

Do Credit Impairment Losses and Asset Impairment Losses have Difference in Economic Consequences: Empirical Evidence from Chinese A&H-share Companies

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Abstract

Based on a sample of listed A&H share Chinese companies from 2015 to 2020, this paper explores the differentiated economic consequences of credit impairment losses and asset impairment losses from the perspective of executive compensation and debt contracts after the executing of IFRS9. The results show that the provision of credit impairment losses is positively associated with the debt cost next period, which is stronger when credit impairment losses presented separately. Furthermore, the cost of debt is more sensitive to credit impairment losses in companies which are state-owned, non-CEO dualit and eastern placed. In terms of executive compensation, asset and credit impairment losses before the separate presentation are significantly negatively associated with the executive compensation. This is more obvious in the companies with private property, non-CEO duality and eastern location.

Keywords

Credit Impairment; Asset Impairment; Debt Cost; Compensation.

1. Introduction

Since the outbreak of the Great Depression, people have generally noticed that the existing accounting standards have some major deficiencies in risk warning and risk management [1]. In 2017, Chinese accounting standards changed the credit impairment loss accrual model from the Incurred Credit Loss Model (ICL) to the Expected Credit Loss Model (ECL), and required separate presentation in the income statement. In 2018, all the A&H share Chinese companies officially began to implement the requirements of the standard, which is undoubtedly the result of accounting standards being subject to external pressures such as financial supervision.

Because of the rise of decision-making availability, standard-setters have unanimously believed that fair value accounting is the most effective way to implement standards[2]. Credit impairment losses are estimated by discounting the expected future cash flows of financial assets based on the ECL model, which is undoubtedly a further manifestation of fair value accounting. Compared with the ICL model, ECL shows stronger characteristics of timeliness, correlation and robustness , but due to the simultaneous introduction of a large number of management estimates, the reliability of the information contained in it has been reduced.

The standard's requirements for the calculation of credit impairment losses are significantly different from the theoretical basis for the provision of asset impairment losses. The accounting information of the financial report should be based on the existing or past events, and the expected credit loss is based on the estimation of the future, and its measurement view is contrary to the traditional accounting essence and related concepts. The tendency to make neutral and unbiased estimates of assets and liabilities embodied in the ECL model is also shaking the boundaries of accounting [3].

There are two main differences in the impairment losses accrued for related financial instruments in the old and new standards: first, the theoretical basis for accruing credit

impairment and asset impairment losses is different; and second, the new standards are presented separately for credit impairment losses. Therefore, the information value of credit impairment losses should be different before and after the separate listing, even though the impairment provision is made for the same financial instruments.

So do the provisions for credit impairment losses and asset impairment losses required by the new accounting policy have significantly different consequences for the measurement based on the contractual view? Effective contracts are an important part of effective corporate governance, and the most typical contract is a contract centered on debt and compensation. Debt contracts often contain clauses based on accounting information, and managers' compensation contracts often depend on reported earnings, so in exploring whether the "forward thinking" of credit impairment losses has an impact on the effectiveness of contracts, the cost of debt and compensation Cost is a more reasonable point of view.

The possible contributions of this research are mainly reflected in the following aspects: First, combined with the latest accounting policies, this paper expands the research on the economic consequences of credit impairment losses on corporate debt costs and executive compensation. Secondly, this paper can help improve the company's corresponding normative mechanism, and provide a certain reference for stakeholders to better understand the connotation of executive compensation and debt cost of listed companies, and how to evaluate and apply accounting information such as credit impairment.

2. Literature Review and Hypothesis

2.1. Impairment and Debt Cost

Asymmetric returns make lenders pay more attention to conservatism than equity investors when weighing the role of accounting information[4,5]. The research of Ball, Robin and Sadka [6] provides proof that the main demander of the robustness of a market condition is the lender, and the creditor is more inclined to choose robust accounting information as the reference for contract formulation. Credit impairment losses are conducive to robustness, because the expected credit loss model is more robust than the incurred loss model, so from this perspective, the accounting information contained in it should receive more attention from creditors.

