

A Summary of Valuation Uncertainty Research

Shaobing Yan

Dongbei University of Finance and Economics, China.

Abstract

The Main purpose of this research is to verify the existence of uncertainty factors in China asset valuation extent and its disclosure function, which is to guide information disclosure method used in valuation report, and guard of financial market bubble and financial market risk. According to anonymous questionnaires on appraiser, we got that most appraisers agree the wide existence of uncertain factors. They think disclosure of valuation results should be in certain scope of rate and have high agreement of disclosure standard in uncertain factors. The cognition and disclosure of uncertainty can improve accuracy of valuation report and faith of appraiser, avoid or decrease risk in financial market.

Keywords

Valuation, Uncertainty, China.

1. Introduction

Elli Pagourtzi (2003) will be divided into the traditional evaluation methods and advanced two, that traditional methods include comparative method, cost method, income method, regression method, profit method and contract law, advanced methods have the experience of ANNs pricing method, spatial analysis method, fuzzy logic and ARIMA model.

Eric T.Reenstierna (2001) believes that uncertainty often exists in the market, and that the appraiser's understanding of the market is often uncertain, which makes it difficult for appraisers to accurately assess the value of assets. Therefore, the point estimate is unlikely to adequately convey the value information of the asset being evaluated, and other alternatives should be explored to represent the assessment results to adequately cover these uncertainties. He proposed to use the value of interval curves and explain some additional words to represent the evaluation results, and points out that the uncertainty of the full disclosure will not reduce the effectiveness of the evaluation results, but will increase the appraiser's prestige.

Tom Harvard (Tim, 1999) uses empirical analysis methods to investigate 40 appraisers from different scales, different industries and different practice experiences to illustrate the factors influencing uncertainty assessment. He through detailed investigation and classification, and finally summed up the nine aspects of knowledge, experience and understanding of information, information availability, evaluation procedures and inherent characteristics, market environment, assessment methods and other reasons is the reason for the uncertainty evaluation form, and summarized five kinds of methods to reduce uncertainty the assessment division by analyzing the scope of value interval can draw the most likely sale price.

Knight was the first economist to discuss the uncertainty of the system. As early as 1921, in his classic "risk, uncertainty and profit" in the book describes the ideas of uncertainty, the uncertainty is defined as "any person can create in a moment that may be state can be aware of the number, and will not fully grasp the future events and divided into risk the former can measure uncertainty, uncertainty, the latter difficult measure of uncertainty, this definition clearly distinguishes between uncertainty and risk. Whether the knight from the event the predictable results point of view of risk and uncertainty, the uncertainty due to incomplete

knowledge or information, the uncertainty is regarded as endogenous, belongs to the subjective understanding of economic behavior, the uncertainty of understanding fundamentally denied the new classical economics completely rational hypothesis. Knight introduced the uncertainty into the economic field, opened up the scope of the research of the uncertain economy, and brought the economic theory research to a new realm.

Hicks (J.Hicks, 1931), Machak (J.Marschak, 1938) and Tian Na (G.Tintner, 1941) to study how to set a mathematical parameter to describe the risk and uncertainty, and put forward using the mean and variance parameters of sorting random risk theory. The application of mathematical and statistical knowledge to the interpretation and description of uncertainty enables people to deepen their understanding of uncertainty from qualitative description to quantitative analysis, thus promoting the deepening of uncertainty theory.

Joel Seagal (Joel Siegel, 1991) suggests that uncertainty refers to one or more alternatives may lead to a series of results in the understanding of the state, but the possibility of either these specific results do not know, or no practical significance. "Unlike risks, the purpose of uncertainty is uncertain and can not be assumed in terms of overall understanding," he said. "In practice, there is no distinction between risk and uncertainty."

With regard to the uncertainty of asset evaluation, the research of foreign scholars has traditionally focused on the measurement of asset evaluation results to explore the accuracy of the evaluation results. With the development of behavioral economics, more and more attention has been paid to the analysis of the evaluation process, exploring the factors that affect the inaccuracy of asset evaluation and the mechanism to reduce the uncertainty of assessment. This paper is summarized in the following four aspects:

Ratcliff (Ratcliff, 1972) took the lead in focusing on the uncertainty of valuation, and introduced probability into the analysis of uncertainty. He believes that the valuation of uncertainty analysis under the condition of the economy, should be based on the probability expression evaluation concept as a measurement means leading to the excessive concern about the assets of the object itself, while ignoring the external market conditions of the construction of the main factor of the price. His assessment of the theory is based on assumptions, these assumptions include: most of the assessment tasks, the customer needs is the most likely sales price; price forecasts are basic methods of statistics, the real estate market simulation method; investigation and evaluation division results are uncertain, need to use probability to express. This hypothesis has a far-reaching influence on the evaluation theory, form the most likely price theory, the highest price instead of the prevailing theory, his research also obtained a view that the evaluation value should be an interval rather than a point based measure of each event, the subjective uncertainty degree, provide the possibility of risk value measurement.

Gao Yu and Liu Huajun (2008) studied the source of uncertainty and its reduction mechanism, and argued that the existence of transaction costs and selection costs was the root of uncertainty. The new institutional economics found that the impact of economic operation and transaction costs, brand economics found the choice cost affects economic behavior subject preferred decision behavior, two are trying to limit conditions of human behavior, find the corresponding solution, reduce the impact of uncertainty on human behavior. They through the establishment of the system of the brand model, based on the analysis of the uncertainty of the root cause, analysis system and brand mechanism to reduce the uncertainty of the system and is the ideal state of the brand are determined to reduce the transaction cost and choice cost to make the real economy by new classical economics. Their research enriches and perfects the theory of uncertainty in economics.

Xu Haiping (1997) that the scope, assets assessment market evaluation method, the evaluation results there are uncertainties on a particular asset, the assessment will be

different from different angles, using different evaluation methods, choose different indicators and determine the channel, get different assessment results, and evaluate the results of uncertainty.

Yan Shaobing (2001) believes that customer influence is an important factor in making the results of the deviation. The impact of the customer is mainly determined by the type of customer, the type of evaluator and the evaluation organization, the purpose of the evaluation, and the beam of the evaluator's access to information. In view of customers, savvy clients often use professional rights and information rights to influence appraisers. He got through the study of the market and the market value, market value is the most basic asset evaluation, a value type is the use of high frequency, and analyzes the characteristics of incomplete market competition effect on market value, that the most possible value should be reflected in the market of incomplete competition in the most reasonable value. In 2004, he also studied the uncertainty of evaluation problems, put forward a method of qualitative and quantitative analysis of the uncertainty of the evaluation work of the division is to provide the assessment of the assets of the most valuable information, and evaluate the uncertainty analysis Division did contain a lot of useful information, these information sometimes has potential use value to the customer, understanding of this phenomenon and disclosure, can make appraisers have a more clear understanding of the evaluation process of ourselves, but also improve the evaluation report of the valuer's credibility and reputation.

Li Lasheng (2002) pointed out that information is absolutely an absolutely important characteristic of perfectly competitive market. The assumption of a perfectly competitive market means that the economic subject is facing a certain economic environment, so it is a single equilibrium, and the market economy condition, asset evaluation is facing a completely competitive market, under uncertain conditions, we obtained should be a non a single multi equilibrium solution. The methods of dealing with uncertainty include econometrics, rational expectation theory, game theory, information economics and so on.

Sun Ruxi (2004) to the deviation of assets appraisal meaning as a starting point, in the comparative evaluation of the values and evaluation values based on the assessment of the price outlook, can better reflect the assets evaluation function, pointed out the practical value and perfect the market price there was one of the reasons of the deviation problem of assets evaluation. Then through the investigation of asset valuation rate to perform research on asset appraisal deviation problem, estimates the revaluation rate of the overall situation and the assets of the annual assessment of the added value of 2001-2003 assets, the assets appraisal industry in China since the revaluation rate is declining trend. On the basis of quantitative analysis combined with qualitative analysis, systematically regulate the related theory of asset evaluation results deviation, explore the asset evaluation in China mainly restrict the formation of the deviation of assets appraisal practice factors, and make some useful exploration to formulate related specific criteria for asset valuation in China.

Li Ying (2007) further estimates the 2004-2006 asset revaluation rate of the overall situation and the asset revaluation rate each year, still shows that China's asset appraisal deviation decreased year by year results, and using the factor analysis method and polynomial regression analysis of the influencing factors of asset appraisal deviation method, obtains the enterprise scale and the size of the net assets, the proportion of intangible assets is the three most important factors influencing asset appraisal deviation.

Zhang Ling, the environmental impact of deer (2007) from the perspective of asset valuation, related factors should pay attention to the characteristics and evaluation process for the evaluation of human resource in the analyzed, determined that the value of human resources is in the process of evaluation by many subjective and objective factors of the decision. The accuracy of the assessment results in addition to the human resources characteristics, organization and personnel of evaluation of the occupation morals, professional level and

information and other things, from a professional point of view, the corresponding evaluation and objective assessment methods is to determine whether the evaluation results and the necessary conditions. In addition, the accuracy of the evaluation depends on whether the selection of the evaluation parameters and the determination are scientific and reasonable.

