Experimental design

# Intro

The goal of the experiment is to look how participants want to divide and endowment between a risky asset and safe asset. The risky asset is just a simple gamble were participants either win 7% or lose -3%. The chance that they win is 40% and the chance that the loose is 60%. The safe asset does not have a return so the part invested stays the same. Participants will invest their endowment for nine rounds.

Questionnaire

**Gender**: male – female

**Age**: #

**Nationality:** Dutch- Germany- Spanish- Other

**Highest finished level of education:** High school – First year college – second year college – third year college – Bachelor – Master – Doctorate

**Study**: Chemistry and physics - Business and Economics - Law - Health and medicine - language and communication - technique – Art and cultures - other

# Differences in endowment

There are three different groups, in each group the endowment works different.

**The additive group:**

Get a new endowment of $10 in each round. The gains or losses of a certain period do not affect the endowment in the next period. In the end all the result of each round is added up. This looks like the next formula:

Where FW is final wealth, X the new endowment in each period, α(t) the fraction investment into the risky assets, r(t) the return on the risky investment in period t and T is the planning horizon.

**The multiplicative group**:

The multiplicative group. They get a single endowment in the first period of $100.-. After the return is randomly chosen participant can reinvest their endowment together with its returns in round 2. This goes own for the remaining 8 rounds. Their final amount is the outcome of the last round\*investment in the risky asset plus what they invested in the safe asset. Mathematically the group looks result of the group looks like the next formula:

Here Y is the initial endowment and the rest of the abbreviations are the same as in the previous equation

# Difference in feedback frequency and commitment period

Each group is further subdivided into four more subgroups:

**Subgroup** **one**: Participants fill in their bet for the first round. Then, the computer chooses if the risky asset gives a gain or a loss. After the round the computer program displays gains or losses from that round. This procedure will be repeated for all nine rounds.

**Subgroup two:** In this group participants will be asked to enter their bet for the subsequent three rounds. Then, the computer decides the gains and losses for all three rounds but does not display these on the computer screen in between. Next, the combined gains or losses of the three rounds will be shown to the participant. This procedure will be repeated in round four and seven for a total of nine rounds.

**Subgroup three:** Again participants are asked to enter their bet for the subsequent three rounds. Then, the computer decides if the first round is a gain or a loss after which this is displayed to the participant (until the participant choose next). Next, the computer decides if the second round is a gain or a loss without the participants entering another bet since the bet is already decided in the first round. Again the result is displayed to the participant until it chooses “next”. Finally the computer chooses for a third time if it’s a gain or a loss and this is again displayed on the screen. This total procedure is repeated three times for a total of nine rounds.

**Subgroup four:** This final group is a bit weird because now participants have to set their bet for the first round only but without the computer showing them a gain or a loss they also have to make a second and a third bet. Then the combined gains or losses of the three rounds will be shown to the participant again. This procedure will be repeated in round four and seven for a total of nine rounds.

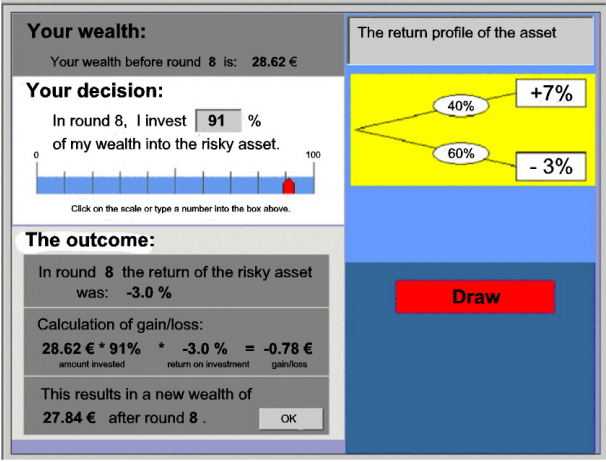
In total this will result in 8 groups.

|  |  |
| --- | --- |
| Additive\*subgroup 1 | Multiplicative\*subgroup 1 |
| Additive\*subgroup 2 | Multiplicative\*subgroup 2 |
| Additive\*subgroup 3 | Multiplicative\*subgroup 3 |
| Additive\*subgroup 4 | Multiplicative\*subgroup 4 |

Participants need to be automatically divided over the 8 groups equally.

# Layout

On the page below you can see how the experiment could like. This does not have to be the exact design however all the information that is on there should also be visible to participants in my experiment.

****