However, asymmetric returns also make lenders pay more attention to reliability when weighing relevance and reliability. From the perspective of effective contracts, the reliability of accounting information can increase the creditor's sense of security and trust[7]. In order to be reliable, valid accounting information should be based on realized trading markets and verifiable by third parties. However, the credit impairment loss calculated based on the ECL model actually introduces a large number of management estimates. The characteristics of the discounted earnings of the ECL model obviously tilt the accounting information contained in the credit impairment loss towards relevance, which in turn affects the reliability. The reduction of information reliability will undoubtedly reduce its value to creditors. Therefore, the reference value of the credit impairment loss item to the contract when it is formulated is controversial, and its information characteristics that are good for robustness but not good for reliability make the formulation of debt contracts into a dilemma.

Both asset impairment losses and credit impairment losses may affect the level of corporate governance, and they also mean the disclosure of risk information faced by enterprises. Once the impairment information of listed companies is made public, it will arouse the negative emotions of stakeholders and further lead to negative market reactions[8]. The provision of impairment losses on assets will transmit negative information about the company to the outside world, which will ultimately affect the cost of corporate debt financing. Therefore, considering the possibility that the borrower's performance declines and the debt principal and interest cannot be repaid in time, creditors will demand higher yields from companies with

greater risk exposure in the debt covenant. Both asset impairment losses and credit impairment losses will have an impact on the cost of debt. At the same time, credit impairment losses are more forward-looking and have introduced a large number of estimates of future expectations, which may have a more significant impact on the company's future debt repayment ability. The impact of impairment losses on the cost of debt may be more pronounced. Based on the above analysis, this paper proposes Hypothesis 1:

H1: The company's provision for asset impairment losses and credit impairment losses will both lead to an increase in the debt cost, and the impact of credit impairment losses on the company's debt cost is more significant.

2.2. Impairment and Compensation

According to the theory of effective contracts, compensation is a reflection of executives' ability [9]. When the company's performance is not good, the board of directors will punish executives by reducing salary or dismissing them [10,11]. Jensen et al. [12] argued that managers' income should be positively related to firm performance. Therefore, both asset and credit impairment losses will affect the company's current performance, which in turn will adversely affect executive compensation.

A large number of literatures have found the correlation between executive compensation and company performance [13,14], and further research has been carried out on the performance sensitivity of executive compensation [15,16]. Zhang Jinruo et al. [17] found that the gains (losses) from changes in fair value included in the income statement are significantly positively (not) correlated with changes in executive compensation, that is, there is a certain phenomenon of "heavy rewards and light penalties" in executive compensation. Mark et al. [18] found that the non-fair value provision of IFRS increased the link between corporate net income and executive cash compensation payments, while the existence of fair value mitigated this link.

Asset impairment losses are extracted according to the ICL model, which reflects the current operating results and the actual situation that has occurred; credit impairment losses are measured based on the ECL model, which reflects the expectations of the corporate authorities on the future performance of relevant financial assets. Information is more fair and forward-looking. Therefore, although both asset impairment losses and credit impairment losses will reduce executive compensation, executive compensation, as a return for executives' current operating efforts, will be more based on current operating conditions or operating conditions that have occurred. react. In addition, executive compensation itself has a rigid demand for changes in fair value, and credit impairment losses introduce an expected estimate, that is, such losses are unrealized losses, which are more likely to make executive compensation formulations less affected. Based on the above analysis, this paper proposes Hypothesis 2:

H2: Enterprises accruing credit impairment losses and asset impairment losses will lead to a decrease in executive compensation, and asset impairment losses will have a more significant impact on executive compensation.

3. Methodology

3.1. Sympols and Data

Considering the availability of H.K. stock data and the differences between H,K, and mainland economic markets, this paper selects China's A&H share listed companies from 2015 to 2020 as the research object, and selects them according to the following criteria: (1) Eliminate samples with variable missing values; (2) Eliminate financial samples; (3) Eliminate the marked ST or *ST samples in the current year; (4) Eliminate some abnormal variables (such as $Lev > 1$) samples. Finally, 1,536 annual samples of debt cost-related research and 1,971 annual samples

of executive compensation-related research were obtained. In addition, this paper winsorize the upper and lower 5% quantiles of all continuous variables.

The data acquisition methods required for the research are as follows: (1) The credit impairment loss data calculated based on the incurred loss model from 2015 to 2017 were collected and aggregated manually; (2) The regional marketization index was obtained from the progress report of the "China Marketization Index" [19]; (3) Other data are taken from the CSMAR financial research database.