Cui Enbo, Yao Chunqi, Wang Jianzhong (2008) on the basis of the relevant theory of the uncertainty of the reference methods and ideas of economics, mathematics and statistics and other disciplines related to the study, using the method of combining qualitative and quantitative analysis of the uncertainty of valuation of mathematical and statistical description, the conclusion is: you can use the value range of a certain confidence level under instead of point estimates said the results of the assessment, and by attaching certain graph text to explain the form of delivery to the customer. Then, the probability curve is used to describe the value of the asset evaluation under different market conditions, and the existing evaluation methods are supplemented and perfected from the perspective of uncertainty.

It can be seen from the research status at home and abroad that in recent years, scholars at home and abroad have paid more and more attention to the evaluation of uncertainty, and have made some groundbreaking research results. Study on the uncertainty evaluation of foreign scholars mainly focus on the measure to the evaluation results, the empirical analysis on post, quantitative analysis and evaluation of uncertainty has made a meaningful discussion, deepened asset evaluation and integration of other disciplines, provides some new ideas for our theory research and evaluation practice. The research on the problem of domestic scholars is lagging behind, although some scholars have given some attention to this problem, but the research is not systematic and in-depth, mostly single, repetitive and non system, and the basic theory and practice in the foreign state. However, the existing research results both at home and abroad provide the basis and valuable reference for the study of this paper.

The first view is a denial of Knight's distinction between risk and uncertainty, equating uncertainty with risk, or that risk is contained in uncertainty. This view undoubtedly provides a way to characterize uncertainty in empirical research on quantitative measurement and management. Undoubtedly, if all the uncertainty can be measured by the probability, or by some numerical calculation, so that the uncertainty into uncertainty, which will reduce the adverse effects of various internal and external factors of the economic system, enhance the stability of economic operation.

In this paper, we tend to distinguish between uncertainty and risk, which are regarded as uncertainty, and the risk is defined as uncertainty with certainty probability. Asset valuation is a kind of assistant method to find assets value by simulating market, analogy analysis and hypothesis judgment before the transaction value is realized. The asset evaluation before the transaction, and the actual transaction in the assessment; because asset evaluation is always based on certain assumptions, and trading hypothesis has become a real market conditions; because the simulation is in general, but the real deal is an other; due to evaluate the need for not to make judgments, but the future is full of nature uncertainty. Therefore, asset evaluation based on hypothesis, analysis, inference and prediction is inherently uncertain. Uncertainty is a real and universal phenomenon in asset evaluation.

Uncertainty about asset valuation has yet to be defined. This paper argues that the uncertainty of asset evaluation refers to the inconsistency of the evaluation results obtained by the same appraiser for multiple evaluations of the same asset. What is emphasized here is that the same appraiser is the same as the 17, which is related to unexpected events and the subjective judgment of the appraiser, in which case the appraiser should give priority to disclosure.

Neutral principle means that the evaluators should maintain independent, objective and impartial stand in the course of the uncertain information disclosure. They are impartial and not partial to the information users of any party.

With the uncertainty of information is not the more the better, too much information, will increase the assessment of staff time and work time and cost, increase the cost of information users screening information, namely, the uncertainty of information disclosure shall conform to the cost-benefit principle.

Evaluation is a process of value judgment, which tries to simulate the market process by certain methods, and evaluates the value of the assets based on historical data. The market value as the basic assumption to perfect competition or complete information, is to determine the value of assets, under ideal condition, however, we live in a world of uncertainty, the objective existence of uncertainty is the assets assessment of the phenomenon. What a best evaluator can do is to rely on information and information, techniques and experience to rule out other possibilities, make assumptions about the most likely circumstances, and obtain relatively definite assessment results. Due to the uncertainty is the objective and universal phenomenon, if we ignore or avoid it, it may cause the evaluation results based on the subjective basis, so as to reduce the evaluation process and the results of scientific and practical evaluation, eventually making mistakes report users. So, to assess possible uncertainties in the process of influencing factors were analyzed to find out the cause of the uncertainty evaluation results, and to assess the teacher assessment report user to better understand and use the evaluation results provide the basis, is the inevitable requirement of development assessment and scientific decision-making.

Uncertainty runs through the whole process of asset evaluation, permeates all aspects of asset evaluation, and has many influencing factors. From the big aspect, the influence factors of the uncertainty of asset evaluation are divided into four parts: the evaluation entity, the evaluation object, the evaluation method and the evaluation environment. The uncertainty caused by the evaluation entity is mainly reflected in the low price competition of the evaluation institution, the quality of the evaluation personnel, the strength of the professional ethics and the subjective judgment.

The asset appraisal institution of the low price competition has been plagued China's asset appraisal problem of the healthy development of the industry, although the "registered assets appraisal basic standards" occupation morality prohibits to reduce fees and other unfair means of soliciting business, but low price competition has become increasingly fierce, especially after the restructuring in the industry, many firms have lower prices "as the main means of competition to maintain the survival of the. However, the enterprise is in the pursuit of profit maximization, reduce fees will inevitably lead to the cost reduced, or even reduce some of the necessary assessment program, which will reduce the quality of asset evaluation, asset evaluation results have led to greater uncertainty.

China's asset appraisal industry has not been developed for a long time. Due to some specific historical conditions, the supply of labor market in the assessment industry is insufficient. In recent years, with the rapid increase in the number of project evaluation, assessment agencies will surge, also a substantial increase in the assessment of the needs of practitioners, making assessment of staff shortage, which makes many assessment agencies to reduce the personnel evaluation standards, the evaluation of the overall quality of the staff is uneven. Assessing the level of knowledge, expertise, and experience of a person makes a difference in the understanding of the same person by different evaluators. The low quality of the personnel assessment, probably because of improper operation, the objective condition of evaluation results and assets far, even for different assessment personnel the same assessment agencies, may draw a different assessment results.

Some of the assessment personnel occupation moral quality is not high, in the assessment process, assessment of responsibility is not strong, only by subjective wishes and personal experience; some even blindly meet the requirements of the client can not abide by the independent, objective and impartial manner, abandoned the occupation ethics basic, great not to the results of the assessment. Uncertainty.

Although there are many factors that influence the uncertainty evaluation, the subjective judgment is the biggest influence. In the evaluation process, the evaluation staff must face a great deal of uncertainty information, and it needs the evaluation personnel to make use of their professional knowledge and experience to analyze and judge. Different appraisers will make great differences in the value of evaluation because of their differences in knowledge and experience, work attitude, risk preference and understanding of information. In the assessment of the results obtained, assuming that other conditions remain unchanged, the appraiser is in a certain range of assessment of the value of right to choose, it all depends on the impact of asset appraiser assessed by the uncertainty of the value of information is cautious judgment or optimistic attitude. Therefore, it is necessary for the appraiser to judge the possible values in the range of the evaluation value to reduce the uncertainty of the evaluation results.

The uncertainty caused by the evaluation object mainly includes the inherent uncertainty of assets, the liquidity of assets, the validity of data, and the influence of clients on appraisers.

Any of the assets has its own inherent characteristics, these characteristics will affect the uncertainty, including reflecting the market of these features, as well as in the process of market pricing in different characteristics of the impact of price level. In the asset evaluation process, the assessor will give additional attention to certain characteristics of the asset and will have an impact on their judgment.

The liquidity of an asset depends not only on the nature of the asset itself, but also on the market and other external circumstances. The greater the liquidity of an asset, the less uncertainty it has. Liquidity is strong, will gradually form a complete property rights trading market, the evaluation value will be bound by the market price mechanism, the assessment results obtained by the assessor will be closer to the real value of assets. At the same time, liquidity affects both the value range and the confidence level. The stronger the liquidity, the smaller the value range, the higher the confidence level, and vice versa.

Need to have sufficient data of asset evaluation, but in the data collection process, the method and the way of information source, has the particularity, difficult to obtain accurate and comprehensive information and data. The validity of the data may affect the scope of the evaluation results and the confidence level of the most possible value range. Therefore, the lack of validity or effectiveness of the data will increase the uncertainty of the evaluation.

Another important factor in assessing the uncertainty of an object is the impact of the customer on the evaluator. From an economic point of view, both the customer and the evaluation agency are rational economic people, and the purpose of all their actions is to maximize their own interests. Customer and stakeholder evaluation report due to the use of different purposes, sometimes have a conflict of interest, then, customers generally want to influence by assessors and assessment process, in order to achieve the purpose to their advantage. In order to obtain the income from customers, the evaluation institution may succumb to the unreasonable demands of the customers, or omit some evaluation procedures to reduce the cost due to the pressure of the charging. As a result, the evaluation institution will be influenced by the client's customer relationship even if it appears in an independent form.

