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#### Abstract

Prior research has confirmed that people develop self-serving interpretations of future uncertainty when it allows them to exploit this "wiggle room" at expense of the other person. The current work builds on this finding and examines ambiguity in relation to the timing of uncertainty resolution- whether ex post (ambiguity has already been resolved before the choice but outcome is still unknown) or ex ante (ambiguity will be resolved after the choice). In the laboratory experiment involving a dictator allocation task with two treatment variables (lottery resolution: ex post or ex ante, and role in allocation decision: dictator or receiver), 249 participants performed a choice task in dictator game. The results demonstrate that ambiguity allows motivated reasoning more so in ex ante condition. The lack of exact probability values and the fact that veil of uncertainty will be lifted at a later point in time in ex ante condition give individuals freedom to interpret facts as it suits them and abuse the uncertainty for selfish gain.


## Introduction

According to decision theorists, no reasonable person would wish to violate axioms of rational choice. If decision theorists were asked, people should live by the phrase "A bird in the hand is worth more than two in the bush." Meanwhile, when faced with uncertainty, any given person's actions often violate reason and hence, rational decision theory (Slovic \& Tversky, 1974).

Another question in decision-making context is whether generosity exists as such or people always have alternative, possibly selfish motives for displaying generosity. While many researchers claim that generosity towards others is triggered by preference for equal distribution between parties and sense of fairness (Bolton \& Ockenfels, 2000; Charness \& Rabin, 2002; Bénabou \& Tirole, 2005), others came to conclusion that giving reflects a desire to keep own face in front of self (Konow, 2000; Dana, Cain \& Dawes, 2006) or others, even when those others are anonymous (Dana, Weber \& Kuang, 2007).

Haisley and Weber (2010) demonstrated in their dictator game experiment that people develop self-serving interpretations of future uncertainty when it allows them to exploit this "wiggle room" at expense of the other person. While behaving selfishly dictators convince themselves that what they do is not so bad and hence, decide to hide behind ambiguity and abuse it. What Haisley and Weber have not looked into is the timing of uncertainty resolution, since they observe only uncertainty which will happen in the future. This study will build on their experiment by looking into an additional factor: timing of uncertainty resolution (ex ante or ex post).

Suppose an apartment owner wants to sell his flat and needs to inform the current tenant to leave the apartment. If he does so, the tenant might have difficulty to find another suitable flat
in a reasonable time, as he is facing an uncertain market. When outcome of owner's selfish choice (expelling the tenant) is uncertain for the other party, as in our example, decision makers inflate the likelihood of good outcome for the other party in order to choose selfishly (Dana et al., 2006). The selfish choice would happen even though decision maker's prior preference for oneself is either ambiguity neutral or ambiguity averse and even though decision makers would prefer the certain option over the uncertain one for themselves, they don't shy away from placing the other party (in our case the tenant) in a situation with uncertain outcome. This might be the case only if the uncertainty has not been resolved already in the past, but will be resolved in the future (Small \& Loewenstein, 2003). In other words, if the flat owner can resolve the uncertainty by consulting a statistical report regarding time needed for the tenant to find a new flat, which either is yet to be released or has already been published, this paper aims to prove that the flat owner is more likely to choose self-interestingly in the case when the report is to be released in the future, as this situation allows him to believe that all will work out well for the tenant, even if he doesn't act towards a good outcome for the tenant.

The results of this paper confirm that ambiguity is a fertile ground for motivated reasoning (Kunda, 1990) as also that one chooses self-serving option and exploits ambiguity, disguising their behavior as not so selfish to maintain a "fair face" in front of self and others (Dana et al, 2006). On top, it adds insight into decision making by considering an additional factor: timing of ambiguity resolution.

## Review of relevant literature

## Other-regarding preferences

The normative theory claims that people are rational and act selfishly, maximizing own utility (Slovic \& Tversky, 1974). But, dictator games show that people are not so, since people do give positive amounts to the receiving party (Camerer \& Fehr, 2004; Kahneman, Knetsch \& Thaler, 1986). Dictator games have been a power horse of research on social (or other regarding) preferences. In this game two people- a dictator and a receiver- share an endowment between themselves, based on the decision made by dictator. According to the normative theory, an entirely selfish dictator should keep the whole cake for himself.

Research proves that people sometimes do act selflessly and seemingly value equality (Camerer \& Fehr, 2004). Even though self-interested dictators should not share their endowment, they often do so. Experiments with students show that dictators give on average between 10 and $25 \%$, even though there is no strong norm regulating the "right" amount to be allocated and so they act in line with their own social preferences (Camerer \& Fehr, 2004). Experiments also show, as summarized by Camerer (2003), that there are hardly any offers in the extreme categories, whether extremely selfish (giving 1-10\% of endowment) or extremely fair (51-100\% of endowment). Majority of dictators do give a positive amount ( $>20 \%$ of endowment) to the passive party (Camerer, 2003), and this reveals that people are not as selfish as assumed by the normative theory.

Kahneman, Knetsch and Thaler (1986) also demonstrate that the standard economic model needs to be broadened, as people often sacrifice own gain for welfare of others, even though extrinsic motivators for doing so are absent. In decisions where self-interest is opposed
to social concerns and welfare of others, people seem to place value on fairness towards others and behave generously. This might not always be the case, but rather only when the situation is less transparent (ambiguous) and allows them to act selfishly and still maintain an illusion of self as fair and generous.

## Ambiguity

In a situation where probability of an event taking place is objectively known, we talk about simple risk. If we, on the other side, consider a situation where probability of an event taking place is somewhere between 0 and 1 with all probabilities equally likely, we talk about uncertainty (Knight, 1921) or ambiguity; these two terms will be used interchangeably throughout this paper. Research suggests that people prefer to make decisions concerning themselves in situations with simple risk, while at the same time showing preference for ambiguity when making decisions which concern others' welfare (Haisley \& Weber, 2010). As Haisley and Weber demonstrate, making decisions in ambiguous situations opens up possibility for decision makers to act selfishly; decision makers hide behind their concern for welfare of others and in fact behave self-servingly and unfairly towards the others. This is because the presence of ambiguity opens the door for self-serving interpretation of what will happen. The decision-maker can, for instance, inflate the likelihood of the favorable event to disguise his selfish choice.

Many studies show that people are averse to decisions (or lotteries) about which they have vague information on distribution of probabilities (Sarin \& Weber, 1993; Hsu, Bhatt, Adolphs, Tranel \& Camerer, 2005). This ambiguity aversion is seen as one of the most noticeable breaches of expected utility theory (Camerer \& Weber, 1992).

Research on social preferences has documented that ambiguity is a fertile ground for motivated reasoning and often leads to selfish behavior (e.g. Kunda, 1990). Namely, ambiguous situations open the door for disguising selfish behavior as if it was not that selfish. In many experiments which are based on dictator games subjects show positive concern for welfare of others, so researchers explored the underlying motivation for this behavior. While some researchers came to conclusion that dictators are concerned with equal distribution of payoffs between self and the other player, apparently valuing fair outcomes (Bolton \& Ockenfels, 2000; Charness \& Rabin, 2002; Bénabou \& Tirole, 2005), others see the behavior of dictators as acting in line with receiver's expectations, even though receiver is anonymous and cannot punish the dictator or fight back (Camerer, 2003; Dana et al., 2006).

