

same experimental time, after using the fuzzy and SVM based algorithm it can achieve better performance in calculating time than before using it.

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Comparative Study on the Effect of Risk Control Organization of Inform Finance Institutions

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Abstract

The organization mode of the process risk control and the risk control organization mode are two kinds of typical risk control organization forms, which has their own characteristics as the main body of the risk of inform finance control, Through the empirical analysis, the risk control ability of the inform finance under the two risk control

organizations is explored, risk control is significant in the process of controlling the risk of security operation, and the risk control organization is significant in the credit risk control and market risk control ability of the enterprise. The conclusion provides theoretical guidance for the construction of the risk control system of small and medium enterprises.

Keywords: INFORM FINANCE, RISK CONTROL, ORGANIZATION, SMEs

1. Introduction

Because the risk control system is only one part of the risk control method of inform finance, the risk of the inform finance has many types, so it is difficult to get a more objective conclusion from the perspective of risk control organization [1]. The comparison of two kinds of risk control organization system takes an indirect way in this paper. Firstly, we design a structure model which can reflect the risk control ability of the inform finance more comprehensively and fit the model by empirical analysis; Secondly, take the risk control organization form as the adjustment variable, and assume the role of the control variables [2]. Inform finance is different for different types of risk control ability; Finally, through the empirical analysis, we compare the output effect of the structure model of risk control in the process of the different degree of the process or the degree of modularity. Thus, we can compare the difference of the risk control ability of the two types of risk organizations [3-5].

In order to compare the difference of the lending risk control ability under the two kinds of risk control organization model comprehensively, in the construction of the risk control ability of the risk control measures, when takes into account the risk factors of endogenous risk and exogenous risk factors of the folk debit and credit, the risk control ability of the inform finance institution is divided into four dimensions: credit risk control, operational risk control, market risk control, and comprehensive risk control [6-7]. And the system, scientific, representative and feasibility of the selection of indicator variables is considered, and the following initial variables are constructed as shown [8-9].

Credit risk control ability (U_1) includes completeness of credit procedure (U_{11}), credit investigation ability (U_{12}), risk audit ability (U_{13}) and risk decision-making mechanism (U_{14}). Operational risk control (U_2) includes operation risk control consciousness (U_{21}), operational risk measurement (U_{22}) and Internal supervision and early warning machine Capacity (U_{23}). Market risk control (U_3) includes market forecast ability (U_{31}) and capital adequacy ratio (U_{32}). Comprehensive risk control ability (U_4) includes organizational structure optimization (U_{41}), professional

personnel training mechanism (U_{42}), risk culture construction (U_{43}) and information degree (U_{44}).

2. Model construction

The process risk control system and the modular organization system are different, which may lead to the difference of the credit risk control ability in the course of business operations. The process of the organization system of each process link closely, when the risk control of a process node is deviation, it will affect the work of the next process node [9]. The key to the modular organization is the division of the module and the division of labor which breaks the flow of the flow operation, if the module is not reasonable, it is not conducive to improve the marginal utility of the module, but also conducive to the control of credit risk. Therefore, the process and the modular organization form have different influence on credit risk control ability [10]. We use the risk control of inform finance to control the degree of the organization's process as a regulator and put forward the following assumptions [11-12]. It is assumed that the risk control organization form of the folk loan is continuous, namely, the higher the degree of the process, the lower the degree of modularization, conversely, the lower the degree of the process, the higher the degree of modularity, and taking the degree of risk control as the control variable of the risk control measures. It is assumed that the higher the degree of the risk control of the inform finance is, the better the risk control ability is, the better the model fitting effect is. According to the structure of the construction of the risk control ability of the inform finance risk, the hypothesis can be further divided into:

H1: the higher the risk control organization, the higher the credit risk control ability.

H2: the higher the risk control organization, the higher the operational risk control ability.

H3: the higher the risk control organization, the higher the risk control ability.

H4: the higher the risk control organization, the higher the risk control ability.