3.2. Variable Description

Table 1 shows the main variables defined in this paper.

It should be noted that the specific data of credit impairment losses measured based on the ICL model from 2015 to 2017 are extracted from the details and notes of asset impairment losses in the annual report. Asset impairment losses from 2015 to 2017 are the remainder of the data presented in the income statement excluding credit impairment losses. From 2018 to 2020, since the credit impairment loss has been listed separately, the asset impairment loss data in the income statement is directly used.

In addition, this paper draws on the methods of Zheng Dengjin and Yan Tianyi [20], Li Xiaodong and Zhang Xiaojie [21] to calculate the cost of debt : (Cash paid for distributing dividends, profits or repaying interest + changes in interest payable-dividends paid in the current year-changes in dividends payable) / (short-term loans + long-term loans +long-term loans due within one year + bonds payable).

Table 1. Variable Definition

| Variable | Symbol | Defination |
|-------------------------------------|------------|--|
| Debt Cost | Cod | The methods of Zheng and Yan [20], Li and Zhang [21] |
| Compensation | LnPay | Ln(Total compensation of the top three executives) |
| Credit Impairment Losses | Credit | Current credit impairment loss/total assets |
| Asset Impairment Losses | Impairment | Current asset impairment loss/total assets |
| Credit-impaired Type | After | 1 for credit impairment based on measurement, 0 otherwise |
| Company Size | Size | Ln(Total assets) |
| Debt to Asset Ratio | Lev | Total liabilities/total assets |
| Profitability | Roa | Net profit/totalassets |
| Fluidity | Cur | Current assets/current liabilities |
| Cash Capacity | Cf | Net cash from operating activities/main business income |
| Growth Ability | Growth | Difference between last year's operating income/current operating income |
| Time Interest Earned Ratio | Icr | (Net Profit + Income Tax Expenses + Finance Expenses) / Finance Expenses |
| Equity Multiplier | Em | 1/(1-Debt to asset ratio) |
| Proportion of independent directors | Idp | Proportion of independent directors in board |
| Book to Market Ratio | Bm | Total assets/market value |
| Market Index | Market | The degree of marketization in the region where the company is located |
| Holding of the largest shareholder | Top | Shareholding of the largest shareholder |
| CEO Dualit | Cd | 1 for CEO dualit, 0 otherwise |
| Industry Dummy | Ind | Industry Dummy Variable |
| Year Dummy | Year | Year Dummy Variable |

3.3. Model Design

Considering the lagging effect of asset impairment losses and credit impairment losses information transmission on contract formulation, this paper lags the debt cost by one period. Since executive compensation mainly reflects the current management performance of executives, variables are used to regress the current executive compensation without considering the lag effect. The model designed for this study is as follows:

$$\begin{aligned} Cod_{i,t+1} = & \beta_0 + \beta_1 Credit_{i,t} + \beta_2 Impairment_{i,t} + \beta_3 After_{i,t} + \beta_4 Credit_{i,t} \times After_{i,t} \\ & + \beta_5 LnSize_{i,t} + \beta_6 Lev_{i,t} + \beta_7 Roa_{i,t} + \beta_8 Cur_{i,t} + \beta_9 Cf_{i,t} + \beta_{10} Em_{i,t} + \beta_{12} Big4_{i,t} \\ & + \beta_{13} Bm_{i,t} + \beta_{14} Idp_{i,t} + \beta_{15} Icr_{i,t} + \sum Ind + \sum Year + \varepsilon_{i,t} \end{aligned} \quad (1)$$

$$\begin{aligned} LnPay_{i,t} = & \beta_0 + \beta_1 Credit_{i,t} + \beta_2 Impairment_{i,t} + \beta_3 After_{i,t} + \beta_4 Credit_{i,t} \times After_{i,t} + \beta_5 LnSize_{i,t} \\ & + \beta_6 Lev_{i,t} + \beta_7 Roa_{i,t} + \beta_8 Cf_{i,t} + \beta_9 Cur_{i,t} + \beta_{10} Cd_{i,t} + \beta_{11} Market_{i,t} + \beta_{12} Top_{i,t} \\ & + \beta_{13} Bm_{i,t} + \sum Ind + \sum Year + \varepsilon_{i,t} \end{aligned} \quad (2)$$