Dana and colleagues (2006) performed two experiments in support of the latter explanation for dictator's motivation to give. Dictators could allocate money between self and receivers. After dictators made their allocation decision, they had an option to take less than maximum amount of money and exit the game and the receiver would get nothing (would also never learn that the game was played). In this study $28 \%$ of dictators took the exit option, even though it was monetarily inferior to taking the full amount. In a further study by the same authors they had a private condition. In the private condition dictators needed to chose the allocation between self and the receiver, but the receiver would not know where the money came from (or that the game was played). In the second step, they could opt out by taking less than maximum amount of money. Looking at the exit decisions in private condition in this second study, only 4\% chose to exit. As expected, exit rate in private condition was significantly lower than in 'public' condition, as there was no need to save face in front of an anonymous receiver. Hence,
the dictators could easily maximize their win and take full amount of money without disappointing the receiver or feeling guilty about their selfish choice.

Furthermore, people can strategically ignore information that challenges their selfesteem. Dana at al. (2007) demonstrated in a binary dictator game that dictators acted generously when dividing income, only if relationship between actions and results was transparent (and could be traced back to them as deciding instance). When the authors relaxed transparency by leaving relationship between actions and results uncertain, they found that dictators exploited "wiggle room" which ambiguity provided to them and acted more selfishly. In all treatments with relaxed transparency between actions and consequences subjects chose to act selfishly, deciding to use the uncertainty regarding the cause of unfair outcomes and hide behind this ambiguity in order to draw personal gain from this situation. It was demonstrated that the main concern for dictators was not an equitable split of resources, but rather personal gain while preserving perception of themselves as generous individuals with integrity in front of others and themselves.

Two further researchers, Schweitzer and Hsee (2002), wrote about ambiguity in terms of elastic values, as they are imprecise and open to numerous interpretations. When dealing with uncertain information, not only cognitive but also motivational factors might influence decisionmaking and communication. If a real estate agent is looking to sell a property and is being asked how much money needs to be invested into renovations, the agent will most likely not know the exact value, but will work with an estimate or range of values. If this agent really wants to sell the property, he might (be motivated to) under-report the cost for renovations. In their studies Schweitzer and Hsee showed that elasticity created a space for decision makers to justify extreme and selfish claims to themselves and others. They compared responses in high elasticity
condition with responses in low elasticity condition and could demonstrate that responses in high elasticity condition were not only more extreme than in the low elasticity condition, but were also more influenced by motivational factors and constrained by private information and justifiability of claims.

## Measuring taste for ambiguity - How people value ambiguous outcomes

Expected utility model says that a person will choose an event with highest expected utility (with the highest average of utilities of outcomes weighted by probabilities he assigns to corresponding events). If two actions have the same expected utilities, an individual should be indifferent between them. As utility is difficult to measure directly, stochastic models have been developed, which talk about probabilities of each alternative being chosen by a subject. Becker, DeGroot and Marschak (1964) performed experiment to determine cash equivalent of a bet: each participant was asked to choose whether to play a bet and receive a random reward or sell his bet ticket for cash (selling price). A number between 1 and 100 was drawn and if this drawn number was less or equal to 50 , participant would win nothing, and if it was higher than 50 , participant would win 100cents. Afterwards the person stated his selling price and again number between 1 and 100 was drawn. If the drawn number was equal or higher than the stated selling price, person would be paid as much as the number says. If the drawn number was smaller than the selling price, participant would play the game: a number was drawn between 1 and 100 and if this number was less or equal to 50 , participant would win nothing, and if it was higher than 50 , participant would win 100cents. The result rejected expected utility model, even though from one round to the next the data did become closer to expected utility model, as subjects got accustomed to the task.

Slovic and Tversky (1974) tested Savage's independence principle (in further text simply SIP), also known as the sure-thing principle (Savage, 1954), using gambles in decision situations. The sure-thing principle claims that outcomes which occur regardless of the chosen actions should not affect one's preferences for alternatives and theorists expect rational individuals to act in accordance with it. In Slovic and Tversky's experiments they tested whether people accepted SIP in the absence of social pressure while understanding the competing arguments, and found that SIP was often violated by subjects, even when special efforts were made to present relevant arguments in a compelling fashion. So, people are not entirely rational in their decisions.

Research on behavior decision-making confirms that people systematically violate norms of rational choice; investigating individual and situational differences may shed more light on the nature of these violations.

Differences between men and women in their response to risk have been researched for quite some time (esp. in respect whether they are consistent with expected utility maximization), so Eckel and Grossman (2008) searched for experimental evidence of difference between men and women on risk aversion and their different attitudes toward risk when it comes to choosing among financially risky alternatives. Studies to-date (McStay \& Dunlap, 1983; Flynn, Slovic \& Mertz, 1994) show that men and women respond to risk in different ways, with women less likely than men to engage in risky behavior. Eckel and Grossman (2008) review gender differences in risky choices and create two categories: 1) abstract, context-free gambles, and 2) experiments presented in a context: in gain domain (investment decisions) and loss domain (insurance decisions). Results of abstract gamble experiments show that women are more risk averse than men and that there are differences between gain and loss domains with women being
more risk prone in loss domain (see Schubert, Brown, Gysler \& Brachinger, 1999; Moore \& Eckel, 2003). At the same time, evidence from contextual environment experiments is less conclusive, ranging from no evidence of significant risk attitude differences between sexes (Schubert et al., 1999), mixed evidence (women more risk averse in investments, but no differences in insurance condition for losses (Moore \& Eckel, 2003)), to conclusions that men are more risk prone than women (Eckel \& Grossman, 2002). Field studies demonstrate evidence that men are more risk prone in their betting habits (Johnson \& Powell, 1994). Also, women hold more of their account balances in low risk investment products (Bajtelsmit \& VanDerhei, 1997). Eckel and Grossman (2008) conclude that this lack of agreement raises concern that risk attitude is a "measurable, stable personality trait, or as a domain-general property of a utility function in wealth or income."

The decision to trust someone is compared to placing a risky bet on the trustworthiness of an anonymous person in a situation where both can gain from cooperation, according to Eckel and Wilson (2004). In their experiments Eckel and Wilson measured risk by letting subjects play a one-shot trust game with a random, anonymously paired individual, in which one person could pass on money to the counterpart, who could decide how to distribute it between themselves. Information on the counterpart was varied, to find out how social distance impacts trust. Subjects were given three tasks to measure risk: 1) incentivized choice tasks representing risky financial decisions where they choose between lotteries, 2) incentivized choice tasks representing risky financial decisions where they choose between lotteries and certain amounts (with the same expected value), and 3) questionnaire to elicit subjects' attitudes on trust and altruism. In risky decision between two lotteries women were more risk averse than men, though the difference is not statistically significant. In risky decision when choosing between lottery and certain amount
subjects rather chose gamble, indicating risk seeking preferences, with males slightly more risk prone than females (though again not significantly).

Moore and Eckel (2003) investigated ambiguity where probability distributions over unknown parameter of the decision were known (labeled as weak ambiguity). Subjects made choices in precise (certain) and ambiguous settings (with probabilities of 0.1, 0.5, 0.9) in gambles with substantial financial stakes with varying probabilities, settings (gain or loss) and environments (abstract or investment/insurance). For this Moore and Eckel developed a new instrument, where experimenter did not have information advantage over subjects on gamble outcomes. They measured by having subjects make choices between gambles (option A) and certain amounts (B) and observed at which point subjects' preference for A (probability is displayed as range (45-55\%)) was traded for preference for B option (certain amount). At low probabilities to win, subjects acted risk seekingly; at high probability to win, they acted risk aversely. When losing, there was not such clear evidence of ambiguity aversion as when winning. In both settings, low probability events were overvalued, while high probability events were undervalued.