In summary, the construction of inform finance risk control measure of initial and the model assumptions with adjustable variables, the model structure is shown in Figure 1:

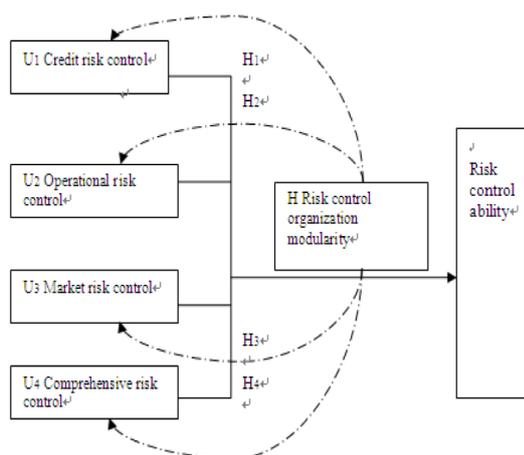


Figure 1. Structure Model of risk control for inform finance institutions

3. Empirical analyses

3.1 Sample selection and investigation method

In this paper, we use the method of questionnaire survey to study the composition of the risk control ability of the inform finance and the influence of the adjustment variables effect the model fitting from statistical significance. Sample taken from Guangzhou,, Foshan, Shenzhen, Dongguan, Zhuhai five areas of the 60 areas of inform finance in Guangdong Province in 2014 , the basic situation of the sample is shown in table 1[13-14]:

Table 1. Basic situation of sample enterprises

	Sample number	Accounted for the overall proportion%
Process oriented organization	28	46.7
Modular organization form	6	10.0
An organization form between process and module	26	43.3

The basic conditions for the selection of inform finance is following:

- (1) Inform finance is an independent legal entity operating;
- (2) At least 2 years of the establishment of inform finance.

The form of the questionnaire is: first, in the above areas, according to the sample selection conditions, the use of the form of mail survey; Two survey on some of the more familiar with the inform finance through the E-mail form; Conduct research interviews on part of inform finance.

In order to enhance the validity of the questionnaire, the following aspects were noted in the questionnaire:

(1) In order to ensure the clarity of the questionnaire and the rationality of the index, the pre testing and pilot testing of the questionnaire before the official release;

(2) The questionnaire is filled out by the top management of the sample enterprise;

(3) To ensure that the questionnaire has a good correlation with a sample of the same sample, it is necessary to analyze the relevance of the questionnaire from the same sample to test the consistency of the questionnaire.

3.2. Variable selection

According to the design of the initial index variables, Before the formal release of the questionnaire, first, the pre testing whose purpose is to let the subjects from their respective professional point of view of the questionnaire, the questionnaire format, the rationality of variable design, and so on .In this paper, the top management of 3 sample companies were interviewed, and the sample of 6 senior management personnel were carried out in the pre test. The questionnaire was completed by the test, and the amendment was put forward. On the basis of comprehensive analysis of the feedback of the pre testing, the questionnaire is modified.

In this study, the internal consistency coefficient (coefficient) of Cronbach was used to carry out a preliminary reliability analysis of 18 questionnaires, the results showed that the Cronbach values of the variables were distributed between 0.8128 and 0.7251. Churchill and Peter were used to determine the reliability criterion. The Cronbach value should be more than 0.5, and the best can be more than 0.7. If less than 0.35 should be rejected [128],Therefore, we can determine the reliability of the questionnaire used in the pilot test, the test of the pilot test from the same sample of enterprises was carried out the preliminary validity test, and then the correlation analysis, the results show that the questionnaire from the same sample Pearson correlation coefficient is greater than 0.65 (significant level $p < 0.001$), indicating that these questionnaires have good correlation, meet the validity requirements. After the pre testing and pilot testing, the risk control ability of the inform finance is still retained by 13 initial variables.

3.3. Data processing and result analysis

A total of 60 inform finance institutions were issued a total of 240 questionnaires, 192 questionnaires were returned, and 159 valid questionnaires, the effective rate of 82.8%.The reliability and validity of the model was analyzed by using SPSS13.0 software package to analyze the data of the questionnaire.

