

52% of Italians is not satisfied with the NHS



Need to ease pressure through:

- accurate information
- prevention strategies
- reduction of inequalities

+200

diseases linked to alcohol abuse



1.3% of European GDP represented by social and healthcare expenses linked to alcohol consumption

Introduction of warning labels on super alcohol bottles to raise awareness and provide information about the risks of alcohol



The research investigates the effectiveness of the proposal in achieving two main goals

Improve public trust in the government

Explore the relationship between consumer behavior and the role of the state in protecting public health

Reduce alcohol consumption

Examine the effects of these interventions across various demographic groups in Italy, such as age, gender, and socioeconomic status

Experimental design

- Experiment will include supermarkets in several italian big cities
- Randomized Control Trial:
 - treatment: introduction of warning labels
 - control: no warning labels
- Duration: 1 year



Model 1: Citizen Satisfaction

$$\mathbf{satisfaction}_i = \beta_0 + \beta_1 \underbrace{alpha_i}_{j=1} + \sum_{j=1}^5 \beta_{ji} \mathbf{age_bin}_j + \beta_7 \mathbf{gender}_i + \sum_{j=1}^2 \beta_{ji} \mathbf{education}_{ji} + \beta_{10} \mathbf{nationality}_i + \beta_{11} \mathbf{smoking}_i$$

$$+eta_{12}$$
ethnicity $_i+eta_{13}$ income $_i+eta_{14}$ pol_part $_i+\sum_{j=1}^4eta_{ji}$ pol_ass $_i+eta_{17}$ health_usage $_i+eta_{18}$ pub_usage $_i$

$$+\beta_{19} \cdot \text{health_usage}_i + \beta_{20} \cdot \text{informedness}_i + \sum_{j=1}^{21} \beta_{ji} \cdot \text{region}_{ij} + \sum_{p} \lambda_p (\alpha_i \cdot X_{ip}) + \epsilon_i$$

- dependent variable = citizen satisfaction score
- target variable = 1 for individuals in target group and 0 for individuals in the control group
- interaction term between treatment ai and control variable
- + control variables that account for individual demographics and experience

Model 2: Purchase of Super Alcohol

$$\frac{\text{purchases}_{i}}{\text{purchases}_{i}} = \beta_{0} + \beta_{1} \frac{\text{alpha}_{i}}{\text{alpha}_{i}} + \sum_{j=1}^{5} \beta_{ji} \text{age_bin}_{j} + \beta_{7} \text{gender}_{i} + \sum_{j=1}^{2} \beta_{ji} \text{education}_{ji} + \beta_{10} \text{nationality}_{i} + \beta_{11} \text{smoking}_{i}$$

$$+\beta_{12}$$
ethnicity_i + β_{13} income_i + $\sum_{j=1}^{21} \beta_{ji}$ region_{ji} + $\sum_{p} \lambda_{p} (\alpha_{i} \cdot X_{ip}) + \epsilon_{i}$

- dependent variable = comulative super alcohol purchase per individual
- target variable = 1 for individuals in target group and 0 for individuals in the control group
- interaction term between treatment αi and control variable
- + control variables that account for individual demographics and experience

Data Collection

Data will be collected from **fidelity card system** and **targeted surveys**Surveys will be administered both online and in-store at individuals in both groups

PRIMARY DATA

- Customer Satisfaction Score
 - Calculated from responses to a survey
 - Questions will evaluate:
 - Overall Satisfaction
 - Expectancy Disconfirmation
 - Comparison to an Ideal
- Purchase
- Treatment Indicator
- Region

