Behavioral and Experimental Economics
Research proposal
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Inertia in Consumer rating – Well Begun is Half Done

Research question: Do existing consumer reviews affect the way that new consumers rate?

Answer: Intuitively, when the existing consumer reviews are very positive (negative), the new consumers would upward (downward) adjust the rating that they enter.

1. Consumers' perception of products/ services is affected by others' opinions.
2. Consumers may adjust their own rating scale to fit in the existing public rating scale. For example, one may see 7/10 as a good score already while others only take 9/10 as satisfying. He might then rate 9/10 to stay consistent with others.
3. Consumers may simply do not want to stand out and hide his true valuation when there are conflicting opinions.

Positioning: This will highlight the importance of review management. It can also justify the existence of review buying especially at the start of a business. Weinberger and Dillon (1980) study the effect of unfavorable product information on consumers purchase intention and find it significant. This project instead focuses on the ex post stage that consumers have experienced the products and how they write down reviews. Guan and Lam (2019) study how consumes react to different format of rating provision. Through an experiment, they show that average rating provision causes consumer attitude toward the product to be more extreme, whereas rating distribution provision reduces this polarization. This project shares the idea that variation of existing reviews could affect consumers' perception. Chen, Hong and Liu (2017) investigate whether and how multidimensional rating systems affect consumer satisfaction (measured by product ratings), based on both observational data and two randomized experiments. While to the best of my understanding, this is the first project that studies how existing reviews affects the newly submitted rating. The result could stress the importance of review management if it is shown that currently rating creates inertia.

Preregistration

Objects are told that they need to help with product testing. Each of them is given a snack to taste, and need to write down review and rate the snack on a website. The website displays a list of "previous reviews" (manipulated) and objects can see them before giving their feedback. The "previous reviews" can be positive or negative, with or without detailed comments, depending on the conditions.

Hypothesis: When the existing consumer reviews are very positive (negative), the new rating tends to be positive (negative), controlling for product quality.

Dependent variable: the rating submitted by objects

Conditions: Objects will be randomly assigned to one of four conditions: (4 between-subject conditions).

Group 1: High current rating – only ratings, without comments
Group 2: Low current rating – only ratings, without comments
Group 3: High current rating – with ratings and comments
Group 4: Low current rating – with ratings and comments

Analyses: Compare the rating submitted by objects under different conditions. Run regression to check significance. We can also see if having detailed comments amplifies the effect.

Sample Size: 400

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Research Proposal 4

Don't leave me out

1 The Don't Leave Me Out Game

We introduce a **neutrally-labeled** game featuring $I = 1, \ldots, N$ of payoff-maximizing citizens who share an endowment of unknown size, where $N \geq 3$. For any endowment, $\omega > 0$, the timing is as follows:

S1. A player $i \in I$ is randomly selected. Player i is told the endowment value and is instructed to choose whether to split it equally among N players (including himself), or decide how to split half of the endowment at a cost $\frac{1}{2}\omega > c > 0$ that is divided among all participants. The rest of the endowment is to be split equally among participants. Therefore,

- **Player i decides to split equally**: The game ends and each player receives the payoff $\frac{\omega}{N}$.
- **Player i decides to be able to split half of the endowment**: The game continues.

S2. A player $j \in I \setminus \{i\}$ is randomly selected. Player j is told the endowment value and is instructed to choose whether to bargain with player i or to end the game. Therefore,

- **Player j decides to end the game**: Each player receives the payoff $\frac{\omega - c}{N}$.
- **Player j decides to bargain**: The game continues.

S3. Player i makes an offer to player j.

- **If offer o is accepted:** The game ends and payoffs are as follows:
  - Player i obtains $\frac{1}{2}\omega + \frac{\frac{1}{2}\omega - c}{N} - o$.
  - Player j obtains $\frac{\frac{1}{2}\omega - c}{N} + o$.
  - Player k for $k \in I \setminus \{i, j\}$ obtains $\frac{\frac{1}{2}\omega - c}{N}$.
- **If offer o is rejected:** The game ends and each player obtains $\frac{\omega - c}{N}$.

Let $\varnothing$ denote the semi-action *Wait*, and denote:

- C(orruption) as player i's decision to decide how to split half of the endowment.
- A(ltruistic) as player i's decision to split the endowment equally among players (the social optimum).
- B(argain) as player j's decision to bargain with player i.
- E(nd) as player j's decision to end corruption and split the endowment net of the social costs of corruption equally among all players.
- A(ccept) as player j's decision to accept player i's offer.

