

Research on the Impact of the Nature of Receivables of Listed Companies in China on Financial Risks

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Abstract—By strengthening the management of the corresponding receivables, it can effectively promote the economic development of the enterprise and enhance the market competitiveness of the enterprise. Different aging analysis methods will affect the accrual of accounts receivable, which will have different degrees of impact on financial risks. This paper takes 296 listed A-share listed companies in China from 2014 to 2017 as the research object, and studies the impact of the nature of accounts receivable of listed companies on financial risks in six aspects. The research results show that the nature of the company's accounts receivable has a significant impact on the financial risks of enterprises. Among of them, the total accounts receivable, the accounts receivable, the accounts receivable for more than two years, the accounts receivable for more than three years are positively correlated with the financial risks. Accounts receivable for more than two years, and accounts receivable for more than three years are negatively correlated with financial risk inputs.

Keywords—*company receivables nature, financial risk, aging, provision for bad debts*

I. INTRODUCTION

Accounts receivable is a kind of creditor's right to win more customers in order to increase sales and expand the market under the fierce market economy. The accounts receivable of listed companies will have an impact on financial risks.

In the study of the impact of accounts receivable on the financial risks of listed companies, scholars draw the following conclusions from different perspectives: Wang Hongyan (2012) believes that there are two reasons for the bad receivables. First, the buyer lacks credit awareness. Second, the seller lacks a sound marketing system and cannot fully understand customer needs. Huang Yanqiu (2012) pointed out that China's current corporate receivables management system is not sound, the response mechanism is not flexible, and the internal incentive mechanism is not perfect. Li Ruxin (2012) believes that a large number of accounts receivable have caused the cost of accounts receivable to rise, and the expansion of some accounts receivable has caused a large number of bad debts, which will further erode the interests of listed companies. This potential risk prevention should attract the attention of enterprises or bring to huge financial risks. Li Min (2013) believes that the scientific evaluation and management of the customer's credit situation is fundamental to control the risk of accounts receivable. It need to establish a credit management system to uniformly and uniformly manage the credit information of all customers. Mao Jinli, Hou Yao (2012) believes that credit evaluation before corporate credit sales is weak. Credit sales are the cause of bad debts. Before conducting credit sales, enterprises should carry out customer credit rating and credit evaluation, strengthen pre-, post-, and post-event control, and strengthen corporate receivables management. Chen Yingxin (2007) described that the risk of accounts receivable was caused by imperfect social credit system and poor internal management.

II. THEORETICAL BASIS

A. Financial Risk Management Theory

- *A narrow understanding of financial risks*

Financial risk refers to the uncertainty of the financial results caused by the company's liabilities. The size of the risk is affected by the size of the company's debt. The larger the debt, the greater the risk. The less the debt, the smaller the risk. This view holds that financial risk refers only to the risk of debt financing, and it is a narrow understanding of it.

- *General understanding of financial risks*

In the various production and operation activities of the enterprise, the internal management system is very important for the normal operation and development of the enterprise. The actual financial income of the enterprise tends to be different from the expected return, which may lead to different degrees of financial loss, thus forming the financial risks of the company. It defines financial risks from the entire financial activities of the company and is a broad interpretation of financial risks. The research perspective of this paper is a broad financial risk, focusing on the risk of payment in the financial risk of the enterprise.

B. Accounts Receivable Management Theory

- *Principle of prudence*

The general enterprise will regularly check the internal and external assets of the enterprise and effectively estimate the possible losses of the assets. The accrual of the accounts receivable of the enterprise needs to follow the principle of prudence, many enterprises will not only make provision for bad debts but also account for other receivables. In accordance with the principle of accrual basis, the current income and expenses and bonds and debts are determined by the actual right to receive cash or the current liability of the liability, which ultimately express the financial book profit. If the enterprise's income is greater than the cost, the profit will increase; if some money cannot be recovered, these additional expenses will cause the company's capital to lose and weaken the capital value. Therefore, provision for bad debts according to a certain proportion and method is conducive to the preservation of corporate capital.