(1) Reliability test

Before the exploratory factor analysis was conducted to test the reliability, the value is that the 4 main factors (4 dimensions) of the risk control ability of the inform finance was carried out respectively the KMO sample test was $0.821 > 0.8$, and the significance level of the test value of Bartlett sphere was $0.000 < 0.001$, which showed that the data of the group was well suited to the analysis. In the exploratory factor analysis, the principal component analysis method is used, and the rotation method is the maximum variance method, and the factor load intercept point is 0.5. The sample data of 132 valid questionnaires were analyzed, and the exploratory factor analysis of the 7 valid questionnaires showed that all of the factors in the risk control ability of the inform finance were consistent with the requirements of exploratory factor analysis, and the Cronbach values of each factor were more than 0.5 and the minimum value was 0.717, which showed that the sample had high reliability.

(2) Validity test

Validity test is the object that is to be measured by the measurement of a scale. This includes the validity and the validity of the test. The convergent validity and discriminant validity of the theoretical model was constructed by confirmatory factor analysis, which is application SPSS13.0 and LISTEL8.9.

The empirical results show that the minimum of the standard factor load value of which the risk control ability of the inform finance institutions of all measurement variables is 0.713, higher than the relevant research suggested the lowest critical level 0.707, which shows that the model has good convergent validity. The R2 values of the variables of the indicators were more than 0.40, indicating it has a high degree of reliability; The reliability coefficient of each factor was greater than 0.70, the construct validity of the VE value was 0.542, which was higher than the minimum critical level 0.5 suggested by the relevant research, which indicated that the factors had better structure.

(3) Fitting test of model

In this study, we choose the common index for model fitting test: RMSEA, RMR, X2, GFI, AGFI, IFI, CFI and so on, Using AMOS4.0 software, the overall model of the risk control ability of the inform finance is fitted, and the goodness of fit index is shown in Table 2:

From the relevant data on the table, we can see that the model of risk control of the inform finance has a good fitting effect, which shows that the model can accurately reflect the actual situation, and the results of data analysis using the model can be accepted.

Table 2. Overall model goodness of fit (N=159)

Goodness of fit index	Model estimation	Model interpretation
Overall goodness of fit index		
X ²	276.23	
X ² /df	2.192	Close to 2, the model has good fitting degree
P	0.152	More than 0.05, the X2 is not significant, and the overall fitting of the model is good.
GFI	0.913	Slightly more than 0.9, the model fits well
AGFI	0.907	Slightly more than 0.9, the model fits well
RMSEA	0.054	Less than 0.06, which indicates that the model fits well
Comparison goodness of fit index		
IFI	0.982	Almost 1, which indicates that the model fitting is very good.
TLT	0.964	Close to 1, the model fits well.
CFI	0.938	Close to 1, the model fits well.
Simple goodness of fit index		
AIC	79.673	In comparison, the value is small, which shows that the model fits well.

* Note: $p < 0.01$; regression sample number N=60.

3.4. Hypothesis testing

(1) Linear regression hypothesis testing

In this study, we use linear regression method to test the research hypotheses who's the impact of risk control of inform finance on the overall risk control ability, the hypothesis of empirical test results are shown in Table 3:

The analysis results show that: the assumption that H1 is supported, that is, the risk control organization has a positive effect on the credit risk of the credit project; Assuming that H2 is not supported, it is indicated that the effect of the modular risk control organization in the promotion of the risk control of inform finance is not significant; Assume that H3 is supported, that is, the extent of risk control is positively affected by the risk control ability of the market; Hypothesis H4 support, that is, risk control organization modularization degree of inform finance risk control ability has a positive impact, but test was used to compare the parameters of the scalar value, the hypothesis test value is weaker than that of hypothesis H1 and hypothesis H3, indicating that this hypothesis although supported, but the test results significantly weaker.

(2) Adjustment of the model goodness of fit test

The sample was divided into four groups according to the degree of modularity and process of enter-

Table 3. overall validation results of the study hypothesis

	Hypothetical description	Standard regression coefficient	P value /Sig.	Test result
H1	The risk control organization has a positive effect on the ability of the credit risk control	0.168	0.024	Support
H2	The risk control organization has a positive effect on the ability of the operation risk control	0.069	0.122	Not supported
H3	Risk control is a positive influence on the market risk control ability.	0.206	0.016	Support
H4	Risk control organization of the degree of modularity has a positive impact on the overall risk control	0.132	0.091	Support

prise risk control. Risk control of the organization is introduced as a measure of risk control ability, Hypothesis model 1 represents the organization form of modular risk control, Model 2 is close to the model of risk control organization form, model 3 is close to the process of risk control organization form, and the model 4 is expressed in the process of risk control.