Model (1) and model (2) studies the differential impact of asset impairment losses and credit impairment losses from the perspective of debt cost and executive compensation respectively. In the regression model, the meaning of Credit is the part of credit impairment losses measured based on ICL and attributed to asset impairment losses and separated by manual extraction from 2015 to 2017; the meaning of the interaction item Credit×After represents the credit impairment losses accrued based on ECL from 2018 to 2020 that can be directly obtained from the income statement. Therefore, by comparing the partial regression coefficient corresponding to Credit and Credit×After in the model, we can compare the impact of credit impairment losses on the cost of debt and executive compensation before and after the separate presentation of credit impairment losses.

According to H1, it could be expected that β_1 , β_2 and β_4 in model (1) are positive, and β_4 is more significant than β_1 , β_2 . According to H2, it could be expected that β_1 , β_2 and β_4 in model (2) are negative, and β_1 , β_2 is more significant than β_4 .

4. Results and Discussion

4.1. Descriptive Statistics

Corresponding to models (1) and (2) in Table 2, the average cost of debt of lagging period after the separate presentation of credit impairment losses is 0.107, which is significantly higher than the average of lagging period before the presentation of credit impairment losses. The quantile results of the cost of debt of the two groups have little difference, and the standard deviation increases significantly before and after the separate presentation, which indicates that the cost of debt of individual enterprises has changed greatly after the separate presentation, leading to a greater degree of differentiation in the overall cost of debt financing. The logarithmic average of executive compensation after separate presentation is 15.344, which is higher than that before separate presentation of credit impairment loss. The three quartiles all increase over time, and the standard deviation of executive compensation from 2018 to 2020 is 0.8923, compared with 0.7293 of executive compensation from 2015 to 2017, that is, the degree of differentiation of executive compensation level is relatively greater.

Table 2. Variable Descriptive Statistics

| Variable | 2015-2017(Before Separate Presentation) | | | | | 2018-2020(After Separate Presentation) | | | | |
|------------|---|--------|--------|---------|--------|--|---------|----------|---------|--------|
| | Mean | 25% | 50% | 75% | SD | Mean | 25% | 50% | 75% | SD |
| Cod_1 | 0.0633 | 0.0313 | 0.0528 | 0.061 | 0.0379 | 0.1070 | 0.04276 | 0.06344 | 0.0721 | 0.1167 |
| LnPay | 15.003 | 14.210 | 14.583 | 15.0703 | 0.7293 | 15.344 | 14.509 | 14.883 | 15.453 | 0.8923 |
| Credit | 0.0019 | 0.0001 | 0.0008 | 0.003 | 0.0027 | -0.001 | -0.0017 | -0.0001 | 0 | 0.003 |
| Impairment | 0.0035 | 0.0001 | 0.0016 | 0.004 | 0.0049 | -0.001 | -0.0033 | -0.0002 | 0.0014 | 0.0071 |
| LnSize | 23.695 | 22.61 | 23.50 | 24.62 | 1.3067 | 23.94 | 22.9486 | 23.68127 | 24.84 | 1.346 |
| Lev | 0.5788 | 0.4731 | 0.5824 | 0.697 | 0.1571 | 0.5452 | 0.42012 | 0.550972 | 0.66406 | 0.1637 |
| Roa | 0.0283 | 0.0116 | 0.0246 | 0.0569 | 0.1425 | 0.0298 | 0.0139 | 0.0307 | 0.0453 | 0.0783 |
| Cur | 1.2805 | 0.7614 | 1.2032 | 1.705 | 0.6539 | 1.346 | 0.87139 | 1.257872 | 1.65128 | 0.6211 |
| Cf | 0.1146 | 0.0205 | 0.0884 | 0.1991 | 0.1579 | 0.1392 | 0.34871 | 0.10259 | 0.2169 | 0.1574 |
| Cd | 0.1423 | 0 | 0 | 0 | 0.3493 | 0.1566 | 0 | 0 | 0 | 0.3634 |
| Market | 8.239 | 7.07 | 8.638 | 9.78 | 1.714 | 9.424 | 8.0118 | 9.5351 | 11.093 | 2.0588 |
| Em | 0.9354 | 0.4329 | 0.7183 | 1.1138 | 0.8156 | 1.11 | 0.5172 | 0.8195 | 1.3803 | 1.1097 |
| Big4 | 0.1940 | 0 | 0 | 0 | 0.3957 | 0.2185 | 0 | 0 | 0 | 0.4136 |
| Bm | 0.6983 | 0.5131 | 0.7408 | 0.911 | 0.2388 | 0.8413 | 0.6612 | 0.908206 | 1.03584 | 0.2443 |
| Idp | 0.3755 | 0.3333 | 0.3636 | 0.429 | 0.0504 | 0.3861 | 0.33333 | 0.363636 | 0.42857 | 0.0632 |
| Icr | 6.509 | 1.8901 | 3.7618 | 7.905 | 7.725 | 8.861 | 1.58063 | 3.930853 | 9.05546 | 13.579 |

