Factors Contribute to Irrational Consumption Behaviors of College Students under New Consumption Environment

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Abstract. From the beginning of human society, economy is always the most vital component and principle of this society. It is well-known that the troika for economy growth is "consumption, investment, and export". For most countries, consumption is the prior in these three factors. For the biggest economy, United State, consumption occupies ranging from 76.68% to 85.13% from 1960 to 2020 for the total GDP growth. Under the rapid development of society and technology, there are more and more factors contribute to people's decision making, especially in consumption: advertisement, social media, education, peer comparison, etc. For college students, who is in a phase that their view towards consumption and decision is forming and developing rapidly, they would be easily influenced by some extroverted factors and make irrational decisions.Irrational decision would lead to problems in different extent. From individual perspective, irrational decision may lead to impulse consumption and regrets afterward. From macro perspective, irrational consumption would make people overconsume the products they do not really need, and further cause under allocation of resources.

Keywords: Present Bia; Framing Effect; Herding Effect; Behavioral Economy; Irrational Consumption.

1. Introduction

The basic principle of behavioral economy is to improve and strengthen the psychological base in economic analysis, and make the analysis become more realistic. Compared to new classical theory or Keynesian theory explanation, behavioral economy could explain the part of economy beyond the 'rationality' assumption: rational people would always be perfectly systematic and determined to reach their goal. However, as people always have bounded rationality, the irrational behavior like donation, impulse consumption, overconsumption, required systematic explanation.

One of these irrational behaviors is irrational consumption. Irrational consumption is the consumption behavior based on several bias and heuristics. Basically, there is Cognitive Bias, Herding Effect, Present Bias, etc.

As irrational behaviors would lead to some negative consequence for both individual well-being and overall economy efficiency, the basic mechanism about how people would be influenced to make irrational consumption, and how to avoid being led by misleading information would be presented in this paper.

2. Literature Review

2.1 Domestic Research

Searching for college students' irrational consumption, there were 162 results on CNKI, all of which were published after 2009. Although China's research in this field is relatively new, there are also many relevant data and literature, but the depth and luminosity need to be strengthened.

Qing Wang, Baoming Liu, Zhao et al. analyze Chinese current situation of college student spending pattern and its basic reason from different model and perspective. But the systematic description still needed to improve.

Xia Hu, Yan Zhang and Bowen An once investigated about the Mechanism and Influencing Factors of Herding Effect of College Students' Network Public Opinion. This study explores the mechanism of herd behavior and the influencing factors of College Students' opinions in online public. The results show that herding is the result of consensus heuristic and ability heuristic.

2.2 Foreign Research

From world perspective, the overall development of behavioral economy is mature. Goerge A. Akerlof, Economy professor in UCB college once introduce the explanation to the wages on unemployment, by using behavioral economy bias.

Daniel Kahneman, 2002 Nobel Prize winner, contributed to the development of behavioral economy by defining a lot of important concepts in this field like Framing effect, Utility, etc.

Kasser and Ryan introduced the Goal Content Model (CGI), to compare the happiness brought by internal and external mission.

Deci and Ryan suggested that Basic Psychological Theory (BPNI), to evaluate the individual decision making.

Irving Fisher provided the theory that people make decision depend on five different factors.

Foreign research was more mature in theory and instrumentalism in general, and some models are also applied in this paper.

2.3 Terminology

Base on the idea of the scholars mentioned above, Irrational consumption includes impulsive consumption, conspicuous consumption, comparative consumption, luxury consumption, non-environmental consumption, and so on. This article focuses on the irrational consumption related to the characteristics of college students themselves, or the new consumption background of the Internet, and the behavioral economics theory behind it.

Utility is the measure of the amount of happiness can be gained from making decisions.

3. Methodology

To discuss the overall framework of this paper, it would be mainly divided into four parts: introduction, analysis, evidence from questionnaire, and solution. The consequence would be briefly stated, and the future solution would be indicated based on several mechanisms mentioned.

3.1 Questionnaire Design

Questionnaire would be design based on the information needed of the theoretical framework. Beside basic information of name, age, and gender. It would focus on funding situation, commodity choice, influence of internet, and reasons to do decision. Also, there would be some of question about bias may involve in like herding effect, and influence of advertisement.

3.2 Questionnaire Aim

To investigate the impact of new consumption environment and the realistic situation od consumption of college students.

4. Analysis

4.1 College Students' Consumption Current Situation

5000 college students are tested in this questionnaire, 1576 of them are taken back, 1504 of them are effective. 63% of them are undergraduate students and 37% of them are graduated students. 46% of them are female and 54% of them are male.

