where $H$ is the per capita human capital of the city, ten thousand yuan; $f_P$ is the disease mortality rate under a polluted environment, 10,000 people; $P$ is the exposed population in the city, 10,000 people; $R$ is the relative risk of human health effects under environmental pollution.

The hospitalization economic loss caused by air pollution mainly includes cost loss and rest cost loss. Hospitalization cost loss includes the direct hospitalization cost loss and the indirect hospitalization cost loss including transportation and nutrition cost loss. The disease cost method is mainly used to calculate economic losses, which is the economic loss of hospitalization for related diseases caused by air pollution. $E_2$ is calculated by the following:

$$E_2 = \sum_{i=1}^{5} f \frac{c \times \beta}{1 + c \times \beta} \times (C + WC_i),$$

(6)

where $C$ is the cost of hospitalization, ten thousand yuan; $W$ is sickness days off work; $C_i$ is the cost of sickness rest; $c$ is the difference between the PM10 concentration under environmental pollution and the threshold of PM10 concentration endangering health, $\mu g/m^3$.

Economic losses (E3) caused by air pollution can also be calculated by formula (6).

Among the water pollutants, the pollution from industry, agriculture, tertiary industry, and people’s life account for about one-third each. There are great differences in wastewater quality and pollutant content in different industries. Even in the same industry, there are great differences in wastewater quality due to different products, raw materials, auxiliary materials, process routes, and treatment methods. Generally speaking, The pollutants in industrial wastewater mainly include organic pollutants such as COD,
BOD5, ammonia nitrogen, cyanide, phenols, and petroleum, and inorganic pollutants such as COD, ammonia nitrogen, heavy metals, and cyanide can be directly calculated by using statistical data. 

\[ E_w = \sum_{n=1}^{\infty} (R_w \times H_w \times P_w), \]  

where \( E_w \) is the virtual treatment cost of industrial wastewater pollutants; \( R_w \) is the emission of pollutants; \( H_w \) is the unit treatment cost of pollutants; \( P_w \) is the virtual removal rate of contaminants.

Unit virtual treatment cost of pollutants COD, petroleum and ammonia nitrogen in the wastewater of various industries, as shown in Table 3. The virtual removal rate of pollutants in wastewater of various industries is 83%

The economic loss of human health caused by water pollution can be divided into the economic loss of infectious diseases caused by drinking water pollution \( E_w \) and the economic loss of premature death of cancer caused by drinking water pollution \( E_{w1} \). The economic loss of human health caused by this water pollution \( E_{wh} \) is calculated by the following:

\[ E_{wh} = E_{w1} + E_{w2}. \]

Water is an important medium for the transmission of diseases, and drinking water pollution usually leads to an increase of the incidence of infectious diseases such as dysentery and hepatitis. The disease cost method is used to calculate the economic loss \( E_{w1} \) of related infectious diseases caused by drinking water pollution. \( E_{w1} \) is calculated by the following:

\[ E_{w1} = P_v \times \alpha \times E_p, \]

where \( P_v \) is the rural population, 10,000; \( \alpha \) is the penetration rate of tap water in rural areas; \( E_p \) Per capita income from related infectious diseases caused by drinking water pollution, yuan/person.

Drinking water pollution usually leads to an increase in the death rate of cancer such as gastric cancer, esophageal cancer and liver cancer. This paper uses the revised human capital method to calculate the economic loss \( E_{w2} \) of premature death from cancer caused by drinking water pollution. \( E_{w2} \) is calculated by the following:

\[ E_{w2} = 10^5 \times \frac{O - 1}{O} \times f_p \times H_p, \]

where \( f_p \) is the mortality rate of malignant tumors in a polluted environment, 10,000; \( O \) is the relative risk of malignant tumors caused by environmental pollution, \( O = 1.50 \); \( H_p \) is rural per capita human capital, ten thousand yuan/person.