Customers generally through two ways impact on appraisers applied, a is used to be assessment of the assets and asset market expertise and has assets of the master or control

information to influence, two is the use of power to pay the cost of the assessment of the influence. To assess the impact of smart clients usually use professional knowledge and information, while ordinary customers will pay by the right and compulsory rights impact assessment; abide by the occupation moral assessment division even by the customer won't make the evaluation results beyond a reasonable range of deviations, and does not abide by the occupation moral assessment division will make the evaluation results beyond reasonable the scope of the deviation. In the first case, because there is a lot of information about the assessment division of assets and asset markets to provide customers, and to determine the information to assess the division is very important, so that customers have the opportunity to use its assets and asset market information and understanding of the situation to influence the appraiser and appraisal process. Although customers have a lot of information, but for their own interests, they may choose to provide information to evaluators, and even provide false information. Sometimes, individual customers may have a good understanding of the evaluation techniques and methods of assessment, and they will make recommendations for the evaluation methods and evaluation parameters that the appraiser chooses, thereby affecting the subjective judgment of the appraiser. In the second case, as the customer has the right to select the evaluation institution, the client may choose another evaluation agency if the appraiser fails to meet the requirements of the client when signing the entrustment agreement. In the assessment of the increasingly fierce competition in the industry today, the evaluation institutions for their own survival, have to consider the requirements of customers, and make customer satisfaction as much as possible, so that the assessment results are conducive to customer purpose. In addition, when the customer refuses to pay reasonable costs of evaluation, assessment agencies may be in order to save time and less work procedures, or send the young, less experienced appraisers do this business, the quality of which will affect the assessment report.

The asset appraisal method is the technical means used by the appraiser to evaluate the value of the assets to be evaluated, including the market method, the income method and the cost method. As far as the methods are concerned, they are scientific and effective. However, in the process of actual evaluation, how to choose the evaluation methods and evaluate the parameters is uncertain.

Although the theoretical basis of the three different methods of evaluation, different angles and applicable conditions are different, but they all belong to the basic method of asset evaluation of specific assets, they may all be the way, this is how to select the evaluation method of the problem.

Assessment results and information economics argue that, as long as human beings are engaged in economic activities, uncertainty is bound to exist in the environment in which people are faced, so exogenous uncertainty is objective uncertainty. Endogenous uncertainty is in the process of cognition and things being reflected in the analysis of people affected by subjective factors, cognitive level and ability to judge the ability to influence the impossible to completely and accurately reflect the cognition of uncertainty, so the endogenous uncertainty is also called subjective uncertainty. Fourth kinds of division, normal uncertainty is generally considered to be objective and unavoidable, and abnormal uncertainty can be controlled, reduced, or even eliminated.

The uncertainty in asset valuation is objective, as Lubin, the former Treasury Secretary, said: "the only certainty in the world is uncertainty."". This uncertainty may arise from either the difficulty of economic measurement or the complexity of economic transactions, or the complexity of the objective environment. Since the uncertainty of asset evaluation is inevitable, it is necessary to correctly understand and treat it to minimize its negative impact. The uncertainty caused by information asymmetry, information asymmetry is not only because people often lack the ability to understand, do not know in any situation where and

when happened or will happen, what is more important, because the actors in order to fully understand the cost of information cost too much, does not allow the master complete information. The problem of asymmetric information originates from the information disclosure, and the solution of the problem lies in the good construction of the information disclosure system. In order to ensure the objectivity and fairness of the results of the asset evaluation, the evaluator must pass the information on the current status and future prospects of the external information users as well as the uncertainty information in the evaluation process. The property of asset evaluation also determines that the information disclosure system must be established in the asset evaluation market. Because: asset assessment is very professional. In the process of asset evaluation personnel make professional judgment on the value of assets is evaluated, according to a large number of data, by calculating the complex and detailed technical process and necessary, do not have the corresponding professional knowledge is difficult to complete the evaluation work.

Asset evaluation is asymmetric. The allocation of asset information between the voluntary buyer and the voluntary seller and between the voluntary buyer and the evaluator is extremely asymmetric. I hope all willing buyer could obtain information assets, and a willing seller yet instinctively tend to provide less information as much as possible, because the disclosure of relevant information will produce cost, more important is to make themselves in a disadvantageous position in bargaining.

Because of the existence of professional evaluation and asymmetric information, if there is no information disclosure system, a small number of people will make use of information to manipulate the value of the assets in advance and damage the interests of the buyer. Only if the uncertainty is disclosed to the investors in an open, fair and equitable manner, can the minority be prevented from manipulating the value of the assets by means of information superiority and fraud and speculation. Therefore, it is necessary to disclose the uncertain information to the healthy and sustainable development of the asset appraisal industry.

The following principles should be followed in the process of uncertainty disclosure:

The term "full disclosure" means that the information necessary to achieve justice reflects uncertainty and its impact, and that it should be fully understood and understandable by the user. The purpose of full disclosure is to meet the user's decision needs and to make the information available to the user to understand and make decisions that are useful for their decisions.

Disclosure of all uncertain information is neither possible nor necessary. Information redundancy and redundant information are detrimental to the decision making of information users. Therefore, the uncertainty information should be screened according to the cost-effectiveness principle and the needs of the information users, and the information that has a significant impact on the investors should be revealed. Whether individual matters or comprehensive evaluation, uncertainty in the final settlement of possible losses, and its significance should be highly valued appraisers. The appraiser's consideration of materiality principle is essentially a professional judgment, depending on the appraiser's perception of the needs of the beneficiaries of the evaluation report. Sometimes uncertainty is not sufficient in depth or breadth in nature or in the frequency of occurrence; the assessment of institutions and personnel has been dealt with lightly.

The impact of the market environment on the valuation is obvious. If the perfect market mechanism, assets will flow in accordance with market rules, the evaluation value is mainly determined by the market supply and demand and price mechanism; if the market mechanism is not perfect, no value after the test of the market, not the market reference price, valuation is likely to deviate from the real market prices, thereby affecting the accuracy of the assessment results. In order to assess the value of assets most likely, the appraiser must

understand the assets and its market environment, taking into account all possible buyers in the market, and the purchase price of the ability and their attitude to make evaluation. Appraiser when making value judgment, because in the market analysis and asset pricing, there are many uncertain factors, often require the use of judgement, this will give the results brought some uncertainty.

In addition, the level of market perfection and dynamic changes (the dynamics of the market are usually represented by the slopes of the normally available value curves) also have an important impact on the smoothness and slope of the value curve. The more perfect the market is, the steeper the value curve is, the probability that the most likely value will increase, and the extent of the value distribution will shrink. On the contrary, the lower the value curve, the probability of a single value point will be reduced, and the scope of the value distribution will be expanded. In a rapidly developing market, uncertainty tends to increase, and uncertainty tends to weaken in a declining market.

In the asset appraisal activities, the evaluation institution essentially obtains the Commission by transmitting and evaluating relevant information, and the information related to the evaluation is the resources that the evaluation institution must have. In the asset evaluation activities, the asset appraiser must also care about and grasp the market information, the national economic development information, policies and regulations, information, customer information and so on. If you do not have a complete and accurate information of the environment, will not only increase the uncertainty of property assessment, evaluation results can not guarantee the quality, increase the risk of asset appraisal practice, or even decline because of social credibility and the basis for the existence of lost assets evaluation. Therefore, asset evaluation must have a good information environment. As an indispensable intermediary industry under the market economy condition, asset appraisal bears the responsibility of maintaining the interests of both sides of the transaction, regulating the order of market transactions, ensuring market safety and maintaining social credit. This is because any transaction activity under the market economy condition, the transaction both sides need to understand the credit situation of the transaction object first, and determine the risk that oneself will undertake. The assets appraisal institution and the appraisal personnel are the main behavior subjects of the assets appraisal activities, and their good faith condition and condition directly influence the quality of the assets evaluation. The integrity of the asset appraisal institution and evaluation personnel in the process of practice, not only can accept the entrusting party and the social parties integrity of the relevant information and real information, and can correctly modify or reject the entrusting party and social related party non credit provided by the relevant information is not true and information, so as to provide with good faith service for the client and the related parties. For not the integrity of the asset appraisal institution and evaluation personnel, even if the information provided by clients and related parties and the integrity of the information is true, there is no guarantee that it can provide to meet the integrity of standardized service for the client and the related parties.

The current market method, cost method, income method is considered to be the most reliable of the three kinds of assessment methods, they are based on complete information assumption, is a deterministic method, the result is a single equilibrium solution. But the reality is that the asset appraisal facing the market conditions are uncertain, the problem to the study of asset assessment of uncertainty is very strong with the deterministic methods, the evaluation value obtained by the real value and in most cases cannot correctly reflect the assets. Therefore, teachers need to assess change a point of view, based on the three basic methods of the traditional, some research methods of other disciplines, evaluation of the uncertainty of assets, complements and perfects the existing evaluation methods.

Mathematics has a precise quantitative science at the beginning of the birth, but with the field of mathematics on the uncertainty of the existence of the phenomenon of attention, people

will gradually have uncertainty as the research object, and in seventeenth Century and 1970s respectively, the probability theory and mathematical statistics and fuzzy mathematics. Mathematicians believe that the phenomena occurring in nature and in human society can be broadly divided into two types: deterministic phenomena and uncertain phenomena. Deterministic phenomena are phenomena that are bound to occur under given conditions. The uncertainty phenomenon can be divided into two kinds: random phenomenon and fuzzy phenomenon, among them random phenomenon is the uncertainty phenomenon mentioned in this article. The so-called random phenomenon is that even if the conditions are exactly the same, the results of their appearance are generally not the same or not completely determined. The so-called fuzzy phenomenon is that things appear in the process of change, "this is also the other", the boundary is not clear phenomenon. Namely: so, the mathematical model can be divided into three categories: first, deterministic mathematical model: object of the model is deterministic, there is a causal relationship between the second, or objects; stochastic mathematical models: the object of the model is random, chance or the relationship between objects; third and fuzzy mathematical model of objects and relations of the model are fuzzy. Therefore, the algebra system consists of three fields related to exact mathematics, stochastic mathematics and fuzzy mathematics, in which probability and mathematical statistics are the branches of mathematics that study and deal with stochastic phenomena.

