

# Optimization of China's Tobacco Tax Policy: A Study Based on the Perspective of Public Health and Fiscal Revenue Balance

Chentian Hu

Fuzhou University, Fuzhou, China

**Abstract.** The current tobacco tax system in China has structural issues, including low tax rates and unreasonable tax collection stages, which significantly hinder the implementation of tobacco control policies. It has been confirmed that the current tax rate has a significant gap with the international standard recommended by the World Health Organization, which greatly weakens the regulatory effect of price on tobacco consumption. The tax collection model, primarily based on the production stage, has strengthened the dependence of local finance on the tobacco industry, thereby forming a potential barrier to tobacco control efforts. In response to the above predicament, this paper proposes a systematic reform plan: gradually increase the tobacco tax rate to enhance the constraint of the price lever on consumption behavior; abolish the tobacco leaf tax to optimize the tobacco planting structure and reduce the tax burden on tobacco farmers; expand the tax collection scope and include new tobacco products such as electronic cigarettes in the tax collection system; integrate the taxes of the production and wholesale stages to simplify the tax collection process; set up a special tobacco control fund for the special use of smoking hazard publicity and smoking cessation intervention services. These reform measures aim to achieve the dual goals of stable fiscal revenue and improved tobacco control effectiveness, providing theoretical support and practical reference for the subsequent optimization of tobacco tax policies.

**Keywords:** The current tobacco tax in China, public health and fiscal revenue.

## 1. Introduction

Tobacco taxation policy is of great significance to public health and fiscal revenue in China's economic and social development. Currently, although tobacco taxation provides essential support for fiscal revenue, deficiencies in tax rates, collection links, and tax structure make it difficult to meet the demands of tobacco control and public health [1]. In terms of tax rates, the comprehensive tax rate of cigarettes in China is approximately 60%, which is far lower than the 70% or higher standard recommended by the World Health Organization. This results in a limited inhibitory effect of prices on tobacco consumption. In terms of collection stages, the centralized tax collection model at the production stage makes local finances highly dependent on the tobacco industry. In some major tobacco-producing areas, tobacco taxes account for as much as 30% of local fiscal revenue. This connection of interest weakens the enthusiasm of local governments for tobacco control. At the level of tax structure, the existence of a tobacco leaf tax increases the burden on tobacco farmers. New tobacco products, such as electronic cigarettes and heated tobacco products, have not yet been included in a comprehensive tax collection and management system, resulting in tax loopholes.

This study focuses on core issues such as the disconnection between tax rate settings and international standards, excessive local fiscal reliance on tobacco taxes, and the contradiction and conflict between tax policies and tobacco control goals. Through an in-depth analysis of the current policy operation mechanism, it explores optimization paths. It proposes to adopt a gradual tax increase strategy, raising the tax rate to a reasonable range in stages; optimize the collection stage, promoting the shift from the production stage to the retail stage tax collection; abolish the tobacco leaf tax and improve the tax policy for new tobacco products. Through a series of reform measures, it aims to ensure the stable growth of fiscal revenue while effectively curbing tobacco consumption, promoting the transformation of the tobacco industry towards a green and healthy direction, and ultimately achieving a win-win situation of tax growth and improvement in public health.

## 2. Problems with the Current Tobacco Tax Policy in China

Zhang Shouwen, the former dean of the Law School of Peking University, stated that the four requirements of legality, rationality, fairness, and efficiency, which are intrinsically consistent with the three fundamental principles of tax law - tax legality, tax equity, and tax efficiency - are universally applicable to all types of tax system reforms, including the reform of the tobacco tax system [2]. Although China has been taxing tobacco for over a century, the current tobacco tax policy in China has significant issues in terms of tax rates, collection stages, and tax structure. [1, 3]