- R(eject) as player j's decision to reject player i's offer.

For simplicity, assume that player j chooses action A when indifferent during bargaining, then there is a unique sub-game perfect Nash equilibrium (SPNE). Using backward induction, we can characterize the SPNE. In stage 3, player j accepts any $o \geq \frac{\omega - c}{N}$. Clearly, player i makes player j exactly indifferent and offers o such that $\frac{\frac{1}{2}\omega - c}{N} + o = \frac{\omega - c}{N}$. This implies $o = \frac{\omega}{2N}$. Player j is indifferent and accepts. In stage 2, player j is indifferent between ending the game or bargaining and thus chooses either action with equal probability. Finally, in stage 1, player i compares her expected payoffs under actions C and A. It is easily verified that C provides a strictly larger payoff such that player i chooses action C. All players k for $k \in I \setminus \{i, j\}$ "choose" action $\varnothing$.

2 RAP

1. **R**esearch questions:
   (a) Are everyday citizens willing to engage in corruption as measured by a behavioral game?
   (b) If given the opportunity to end unjust practices in a behavioral game, will everyday citizens forgo the opportunity to obtain sizable gains to stop them?
   (c) Can we link the game's results to real-life outcomes?
2. **A**nswers:
   (a) Given the theoretical predictions of the game, it is clear that some positive share of players will engage in corruption.
   (b) The vast majority of participants (more than the theoretical 50%) will choose to profit from this injustice rather than end it.
   (c) All participants will end up with the money value of their endowment share at the end of the game. Following Banerjee (2016), we propose to overpay subjects and analyze the rate at which they report the over-payment. We expect a positive correlation between the decision to engage in corruption in the game and the decision to effectively "steal" the excess money.
3. **P**ositioning: There is a large literature on lab and lab-in-the-field experiments dealing with corruption. Abbink et al. (2002) proposed the archetypal game. Since then, there have been many advances.[1] We follow the literature (e.g. Frank and Schulze (2000); Schulze and Frank (2003); Barr and Serra (2009)) in proposing a game that involves an equilibrium with partial corruption. However, we introduce a fairly recent innovative feature. Similar to Armand et al. (2021) and Gneezy et al. (2018), our game is equipped to capture in-group dynamics and how those in it (active players) behave towards the out-group (inactive players). Following Banerjee (2016), we propose a parsimonious way to link the behavioral game's results to real-life outcomes. This topic is of great economic importance as corruption is considered to be harmful for economic development, with empirical evidence showing its detrimental effect on public good provision (Ferraz et al., 2012) and firm efficiency (Sequeira and Djankov, 2014).

3 Pre-registration

1. **Hypotheses:**
   The project will test whether the following hypotheses are true (these directly relate to the research questions and answers detailed in the RAP above):

[1] See Abbink and Serra (2012) for a review.

(a) The majority of individuals chosen to be the first-mover (player i in our previous notation) will choose action C. However, it will be less than 100% such that a positive amount will show altruism.

(b) More than 50% of second-movers (player j in our previous notation) will choose to bargain with the first-mover, thus engaging in corruption.

(c) First-movers will have the largest payoff. However, their offers will be, on average, larger than the theoretical prediction, such that second-movers are better off relative to the SPNE.

(d) Participants who chose corrupt behavior in the game will report over-payment less frequently than those who did not.

2. **Outcome variables:**

   (a) **Incidence of corrupt behavior**:

   - **Overall**: Indicator variable that takes value 1 if any of the active players in the game choose a "corrupt" behavior, and 0 otherwise. Corrupt behaviors are C for the first-mover and B for the second-mover.
   - **First-mover**: Indicator variable that takes value 1 if the first-mover chooses action C, and 0 otherwise.
   - **Second-mover**: Indicator variable that takes value 1 if the second-mover chooses action B, and 0 otherwise.

   (b) **Failure to report over-payment**: Indicator variable that takes value 1 if the participant did not report that he or she was over-payed.

3. **Treatment:** All participants are randomized into groups of $N \geq 3$. Each group plays the one-shot game. Then, participants are randomized into one of the following groups:

   (a) **Corruption scheme**: Only one participant, the first-mover, is selected at random into this group. Once this player is selected, she will be provided with the size of the endowment and all possible actions in further stages of the game. If the game continues after stage 1, a second-mover, is selected at random from the remaining participants. The second-mover will be provided with the size of the endowment and all possible actions in further stages of the game.