Probability theory holds that parameter estimation is usually divided into two categories: one is point estimation, the other two is interval estimation, and interval estimation provides a theoretical basis for describing uncertainty. Point estimation of unknown parameters is just an approximation, and does not reflect the error range of the approximation, but in practical problems, we not only need to compute the approximate values of the parameters, but also to roughly estimate the approximation accuracy and reliability.

The interval estimation is from point estimates and standard errors of sampling interval, includes the establishment of parameters to be estimated according to the given probability value, it is expected the estimated parameters value will fall in a range of upper and lower range, and gives a reliable degree, with certain probability to ensure total body parameters fall within a given interval.

The phenomenon will make different choices of the same asset evaluation results appear very different, therefore, the specific evaluation object, evaluation method of how to select the most scientific and reasonable is one of the key links in the assessment work.

The use of various methods involves some specific parameters, although these parameters may theoretically reach the ideal state, but there is uncertainty in actual quantification. Factors of the uncertainty mainly comes from the evaluation of market conditions, the development of science and technology, the level of management, such as determining the discount rate requires assessors to determine according to the comprehensive analysis of the society, industry, enterprise and the assessment object income level, there are a variety of ways and methods of calculation, but there is no fixed pattern of an industry recognized this parameter, the uncertainty in the process is inevitable and unavoidable. How to make the parameters with uncertainty as accurate as possible, which puts forward high requirements for the evaluation staff, and is also a concrete embodiment of the evaluation work.

The assets appraisal is on assets under the assumption that the simulation on the market value of simulation market is an ideal market for some unknown conditions in the market made the assumption, and the reality of the market has a gap, but with the reality of the market have in common, should consider the environmental impact on the asset value of assets assessment, evaluation the environment is an important factor affecting the assets assessment of uncertainty.

Professor Wang Jianzhong (2008) according to the characteristics of environmental assets assessment of the present stage in our country and will China asset appraisal industry practice environment summed up into two aspects external environment and internal environment, the external environment including the legal environment, policy environment, market environment and internal environment including tax environment, information environment and the integrity of the environment, and the bottleneck constraints on me in the evaluation of the development of the industry policy, management, and other aspects of the system made a systematic exposition. All of these provide reference way for the study of this paper, according to the above classification, this paper on asset valuation uncertainty environmental factors larger summarized into five aspects of legal environment, policy environment, market environment, information environment and credit environment.

The legal environment is the foundation of the establishment of the asset appraisal system and the guarantee of the development of the asset appraisal industry. The more complete the legislation is, the more unified it is, the more conducive to the evaluation personnel to make the correct evaluation and judgment. At the same time, the legal system for the protection of CPA practice is more perfect, more personnel evaluation can give full play to their professional judgment, are not or less affected by the external environment, reduce the uncertainty of property assessment. With the acceleration of the process of legalization of China's legal environment, gradually complete, evaluate the legal requirements for the development of the industry is also more and more high, and the asset appraisal industry in China has been facing the legal environment is not perfect, mainly to be updated, based on departmental rules needs to be unified and evaluate litigation system deficiencies, legal appraiser unclear responsibilities and other aspects.

Asset evaluation policy environment refers to government departments and industry according to the needs of the development of the industry, asset evaluation and market operation, through direct or indirect way, formulated and implemented to promote the development of asset evaluation industry related guideline and policy measures, and thus the industry and society to guide asset evaluation, promote the evaluation industry behavior situation and conditions for development, industry.

The assets assessment shall be a social intermediary service, and the procedures and methods for evaluation thereof shall be carried out in accordance with the relevant provisions of the state, and shall not be disturbed by any administrative organ or social group. But in China, government departments and agencies to assess the link between the interests and the interests of the administration too closely, make the evaluation work of the administrative power, administrative strong color, seriously affect the assessment work independently, objectively and impartially, thereby increasing the uncertainty of the results of asset evaluation.

The asset appraisal association is a social organization legal person, whose important function is to supervise the function. The asset appraisal association should play a role in itself, so it is necessary to supervise the practice of the evaluation institution and the evaluation personnel. If there is no effective supervision, there is no effective self-discipline. Overall, the function of supervision Association of China's assets appraisal has yet to play in place, mainly reflected in: Supervision, normal distribution, standard symmetry, located on both sides of the value that the value of V has the same probability distribution. However, in most cases, the market is not in such a state, sometimes resulting in displacement, at this time, in the evaluation of uncertainty expression evaluator, may think that is most likely the probability value is larger than the other side of the side of the. If the market is on the rise, or potential buyers have an optimistic view of the market because they have some information, the most likely value will move to the location. If the market is in a downward trend, or the assessment division made a cautious choice, this cautious maybe derived from a reversal may occur on the market or the

asset itself the uncertainty of judgment, the most likely value will be moved to the position. Although the values of the two curves are distributed between Va and Vz, the location of the curve is determined by the position of the most probable value.

Some scholars think that under uncertainty, market value should be the statistical distribution of all transaction prices. It usually includes the following three parameters: mean (or median), discrete degree, graphic shape. Therefore, it is necessary to make a review of the average and variance indicators in statistics. The average index and the index of variation is two different types, but the statistical index very close relationship, they were used to reflect the overall concentration of some kind of internal quantity mark and discrete degree, statistical analysis is used to describe the phenomenon, the most commonly used statistical inference of the comprehensive index.

The average index can be divided into numerical average and average number of positions, including the former arithmetic mean, geometric mean, median and mode etc. the latter includes.

Asset evaluation belongs to the scope of consultation and should serve both sides of the transaction, not just the clients. Because of the information asymmetry and mutual distrust between the two sides of the property right transaction, an independent, objective and impartial professional appraiser is hired to provide consultation services for both parties in the negotiation. Only the appraiser based on certain evaluation procedures and methods to assess the value, based on independent, objective and impartial to the actual existence of asset value estimation, and do not consider the hidden costs of the assets and the cost of the asset acquisition, such as not reasonably accounted for start-up costs, also did not consider possible the special market environment. As long as both sides consider the transaction, it will inevitably form a value range, rather than a point estimate. For example, a state-owned coal industry group and a private coal mine to form a joint-stock enterprise, commissioned by us to assess the private coal mine. On the basis of scientific assessment methods, standing in the independent, objective and impartial perspective, that assessment of the coal value of 325 million 689 thousand yuan, while the coal report recorded a 146 million 576 thousand and 700 yuan of long-term prepaid expenses, which belongs to the preparation process of the start-up, but can not provide the corresponding invoice or purchase contract, according to the evaluation criteria we is unable to confirm this part of the assets of the. At the same time, we also know that in order to strengthen the national coal mine production safety and make full use of resources, to encourage mergers and acquisitions of state-owned coal mine private coal mines, limiting the private coal mine development, so that the private coal mine is facing difficulties, it will lead to the private coal mine in a disadvantageous position in the negotiation process. In this case, when we arrive at the point estimate, we should provide a value interval between the two sides of the transaction, which takes into account some special cases that affect the transaction and disclose it to both sides of the transaction.

China in 2005 in the "financial non-performing assets assessment guidance (Trial)" was first introduced in the concept of interval value stipulates: "the CPA should in the assessment report to the text and numbers that form the evaluation conclusion, the evaluation conclusion usually should be clear values, through communication with the client, you can use interval value assessment."

We can use the X axis represents the value of each axis represents the probability Y value, the lower confidence limit Va, Vz represents the confidence limit curve of each point and the probability is 100%, the value distribution in Va - Vz, most likely to have a maximum probability value of Pz was V, the median is the observation of some value in order of size after the arrangement in the observation sequence midpoint value. The median is a typical location average, its biggest advantage is not affected by the distance and the opening sequence in the extreme value distribution, when the overall number showed a skewed

distribution, the median concentration trend can reflect the phenomenon more accurately than the arithmetic mean of the representative better.

The mode is the most common value refers to the total, the maximum number of repeats is numerical series. Mode and median, is not affected, from the extreme values and opening sequence method is simple, easy to use. When the number of distribution is to arithmetic average normal symmetrical center, both ends of the distribution, the mean, median and mode three equal; variation index reflects the degree of difference between each observed within the overall value indicators, including the most commonly used standard deviation and dispersion coefficient.

Standard deviation is the most commonly used index of absolute numerical value. The coefficient of variation is also called coefficient of variation. Because the variation of absolute number is the most widely used standard deviation, the standard deviation coefficient corresponding to it is most widely used:

The method that in conditions of uncertainty, the market value should be the statistical distribution of all transaction price, can use the average (or median), degree of dispersion, graphic shapes to represent the evaluation results, the average (or median) said the most likely value.