### 2.1 The Current Tobacco Tax Rate is Too Low

In terms of tax rates, China's tobacco taxes consist of consumption tax and value-added tax (17%). Many scholars have compared China's current tobacco tax (consumption tax as shown in Figure 1) with the World Health Organization's (WHO) standard of "70% of the retail price," [4] and found that the proportion of tobacco taxes in the retail price in China is still below this level, resulting in limited constraints on consumption by tobacco product prices. Compared to major global economies, China still has a significant gap in its tobacco tax rate. Even for the cigarette category with the highest tax rate, its tax burden level is still significantly lower than that of countries such as the United Kingdom, Australia, Japan, and Germany (as shown in Figure 2). The low tax burden leads to limited constraints on consumers by tobacco product prices, making it difficult to effectively curb smoking behavior, especially among teenagers and low-income groups. [1]

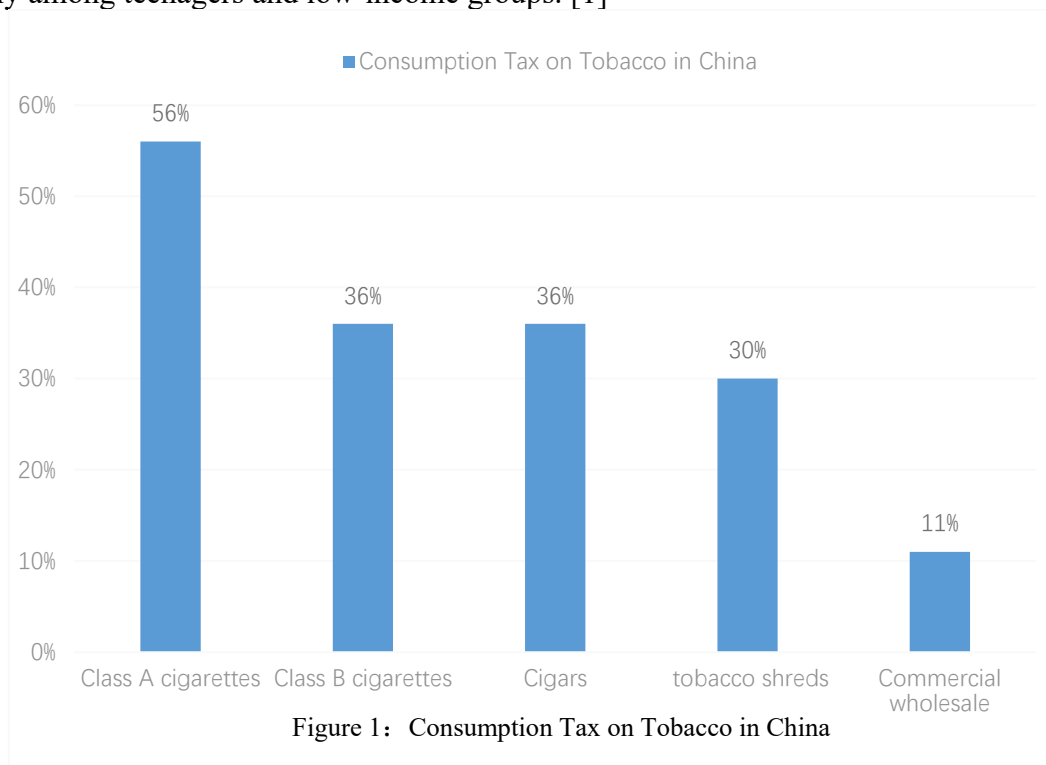


Figure 1: Consumption Tax on Tobacco in China

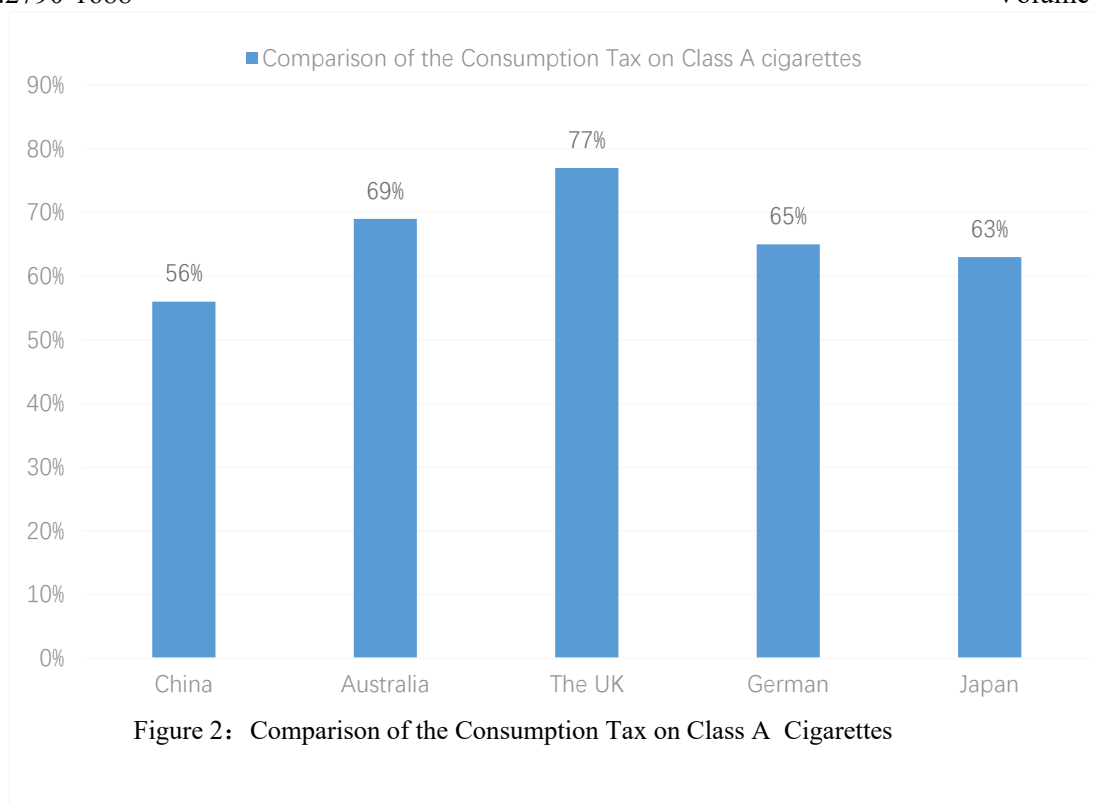


Figure 2: Comparison of the Consumption Tax on Class A Cigarettes

Data Sources: WHO, OECD, and national tax authorities

## 2.2 Tax Dependency at the Collection Stage

The core drawback at the collection stage of consumption tax is its excessive concentration in the production phase. The current collection model has led local governments to form a close connection with the tobacco industry due to tax interests. In some regions, to ensure tobacco tax sources and achieve the goal of maximizing their income, there is a certain degree of passive enforcement in tobacco control efforts, and many supportive and protective measures have been taken to promote the development of the local tobacco industry [5, 6].

