Analysis of the Impact of the Implementation of Accounting Standards for New Financial Instruments on Corporate Financial Performance -- Based on the Empirical Study of Listed Companies in the Domestic Financial Industry

Qian Li*

School of Management, Shanghai University, Shanghai 201800, China
Corresponding author e-mail: LiQianshanghaiSHU@163.com

ABSTRACT. *This paper takes 2018-2019 Shanghai and Shenzhen listed financial companies as research samples to study the impact of the implementation of accounting standards for new financial instruments on the financial performance of enterprises. The results show that :(1) the implementation of accounting standards for new financial instruments is positively correlated with the financial performance of listed financial companies. (2) The implementation of accounting standards for new financial instruments has a more significant impact on the operating performance of non-bank financial institutions than that of bank financial institutions.*

KEYWORDS: *Financial Instruments; Accounting Standards; Financial Performance*

1. Introduction

Since the financial crisis in 2008, the old financial instrument standards have been unable to better meet the actual needs of modern enterprise accounting, and their shortcomings have been increasingly visible, which gradually hamper the process of internationalization of enterprises. After practical research, on March 31, 2017, the Ministry of Finance revised and released the "Accounting Standards for Enterprises No. 22 - financial instruments recognition and measurement" and other new financial instruments related accounting standards, can make China's accounting standards system more perfect, maintain an important result of convergence with international financial reporting standards. The comprehensive implementation of accounting standards for new financial instruments is a significant change of accounting system for financial institutions, and the operation of financial institutions will have a series of significant effects. As a basic service industry, the growth of finance itself will affect the growth pace of the entire national economy. Performance is the most basic goal of a company, and it is also the basic reason for the emergence, existence and development of a company. This paper, based on the perspective of the new guidelines and business performance, to explore new financial instruments accounting standards influence on financial financial performance of listed companies within the territory of China, through analyzing the data before and after the new rules, and USES the finance and the financial data of listed companies, on the relationship between the theory and empirical research, and according to our country enterprise the present situation of the implementation and application of new financial instruments accounting standards, puts forward the corresponding suggestion, very beneficial to the development of China's financial industry, is conducive to China's enterprises to better understanding and application of new accounting standards for financial instruments, so as to promote the long-term stable development of the enterprise, as well as to the accounting policy formulation in our country, This paper has a strong practical significance to make Chinese enterprises better and faster adapt to the opportunities and challenges brought by the opening of the financial industry.

2. Major Changes in Accounting Standards for New Financial Instruments

The old standards of financial assets impairment using the "loss method", only in the loss of assets can use accounting tools for accounting, this approach can not meet the contemporary financial activities changing rapidly, although convenient but lack of flexibility. The new financial instrument criterion is the "expected credit loss method", which measures the credit loss provision that should be recognized at present by the expected value of the loss caused by the possible default event in the future. This impairment can be divided into three phases and applies to the purchase or origination of financial instruments without credit impairment losses. As shown in Table 1, the first stage: if the financial asset has good credit risk, the enterprise shall confirm the credit loss provision in accordance with the expected credit loss in the next 12 months, and calculate the interest income in accordance with its book balance and the actual interest rate. The second stage: the financial asset has obvious malignant credit risk. At this time, the enterprise shall make provision for credit loss in accordance with the expected credit loss within the entire duration of the financial instrument, and calculate the interest income by multiplying the book balance by the actual interest rate. The third stage: the financial assets have been malignant credit impairment, the enterprise shall be in accordance with the book balance minus the book value of the impairment provisions and the actual interest rate in the entire duration of the calculation of interest income.

For the financial instruments with malignant credit impairment losses occurring at the time of possession, the enterprise shall calculate the interest income by multiplying the book value of the impairment provisions deducted by the real interest rate adjusted by the credit.