   (b) **Inactive players**: Their only action is *Wait*. They are never told the size of the endowment or are made aware that two players are active.

4. **Analyses:**

   - Compare the frequency that action C is chosen with its theoretical counterpart.
   - Compare the frequency that action B is chosen with its theoretical counterpart.
   - Correlate incidence of the corrupt behaviors with failure to report over-payment.
   - Test the difference of means of the failure rate of active players relative to inactive players.

5. **Sample Size:** To keep costs low, we choose $N = 3$ and a sample size of 300 participants such that we observe 100 games. All participants will be required to answer a survey collecting demographics, a Raven's test to proxy for cognitive ability and to rank what issues are most pressing for society. For the latter, clearly corruption will be one of them.

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ALBERTO

Research Proposal – Behavioral 4

Navigating on Sight: How Agents Optimize Their Choices Heuristically.

RAP

- Research Question How do agents optimize over a monotonic choice set (for example how much time I devote to work or how much of a certain good I consume)[1]? Rational optimization implies that agents contemplate the full choice set and optimize accordingly. A simple rule that that is taught in any introductory course of economics is that agents choosing among a continuous univariate choice set decide according to the simple rule *Marginal Benefit = Marginal Cost* with the intuition that consumers increase or decrease their consumption until a marginal increase in the choice variable leads to an equal increase in cost and benefits. Within this intuition lies a slightly different heuristic of choice that is more similar, borrowing from computer science, to a loop cycle with an if-clause to break out of it once a certain condition is met. I will refer to this heuristic as a sequential marginal optimization (SMO), to be compared to the classical rational optimization (RO). Let us consider a simple example: let us suppose an agent has to decide how many slices of a cake to consume, under RO the agent will optimize according to the standard maximization problem of economics, while under SMO the agent will consume a slice of cake, then evaluate whether the next slice of cake will improve its utility, and if not he/she will stop consuming.

  Under well behaved utility function the two mental processes are equivalent[2], but as soon as we consider a utility function that is not monotonic agents that adopt the sequential marginal optimization might fall into a cognitive trap, stopping when the simple heuristic rule is met, even though higher amounts of consumption might lead to higher utility. The aim of this experiment is to test which heuristic agents follow when optimizing over a univariate choice set.

- Answer I expect at least a subset of agents to adopt the simpler SMO heuristic over RO. In particular, I expect that people that choose the simpler SMO heuristic to display higher impatience and lower indicators of cognitive abilities.

- Positioning The experiment is tightly related to studies on the heuristic chosen by agents when making choices, such as Hart (2005) and Gigerenzer (2011). The paper would test whether the optimization heuristic followed by the agents follows the standard approach or what I define as the SMO heuristic, which is adopted implicitly, for example, in Alaoui and Penta (2016). More specifically the experiment is tied to the literature on choice overload, as one of the possible advantages of the SMO heuristic is to reduce the choice overload by considering at most two choices. In this sense Besedeš et al. (2015) is the closest paper I have found which assesses through explicit sequential choices architectures whether it is possible to reduce choice overload without reducing the cardinality of the choice set. This experiment would test whether agents construct these infrastructure implicitly when optimizing.

[1] Without loss of generality this proposal will consider the case of an optimal consumption choice of a specific good.
[2] Thus, justifying the intuition provided to undergraduate students taking an introductory economics course.

Pre-Registration

- Title Navigating on Sight: How Agents Optimize Their Choices Heuristically.
- Hypothesis People may adopt the SMO heuristic compared to the RO heuristic assumed by standard economics. Thus, with non-monotonic payoff functions they might pick non optimal actions that respect the simple SMO heuristic stopping rule.
- Dependent Variable The difference between the share of subjects who get to the final round of the game with those that stop at the critical 'cognitive pitfall' round. The specific experiment is explained in the following section.
- Treatment Agents are subjected to an initial questionnaire to collect background information and 16[3] rounds of a simple choice to be administered at a computer. Each round is provided at a different page, so that subjects must click to a specific link to go from one round to the following one. Next to the link they also have the choice to terminate the treatment and collect their payoffs. At the beginning they are notified exactly of what happens at each round (including the exact size of the payoffs). At each round the subjects must complete an annoying and long task that does not change between different rounds to receive a determined payoff with the exclusion of the last two rounds. Each page also states the payoff of the next round and whether the subject will have to repeat the task. The payoffs are decreasing in the first 14 rounds with $payoff_{14} = 0$, $payoff_{13} = a$ and $payoff_{15} + payoff_{16} \geq a$.
  In other words, the agents for the first thirteen rounds after completing an annoying task receive a payoff that is decreasing in the number of rounds. At the fourteenth round they complete the annoying task without any payoff and in the last two rounds they receive the payoffs (which are collectively larger than the thirteenth round one) without any task to complete.
- Analysis It is possible to notice that the total payoff of the last three rounds is equal or better than the one of the thirteenth round with the same cost (one iteration of the annoying task). Thus, an agent following the standard RO heuristic, conditional on accepting to run the thirteenth round, will complete also the last three. On the other hand, an agent following the SMO heuristic will never accept to run the fourteenth round. Thus, we can observe the share of agents who use either of the two heuristics to optimize their choice.