The average and the median are the two most commonly used statistical parameters of appraisers. They can basically avoid the occurrence of outliers, and they are obviously centrality, so that the results of assessment will not show greater deviations. The two also have certain limitations, under certain market conditions, due to the existence of abnormal data will have a certain impact on the average and median in asymmetric distribution will move to the direction of tilt is slow so in asymmetric distribution, the median was rarely used. The most likely value is the market price of the most, the highest frequency value, for example, there are eight market trading case, the market price of 1 million yuan, 1 million 200 thousand yuan, 1 million yuan, 1 million 500 thousand yuan, 1 million yuan, 800 thousand yuan, 1 million yuan, 1 million yuan, 1 million yuan price is the highest frequency for 5 times, so the most likely value of 1 million yuan.

The standard deviation is used to measure the degree of dispersion, the smaller the standard deviation is, the smaller the dispersion is to the mean. The standard deviation represents the absolute value of the degree of dispersion. One of the main parameters of the coefficient of variation is discrete degree, is equal to the standard deviation divided by the mean value, coefficient of variation is small, discrete degree distribution is smaller. The coefficient of variation is a relative numerical discrete degree distribution.

Appraisers usually use normal distribution to describe the value of asset valuation, theoretically, relationship between trading volume and market value should obey the standard normal distribution (mean, median, the most likely value, however, completely overlap) in the real market, the market value of the distribution is not a normal distribution. But the non normal distribution.

Represent the most probable values, medians and averages, respectively. The average and median are at the right side of the most probable price. With the increase of the degree of asymmetric median and average distance and the most likely value will be more and more big, the degree of asymmetric effects on the average value of the maximum, thus, we can see the limitations of the average value and the median value, most likely is the representation of the most reasonable assessment of the value of assets.

This method provides a good idea for us to draw the value evaluation under uncertainty, which most likely value point estimates, but the most likely value through a lot of market trading case, however, in reality, is always a limited number of transactions of any asset, which produced a problem, characteristic that need how many number of transactions in

order to effectively describe the market. According to the research of some scholars, asset evaluation results amount of uncertainty range and deal that inversely, trade amount is more, the uncertainty is smaller; the number of transactions is less, a larger range of uncertainty. At the same time, these scholars give an empirical value.

The asset evaluation describing the uncertainty of mathematics and statistics, this paper draws the conclusion that the most likely value (usually can be used instead of the average or median point estimate) said, express the uncertainty scope with a certain confidence interval value level, and by attaching certain graph text to explain the form of delivery to the customer. The former draws on the research methods and ideas of mathematics and statistics and other related disciplines, and uses the inductive and deductive methods to obtain the alternative method of point estimation. The method will be used to describe the value of the asset evaluation under different market conditions by using the probability curve.

According to the market theory of Western microeconomics, the market can be divided into perfect competition market, monopolistic competition market, oligopoly market and complete monopoly market. There are four main factors that determine the market type: the number of manufacturers, the degree of product differentiation, the degree of control of a single manufacturer and the degree of difficulty of an enterprise entering and leaving an industry.

In assessing the market, assessment of the assets is the "product", assessment of the assets of owners is the "manufacturer", but with different product market, market assessment of "product" in the larger value and transactions are not often and with specific purpose. Regardless of whether the product market or market assessment, "product" value should be decided by the market, the value can be determined to be borne by the internal staff can also be borne by persons outside the business, the appraiser is the customer in order to reduce the transaction costs and hired outside the enterprise staff.

Market value is the value in many types to the most stringent value, it is determined that the assessment result in full information, perfect competition under the ideal state, but in the actual economic environment, the information asymmetry phenomenon, the existence of a market value the value of this type may not be the objective reality, affected by uncertainty factors the value showed more uncertainty of valuation. In the market of different types, different decision mechanisms are the price of assets, determine the market structure is the number of market participants, is a minority, or a single, following on the value of the assets assessment under different market conditions are described.

A perfectly competitive market is an ideal state, the main features are: a large number of buyers and sellers, buyers and sellers are unable to influence the market price, they are price takers; products are the same, without distinction; resources free flow of information is complete. Obviously, in a perfectly competitive market, sellers can not as high as the market price of goods sold, the buyer can not be lower than the market equilibrium price of purchased goods, because of the single price competition in the market completely homogeneous commodities (price) completely dominate market. Therefore, in the perfectly competitive market, the definition of the value of the asset evaluation can be fully satisfied. The market value is a single point estimate, that is, the equilibrium price of the market. In reality, a perfectly competitive market does not exist, the ordinary commercial housing market is considered the most close to the completely competitive market. Here, we put the ordinary commercial housing market as a completely competitive market into our analysis.

For example, we evaluate a house, the house is one of thousands of homes, all houses built in the same model, the use of 10 years, a house does not have any advantage, environment and infrastructure are the same, in a perfectly competitive market conditions, the housing assessment division point the estimated value of 3000000 yuan. Oligopoly market is a kind of market organization in which a few firms control the production and sale of products in the

whole market. Oligopoly market is considered as a kind of common market organization. We also take housing as an example, in an oligopoly market, the evaluation value is more dispersed than the monopoly competition market, and the appraiser concludes that the probability of evaluating the value falling between 2950000~3050000 yuan is 70%".

A fully monopolized market is the only one in the industry. Specifically, the characteristics of complete monopoly market has three main points: the market for a manufacturer only in the production and sale of goods; the manufacturers to produce and sell goods without any close substitutes; any other firms enter the industry is very difficult or impossible. In such a market, monopolies control the production and sales of the entire industry, and can control and manipulate market prices. Like a fully competitive market, a fully monopolized market hardly exists in real life. In this market, because there is only one that cannot be replaced by assets appraisal, the owner can control the market price of the asset assessment, evaluation value is only a theoretical value, the actual transaction price may be higher than the value of many. At this time, evaluation value may fall to a broader range of drop probability in 2950000 ~ 3050000 yuan between the value of the assets assessment may only 30% different purposes under symmetrical distribution, mean, median, the most likely value are coincidence, but in some cases, describes the assessment of the value of the trouble with symmetric distribution, then only by the asymmetric distribution. The value of assets for different purposes is different. When these different values are expressed together, they produce value curves for different purposes.

If we are evaluating a special building, a church recently completed, cost method is easy to reach its replacement cost is 10000000 yuan, but the appraiser noticed around a few very similar to the church, because the congregation was forced to sell less, for the office, with the market law that their sales price of 4000000 yuan. In this case, how should an appraiser determine the value of the church? Considering the difference of evaluation value is mainly due to the cost method and market method, appraisal conclusion is: for the assessment of the value of law cost depend on the willingness and ability of the community to support the church, that the amount of social donations to support the church, in order to continue the spirit of the church, as long as these conditions are met. The church is the value of the cost price of 10000000 yuan; if used in office buildings, the value of it will fall to the level of 4000000 yuan market method. We further assume that in a short period of the forecast, the possibility of social organizations to provide financial support to the church to continue to exist in 75%, when its value is 10000000 yuan; the possibility of social organizations to provide financial support for the church in 25%, when its value is 4000000 yuan. We constructed two figure, the highest point of a department said 10000000 yuan, the assessed value is determined by the cost to obtain the highest point; another said at 4000000 yuan, equivalent to the first curve of the highest point of $1/3$ ($25\%/75\% = 1/3$), which is obtained by the market. That is to say, the probability of the church to assess the value of 10000000 yuan is 75%, the probability of 4000000 yuan is 25%, the former is 3 times the probability of the latter.

On the other hand, he refuses to pay more because the A land is worthless to the rest of the world. In this case, the appraiser will not be able to determine the valuation of the A land. We can conclude that A land sales in the short term prices will be distributed in a forced sale price of 2000000 yuan and the normal market price of 10000000 yuan, and the probability was higher than that of the latter; but in the long run, A land sales prices over time may eventually be equal to the normal market price of land with, or slightly RBI the probability of discount, and the sales price is equal to the normal market price of land increased obviously. Therefore, if A is the owner of the land now forced to sell the land, the sale price may be much lower than the normal market price of land, if you wait until the time is ripe, the sale price may be normal and the market price of land is equal to or slightly less. The use of three dimensional diagrams

to represent monopolistic competition is that many firms sell similar, but not homogeneous, but differentiated products. The characteristics of this market organization with both a monopoly and competition, with characteristics, characteristics of monopoly products in non homogeneity, which can affect the extent of the price, according to the basic characteristics of monopolistic competition, western economists put forward the concept of production group. Specifically, the characteristics of monopolistic competition in the market has three main points: differentiated products in mass production enterprises in the production group, between each of these products are very close substitutes; a number of production enterprises in the group very much, so that each firm that their behavior effect is very small. Will not cause the attention of competitors and their reaction, thus are not affected by any retaliatory measures of competitors; manufacturers of the small scale of production, therefore, a relatively easy import and production group.

The monopolistic competition market is close to the perfectly competitive market. We can analyze the asset evaluation value under the monopolistic competition market by adjusting the hypothesis of the perfect competition market. If our assessment object is still a house, and a perfectly competitive market is all the house has at least one major aspect is different, some may have a different life, some may be building style is different, some may be of different size. Different from the perfectly competitive market, the housing value assessment division is no longer a point estimate, but the value of a certain confidence interval, the level for example, appraisers that assess the probability value fell 2950000 to 3050000 yuan for 95%".