Table 1. Three-stage expected credit impairment loss method

	The first stage	The second stage	The third stage
The credit risk	There was no significant increase after initial confirmation	Significant increase after initial confirmation	Credit impairment occurs after initial recognition
The basis of loss provision	Credit loss provisions are recognized based on expected credit losses over the next 12 months	Provision for credit loss shall be drawn according to the expected credit loss during the whole life of the financial instrument	Provision for credit loss shall be drawn according to the expected credit loss during the whole life of the financial instrument
Calculation of interest income	Book balance times the real interest rate	Book balance times the real interest rate	The book value times the real interest rate

3. Research Hypothesis

The new financial instrument standard adopts the expected credit loss method when drawing impairment provisions, attaches more importance to the possibility of expected credit loss, and can effectively predict the relevant risks existing in financial assets. By predicting the future cash flow of an enterprise according to the expected default loss, etc., it can play the role of pre-risk management and avoid the situation of drawing impairment provisions after the loss occurs, which is conducive to improving its own defense ability and making the operation of an enterprise more stable. Fu council (2019) argue that the new financial instruments accounting standards can not only help enterprises to establish perfect risk early warning mechanism, enhances the enterprise the risk identification ability, at the same time, also can make enterprise risk activity and hedging accounting together, so that enterprises can more flexible use of financial instruments, which can effectively prevent the occurrence of business risk and financial risk. Therefore, hypothesis 1 is proposed in this paper

H1:The implementation of accounting standards for new financial instruments is positively correlated with the financial performance of listed financial companies.

Chen Peng (2020) believes that the new accounting standards for financial instruments pay more attention to subjectivity, and the new standards for financial instruments pose greater challenges to the valuation management of enterprises, and the impact of valuation fluctuations of financial assets on the financial statements of enterprises is more intuitive and obvious. Besides, the huge market has a great obstacle for the new standards. The introduction of the new standards, enterprises need to optimize and upgrade assets, which will increase the operating costs of enterprises in the early stage, which may hinder the development and growth of enterprises. At the same time, enterprises need to carry out professional training for their financial personnel, so that financial personnel can be qualified for their jobs, to ensure the overall quality of enterprise personnel. The stability of financial personnel also plays

a significant role in promoting the development of enterprises, but the cost of staff training and accounting system upgrading is also a large expense for enterprises, and the cost is very high. Therefore, hypothesis 2 is proposed in this paper:

H2: The implementation of accounting standards for new financial instruments is negatively correlated with the financial performance of listed financial companies.

While banks act as creditors and debtors in their business, the transaction role of non-bank institutions is more complex and is primarily financed by means of non-deposits. The existence of non-bank financial institutions enriches financial business and holds more diversified financial assets compared with banks. Therefore, hypothesis 3 is proposed in this paper

H3: The implementation of accounting standards for new financial instruments has a more significant impact on the financial performance of non-bank financial institutions than that of bank financial institutions.

4. Study Design

4.1 Samples and data sources

This paper selects the quarterly financial statements from the first quarter of 2018 to the fourth quarter of 2019, and the data of A-share financial listed companies in Shanghai and Shenzhen stock exchanges spanning eight quarters as samples. The selected data are from the national Tai 'an database. Listed companies such as ST and *ST were removed, companies with obvious errors in data were deleted, and companies with missing data could not be found and deleted after manual search. Finally, 334 sample data in the four quarters of 2018, 326 sample data in the four quarters of 2019, and a total of 660 samples in the eight quarters were selected. Excel was used to screen and organize the data, and Stata was used for concrete empirical analysis.

4.2 Variable design and model

In this paper, the empirical analysis part of basic research idea is: in the control under the condition of other variables affect the enterprise's financial performance, with the implementation of new financial instruments accounting standards or not and reflect the performance of the securities company financial indicators respectively explain and be explained variables, and then analysis the new financial instruments accounting standards on financial industry operating performance of listed companies.

4.2.1 Selection of explained variables

This paper refers to Zhao Minru (2019), who takes return on total assets (ROA) and return on equity (ROE) as indicators to measure corporate financial performance.

4.2.2 Selection of explanatory variables

Referencing the variable definition method of Zhang Changzheng (2008), this paper uses a dummy variable to measure whether the new financial instrument standards are implemented. The new accounting standards for financial instruments will be implemented on January 1, 2019. Therefore, this paper takes the second quarter of 2018 to the fourth quarter of 2018 as before the implementation of the new standards, and the first quarter of 2019 to the third quarter of 2019 as after the implementation. Before the implementation of the new standards, the value is 0, and after the implementation of the accounting standards for new financial instruments, the value is 1. The dummy variable is also used to measure the type of financial institutions. Non-bank financial institutions are assigned as 1 and bank financial institutions are assigned as 0.

