

## **Research on Enterprise's Financial Risks Based on the Theory of Sustainable Development**

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### **Abstract**

*Financial risk refers to the financial activities which obtain uncertain possibilities that will let the enterprises suffer economic losses or get a bigger profit. The financial risk is the monetization of the performance of enterprise risks. Nowadays, with the development of the economy, the financial risk which enterprises faced has the trend to be diversified. The financial risk not only will have a huge impact on the enterprises, but also will affect the economy and the social stability in whole country directly. Therefore, it's very important to control the risks. Firstly, the paper describes the theories of financial risks and sustainable development. It includes the types of the risks, the causes and some theories of sustainable development. Then it will search the relationship between the risks and sustainable development. And lastly the paper puts forward some suggestions to control the risks based on the theory of sustainable development.*

**Key Words:** Financial risks; Sustainable development; Risk Controlling

### **1 Introduction**

The development of economy is an important premise of social development and enterprises are the main force of economic development. Therefore, to formulate, implement the strategies and to build economic system of sustainable development are the inevitable choice of enterprises' survival and development and they are also the inherent requirements of social and economic development in China. In the modern economic society, the social and economic environment that enterprises face is complex and changeful; enterprises cannot obtain the information which is helpful to their operations timely and accurately. And the competition among enterprises is increasingly fierce. After the breakout of the financial crisis, the whole world economy is particularly vulnerable. There are many examples that illustrate financial problems have led to the enterprises' bankruptcy, such as CHRYSLER Corporation and GE in USA.

In the process of enterprises' operation, the liquidity of enterprises' resources is increasingly strengthened. The capital resource has become the key factor which can determine an enterprise's development condition and has become the dominant factor that leads other factors. The using efficiency of funds directly determines the operation effect of the enterprises. So how to effectively analyze and control the financial risks that enterprises face and realize the sustainable development of enterprise, this is the meaning why we do research on enterprises' financial risks and sustainable development.

The thesis discusses the concept, the type of financial risks and analyzes the causes of financial risks in detail. It illustrates the importance of the research on how to control the financial risks through analyzing the relationship between financial risks and the theory of sustainable development. In the end, we take Hefei Department Store Group as a case and put forward some strategies after analyzing its financial risks.

### **2 Relevant Theories**

#### **2.1 Summary of Enterprise Financial Risks**

Financial risks measure the additional risk that the firm's stockholders bear when the firm is financed with debt as well as equity. From the perspective of philosophy, financial risk is a kind of objective existence. The managers can only take effective measures to reduce or avoid risks, but cannot completely eliminate the risk.

According to the basic content of financial activities, the financial risk can be divided into funding risk, investment risk, working capital risk, revenue allocation risk. Among these four risks, funding risk refers to the uncertainty of enterprises' financial risks which due to the debt. Investment risk refers to the uncertainty of enterprises' investment income which due to the investment. Working capital risk refers to the uncertainty which will produce negative effects on financial condition and financial result because of the lack of working capital. Revenue allocation risk refers to the uncertainty on production and operation activities in the future due to the revenue allocation.

## **2.2 Introduction of the Theory of Enterprises Sustainable Development**

Enterprises sustainable development refers to when enterprises are in the pursuit of self survival and sustainable development, they should not only consider the achievements of operation goals and the improvement of market position, but also maintain the position in the leading fields, so as to make the enterprises survive for a long time. If an enterprise wants to achieve sustainable development, it must do the followings: system modernization, structure rationalization, advanced technology, collectivized scale and managerial scientization.

## **2.3 The Relationship between Enterprises' Financial Risks and Sustainable Development**

### **1. Enterprises' financial risks restrict the sustainable development**

Financial risk is a very unstable factor during the enterprise' development process, once dropped in financial problems, the impact on the enterprise may be fatal. So it is undoubtedly that the control of financial risk will affect the enterprises' sustainable development, even directly related to the survival of the enterprise. Therefore we must formulate appropriate fiancé strategies.