The report "Curbing the Epidemic: Government and the Economics of Tobacco Control" reached a widely cited conclusion: raising the price of a pack of cigarettes by 10% through increased taxation could reduce cigarette consumption by 4% in high-income countries and by 8% in middle- and low-income countries. However, empirical analysis in China indicates that while raising taxes has a significant effect on increasing government revenue, their impact on reducing cigarette consumption is very limited. Yunnan Province, as the largest tobacco planting and processing base in China, relies significantly on the tobacco industry for its fiscal revenue. According to statistics, in 2020, tobacco-related taxes accounted for approximately 30% of Yunnan Province's total tax revenue. The reliance on them was even higher in some major tobacco-producing counties (such as Yuxi and Honghe) (Yunnan Provincial Department of Finance, 2021). This economic structure leads to conflicts of interest for local governments in the implementation of tobacco control policies. Despite the active promotion of implementing the Framework Convention on Tobacco Control at the national level, tobacco control measures in Yunnan Province are relatively lagging behind. For instance, Kunming did not officially introduce the "Regulations on Smoking Control in Public Places" until 2019, nearly a decade later than many first-tier cities in China. Moreover, the law enforcement is limited, and the phenomenon of illegal smoking in public places is still relatively common (Chinese Center for Disease Control and Prevention, 2020). In addition, the investment in tobacco advertising supervision and the construction of smoking cessation service systems in Yunnan Province is also significantly insufficient. The assessment of the creation of "smoke-free units" by some grassroots governments is merely a formality. This case suggests that in regions with a strong reliance on a single industry, the

