

Research on Limitations of Financial Statement Analysis

Based on Data of Listed Companies

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Abstract—This paper starts from four aspects in assets, profits, the timeliness of financial statements and the authenticity of financial data to study the limitations of financial statement analysis by using the case data of listed company. It puts forward to strengthen the theoretical knowledge study of financial analysis, combine the non-financial information analysis of enterprises, reasonably adjust the data of financial statements, shorten the interval time and information gap period of financial statement information disclosure, and strengthen the supervision and self-discipline of financial statements to deal with the limitations of financial statement analysis.

Keywords—*financial statement; analysis; limitations*

I. INTRODUCTION

Financial statement data is formed on the basis of basic accounting assumptions and general principles of accounting. Basic accounting assumptions include accounting subject, continuous operation, accounting period and monetary measurement. General principles of accounting include objectivity, relevance, consistency, comparability, timeliness, clarity, matching, importance, and accrual basis, cash basis of accounting, actual cost and shared costs. The preparation data of financial statements are constrained by the above factors, some important non-financial information, external economic environment, industry environment and business cycle of enterprises are not reflected in the financial statements, which restricts the analysis of financial statements data on the financial status and profitability of enterprises to some extent. With the wide application of financial statement analysis in the securities industry, bank operation, insurance investment and other industries, it has been regarded as an important financial skill, and the limitations of the application of financial statement analysis are gradually revealed. If these problems are not fully understood, it will lead to decision-making errors in practice. Through years of practical research, the author found that the limitations of financial statement analysis are as follows.

II. LIMITATIONS OF FINANCIAL STATEMENT ANALYSIS FROM THE PERSPECTIVE OF ASSETS

A. *Non-monetary Measurement Cannot Reflect the Balance Sheet Asset Information, Which Affects the Accuracy of Asset Information*

The information of non-monetary measurement is related to the value measurement of human resources. Human resources have become an important competitive resource of enterprises, such as training, relearning, working experience accumulation, team cooperation promotion, etc. there are costs, but the value cannot be measured by currency. Corporate culture asset is an important cornerstone to promote the sustainable development of enterprises. Effective corporate culture brings constant value to enterprises. When the enterprise assets of the famous China Vanke Co., Ltd. is analyzed, it is easy to find that the excellent management cultural assets created by the management team represented by Wang Shi are the important assets of Vanke enterprise operation, the key to the development and growth of the enterprise, but they are not reflected on Vanke's balance sheet.

The non-monetary measurement information also involves the patent formula and brand formed by the enterprise over many years. For example, Kweichow Maotai Co., Ltd., a well-known enterprise in China, whose traditional brewing technology and brand are the key to the sustainable development of the enterprise into a world-class large enterprise, has an intangible asset of 3.446 billion Yuan, a total asset of 162.6 billion Yuan, and a market value of 1.5 trillion Yuan. Due to the non-monetary measurement, the traditional brewing technology and brand of Maotai are not fully reflected in the financial statements. The well-known domestic famous Yunnan Baiyao enterprise relies on its important asset, Yunnan Baiyao formula patent, to develop into a world-famous traditional Chinese medicine enterprise, it is found that the intangible assets in the balance sheet are only 488.3 million Yuan by looking up the third quarter report of 2019, which can be seen that this asset is not fully reflected in the financial statements of Yunnan Baiyao.

The financial statements cannot fully reflect the information of enterprise assets due to the non-monetization,

and there are limitations on the analysis and use of financial statements.

B. The Real Asset Status of the Enterprise Cannot Be Reflected on the Base of Historical Data

The methods of preparing financial statements include historical cost method and fair value method. Historical cost method is generally used in the valuation of assets of enterprises based on the consideration of the data robustness of financial statements. The historical cost method refers to the recording of accounting elements, and the measurement and valuation shall be based on the acquisition cost when the economic business occurs. During financial treatment process, if the book value of the asset is lower than the market value, it must be devalued. When the market value is higher than the book value of the asset, there is no need to increase the value. Part of the enterprise assets is increasing in the use process due to the continuous development of social economy, but their book value is still unchanged, which makes it difficult for the report analysts to understand the true value of the enterprise and affects their accurate judgment of the enterprise value. For example: a real estate listed company won the bid for 1,000 acres of land in a certain year, with the price of 400,000 Yuan per acre. In the following years, the land price has increased steadily and reached nearly 10 million Yuan per acre. However, the book value of the intangible assets is only 400 million Yuan according to the historical cost valuation, which is obviously not consistent with the market value. If company B holds the investment equity of Industrial Bank, the early holding cost is low. Due to the continuous growth of Industrial Bank and the constant appreciation of enterprise value, the original book value of the company is far lower than the market value when the stock price reaches more than 70 Yuan after listing, which is obviously inconsistent with the asset value of the company.