4.2.3 Selection of control variables

This paper included the asset-liability ratio into the control variable. Other control variables include operating income growth rate, capital reserve ratio, cash flow per share from operations, capital intensity, and net assets per share. The summary is shown in Table 2:

Table 2. Variable definitions

	The variable name	Variable symbol	Define/calculate the formula
Explained variable	Return on total assets	ROA	Net profit/average total assets
	Return on equity	ROE	Net profit/average owner's equity
Explanatory variables	Whether to implement new accounting standards for financial instruments	Policy	The value is 0 before implementation and 1 after implementation
	Type of Financial Institution	Type	The value of bank financial institutions is 0, and that of non-bank financial institutions is 1
Control variables	Cash flow per share from operating activities	CFPS	Cash flow from operations/total capital stock
	Asset-liability ratio	DARatio	Total ending liabilities/average total assets
	Growth rate of operating income	Growth	Increase of current operating income/previous operating income
	Capital reserve ratio	Rct	Retained earnings/total assets
	Capital intensity	CAP	Net fixed assets/ending total assets
	Net assets per share	NAPS	Total shareholders' equity/number of common shares
	The enterprise scale	Size	The natural log of total assets

In order to verify the correctness of Hypothesis 1 and Hypothesis 2, this paper selects the panel data model for regression analysis. The panel model can not only increase the sampling accuracy of the estimator, but also obtain the consistent estimator of the parameters for the fixed-effect regression model. In order to test the hypothesis in this paper, the following model is designed according to the principle of panel data by referring to the model of Mo ru Yang (2016):

$$ROA_{it} = \beta_0 + \beta_1 Policy_{it} + \beta_2 Growth_{it} + \beta_3 Rct_{it} + \beta_4 NAPS_{it} + \beta_5 DARatio_{it} + \beta_6 Size_{it} + \mu_{it} \quad (1)$$

$$ROA_{it} = \beta_0 + \beta_1 Policy_{it} + \beta_2 CFPS_{it} + \beta_3 Rct_{it} + \beta_4 CAP_{it} + \beta_5 DARatio_{it} + \beta_6 Size_{it} + \mu_{it} \quad (2)$$

$$i=1,2,\ldots,n$$

In order to test the correctness of Hypothesis 3, a multiple regression model is designed in this paper. The explanatory variables and other control variables representing the type of financial enterprise that is a bank are introduced into the multiple linear regression model at the same time. The model is established as follows:

$$ROE_i = \beta_0 + \beta_1 Type_i + \beta_2 Growth_i + \beta_3 NAPS_i + \beta_4 DARatio_i + \beta_5 CFPS_i + \beta_6 Size_i + \mu_i \quad (3)$$

$$EPS_i = \beta_0 + \beta_1 Type_i + \beta_2 Growth_i + \beta_3 NAPS_i + \beta_4 DARatio_i + \beta_5 CFPS_i + \beta_6 Size_i + \mu_i \quad (4)$$

$$i=1,2,\ldots,n$$

5. The Empirical Results

5.1 The impact of new financial instrument accounting standards on the financial performance of domestic financial listed companies

The selected 660 samples of listed companies in the domestic financial industry from the first quarter of 2018 to the fourth quarter of 2019 were substituted into Model (1) for empirical test.

As can be seen from Table 3, the t-test accompanying probability P value of explanatory variables is all below 0.05, and most of them are less than 0.01, showing a significant correlation with corporate financial performance. Through the test, it is further proved that the selection of control variables is reasonable. Within the 99% confidence interval, the core variable Policy passes the significance test and its regression coefficient is positive, indicating that the implementation of accounting standards for new financial instruments has a significant positive correlation with the financial performance of listed companies in the domestic financial industry. That is, the implementation of accounting standards for new financial instruments can improve the financial performance of enterprises. Hypothesis 1 holds.

Table 3. Model (1)Regression results

Explanatory variables	coefficient	T value	P values
Policy	0.0025	2.58	0.005 ***
Growth	0.0197	5.59	0.000 ***
Rct	0.0141	2.61	0.009 ***
NAPS	0.0002	2.55	0.011 **
DARatio	-0.0326	-8.45	0.000 ***
Size	0.0011	3.43	0.001***
Number of samples	660		
The F value	28.28	P values	0.0000***
R^2	0.2060	Adjusted R^2	0.1987

*** $P<0.01$, ** $P<0.05$,* $P<0.1$

The 660 samples of selected listed companies in the domestic financial industry from the first quarter of 2018 to the fourth quarter of 2019 were substituted into Model (2) for robustness test. The results are shown in Table 4.