For their fund resources for expenditure, based on the result of questionnaire, there are 70-80% of college students impose their consuming behavior base on their parents' support, approximate 10%

of them rely on either students' grant or students' loan. Only lower than 5% of them pay the money they used to spending by the money earned by themselves.

4.2 Reasons for Irrational Consumption

4.2.1 Psychology analysis on Consumption Funds

Fisher mentioned in Theory of Interest (Irving Fisher, 1930) that he established his understanding on personal capital on 5 features: Foresight, self-control, habit, expectation of life and love for future generations. As mentioned, most of college students make expenditure base on the funding support from parents or school, they haven't developed their own awareness on their personal property completely. Most of them would not develop any love for future generation as they haven't established families by themselves. As college students' age usually range from 18-24, they are still in the phase of developing self-control and trying to determine their career path and future orientation. Thus, it is hard for them to develop irrational consumption base on misunderstanding on their own property.

4.2.2 Psychology analysis on Consumption Decision Making

Based on the unclear planning for their own life path, and lack of responsibility, internal goal would be more attractive to college students. Sheldon and Kasser introduced the Goal Content Theory (GCI), (Kennon M. Sheldon and Tim Kasser, 1998) [1]. They mentioned that internal goal, like Gregarious, is always more attractive to people than external goal like money, houses, fame, etc. For college students who haven't had a job and get into society, they have generally low desire for external goals. Thus, their consumption behavior is generally motivated by internal goal, which may lead to irrational consumption because of bias because of misunderstanding of their own internal goal or conduct their internal goal into consumption in a wrong way.

4.2.3 Influence of Exterenal Environment on Consumption Behavior

New consumption environment refers to new consumer behaviors driven by new technologies such as digital technology, new business models such as online and offline integration, and new consumer relationships based on social networks and new media. There is 33% of them would choose to purchase a product because of online recommendation, especially from familiar bloggers or celebrities.

Under this circumstance, a new model replaces the origin AIDMA model (Attention – Interest – Desire – Memory – Action) is introduced based on the internet effect on consumers—AISAS model (Attention – Interest – Search – Action – Share) [2].

For one thing, new consumption environment influence people's internal decision-making process. In the questionnaire, 76% students shared their consumption in social media at least once. Thus, internet add Veblen Effect to consumption, which is the value generated from sharing the goods and make consumer think themselves better than others.

For another, internet also make the first two phase easier. Internet make advertisement become more precise and wider spreading. Based on the big data, most of the advertisement could achieve precise marketing now. As specific goods are promoted to specific people interested in that, it is easier to call on the third phase of decision making, both desire and searching.

Therefore, as questionnaire's result shows that only 13% students would do research before, they do the expenditure. Veblen effect and advertisement would get greater proportion in their final consumption decision and lead to irrational consumption.

4.2.4 Internal Requirement of College Students

Deci and Ryan indicated that people's needs, and the self- determination depends on three requirements: Social requirement, self-requirement, and relation requirement [3]. The data collected could also prove this argument.

The main types of commodities the consume is the necessity for living, occupying 32% approximately in their whole expenditure. What worth mentioning is that 27% of their expenditure is distributed into personal appearance, and 14% of that is distributed to entertainment online like video app VIP, or computer game.

There is 43% of students would choose to buy a product because of peer recommendation or common interest with their friends. There are 80% students agrees that make expenditure for friends or lover is necessary.

4.3 Irrational Bias in College Students 'Decision Making

4.3.1 Present Bias

Present bias refers to that people would pay more attention which would bring short term benefit, but not long-term effect. Generally, for most people, they would prefer short-term decision because they do not have the ability to predict for future completely. Huge uncertainty would make people tend to fulfill their short-term desire instead of the long term one[4].

This could be illustrated by the term "time discounting."

Time discounting refers to all the reason people pay more attention to present utility than future utility. Two arguments introduced:

a) Only when addition from expected utility in future could implement loss of present utility, consumption would be delay.

b) Under the hypothesis that future expected utility equals to present utility, self-control would lead to pain mentally[5].

Thus, these two reasons attributes time preference to expectation ability for future and ability to endure the pain of satisfaction delay[6].

Then when the time discounting comes to college students, they may lack of both abilities. For the ability to expect future utility, it might be hard for most people because no one could really imagine something haven't happen. However, for college students, it is especially severe. As they just gain the right to distribute money and payment by themselves, they are the youngest consumers in the market, so they do not have any experience on the amount of utility they can gain from consumption behavior. As they do not have the ability to measure the utility, they gain from purchasing, they cannot compare that with future utility in a rational way.

Also, they are lacking ability to endure the pain of delay satisfaction. In the questionnaire, 87% of students choose that their monthly payment from their parents would always become zero before the end of the year. And 78% people choose that "when they got enough money and they see something really great but not in spending plan, they would immediately pay for it." Linked back to college students' age ana experience, they are the youngest consumer; it is also the first time they got completely freedom in money distribution for most of college students. Thus, they would prefer just to spend their saving away.