The comprehensive utilization and disposal rate of solid waste is not high. It is mainly stored and piled up in the form of storage, so it occupies a large amount of land area. It is assumed that all the land occupied is used for crop cultivation, and then the income obtained from planting is regarded as the economic loss \( E_s \) caused by the solid waste occupation. \( E_s \) is calculated by the following:

\[ E_s = Q_p \times S_p \times S_s. \]

### Table 1: The accounting indicator system of environmental pollution Economic loss.

| Pollution type               | Accounting indices | Pollution factor                | Accounting method                                      |
|-----------------------------|--------------------|---------------------------------|--------------------------------------------------------|
| Atmospheric pollution       | Human health       | PM10                            | Amended human capital act; disease cost method         |
| Water contamination         | Human health       | Unsafe drinking water           | Amended human capital act; disease cost method         |
| Solid waste footprint loss  | Solid waste area   |                                 | Protection cost method                                 |

### Table 2: Crop yield reduction factor under polluted environment.

| Industry            | Combustion process SO₂ | Productive process SO₂ | Smoke dust | Dust | Ox nitride |
|---------------------|-------------------------|-------------------------|------------|------|------------|
| Pollution industry  | 1350                    | 650                     | 100        | 230  | 3030       |
| Metal industry      | 840                     | 650                     | 140        | 65   | 3030       |
| Other industries    | 840                     | 650                     | 140        | 230  | 3030       |

### Table 3: Crop yield reduction coefficient under polluted environment.

| Industry            | COD  | Petroleum | Ammonia nitrogen |
|---------------------|------|-----------|------------------|
| Colliery            | 1517 | 125       | 47               |
| Petroleum           | 1110 | 6369      | 82               |
| Nonferrous mines    | 1384 | 282       | 1.7              |
| Nonmetallic mine    | 383  | 172       | 0                |
| Food processing     | 1362 | 26        | 3                |
| Food manufacturing  | 1834 | 19        | 864              |
| Beverages           | 2130 | 948       | 1615             |
| Tobacco             | 2699 | 25        | 132              |
| Cottonocracy        | 2067 | 2         | 580              |

### 2.4. Environmental Pollution Economic Loss Accounting Procedures.

In the process of economic loss accounting of environmental pollution, the first step is to determine the main objects and pollution factors affected by environmental pollution, and the determination of the main objects of environmental pollution is the premise of accounting [20]. Determining the main objects of environmental pollution impacts should follow the principles of adjusting measures to local conditions, highlighting key points, having the basis of scientific calculation and having the support of information and data. Environmental pollution factors mainly include air, water, and solid waste pollution factors. The
second step is to make clear pollution conditions and pollution range, basically be the economic loss that causes to air, water, and solid waste pollution undertakes calculation, its pollution exceeds the standard part as the scope of calculation. The third step is to establish the economic loss of various environmental pollutants accounting indicators. The fourth step is to count the number of objects affected by pollution within the scope of environmental pollution, which is the basis for accounting. The fifth step is to calculate the physical loss caused by environmental pollution. Finally, the average concentration of environmental pollutants was used to represent the damage of environmental pollution. Therefore, establishing the relationship between the concentration of environmental pollutants and various physical losses is the key to calculating the physical losses caused by environmental pollution. Transform the physical loss into the monetary loss is the core point of environmental economic loss accounting. Figure 1 shows the accounting procedure for economic loss of environmental pollution.

2.5. Comprehensive Environmental Economic Accounting System [6]. According to the view of environmental economics, environment, as an indispensable natural condition for human survival and development, must be incorporated into the traditional economic system to form a new environment-economic system, as shown in Figure 2. Comprehensive environmental economic accounting was to integrate environmental factors into the economic system, regard the natural environment and economic system as a whole, and form the SEEA system. A comprehensive environmental economic accounting system emphasizes the supporting role of the environment on the economy, reflecting the mutual network of the natural environment and economic process. The environment plays an important role in economic development for human beings and other living beings in the environment. Firstly, the environment provides physical natural resources for various economic activities. These resources enter the economic system through economic activities and are transformed into materials and services that can be used by human beings. Secondly, the environment, as a receptor of various wastes, absorbs the emissions generated during production and consumption, which are discharged into the atmosphere, water bodies or into landfills. Finally, the environment also provides public goods for human beings and other living beings. These functions correspond to the three functions of the environment in SEEA: resource function, precipitation function, and service function.

