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Analysis on Financial Risks of Derivation and Preventive Measures

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Abstract

Financial derivatives, as innovative financial instrument, have been designed for enterprises to avoid financial risks. Most of these derivatives rely on future trends of traditional tools, such as valuation, interest rates and exchange rates. Such expected future transactions or events can not be recognized as assets because they do not meet the definition of assets, economic resources owned or controlled by enterprises and only made by past transactions. The use of the traditional accounting model does not accurately disclose this kind of "off-balance-sheet items," and their impact on financial statements. This paper provides some methods for enterprises and government to appropriately recognize and reveal the risks and benefits of financial derivatives.

Keywords: Financial derivatives, Fair value, Market risk, Financial statement

1. Introduction

Financial Derivatives have been designed based on the traditional tools. Also known as innovative financial instruments, financial derivatives, which rely on future trends of financial instruments, such as valuation, interest rates and exchange rates, pay a small amount of bonds or gold and sign an inter-period contract or swap transactions of different forms of new financial instruments. They are principal instruments for enterprises to avoid financial risks. So therefore judging from the nature of financial derivatives, it is a contacting access to speculative profits with lower initial investment requirements. So far, there have been 1200 different types of financial derivatives in the international financial market.

In contrast, China's financial derivatives markets have been lagged behind, till the formal launch in 1991. At present, the publicly traded financial derivatives in China are: convertible bonds, foreign currency futures, stock index futures, warrants, bonds, futures and so on.

Financial derivative transactions, excluding futures, which are known as the "off-balance-sheet items," are outside the main financial statements of economic issues. The use of the traditional accounting model does not accurately disclose these transactions and the impact on of enterprises' financial situations are not reflected in the statements, and this is inappropriate to the extremely alarming risk caused by financial derivatives. Many users of accounting information discontented with the sufficiency of the existing financial statements revealed. And thus how to appropriately recognize, measure and reveal the risks and benefits of financial derivatives has become urgent in current accounting theory field. In the following passage, the author will talk about this issue.

2. The Financial Derivatives' impact on traditional financial accounting

2.1. The impact on basic concepts of financial accounting

From the concept of assets and liabilities, the assets are economic resources owned or controlled by enterprises; they can only be made by past transactions and the expected future transactions or events that can not be recognized as asset. However, the major feature of financial derivatives is that the contract embodied in the transactions or events to occur in the future. Therefore, according to the traditional concept, financial derivatives can not be recognized as an asset and so reflected in accounting statements. If the financial derivatives are reduced to assets, it is necessary to change the "assets" concept. If the financial derivatives are reduced to liabilities, it is only a contingent liability that can never be translated into reality liabilities. Once the concept of assets and liabilities are changed, other basic concepts of financial

accounting will also need a series of corresponding changes.

2.2. The impact on recognized accounting standards

Traditional recognized accounting standards are accrual basis and request that income be realized. Both accrual basis and cash basis identified are occurred transactions or events rather than occurring transactions. But financial derivatives transactions indicate a number of financial changes in the future. The sign of forward contracts, a common financial instrument, indicates a certain priced-transaction between financial assets buyer, seller and a series of changes in collection and payment between a certain amount of currency and interest rate during swaps. Such transactions or events, not recognized or reflected in the financial statements, are unpredicted risk faced by user of accounting information. The imperceptibility of off-balance-sheet business has a significant risk and that also explains why effective monitor was difficult to conduct in controlling constant financial derivative chaos these days.

2.3. The impact on the disclosure of financial report

Existing accounting theory is based on realization, matching and conservatism principles, treating the major role of accounting as reflecting corporate occurred profits and request the matching of income and expenses. The fair value of futures contract rate fluctuates with the changes in interest rate while the profit and loss are only related to purchase decision rather than production activities, which makes the achievement of profit no longer the most critical issues. In addition, any change in fair value can not be confirmed in any separate transaction for the period existing between the signing contracts and the final performance. Therefore, the current accounting theory suggests that profits and losses arising from the changes in fair value of interest rate futures contracts are "not achieved", thus should not be confirmed for reliability considerations. The huge amount of risk arising from the frequently fluctuating transaction is not reflected in the balance sheet and will lead to a misleading financial statement, apparently violating the full disclosure principles.

3. Proposed control measures for the financial risks of derivatives

Through the transactions of financial derivatives, part of traders achieves the purpose of hedge and the other part can get high earnings for undertaking risk. Such transactions contribute to economic development and we should not deny the positive role of derivatives. In order to limit the financial risks of derivatives transactions to a certain level, from a macro perspective, the government should establish a sound law and regulation system, carry out seriously and make the best use of such situation; also from a micro perspective, the monitors should strengthen management, make full use of advantage, avoid disadvantage and set models.