absence of an effective fiscal substitution mechanism may lead to a weakening of local governments' motivation to control smoking, due to tax dependence, thereby hindering the achievement of the country's public health goals.

### **2.3 Tax Type Issues**

Meanwhile, in terms of the tax structure, China's tobacco taxation system involves multiple taxes, including value-added tax, consumption tax, and a tobacco leaf tax. There is a lack of coordination among these taxes, which increases the difficulty and cost of tax collection and management. The complex tax structure provides space for tax planning by enterprises and reduces the overall regulatory effectiveness of tax policies. Among them, the tobacco leaf tax, as the only agricultural tax still levied in China, has a small volume and is unevenly distributed across regions. It receives less attention both in terms of fiscal significance and tobacco control [7]. The tobacco leaf tax does not conform to China's national conditions. It not only induces tobacco cultivation to a certain extent but also increases the burden on tobacco farmers [8]. This tax type has solidified the single agricultural economic structure. Typical cases show that in Yuxi City, Yunnan Province, the tobacco leaf tax accounts for more than 30% of the local tax revenue. The government guides farmers to expand planting through subsidy policies, resulting in a continuous decline in the proportion of economic crop planting in areas such as Eshan County. The soil fertility has deteriorated due to long-term single planting. What is more serious is that the current tax system design has the problem of unbalanced regional distribution: tobacco farmers in Yunnan bear the ecological cost of the planting process, but only receive 20% of the tobacco leaf tax, while cigarette processing areas obtain the majority of the profits through value-added tax, forming a pattern where "poor provinces grow tobacco and rich provinces make money".

Compared to international experience, the fixed tax rate on tobacco in China lacks price elasticity. It does not link tax revenue to public health expenditure, as is the case in Brazil, making it merely a local financial resource tool. These structural contradictions suggest that the tobacco leaf tax has become a pivotal point, maintaining the tobacco economic chain. It not only hinders agricultural transformation and balanced regional development but also becomes an institutional obstacle to the implementation of tobacco control policies.

## **3. Optimization Plan**

### **3.1 Modification of the Tobacco Tax Structure**

#### **3.1.1 Progressive Increase in Tax Rates**

Raising tobacco tax prices is a gradual process. Consumers' addiction to smoking also requires a process of quitting. A sudden and rapid increase in prices may lead to the opposite effect, possibly rapidly boosting the market for smuggled cigarettes, counterfeit cigarettes, and electronic cigarettes. The increase in tobacco tax prices also needs to be closely coordinated with anti-smuggling and customs efforts to cut off the supply of tobacco from all aspects. [5] Therefore, it is necessary to formulate a plan for gradually increasing tobacco tax rates in line with China's national conditions. Establishing a dynamic adjustment mechanism for tax rates is very important. Link the tax rate to indicators such as inflation rate, smoking rate, and public health expenditure to ensure that the tax rate can effectively curb tobacco consumption. Only when the increase in tobacco tax rates and tobacco prices is faster than the growth rate of residents' income can the affordability of tobacco products be reduced, achieving effective control over tobacco products. [9] Use the tax lever to implement differentiated tax rates for tobacco products with different tar contents and prices, increase the tax rate for high-risk, low-priced tobacco products, and guide consumers to switch to low-risk products or quit smoking.