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[3] According to Besedeš et al. (2015) there is evidence that a choice set of cardinality at least 16 is enough to trigger a behavior consistent with choice overload.

Cristóbal Ruiz-Tagle

Bargaining aversion as a determinant in the gender gap

The research questions of this project are two:

1. Are female college students less likely to negotiate an offered salary than their male peers in a vignette experiment?
2. Do this gap in gender behavior change if female individuals are enrolled in a STEM degree?

Vignette studies examine discrimination in the laboratory by trying to simulate personnel decisions made by employers. I want to simulate an environment of job hiring with the alternative of a risky bargaining process where there is no strategic behavior from the employer.

The answer that I expect to document is that female students are less prone to start a risky bargaining process and that this behavior is attenuated for those females that get involved in more competitive fields.

This potential conclusion is relevant because one explanation for the persistent gender pay differences in labor markets is that women avoid salary negotiations (Neumark, 2018). This is a behavior difficult to identify in using administrative data or special samples. Lab setting would help to address this question (Dittrich et al. 2014; Small et al., 2007).

Pre-registration

1. *Name:* Bargaining aversion as a determinant in the gender gap

2. *Hypothesis:* Female college students are less prone to initiate a bargaining procedure when they are in a hiring process, but this aversion is reduced when females are immersed in competitive environments like STEM degrees.

3. *Dependent variable:* Individual outcome obtained in the proposed game that emulates a hiring process with given strategies from the employer.

4. *Treatment:* A stratified randomly selected group of college students is going to face the following game in a lab setting. The objective of the game is to obtain the maximum monetary outcome. Each individual will receive a card (the same for everybody) that includes the description of a median worker who performs in an activity that is not gender-based stereotyped (i.e.: journalist). The card will also include information about working experience, educational background and other factors that may affect productivity. Finally, the card will include the distribution of earnings for that activity according to official statistics based on administrative data. For the purpose of the project, the distribution will be normalized to bounder it between $0 and $15. And, to make things easier the quartiles will be clearly pointed.

   Then, each individual will face a computer that will show the initial salary that is offered to them. The participants will be informed that the secret offer is randomly generated and that they are competing with other applicants. The system will choose the one who accepts the cheapest offer (emulating a firm) and that those who are not chosen, will receive zero monetary payoff. But each

individual will receive the exact same offer; the equivalent to 70th percentile in the distribution. The idea is to induce a placebo.

Each individual will internalize that they got a "fairly good" draw. Then the system will ask if they want to accept the offer or if they want to start a bargaining process. The system will warn about the risk associated with the bargaining alternative (i.e.: that the system could choose a competitive alternative letting a zero payoff or receiving a lower offer). Individuals will only have 30 seconds to make a decision.

If the individuals accept to bargain, then they will be informed by the system that they will receive a new offer that consists of the original one, plus a correction that is going to be bounded in the segment -5 percentiles points to +5 percentiles points. But again, using the placebo, the correction will be fixed and each individual, conditional on accepting, will receive the equivalent to the 73th percentile. If they do not like to bargain, they accept the offer and the system informs them that they are the chosen ones, obtaining an outcome equal to the first offer.

This process will be repeated up to two times or until each individual decides to accept the given offer. If the participant wants to bargain again, the procedure is the same that in the first stage, and the fixed offer will be the equivalent to 76th percentile. The outcome each individual obtains will be the last offered salary by the system. As a result of the placebo design, nobody obtains zero payoff.

One advantage of doing this in a context of students is that it is highly probable that they have never faced a hiring process, so the identification of this hypothetical gender-driven aversion would be clearer. Also because they are probably not exposed to relevant factors that would restrict the choice set in a typical hiring process (i.e.: necessity/urgency because of children maintenance).