Table 4. Model (2)Regression results

Explanatory variables	coefficient	T value	P values
Policy	0.0027	3.00	0.003***
CFPS	0.0001	2.06	0.039 **
Rct	0.0185	3.42	0.001***
DARatio	-0.0336	-8.74	0.000***
CAP	-0.0312	-3.26	0.001***
Size	0.0015	4.84	0.000***
Number of samples	661		
The F value	24.29	P values	0.0000***
R^2	0.1822	Adjusted R^2	0.1747

*** $P<0.01$,** $P<0.05$,* $P<0.1$

As shown in Table 4, after partial control variables are replaced, the model is still significant on the whole. Meanwhile, the coefficient symbol of the core variable Policy is still positive, with a P value of 0.003 and a significance level of 0.01, showing good significance. Therefore, the robustness of Model (1) basically meets the requirements.

5.2 The impact of new financial instrument accounting standards on non-banking and banking

The selected 326 samples of listed companies in the domestic financial industry in the fourth quarter of 2019 were substituted into Model (3) for empirical test.

It can be seen from Table 5 that the coefficient of Type is -0.0174 and the P value is 0.014. Within the 95% confidence interval, the core variable Type passes the significance level test, indicating that after the implementation of the accounting standards for new financial instruments, the financial performance of non-bank financial institutions is lower than that of banking financial institutions. This may be because the existence of non-bank financial institutions enriched the financial business, compared with types of Banks to hold more variety of financial assets, thanks to new financial instruments accounting standards by using expected credit provision for impairment loss, so there is more categories of financial assets, the depreciation more impairment loss led to a decline in performance.

Table 5. Model (3)Regression results

Explanatory variables	coefficient	T value	P values
Type	-0.0174	-2.45	0.014**
Growth	0.1234	6.54	0.000 ***
NAPS	0.0014	3.22	0.001 ***
DARatio	-0.0722	-3.62	0.000 ***
CFPS	0.0000	-0.04	0.965

Size	0.0110	5.57	0.000 ***
Number of samples	326		
The F value	32.37	P values	0.0000***
R^2	0.2182	Adjusted R^2	0.2140

*** $P<0.01$,** $P<0.05$,* $P<0.1$

The selected domestic financial listed companies were substituted into Model (4) for robustness test from 326 samples in the first quarter and the fourth quarter of 2019, and the results are shown in Table 6.

Table 6. Model (4)Regression results

Explanatory variables	coefficient	T value	P values
Type	-0.1972	-3.50	0.000***
Growth	0.5078	3.38	0.001 ***
NAPS	0.0885	25.43	0.000 ***
DARatio	0.3509	2.22	0.027 **
CFPS	0.0226	9.18	0.000***
Size	-0.0027	-0.17	0.862
Number of samples	326		
The F value	`123.31	P values	0.0000***
R^2	0.6141	Adjusted R^2	0.6107

*** $P<0.01$,** $P<0.05$,* $P<0.1$

As shown in Table 6, after the explained variable is changed to earnings per share EPS, the model is still significant on the whole. Meanwhile, the coefficient sign of the core variable Type is still negative, with a P value of 0.000 and a significance level of 0.01, showing good significance. Therefore, the robustness of Model (3) basically meets the requirements.

6. Conclusion

Through the empirical analysis of 2018-2019 Shanghai and Shenzhen stock financial listed companies, this paper studies the impact of the implementation of accounting standards for new financial instruments on the financial performance of enterprises. It is found that the implementation of accounting standards for new financial instruments is positively correlated with the financial performance of listed financial companies. It shows that the new financial instrument standards make up for the shortcomings of the old standards and make the accounting standards more standardized and rigorous. It not only improves the quality of accounting information, but also has a positive impact on the financial performance of financial listed companies. In addition, the study also found that the financial performance of non-bank financial institutions will be lower than that of bank financial institutions in one year after the implementation of the accounting standards for new financial instruments. Due to the complexity of non-bank financial institutions and financial assets held by the complex and varied types, and the expected credit penalty method under the new rules, make provision for loss of business set up to increase, but in the long run the new guidelines to enable managers to the assets of the structure has a more clear understanding, reduce the proportion of bad loans, also can let enterprise has some assets structure become more healthy and stable.

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