Value provides the basis for making the correct trading price decision, thus becoming the trustee of the asset evaluation and the demander of the evaluation information. From the point of view of the asset seller, they always hope that the evaluation institution can overestimate the value of the assets so as to achieve their psychological expectation of higher value of the assets. As in the sale of assets or enterprise and other enterprises to form a new business enterprise, in order to make the sale of assets or more share in the new company at a higher price of the shares, assets tend to overestimate the transferor identity value of assets. In the mortgage business for assessment purposes, although not to sell the assets involved, but because of the evaluation level directly affects the assets in the bank loan amount, the principal usually also hope overvalued assets value, to obtain more loans from the bank in order to achieve the purpose of.

The transferee of the asset is the purchaser or the recipient of the asset in the asset transaction. Because the purchase of assets to the status of information less, they urgently need third in the right place to make an objective judgment on the value of the assets, in order to achieve the most economical price to complete the asset trading purposes. From the point of view of the transferee, they always hope that the appraiser can underestimate the value of the asset and achieve the goal of buying the assets at a lower price by making the lower price expectation of the asset maker. When the assets of the transferee is the principal asset evaluation, he will often provide assessment information on the impact of asset price asset assessment staff determined the value of assets, so as to achieve their asset value judgment psychological expectations, especially when the transferor of assets for state-owned assets, this phenomenon is more obvious. As in the state-owned enterprise restructuring or transfer of ownership of the assets assessment projects, the existing enterprise managers often is the transferee of assets, transferring the assets is the property owner of state-owned assets, the state-owned assets in order to buy at lower prices, they will want to underestimate the value of the assets, and that the assets assessment under certain conditions low value is reasonable.

2. The Theoretical Research

As a scientific and professional social activity, asset evaluation has been made for more than 200 years, but the definition of asset evaluation has not been unified in the world. At present, the more representative views are:

The international valuation criteria states that "asset assessment is the assessment of the value of a particular asset by an expert who has expertise and experience to assess the value of a particular asset."". China's "asset appraisal standard basic standard" will be defined as the asset appraisal: CPV according to the relevant laws, regulations and asset appraisal standards, assessment of the object in the assessment of special purpose of the base date of next analyze and estimate the value and professional opinions for and process. The CPA examination counseling textbook written by the group of "asset assessment" (2008 Edition) said: "the assets appraisal professional organizations and personnel in accordance with national laws and regulations and asset appraisal standards, according to the specific purpose, follow the principles of assessment, in accordance with the relevant procedures, select the appropriate type of value, the use of scientific methods, analyze and estimate the value of the assets and the behavior and process of professional opinions".

Professor Wang Jianzhong (2008) in his doctoral dissertation, the study of the structure of the theory of asset evaluation, according to the idea of "plus" and "difference", the author believes that the "valuation" of the asset evaluation is the process or behavior of the estimation. In the large category of estimating process or behavior, the difference between asset evaluation and other kinds is value. That is to say, the value of the assets to be evaluated is the fundamental attribute that distinguishes the activities of assets evaluation from other activities. It determines the basic attributes of assets.

This paper also emphasizes the value attributes of asset evaluation, and considers that asset evaluation is the process of evaluating and estimating the value of a particular asset using value norms or evaluation criteria. The value of assets is the utility of assets to the subject, the function and influence of assets on the subject, the objective existence, and the object of asset evaluation.

The value of asset evaluation is one of the most basic concepts in asset evaluation. It is closely related to the selection of asset evaluation standards and the application of asset evaluation methods. Therefore, the study of asset evaluation uncertainty must pay attention to the study of asset evaluation value. Generally speaking, the value of asset evaluation is the evaluation of the value of assets. It is a kind of conceptual activity of the main body. It is the evaluation of the value of the assets by subjective activities or the concept of the evaluation subjects. The value of assets determines the value of assets evaluation, the value of assets evaluation reflects the value of assets, and the value of assets evaluation is a form and result of the subjective grasp of the value of assets.

The definition of value is recognized as the means for the relationship between money people buy assets and the sale of these assets service services, or to assess the value of the assets is the total monetary asset owners get the future specific period of income paid. As a result of asset evaluation, asset evaluation value is neither the value of assets, not the actual market price, but by the dynamic value assessment of a specific purpose, value types and specific methods of joint decision, is a form of value.

The labor value theory, the utility theory of value and the equilibrium price theory in economics explain the value of asset evaluation from different angles:

First, the theory of labor value explains the value of commodity from the supplier's point of view, depending on the amount of necessary labor and the time necessary for social work. Based on the theory of labor value assessment, professional assessment of the assets of the

production cost can be considered from the producer's point of view, considering the impact of the social necessary labor time and social average technology level of the value of assets.

Second, the utility theory of value explains the value of the goods from the point of view of the demander, and the utility of the goods for the possessor, which is determined by the satisfaction of the possessor's subjective desires or demands. The effective use of the asset by its owner means that the asset can bring benefits to its owner, that is, the value of the asset. The greater the asset's future earnings, the greater its value to its owner. Therefore, in the activity of asset evaluation, we can estimate the value of the timing of the asset by estimating the future income of the asset.

Third, the equilibrium price theory holds that in the market economy, the value of assets is equal to the market equilibrium price. The market equilibrium price is determined by the market supply and the market demand of the commodity. When the two are equal, the price is the market equilibrium price, that is, the value of the asset. The equilibrium price theory tells us that when assessing the value of assets, we should consider the market supply of assets and the demand of the market in a comprehensive way, and also consider the influence of the market environment on the supply and demand.

With the development of asset appraisal industry, there are more and more assets in the scope of assessment. The diversity of asset classes, indicate the formation of asset value is complex, therefore, in assessing the value of the assets, assets should be evaluated considering the characteristics and the market conditions and other factors to choose the value evaluation way.

The goal is to systematically discuss the desired results, and to identify different goals according to the problems that need to be addressed and studied by different systems. According to the nature, characteristics and environmental requirements of asset evaluation, it can be determined that the objective of asset evaluation is to provide stakeholders with value information that helps to make decisions. The correct goal is the premise of the benign cycle of the system, and the establishment of the correct value target of asset evaluation is of the same significance.

What are the value goals of asset appraisal? This paper analyzes the causes of asset valuation. The asset evaluation is an intermediary service because the asset transaction parties are divided on the asset price and need independent third parties to provide objective opinions. Since the asset valuation involves several parties, only when the result of the asset evaluation is fair can we all accept it. From this point of view, fair value is the value target of asset evaluation.

What is fair value? The International Valuation Standards that fair value is an accounting term "fair value" refers to the reasonable expectations may be obtained in the amount of the current voluntary transactions between buyers and sellers, rather than mandatory liquidation or sales amount." Fair value in asset evaluation refers to the reasonable estimate of the objective exchange value of the evaluated assets according to the conditions of the assets being evaluated and the market conditions they are facing. As long as the assessment results and assessment of the assets of their own conditions, when market conditions coincide, and no damage to the legitimate rights and interests of the parties of the transaction, will not damage other people's interests, the assessment results can be considered fair value.

Has not used the concept of fair value in the field of asset evaluation, an important reason is that the relationship between fair value and market value have been relatively vague, this is mainly due to the fair value accounting industry defined as the fair value concept in general. The comparison between the concept of fair value and the concept of market value in asset valuation seems to make little difference between the two. However, the evaluation of asset fair value and market value are two concepts of different levels, the fair value of the assets

valuation is the concept of general level, it includes the reasonable evaluation results of normal market conditions and non normal market conditions for two cases; and the normal market conditions the market value of the assets valuation of assets at reasonable evaluation results under the best condition, and who does not meet the conditions established in the market value of other reasonable evaluation results are also a kind of value type, non market value. Therefore, the fair value in asset valuation includes both the market value under deterministic conditions and the non market value under uncertainty, but the values in different conditions are different.

Market value, also known as open market value or fair market value, is a generally accepted concept in the International Valuation circle. "International Valuation Standards", defined as follows: the market value of the willing buyer and seller, after the normal marketing in the valuation date, the estimated amount reached in an asset even bargain should be the value of the transaction, the parties should be smart, their caution, without compulsion. The theory of asset valuation in China defines the market value as the estimated value of exchange value which is most likely to be realized in the normal use (optimum use) of the benchmark open market.

Market value is an ideal possible price, in line with the requirements of fair value. Market value is not necessarily the transaction price of the asset or the market transaction price, but the transaction price which may be formed under certain conditions. Different trading conditions determine the different market prices, this is why there are different evaluation conclusions of reason, the market value of the meaning is as long as it is with the market based on the data obtained by any method, evaluation results are market value.

The market value is a kind of ideal price, the ideal price from the ideal market conditions, ideal market conditions refer to the following conditions: the market is willing buyer willing seller;; the seller is limited rational behavior; expressed in monetary terms; normal trading conditions; valuation date determined; there is enough time in the show on the market. In such conditions, theoretically, the number of transactions and transaction value is the standard normal distribution, in accordance with the definition of market value, market value is the market price of the most likely value is also symmetrical normal distribution, this point is the largest number of transactions.

Non market value, also called market value, is defined as non market value in the International Valuation Standards, which are not consistent with the definition of market value. Non market value is a kind of value concept relative to market value, which is the most possible value of assets under various open market conditions. Because of the diversity of specific economic behavior, there are many forms of asset valuation based on non market value. Non market value can be described as a series of generic types that do not belong to the market value type. Common non market values include value in use, value of investment, value of continuing operation, insurance value, and so on.