In this paper ambiguity aversion was measured with a simple test where subjects were asked to indicate the selling price of a ticket that could give them a certain payoffs if their winning color is drawn from the lottery.

## Assessing partner's taste for ambiguity - Predicting the other's evaluation of ambiguous outcomes

Lack of empathy is seen as one of the roots of selfishness in one's behavior and it stands in contrast to altruism and prosocial choices. While many decision-making theories assume that
people make decisions while calm and with a cool head, in reality many decisions are made in a "hot" and passionate state of mind, so emotional and affective considerations need to be included in decision making theories (Loewenstein, 1996, 2000). He points out that people often claim that they are "out of control" when their actions or decisions are against their self-interest and not rational. He connects "out of control" state to "visceral factors"(includes drive states such as hunger, thirst and sexual desire, moods and emotions, physical pain and addict's craving for a drug), hoping to bridge the gap between rational self-interest and actual behavior people display, which is often irrational. Loewenstein (1996) found that at high enough intensity visceral factors caused people to act against their self-interest by narrowing their attention to present moment and focusing inwardly, hence creating empathy gap and weakening altruism. Apart from focusing on here and now, Loewenstein further suggested that visceral factors in past or future as well as those experienced by other people are systematically underweighted.

As Faro and Rottenstreich (2006) point out, in strategic interactions it is important to make accurate predictions of other's decisions. They assess accuracy in predicting other people's choices under risk or uncertainty in four experiments, when the other person is not highly familiar. The first experiment explored this prediction accuracy with gains, the second one with losses, in the third experiment they facilitated empathy by asking subjects to consider oneself make a prediction of a close friend and in the fourth they explored self-reported empathy. Results in gains and losses show that predictions of other person's choices are inaccurate: they are too regressive compared to actual decisions of choosers and closer to risk neutrality than they actually are. On top, they argue that risk-as-feeling and empathy gap account for this. This might confirm the 3 methods of decision making proposed by Weber, Ames \& Blais (2005): Affect-based decision making method (decision makers follow their affective reactions to each
option), calculation-based (evaluate probability and outcome information that is available) and recognition-based (current circumstances are recognized as a pattern already experienced, and this leads their decision making process). Faro and Rottenstreich (2006) add that for decisions concerning oneself individuals seem to use affect-based decision making method, while they use calculation-based or recognition-based reasoning when predicting others' choices and decisions. They also conclude that by asking subjects to consider own reactions it is possible to minimize regressive predictions.

To measure how subjects assess their partners' ambiguity preference we elicited subject's incentivized beliefs about their partner's preference for ambiguity. Aforementioned research by Faro and Rottenstreich (2006) suggests that predictions of minimum selling price of other person would be more risk neutral than those decisions really are.

## Ex ante or ex post resolution of the lottery determining the recipient's payoff

It has been observed by Small and Loewenstein (2003) that identifiable, specific victims draw more attention and stimulate deeper emotional reactions than statistical ones who have not yet been identified. In contrast, abstract victims are dealt with as heuristics, with quite shallow processing and attention. In searching for possible causes for this phenomenon, only the size of victims' reference group received strong support, as Jenni and Loewenstein showed (1997). They demonstrated that people had greater concern for victims whose reference group was rather small. For example: 10 deaths in a village of 100 inhabitants is seen as catastrophic, while 10 deaths in a city of 3000 inhabitants is viewed as a relatively small number.

To demonstrate that identifiable victim effect does exist, Small and Loewenstein (2003) performed an experiment and a field study. In their laboratory experiment, subjects played a
modified dictator game, where each subject received $10 \$$, but only dictators were lucky and could keep their endowment. Dictators could share their endowment with victims (who lost their endowment), manipulating whether victims were already identified (ex post) or were yet to be determined (ex ante). Results of dictators' choices supported the hypothesis that already identified victims would get more money (ex post condition). In their field study subjects did a survey and were paid $5 \$$ for it, which they could donate (all or any part of it) to an organization who helps to build homes for disadvantaged families. Again, manipulation was whether the neediest family was already selected or will be selected. As in the laboratory experiment, when beneficiaries were already determined - ex post condition - (even though subjects had no info which family is the one in the worst situation and needing help the most), donations were larger than in undetermined victim condition.

Connecting the stream of research by Haisley and Weber (2010) and the one by Small and Loewenstein (2003), this paper aims to demonstrate in a dictator game that people develop self-serving interpretations of uncertainty in relation to the timing of uncertainty resolution- in fact they exploit the "moral wiggle room" at expense of the other person more with ex ante uncertainty (when the uncertainty is yet to be resolved) than with ex post (when the uncertainty has already been resolved). It appears that in ex post condition when victim is already identified, dictators could not deny it and felt more compelled to act than in ex ante condition, when they could still hope that things will somehow work out for victims and there's no real need to give.

## Method

To test the predictions, a between-subject laboratory experiment was designed. Participants were 249 students from the Corvinus University, Budapest, Hungary. Data was collected in 14 sessions with 18 subjects per sessions on average in a double blind setup. The roles of dictator (who played with real stakes) and receiver (who played with hypothetical stakes) were assigned randomly and were kept anonymous. Each session lasted about 20 minutes; all four conditions were implemented within a session. There was no show up fee.

In the experiment there were two treatment variables: 1) Lottery resolution (ex post/ex ante) and 2) Role in allocation decision (dictator with real stakes and receiver with hypothetical stakes). This lead to $2 * 2$ factorial design with four conditions: ex post/dictator, ex ante/dictator, ex post/receiver, ex ante/receiver.

## Procedure

Participants came into the laboratory and were seated apart from each other. All instructions were displayed on the screen. The experiment was programmed in OTree (Chen, Schonger \& Wickens, 2014). Subjects could only communicate with the experimenter privately after raising their hands. They were told that they were anonymously taking part in a study and would be paid in cash at the end of the experiment. They were informed that their earnings were dependent on their decisions made in the experiment.

After filling out demographic data, they were described the first lottery: There are 60 red and blue balls in a bag, which are absolutely identical apart from their colour and no one knows the exact composition of the 60 balls. In ex ante condition they were told that lottery has not been played yet and the winning colour of the ball is not known yet. In ex post condition they
were told that the winning colour of the ball was already drawn, but it is not known to everyone yet. In both conditions they were asked to pick their winning colour.

Then, they were instructed that they would receive 1000 HUF, if their chosen colour would be drawn (ex ante) or was drawn (ex post). If the other colour is drawn, they would receive 0 HUF. Afterwards they had an opportunity to sell their ticket. Namely, they indicated their minimum selling price and a number between 1 and 1000 was drawn; if the drawn number was higher or equal to their indicated selling price, they would receive their selling price. Otherwise, lottery would be played and this determined the outcome. They were asked to indicate their minimum selling price.

In the next step subjects were explained that they have been paired with someone and asked to tell us what they think minimum selling price of their partner was. If subject's estimate of their partner's minimum selling price was within $+/-5 \%$ of the actual minimum selling price of the partner, they received an extra 300 HUF.

