

# The Research on Fair Value Measurement Based on Application Environment

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**Abstract:** With the rapid economic development, especially in technological innovation and financial innovation, accounting environment changes always led to new accounting requirements. The context, analyzing the fair value measurement problems and solutions on the fair value measurement model via the analysis of the accounting environment, is to further improve the fair value measurement.

**Keywords:** financial crisis; subprime crisis; accounting environment; fair value; measurement model

## 1. Introduction

Since 2008, the U.S. subprime mortgage crisis triggered by the global financial crisis, the world economy suffered a severe challenge. With financial innovation and the capital markets' internationalization, international business increasingly involves foreign investment, and the main accounting problems related to corporate international activities is asset' or liability' fair value measurement. Accounting environment is different in every country, so financial officers must understand the complexity of the environment impact on the relative fair value.

## 2. The Environmental Factors of Fair Value

The existence and development of accounting depends on the specific environment, each time the accounting changes are the result of the accounting environment. Accounting is not only determined the status of accounting theory and practice, but also determine its direction. Here only analyzes the environmental impact of the fair value application.

### 2.1. Economic Factors

Economic factors are most important in all environmental factors which influenced the fair value. It is not only directly have important or decisive factors on the fair value, but also through political, legal, education and other environment indirectly affect the fair value. The economic factors have direct impact on the fair value including economic systems, capital markets, economic development, inflation levels, national interests and economic links between countries.

### 2.2. Legal Factors

In general, legal systems around the world divided into two categories: statutes and case law. For accounting, the implementation of the statute countries, accounting principles and systems are more far-reaching impact by law, the corporate accounting and financial reporting re-

quirements are often directly as a business or commercial law part, the government to impose more intervention in the enterprise, the enterprise combination of financial accounting and tax accounting more closely. The implementation of the national case law, accounting principles and systems generally do not make detailed provisions through legislation, it is usually by the accounting professional groups or concerned organizations to develop the auspices of the specialized agencies which have authority and flexibility than the former.

### 2.3. Social and Cultural Factors

The cultural value of a community which is long formed has a profound impact on accounting theory and practice. According to gay, he proposed a framework for connecting culture and accounting, "accounting value dimensions" which can be found: a strong sense community focused on the personal effort and more respect for the individual professional judgments, so the accounting profession tend to be developed; the distance between the right is small and hierarchy rather vague, it is emphasized the equal participation and do not like to interfere accounting activities with the government in the form of regulations, therefore professionalism is a higher degree. In such a social and cultural environment, accounting personnel tend to be more willing to take risks and high freedom degree accounting methods and more conducive to the development of fair value, on the contrary, they are also.

### 2.4. Accounting Profession

The size and ability of the accounting profession in a country have an impact on the accounting can not be ignored. Accounting education and teaching system quality also determines the quality of accounting personnel, the level of accounting theory research methods and technology. In countries with higher levels of accounting education, the higher quality of accounting personnel and more developed accounting profession which provides for the guarantee of the fair value application. The fair value of

the United States has been in the world leading level, it is related to the developed education and the accounting profession.

### 3. Fair Value Measurement Problems in the Application

Fair value measurement has played a facilitating role in improving the quality of accounting information, transparency, and to provide objective factual information to the user, but it itself is defective, the fair value measurement making accounting information authenticity and reliability have some limitations.

#### 3.1. The Operational Problems of Fair Value

The application of fair value not only to the accounting recognition, measurement, reporting system, system tuning, but also involves the adjustment of the accounting office, personnel and responsibilities; not only to the problem of how to obtain fair value, but also to the problem get involved and report the fair value information can be generally recognized; not only to the adjustment problems of accounting standards and accounting system, but also to how to appropriate the financial system about auditing standards, tax regulations and the coordination. So the problem stems from inadequate operational the market information diversity, the complexity of the valuation method and the estimated human nature.

Operational deficiencies which is including two reasons, First, the fair value measurement than historical cost put forward higher requirements above technology and talent, the fair value measurement and accounting needs technology as a basis for valuation, and valuation techniques needs a professional team to successfully complete the technical evaluation, which also increases the management cost; second, assets and liabilities in the market is difficult to find an observable transaction prices, the future cash flows discounted at a certain discount rate into the current valuation of the cash value, this tend to be the most important technical means which estimate the measured relative prices( the fair value). But the amount, timing, time value of future cash flows are uncertain, often the operation of the measurement very difficult, thus the complexity of the valuation measurement is difficult to implement fair value measurement model application.

