

Evaluation of Credit Consumption based on Factor Analysis

-- A Case Study of Bengbu University Town

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Abstract

At present, due to the advent of the era of Internet of everything and the ease and convenience of mobile payment, college students have huge credit consumption potential. However, due to the lack of sufficient credit recognition and the complexity of credit consumption itself, it is likely to be unable to repay the debts, resulting in a series of problems such as the reduction of personal credit rating. In the process of promoting the construction of credit system in China, it is very important for college students to have a good credit foundation for their future career. Based on the survey of college students in Bengbu, Anhui Province, this paper analyzes the consumption ability and credit of college students. According to the survey results, this paper constructs the consumption ability and credit model of college students by factor analysis, and uses cluster analysis to evaluate the classification. Thus to effectively improve the consumption credit level of college students, promote college students to develop good consumer behavior to provide countermeasures and suggestions.

Keywords

College Students; Consumption Ability; Consumption Credit; Factor Analysis.

1. Introduction

In this paper, the current university students in Bengbu, Anhui Province as the research object, perspective of the personal credit consumption of contemporary university students, it is of practical significance to reduce the risk of bad credit consumption, maintain the credit reputation of college students, and perfect the concept of credit consumption under the Socialist market economy. This study will help college students to establish a correct attitude towards consumption, change their bad consumption patterns, and help them to make rational use of scarce resources. As an immature special social group, college students have the characteristics of incomplete economic independence, but the acceptance has the new characteristics of high interest and adaptability. Focusing on the concept of consumption will help college students establish correct consumption, world, life and values, and contribute to the development of socialism with Chinese characteristics. On the other hand, it is helpful to strengthen the formation of college students' healthy credit consumption concept by understanding their credit status and consumption psychology. At present, university students have the phenomenon of over-consumption, neglecting their own economic bearing capacity, and the phenomenon of irrational consumption is becoming more and more serious. Through the empirical investigation, to understand the actual situation of college students' credit, find out the adverse effects and explore the reasons, and seek targeted countermeasures. Guide college students to reasonable consumption, green consumption, scientific consumption, enhance the effect of ideological and political education, promote the healthy growth of college students.

2. Overview of the Current Situation

According to Tencent's 2015 report on the use of online loans by Chinese college students, the proportion of students who have used online loans is 21%. A survey by Yang Xueying (2016) found that college students have increased their spending on credit cards in recent years, and the motivation is mainly advanced spending and temporary emergency functions, but the typical problems are excessive overdraft and delayed repayment, there is no fixed source of repayment funds.

3. Empirical Analysis

3.1. Factor Selection

Table 1. Credit Evaluation System for college students

Primary Index	Secondary Index
Basic income	Source of income Monthly subsistence surplus Use of credit consumption instruments
Credit consumption	Monthly credit payments Timely repayment Risk perception of Internet loan
Understanding of credit consumption	Plan repayment cognition Product Awareness

3.2. Factor Analysis Results

KMO test and Bartlett test were performed. As shown in Table 2, both KMO statistics were greater than 0.5, and the P value of Bartlett sphericity test was 0.000, which indicated that the indexes were highly correlated and suitable for factor analysis.

Table 2. KMO test and Bartlett test

Kaiser-Meyer-Olkin measurement of sampling adequacy		0.683
Globular test of Bartlett's	Approximate chi-square	970.024
	df	28
	Sig.	0

Principal component method is used to extract the factors, and the factor whose eigenvalue is greater than 1 is extracted. The results are shown in Table 3. It can be seen that the cumulative variance contribution rate of the factors extracted is above 60%. Information is needed to better explain the consumption credit ability of college students.

Table 3. The factor analysis

Factor	Initial eigenvalue			Rotate Square sum load		
	Total	Contribution to variance%	Cumulative variance contribution%	Total	Contribution to variance%	Cumulative variance contribution%
1	2.776	34.704	34.704	2.730	34.119	34.119
2	1.388	17.349	52.053	1.425	17.808	51.927
3	1.134	14.176	66.229	1.144	14.301	66.229

The factor load Matrix is obtained by using the maximum variance method. As shown in Table 3, the first factor is the credit consumption factor. The second factor is the cognitive factor of

credit consumption. The third factor is the basic income factor. The contribution rate of these three factors to the evaluation of financial performance is 34.119% , 17.808% , 14.301% respectively, and the cumulative contribution rate is 66.229% . The factor score is calculated by regression method, and the factor score coefficient Matrix is obtained. The factor can be expressed as shown in figure. The variance contribution rate of each factor is taken as the weight, and then divided by the cumulative variance contribution rate, the factor score of each individual is obtained.