4.2. Correlation Analysis

The debt cost (Cod_1) is significantly positively correlated with credit impairment losses (Credit, Credit×After) (the P values are 0.000 and 0.000 respectively), which is consistent with hypothesis (1). Besides, there is a significant negative correlation between current executive compensation (LnPay) and asset Impairment losses and credit Impairment losses (P value is 0.000 and 0.000 respectively), indicating that the higher asset Impairment loss is, the lower executive compensation is, which is consistent with hypothesis (2). Finally, the symbols of control variables are basically consistent with expectations, indicating that the selection of variables is reasonable.

4.3. Regression Analysis

(1) Regression Analysis of Debt Cost Model

The full-sample regression results in Table 3 show that the partial regression coefficients of credit impairment losses (Credit) before and after (Credit×After) separate presentation are significantly positive for the lagging debt cost, and the latter has a stronger significance. This indicates that credit Impairment losses in the current period will lead to the increase of debt cost in the next period, and the impact of credit Impairment losses on debt cost will be more obvious after they are listed separately. The result is consistent with the expectation of H1.

In addition, this paper makes a separate regression for 2015-2017 (before separate presentation) and 2018-2020 (after separate presentation), and deletes the sample of companies with zero reported amount of credit impairment loss and makes a regression. The results show that there is still a significant positive correlation between the debt cost of the lagging period and the Credit impairment losses (Credit×After). In contrast, the partial regression coefficient of asset Impairment losses (Impairment) and Credit Impairment losses before separate presentation (Credit) is weak, which indicates that Credit Impairment losses after single listing has a more significant effect on debt cost.

(2) Regression Analysis of Executive Compensation Model

According to the full-sample regression results in Table 4, the partial regression coefficient of asset Impairment losses in the current period (Impairment) was significantly negative on executive compensation, while the correlation between Credit×After and executive

compensation was not significant. The regression results of explanatory variables were generally consistent with H2.