Afterwards, participants were presented with another lottery with a bag of 60 orange and green balls, which were absolutely identical apart from their colour and also in this case no one knew the exact composition of the 60 balls. They indicated their winning colour and were told that this lottery would be important for financial decisions they were about to make.

In the next page they were randomly assigned to dictator or receiver role. If they were assigned to the dictator role, they were instructed that their decision would impact their and their partner's earnings from this task. If they were assigned a role of receiver, they were instructed that their decision would be hypothetical and it would not impact neither their nor their partner's
earnings from the task, but their earnings in this task would depend on their partner's choice. They were presented with 3 choices (below) and were asked to pick one of them.

- A: You get a ticket that gives you a sure 1000 HUF and your partner gets a ticket that gives him/her a sure 1000 HUF.
- B: You get a ticket that gives you a sure 1500 HUF and your partner gets a ticket that gives him/her a sure 500 HUF .
- C: You get a ticket that gives you a sure 1500 HUF and your partner gets a ticket that gives him/her 1000 HUF if his/her winning color will be drawn/was drawn in the second lottery.

After making their choice, they were asked to indicate what they believed the other person's minimum selling price was in option C. At the very end they were presented with the exit survey and asked to indicate how helpful and selfish they felt. Afterwards, they were told how much money they earned and were paid. Note, all experimental material can be found in Appendix B.

## Subjects

In total 249 participants were enrolled in the study, but 29 were excluded due to computer issues (i.e., program collapsing). The mean age in years was $23.54(S D=3.65)$, and age did not differ between the four conditions. Fifty-nine percent of the participants were males, and median income was in third quartile of the Hungarian population. Again, these latter two demographic variables did not differ between conditions. The demographic variables did not differ significantly across the conditions.

## Results

The key prediction was that dictators in ex ante condition would be more likely to select the selfish with lottery choice than in the ex post condition. The distribution of choices in the four conditions are presented in Table 1.

Table 1
Distribution of choices made across conditions

|  | Condition |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Dictator | Dictator | Receiver | Receiver |
|  | ex ante | ex post | ex ante | ex post |
| Prosocial choice | $38 \%$ | $53 \%$ | $76 \%$ | $67 \%$ |
| Selfish with no lottery | $20 \%$ | $31 \%$ | $9 \%$ | $15 \%$ |
| Selfish with lottery | $42 \%$ | $16 \%$ | $15 \%$ | $18 \%$ |

To specifically address our key prediction we restrict the sample to dictators ( $\mathrm{N}=110$ ). Performing a multinomial logistic regression of choice on resolution (ex ante/ex post), -2 Log likelihood=16.37 we find that ex ante dictators are more likely to select the lottery option than the selfish with no lottery option $(\beta=1.37(0.55), p \leq 0.05)^{1}$.

When, however, focusing on receivers, no relationship was found between likelihood of choosing either option over the other (prosocial, selfish with lottery, selfish with no lottery) conditional to lottery resolution (ex ante/ex post).

Aforementioned literature reports difference between dictator and receiver, and our data confirms it for ex ante condition $\chi^{2}(1, N=55)=16.38, p=0.00$ with highly significant result. For the ex post condition, no difference is observed $\chi^{2}(1, N=55)=2.42, p=0.12$.

To answer the questions whether dictators' behavior in ex ante condition is self-serving,

[^0]we take a look at how subjects priced their tickets (Table 2). Namely, one of the ways to behave self-servingly is to exaggerate the probability that the lottery will turn out favorable for the receiving party. Subjects' beliefs about this probability prior to the allocation choice (with unannounced forthcoming allocation choice) was elicited, and this paper argues that:

1) Dictators behave self-servingly if they choose the option with the lottery over the sure selfish one (while there is no difference between their prior beliefs on the winning probability between ex ante and ex post conditions), and
2) They assume ambiguity aversion on their partner's side.

## Table 2

Summary of ticket prices for self and other across conditions

| Measures |  | Ex ante | Ex post | Test of statistical <br> differences |
| :--- | :--- | :--- | :--- | :--- |
| Ticket price (self) | Mean | 566.07 | 552.16 | $\mathrm{~F}=0.35, \mathrm{t}=0.59$ |
|  | (SD) | $(177.83)$ | $(170.55)$ |  |
| Guessed ticket price | Mean | 474.08 | 467.42 | $\mathrm{~F}=0.13, \mathrm{t}=0.36$ |
| (other) | (SD) | $(136.59)$ | $(138.35)$ | $\mathrm{F}=0.13, \mathrm{t}=0.36$ |
| Difference between | Mean | 91.98 | 84.75 |  |
| self \& other | (SD) | $(145.67)$ | $(152.08)$ |  |

As can be seen in Table 2, ticket selling prices for self and guessed ticket selling prices for other person are not affected by timing of the lottery resolution (before or after the selling price is revealed). Both variances (F-tests) and means (t-tests) were statistically not different across lottery resolution conditions. That means that the extent of the ambiguity aversion for the self and for the other was unaffected by timing of the lottery resolution.

Table 3
Comparison of ticket prices for self and other

| Measures |  | Ex ante | Greater than | Ex post | Greater than |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Ticket price (self) | Mean | 566.07 | 500, | 552.16 | $500, \mathrm{t}(109)=3.21$, |
|  | (SD) | $(177.83)$ | $\mathrm{t}(109)=3.89$, | $(170.55)$ | $\mathrm{p}=0.002$ |
|  |  |  | $\mathrm{p}<0.001$ |  |  |
| Guessed ticket price | Mean | 474.08 | $500, \mathrm{t}(109)=-$ | 467.42 | $500, \mathrm{t}(109)=-$ |
| (other) | SD | $(136.59)$ | $1.99, \mathrm{p}=0.049$ | $(138.35)$ | $2.47, \mathrm{p}=0.05$ |
| Difference between | Mean | 91.98 | $0, \mathrm{t}(109)=6.62$, | 84.75 | $0, \mathrm{t}(109)=5.85$, |
| self\&other | SD | $(145.67)$ | $\mathrm{p}<0.001$ | $(152.08)$ | $\mathrm{p}<0.001$ |

From Table 3 the following conclusions can be drawn:

1) As means for ticket price for self in both conditions is above 500 HUF , which is expected value of the lottery, it indicates that subjects had a slight preference for ambiguity.
2) Since means for ticket price for other person in both conditions is below 500 HUF, it confirms that people assume slight ambiguity aversion on their partner's side. They believe that their partner is less of an ambiguity seeker than themselves in ex ante and ex post conditions.

When incorporating guess about the other's ticket selling price (again on restricted sample for dictators, $\mathrm{N}=110$ ) and performing a multinomial logistic regression of selfish lottery choice vs. selfish no lottery choice on lottery resolution controlling for guesses, -2 Log likelihood=109.68. We find that ex ante condition still significantly increases the likelihood of selecting the option with the lottery versus the option with no lottery, $(\beta=1.33(0.56), \mathrm{p} \leq 0.05)$ and the guesses do not influence this likelihood. This means that when we control for beliefs about other's ticket selling price, the results get confirmed and the beliefs about how the partner values the lottery did not influence choice.

Finally, before learning their payoffs but after having made their choices participants were asked to reflect on their choice behavior. Results of these responses are summarized in Table 4 for the whole sample.