5. *Analysis:* To compare the outcomes obtained by female participants with the outcomes obtained by male participants. Then add a control if the female participants are enrolled in a STEM program. Buser et al. (2014) show in a lab setting that competitiveness is strongly positively correlated with choosing more prestigious academic tracks (more intense in math and science) even conditional on academic ability.

6. *Sample Size:* 400 college students.

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Gender differences in exposure to sexualised advertising and economic behaviour.

- Question: How does exposure to sexualised advertisement affect economic behaviour? Are there gender differences?
- Motivation
  - Sexualised advertisement is ubiquitous, both displaying suggestive women and men.
  - Bonnier et. al. (2020) explored the effects of exposure to semi naked women on risk taking, willingness to compete, and math performance in a laboratory experiment both for men and for women.
  - I propose to build on this in two ways:
    - Exposing each gender to the opposite gender, instead of both genders to one gender.
    - Consider the effect of sexualised imagery on an additional outcome: **Altruism.**

- Hypothesis: Do men and women react differently to sexualized imagery?
- Dependent Variable: Risk taking, willingness to compete, math performance, altruism.
- Conditions (or Treatments):

  Before each of the games 100 are exposed to a picture of semi-naked member of the opposite sex, 100 to a fully clothed member of the opposite sex, and 100 to nothing at all. The image appears on the computer screen for 20 seconds before each of the games.

- A) Risk taking game, where subjects have to choose between two multiple price list lotteries after being exposed to the images.
- B) Math solving game, where they receive 1 euro per set of math problems solved
- C) Competitive math game, where the payment system is related to the rank
- D) Players select either a set or competitive reward system for solving math problems.
- E) Dictator game where players allocate 10 euros between themselves and another player.
- Difference in means between male and female performance in each of the treatment groups.
- 600 subjects (50 pairs in each treatment (3 treatments, 2 genders))

Teaching principles or coaching schemes?

Research Proposal

Enrico Stivella

Feb 11th, 2022

RAP

Research question Does the way skills are taught impact their application to tasks? In particular, does coaching make students less able to apply the skills they have acquired to new circumstances?

Positioning Literature in Economics of Education has investigated the so-called "technology of skill formation" (Cunha and Heckman, 2007). Cunha, Heckman, and Schennach (2010) differentiate between cognitive and non-cognitive skills. They use this differentiation in order to target educational investment. However, little is said about the adaptability of some skills. By this term I mean to define skills that can be applied to a wide range of tasks and do not depend on the context (i.e. algebra is an "adaptable" skill, while knowledge of Stata can be applied to a smaller range of tasks).

Another stream of literature in Economics of Education has dealt with assessment-based-incentives and coaching. Neal (2018, Chpt. 2.6.2) presents evidence on teachers that targeted test scores - i.e. coaching - rather than knowledge of the subject.[1]

The experiment I propose aims to link coaching to skill adaptability, trying to understand whether the way a simple skill is taught impacts the adaptability of the skill itself. I would teach the first group of kids some "principles" and let them apply to a simple task. The second group would be coached in performing the task.

Expected Answer I expect that kids that are coached are more efficient in performing the task with respect to the kids that are taught the "principles". On the other hand, I expect that kids who are taught the "principles" are more able to apply the same principles to a different situation. If the evidence is opposite - i.e. coached kids are also more able to apply the "principles" to a different situation - the results would still be interesting, because it would imply that kids inductively learn principles and are able to actively apply them to other scenarios.

[1] Further evidence is present in Hamilton, Stecher, and Klein (2002), Holcombe, Jennings, and Koretz (2013) and Shepard and Dougherty (1991).

Treatment

I would take two groups of small kids (around age 5) with no experience with Lego. They would face the following procedure:

Group A

1. Members of group A are in a playing room. Every kid has her own Lego kit.
2. The teacher explains them what are the principles to build properly a Lego house - i.e. when creating a wall, put the bricks one on the top of the other, but take care that the end of the superior brick does not match the end of the inferior, otherwise the wall is not stable. Kids can replicate what the teacher does.
3. Then they have to build a simple three-layer house. The teacher can help them, but only reminding the principles and not correcting any mistake.

Group B

1. Members of group B are in a playing room. Every kid has her own Lego kit.
2. The teacher directly starts from the instruction booklet (that explains how to build the same house as for Group A). She explains how to do every step, and the kids follow.