Table 4. Risk control ability adjustment model goodness of fit

Goodness of fit index	Model estimation			
	Model 1	Model 2	Model 3	Model 4
Overall goodness of fit index				
X ²	358.42	316.23	282.62	268.68
X ² /df	2.662	2.334	2.256	2.153
P	0.01	0.03	0.05	0.06
GFI	0.76	0.81	0.86	0.89
AGFI	0.81	0.83	0.89	0.91
RMSEA	0.053	0.058	0.057	0.056
Comparison goodness of fit index				
IFI	0.912	0.889	0.886	0.859
TLT	0.904	0.907	0.929	0.932
CFI	0.928	0.919	0.915	0.911
Simple goodness of fit index				
AIC	87.231	85.602	81.131	79.338

According to the model fitting index of table 4, compared with goodness of fit for risk control of inform finance, between the form of modular risk control organization and process risk control organization, It shows that organization form of the risk control is better than the process of risk control in the overall risk control.so hypothesis H1, H3 and H4 are further supported.

4. Discussion and conclusion

The hypothesis of the non pass inspection is discussed, and the practical operation of the inform finance in the sample is studied the reasons for the non support, this further reflects the special problems in the practice of risk control of inform finance.

Assuming that the relationship between the level of H2 and the ability to control the risk control of the

inform finance is not supported, this paper considers that this hypothesis has not passed the examination of the main reasons are the following two aspects:

In this paper, the risk control ability of the inform finance operation is mainly controlled by the operational risk control, operational risk measurement, internal supervision mechanism to reflect, The hypothesis testing of the non - pass shows that the form of the modular risk control organization is compared with the process oriented organization, which is slightly lower than the process organization form in the aspects of risk control consciousness, operational risk measurement and internal supervision. This is due to in the process of the organization system the risk control requirements and objectives of each process node is more clear, and set up the corresponding position to ensure that only in the process of the work of a node, will flow to the next working node; And the modular organization form, in a considerable extent, in the process of a internalization sub module complete the basic risk control process, it is easy to cause a person to more than one person or more than one role, .the role of the operation risk control is relatively weak.

The modular organization form is not obvious to the operation risk control effect and the practices of operational risk control of sample inform finance is also in agreement. In the field survey of part of the sample enterprises, we have learned to have a relatively complete system of process risk control organization system of inform finance, due to the personnel operation is less, and credit personnel operating risk of the use of modular organization in the form of inform finance is relatively prominent. This situation also provides a theoretical reference for the design of the risk control system of the inform finance, that is, the use of modular organization form need to strengthen the operational risk control and prevention.

Assuming that H4 is supported, but the parameters are not very significant. This paper discusses the relationship between the organization form of risk control and the risk control ability of inform finance, The

main reason of the test index value is not significant is that in this paper the comprehensive risk control ability of the inform finance is studied by the optimization of the organizational structure, the ability of professional personnel training, the construction of risk culture, and the degree of information, In the form of risk control organization, the organization of risk control is divided into many sub modules, such as the business type and region, which makes the organization more flexible and easy to adjust; And due to the breakdown of the module, the credit personnel in the fine molecular module can be better training and play their professional ability, but in terms of risk culture construction, the sub-modules are sub cultural differences, compared with the process of organizational form is not more conducive to the formation of unity of risk culture; In the degree of information technology, it can be achieved through the IT technology, there is no obvious difference between the two; Therefore, the impact of the 4 variables on the comprehensive risk control of the inform finance is the combination of the above risk control. It can be explained that there is no obvious reason for the H4 parameters.

Risk control is significant in the process of controlling the risk of security operation, and the risk control organization is significant in the credit risk control and market risk control ability of the enterprise.

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