Table 4
Summary of reported feelings

| Role | Dictator |  |  |  | Statistical test of <br> differences |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Condition | Ex ante | Ex post | Ex ante | Ex post |  |
| Selfish | $2.31(0.94)$ | $1.93(0.88)$ | $1.80(0.80)$ | $1.84(0.83)$ | $\mathrm{F}(3,216)=2.99 * * *$ |
| Helpful | $2.76(0.83)$ | $2.84(0.90)$ | $2.85(0.95)$ | $2.84(0.74)$ | $\mathrm{F}(3,216)<0.12$ |
| ${ }^{*} p<0.1, * * p<0.05, * * * p<0.001$ |  |  |  |  |  |

In regard to selfishness, the effect of role is significant $(p=0.011)$ and the role*resolution interaction is marginally significant $(p=0.075)$. As can be observed in the Table 4 , dictators in ex ante condition feel the most selfish. Regarding helpfulness, none of the factors are significant. The above results could not be explained by any ex ante and ex post differences in ambiguity preferences measured by the ticket selling price.

## Discussion

The prediction that dictators in ex ante condition would be more likely to select the selfish with lottery choice than in the ex post condition was supported by the data of the study. The thesis connected two important pieces of research: one by Haisley and Weber (2010) and the other one by Small and Loewenstein (2003), aiming to test in a dictator game that people develop selfserving interpretations of uncertainty in relation to the timing of uncertainty resolution. In fact, literature suggests that they exploit the "moral wiggle room" at expense of the other person more
with ex ante uncertainty (when the uncertainty is yet to be resolved) than with ex post (when the uncertainty has already been resolved).

The current work contributes to better understanding of ambiguity in relation to timing of uncertainty resolution- whether ex post (lottery draw already happened) or ex ante (lottery draw will happen in future). The results demonstrate that ambiguity allows motivated reasoning more so in ex ante condition (when uncertainty is to be resolved in the future), as the lack of exact probability values and the fact that veil of uncertainty will be lifted at a later point in time give individuals freedom to interpret facts as it suits them. It appears that in ex post condition when lottery is already resolved, dictators could not deny the fact that lottery was already played and felt more compelled to act than in ex ante condition, when they could still hope that things will somehow work out for victims and there's no real need to give. They acted as if they hoped for divine intervention.

To date research suggests that in ambiguous situations people lie and feel moral nevertheless, as they use self-serving justifications (Shalvi, Gino, Barkan \& Ayal, 2015). Surprisingly, though, dictators in the current study in ex ante condition felt the most selfish, even though it would be expected that they don't feel selfish at all, as the elastic situation allows for motivated reasoning while "saving face" in front of self and others. Possible reason for this unanticipated finding is that dictators might have had awareness that they exploited the situation badly for a selfish gain, even though they could have acted fairly and had given a sure 500 HUF to their partner.

## Conclusions

Very often we can observe selfish behavior in people who use ambiguity and hide behind it, in order to choose self-servingly in allocations of goods. They seem to use the elasticity of the situation and interpret it the way it suits them, without hurting their perceived self image in front of self or others. In the current study it was demonstrated in a dictator game that people develop self-serving interpretations of uncertainty in relation to the timing of uncertainty resolution- they abuse "moral wiggle room" which ambiguity allows at expense of the other person significantly more when the uncertainty is yet to be resolved. It seems that in ex ante condition they still hope that things will somehow work out for receivers and there's no real need to act, as if a divine intervention will make things right.

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## Appendix

## A. List of Tables

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## B. Instructions for Participants

> Üdvözöljük,

Ûdvózoljuk kisérletünkben, amelyben pénzuggyi dóntéseket kell majd hoznia. A kisérletben minimum 500 Ft ès maximum 3300 Ft -ot kereshet. Värható keresete (ätlagos kereset) pedig 2150 Ft . A kisérletben nincsen àtverès vagy csalâs. Minden úgy tôrtènik, ahogyan olvassa. Keresetét a kisérlet végèn készpénzben kapja meg. Ha kèrdèse van ne bekiabäljon, hanem nyújtsa tel a kezèt ès odamegyünk.
Kisérleti azonositōja: fupugova. EZT A BETUSORT AZONNAL IRJA FEL AZ ÖN MELLETT TALÁLHATÓ POST-IT-ra!

Ha megértette a feladatot, akkor kezdjen dolgozni a lapon. Kezdje KiSÉRLETI AZONOsiTÓJÁ-nak felirásäval. Ha készen van, forditsa le a lapot ès vȧrjon, amig a kisérletvezetōk engedélyt adnak a Tovãbb gombra valô kattintãsra.

FONTOS, HOGY KISÉRLETBEN NEM LEHET VISSZAFELÉ MENNI, ÉS A BROWSERBEN A VISSZA GOMBRA KATTINTANI. AKI A BROWSERBEN A VISSZAGOMBRA VAGY FRISSITÉSRE KATTINT ,VAGY BȦRMIT A BROWSERBE IR, KIZÁRJA MAGȦT A KISÉRLETBÖL.

CSAK AKKOR KATTINTSON A TOVÁBB GOMBRA, HA BIZTOS BENNE, HOGY MEGÉRTETTE AZ OLDALON LÉVŌ INFORMÁCIÓT, BÁRMILYEN KÊRDESE VAN MINDIG NYÚJTSA FEL A KEZĖT ÉS ODAMEGYUNK

## Next

Welcome,
Welcome to our experiment in which you will have to make a series of financial decisions. Your earnings can range between 500 HUF and 3300 HUF and your mean earnings are 2150 HUF. There is no deception in this experiment. If you have questions please raise your hand instead of asking them publicly.

Your experimentel ID is: fupugova. PLEASE WRITE DOWN THIS ID ON THE STICKYNOTE PLACED ON YOUR DESK BECASUE YOU WILL NEED TO SHOW THIS WHEN YOU GET PAID.

Start with writing your ID down. When the expriment instructs you, you can start working by clicking on Next.

YOU CANNOT CLICK ON THE BROWER'S BACK BUTTON. THOSE CLICKING ON THIS BUTTON WILL BE EXCLUDED FROM THE EXPERIMENT.

ONLY CLICK ON THE NEXT BUTTON IF YOU ARE READY TO START. RAISE YOUR HAND IF YOU HAVE ANY QUESTIONS.

## Demográfiai kérdések

```
Nêhảny demogràtial kėrdėssel kezdjuk.
Szuletėsi ėve:
\square
Neme:
\square-
Legmagasabb iskolai vegzettsége:
\square
Hova sorolja sajăt vagy családja (ha nem onnfentartó) jovedelmi helyzetét a magyar társadalomban?
*----
Jelenleg jär felsōoktatási intézménybe?
Milyen szakon tanul/tanult?
    Next
```

Firstly, a few demographic questions.

1. Your year of birth
2. Your gender: Female/Male
3. Your highest level of education:

- Elementary school
- High school
- BA/BSc or equivalent
- MA/MSc or equivalent
- $\mathrm{PhD} /$ Advanced
- Other

4. Based on your family income (or your own in case you make a living on your own) how would you rate your income level within the Hungarian population?

