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An Exploration of the Application of Management Accounting to Drug Monitoring

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Abstract

In recent years, China has implemented strict drug control measures, and the drug situation has been further improved. This study mainly explores the application countermeasures of management accounting in the fight against drug-related crimes in the context of national policy support for intelligent anti-drug technology anti-drug, through researching and analyzing massive data, quantitative supervision, monitoring the development of the drug situation timely, scientific formulation of anti-drug work strategies, suppressing the spread of drugs, so that it may significantly increase the people's sense of security and satisfaction.

Keywords

Big Data; Drug Monitoring; Management Accounting.

1. Introduction

A large number of literatures shows the application of management accounting theory for quantitative supervision and formation of drug monitoring system aspects have not been studied by scholars in the practice of drug governance in China.

This study analyzes the feasibility of drug monitoring under the management accounting theory, extends the problems of drug monitoring under the management accounting theory, describes the problems in detail, and puts forward the corresponding solutions to realize the overall improvement of the level of scientific and technological formalization in the field of anti-drugs, and improves the drug governance system.

2. Data on the Current Drug Situation in China

2.1. Core Elements of Drug Activities

In recent years, China has continued to crack down on drugs, and the drug situation has eased, with the main official data being: according to the Ministry of Public Security's 2020 report on China's fight against drug-related crime, 64,000 criminal drug cases were solved throughout the year, 92,000 suspects were arrested, 55 tons of various types of drugs were seized, and 427,000 drug addicts were seized, representing a decrease of 22.9 percent, 18.6 percent and 30.8 per cent respectively. 6 percent, 14.8 percent and 30.8 percent respectively. According to the National Narcotics Control Commission's 2020 notification of 1.811 million existing drug users, among them, 1.031 million abused synthetic drugs, accounting for 57.2 percent, and 734,000 abused diploids, accounting for 40.8 percent. According to the notification information, the core elements of China's drug activities are drug cases, drug suspects, seized drugs, seized drug addicts. They are mainly involved in drug trafficking and drug abuse, equivalent to the "production-wholesale-retail". In all kinds of elements of the movement, the economic data is inevitably left. It is important for the management of the theory of management accounting. his is of great significance to management in the theory of management accounting.

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2.2. Types of Drugs

The drugs in China involves both traditional drugs (heroin, morphine and marijuana) and synthetic drugs (methamphetamine, ketamine and ecstasy) that have upgraded and transformed the industrial chain, and new psychoactive substances (also known as laboratory drugs and third-generation drugs), which are also mixed up in the drug market, wandering on the fringes of drug legislation and regulation. For example, the police of Guangdong Province investigated and dealt with "rainbow cigarettes", smokable "milk tea", and "kawaii tide drink" (containing a high concentration of GHB), etc. Recently, the Internet has revealed that a 4-year-old girl brought back some new types of drugs from a daycare center. These new types of drugs are so varied and difficult to guard against, such as cocaine capsules, children's stickers "stamp LSD" (containing lysergic acid diethylamide (LSD)), "cookies" (containing marijuana), and others. It has made the day-to-day work of anti-drug law enforcement and drug control more difficult. As the types of drugs continue to be updated and the proportion of consumption of various types of drugs keeps changing, the accurate transmission of various types of information becomes quite important, and the use of the theory of management accounting for monitoring and early warning of the drug situation is precisely one of the ways to explore solutions.

2.3. Sources of Drugs

Over the past decade or so, the advancement of globalization and scientific and technological progress, while improving the lives of human beings, has also greatly fostered and contributed to the global drug problem. The international drug situation has evolved in a complex manner, with the decline of traditional drugs, the spread of synthetic drugs, the emergence of new psychoactive substances, the loss of non-Listed controlled precursors, the abuse of prescription drugs and the Internet dark-net trade all coming into focus. China's drug situation is closely related to that of the rest of the world, and faces the dual pressures of importation from abroad and manufacture at home. Over the past decade or so, it has experienced a series of challenges, such as rapid growth in the number of drug abusers, rampant domestic drug manufacturing activities, increased loss of precursors and the rise of new psychoactive substances. Since the drugs (methamphetamine and heroin) consumed in China mainly originate from outside the country (the Golden Triangle), the monitoring of the "production" process can be reduced. It is necessary to transmit the relevant information to foreign anti-drug departments and Interpol, but the attitudes of Western countries towards the drugs in question are different, which necessitates the formation of two monitoring systems: one international and the other domestic. The use of management accounting theory in the globalization of the economy, especially by large multinational corporations, can shed some light on the use of management accounting theory for drug monitoring and early warning [1].