#### 3.2. The Reliability of Fair Value

First, market environment is imperfect. For example, there is no monitoring system to establish sound accounting, market transactions not up to standard, the lack of an open market in some areas; due to the local interests drive and information asymmetry and other reasons, it led to the occurrence of risk or failure to carry out prevention, the root cause of Lehman Brothers bankruptcy is the abuse of derivatives, there is no sound accounting supervision system to monitor. The second is honesty. Honesty

reflected the entire process in the economic units accounting integrity of accounting recognition, measurement, recording, preparation and reporting and disclosure. Revelation and the disclosure of accounting information to the accounting integrity of the economy with strong externalities, and fraud caused a strong social impacts, accounting information would endanger the entire market, or even the whole society. In order to pursuit interests, some accounting violated the professional ethics for false accounting and providing false accounting information and the forming moral hazard.

#### 3.3. The Lack of Robustness Problems

Assets and liabilities which exist active market fair value is the market price, but the offer by the market liquidity, capital requirements, investors and other factors, and also influenced market prices have also been recognized unrealized gains in advance.

On the one hand, fair value assets and adjusted profit and loss will be enlarged or reduced and making the business uncertainty, overvalued assets and profit or underestimate the liability and loss; on the other hand, enterprises benefit from the fair value measurement and substantial increase in net profit made, but this did not realize some of their profits to trading financial assets. for example, Trading financial assets, because the market price of financial assets volatility is affected by the economic environment and market and other factors, the historical cost model measurement only the disposal of the profit or loss is recognized, and in the fair value model, you need to confirm the changes in fair values, which resulted in inflated the net assets and making the lack of robustness of accounting measurement.

### 4. Improve the Function of the Proposed Fair Value Measurement

Although it is not fair value measurement model underlying causes of the financial crisis, but it is undeniable that it played a role in fueling the financial crisis, therefore, it is necessary to improve the fair value measurement under the financial crisis status.

#### 4.1. Strengthen the Supervision

In order to make fair value measurement to better meet the needs of the financial markets and promote financial market developments, to ensure the rational use of fair value and to ensure the true and complete accounting information, we must strengthen supervision. On the one hand to establish a sound system of internal supervision, regular effective monitor and evaluate all aspects coordination such as long-term loans, bad debts and other internal control implementation, financial institutions do to promote the fair value measurement and disclosure; another respect to establish a sound external market supervision system, the government improve the relevant laws

and regulations and strengthen the disclosure of fair value information and the notice from time to time according to information disclosure.

#### 4.2. Sound Risk Management System

In order to ensure the authenticity of the fair value, we must establish corresponding risk management system. The introduction of comprehensive risk management system is not only at the enterprise level, it is in the market level, the financial risk as the core of risk management system, establishing risk management policies, procedures and control measures and give full play to the role of risk management to ensure the decision usefulness of fair value.

#### 4.3. Enhance the Operability of Valuation Techniques

To determine the fair value by the reference value of the market, which requires professional judgments, it can prevent the company inflated profits and manipulated the markets results. Estimated fair value valuation techniques is an important method to calculate fair value, when there is no fair market value, we needs to use this techniques to calculate the fair value. Improving the valuation techniques operability, it is necessary to facilitate the operation, but also enable them to solve specific problems. This requires that accounting staff constantly update the knowledge based on the market environment and accounting system, making the valuation technique of fair value is easy to operate and easy to understand and to better address the problems in practice.

#### 4.4. Improve the Quality of Accounting Practitioners

No high-quality accounting personnel, fair value can not be reasonably estimated and have a good use. The quality of financial officers have an impact on the use of the fair value, improve the quality of accounting personnel is an effective way access to accurate and fair value, because the assessment of fair value need to rely on accounting staff' specialized professional judgments. Improve the quality of accounting personnel mainly from two aspects. On the one hand, it is needs to strengthen the sense of law and moral education, enhance ideological level and to eliminate the manipulate profit from the subjective motive; on the other hand, enhance business train-

ing to help accounting staff are familiar with and master new accounting methods and procedures, in order to improve make complex judgments which is their trading and matters of recognition, measurement, report, in order to reduce the behavioral distortion of accounting information and the deviation of the fair value.

#### 5. Conclusion

The financial crisis sweeping the globe making the world economy suffered serious losses, which requires all financial regulators to strengthen financial market regulation to ensure the orderly development of the market, fair value measurement should also strengthen cooperation with the financial regulators to ensure the healthy operation of the financial system, careful and reasonable use of fair value.

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