- Lowest 25\%
- Second lowest 25\%
- Third $25 \%$
- Fourth $25 \%$

5. Are you currently enrolled in higher education?

- Yes
- No
- On hold

6. What is the field of your studies?....

## Instrukciók az 1-es Lutrihoz

```
Most osszekapcsoltuk egy másik személlyel, akj innentöl kezdve az Ón párja lesz e kisérletben. E személy itt van a teremben, de se Onn, sem a
kisérlet-vezetōk nem tudjäk, hogy ki a párja. Ön ès párja ugyanazokon a feladatokon dolgoznak és ugyanazokat a dontéséket kapjäk, de mincketten
EGYENILEG dolgoznak
Elöször mindketten elolvassäk, hogy miröl szöl az elsǒ lutri és egyénileg kiválasztjak, hogy mi legyen a "nyerô szinuk" ezen elsơ lutrin. Ezután
egyénileg két olyan döntést fognak hozni, ahol e lutri érintett.
```

```
Next
```


## Instructions for Lottery\#1

Now you are paired with someone from the room. This person will be your partner for the whole experiment. Neither you nor the experimenters know who this person is. Your partner works on the same tasks and decisions as you. However, you are both working individually in these tasks and decisions.

First, you will both read what lottery\#1 is about and select your „winning color" on lottery\#1. Then, you will individually bring two decisions in which this lottery\#1 is involved.

## Lutri \#1

[^1]
## Lottery\#1

There are 60 balls in a hat and the balls are either blue or red. This means that the exact number of blue and red balls are unknown and it is only known that they add up to 60 . A random process determines the exact number of red and blue balls in the hat. This means that every combination of blue and red balls is equally likely as long as they add up to 60 . Moreover, it is also known the balls are perfectly identical expect for the differences in their color.

Please select your winning color before this lottery\#1 is played. Playing the lottery means that one ball will be randomly selected from the hat. In other words, you have to select the color which you think will be drawn from the hat. On the next page you will find out what you can win if your winning color will be drawn. At this point nobody knows which color will be drawn.

My winning color is:

```
O Red
O Blue
Lutri #1
``` egyformảk, csak szinükben különbōznek.

Ezt a lutrit (Lutri \#1) már lejảtszottảk, azaz egy golyót vẻletlenszerūen már kihúzott a kalapbỏl komputer. Most vàlassza ki a "nyerō szinèt". Azaz tippleje meg, hogy melyik szint (piros -at vagy a kêk -et) húzta ki a komputer. A következō oldalon megtudja, hogy mit nyerhjet, ha eltalálta a kihúzott szint. Elötte azonban ki kell välasztania a nyerô szinét. Tajékoztatjuk, hogy senki sem tudja (a komputeren kivul), hogy milyen szint hüztak ki.

A "nyerō szinem" legyen a:
piros
kék
```

Next

```

\section*{Lottery\#1}

There are 60 balls in a hat and the balls are either blue or red. This means that the exact number of blue and red balls are unknown and it is only known that they add up to 60. A random process determines the exact number of red and blue balls in the hat. This means that every combination of blue and red balls is equally likely as long as they add up to 60 . Moreover, it is also known the balls are perfectly identical expect for the differences in their color.

This lottery\#1 has already been played. This means that one ball has already been drawn from the hat. You have to select your winning color now. In other words, you have to select the color which you think was drawn from the hat. On the next page you will find out what you can win if your winning color was drawn. At this point nobody knows which color was drawn.

My winning color is:
- Red
- Blue

\section*{Most kapott egy jegyet, amit el tud adni}

Most kapott egy jegyet, amely a következōt igéri Ónnek:
Ha az On âltal välasztott "nyeró szin"t húzzảk majd ki az elsó lutrin, akkor On 1000 Ft -ot kap. Ha nem az On által vallasztott "nyerô szin"t húzzák majd ki, akkor 0 Ft -ot kap. Tájèkoztatjuk, hogy senki sem tudja, hogy milyen szint hüznak majd kj.

A következő szabảlyok szerint lehetósége van eladni ezt a jegyet:
A következő oldalon meg kell adnia, azt a 0 Ft és 1000 Ft közé esó minimum àrat, amelyen eladná ezt a jegyét. Csak egész szàmot adhat meg.
Mután megadta a minimum eladási árat a komputer húz egy 0 és 1000 közötti egész számot, ahol minden szàm kihúzásának azonos az esélye. Ha ez a szàm legalàbb akkora (nagyobb vagy egyenlठ̄) mint az Ôn által megadott minimum àr, akkor a jegyét sikeresen eladta. Ha kihúzott szám kisebb mint az On minimum eladảsi ára, akkor a jegyet nem tudta eladni és keresete attol függ. hogy a nyeró szinét húzzảk-e ki a lutrin.

A kisērlet vêgén tudja meg, hogy mennyit keresett ezen a jegyen.
Kattintson a Tovább-ra, ha megértette a feladatot.

\section*{Next}

Now you received a ticket that you can sell.
This ticket offers you the following:
If your winning color will be selected on the lottery\#1 you will get 1000 HUF, otherwise you get 0 HUF. Note: nobody knows which color will be drawn on lottery\#1.

You have, however, the opportunity to sell your ticket under the following circumstances:
On the next page you will have to indicate the minimum price between 0 and 1000 HUF (only integers are allowed) for which you would sell your ticket.

After you indicated your minimum selling price the computer will randomly draw an integer between 0 and 1000 (where every integer is equally likely to be drawn). If this number is equal to or greater than your minimum selling price your ticket is sold and you will receive this sales price in cash at the end of the experiment. If this number is smaller, than you could not sell your ticket and the outcome of lottery\#1 determines whether you receive 1000 HUF or you receive 0 HUF.

You will learn your earnings from this decision at the end of the experiment.
Click on Next if you understood the task and are ready to proceed.

\section*{Most kapott egy jegyet, amit el tud adni}

Most kapott egy jegyet, amely a következōt igéri Önnek
Ha az On altal vàlasztott "nyeró szin"tt húzták ki az elsō lutrin, akkor On 1000 Ft -ot kap. Ha nem az On âtal vâlasztott "nyerō szin"t húzták ki, akkor 0 Ft -ot kap. Tajjèkoztatjuk hogy senki sem tudja (a komputeren kivul). hogy milyen szint huztak ki.

A következō szabälyok szerint lehetôsége van eladni ezt a jegyet
A következō oldalon meg kell adnia, azt a 0 Ft ès 1000 Ft közé esō minimum àrat, amelyen eladnà a jegyét. Csak egész szàmot adhat meg.
Mután megadta a minimum eladási árat a komputer húz egy 0 és 1000 kōzötti egész számot, ahol minden szàm kihúzásának azonos az esélye. Ha ez a szảm legaläbb akkora (nagyobb vagy egyenlō) mint az Ön altal megadott minimum àr, akkor a jegyèt sikeresen eladta. HHa kihúzott szàm kisebb mint az On minimum eladási âra, akkor a jegvet nem tudta eladni és keresete attól fugg, hogy a nyerő színét húztáke ki a lutrin.

A kisérlet végén tudja meg, hogy mennyit keresett ezen a jegyen.
Kattintson a Tovabb-ra, ha megértette a feladatot.

\section*{Next}

Now you received a ticket that you can sell.
This ticket offers you the following:
If your winning color was selected on the lottery\#1 you will get 1000 HUF , otherwise you get 0 HUF. Note: nobody knows which color was drawn on lottery\#1.

You have, however, the opportunity to sell your ticket under the following circumstances:
On the next page you will have to indicate the minimum price between 0 and 1000 HUF (only integers are allowed) for which you would sell your ticket.