### **2. Sustainable development of the enterprise has incentive to control financial risk**

To achieve sustainable development is the ultimate goal of the enterprise, but the financial risk is an obstacle in the way to achieve sustainable development. To achieve the ultimate goal, the enterprise will take a series of measures, such as optimizing the structure of production, organizational innovation and so on. These measures laid a solid foundation for sustainable development in the future and provide advantages and power for the development at the present stage.

### **3. The financial risk and sustainable development are interacted on each other**

Through the two points above, we can know that financial risk has a close relationship with sustainable development of enterprise. Enterprise financial risk accelerates the perfection of enterprise financial strategies and improves sustainable development of enterprise; The sustainable development of enterprise makes it more meaningful for the enterprise to make response to financial risk.

In conclusion, financial risk and sustainable development of enterprise are closely related and they are interacted on each other.

## **3. Analysis on Enterprise's Financial Risks Based on the Theory of Sustainable Development**

After describing the relationship between enterprise's financial risks and sustainable development, we can make a conclusion: If an enterprise tends to realize sustainable development, it must regard a good way to deal with financial risks as the premise.

One demand is to hold a stable sustainable growth rate when one enterprise wants to achieve sustainable development. Sustainable growth rate refers to the computation formula is as the following:

Sustainable Growth Rate=Equity Multiplier\*Net Profit Margin on Sales\*Total Assets Turnover\*Retained profit rate

We can explain the four factors in the formula above in four aspects.

### **3.1 The Analysis on Enterprise's Funding Risk**

If enterprise wants to realize normal operations and get profit from the operations, it needs adequate capital. However, the owner of the enterprise should not have all the needed capital for enterprise's operation. So the enterprise should take funding activity before its formal operation.

#### **3.1.1 The Significance of Funding**

When the market economy system is established, the supply system that all the capital enterprise requires should be directly supplied was completely broken.

In this situation, the operators and managers of the enterprise should attach importance to raise funds to expand reproduction. Every link in the operation cannot separate from the support of capital, so raising funds is indispensable to enterprise's operation.

We use Equity Multiplier to measure capital invested by the owners accounted for the proportion of total assets. If the numerical value of Equity Multiplier is big, it indicates the proportion of owners' investment is small; the debt level of enterprise is high. Otherwise, it indicates the debt level is low. The capital structure will change through raising funds, and then lead to the change of Equity Multiplier, and eventually lead to the change of Sustainable growth rate.

### **3.1.2 The Causes of Enterprise Financing Risk**

Financing is essential to any enterprise, if the financial activity is inappropriate, it will lead to financial risk. Mainly embodied in the following four aspects:

#### 1. No legitimacy of financing activities

Illegal fund-raising activities will cause loss to the enterprise itself and related subjects.

#### 2. The low efficiency of financing activities

If an enterprise has the low financing efficiency, it cannot make ends meet, this will lead to the capital turnover difficult. What was worse, it will lead to financial risks.

#### 3. The irrationality of financing activities

The irrationality refers to the scale and the structures of financing activities are irrational.

#### 4. The delay of financing activities

The financing activities should adapt to the time of capital investment. Too early or too late in financing activities can lead to financial risks.

### **3.2 The Analysis on Enterprise's Investment Risks**

In the condition of market economy, whether one enterprise can put the capital to the projects with big earnings but low risks or not is vital to its survival and development.

#### **3.2.1 The Significance of Investment**

In the stage of financing, enterprise has already obtained indispensable capital. At this time, if it tends to be stronger, it should make a general plan of investment and make the resources have an appropriate use. In order to make sure the enterprise can keep the sustainable development.

We use Net Profit Margin on sales to measure the ability of obtaining sales revenue in a certain period and the effect caused by the investment. One enterprise should make the Net Profit Margin on sales be stable in order to keep good health of it.

#### **3.2.2 The Causes of Enterprise Investment Risks**

The irrationality of investment activities will lead to financial risks. Mainly embodied in the following two aspects:

1. The incomplete collection of investment information: The investment decision of one enterprise was decided by the information collected by it. If the enterprise cannot collect enough information, it will easily cause financial risks.