The first part is the basis of SEEA, which mainly expounds the asset supply and demand accountability of the redesigned SNA to reflect the total amount of specific economic activities related to the environment. The second part mainly expounds on those flows and stocks that are included in the traditional accounting but are not clear, as well as the accounting of nonfinancial assets from the table of demand and supply to the first part. The third part mainly expounds on the concept of raw material and energy balance and natural resource accounting. The fourth part and the fifth part expand the output concept of SNA, expand social production to the category of household production, and its impact on the environment and human welfare.

2.6. Environmental Assets. The accounting object of comprehensive environmental economic accounting is environmental assets. SEEA determines the scope of environmental assets according to the functions of the environment. The environment not only provides natural resources for economic production but also serves as a place to receive waste from economic activities. Meanwhile, the ecosystem provides a living environment for all living organisms. The SEEA expanded the range of assets to include all environmental assets within a country’s territorial boundaries. Environmental assets include natural assets such as sources of raw materials and energy and provide ecological functions assets such as waste absorption, biological habitat, environmental services, and other noneconomic natural assets such as health or aesthetic value. Noncultivated forests, wildlife, and all ecosystems excluded from the economic sphere are included in SEEA assets. Therefore, environmental assets include natural resources, land and connected water surface, ecosystem, as well as intangible assets related to environmental issues, as shown in Figure 3:

3. Results

3.1. Cost Accounting of Environmental Pollution Loss in Guangdong Province. The pollutants in industrial waste gas mainly include sulfur dioxide, soot, dust, and nitrogen oxide. Sulfur dioxide is divided into sulfur dioxide produced by the process and sulfur dioxide produced by the combustion process. The national statistics were used to derive virtual treatment costs per unit and virtual pollutant removal rates for each industry. The specific data on the virtual treatment cost of atmospheric pollutants in all industrial industries are shown in Figure 4.

The hospitalization economic loss of the diseases caused by air pollution was calculated through the disease cost method. The economic loss from air pollution in Guangdong province was 27.752 billion yuan.

Industrial wastewater contains COD, petroleum, and ammonia nitrogen pollutants. The national statistics were used to derive the virtual treatment cost per unit of pollutant and the removal rate of pollutants from wastewater for each industry. The virtual treatment cost of all pollutants in the wastewater was calculated, as shown in Figure 5.

The virtual treatment cost of livestock and poultry breeding wastewater consists of COD treatment cost and ammonia nitrogen treatment cost, Table 4 as shown in Table 3.

The disease cost method was used to calculate the economic loss of infectious diseases caused by water pollution. The economic loss from water pollution in Guangdong province was 6.411 billion yuan.

The virtual treatment cost of industrial solid waste was composed of the virtual treatment cost of the stored and discharged wastes. The virtual treatment cost of solid waste in all industries is shown in Figure 6.
3.2. Air Pollution Loss Cost Control. The main sources of air pollutants in Guangzhou province were coal, petroleum, mining, and other industrial production. The energy mix promote the use of clean fuels such as low-sulfur coal, clean coal, fuel oil, liquefied natural gas, and liquefied petroleum gas has promoted the use to improve the energy structure. Actively promote coal, low-altitude nonpoint source generation gas projects, and efforts to reduce smoke pollution. Increase the proportion of clean energy such as electricity and natural gas, replace high-sulfur coal with clean coal, high-quality energy to control, and eliminate soot pollution and reduce greenhouse gas emissions. The use of clean energy can reduce the total emissions of sulfur dioxide and is very important for the long-term sustainable use of...
Gradually use of clean energy such as natural gas reduce the use of coal. Through actively researching new flue gas desulfurization and gentrification technology and from the end to control the emission of acid gas, should vigorously develop and research new boiler and power plants with lower energy consumption, low operating costs of advanced flue gas desulfurization technology, and gentrification technology. The acid gas emissions can meet the standards and achieve total control requirements. The control and management mechanism of urban dust pollution should be established, and the construction projects should be strictly managed to prevent and control dust pollution.