After you indicated your minimum selling price the computer will randomly draw an integer between 0 and 1000 (where every integer is equally likely to be drawn). If this number is equal to or greater than your minimum selling price your ticket is sold and you will receive this sales price in cash at the end of the experiment. If this number is smaller, than you could not sell your ticket and the outcome of lottery\#1 determines whether you receive 1000 HUF or you receive 0 HUF.

You will learn your earnings from this decision at the end of the experiment.
Click on Next if you understood the task and are ready to proceed.

\title{
Példák arról, hogy mikor tudja eladni a jegyét
}

Itt van néhány példa a jegyeladás szabàlyairól:
- Ha On minimum 340 Ft-ot kér a jegyért és a véletlenszerūen húzott szâm 282, akkor nem tudta eladni a jegyét, mert 282 kevesebb mint 340 Ebben az esetben Ön megtartja a jegyét és az elsö lutri alapjain döl el, hogy nyer-e 1000 Ft -ot a jegyen
- Ha On minimum 872 Ft-ot kér a jegyért és a véletlenszerūen húzott szảm 923, akkor On el tudta adni a jegyét, mert 923 nagyobb mint 872 Ebben az esetben a kisérlet végén kifizetjuk Önnek a jegyért kért àrat, ès nem számit, hogy nyer-e az elsō lutrin

\section*{Next}

Examples on selling your ticket:
- If your minimum asking price is 340 HUF and the randomly selected number is 282 you did not sell the ticket. This is because 282 is smaller than 340 . In this case you keep the ticket and your lottery\#1 will determine whether you get the 1000 HUF or not.
- If your minimum asking price is 872 HUF and the randomly selected number is 923 you did sell the ticket. This is because 923 is greater than 872 . In this case you will receive your sales price and the outcome of lottery\#1 is irrelevant for you.

\section*{Kvíz arról, hogy megértette-e mikor tudja eladni a jegyét}

Most ellenőrizzük megértette-e, hogy mikor tudja eladni a jegyét.
Tegyük fel, hogy On minimum 200 Ft -ot kèr a jegyétt és a veletlenszerūen huzzott szàm 150
Megvennèk Öntōl a jegyét?
- Igen
- Nem

Nem tudom

\section*{Next}

Quiz on your understanding about when you can sell your ticket
Now we test your understanding on the circumstances under which you can sell your ticket.
Assume that you ask at least 200 HUF for the ticket and the randomly drawn number is 150 .
Would you be able to sell your ticket?
- Yes
- No
- I do not know

\section*{Minimum jegyeladási ár}

Sikeresen välaszolt a kérdésre
Most adja meg a minimum árat: amelyen eladnả a jegyét (Ez a szàm 0 Ft és 1000 Ft közé esō egész szàm lehet csak.)
Emlékeztetōul, ez a jegy 1000 Ft -ot fizet Önnek, ha az elsō lutrin a "nyerō szinèt" (piros) húzzảk majd ki, és 0 Ft-ot fizet Önnek, ha nem a "nyerō
szinét" hủzzák majd ki. Emlékzetjük, hogy senki sem tudja, hogy melyik szint hüzzäk majd ki.
\(\square\)

Next

Minimum ticket selling price
You successfully answered the previous question.
Now indicate the minimum price between 0 and 1000 on which you would sell you ticket. You can only enter integers.

Recall, this ticket gives you 1000 HUF if your winning color will be drawn on lottery\#1, otherwise 0 HUF. Please note, nobody knows which color will be drawn.

Minimum jegyeladási ár

Sikeresen välaszolt a kėrdésre.
Most adja meg a minimum árat, amelyen eladná a jegyét (Ez a szám 0 Ft és 1000 Ft közé esō egész szám lehet csak.)
Emlëkeztetōul, ez a jegy 1000 Ft -ot fizet Önnek, ha az elsō lutrin eltalälta a kihúzott szint, azaz a "nyerō szine" (piros) megegyezik a kihúzott színnel, és 0 Ft-ot fizet Onnek, ha a "nyerô szine" nem egyezik meg a kihúzott szinnel, azaz nem talalta el a kihúzott szint. Emlékzetjük, hogy senki sem tudja (a komputert kivéve), hogy melyik szint húzták ki.
\(\square\)

\section*{Next}

Minimum ticket selling price
You successfully answered the previous question.
Now indicate the minimum price between 0 and 1000 on which you would sell you ticket. You can only enter integers.

Recall, this ticket gives you 1000 HUF if your winning color was drawn on lottery\#1, otherwise 0 HUF. Please note, nobody knows which color was drawn.

\section*{Becsülje meg párja minimum mennyit kért a jegyért}
```

Ön párja is egy ugyanolyan jegyet kapott mint Onn és megadta azt a mininmum árat, amelyen eladná ezt a jegyet. Párja ugyanazon feltételek mellett
tudja eladni a jegyét mint On.
Adja meg legjobb becslését arra, hogy párja minimum mennyit kért jegyért. Ha becslése partnere minumum árának plusz/minusz 10 Ft -0s
tartományába esik, akkor Ön 300 Ft-os boonuszt kap.
Emlékeztetjük, hogy ez a jegy 1000 Ft -ot fizet párjának, ha az elsō lutrin a párja "nyerō szinét" húzzák majd ki, és 0 Ft -ot fizet nekj, ha nem a "nyerō szinét" húzzâk majd ki.
Mit gondol, mi az a minimum ár, amelyen partnere eladná a jegyét? Adjon meg egy 0 és 1000 közé esō egész számot.

```

A kisérlet végén tudja meg, hogy sikeres volt-e becslése, azaz megkapja-e a 300 Ft -os bónuszt.

\section*{Next}

Estimate your partner's minimum ticket sales price
Your partner received the same ticket as you did and he can sell the ticket under the same circumstances as you could. Furthermore, your partner can sell his ticket under the same conditions as you could.

Please give your best estimate on your partner's minimum ticket sales price. If your estimate is within plus/minus 10 HUF range of your partner's minimum sales price you will receive an extra 300 HUF.

Recall that this ticket gives 1000 HUF for your partner if his winning color will be drawn in lottery\#1, otherwise 0 HUF.

Provide your best estimate on your partner's minimum ticket sales price. The number must be between 0 and 1000 and must be an integer.

At the end of the experiment you will learn whether you receive the extra 300 HUF.

\title{
Becsülje meg párja minimum mennyit kért a jegyért
}
```

On párja is egy ugyanolyan jegyet kapott mint On és megadta azt a mininmum árat, amelyen eladná ezt a jegyet. Párja ugyanazon feltételek mellett
tudja eladni a jegyét mint On
Adja meg legjobb becslését arra, hogy párja minimum mennyit kért jegyért. Ha becslése partnere minumum árának plusz/minusz 10 Ft -os
tartományába esik, akkor Ön 300 Ft-os bónuszt kap.
Emlékeztetjü, hogy ez a jegy 1000 Ft-ot fizet párjának, ha az elsõ lutrin párja eltalalita a kihúzott szint, azaz a "nyerō szine" megegyezik a kihúzott
szinnel, és 0 Ft-ot fizet neki, ha párja "nyerơ szine" nem egyezik meg a kihúzott szinnel.
Mit gondol, mi az a minimum ár, amelyen partnere eladná a jegyét? Adjon meg egy 0 és 1000 közé esõ egész számot.