Later in the day, kids from both groups are divided in two subgroups. Members of subgroups A1 and B1 are asked to build a new 4-layers house, with the use of the instruction booklet. Members of subgroups A2 and B2 are asked to play a new game in which they have to perform a similar task.[2]

Dependent Variables

Two are the main outcomes:

- **Correct completion** is measured as the number of links correctly built. A link is defined as the place in which a brick ends and the following brick begins. The link is correctly built if the brick on the superior layer is placed on the intersection and does not completely lie onto one of the two inferior bricks.
- **Completion time** is just the amount of time that kids spend building the Lego house.

Analyses

In order to test the main hypothesis, I would compare the results of group A2 and B2 with a simple t-test. I would do a similar t-test comparison for groups A1 and B1, in order to understand if coaching worked well.

[2] An example may be a construction game with wooden bricks, but also electronic games with the same principles may suit.

Sample size

I would have a sample of 256 kids. Every subgroup would be formed by 64 kids. The calculation is obtained by assuming a power of 0.8, a significance level of 5% and an effect size of 0.5 standard deviations for both A1-B1 and A2-B2 comparisons. I would prefer to have kids who have little experience in playing with Lego, so that the learning process is harder.

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Investor behavior under inflation

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Research Proposal 4

Julian Streyczek
February 2022

1 RAP

Research question: How do private investors adjust to inflation?

Positioning: Historically, there has been much interest in the effects of inflation on the stock market (e.g. Mundell 1963, Feldstein 1980), which currently resurges with the recent high inflation rates. From the past, one may derive insights about which asset types typically hedge against inflation, as for example raw materials (Dempster and Artigas 2010) and production industry stocks (Froot 1995).

While professional investors can be expected to follow these guidelines, it is unclear whether and to what extent private investors are aware of the implications of inflation and respond to them; especially because inflation was relatively low during the last decades, many investors might have to catch up on knowledge over the next months and years, which might gradually reflect in their investment decisions. However, empirical evidence is scarce and mainly concerns the previous century (e.g. Oehler 1999, Johnsson, Lindblom, and Platan 2002).

Answer: Since learning about inflation and optimal investment thereunder is likely a slow, gradual process, it is difficult to answer the research questions solely using observational data. Moreover, individual investment decisions are usually not openly observable. Therefore, I propose a field experiment in partnership with an online broker (e.g. Trade Republic or Robinhood).[1] In the experiment, participants are exposed to different treatments such as newsletters or online classes which inform them about latest inflation developments and teach about the impact of inflation on different types of assets. The online broker's database as well as survey responses then provide a detailed picture of how our treatments affect investment decisions.

2 Pre-registration

1. **Name:** Investor behavior under inflation
2. **Hypotheses:**
    - Investors adjust their investment when being exposed to and learning about inflation
    - Adjustments are larger when exposition is more intense
    - Investments shift away from startups, tech, and stocks, and towards raw materials, production industry, and ETFs

[1] Online brokers allow private investors to invest into a wide range of financial assets via desktop or smartphone. Instead of traditional brokers, they operate exclusively online, and are currently gaining popularity due to their ease of use and low transaction fees.

3. **Dependent Variable:** Participants' investment decisions (type and amount)
    - ... using online broker, as obtained from database of online broker.
    - ... outside online broker, as indicated by monthly self-reported survey.
4. **Treatments:** Information on inflation news and the impact of inflation on different types of financial assets. Varying intensity:
    - *Control*: no treatment
    - *Newsletter*: participants receive a monthly newsletter which includes
        - information on inflation trends and expected inflation
        - news on monetary authority statements
        - pieces of common knowledge on importance of inflation for investment decisions (e.g.: inflation decreases profitability of firms which are financed in large parts by credit)
    - *Newsletter, incentivized*: as *Newsletter*, but careful reading is incentivized by a set of questions on its content, with small monetary payoffs for correct answers (e.g. five questions, $5 if all answered correctly, $ otherwise)
    - *Online course*: instead of receiving the newsletter, participants are required to attend a monthly 30-minutes online class which covers the same contents
5. **Analyses:** Compare average investment of control and treatment groups into popular stocks, ETFs, and raw materials, as well as in groups of the former (e.g. grouped by industry), via separate t-tests.
6. **Sample Size:** Participants are obtained by promoting "a paid experiment on investment and inflation" via the online broker's mailing list. The participants should be representative of the customer base, but need to satisfy some conditions that ensure active use of the platform, e.g. a certain number/amount of active investments and a certain number/amount of investments in the past months.

    250 participants per group $\Rightarrow$ 1,000 participants in total.

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