3.1 Government should limit the degree of an open financial derivatives market.

The creation of financial instruments has given birth to an unprecedented, prosperous and blooming financial market, changed the traditional areas of business and trading rules of banking system. Derivatives trading business tends to replace the traditional deposit and lending business and becomes the dominant business in commercial banks, investment banks, trust and investment company. Financial enterprises, especially those multinational financial giants rich in operating experience will compel the government to open the market and facilitate it as a perfect profit machine. So the crucial point is whether the government could determine the degree of open market according to its control ability of derivatives and the actual economic condition and create a rational fair market by strengthening internal risk control and clear the responsibility of each trading body. China's financial derivatives have been strictly controlled and the variety and scale of financial instruments are extremely limited until the issue of "Interim Measures for the Administration of financial derivatives transactions" in 2005. All above this show that China's financial derivatives market is still in the initial stage, in terms of the regulatory standards, risk awareness among investors, business level and self-regulatory mechanism. Our country should gradually open the financial derivatives market in accordance with the specific circumstances and the management standards.

3.2. Corporate should divide the confirmation time of financial derivatives into initial stage, follow-up and termination.

Initial recognition is the first confirmation of any item. Generally speaking, initial recognition should be made when a specific and criteria-met transaction occur. Unlike most items, confirmed once, financial derivatives need to be recognized again in follow-up and termination stage because they are on behalf of each forward contact holder's rights and obligations and the period between the signing and the final performance cannot be eliminated. International Accounting Standards No. 39 (IAS39) set the initial confirmation standard as, "Only when enterprises have been one party of a derivative contract, they should confirm it as a financial assets or liabilities in its balance sheet". American Financial Accounting Standard Board (FASB) also points out," the recognition should record not only the occurrence of relevant items but also their consequences after eliminated from financial report." If an item occurs after the initial recognition, the value changes most, for example, the fair value of financial derivatives. Termination and confirmation set the purpose of a contract's final result. IAS39 sets out the termination standards for financial assets and liabilities. To the termination of financial assets, whether it changed into "out of control" is the key issue. To the termination of financial liabilities, only when the liability (or part of liability) abolishes (the discharged, canceled or expiration of obligation), the enterprise should recognize it as financial liability and remove it from the balance sheet.

3.3 Enterprises should enhance the financial information disclosure of derivatives.

First of all, they should improve the structure of traditional accounting statements. For those trading companies with frequent transaction of derivatives which accounted for a larger proportion of turnover, they can increase the content of financial assets and financial liabilities, or change the assets and liabilities according to its liquidity. Assets can be classified as "financial assets" and "non-financial assets", liabilities as "financial liabilities" and "non-financial liabilities." In addition, enterprises can prepare some special statements, such as "financial instruments" and "comprehensive income".

Moreover, we should gradually expand the application of the conservation principle in order to prevent risks. This is a method avoiding risks without revising accounting theory. Specific operation is as follows: First, use a certain method to measure different types of risks. Market risks can be measured by "risk matrix"; credit risk can be calculated by replacement cost; liquidity risk can be based on daily turnover and open positions; operational risk and legal risk can be combined with management mechanism, operating level, and the degree of social law and the quality of employees. Secondly, companies can prepare risk reserve in accordance with the level of risk, the amount of margin and risk factor. Such conduction can ensure the authenticity and accuracy of reserve and has a strong interoperability. Thirdly, company should provide derivatives risk reserve. Debit on "management costs" and credit on "derivative risk reserve" when extraction occur; actual loss, debit on "derivatives risk reserve" and credit on corresponding "financial assets subjects" when actual loss occur. Such information disclosure will help users realize the market supervision from authorities and analyze the current status of company.

Furthermore, we should pay attention to the risk of “off-balance-sheet”. The first thing is to increase the number of notes for a sound realization of financial derivative transactions, which are complex and changeable transactions with a great deal of uncertainty. The specific subjects should include the used accounting methods and policies and its related risks with derivatives. Notes should also include other off-the-balance items, such as a special terms contract. Other important factors, affecting the future cash flows, timing and certainty, should also be considered. The second thing is to use the VaR (Value at Risk) risk management techniques. VaR can be regarded as a dynamic risk management techniques and its value will be revealed in an accounting report. The application of this technique makes an excellent supplement to the traditional static accounting report.

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