

Analyzing the Effect of COVID-19 on Household Consumption of Small Luxury Goods in Qingyuan City, China Using the Lipstick Effect

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Abstract: The COVID-19 pandemic has altered people's lifestyles and spending habits in unexpected ways globally. Similarly, consumer shopping habits in China have shifted as a result of the pandemic. China is turning into one of the most important luxury goods markets. The rapidly expanding demand for luxury goods in China is helping entertainment and cosmetic industry. While interest in the luxury sector in China is growing, there has been little research on the impact of COVID-19 on household consumption of small luxury goods using the "lipstick effect". It has been suggested that the "lipstick effect" can explain the observed changes in household goods consumption patterns before and during a pandemic. The lipstick effect suggests that as customers' earnings decline, they would forgo large-ticket luxury goods purchases that they can no longer afford in favor of lesser luxury things. The goal of this study was to determine whether the lipstick effect occurred in selected household consumption areas in the Qingyuan City area of Guangdong Province, China, as a result of the COVID-19 pandemic. This study adopted a quantitative research design. Relevant data were collected from a sample size of 384 households using a household survey questionnaire. The results found that evidence of lipstick effect in household consumption of entertainment and cosmetic goods during the pandemic. The two goods were inferior and income elasticities of expenditure shares became less inelastic during the COVID-19 pandemic. The lipstick effect can be used to predict or monitor economic downturns as these goods exhibiting lipstick effect are resilient during downturns. In turn, these industries are sources of growth during downturns or health crisis.

Keywords: COVID-19; Small Luxury Goods; Lipstick Effect; Engel Curve

1 Introduction

The Chinese economy has entered a new normal and is facing downward pressure, while the entertainment industry is growing against the trend. This phenomenon is similar to the "lipstick effect", where consumers turn to cheap non essential items during economic downturns. Qingyuan's entertainment industry income has increased significantly, which can be used as a model to study the impact of the COVID-19 on China's household consumption of small luxury goods. The aim of this study is to explore the impact of lipstick on the consumption of movies, sports, and cosmetics by households in Qingyuan City under different consumption emotions, and to explain the determining factors of changes in household consumption of small luxury goods. The study also focuses on the socioeconomic status of families and policy implications. Previous research has shown that the film, television, and gaming industry benefits from the lipstick effect. This study attempts to explain the reasons through factors such as household income and consumption patterns.

2 Method

This study adopts a quantitative design to explore the impact of COVID-19 on small luxury old consumer goods in Qingdao, discuss the lipstick effect, and focus on the influencing factors of internal and external purchases.

2.1 Research Environment

This study was conducted in Qingyuan City, Guangdong Province, with a total population of approximately 3.97 million, mainly speaking Cantonese. The city covers an area of 19015 square kilometers and borders Guangzhou, Foshan, and other places.

2.2 Research Respondents

The research subjects are households in Qingyuan City, and the answer to the research question is provided by the head of the household. The sample size is 384 households. The sample distribution is based on the 2020 census data and is conducted online using snowball sampling method.

2.3 Research Instrument

The study used a household survey questionnaire as a data collection tool, which consists of a series of standardized questions and answers aimed at eliminating ambiguity in data analysis. The questionnaire is divided into three parts: demographic information, the impact of independent variables on dependent variables (such as household income, entertainment, sports, and cosmetics prices), and customer perceived value factors (emotional, quality, and functional value). The purpose of the survey was to explore the changes of Qingyuan residents' consumption patterns of sports, films and cosmetics before and after COVID-19. The questionnaire consists of open-ended and closed ended questions, with a survey duration of

approximately 10 to 15 minutes.

2.4 Research Procedures

This study combined literature review, household survey questionnaires, and other channels. After classification and coding, SPSS was used to conduct multiple regression analysis on the data to explore the relationship between independent variables (household income, entertainment, sports, and cosmetics prices, etc.) and dependent variables (the proportion of household expenditure on cosmetics, movies, and sports equipment). Six regression models were developed for the situation before and after COVID-19.

This study estimated two models for each type of small luxury goods (before and after COVID-19), and used the variables *vis* and *wis* to express the share of expenditure in household monthly income. Assuming a two-stage budgeting process, calculate the expenditure share of small luxury goods and other consumer goods on the logarithm of household monthly income to determine the expenditure elasticity of small luxury goods. This method calculates these shares based on the logarithm of the family's total expenditure on small luxury goods, and is applied to the expenditure analysis during COVID-19.

According to the variables in this paper, multiple linear regression was used for data analysis and ordinary least squares estimation was applied for parameter estimation. Multiple linear regression is one of the statistical analysis methods, which is widely used to determine the interdependent quantitative relationship between two or more variables by regression analysis in mathematical statistics.

3 Results, Analysis and Discussion

This chapter focuses on the analysis of online questionnaire data, and studies the changes in the consumption patterns of family sports, films and cosmetics in Qingyuan before and after COVID-19. Using snowball sampling method to obtain data, provide household profile and consumer expenditure data. Using multiple regression analysis to explore the impact of independent variables on the dependent variable (household consumption patterns).