3.3. Cluster Grouping of Factor Scores Using K-MEANS Method

Using SPSS to cluster the factor scores of each college student, and get the final cluster center and cluster results. The consumption ability can be ranked into 2,4,1 and 3 by the final cluster center value, and the consumption ability can be graded into excellent, good, qualified and poor according to the conventional thinking. Count College Students by category, as shown in figure.

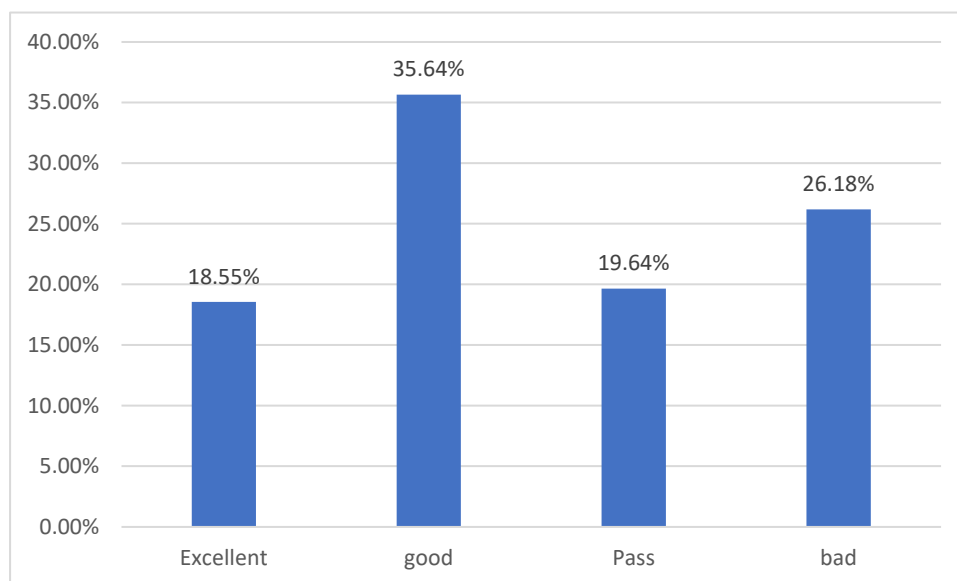


Fig 1. Consumption ability of college students

As can be seen, 18.55% of our college students in Bengbu have high consumption credit, 35.64% have good consumption ability, 29.09% have general consumption ability, and 6.55% have poor consumption ability. It shows that only some Bengbu College Students' consumption ability is below the average level, and the vast majority of college students' consumption level has little difference.

4. Conclusion

4.1. For the Consumption Ability of College Students

1.To a certain extent, the location of family influences the living expenses and consumption amount of college students

Chi-square analysis shows that there are significant differences in monthly living expenses and monthly consumption among college students in different areas, that is to say, there are significant differences in monthly living expenses and monthly consumption among college students in different areas. 25.1 percent of college students living on less than 1,000 yuan a month came from the countryside, 15 percentage points higher than in the cities; 32.7 percent of college students living on less than 1,000 yuan a month came from the countryside, 16 percentage points higher than in the cities.

2. More than 80% of college students have a healthy consumption outlook, but still have a tendency of bad consumerism

The survey results showed that 91.93 percent of college students think they should spend moderately, 22.81 percent of college students say they will follow suit and learn to increase their consumption amount, and 13.33 percent of college students say their living expenses are often not enough and they are often in debt.

3. The psychology of advanced consumption affects the average monthly credit expenditure of college students to some extent

The chi-square test shows that there is a significant difference in the average monthly credit expenditure of college students who hold different attitudes toward the advanced consumption behavior. Among the sample of college students with the tendency to lead consumption, 60.5% choose to make credit consumption, and the average monthly credit expenditure is 258.25 yuan.