- *Credit Management of Accounts Receivable*

Accounts receivable is a kind of commercial credit provided by the enterprise to the customer. The payment management can be divided into two aspects:

(1)reconciliation management. Focus on follow-up for key customers, conduct daily reconciliations at any time, and conduct centralized reconciliations on a regular basis. If you find a problem, you need to solve the problem and report it in time.

(2)Ageing analysis. Regularly develop an aging analysis form, analyze the aging of the accounts receivable, and hold special analysis meetings on a regular basis to discuss the amount of accounts receivable, customer credit management, risk customers, and key collection targets, etc. For different aging periods, there must be a targeted method for payment, and extra care should be paid to the overdue debts to avoid bad debts.

III. EMPIRICAL ANALYSIS

A. Data Source

This paper takes 296 listed A-share listed companies from 2014 to 2017 as the research object. Considering the use of panel data, the listing time is up to 2017, and companies with significant missing and missing data are excluded. All of the financial data in the empirical analysis comes from the CSMAR database. By downloading the annual financial statements of listed companies, a large amount of data on accounts receivable in the listed company's statements was manually collected.

B. Research Hypothesis

This paper studies the relationship between accounts receivable and the company's financial risk from six aspects(The book value of accounts receivable with one year, two years and three years, and the provision for bad debts of accounts receivable)

- *The relationship between financial risk and total accounts receivable*

The total amount of accounts receivable is the sum of accounts receivable formed by the sale of goods and the provision of labor services. Generally speaking, the more accounts receivable formed by enterprises selling goods or providing labor services, the more accounts the company expects to receive, so the financial risks of enterprises will be higher.

Hypothesis 1: Total amount of accounts receivable is significantly positively correlated with corporate financial risk

- *The relationship between financial risk and provision for bad debts of accounts receivable*

The company will generate a large amount of accounts receivable in the course of operation, but the accounts receivable as an asset of the enterprise may not be able to recover, so the company has to accrue a certain proportion of bad debts every year. However, if the provision for bad debts is too high, it will affect the business results of the company and increase the financial risks of the company.

Hypothesis 2: The provision for bad debts of accounts receivable is significantly positively correlated with corporate financial risk.

- *The relationship between financial risk and accounts receivable for more than two years*

Many companies' accounts receivable use aging analysis to estimate the possibility of capital recovery. The more accounts receivable for more than two years, the higher the financial risk of the company.

Hypothesis 3: Accounts receivable for two years or more are significantly positively correlated with corporate financial risk

- *The relationship between financial risk and provision for bad debts of accounts receivable for more than two years*

Enterprises follow the principle of accrual and cautiousness. More than two years of accounts receivable are accrued for bad debts, which is conducive to the early recognition of the difficulty of receivables, and timely adoption of corresponding remedial measures. , thereby reducing the business risk of the company.

Hypothesis 4: The provision for bad debts of accounts receivable for more than two years is significantly negatively correlated with corporate financial risks.

- *The relationship between financial risk and accounts receivable for more than three years*

The more accounts receivable of the enterprise for more than three years, the more funds that are not recovered by the

company over time, which undoubtedly leads to the reduction of the company's funds, the financial risks of the company and the normal operation of the company.

Hypothesis 5: Accounts receivable for three years or more are significantly positively correlated with corporate financial risk

- *The relationship between financial risk and provision for bad debts of accounts receivable for more than three years*

The more bad debt provision for the accounts receivable of the enterprise for more than three years, the more the company has realized the difficulty of collecting accounts receivable for more than three years, so the amount of the provision is large, and the countermeasures can be taken earlier. Reduce financial risk.

Hypothesis 6: The provision for bad debts of accounts receivable for three years has a significant negative correlation with corporate financial risks.