2. The irrationality of investment methods: In the condition of market economy, enterprise has a lot of investment channels to choose, such as buying stocks, bonds etc., and every investment manner has different earnings and risk. So enterprises should optimize the investment portfolio.

### **3.3 Analysis on Enterprise's Working Capital Risks**

#### **3.3.1 The Significance of Working Capital Management**

The working capital is the money which maintains the enterprise's daily operation in a good way; its operation is the basis of the whole enterprise's operation.

We use Total Assets Turnover to measure the ability to gain profits during the period of the operation. If the Total Asset Turnover is unstable, it will lead to the instability of Sustainable Growth Rate, and then it will influence the sustainable development of the enterprise.

### **3.3.2 The Causes of Working Capital Risks**

1. The confusion of working capital management: Every enterprise regards to be stronger as its goal, but if the enterprise's operation goal is not adapt to the financial ability, then the problems will appear.
2. Improper enterprise working capital decision: This means when an enterprise is carrying on the decision of working capital, it cannot make a balance between profitability and risks.

### **3.4 The Analysis on Revenue Allocation Risks**

Revenue allocation is the last step of a financial circle, but we should not look down upon it. The method one enterprise choose to allot its profit will tell investors the financial condition of the enterprise.

#### **3.4.1 The Significance of Revenue Allocation**

Only does the enterprise allot part of the profit to the stockholders can mobilize their investment enthusiasm. In this way, enterprise can have stable investment resource.

We use Retained profit rate to measure the number for dividend income accounted for the proportion of profit after tax.

#### **3.4.2 The Causes of Revenue Allocation Risks**

One reason is that the confirmation of earnings is not accurate, the second reason is that the irrationality of accounting method, the last reason is that the improper enterprise income distribution choice.

### ***4 Analysis on the Financial Risks Control Strategies***

Through the analysis above, we consider that if one enterprise wants to achieve sustainable development, it should get deal with the risks which may run into in the process of financing, investment, operation and allocation.

The purpose of research on financial risk is not to avoid it but to control it in the smallest degree by taking some measures. But for different financial risks, the countermeasures are different.

#### **4.1 The Methods to Control Fund-Raising Risk**

There are various ways to raise money, and the risks caused by fund-raising activities are different. The purpose to do research on controlling financing risks is to decrease the risk when enterprise gets funds. To control fund-raising risks, at first enterprise should do research on financing efficiency. Then, the enterprise selects the appropriate financing scale. Thirdly, the enterprise should select the appropriate financing methods.

#### **4.2 The Methods to Control Investment Risk**

After the enterprise gets enough funds, it will put the money into specific projects. Investment activities include inward investment and external investment. The methods to control investment risks are as followings: Firstly, it should build a perfect system of management. Secondly, to choose the appropriate investment projects. At last, the enterprise should choose the appropriate combination.

#### **4.3 The Methods to Control Working Capital Risk**

In reality, due to the influence of a variety of reasons, working capital has become a weak point in the modern capital circle. So to control working capital risks is of great urgency. The enterprise can control the risks through the methods below. Firstly, make sure the coordination of enterprise internal management functions and strength the management of working capital. Secondly, enterprises should constantly monitor the movement of money in the business activities and optimize the financial structure.

#### **4.4 The Methods to Control Revenue Allocation Risk**

Revenue allocation risk is objective existence, nobody can avoid it, but we can put forward some countermeasures to control it. Firstly, the enterprise should improve the method of accounting. Secondly, it also needs to choose a suitable revenue allocation policy.

## 5. Analysis on Case Company

We take Hefei department store co., LTD (Stock Mode: 000417) as a case. Then use Z-value analysis to analyze the financial risk.

### 5.1 Company Profile

Company's basic situation:

Hefei department store LTD. was founded in 1959. In October 1993, after the approval of Anhui Provincial Reform Committee, Hefei Department Store Building Industrial Company, Hefei Meiling LTD. and Hefei Huaqiao Company got together to form the Directional raise LTD. In 1996, after the approval of the China securities regulatory commission, the company issued 18 million shares to the public, with the shares traded in August. The company's equity is 60,652,490.00yuan after the sale.