There are still many cases like this. The accounting book value is mainly measured on the basis of historical cost; there may be a big difference between the accounting book value and the market value. The financial statements cannot fully and accurately reflect the information of the enterprise assets, so there are limitations in the analysis and use of the financial statements.

C. The Balance Sheet Cannot Fully Reflect the Enterprise Value Assets

According to the definition of assets, assets are the resources owned or controlled by the enterprise, which are expected to lead to the inflow of enterprise benefits. Generally, the larger assets will bring the greater benefits to the enterprise. However, looking at the data of listed companies, it is found that Hangzhou Hikvision Digital Technology Co., Ltd., a leading enterprise in electronic products, has a total asset of 68.289 billion on September 30, 2019, and a market value of 306.5 billion Yuan, while Ping An Bank Co., Ltd. has a total asset of 370.683 billion on September 30, 2019, and a market value of 310 billion Yuan. It is easy to see that most of the asset value of high-tech enterprises is technological research and patent products,

which is obviously different from the traditional bank asset value. In terms of assets, the latter is 600 times higher than the former, but the market value of these two enterprises is equivalent. It is necessary to distinguish the technology-based enterprises and traditional enterprises in order to analyze the asset value of enterprises according to the balance sheet.

D. The Balance Sheet Is a Time Point Report, Which Has Limitations in Reflecting the State of the Enterprise

The balance sheet describes the situation of an enterprise at a certain time point. For example, the annual report reflects the financial situation at the time point on December 30. It is unable to track the asset flow of an enterprise in a complete and real-time manner. On the non-balance sheet date, the information discloser takes advantage of this feature to transfer the assets away for other uses or misappropriate them by himself, and then transfers them to the enterprise account before the balance sheet date, and the balance sheet and cash flow statement data have no change. It is difficult for analysts to obtain the authenticity information of the balance sheet, and there are limitations in analyzing the situation of enterprises.

E. The Going Concern Assumption and Erroneous Judgement of Enterprise Value

The assumption of going concern refers to that the enterprise can continue to operate in the foreseeable future according to the current production situation. Changes in economic growth will affect the asset value of enterprises. Some asset values will depreciate significantly in the economic downturn and industry cycle recession. Technological changes in the industry and different stages of the enterprise life cycle also have an impact on the assets of the enterprise. There is uncertainty in the continuous operation of the enterprise. At the same time, the changes of these assets are difficult to be reflected in the statement, and it is not easy to track and fully estimate them in real time. It is difficult for the statement analysts to comprehensively judge the assets of the enterprise, and there are limitations in the analysis of financial statements.

F. The Risk of Current Asset Value Is Ignored, Which Leads to the Misjudgment of Asset Value

The current assets of an enterprise usually include monetary capital, notes receivable, accounts receivable, inventory and prepayment, etc. generally, these assets have strong liquidity, but the risk of current assets will also increase in the case of bad economic environment, industry environment and enterprise operation. When the economic environment is in a downward cycle or a bottoming cycle, the accounts receivables and notes receivable of an enterprise are difficult to be recovered, which directly affects the liquidity of the enterprise and the quality of current assets declines. Therefore, it is necessary to conduct impairment treatment. These situations usually make it difficult for report analysts to predict and prevent. For example, a film and television listed company, once an excellent enterprise in the industry, announced on February 28, 2019 for the scope

and total amount of assets for which the provision for asset impairment is made. "Table I" has shown the details.

TABLE I. ASSETS DEPRECIATION RESERVES OF A LISTED FILM AND TELEVISION COMPANY

Assets Class	Proposed Amount (10,000 Yuan)
Accounts receivable	127,399.58
Other accounts receivable	12,706.45
Inventory	18,473.85
Advance payment	42,075.17

The company announced that the provision for impairment this time is 2,006,550,500 Yuan in total, which had an impact on the total profit of the parent company of 2,006,550,500 Yuan. The reason for impairment is that "it has not been fully considered the factors of market liquidity, changes in the overall environment of the industry and tax risks of film and television practitioners, etc." The company's current assets in the previous year totaled 4.183 billion Yuan, accounting for 47.97% of the total. The liquidity of the enterprise causes great losses. The above cases show that the value of current assets should be judged in combination with the external environment and enterprise operation.