However, present utility may be higher than realistic utility because of the value added from impulsion. Thus, they may buy some things they don't really need because of the bias.

4.3.2 Herding Effect

Herding effect refers to people's tendency to follow public's opinion and people's requirement of living in group or herd. The basic principle of it is the aversion towards uncertainty and disagreements. Internet enlarge this effect[7].

Internet would lead to polarization towards people. This is achieved by echo chamber. Because of attention economy, advertiser would tend to try their best to gain people's attention. This can be achieved by big data, to promote precise marketing. Then people would always hear about only one kind of voice. Then, potentially, they would label themselves as majority. Then herding effect would occur. As they are tending to believe the majority voice instead of their own judgement, in short run, they would be easy to be led by advertisement result from precise marketing and echo chamber. Then they would do irrational consumption base on the advertisement without doing research[8].

In long run, people would tend to stick on their own opinion because of herding effect and become less inclusive towards other opinion. Then their ability of critical thinking would be lost. Some of today's college students is the majority of living under internet and digital environment from very young age and be influenced by it in an aggressive way.

Thus, because of lack of judging force and huge influence from digital marketing, people would be largely influence by herding effect.

Besides, they may do irrational consumption because of the herding effect, they may consume some products that they don't need, but recommended by famous celebrities or public figures that everyone is pursuing. It is the same with branding effect. Even they don't like it, which means it wouldn't bring them corresponding utility with its price, they would still buy it because of chasing for popularity.

Also, for relationship requirement, it would also lead to irrational decision because of herding effect. A college student was asked in the interview "have you ever bought anything for your girlfriend?" He said that there were, and very often, festivals of any kind. His tone was not happy, even painful. He told me that he thought it ridiculous to spend the money earned by his parents on his relationship without a stable income. But he did it anyway because this is the society's requirement for a qualified boyfriend.

So, he didn't get any utility from his consumption behavior, but he did so to better integrate with herd. This is also a herding effect.

4.3.3 Framing Effect

Under the rapid development of behavioral economy theory, faming effect is applied in a lot or perspective in marketing and pricing. Take an example in the field of pricing, framing effect mainly focus on how to frame the expression of pricing. As the expression of pricing is changed in two ways: framing in expression of number[9].

For the expression of number, it is always used to maximize the effect of expression of discount on people's mental. This goal could be achieved by adjusting the expression of the amount of discount: by describe it in percentage or specific amount.

If the product is less than $100, the percentage discount would seem larger. This is because as the number of percentages is expressed in proportion, which is how much the discount number occupied in 100. Thus, compare to the real amount of money, the percentage would contain a larger number, which would make people feel that discount is larger than it really is.

If the product is greater than $100, the discount would usually be expressed in real number but not percentage. Because for percentage, it expresses the number of discounts by the proportion in the base number which is greater than 100. Thus, for the greater dominant number, it would lower the number could be expressed as percentage. Under this circumstance, the representation of number would seem greater than percentage representation.

The only way to avoid irrational consumption lead by framing effect is to gain experience or learning about this theoretical knowledge. But the questionnaire support that only 13% of people would do research before making purchasing action. Also, as they are always relatively new consumers, they are lacking spending experience[8].

Thus, they would likely to do irrational choice because of different type of marketing.

5. Consequence of Irrational Consumption

5.1 Micro Perspective

From individual perspective, college students who haven't have stable income would easily over consume by using their parent's money. From economic loss perspective, it would lead to unnecessary burden to families, which would lead to reduction of saving in family. From personal perspective, it may lead to conflict between family members.

5.2 Macro Perspective

From perspective of society, it may lead to over allocation of resources and market failure. Irrational consumption would likely lead to negative externality of purchasing. Because of the micro perspective negative consequence just mentioned, irrational consumption would bring the externality of overconsumption because it would not bring that much benefit to family and society as it brings to individuals. Thus, the line represent social benefit is lower than the private benefit one. The quantity between Qopt and Qe is the amount of overconsumption, because of its own private benefit (MPB) surpass the social benefits (MSB). Thus, when the social benefit meets social cost, it is the optimal equilibrium without any overconsumption of demerit goods or without negative externality of family burden. However, when the private benefit meets private cost, it is the real market equilibrium. It can be seen that the quantity Qe greater than Qopt is the quantity for overconsumption of resources. The shaded area is the welfare loss calculated by the difference in sum of consumer and producer surplus. Thus, the over consumption led to misallocation of resources, and result into market failure. The process of market failure forming is summarized below in figure 1.