In March 1998, after the approval of the China securities regulatory commission, the share capital of the company was changed to RMB 75,403,830 after the allotment of shares by 10 to 3 based on the total share capital of 60,652,490 shares in late 1996. Since 1998, through the rights issue, sending bonus shares and sharing capital by capital reserve, directional issuance and so on, as of December 31, 2012, the company issued a total share capital of 779,884,200 shares, and registered capital of RMB 779,884,200.

The company is a retail industry, the main business scope includes: department stores, hardware, pay electricity, chemical products, textile, food, gold, jewelry, stationery, watches and so on.

### 5.2 Analysis on Corporate Financial Risk

#### 1. Data source description

Select the 2009-2012 financial statement data of Hefei Department Store (stock code: 000417), coming from the Tide of information network (<http://www.cninfo.com.cn>).

#### 2. Z- Value model analysis

**Table 1: 2009-2012 Balance Sheet (partial) of Hefei Department Store**

Unit: RMB

Year	2009	2010	2011	2012
Project				
Total assets	3,693,840,245.74	4,473,527,463.15	6,171,607,445.51	6,664,443,395.38
Total liabilities	2,384,828,232.55	2,822,612,366.94	3,490,532,340.27	3,596,872,332.08
Liquid assets	2,349,718,293.17	3,061,475,898.28	4,649,991,908.94	4,616,472,480.71
Current liabilities	2,347,242,444.40	2,775,796,319.65	3,356,073,247.39	3,432,801,202.19
Undistributed profit	317,037,067.18	508,630,012.65	868,236,890.67	1,158,194,038.26
Surplus reserve	214,399,981.82	260,577,115.42	357,649,500.52	414,202,846.64
Earnings before interest and tax	397,585,740.77	479,037,639.14	781,465,944.72	578,582,200.10
Market value of shareholders' equity	1,309,012,013.19	1,650,915,096.21	2,314,582,479.09	2,660,966,151.14
The main business income	5,885,411,394.09	7,061,699,441.79	8,551,476,138.14	9,105,499,644.95

$$Z=1.2X_1+1.4X_2+3.3X_3+0.6X_4+0.999X_5$$

X1: operating assets / total assets

X2: retained earnings/total assets=(undistributed profits + surplus reserves)/total assets

X3: EBIT / total assets

X4: market value of shareholders' equity / total liabilities

X5: the main business income / total assets

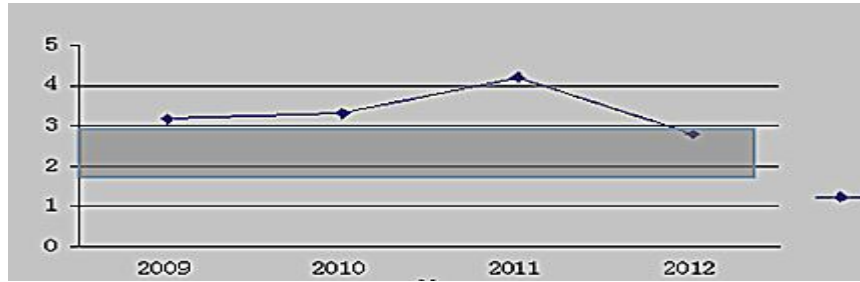
Earlier we mentioned four indices which affect the sustainable growth rate: equity multiplier, sales margin, and total asset turnover and revenue allocation. Then through the comparison we can draw the conclusion that Z model can also be used to analyze the financial risk of the enterprise.