To prevent the possible negative effects brought about by tax and price adjustments, it is necessary to establish a comprehensive governance system featuring multi-departmental collaboration. The tax

authorities should strengthen the supervision of the entire industrial chain and apply blockchain technology to establish a full-process electronic traceability system from planting to sales. Customs and public security departments need to strengthen border inspections and utilize big data to identify abnormal transaction patterns. For the low-price tobacco market, a "price-tax linkage monitoring mechanism" can be established. When the retail price is abnormally low, an inspection will be automatically triggered. At the same time, it is necessary to improve the anti-counterfeiting technology of packaging and implement a unified national electronic tax ticket identification system to facilitate consumers' verification of authenticity. At the policy implementation level, it is suggested to set a tax rate transition period of 3 to 5 years, adopt gradual tax adjustments to avoid market fluctuations, and simultaneously strengthen public health education. More importantly, a tax feedback mechanism should be established. The newly added tax revenue should be used in proportion to strengthen anti-smuggling forces and smoking cessation services, thus forming a virtuous cycle of "controlling smoking and prohibiting smuggling through tax". These measures need to clarify rights and responsibilities through legislation, establish a cross-regional regulatory information sharing platform, ensure the coordination and sustainability of policy implementation, and effectively curb derivative problems such as tax evasion, tax fraud and smuggling while achieving the goal of tobacco control.

### **3.1.2 Abolishing the Tobacco Leaf Tax**

The drawbacks of tobacco tax have been specifically discussed above. Here are two optimization plans. The first is to abolish the independent nature of the tobacco leaf tax and incorporate it into the sub-tax category of consumption tax. This is the approach currently adopted in China. The main aspects such as the tax collection stage, tax rate, and revenue allocation will continue to follow the regulations of the tobacco leaf special agricultural tax. The second option is to directly abolish the tobacco leaf tax and continue to increase the tax rate of cigarette consumption tax, and use transfer payments to make up for the fiscal gap at the local level. [7] This option has significant advantages: On the one hand, by simplifying the tax system structure, it can effectively reduce the cost of tax collection and administration and avoid the current double taxation problem of parallel tobacco leaf tax and consumption tax; On the other hand, moving the tax collection stage back to the consumption end not only better conforms to the modern tax principle of "who consumes, who bears", but also can directly curb terminal consumption by raising the consumption tax on cigarettes, which has a stronger tobacco control effect than taxing at the production stage. Meanwhile, in coordination with the special transfer payments from the central government to local governments, it can not only ensure the fiscal revenue of traditional tobacco-producing areas, but also eliminate the motivation of local governments to blindly expand tobacco cultivation in pursuit of tax revenue, fundamentally breaking the predicament of "fiscal dependence hindering tobacco control". This reform path not only conforms to the internationally prevailing development trend of the tobacco tax system, but also achieves a dual balance between tobacco control goals and local fiscal stability. It is a more thorough institutional optimization plan.

## **3.2 Optimization Measures in Tax Collection**

### **3.2.1 Expansion of the Tax Collection Scope**

The essential purpose of imposing heavy taxes on tobacco is to reduce smoking among the public. Therefore, the scope of tobacco tax collection should not be limited to traditional cigarettes and cigars only. As of April 2019, 26 countries worldwide have included electronic cigarettes in the scope of consumption tax collection, with components such as e-cigarette devices and e-liquids being taxable objects. [10] China can also learn from such schemes and extend the tax to tobacco-related items such as pipes and cigar cutters.

The specific implementation can be advanced in three steps: In the first stage (1-2 years), new tobacco products such as electronic cigarette devices and e-liquids will be included in the scope of consumption tax collection. Referring to international experience, a specific tax will be levied on e-

liquids based on milliliters. In the second stage (2-3 years), the taxable objects will be extended to traditional tobacco utensils, and an AD valorem tax of 10-15% will be levied at the retail price. In the third stage, a dynamic adjustment mechanism will be established to regularly assess the taxation effect and extend it to other derivatives. This plan has three advantages: First, it fills the regulatory gap of emerging products such as e-cigarettes, avoiding the policy loopholes of "restricted traditional tobacco and rampant new products". The second is to curb the use of various tobacco products through the price lever, including the frequency of use of auxiliary tools; Third, a complete tobacco tax system should be formed to prevent various substitutes from serving as tax avoidance channels.