3.3. Cost Control of Water Pollution Loss. According to the analysis of the internal variation of standard pollution loads such as industrial wastewater from key pollution sources, the
key pollutant discharge loads basically showed a decreasing trend year by year. As the management strengthens the supervision and management of key pollutant sources main wastewater pollution indicators are significantly reduced. From the actual situation of wastewater monitoring, the key source enterprises have increased their investment in pollution control, the phenomenon of direct discharge of untreated production wastewater has significantly reduced, and the effect of wastewater treatment has generally improved.

3.4. Use and Disposal of Solid Waste. Although a large amount of solid waste is a pollutant that harms the environment, it is also a renewable resource that can be recycled. Through improving the technical level of solid waste disposal, improving the comprehensive disposal capacity of solid waste reduction and recycling, especially strengthening the classification and collection of garbage, promoting the comprehensive utilization of garbage, realizing the reduction and recycling planning of garbage, and introducing the new technology of waste microbial treatment, improve the level of safe disposal of hazardous waste. Based on the characteristics of hazardous waste, safety must be ensured in the process of collection, transportation, and disposal. The number of units for comprehensive utilization of hazardous waste should not be too much. The site selection of facilities for comprehensive utilization should meet the requirements of city planning to realize the resource recovery of hazardous waste on the basis of fully ensuring environmental safety.

4. Conclusions

(1) With the increasingly serious environmental pollution problems, the call for sustainable human development is growing. The development and environmental protection synchronously must pay full attention to the accounting and control of environmental costs. In this paper, Guangdong province, as the research target, estimated the cost of environmental pollution loss and put forward the control methods to control environmental pollution from the source and reduce the environmental cost. Based on the environmental cost accounting and control system, environmental value quantity accounting is key to environmental pollution virtual management cost accounting. The pollution of the environment cost was estimated but did not consider the ecological destruction. In fact, for the forest, grassland, wetland, farmland, rivers, and ocean ecosystem, the damage was increasing enough attention.

(2) The current situation of environmental pollution and environmental damage cost control in Guangdong Province was studied. The method of economic loss accounting of environmental pollution was used to calculate the cost of environmental pollution loss and calculates the number of the affected objects within the scope of environmental pollution. The main sources of pollutants in Guangzhou province were air pollution, water pollution, and solid waste pollution, which must be controlled at the source. Based on the current situation of pollution, it was proposed to optimize the type of energy structure, promoting the use of clean fuels, increase the capital for water pollution control, enhancing the comprehensive disposal capacity of solid waste, regulating and adjusting the industrial structure and eliminating enterprises with high energy consumption and high pollution, and developing a low-carbon circular economy.

(3) With the source of environmental pollution control increasing, ecological civilization construction continues to be promoted, and the proportion of environmental costs gradually increases, becoming one of the important factors affecting economic efficiency, accurate accounting, and effective control of environmental costs. The current status of environmental cost accounting and control was studied from the source text, and the problems and causes were analyzed. The economic loss of environmental pollution was calculated and the control measures of environmental pollution loss cost were put forward. The research on environmental cost accounting and control was still in its infancy and development stage. The theory needs to be further developed, the specific accounting method needs to be improved, the relevant supporting mechanism needs to be established, and the specific control method needs to be tested in practice.

Data Availability

The figures and tables used to support the findings of this study are included within the article.

Conflicts of Interest

The authors declare that they have no conflicts of interest.
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