TABLE II. DEPRECIATION PERIOD ADJUSTMENT OF FIXED ASSETS

Classification of Finance	Current Depreciation Life	Adjusted Depreciation Life
Transmission equipment	19	24
Mechanical equipment	19	24
Power equipment	12	17
Transportation equipment	10	12

It is estimated that the audited owner's equity and net profit of the company in 2014 will increase by 412 million Yuan respectively, accounting for 0.86% and 44.40% of the audited owner's equity and net profit in 2014 respectively.

It can be seen from the above cases that the adjustment of fixed asset life will have an impact on the profits of enterprises. In the analysis, this impact should be eliminated to obtain the actual operating profitability of enterprises.

B. The Limitation of Profit Quality Analysis Under the Principle of Accrual Basis

In China, the accrual basis is adopted for the accounting of enterprise profits. When an enterprise issues goods and the other party confirms the receipt of the goods, the company can recognize the formation of revenue. Cost is recognized when revenue is recognized according to the matching principle. Profit is equal to income minus expenses, and then profits come into being. If credit sale is adopted, the book profits of the enterprise will come into being. Especially at the end of the year, focusing on sales, it is difficult to judge

III. LIMITATIONS OF FINANCIAL STATEMENT ANALYSIS FROM THE PERSPECTIVE OF PROFIT

A. The Influence of Depreciation Method of Fixed Assets on Enterprise Profit

Accountants need to adopt different depreciation methods for fixed assets of enterprises according to the specific business conditions of enterprises. The choice of different methods of depreciation and amortization of fixed assets affects the analysis of corporate profits, which makes it difficult for users of financial statements to analyze.

The depreciation methods of fixed assets include: average depreciation method, workload method, accelerated depreciation method, etc. Based on the consideration of some aspects, the report makers will form different corporate profits by using different methods. If the analysts cannot understand these methods in depth, it will affect their accurate judgment of corporate profitability. For example, a listed company conducts earnings management by adjusting the service life of fixed assets.

On October 16, 2015, Angang Steel Co., Ltd. issued a notice on adjusting the depreciation life of some fixed assets, and decided to adjust the depreciation life of some fixed assets of the company from November 1, 2015. "Table II" has shown the specific adjustment scheme.

whether the loan can be collected truthfully, which will affect the accurate judgment of profit quality.

C. Limitation of Cost Valuation Method Affecting Profit Quality Analysis

In the case of inflation, the enterprise adopts the first in, first out inventory pricing mode to form a matching ratio between the actual income and the historical low cost, but it will push up the current profits, then investors will misjudge the improvement of the enterprise's profitability and affect the decision-making of information users.

IV. LIMITATIONS OF THE TIMELINESS OF FINANCIAL STATEMENTS ON THEIR USE

China's listed companies shall disclose financial reports in accordance with the relevant provisions of the China Securities Regulatory Commission, and stipulate the disclosure time of the first, middle, third and annual reports.

After sorting out these disclosure times, it is found that users'

information is lagging behind ("Table III").

TABLE III. DISCLOSURE TIME AND INFORMATION LAG OF FINANCIAL REPORT

Project Report Name	Time & Content of Report Disclosure	Latest Disclosure Time	Information Is Not Timely, Maximum Lag Time	Information Gap Period (Disclosure Interval of the Two Disclosure Reports)
First quarter report	January 1st to March 30th	April 30th	One month	One month
Second quarter report	January 1st to June 30th	August 30th	Two months	Four months
Third quarter report	January 1st to September 30th	October 30th	One month	Two months
Annual report	January 1st to December 30th	April 30th of the following year	Four months	Six months

From the above table, it is easy to see that the report information is not timely, the interval is from 1 month to 4 months, and the maximum lag time is 4 months. The information gap period refers to the time interval between the disclosure of two reports, during which there is no enterprise related information, and the maximum information gap period is 6 months. In the information age, there is no doubt that the value of information, in addition to the fierce competition among enterprises and the ever-changing business information, the earlier the information is obtained, the more accurate decision-making is.