3.1 Patterns of Household Profile

In this study, the data was obtained from a representative sample of 384 households in Qingyuan City. Population statistics placed the city at a total population of 3,969,473.

3.1.1 Changes in household income and consumption patterns

Family income gradually decreased from low income to high income, and during the epidemic, household income in all income categories decreased. The consumption of entertainment products remained stable before and after the epidemic, but the consumption of sports products decreased. The significant increase in expenditure on cosmetics in household consumption indicates that families place more emphasis on appearance.

3.1.2 Family background characteristics

The household heads are mostly middle-aged people, with a primary education level of secondary school and fewer higher education providers. The main sources of livelihood for the family are diverse, mainly consisting of employees from other industries, private enterprises, and self-employed individuals. The average family size is 5.02 people, with the most common being a family of 4 people. The online time shows a bimodal distribution, with no specific average

time being the most common.

3.1.3 Small luxury consumption

Small luxury goods such as movies and cosmetics account for a certain share of household expenses. The preference for movie consumption is slightly inclined towards high prices, while cosmetics consumption tends towards medium prices. The consumption of sports equipment shows the opposite trend, with less consumption of high priced goods.

3.1.4 Emotional, Quality, and Functional Value Factors

In terms of emotional value factors, most families hold a neutral attitude towards the emotional perception of purchasing small luxury goods, neither agreeing nor opposing. In terms of quality and value factors, a neutral attitude is also dominant, but slightly less than one-fifth of people disagree. In terms of functional value factors, neutral attitudes are still the most common, but the proportion of agreement holders exceeds one-fifth, indicating the importance of functionality in purchasing decisions. Compared with emotional value factors, functional value factors have lower neutral opinions, indicating that families pay more attention to the practicality of products when purchasing.

3.2 Research on Changes in Household Small Luxury Consumption

This study analyzed the changes in household consumption of small luxury items such as entertainment, sports, and cosmetics before and during the pandemic. The results show that all three types of goods are inferior, meaning that consumption decreases when income increases and increases when income decreases.

3.2.1 Entertainment supplies

As household income decreases, entertainment consumption increases. Before the epidemic, a 1% decrease in income would increase the income elasticity of entertainment expenses by 0.70%, while during the epidemic, it would increase by 0.78%. In addition, educational level, emotional and functional value factors also affect the consumption of entertainment products.

3.2.2 sports goods

The impact of income decline on sports equipment expenditure was -0.83% before the pandemic and -0.81% during the pandemic. Education level, livelihood sources, internet time, and quality value factors are significantly correlated with sports equipment consumption. During the epidemic, the relationship between sports equipment expenditure and various factors has become more complex.

3.2.3 Cosmetics

Before the epidemic, a 1% decrease in income would increase the income elasticity of cosmetics expenditure share by about 0.87%, while during the epidemic it increased by 1.18%. The consumption of cosmetics is significantly correlated with factors such as average price, education level, source of livelihood, and emotional value. During the pandemic, changes in cosmetics consumption are related to the lipstick effect, where people seek psychological comfort by purchasing small luxury items during economic downturns.

This study reveals the changes in household consumption of small luxury goods and their influencing factors. The lipstick effect is particularly evident in entertainment and cosmetics consumption, indicating that in times of economic hardship, people are still willing

to consume to improve their quality of life.

4 Conclusions

The purpose of this study is to explore whether household consumption of small luxury goods (entertainment, cosmetics, sports goods) in Qingyuan, China, has a lipstick effect during the COVID-19 pandemic. Regression analysis shows that the consumption of cosmetics and entertainment products increases when income decreases, confirming the lipstick effect. Policies can be used to promote the economy, such as tracking lipstick sales to predict economic turbulence and enhancing the resilience of lipstick

effect companies. These products have elasticity during economic downturns and can stimulate the economy. Education, livelihood, and emotional factors also affect consumption.

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References

- [1] Achille, A., & Zipser, D. (2020). A perspective for the luxury-goods industry during— and after—coronavirus. McKinsey & Company, 1
- [2] Andersen, A. L., Hansen, E. T., Johannesen, N., & Sheridan, A. (2020, May 26). Consumer Responses to the COVID-19 Crisis: Evidence from Bank Account Transaction Data. SSRN.
- [3] Cannito, L., Anzani, S., Bortolotti, A., Palumbo, R., Ceccato, I., Di Crosta, A., ... & Palumbo, R. (2021). Temporal discounting of money and face masks during the COVID-19 pandemic: the role of hoarding level. *Frontiers in Psychology*, 12, 2215.
- [4] Chen, H., Qian, W., & Wen, Q. (2021, May). The impact of the COVID-19 pandemic on consumption: Learning from high-frequency transaction data. In *AEA Papers and Proceedings* (Vol. 111, pp. 307-11).
- [5] Chen, Z., & Zhang, L. (2019, December 29). Qingyuan economy affected by the global spread of the Crown-19 pneumonia COVID-19 and coping strategies.