

# Analysis of Influencing Factors of College Students Installment Purchase

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**Keywords:** Installment; demographic factors; utility; discount factor

**Abstract.** The article designed based on consumer psychology theory and other related research from inner and foreign country. The utility theory and discounting factor are used to establish a model to determine the level of psychological discount rate that consumers would be willing to accept. Finally, this paper draws the conclusion and makes a discussion of some extension of the paper.

## Introduction

Since the China Banking Regulatory Commission (CBRC) issued a notice in 2009, the credit card business gradually withdrew from the campus lending market and the data released by National Bureau of Statistics shown that Chinese Ordinary College about to have 2547.7 million students in 2014 [1], such a broad market and in recent years the continuous development of the Internet provides the installment shopping platform opportunities to develop. Since 2013, such as Qu Fenqi and Fenqi Le consumer installment shopping platform have been rapidly developed.

## Literature Review

**Consumer Psychology and Demographic Factors.** Western scholars have done a lot of research on this aspect to prove the influence of demographic factors on payment behavior. According to Modigliani's life cycle hypothesis of saving model [2], consumers tend to spend the life received resources in whole lifetime smoothly. The people who are in the early stage career have a more positive attitude towards the installment, because they expect to have more resources for the future to pay for them. Slocum and Mathewa found high level earners compared to the people who is has a lower income are more likely to accept the advanced consumption concept because of a higher solvency [3]. Ahw and Waters think that young people are more optimistic about the consumption in advance [4]. According to the Survey of Consumer Finances (SCF) data in 1998, Stavins concluded that young people and highly educated people use more of the new payment means [5]. Hayhoe verifies the gender differences in college students' consumption. In terms of purchase merchandise, women tend to buy appearance related items while men are more likely to buy electronic products. But in interest payments, the difference between the sexes is still very small [6].

**Utility Theory.** Economists have commonly described utility as if it were quantifiable, that is, as if different levels of utility could be compared along a numerical scale [7]. Contemporary mainstream economic theory frequently defers metaphysical questions, and merely notes or assumes that preference structures conforming to certain rules can be usefully represented by associating goods, services, or their uses with quantities, and defines "utility" as such a quantification [8]. Then Adriano Galliani gave a comprehensive summary of the previous research, and draws the conclusion that value lies in the proportion of utility and scarcity, depending on the ratio between the number of items, utility and demand factors such as: "value is the proportion; it by the proportion of 'utility' and 'scarcity'" [9]. Then Mr. Ghosn summarized theorems and outlined in three aspects. The first is desire or diminishing utility theorem, the utility of human desire or goods is diminishing; The following is equal theorem, namely scarcity under the constraint to maximize satisfied the desire, allocation of

scarce goods, to be able to make people's all desire is satisfied to the same degree; finally is if original desire would have been met, the people tend to find new enjoyment or expanding old pleasure, in order to obtain more enjoyment [10]. Stigler calls the 'fundamental principle of marginal utility theory' In Gossen's words, "Man maximizes his total life pleasure if he distributes his entire money income among the various enjoyments, so that the last atom of money spent on each single pleasure yields the same amount of pleasure" [7].

### Model

From the angle of economics, a monetary unit now and a monetary unit in future's purchasing power is not the same. Now if a unit of money saving will need more than one unit of currency consumption as compensation for the delay of consumption. The present value is P, equal monthly repayment amount is A, discount rate is I, we can set up the model:

$$P = A(1+i)^{-1} + A(1+i)^{-2} + \dots + A(1+i)^{-n} \quad (1)$$

The formula can be simplified as follow:

$$p = \frac{A}{i} [1 - (1+i)^{-n}] \quad (2)$$

We recently use several commodities selling on the Qu Fenqi website as examples [11]. First, Apple's full line of products are lower than the official website's offering, even without the discount rate, consumers believe that installment is appropriate. Other mobile phone brands such as Samsung S6 series and note4 series, Huawei P8 and ascend mate 7 monarch version, and oppo N3 series the quotation is consistent with official website. In addition, the electronic products such as magic sound tears diamond series and CASIO EX-TR-550 self-artifact is consist with Tmall. So as long as there is a discount rate, consumers can accept payment by installments. Considering that there is a certain rate of inflation, the consumer can accept payment by installments. About the camera equipment I selected two series of cameras. Nikon D7200 (18-200mm) series of Qu Fenqi installments for ¥9699, while the Zhongguancun integrated the 289 business is give the product ¥9659, so after the calculation of  $i=1.96\%$ . When people's psychological discount factor is greater than  $i$ , it will accept payment by installments. SONY HDR-CX900E camera Qu Fenqi installments for ¥9660, the Zhongguancun integrated 236 businesses given the reference price ¥9100, after the calculation of  $i=2.54\%$ . So the gap between the psychological discount rate of photographic equipment is still relatively large. Other series of interest on staging sites such as luxury and outdoor sports models are numerous and the online offer a large gap, so consumers can choose according to the situation.

### Conclusion

Since the reforming and opening up, China's opening degree to the outside world has gradually deepened, and the concept of western consumer spending pattern has become increasingly accepted by the new generation of young people. For young people, compared to the old consumers the demand for electronic products increasingly strong, and college students monthly disposable funds are limited and most sources from parents, so staging shopping way can significantly relieve the economic pressure to young people.

The use value of the goods is the value to meet the people's need which means that the use value of the goods is to satisfy the people's surplus value. Therefore, each unit of commodity's use value is also the marginal utility of products. And installment purchase of general merchandise to consumers can be sustained for a long time, so a pay of full amount with the inconsistent psychological feeling is not suitable, the installment is just able to meet this kind of psychology.

Finally, with the development of information network, online payment is convenient, save a lot of cost and becomes the future's development trend. Once upon a time when use the terms of payment by installments need to develop complex contracts and spend a lot of manpower and material costs to achieve each of the payments business. Now using the online payment, the cost was greatly reduced. In brief, the installment purchasing method in our country has been developed a lot in recent years.

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