Table 3. Regression Result of Asset Impairment, Credit Impairment and Debt Cost

| Variable | All samples | All samples | All samples | All samples | Drop samples Credit=0 |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | Cod _{i,t+1} | Cod _{i,t+1} | Cod _{i,t+1} | Cod _{i,t+1} | Cod _{i,t+1} |
| | 2015-2020 | 2015-2020 | 2015-2017 | 2018-2020 | 2015-2020 |
| Credit | 1.86** (2.35) | 1.64** (2.08) | -1.45* (-1.83) | | 2.05*** (2.59) |
| Impairment | -0.092 (-0.37) | -0.115 (-0.46) | -0.331 (-1.13) | 0.39 (0.79) | -0.43 (-1.50) |
| Credit×After | 3.52*** (3.24) | 3.39*** (3.02) | | 2.28*** (2.70) | 3.83*** (3.47) |
| After | -0.035** (-2.48) | -0.036** (-2.51) | | | -0.036** (-2.07) |
| LnSize | -0.0022 (-1.41) | -0.0026* (-1.67) | -0.005** (-2.22) | -0.5306*** (-2.59) | -0.0017 (-0.95) |
| Lev | -0.0013*** (-4.95) | -0.0012*** (-4.00) | -0.0013*** (-3.02) | 0.0321*** (4.08) | -0.0013*** (-4.14) |
| Roa | -1.71*** (-8.54) | -1.71*** (-7.77) | -1.669*** (-5.53) | -0.83* (-1.92) | -1.82*** (-7.85) |
| Cur | 0.0065** (2.33) | 0.0086** (2.41) | 0.0061 (1.09) | -0.1861* (-1.69) | 0.0059** (1.96) |
| Cf | 0.0002* (1.66) | 0.0001 (0.76) | -0.00006 (-0.36) | -0.0009 (-0.40) | 0.0002** (2.19) |
| Em | -0.021*** (-3.21) | -0.02*** (-3.00) | -0.201** (-2.13) | -0.8475*** (-3.14) | -0.019** (-2.43) |
| Big4 | 0.0091** (2.17) | 0.0086** (2.09) | 0.0098* (1.77) | 0.8749 (0.52) | 0.007* (1.67) |
| Bm | -0.0083 (-0.93) | -0.0065 (-0.67) | 0.015 (0.95) | -0.023* (-1.66) | -0.013 (-1.32) |
| Idp | 0.001*** (2.67) | 0.0009*** (2.57) | 0.001*** (2.80) | -1.590*** (-3.28) | 0.0009** (2.07) |
| Icr | 1.426*** (7.99) | 1.43*** (7.17) | 1.318*** (4.83) | -0.0037*** (-2.99) | 1.52*** (7.39) |
| Year | Control | Control | Control | Control | Control |
| Industry | / | Control | Control | Control | / |
| R ² | 0.1342 | 0.2039 | 0.2049 | 0.1524 | 0.1510 |
| Sample Size | 1536 | 1536 | 669 | 867 | 1002 |

Note: *, ** and *** are significance levels of 10%, 5% and 1% respectively. The values in the lower brackets are standard error at the corresponding levels. The same below.

In addition, referring to the robustness test of executive compensation conducted by Lu Yu and Qu Xiaohui [22], "top three executive compensation" (LnPay) was replaced by "Top three executive compensation of directors, supervisors and executives" (LnPay'), and the regression results showed strong robustness.

Table 4. Regression Result of Asset Impairment, Credit Impairment and Compensation

| Variable | All samples | All samples | All samples | All samples | All samples | Drop samples Credit=0 |
|----------------|-----------------------|-----------------------|----------------------|----------------------|-----------------------|--------------------------|
| | LnPay _{i,t} | LnPay _{i,t} | LnPay _{i,t} | LnPay _{i,t} | LnPay' _{i,t} | LnPay _{i,t} |
| | 2015-2020 | 2015-2020 | 2015-2017 | 2018-2020 | 2015-2020 | 2015-2020 |
| Credit | 4.008 (0.89) | 4.98 (1.03) | 1.52 (0.33) | | 4.24 (0.93) | 2.82 (0.62) |
| Impairment | -5.19*** (-2.74) | -5.32*** (-2.80) | -1.54 (-0.36) | -4.20* (-1.94) | -4.91** (-2.46) | -6.28*** (-2.99) |
| Credit×After | -8.47 (-1.52) | -8.48 (-1.43) | | -6.23* (-1.82) | -5.89 (-1.13) | -7.24 (-1.30) |
| After | 0.183*** (3.07) | 0.19*** (3.28) | | | 0.14* (1.95) | 0.169*** (2.78) |
| LnSize | 0.185*** (12.78) | 0.201*** (13.47) | 0.251*** (11.04) | 0.14*** (7.29) | 0.225*** (14.31) | 0.19*** (12.16) |
| Lev | 0.246** (2.20) | -0.003 (-0.02) | 0.172 (1.08) | 0.31* (1.94) | 0.29** (2.23) | 0.23** (1.99) |
| Roa | 2.64*** (5.89) | 2.48*** (5.37) | 3.88*** (6.32) | 1.40** (2.11) | 3.72*** (8.56) | 3.24*** (6.81) |
| Cf | -0.0038*** (-4.07) | -0.0023** (-2.19) | -0.005*** (-3.35) | -0.003** (-2.32) | -0.003*** (-3.19) | -0.004*** (-4.05) |
| Cur | 0.053** (2.55) | -0.027 (-1.15) | 0.048* (1.70) | 0.044 (1.39) | 0.064 (2.82) | 0.047** (2.11) |
| Cd | 0.145*** (3.30) | 0.077* (1.74) | 0.17*** (2.95) | 0.114* (1.73) | 0.18*** (4.02) | 0.16*** (3.35) |
| Market | 0.088*** (9.87) | 0.074*** (8.08) | 0.095*** (7.64) | 0.079*** (6.36) | 0.09*** (8.25) | 0.089*** (9.18) |
| Top | -0.0066*** (-6.67) | -0.0042*** (-4.08) | -0.01*** (-7.02) | -0.004*** (-2.79) | -0.009*** (-8.44) | -0.007*** (-6.71) |
| Bm | -0.182** (-2.34) | -0.107 (-1.30) | -0.28** (-2.28) | -0.201** (-2.02) | -0.33*** (-4.41) | -0.16** (-1.97) |
| Year | Control | Control | Control | Control | Control | Control |
| Industry | / | Control | / | / | Control | / |
| R ² | 0.2642 | 0.3325 | 0.3242 | 0.1531 | 0.1161 | 0.2842 |
| Sample Size | 1971 | 1971 | 975 | 996 | 1971 | 1702 |