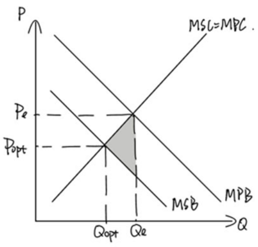

Figure.1 Diagram of market failure
(from: https://elevate.cambridge.org/Elevate/Reader/viewer.aspx#book/1683/Chapter5-4)

6. Solutions

To solve the problem of irrational consumption, different approaches is introduced.

6.1 Government Policy Suggestion

6.1.1 Education

As mentioned, present bias is one of the most vital factor of campus students' irrational consumption. It is necessary to make compulsory property management for undergraduates. A university should teach students how to better integrate into the society rather than imparting subject knowledge. By learning this course, they would have the awareness of the possibility of irrational consumption. As they got the awareness, it would be easier for them to avoid being impulse or irrational when making consumption decisions. This process of correction is shown in Figure 2.

Generally, for this part, the course setting should be focus on long-term planning, including career path instruction, property management, or lectures like decision making; also, behavioral economy would also be helpful. By imposing these courses, it would implement university students lack experience, which could give them ability to better evaluate their future utility lead by their consumption which might not be irrational.

This policy can help to solve the problem of irrational consumption from very initial position; this would lower the personal private benefit by limited the consumption, sand further reduce the welfare loss into the darker shaded area in this graph.

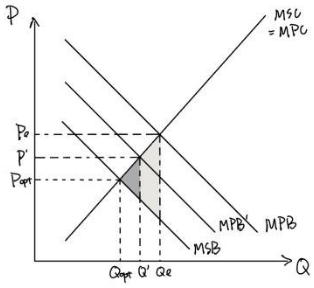

Figure.2 Diagram of solution to market failure
(from: https://elevate.cambridge.org/Elevate/Reader/viewer.aspx#book/1683/Chapter5-4)

This is investment into human capital. This investment could effectively solve the problem of both micro and macro perspective as it would be effective in long term, but it also has drawback of time lag. It need time for student to absorb the content included in the courses or lectures, which may reduce the effectiveness. However, still, it is an effective long-term strategy.

6.1.2 Online Regulation

This is a policy in response to the framing effect. As many commercial advertisements is catching people's attention in an irrational way like precise marketing and personal privacy seeking, framing effective become more and more variable and manipulative in people's decision making. This would lead to irrational consumption and its corresponding market failure[10].

The government should regulate Internet marketing to a certain extent. The degree of access to personal privacy greatly limits the possibility of precision marketing. If the government sets an objective standard to protect personal privacy, the possibility of precision marketing will become smaller, and the possibility of contemporary college students falling into the herding effect will become relatively smaller. Therefore, this is a way to indirectly reduce irrational consumption.

6.2 Individual Suggestion

6.2.1 Develop the Habit of Bookkeeping

Bookkeeping is a good way to manage wealth. Through bookkeeping, college students are more likely to realize the problems of irrational consumption, to avoid such behavior. At the same time, through bookkeeping, college students will also know their spending every month and every day, which will effectively reduce irrational consumption, thus reducing the burden and unnecessary expenditure of irrational consumption on families.

As the micro perspective mentioned, irrational consumption would lead to unnecessary financial burden to their family, or even inner-family conflict. By bookkeeping, for one thing, it would be an effective way to lower the possibility of irrational consumption, which would originally reduce the burden to family. For another, it would also be an effective way to reduce unnecessary guess and do some review when people found that there is something unusual in their account.

6.2.2 Refuse to Blindly Pursue Fashion

Corresponding to the herding effect as mentioned. Contemporary college students should broaden their horizons and reject the cocoon of information. Contemporary college students should be more tolerant and diversified in their views and avoid extremism. In this way, it will be free from the influence of herding effect on the pursuit of fashion, because receiving more diversified information will not blindly pursue a fashion but will develop a unique aesthetic of its own. Only in this way to maximize the utility brought by consumption behavior, instead of pursuing fashion, because fashion always changes. When the fashion changes, the utility brought by herding effect no longer exists, then this consumption will become meaningless.

6.2.3 Refuse to Blindly Pursue Fashion

Make appropriate expenditure planning at the beginning of each month, which will effectively enhance the prediction of contemporary college students for the future and never reduce the huge impact of present bias. At the same time, in the long run, effectively reducing the additional expenditure of families can also improve the well-being of each family.

7. Conclusion

This paper focus on the irrational consumption behavior of College Student, offer several solutions to the consequence caused by irrational consumption. Also, the reasons of irrational consumption and behavioral economy theory involved also mentioned in this paper.

Overall, the phenomenon of irrational behavior occur in nowadays college students because of several bias. But it could be solved by several policies. The market failure because of irrational consumption would be eliminated in the future.

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