C. Variable and Variable Definition

TABLE I. VARIABLE DEFINITION TABLE

| Variable type | Variable name | Variable symbol | Variable definition |
|--|---|-------------------------|--|
| Interpreted variable Financial risk Z | Financial risk | Z | $Z=1.2X_1+1.4X_2+3.3X_3+0.6X_4+0.999X_5$ |
| Explanatory variable | Total amount of accounts receivable | AC_TOTA | Total of sales of goods and labor receivables divided by total assets |
| | Accounts receivable accrual | AC_CODR | Accounts receivable bad debt provision divided by total assets |
| | Accounts receivable for more than two years | AC_TWO | Accounts receivable that the company has not recovered within two years divided by total assets |
| | Accounts receivable for more than two years | AC_TWCO | Accounts receivable that the company has not recovered within two years divided by total assets |
| | Accounts receivable for more than three years | AC_THER | Accounts receivable that the company has not recovered within three years divided by total assets |
| | Accounts receivable for more than three years | AC_THCO | Provision for bad debts of accounts receivable that have not been recovered within three years divided by total assets |
| Control variable | Cash flow | CAFL | The amount of cash and cash equivalents flowing into and out of the enterprise over a certain period of time |
| | Capital size | ASSE | The natural logarithm of total assets |
| | Asset-liability ratio | DEBT | Total liabilities / total assets at the end of the year |
| | Cash in hand | CASH | Cash and cash equivalents / average total assets |
| | Proportion of independent directors | INDI | Independent directors / number of board members |
| | Top ten domestic firms | AU_TEN | Whether INDV is the top ten accounting firm in China is 1 or not 0 |
| | Asset income | ROA | Net profit / book total assets |
| | Annual dummy variable | YEAR | The year is 1, no 0 |
| Industry dummy variable | INDV | The industry is 1, no 0 | |

D. Data Analysis

- *Model construction*

Based on the above assumptions, in order to explore the degree of impact of the nature of accounts receivable of listed companies in China on financial risks, financial risk is selected as the observed indicator of explanatory variables. Total accounts receivable (AC_TOTA), bad debt provision for accounts receivable (AC_CODR), accounts receivable for more than two years (AC_TWO), bad debt provision for accounts receivable for more than two years (AC_TWCO), more than three years (AC_THER) and the bad debt provision for accounts receivable for more than three years (AC_THCO) were determined as explanatory variables for explanatory variables, and the following multiple regression models were established

$$Z_{i,t}=\beta_0+\beta_1 REC_{i,t}+\beta_2 CAFL_{i,t}+\beta_3 ASSE_{i,t}+\beta_4 DEBT_{i,t}+\beta_5 CASH_{i,t}+\beta_6 INDI_{i,t}+\beta_7 AU_TEN_{i,t}+\varepsilon \quad (1)$$

Where Z is the size of the financial risk; GOV is the explanatory variable, which represents AC_TOTA, AC_CODR, AC_TWO, AC_TWCO, AC_THER, AC_THCO, respectively. AC_TOTA is the sum of the sales of goods and labor receivables of the enterprise; AC_CODR is the provision for bad debts in the sum of accounts receivable; AC_TWO is the accounts receivable that the enterprise has not recovered within two years; AC_TWCO is confiscated within two years Bad debt provision for the back receivables. AC_THER is the provision for bad debts for accounts receivable that have not been recovered within three years; AC_THCO is the provision for bad debts for accounts receivable that have not been recovered

within three years. *i* and *t* represent the company and the year, respectively. Model (1) explores the impact of the nature of accounts receivable in listed companies on financial risks in China, and uses the above model as the basis for regression analysis.