The calculation results are shown in the table below:

**Table 2: Z-value calculations of Hefei Department Store from 2009 to 2012**

	2009	2010	2011	2012
X <sub>1</sub>	0.6358	0.6524	0.5513	0.604
X <sub>2</sub>	0.0916	0.1719	0.1968	0.118
X <sub>3</sub>	0.1076	0.1071	0.1266	0.0868
X <sub>4</sub>	0.5489	0.5848	0.663	0.7398
X <sub>5</sub>	1.593	1.58	2.4499	1.366
Z-value	3.17	3.31	4.2	2.97

According to table 2, we can draw the Z-value line chart of Hefei Department Store from 2009 to 2012:



**Fig.1 Z-Value Line Chart**

Through the calculation, we can see that Z-values in 2009 – 2011 are all bigger than 2.99, indicating that the company's financial condition is great in these three years. However, in 2012 the Z value decreased,  $Z=2.97$  is between 1.81~2.99 of the "gray area", which needs to cause the attention of enterprise managers. Let's analyze the reasons for the decline of Z-value:

(1) Increase in assets

In 2012, the total assets increased 7.98%, and the main reason is that the trading financial assets and fixed assets increase. A substantial increase in assets leads to the decrease of X variables.

(2) Increase in long-term loan

The increase in borrowings of Branch Suzhou Baida leads to the increase of long-term loans. Then, the significant increase in long-term loans and Current liabilities has led to a substantial increase in total liabilities, making X<sub>4</sub> reduced.

(3) Sales, management cost greatly increased

The sales and administrative expenses in 2012 have increased significantly compared to 2011, mainly caused by the increase of staff costs and advertising costs, which brings the burden of enterprise financial.

(4) Total profits decrease

In 2012, the main business income of Baida has increased compared to 2011, but the operating costs increased more greatly over the previous year. Because of the large number of loan and the increased selling expenses, administrative expenses and financial expenses caused by the rapid expansion of store, the operating costs of enterprises also greatly increased. Due to the increased operating costs higher than the increased enterprise income, total corporate profits shows a negative growth.

**5.3 The Issues of Sustainable Development of Baida**

Through the analysis on Hefei Baida's Z value, we can see that from 2011 to 2012, the financial status of the enterprise changes largely, some of which is positive for the enterprise, the other is unfavorable. Concrete analysis is as follows:

(1)The enterprise in a commercial retail, if Baida continue to invest Operating capital to the fixed asset with poor cashability, Baida may face with the problem of shortage of funds. Then, the enterprise's debt paying ability drops, and brings debt crisis, which will make the enterprise in trouble eventually and adverse to the sustainable development of Baida.

(2) The enterprise is in the mature stage. In order to maintain a stable market share, as well as maintain the confidence of investors, the enterprise didn't borrow money to invest. This approach is conducive to the stability of the enterprise, but is unfavorable for the long-term development of enterprise.

(3) The future development of the retail industry may appear two kinds of trends: one is the chain reaction; the other one is to enter the multi format. Hefei Baida has branches in many second tier city in Anhui Province, and involved in many industries, taking the road of diversified development, gradually formed the scale economy, so as to disperse the risk of enterprise management. All these approaches are advantageous to the long-term development of business, but managers must pay attention to complex management problems arise at the same time.

(4) The profitability of enterprises is relatively high. Because the retail business accounted for most of the sales, the sales of inventories and the recovery of funds relatively smooth. In addition, the local people's trust in business is relatively high, so the enterprise can timely recover funds and to achieve the expected profit. Baida should strive to maintain its credibility, and bear certain social responsibilities to create a good public opinion environment for sustainable development.

#### **5.4 Implications and Recommendations**

Through the analysis of the Hefei Baida, we can see that the enterprises of our country are facing great challenges in the condition of increasingly mature market economy. In order to emerge in the competition, and to realize the sustainable development, they need to improve themselves. A few suggestions are as follows:

1. Establishing and improving internal control system of enterprise groups. With the continuous expansion of business scale, internal management issues will become increasingly complex. While sound internal control system is able to restrict relevant personnel, as far as possible to avoid loopholes in the management, and control financial risks at the same time.
2. Strengthening the enterprise's capital budget, allocate funds legitimately, maintain appropriate cash reserves, and select the appropriate financing and investment to ensure optimum efficiency in the use of funds.
3. Establishing the risk early warning system, and analysis the company's financial data regularly to understand the changes in the enterprise financial situation. Identify problems and adjust timely to reduce the probability of the occurrence of financial risks. For example, we can analyze by the Z value model, and make response to the problems may appear in advance.

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