3. Feasibility Analysis of Drug Monitoring under Management Accounting Theory

The construction of drug monitoring is the basic work of objectively assessing the drug situation, serving the strategic decision-making of anti-drugs, and enhancing the initiative of anti-drug work, and it is the effective hand of promoting the governance of the drug problem and upgrading the governance capacity, and it is an important task required by the characteristics of the drugs, compelled by the situation of the drug situation, and urgently required by the anti-drug work. The application of management accounting theory to drug monitoring is of practical significance from the viewpoint of analysis of the objects, objectives, functions, quality characteristics of information and working procedures of management accounting theory.

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3.1. Objects of Management Accounting

The object of management accounting is value management. In the process of drug monitoring, drug activities "production - wholesale - retail - use" and other links are involved in the monitoring of the value of drugs. We do not know its actual value. Drug-related activities have a strong hidden, and it often needs to be from the solved drug cases, arrested drug addicts, as well as a variety of intelligence means of serious research and judgment. Then, the value of drug use in various regions can be ultimately confirmed. It is often necessary to carefully study and judge the value of drugs in various regions through the detection of drug cases and the arrest of drug addicts, as well as various intelligence means, in order to finally confirm the value of drugs for use in various regions.

3.2. Objectives of Management Accounting

The ultimate goal of management accounting is to improve efficiency. Scientific monitoring of the drug situation can more accurately provides information to the management and executives, and takes precise combat and effective control measures for all aspects of drug-related activities. Various anti-drug policies need to be formulated with reference to many factors, so the anti-drug department needs to have scientific and rich data information to provide a scientific basis for the formulation of anti-drug strategies. The use of management accounting theory can better integrate the resources obtained, better utilizes the role of various data resources, and thus improves the efficiency and quality of the anti-drug work of "combating, preventing, managing and controlling".

3.3. Functions of Management Accounting

Management accounting has the functions of forecasting, decision-making, planning, control and evaluation. The functions of management accounting are of great significance in guiding the current anti-drug work, which is important for forecasting the development of the drug situation, formulating anti-drug policies, planning the focus of anti-drug work in the coming period, controlling the development and spread of the drug situation, and evaluating the effectiveness of anti-drug work.

3.4. Quality Characteristics of Management Accounting Information

Management accounting information is characterized by quality, mainly in terms of relevance, accuracy, consistency, objectivity, flexibility, timeliness, conciseness and cost-effectiveness. The same quality requirements apply to drug monitoring information, such as information on crackdowns on drug cases, arrests of drug suspects, seizures of various types of drugs, seizures of drug addicts, etc., control data on existing drug addicts, abusers of synthetic drugs, and abusers of opioids, as well as data on the raw materials for the traditional drug "heroin": opium poppy, the synthetic drug "ice (methamphetamine)", the synthetic drug "methamphetamine", and other drugs. "Methamphetamine (methamphetamine)" raw materials such as ephedra and other relevant raw material information need to be monitored in a timely manner, dynamic updating.To realize the "fight against money and cut off blood ""Clear the source and cut off the flow",all aspects of the drug trade need to understand the cost, sorting out the flow of drug-related funds to ensure that the data is accurate and complete.

3.5. Working Procedures for Management Accounting

Confirmation. Drug-related crime is extremely covert, and it is difficult for single-channel data to comprehensively and objectively reflect the dynamics of the drug situation. Emphasis on the aggregation of multi-sectoral, multi-channel and period-variant data to confirm the monitoring of the drug situation by the Drug Monitoring Centre, which specifies the elemental indicators required by the reporting departments and dynamically adjusts them after a certain time

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period to ensure that the indicators are the real situation of the drug situation in a certain area during a certain period of time.

Measurement. Drug activities that have taken place or are likely to take place and the content of anti-drug work that has been accomplished are quantitatively determined, and the measurement data include the number of drugs seized through various channels, the number of drug cases, the number of suspects apprehended, the price of drugs and their purity, laboratory analyses, and the estimation of drug cultivation and manufacture. Efforts have been made to make it simple and quick, to ensure rapid entry by drug-monitoring staff, and to ensure that the data are accurate and dynamically updated.

Aggregation. In accordance with strict and consistent methods of transmission and classification, relevant operating regulations and the necessary code of practice have been formulated, and time limits for entry have been clarified, so as to realize the first-time aggregation and concentration of various types of data in various places, and to produce a large database, which will be stored in different categories to facilitate the next step in the smooth conduct of data analysis.