V. THE FINANCIAL DATA IS NOT TRUE, AND THE ANALYSIS OF FINANCIAL STATEMENTS HAS LIMITATIONS

Once the data of financial statements are falsified and the data is wrong, it is difficult for general data users to distinguish the true situation of the analysis of financial statements. The conclusion of the analysis based on the data of financial statements is bound to be wrong. Recently, China Securities Regulatory Commission disclosed the data of a listed company's fraud for four consecutive years. From 2015 to 2018, the total amount of false profits increased by tens of billion Yuan, and the firm was unaware of it. From January 2018 to May 2018, the investment bank published 13 research reports of the company, including 8 purchase ratings reports and 5 increase holdings reports. Another example is that from 2016 to 2018, a company used false bank documents to falsely increase deposits and falsify business vouchers for fictitious income, with an amount of tens of billion Yuan. From December 2017 to January 2019, the investment bank provided 13 research reports, including 6 purchase rating reports, 6 increase holding rating reports and 1 neutral report.

From this case, it is not difficult to see that the professional securities companies with information advantages over the general investors have not found any falsification of the company's financial data, thus there are limitations in the use of financial statement data analysis.

VI. SUGGESTIONS ON THE LIMITATIONS OF FINANCIAL STATEMENT ANALYSIS

A. *Strengthening the Study of Basic Knowledge of Financial Analysis and Improving Analysis Ability*

Financial analysts should have a full understanding of the basic accounting assumptions and general principles of accounting, strengthen the study of relevant principles, grasp the theoretical knowledge of financial analysis, and improve the accuracy of financial analysis.

B. *Analysis Based on Non-financial Information of Enterprises*

It is not enough for financial analysts to analyze only on the basis of financial statement data. They should comprehensively analyze the non-financial information of enterprises and the value of patent intangible assets of enterprises, such as the past historical data of enterprises, production process of enterprise products, enterprise management strategy, market share, human resources, technological research & development innovation, enterprise culture, core competitiveness of enterprises, etc., pay attention to the combination of qualitative analysis and quantitative analysis to find the real assets of the enterprise.

C. *Paying Attention to the Reasonable Adjustment of Financial Statement Data*

Financial analysts should pay attention to the gap between the measurement of historical data and the actual value of assets, find out the assets of enterprises through field research, and accurately grasp the asset value; financial analysts should focus on the changes of business environment brought by economic cycle, industrial development and industrial technological change, continuously understand and analyze the impact of these changes on the enterprise, accurately grasp the sustainable operation ability of the enterprise, and reasonably judge the asset value of the enterprise; financial analysts should note the changes of accounting policies and accounting estimates in the preparation of accounting statements of enterprises, make necessary adjustments to the financial data in time, restore the actual report data of enterprises, and improve the ability of statement analysis.

D. Shortening the Interval Time of Information Disclosure and Information Gap Period of Financial Statement

Listed companies should make full use of modern information technology, speed up the making speed of financial statements, reflect the company's financial situation, profitability and other financial information in real time, release them to external financial statement analysis users through the Internet regularly and quickly, shorten the interval time and information gap period of financial statement information disclosure, and make investors know the financial information of enterprises in time.

E. Strengthening the Supervision of Financial Statements and the Self-discipline of Information Disclosers

The regulatory authorities should strengthen the supervision of the authenticity of financial information of listed companies, increase the punishment of false information disclosure, increase the publicity and education of relevant laws and regulations, let the information disclosers fear the market, constantly improve the level of professional ethics, improve self-discipline, and stick to the bottom line of ethics that accountants only do real accounts.

VII. CONCLUSION

Financial statement analysis is an important way for investors, creditors, tax managers and regulators to understand the financial situation of an enterprise. Studying the limitations of financial statement analysis can reveal the shortcomings of financial statement analysis, get close to the truth of the financial data of an enterprise as much as possible, make users keep rational and make reasonable and correct judgments with financial analysis data prudently.

It is not enough for listed companies to rely on financial statement data only to reflect the assets, liabilities, profitability, and operating efficiency and so on. The statement analyst needs to make a comprehensive judgment based on the external environment, industry environment, business cycle and external financing resources available to the enterprise, especially the non-financial information that can reflect the core competitiveness of the enterprise, which involves human resources, product patents, product quality, etc. and can help statement analysts to make a reasonable decision.

It is not enough to study the limitations of financial statement analysis only from the above aspects, it is necessary to carry out follow-up research on the limitations of cash flow statement analysis, financial statement analysis methods, and financial index analysis.

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