4.4. Heterogeneity Analysis

(1) Classification of the Debt Cost Discussion

Table 5 shows that correlation between credit losses at state-owned enterprises and the lag issue debt costs present a significant positive, which is not significant in private enterprises, this shows that property rights do influence the function of credit impairment losses on the debts of the enterprise cost and operational efficiency of the state-owned enterprises because of the high quality and responsibility for a policy response, Its debt cost is more sensitive to related impairment information. Compared with the CEO dualited and no-eastern located enterprise, the non-CEO dualited and eastern located enterprise credit impairment losses and the lag issue debt costs show a more significantly positive correlation. Due to enterprises with non-CEO duality and eastern location has higher transparency, they are more sensitive to the loss of fair value changes. Therefore, the formulation of the debt cost of such enterprises has a higher reflection power to the relevant information of the company, thus showing a higher robustness.

Table 5. Grouped Regression of Asset Impairment, Credit Impairment and Debt Cost

| Variable | State-owned | Private | CEO dualited | Non-CEO dualited | Eastern | Non-eastern |
|----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | Cod _{i,t+1} | Cod _{i,t+1} | Cod _{i,t+1} | Cod _{i,t+1} | Cod _{i,t+1} | Cod _{i,t+1} |
| | 2015-2020 | 2015-2020 | 2015-2020 | 2015-2020 | 2015-2020 | 2015-2020 |
| Credit | 1.98** | 1.52 | 1.64** | 1.66 | 1.45* | 2.62 |
| | (2.19) | (0.98) | (2.05) | (0.47) | (1.71) | (1.64) |
| Impairment | -0.24 | 0.38 | -0.27 | 0.81 | -0.14 | -0.45 |
| | (-0.86) | (0.72) | (-0.98) | (1.25) | (-1.48) | (-0.89) |
| Credit×After | 3.81*** | 3.38 | 3.57*** | 2.89 | 3.75*** | 2.75 |
| | (2.91) | (1.54) | (3.11) | (0.6) | (3.35) | (0.91) |
| After | -0.022 | -0.057** | -0.041*** | -0.002 | -0.026 | -0.05* |
| | (-1.46) | (-2.01) | (-2.61) | (-0.05) | (-1.63) | (-1.96) |
| Cons | Control | Control | Control | Control | Control | Control |
| Year&Ind | Control | Control | Control | Control | Control | Control |
| R ² | 0.2395 | 0.2822 | 0.1953 | 0.4532 | 0.2243 | 0.4079 |
| Sample Size | 1074 | 462 | 1296 | 240 | 1224 | 372 |

(2) Classification of the Compensation Discussion

Chen Zhen et al. [23] found that compared with private enterprises, executive compensation in state-owned enterprises is not sensitive to enterprise risks. The power structure arrangement with the combination of two positions has an impact on the agency problem. Chen Xiaosan et al. [24] showed that the combination of chairman and CEO can significantly increase executive compensation, and also significantly reduce the sensitivity of executive compensation to the company's performance. Fang Junxiong et al. [25] indicated that due to the higher marketization degree, mature and perfect market mechanism and more intense market competition in developed regions, listed companies have to follow market rules more, so executive compensation is more sensitive to relevant information.