- *Results Analysis*

TABLE II. REGRESSION TABLE OF ACCOUNTS RECEIVABLE AND FINANCIAL RISK

| | Z(1) | Z(2) | Z(3) | Z(4) | Z(5) | Z(6) |
|---------------------------|-----------------------|-------------------------|-----------------------|-----------------------|-----------------------|------------------------|
| <i>C</i> | 52.744*** (5.815) | 39.362*** (7.317) | 52.676*** (5.622) | 47.782*** (6.296) | 56.619*** (5.766) | 55.177*** (6.075) |
| <i>AC_TOTA</i> | 4.251*** (11.753) | | | | | |
| <i>AC_COD</i> <i>R</i> | | 52.017*** (4.171) | | | | |
| <i>AC_TWO</i> | | | 3.893*** (12.085) | | | |
| <i>AC_TWC</i> <i>O</i> | | | | -7.554*** (-3.440) | | |
| <i>AC_THE</i> <i>R</i> | | | | | 35.249*** (8.622) | |
| <i>AC_THC</i> <i>O</i> | | | | | | -20.769*** (-7.681) |
| <i>CAFL</i> | 8.188*** (8.567) | 8.655*** (8.672) | 8.236*** (9.168) | 7.475*** (8.535) | 17.587*** (7.483) | 7.803*** (8.409) |
| <i>ASSE</i> | -2.079*** (-5.431) | -1.580*** (-8.731) | -2.058*** (-5.241) | -1.929*** (-6.396) | -4.054*** (-5.366) | -2.183*** (-5.598) |
| <i>DEBT</i> | 0.641 (1.333) | 0.288 (0.701) | 0.213 (0.498) | 0.351 (0.664) | 9.370*** (4.620) | 0.729 (1.447) |
| <i>CASH</i> | 8.700*** (0.798) | 5.584** * (4.416) | 8.002*** (10.091) | 10.258 (12.382) | 3.340 (1.196) | 8.738*** (10.295) |
| <i>INDI</i> | -4.798*** (-3.242) | -2.757 (-1.256) | -5.176*** (-3.106) | -3.199** (-2.332) | -5.374** (-2.244) | -4.086** (-2.563) |
| <i>AU_TEN</i> | -0.147 (-1.088) | -0.207 (-1.195) | -0.199 (1.655) | -0.076 (-0.477) | -1.453** (-2.950) | -0.088 (-0.691) |
| <i>YEAR</i> | <i>YES</i> | <i>YES</i> | <i>YES</i> | <i>YES</i> | <i>YES</i> | <i>YES</i> |
| <i>INDV</i> | <i>YES</i> | <i>YES</i> | <i>YES</i> | <i>YES</i> | <i>YES</i> | <i>YES</i> |

From the results of the model test, it can be seen that the F values are all significant at the level of 1%, and the regression equation of the model can be judged to be highly accurate; the adjustment R2 is also about 0.5, indicating that the interpretation ability of the model 1 is still relatively strong, indicating that the total amount of accounts receivable, bad debt provision for accounts receivable, accounts receivable for more than two years and accounts receivable for more than three years are significantly related to financial risks. that is, the total amount of accounts receivable, accounts receivable, accounts receivable for more than two years, and the higher the accounts receivable for more than three years, the higher the financial risk of the enterprise. It shows that the excessive amount of accounts receivable of enterprises is not conducive to the economic development of enterprises and will weaken the value of enterprises; The regression coefficients of AC_TWCO and AC_THCO are both negative and significant at the level of 1%, indicating that there is a significant negative correlation between the provision for bad debts of accounts receivable for more than two years and more than three years and financial risks, which explains that excessive provision of bad debts by enterprises will weaken the profitability of enterprises and is not conducive to the economic development of enterprises.

IV. CONCLUSION

Based on the empirical research results of the impact of the above-mentioned sub-indicators on the financial risks, and based on the theory of accounts receivable and financial risks and the existing relevant literature, this paper puts forward the

following suggestions.

1) Take the method of double analysis of aging. After the formation of accounts receivable, the analysis of the age of the accounts should also pay attention to the part of the accounts receivable that has not been recovered, and analyze it reasonably according to the characteristics of the ageing.

2) Not only must we consider the amount of aging but also the quality, so that we can provide more effective information for enterprises. A scientific method is used to divide the aging section. Accounts receivable has its own unique characteristics. In the statistics, it should be fully considered. Accounts receivable has strong liquidity, and the gap between each age group is gradually adjusted according to the increase of age.

3) To establish a scientific and reasonable internal control system for accounts receivable, for the accounts receivable enterprises, there should also be a set of unique, scientific, and practical value control systems, which will be specific financial analysis, opinion analysis, and system optimization. Assigned to specific positions. Secondly, the setting of the control system can fully reflect the importance attached by the enterprise leadership to the work, and the responsible personnel of the relevant work will complete the work more seriously and meticulously.

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