Is the fair value of assets appraisal goal, it requires the assessment of the value of assets evaluation personnel are fair, the market value is relatively fair, and the market value of non market value should be fair, and it differs from the market value only in market conditions, non market value is in the special market conditions Fair, is a condition of justice, also belong to the category of fair value, otherwise the behavior will lose the fairness of the assessment. The market value is in full possession of the assets in the show time, best use value, non market value is limited in specific assets and special purpose under the condition of value, the difference of market conditions and the market value of the market condition is not ideal enough to reach the number of transactions, in this case the distribution, the non market value should be an interval distribution in the normal distribution of vertices on both sides of the symmetrical region, the value expressed in a particular situation, a range of assets of non market value, the non market value is formed in the non open market, non open market is

because the assets have specific assets in the market and the display time does not affect the number of simulated market traders, resulting in supply and demand exchange assets can not be the same, thus forming a Reasonable market value is only the objective in the open market, the non market value of assets and special purpose connected also has only the corresponding price, the value of this attribute is the asset itself, but also the source of non market value is fair. But non market value cannot be determined only because people's subjective judgment cannot predict the market conditions accurately.

In order to ensure the realization of the fair value of the target, assessment personnel in the assessment, should pay attention to the specific purpose, adhere to the value type is matched with the evaluation of specific purpose in the evaluation process, to reflect on the value type specific business requirements, obtain fair value, realize the goal of asset appraisal.

The introduction of uncertainty into economic analysis can be traced back to the book "risk, uncertainty, and profits", which was written by knight in 1921. In the book, Knight expounded the idea of uncertainty and laid the theoretical foundation for the development of uncertainty. Knight (1921) distinguishes risks and uncertainties from the perspective of whether the outcome of the event is predictable. He will be defined as the uncertainty at any moment to create personal that may be state can be aware of the number, and will not fully grasp the future events for the distinction between risk and uncertainty (the former can measure the uncertainty, the uncertainty is difficult to measure). According to his understanding, the risk that economic actors face to random objective probabilistic representation of concrete and, if economic actors for different events may not specify or can not determine the specific probability value is uncertain. Moreover, Knight further attributes the uncertainty to the incomplete nature of knowledge, regards uncertainty as endogenous, and belongs to the subjective category of the subject of economic behavior.

Knight's definition of uncertainty had a major impact on western scholars and was accepted by most Western scholars. Keynes absorbed the knight's thought, that most of the economic decisions are made under uncertainty condition, he criticized the new classicism that uncertainty is given a simple form and can be calculated, the uncertainty into the risk. The results of the multiple evaluations of assets are inconsistent, rather than the results of different assessments by different appraisers on the same asset. In this paper, the former is defined as the uncertainty of asset valuation, and the latter is defined as the difference of asset evaluation. The difference may be due to the fact that the relevant information is created by different appraisers, which are two different concepts from the uncertainty of the same appraiser.

According to most scholars of Western perceptions of uncertainty in economic activities can be divided into two categories: one is the uncertainty of the market, every person completely known his own preferences, resource endowments and production opportunities, but I do not know the other economic entities of the supply and demand, obviously, this kind of uncertainty is determined by within the economic system of the. The other is the event of uncertainty, every person on the market price of all completely that, just can't know external accidents, these accidents will affect his personal environment or the entire market, these uncertainties may include events, resource endowment, production machine or public policy.

According to the causes of uncertainty, uncertainty can be divided into subjective uncertainty and objective uncertainty. The former is the uncertainty of the event cognition, and the latter is the uncertainty of the result of the thing itself. The origin of the world is material, but the form of material is varied, and human beings live in a colorful world. The natural state of the objective world can not be exhausted. These objective phenomena, which are not transferred by people's will, can be called objective uncertainty. The objective world is the natural state while uncertainty, but people can rely on their own knowledge and experience of natural state may appear in the form of prediction, choice of action, different in different natural conditions

but, due to the limited subject complexity and behavior understanding of the operation of the economic system, people can not accurately predict trends and results of economic operation, even for the same choice, the execution results may also be inconsistent.

This kind of uncertainty caused by subjective prediction ability of behavior subject is called subjective uncertainty. According to the sources of uncertainty, exogenous uncertainty and endogenous uncertainty can be classified. Exogenous uncertainty refers to the uncertainty caused by external reasons, sometimes called environmental uncertainty, which has nothing to do with the nature and capability of the economic subject itself. The so-called endogenous uncertainty refers to the uncertainty of economic behavior and economic results caused by the internal cause of the economic entity or its internal structure. Each economic entity's own knowledge, experience, and capabilities are different. In the course of economic operations, the buyer is not sure whether a suitable seller will be encountered, and vice versa. Neither side is certain about the conditions under which a decision maker cannot know the decisions or plans made by other decision-makers at the same time.

RICS Redbook (1996) mentioned in the concept of abnormal uncertainty, the uncertainty is divided into normal and abnormal uncertainty uncertainty. The formation of abnormal uncertainty is closely related to the sudden changes in market conditions, such as financial turbulence, and may also be caused by the characteristics of assets, the type of litigation and the types of assets involved. They further believe that the actual scope of assessment in the range of uncertainty than we know the normal uncertainty is much larger, so the appraiser should disclose the uncertainty of the situation, so that customers can judge the reality of assessment of the assets of the.

The first division, two kinds of uncertainty is built entirely that their preference in everyone and to all market prices fully informed two assumptions, but in reality these two assumptions can hardly exist, itself is uncertain. The second, third kinds of division and the two viewpoints are in essence consistent. Exogenous uncertainty is the uncertainty caused by the external environment in the process of development of things. The development of anything cannot do without the specific environment, the environment is complex and changeable, so that the development of things is full of uncertainty, and even some changes cannot be expected, it is objective, not the people's will for the transfer. The modern property rights "on the possibility of" a Book of risk and uncertainty analysis, with its point of view and the same Knight "risk, uncertainty and profit" is exactly the same: risk can be predicted, but insurance, and uncertainty is not, the risk is described as follows. The probability distribution is known, the number can be determined, closed and complete; and the probability distribution of uncertainty is not known, is uncertain, vulnerable to new things.

After Keynes's school and Austria school, with particular emphasis on the uncertainty and risk difference, they think the real economic world is not in a state of statistical control, economic decision-making basically is uncertain about the future of the decision. The school representative, Hayek has a deep research on the problem of uncertainty, that can be calculated or probabilistic risk and real uncertainty is strictly distinguish, under uncertainty condition, forecast in the best case is also uncertain, but in the worst case is not impossible. The uncertainty that cannot be eliminated, it is a fundamental characteristic of the free market, the mathematical model of economic phenomenon is unrealistic. Joel Seagal argues that uncertainty refers to the state of awareness of one or more alternatives that lead to a range of possible outcomes, but the likelihood of these specific outcomes is either unknown or practically impossible. Unlike risks, the purpose of uncertainty is not clear, and it is impossible to assume a comprehensive understanding of the scheme, which tends to differentiate between risk and uncertainty in practice.

The contrast between the two forces in the game determines their choice of action to a certain extent. The game in the customer and evaluation mechanism, the customer is evaluation

principal, but also the assessment of purchase products, holds the choice evaluation institution and pay the cost of the assessment authority; and assessment agencies is to assess the activities of the trustees, and evaluate the production and the sale, undertake the assessment of the project is the main source of income, but also maintain the basic point of survival. In our current asset evaluation environment, the strength of both the customer and the evaluation agency is not balanced, and the evaluation institutions are under more pressure from customers. The ability of an asset appraisal institution to withstand customer pressure mainly depends on the comparison of the penalties and loss of credibility between the asset appraisal institution and the loss of the customer. Judging from the current situation in China, the asset appraisal institutions have relatively weak bearing on the impact of customer pressure.

First of all, from the point of view of environmental impact assessment, asset evaluation industry in China after more than 10 years of development, evaluation institutions grew rapidly, a large number of small assessment agencies and more has brought the fierce market competition, so that customers choose assessment agencies to increase space. If an evaluation institution does not meet the unreasonable demands of customers, customers will turn to other assessment agencies, and some poor awareness of risk assessment agencies in order to survive, will meet the requirements of customers, which makes the evaluation mechanism in an awkward position. Customers also have the right to pay the cost of the assessment, in order to avoid trouble in charge, more important is to maintain good relationship with customers, retain customers, entrusted in the future can still, assessment agency situation will have a tendency to accommodate customers and customers. Therefore, tend to pay the cost of the assessment customer master rights and replace the rights of appraisal institutions makes the assessment institutions prone to succumb to the customer, to a certain extent reduces the ability of assessment agencies under customer pressure.