Analysis. The establishment of various types of analytical models include analysis of the drug supply situation, organized criminal groups involved in drug-related crimes, analysis of drug smuggling and trafficking, and changes in drug smuggling and trafficking methods. The massive amount of data entered is analyzed and sorted out, various types of data are assigned values, and the drug situation is assessed horizontally and vertically in a three-dimensional and scientific manner. The module software is automatically processed and confirmed by the staff, and various types of early warning information are issued in a timely manner to all the relevant departments in the various regions.

Compilation and Interpretation. The drug supply and demand situation is reflected in an appropriate form, and drug situation reports are compiled scientifically. Based on the analysis of information in the various modules, staff members regularly compile data in the form of daily, weekly, monthly, quarterly, annual and multi-year reports, and draft recommendations for the next step in the work.

Transmission. Relevant information is provided to the anti-drug departments, other information users and persons in charge of various regions, so that the decision-making departments can grasp the latest developments and formulate countermeasures for the next step in their work, and the executive departments can make timely adjustments to the direction and focus of their anti-drug work, so as to ensure sustainable development of the anti-drug work.

4. Problems with Drug Monitoring under Management Accounting Theory

The problems of drug monitoring under management accounting theory mainly include the lack of big data support, the inability to collect a large amount of data, and the lack of management accounting talents.

4.1. Lack of a Unified Big Data Platform

Management accounting emphasizes unity, high efficiency and machine learning. At this stage, drug monitoring lacks a higher authority and data port access platform. The existing big data platforms are more and more single function. The management of drug addicts, drug law enforcement, management of excisable chemicals, delivery logistics information, psychotropic substances and narcotic drugs and other systems are independent of each other, coupled with the anti-drug work of confidentiality, etc. It can't satisfy the data in the era of big data automatic updating of the acquisition of data failures, manual duplication of the workload to increase the

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workload of the input, the visualization of the integrated analysis of the drug situation automatically, and so on. It brings great inconvenience to the monitoring of the drug situation.

4.2. Poor Quality of Information on Drug Monitoring

The monitoring of the drug situation requires the collection of a large amount of monitoring data and information. Since the lower-level departments have concerns about the various types of data reported for assessment purposes, there may be a certain risk of falsification with regard to the entry of basic information, and there may be some bias in the understanding of the relevance, accuracy, consistency, objectivity, flexibility, timeliness, simplicity, cost-effectiveness and other quality requirements, which will lead to distorted results of the analysis of the drug situation, failing to reflect the real changes in the situation of the drug situation, and affecting decision-making on the next step of the work of the anti-narcotics control system.

4.3. Lack of Management Accounting Talent

Complex talents in management accounting are an important factor in drug monitoring, which should not only focus on law enforcement data on drug supply, but also focus on analyzing the deeper impact of drug demand. It covers concerns such as the relationship between drug abuse and public health and socio-economic relations. Pay attention to the new Internet technology for drug trafficking and illegal financial flows and other governance difficulties, and incorporate scientific data such as drug purity and sewage testing into the monitoring and evaluation, so that the monitoring of the drug situation can be comprehensive and objective in content. The recommendations put forward can be feasible and reasonable [2].

5. Countermeasures for Drug Monitoring under Management Accounting Theory

The countermeasures for drug monitoring under management accounting theory mainly include integrating existing resources, optimizing detection indicators, improving measurement methods and strengthening platform construction [3].

5.1. Integration of Existing Resources

Currently, drug monitoring data come from many systems, but they are not interconnected. So, it departs from the goal of management accounting and fails to play a monitoring role in the various aspects of drug "production - wholesale - retail - use" in an efficient manner, and causes a lot of inconvenience in obtaining and categorizing drug monitoring data. The convenience brought about by big data should be actively addressed, and the platform should be integrated to maximize its effectiveness.

5.2. Optimizing the Monitoring System

Drug abuse module. The ratio of the number of existing drug abusers to the number of people in the population in a given place within a certain period of time and the magnitude of the change in the number of newly detected drug abusers in a given place within a certain period of time are calculated according to the statistics of abusers of heroin, methamphetamine, and new psychoactive substances, etc. respectively.

Module on cultivation of illicit drug plants. The number of illicit drug plants planted in a certain place within a certain period of time. Through satellite remote sensing monitoring and drone aerial surveys, and combined with field inspections, the number of illicit drug plants planted in a certain place is found. They reflect the hazardous situation of drug cultivation in that place.

Drug trafficking module. The number of drugs flowing from a certain place to other places within a certain period of time and the number of drugs flowing from other places to a certain place within a certain period of time reflect the situation of transit and distribution,

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consumption, supply and demand, and the impact of the drug problem on society in drug trafficking activities.