### **3.2.2 Combined Collection at the Production and Wholesale Stages**

In the past tobacco tax policies, China's tobacco consumption tax was overly concentrated in the production stage. Although the 2015 tobacco consumption tax reform began to focus on the wholesale stage, increasing taxes while strengthening tobacco control, the 2015 reform did not consider the production and wholesale stages together and did not fundamentally solve the problem between tobacco consumption tax and the intensity of national tobacco control. Data from pilot provinces in China show that after Yunnan Province piloted the merger of production and wholesale taxes in 2017, the tax on a single case of cigarettes increased by 15%, while the number of smuggling cases decreased by 32% (State Taxation Administration, 2019). These data prove that, on the premise of ensuring the appropriate collection and management fees, merging the collection of consumption tax at the production and wholesale links is a feasible strategy for the reform of tobacco consumption tax. It can play the role of consumption tax in regulating tobacco prices to control smoking while controlling the collection and management costs. [11]

### **3.2.3 Optimization of the Use of Tobacco Consumption Tax**

China's current tobacco tax revenue has reached over one trillion yuan, but the expenditure on tobacco control activities is relatively small. [12] To more effectively carry out tobacco control work and ensure that the revenue from tobacco consumption tax can have a direct and positive impact on tobacco control goals, it is necessary to rationally allocate the use of tobacco consumption tax to compensate for the interests of all parties to a certain extent. Balancing the interests of all parties is of certain significance. The most direct method is to establish a special fund for tobacco consumption tax. The main uses of the special fund for tobacco consumption tax are two aspects: on the one hand, to make up for the reduction in consumer surplus. For example, it can be used for medical and health care, anti-smoking publicity, and smoking cessation subsidies. On the other hand, to make up for the reduction in producer surplus. For instance, it can be used to subsidize tobacco farmers and tobacco enterprises, etc. [13]

## **4. Conclusion**

This paper analyzes the inhibitory mechanism of local fiscal reliance on tobacco control policies from the perspective of tax system structure, providing an empirical basis for solving the failure of the policy of "integrating prohibition into taxation". By analyzing the current situation and contradictions of China's tobacco tax policy, the structural flaws in the balance between tobacco control effectiveness and fiscal interests are revealed. The research shows that the current tax system not only fails to curb tobacco consumption effectively but also implicitly incentivizes the tobacco industry through local fiscal dependence. The proposed optimization plan centers on a core of progressive tax rate adjustments, combined with reforms in the collection process and simplification of tax types, to create a more flexible tobacco tax system with regulatory elasticity.

Global experience indicates that an effective tobacco tax system must achieve three key synergies: aligning tax rates with health costs, encompassing new products within the scope of taxation, and striking a balance between the interests of central and local governments in tax distribution. This study suggests that in the subsequent reforms in China: 1) Include e-cigarettes and accessories in the scope of consumption tax to fill regulatory loopholes; 2) Establish a special fund for tobacco taxation

and provide 20-30% of the newly added tax revenue to support smoking cessation services and the transformation of production areas. 3) Establish a cross-departmental big data supervision platform to curb smuggling and tax evasion. These measures can not only align with the global trend of "tax-price linkage" in tobacco control but also solve the unique central and local game problem in China through institutional innovation, providing a model reference for developing countries to balance health demands and fiscal needs.

The implementation of policies should be accompanied by strengthened support for alternative industries to tobacco and guarantees for the transformation of tobacco farmers, ultimately achieving a multi-dimensional balance between public health and economic and social development under the "Healthy China" strategy.

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