4.2. Consumer Credit Survey for College Students

1. The location of family, the cognition of online loan risk and the attitude of consumption affect the probability of using online loan platform to some extent

The regression results show that the probability of using online loan platform is different among college students with different family locations, and there is a significant difference between the Regression Coefficient obtained from Logistic regression and zero in 29 statistical sense, therefore, it is believed that family location, credit risk perception and consumption attitude have a great impact on the probability of using the platform. Relatively speaking, the location of the family is the city, the Internet loan risk is well known, and the support attitude to the advanced consumption of college students to use the Internet loan platform higher probability.

2. To a certain extent, the understanding degree of net loan affects the amount of credit consumption of college students

The results of variance analysis show that the monthly credit consumption of college students with different understanding degree of online loan is different. If only the influence of the single factor of the understanding degree of online loan is considered, the difference between the inter-group variance and the intra-group variance is 5.924, and the probability is approximately 0. There is a significant difference between them. That is, the deeper the understanding of online lending, the more credit consumption.

3. More than 90 percent of college students said the most commonly used credit consumption tools were ant Huabai, jd.com iou and credit cards. College students were mainly concerned about the safety of credit consumption tools

According to the survey results, 91.71 percent of college students use credit tools such as ant Huabai, Jd.com Baitiao and credit cards, while only 1.66 percent of college students choose shopping installment websites and P2P loan products, the priority of college students' choice of credit instruments is security, interest expense, convenience, public usage rate, preferential activities, relatives and friends' recommendation and advertisement.

4. College Students' ability to repay loans on their own is low

According to the results of the survey, 11.6% of the students indicated that they were unable to pay their debts on time. It is also worth noting that 75.69 per cent of those who were able to repay on time said that their parents provided the amount of their repayment. To sum up, the Group of college students have not yet economic independence, for the repayment of consumption in advance, it is difficult to rely on, their own repayment.

5. Suggestions

5.1. A Dialectical View on the Use of Credit Consumption Tools by College Students

In our country to encourage the development of the internet + PRATT & Whitney Finance today, credit consumption tools to ease the urgent need for funds for many college students, but also help many college students to develop a rational concept of credit consumption. Credit consumption itself is an inevitable outcome of the economic and social development, and is a new service mode of the combination of Internet and finance. It should be a supplement to formal financial institutions such as banks, but some lending platforms excessively pursue profits, there are times when the market goes haywire. Therefore, we should dialectically look at the credit consumption tools for college students. The regulatory authorities should give proper treatment to the problem, support the helpful platform, help the platform to perfect its risk control system and strengthen the construction of the risk early warning system, in order to guarantee the credit security of college students, we should concentrate on the regulation of the black sheep in the loan instruments and raise the entry threshold of the credit loan market.

5.2. Colleges and Universities Should Strengthen the Consumption Credit Knowledge Education for College Students

With the rapid development of Internet finance, colleges and universities should actively carry out the education of consumer credit knowledge, strengthen the students' understanding of credit tools, and control the credit risk themselves. To Guide college students to form credit concept and sense of responsibility in consumer behavior, and to be a modern consumer with credit.

5.3. College Students Should Strengthen Their Credit Concept and Financial Planning Ability

College students should actively study the basic of credit, pay close attention to the relevant laws and policies of the state in the field of credit, cultivate healthy consumption concept, strengthen the ability of financial planning, strengthen the concept of credit, value personal consumption credit. Study Law, finance, financial management and other related professional knowledge, calmly deal with the Internet background of the temptation and impact of credit consumption.

5.4. Set up the Correct Consumption Idea, The University Student Colony Should Reduce the Consumption in Advance

According to the survey results, there are still a certain proportion of college students who do not have the right consumption concept, and the number of those who advance consumption and carry out credit instruments is not a small number. But college students have not yet economic independence, credit consumption, it is easy to lead to non-repayment. In recent years, all kinds of college students lead the consumption of malignant events continue to increase. Therefore, colleges and families should help college students to establish a correct consumption concept, and college students themselves should realize the advantages and disadvantages of advanced consumption concept and reduce the occurrence of advanced consumption.

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