Table 6. Grouped Regression of Asset Impairment, Credit Impairment and Compensation

| Variable | State-owned | Private | CEO dualited | Non-CEO dualited | Eastern | Non-eastern |
|----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | Cod _{i,t+1} | Cod _{i,t+1} | Cod _{i,t+1} | Cod _{i,t+1} | Cod _{i,t+1} | Cod _{i,t+1} |
| | 2015-2020 | 2015-2020 | 2015-2020 | 2015-2020 | 2015-2020 | 2015-2020 |
| Credit | 2.47 | 6.04 | -5.42 | 7.39 | 13.26** | -4.00 |
| | (0.45) | (0.54) | (-0.36) | (1.57) | (2.22) | (-0.36) |
| Impairment | -2.28 | -7.83** | -3.11 | -4.87** | -5.71** | -4.04 |
| | (-0.97) | (-2.11) | (-0.72) | (-2.20) | (-2.53) | (-1.01) |
| Credit×After | -1.67 | -8.42 | 1.30 | -10.34* | -14.16** | -4.53 |
| | (-0.26) | (-0.68) | (0.08) | (-1.75) | (-2.08) | (-0.33) |
| After | 0.169*** | 0.233* | 0.34** | 0.15** | 0.089 | 0.35*** |
| | (2.47) | (1.9) | (1.97) | (2.38) | (1.28) | (2.70) |
| Cons | Control | Control | Control | Control | Control | Control |
| Year&Ind | Control | Control | Control | Control | Control | Control |
| R ² | 0.3277 | 0.0784 | 0.4381 | 0.2051 | 0.2997 | 0.1842 |
| Sample Size | 1388 | 576 | 294 | 1673 | 1369 | 571 |

Table 6 regression shows that there is a significant negative correlation between executive compensation and asset impairment losses in enterprises with non-state-owned property rights and non-CEO duality. The correlation between impairment losses and executive

compensation in eastern developed regions is significant, while that in non-eastern regions is not. The regression results are consistent with existing studies.

5. Conclusion

Impairment losses are reflection of GAAP fair value accounting tendency, which makes accounting information have stronger relevance and timeliness. But from the point of view of concept of effective contracts, the application of credit losses caused a certain degree of dilemma to contract formulation, for reasons of above has the contradiction, in this paper, the different credit before and after the impairment loss of a single contract to explore the impact, will officially before the implementation of new financial instruments standard credit part separated from the subjects of the declined value of asset impairment loss, with asset impairment losses and credit impairment losses after the implementation of the new financial instrument standards as explanatory variables, the influence of these on corporate debt financing costs and executive compensation is compared.

The results show that credit impairment losses and asset impairment losses do show some differentiated effects on contract formulation after the implementation of the new standards. The provision of credit impairment losses in the current period is significantly positively correlated with the increase in the cost of debt in the next period. Compared with the increase in the debt cost in the next period, the credit impairment losses after the separate presentation have a stronger impact on the debt cost in the next period. In further research, state-owned property rights, non-CEO duality and enterprises registered in the eastern developed areas of the lagged debt cost of the credit impairment losses more significant response, the debt cost contains losses and risks of accounting information reflects a higher sensitivity. From the perspective of executive compensation, asset impairment loss has a significant negative correlation with executive compensation in the current period, while the negative correlation between credit impairment losses and executive compensation after single listing is not significant, which is more obvious in enterprises with non-state-owned property rights and non-CEO duality. In addition, the negative correlation between credit impairment losses, asset impairment losses and executive compensation of enterprises registered in eastern developed regions is more significant than that of enterprises registered in non-eastern regions.

Therefore, this paper believes that the change of the new financial instrument standard will affect the quality of accounting information, and credit impairment loss has actually broken through the traditional definition of accounting. Because it is forward-looking and largely depends on management estimates, its information reliability is likely to be affected. This will further lead to the correlation effect of credit impairment loss item on contract formulation and affect the information value of difference between it and asset impairment loss item.

It is undeniable that accounting information has advantages and disadvantages when facing the conflict between the view of usefulness of decision and the view of effective contract. Users of accounting information have different positions and different preferences for information. Contract makers need more robust and reliable information for reference of contract elements, while investors prefer more accurate and timely information to influence investment decisions. In fact, it is difficult to balance the demands of all parties. This requires the standard makers to consider more when they play their roles and assume social responsibility for the better development of the capital market.

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