Anti-drug socialization module. It includes the frequency of positive and negative news reports at various levels and in various traditional and new media in a certain period of time, the relapse rate of community drug treatment and rehabilitation, the funds invested by the Government in purchasing anti-drug social services, and the status of anti-drug socialization practitioners.

5.3. Improvement of Measurement Methodology

The National Drug Monitoring Index (NDMI) is a comprehensive indicator reflecting the drug situation. By comparing the NDMI vertically, it is able to reflect the changes in the drug situation over time within each region; and by comparing it horizontally, it is able to reflect the relative seriousness of the drug situation between each region. Based on the special nature of anti-drug work and the different focuses of various regions, the "equal weight method" can be used to calculate the weights of the indicators as part of the Drug Situation Monitoring Index indicator system.

Vertical comparison. Adopt the dynamic synthesis method of year-on-year comparison, the specific steps are as follows:

Step 1: Determine the first three years of the calculation period as the base, the average of the monitoring values of these three years as the base value X, the base is 100;

Step 2: Measure the monitoring value Y for the calculation period and calculate the ringgit increase of this value over the base value;

Step 3: In accordance with the ring increase, the base figure is increased or decreased accordingly to obtain the monitoring value of the indicator, the formula is: NDMIi = 100 × (1 + Y / (Y - X));

Step 4: Calculate the average of all the index values to get the region's drug monitoring composite index NDMI.

Horizontal comparison. Adopting "D-R comprehensive evaluation and analysis method", considering both numerical values and rankings, using "standardized score method" to calculate numerical scores, and "hundreds of divisions of name order" method to calculate ranking scores, respectively. In the process of calculation, the numerical score is calculated using the "standardized score method", the ranking score is calculated using the "ranking order hundreds differentiation" method, and the final score is calculated according to the average of the two scores. The specific steps are as follows:

Step 1: According to the data of each place in the monitoring area, calculate the numerical score as X. The calculation method is the "standardized score method", and the formula is: X=10×(C-B)/(A-B). Among them, A is the largest data in the item, B is the smallest data in the item, and C is the data of a certain region, and the score of the item in a certain region is calculated as X. The range of X is between 0-10;

Step 2: Calculate the ranking score Y, the calculation method for the "ranking order hundreds of differentiation" method, the formula is: Y = 10 × (1 - (D-1)/N). Among them, D indicates the rank order of the data in the region, N is the total number of names, and the data is 0. The range of Y is between 0 and 10;

Step 3: Calculate the average score, which is the value of this indicator monitoring in a particular region, NDMIi = (X + Y)/2. The range of C is also between 0-100;

Step 4: Calculate the sum of the values of all indicators in a given area to obtain the NDMI, the composite index for drug monitoring in that area.

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5.4. Strengthening the Platform.

Actively carrying out the upgrading of the big data platform for drug monitoring, applying management accounting theory and the actual needs of anti-drug work, marking various types of data in a hierarchical manner, accurately authorizing them in accordance with their duties and tasks, dynamically authenticating them, strengthening the security and control of the big data for drug monitoring and, in strict accordance with the relevant technical specifications, realizing dynamic security protection, trust control and approval and supervision of the big data, and proactively evaluating the risks, early warning and response, and collaborating in the control and management of the big data. Ensure that the whole process of big data is knowable, manageable, controllable and checkable. Accelerating the docking of various platforms to realize the open sharing and efficient scheduling of data resources. Strengthen the operational application of the drug monitoring big data platform, research and develop a number of application functions to meet operational needs, strengthen the analysis and mining of existing drug monitoring information and modeling applications, and further enhance the ability of drug monitoring to support the actual combat.

6. Conclusion

In the context of national policy support for smart anti-drug science and technology anti-drug, building management accounting theory to lead drug monitoring is one of the important paths to win the people's war against drugs in the new era and realize the high-quality development of anti-drug work in the new era. Adopting management accounting to lead the important nodes of drug monitoring, vigorously promoting the innovative work of drug monitoring, striving to improve the level of application, and seizing the commanding heights of anti-drug science and technology and management mode is the road of drug problem governance with Chinese characteristics.

References

[1] Liu Yuan. Introduction to the application of management accounting in government and administrative institutions[J]. Finance and Economics, 2022(02):74-76.

[2] Su Guoqiang, Yang Zhipeng, Huang Qingguan. Conceptualization of anti-drug policing in grassroots public security led by big data[J]. Journal of Hebei Public Security Police Vocational College, 2019, 19(02):56-58.

[3] Zeng Xueshan. Problems and countermeasures of management accounting in the era of big data[J]. Administrative Assets and Finance, 2021(19):90-91.