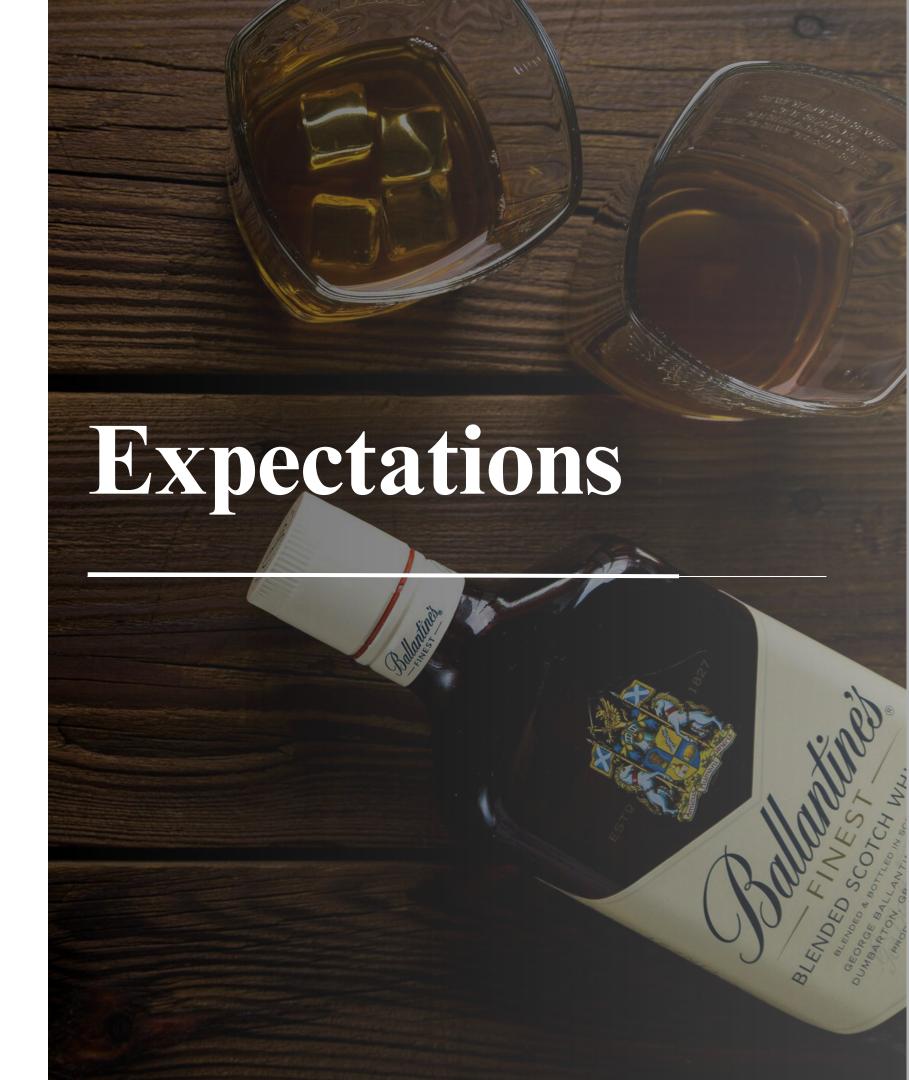
- Demographic Controls
 - Age bins, Gender, Education level,
 Nationality, Smoking habits, Ethnicity,
 Income
- Additional Controls
 - Political participation, Political
 association, Public health usage,
 Preference for public or private service,
 Informedness on political issue

Evaluation of Results

- **Estimation of the model through OLS**
- Evaluation of significance of the model through an F-test
- Evaluation of significance of the treatment variable through a t-test
 - Interpretation of coefficient as average change in alcohol spending/citizen satisfaction when moving from control to treatment
- Activation of interaction terms and evaluation of significance through t-test
 - Interpretation of coefficient as the additional marginal effect of the treatment on the selected sub-group

Expected main positive drivers for Citizen Satisfaction and Alcohol Consumption

- Age: higher responsiveness for young adults
- Higher education level
- Higher Income
- Regional differences
- Non-smokers



Implications

- Improved public trust, which may foster cooperation on other health-related policies
- Healthier population, which is could lower healthcare costs and improve service deliver

Drawbacks

- Negative impact on firms
 - Possible economic bonuses
- Long-term effects on NHS may take time
- Cultural resistance could limit the success of the experiment

Follwing steps

- Sustained communication and transparency to maintain satisfaction
- Targeted campaign, based on the results of the interaction terms
- Combined approach, in case of positive results on consumption reduction, but negative on satisfaction

