Analyse the Development Model of Tax Accounting and Financial Accounting Based on MATLAB Software

Yao Chen¹,*
¹Two Department of Accounting, Yunnan Business College, Yunnan, China, 651701
*Corresponding author e-mail: 21832197@ynjsxy.edu.net

Abstract. MATLAB is a commercial math software for data analysis and other fields. Tax accounting is gradually developed and developed in the formation and development of financial accounting. It does not exist independently as a substantive work. It is based on financial accounting, but has its own tax characteristics and financial Accounting is significantly different. China is still in the primary development stage of tax accounting. In order to meet the needs of global economic development, the paper mainly analyzes the application of MATLAB in the accounting industry. We need accountants to continuously analyze and summarize the development of accounting.

Keywords: Tax Accounting, Financial Accounting, Corporate Finance, Relationship Analysis, MATLAB Software

1. Introduction
In the middle of the 20th century, the social innovation productivity increased, and the rapid development of the economy and the relatively perfect modern technology gradually formed. Corporate tax accounting has gradually separated from corporate financial accounting and management accounting, and has become a relatively independent accounting branch. After the 1980s, corporate tax accounting was studied as a science. In the United Kingdom, the United States, and other countries, tax accounting has long been independent of financial accounting, and has developed into an independent tax accounting system. In China, with the vigorous development of China's socialist market and the formulation and improvement of relevant accounting laws and standards, the distinction between tax accounting, management accounting and financial accounting has become more and more obvious.

2. The concept and principle of corporate tax accounting

2.1. The concept of tax accounting
Corporate tax accounting is based on the taxation legal system, using the theory and methods of accounting, for the tax-related activities of enterprises (taxpayers) (including the formation and calculation of tax, tax returns and tax payments, etc.)

2.2. Principles of tax accounting
The first is the principle of law, that is, the accounting treatment according to the tax law; the second is to ensure the principle of tax revenue, that is, to ensure the national tax revenue as the first priority; then the procedural rules in the tax law are superior to the principle of the entity, the taxpayer’s tax liability. It is an entity problem. The means of fulfilling the tax liability is procedural. The taxation accounting should follow the principle that the procedural rules are superior to the entity problem. As shown in figure 1 below, it is the development model of corporate tax accounting and financial accounting:

![Figure 1. Development model of tax accounting and financial accounting.](image)

As shown in figure 1 above, for example, when there is doubt about the payment of tax payment, you should first perform the obligation to pay the tax, and make relevant complaints; finally, accept the auditing and supervision principles of the tax authorities, to effectively supervise the taxation work and ensure that the taxpayers are in time according to law. Taxpayers are responsible for taxation, and tax authorities are obliged to accept supervision[1].

3. The basic premise of tax accounting

3.1. Taxpayer
The taxpayer of tax accounting is closely related to the taxpayer of financial accounting, but it is not necessarily equivalent. The accounting entity mainly refers to the specific units and organizations of accounting and supervision, and is the spatial scope of accounting measurement, confirmation and reporting; and the taxpaying entity refers to the party that pays the tax liability in accordance with the tax legal relationship and pays the tax payment.

3.2. Currency time value
The time value of money can also be called the time value of money; it means that as time goes by, the value of funds invested by enterprises in actual operation will further increase. This kind of fund appreciation is the time value of money. This basic premise has become the basis of tax legislation and tax collection and management. It profoundly reveals one of the taxpayers' goals of tax planning - tax delay, and also explains the need for tax adjustment in the income tax accounting.

3.3. Annual accounting
Annual accounting is the most basic premise in tax accounting, that is, the tax system is based on annual accounting, rather than based on a specific business. Taxation is only for the net result of all events that occur during a particular tax period. The results of the period in the subsequent year are not considered and are only considered within the current annual period.
4. The relationship and difference between tax accounting and financial accounting

4.1. The relationship between tax accounting and financial accounting
On the one hand, based on the relevant information such as accounting vouchers, books and statements produced in the business activities, the company has established a relatively complete set of accounting information system data for external reporting. We can see from the tax accounting practices of various industries and countries that similar corporate income tax is based on the enterprise accounting profit as the data base, and then rewritten according to the national tax requirements. It can be said that financial accounting is the premise and basis of tax accounting. Tax accounting is developed on the basis of financial accounting to adapt to the development of enterprises, and more targeted; at the same time, on the other hand, tax law has a profound impact on accounting, which makes accounting practice more standardized and legalized, which also restricts the choice of accounting for certain accounting methods [2].

4.2. Tax accounting and financial accounting measurement are the same as the business entity
The work of tax accounting and financial accounting is essentially for enterprise services. In the accounting work, although the financial accounting directions of the two are different, they serve the same business entity, and the business operations overlap, a complete enterprise. The accounting work system must have both financial accounting and tax accounting in order to better play the role of the financial work function of the enterprise. The coordination between tax accounting and financial accounting is reflected in the external financial report of the enterprise. The analysis and processing of any tax work of any enterprise will have certain impact on the financial accounting work of the enterprise. The coordination relationship between the two accounts is mainly reflected in the enterprise. In the external financial report, as shown in figure 2 below:

Figure 2. Comparative analysis of development systems for different accounting.

In figure 2 above, the changes in corporate financial accounting information caused by tax accounting are inevitably reflected in the corporate financial accounting report. For example, companies compare the assets, liabilities, etc.

4.3. The difference between tax accounting and financial accounting
The accounting object of financial accounting is all the economic matters measured by the enterprise in monetary terms. It not only reflects the financial status of the enterprise, but also reflects the relevant information of the company's operating results and cash flow. The accounting object of tax accounting is the narrow tax fund movement process, which includes activities such as operating income, cost (expense) and asset pricing, income distribution tax return and tax payment, tax reduction and tax planning, and other activities directly related to taxation matters [3].

5. Conclusion
In the early stages of development, there are still many places in China that need to be improved and perfected in combination with MATLAB software\(^4\). Financial accounting should pay attention to the relationship and difference between financial accounting and tax accounting, analyze the controllability between the two, and make the most coordinated development plan for financial accounting and tax accounting based on MATLAB software to meet the needs of the needs of China's economic development\(^6\).

References

[1] Chen M C, Chang C W, Lee M C. The effect of chief financial officers’ accounting expertise on corporate tax avoidance: the role of compensation design[J]. Review of Quantitative Finance and Accounting, 2019:1-24.

[2] Shaviro D. The Optimal Relationship Between Taxable Income and Financial Accounting Income: Analysis and a Proposal[J]. Social Science Electronic Publishing, 2008, 97(2):423-484.

[3] Kondo T, Hayakawa T, Shibata T, et al. RELATIONSHIP BETWEEN ACCOUNTING AND TAXATION IN ROMANIA: A BEHAVIORAL ANALYSIS[J]. Annales Universitatis Apulensis, 2013, 1(1):7.

[4] Zhang Fuqing, Lin Zhenshan, Jiang Quanrong. The Fractal Dimension Distribution of the Short-Term Climate System in China and Its Connection with the Monsoon Climate[J]. Advances in Atmospheric Sciences. 1994(04).

[5] Angeline Wong, Leejay Wu, Phillip B. Gibbons, Christos Faloutsos. Fast estimation of fractal dimension and correlation integral on stream data[J]. Information Processing Letters. 2004(2).

[6] Li Tao, Zhu Zhe, Wang Dongsheng, Yao Chonghua, Tang Hongxiao. The strength and fractal dimension characteristics of alum - kaolin flocs[J]. International Journal of Mineral Processing. 2006(1).