Secondly, from the characteristics of asset evaluation itself has a point of view, asset evaluation has certain subjectivity, such as the use of evaluation methods for the evaluation of the parameter selection, to a great extent to the experience of professional judgment. Although the organization and personnel of evaluation to estimate the value of the assets is based on professional knowledge and experience, but since it is the judgment of personnel with the staff judge inevitably subjective consciousness, with certain subjectivity, and evaluate the project more complex, more subjective, it provides an opportunity for customer influence evaluation institutions. The evaluation mechanism may have subjectivity in some place to carry on the revision, so as to meet the reasonable requirements of customers, seize the customers, but also can maximize avoid their potential liability, which indirectly led to the impact assessment personnel to client pressure to bear ability is weak. In addition, from the perspective of asset appraisal institutions, China's assessment institutions have small and many characteristics. On the one hand, the evaluation institutions are small in scale and weak in competitiveness. Our existing more than 3400 asset evaluation agencies, has a large size of the securities industry to assess the qualifications accounted for less than 3% of the assessment agencies, appraisers in the number of assessment agencies under 10 people accounted for about 80%, assessment agencies above 70% average annual income of less than 500 thousand yuan. Because the evaluation agency personnel less, income is not high, so the evaluation institutions to survive is a top priority, only in the basis of assessment agencies can survive only on the agency's credibility is also considering the assets appraisal quality problems. Small assessment agencies in order to survive will try all vying for a variety of customers, will most likely meet customer's unreasonable demands, which seriously reduces the impact on the customer evaluation agency pressure bearing capacity. On the other hand, unfair competition among a large number of small evaluation institutions also gives customers a dominant position in the game. From ten years development of asset appraisal

agency of our country, the pace of development of asset appraisal institutions and certified asset appraiser rapidly, has formed a certain scale, and the valuation of assets business demand is still mandatory requirements of relevant department in the government. The number of this one asset evaluation agencies and personnel continue to increase, and on the other hand, asset evaluation and the situation of insufficient effective demand has not improved, causing the assessment agencies in order to compete for customers and fierce competition, occupation morals level plus the asset appraisal industry in China in general is not high, the asset appraisal institution the malicious price competition has become an important means of business contract. In addition, the assessment agencies customers can choose a lot, if an evaluation institution does not meet the unreasonable demands of customers, customers will turn to other assessment agencies, and assessment agencies will certainly have promised to the requirements of customers, which makes the assessment agencies into a more awkward position.

Can be seen from the above analysis, in the current situation, change evaluation institutions influence on customer pressure conditions, choose the game participants strategy changes may also occur, then the equilibrium state of the original will be broken, the game will continue to evolve to new equilibrium. Therefore, by changing the conditions that influence the choice of tactics in the game, the equilibrium state of the game can be formed, which is the method and countermeasure to solve the problem.

There are two basic assumptions about the game between the customer and the evaluation agency:

The first is the hypothesis of rational man. This is emphasized is that all persons involved in the game are rational, and the game participants know all the participants are rational, the game participants know the contents of my choice when making decisions, but also give full consideration to the game between the parties to the interaction and influence, and ultimately make rational choice. The rational choice is that the game participants are to maximize their own interests as the only goal in the strategy choices, they are the starting point and destination selection strategy is to maximize the economic benefits. As the undertaker of the independent economic responsibility, the customer and the asset appraisal institution should be rational in making various decisions in order to realize the maximization of their own interests. Second, the hypothesis of bounded rationality. Because of incomplete market, information asymmetry, restricting factors such as imperfect market, such as some of the game participants may have more clear insight or analysis ability more of the game situation, and this is the other participants do not know or do not have, which makes it all in theory strategy game participants rational choice choice in practice there are some limitations. The limited rationality hypothesis of customer and asset evaluation institution is the basic premise of studying the game between them.

According to game theory, a complete game should contain four basic elements: first, participants in the game. The participants in the game are also known as the "people in the game" or the "game maker". They are the participants in the game. The participants of the game mainly refer to individuals or organizations who can make decisions and actions independently, and can independently bear the results of decisions, and these individuals and organizations play an important role in the game. The game between the customer and the hypothesis evaluation institutions only two participants, namely customer and assessment agencies, both players know exactly what effect in the evaluation of the market situation and other strategies for their choice of strategies and interests.

Second, strategy combination. Strategy is the means and tools for the game among the people in the Bureau, and each person should have at least two different strategies in making decisions. The game model assumes that both sides of the game have only two strategies to choose from. For customers, you can choose to influence the assessment agencies to assess

the assessment agencies according to their own requirements, can also choose the wrong evaluation institutions influence; evaluation of institutions, can choose to meet customer requirements for illegal operations or adhere to the principle of not illegal operations.

The basic elements of the game between the regulatory authorities and the evaluation agencies are:

First, participants in the game. The game in the supervision department and the evaluation institutions, assuming only two game participants, namely the supervision department and the asset evaluation agencies, both sides clearly affect their position in the game status and other behavior patterns on their own.

Second, strategy combination. Strategy is the means and tools for the game among the people in the Bureau, and each person should have at least two different strategies in making decisions. The game model assumes that both sides of the game have only two strategies to choose from. The strategy set of the supervision department is: in the process of supervision, we can seriously supervise and discover the problems existing in the assessment institutions, and can not find the problems existing in the evaluation institutions because they are not seriously supervising the evaluation institutions. The strategy set of the asset appraisal institution is to do illegal operation and not to violate the rules.

Third, the order of the game. The order of the game is the order in which the parties in the game make their strategic choices. The game model assumes that both the evaluation agency and the regulatory authority make strategic choices at the same time. Because although assessment agencies and regulators in the strategy choices of time is not the same, the sequence, but before the game to make strategic choices in their own do not know each other's choice of strategy, so you can think of them as such is selected at the same time, with the actual situation is relatively close.

3. Conclusion

Can be seen from the above analysis, western scholars understanding of uncertainty is not unified, to sum up, there are two different kinds of understanding: one is the uncertainty and probability of events associated with the variance of a random variable to describe the magnitude of uncertainty, that is to advance understanding of the risk can know all the possible outcomes, and the probability of each the results, and the uncertainty of understanding do not know all the possible results, or that may result, but do not know the probability of each outcome. For example, throw a coin, the result is either to know beforehand what is back, and the positive and negative probability is 50%, this is the risk of problems; and if the weather forecast is known to snow tomorrow, the snow may or may not snow, but the snow probability cannot be determined, this is the problem of uncertainty. Another is that uncertainty has no stable probability and is not related to probability events. Therefore, one cannot predict the probability of occurrence according to the existing experience or ability.

The first view is a denial of Knight's distinction between risk and uncertainty, equating uncertainty with risk, or that risk is contained in uncertainty. This view undoubtedly provides a way to characterize uncertainty in empirical research on quantitative measurement and management. Undoubtedly, if all the uncertainty can be measured by the probability, or by some numerical calculation, so that the uncertainty into uncertainty, which will reduce the adverse effects of various internal and external factors of the economic system, enhance the stability of economic operation.

In this paper, we tend to distinguish between uncertainty and risk, which are regarded as uncertainty, and the risk is defined as uncertainty with certainty probability. Asset valuation is a kind of assistant method to find assets value by simulating market, analogy analysis and

hypothesis judgment before the transaction value is realized. The asset evaluation before the transaction, and the actual transaction in the assessment; because asset evaluation is always based on certain assumptions, and trading hypothesis has become a real market conditions; because the simulation is in general, but the real deal is another; due to evaluate the need for not to make judgments, but the future is full of nature uncertainty. Therefore, asset evaluation based on hypothesis, analysis, inference and prediction is inherently uncertain. Uncertainty is a real and universal phenomenon in asset evaluation.

Uncertainty about asset valuation has yet to be defined. This paper argues that the uncertainty of asset evaluation refers to the inconsistency of the evaluation results obtained by the same appraiser for multiple evaluations of the same asset. What is emphasized here is that the same appraiser is the same as the 17, which is related to unexpected events and the subjective judgment of the appraiser, in which case the appraiser should give priority to disclosure.

Neutral principle means that the evaluators should maintain independent, objective and impartial stand in the course of the uncertain information disclosure. They are impartial and not partial to the information users of any party.

With the uncertainty of information is not the more the better, too much information, will increase the assessment of staff time and work time and cost, increase the cost of information users screening information, namely, the uncertainty of information disclosure shall conform to the cost-benefit principle.

Evaluation is a process of value judgment, which tries to simulate the market process by certain methods, and evaluates the value of the assets based on historical data. The market value as the basic assumption to perfect competition or complete information, is to determine the value of assets, under ideal condition, however, we live in a world of uncertainty, the objective existence of uncertainty is the assets assessment of the phenomenon. What a best evaluator can do is to rely on information and information, techniques and experience to rule out other possibilities, make assumptions about the most likely circumstances, and obtain relatively definite assessment results. Due to the uncertainty is the objective and universal phenomenon, if we ignore or avoid it, it may cause the evaluation results based on the subjective basis, so as to reduce the evaluation process and the results of scientific and practical evaluation, eventually making mistakes report users. So, to assess possible uncertainties in the process of influencing factors were analyzed to find out the cause of the uncertainty evaluation results, and to assess the teacher assessment report user to better understand and use the evaluation results provide the basis, is the inevitable requirement of development assessment and scientific decision-making.

In addition, in the evaluation of state-owned assets in China, the asset assessment project can be recognized by the relevant regulatory authorities, and it is an important symbol of the successful completion of the asset evaluation project. China's current state-owned assets assessment is the implementation of the audit, filing system, project evaluation of major state-owned assets, must pass the relevant administrative departments of the audit, such as the SASAC, the Commission and other departments, only through the Department of asset evaluation report has the corresponding legal effect.

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