```

A kisérlet végén tudja meg, hogy sikeres volt-e becslése, azaz megkapja-e a 300 Ft -os bónuszt.

\section*{Next}

Estimate your partner's minimum ticket sales price
Your partner received the same ticket as you did and he can sell the ticket under the same circumstances as you could. Furthermore, your partner can sell his ticket under the same conditions as you could.

Please give your best estimate on your partner's minimum ticket sales price. If your estimate is within plus/minus 10 HUF range of your partner's minimum sales price you will receive an extra 300 HUF.

Recall, that this ticket gives 1000 HUF for your partner if his winning color was drawn in lottery\#1, otherwise 0 HUF.

Provide your best estimate on your partner's minimum ticket sales price. The number must be between 0 and 1000 and must be an integer.

At the end of the experiment you will learn whether you receive the extra 300 HUF.

\section*{Instrukciók az 2-es Lutrihoz}

Továbbra is össze van kapcsolva párjával ès mindketten, EGYÉNILEG ugyanazon a feladatokon és döntèsen dolgoznak A következō lépésben mindketten elolvassàk, hogy mirōl szöl a mảsodik lutri és egyénileg kivälasztjàk, hogy mi legyen a "nyerō szinok" ezen a mäsodik lutrin. Ezutản egyénileg egy olyan pénzügyi döntést hoznak, amely tartalmazhatja e második lutrit.

You are still paired with the same person and you will again individually work on the same tasks and decisions. Next, you will read about lottery\#2, and select your winning color on this lottery\#2. Then, you will make a financial decision that may involve this lottery.

\author{
Lutri \#2
}
```

Egy kalapban összesen 60 darab golyó van, és a golyök lehetnek zöld -ak vagy narancssàrga ek. Ez azt jelenti, hogy csak a golyök
Osszszáma ismert ( }60\mathrm{ darab), de az ismeretlen, hogy ebböl hány darab zolld golyó és hány darab narancssárga golyó van a kalapban. Egy veletlen
folyamat dönti el, hogy pontosan hány darab zoldd és pontosan hány darab narancssärga golyó van a kalapban, ami kiadja az ósszes 60 darab golyót,
Ez azt jelenti, hogy minden lehetséges kombinációban elöfordulhatnak a zold és narancssarga golyök, amig osszesen 60 at adnak ki. Az is ismert
továbbá, hogy a golyök teljesen egyformäk, csak szinükben különböznek
Mielōtt lejátszäk e lutrit (Lutri \#z) välassza ki a "nyerõ szinér"! A lutri lejajtsszása azt jelenti, hogy a kalapbobl véletlenszerūen kihúznak egy golyót
és megnézik, hogy mi a kihüzott golyó szine. Onnek tehát ki kell välasztania, hogy a zold vagy a narancssárga szinnel tud nyemi ezen a lutrin. Azaz
meg kell tippelnie, hogy melyik szint fogják kihúzni. A kovetkezö oldalon megtudja, hogy mit nyerhjet, ha eltalälja a kihüzott szint. Elötte azonban
ki kell vallasztania a nyerő szinét. Tajjèkoztatjuk, hogy senki sem tudja, hogy milyen szint hüznak majd ki.
A "nyerō szinem" legyen a:
O}\mathrm{ zold
- narancssárga

```
Next

Lottery\#2
There are 60 balls in a hat and the balls are either green or orange. This means that the exact number of green and orange balls are unknown and it is only known that they add up to 60 . A random process determines the exact number of green and orange balls in the hat. This means that every combination of green and orange balls is equally likely as long as they add up to 60 . Moreover, it is also known the balls are perfectly identical expect for the differences in their color.

Please select your winning color before this lottery\#2 is played. Playing the lottery means that one ball will be randomly selected from the hat. In other words, you have to select the color which you think will be drawn from the hat. On the next page you will find out what you can win if your winning color will be drawn. At this point nobody knows which color will be drawn.

My winning color is:
- Green
- Orange

\section*{Lottery\#2}

There are 60 balls in a hat and the balls are either green or orange. This means that the exact number of green and orange balls are unknown and all is known that they add up to 60. A random process determines the exact number of green and orange balls in the hat. This means that every combination of green and orange balls is equally likely as long as they add up to 60 . Moreover, it is also known the balls are perfectly identical expect for the differences in their color.

This lottery\#2 has already been played. This means that one ball has already been drawn from the hat. You have to select your winning color now. In other words, you have to select the color which you think was drawn from the hat. On the next page you will find out what you can win if your winning color was drawn. At this point nobody knows which color was drawn.

My winning color is:
- Green
- Orange

Instrukciók a pénzügyi döntéshez

\footnotetext{
A kōvetkezō feladatban arról fog dönteni, hogyan osszon szét pénzt Ön és párja közōtt. Ez azt jelenti, hogy az Ön döntése határozza meg, hogy Ön és párja mennyi pénzt keres ebben a feladatban.
Három féle opció lesz felkínálva a pénzt szétosztásra. Lesz olyan opció is, amely tartalmazza az imént bemutatott második lutrit, amelyben a zöld és narancssárga golyök között kellett vâlasztania.

Emlékeztetjük, hogy az imént bemutatott második lutri még nincsen lejátszva. Ez azt jelenti, hogy a nyertes szin még nincsen kihúzva. A nyertes szint majd csak döntése után húzzảk ki.
Kattinson a Tovább gombra, ha megértette a feladatot és készen all a folytatásra.
Next
}

Instructions for financial decision
Your next task is to divide money between you and your partner. This means that your decision will determine how much money you and your partner get.

You will have three options to select from and one option will involve lottery\#2.
Recall that lottery\#2 is not yet played. This implies that the winning color is not drawn yet and it will only be drawn after you made your forthcoming financial decision.

Click on Next if you understood your task and are ready to proceed.

\section*{Instrukciók a pénzügyi döntéshez}

Instructions for financial decision
Your next task is to divide money between you and your partner. This means that your decision will not determine how much money you and your partner get. In fact, your earnings from this task depend on your partner's choice.

You will have three options to select from and one option will involve lottery\#2.
Recall that lottery\#2 is not yet played. This implies that the winning color is not drawn yet and it will only be drawn after you made your forthcoming financial decision.

Click on Next if you understood your task and are ready to proceed.

\section*{Instrukciók a pénzügyi döntéshez}

\footnotetext{
A következö feladatban arról fog dönteni, hogyan osszon szét pénzt Ön és párja között. Ez azt jelenti, hogy az Ön döntése hatãrozza meg, hogy Ón és párja mennyi pénzt keres ebben a feladatban.

Hàrom féle opció lesz felkinálva a pénzt szétosztásra. Lesz olyan opció is, amely tartalmazza az imént bemutatott màsodik lutrit, amelyben a zold ès narancssárga golyók között kellett választania.
Emlékeztetjuk, hogy az imént bemutatott második lutri már le van jätszva. Ez azt jelenti, hogy a nyertes szin már ki van húzva, bár Ön még nem tudja melyik szin nyert. Senki nem tudja (a komuteren kivol), hogy melyik szint húzták ki.

Kattinson a Tovább gombra, ha megértette a feladatot és kèszen âll a folytatàsra
}

Next

Instructions for financial decision
Your next task is to divide money between you and your partner. This means that your decision will determine how much money you and your partner get.

You will have three options to select from and one option will involve lottery\#2.
Recall that lottery\#2 has already been played. This implies that the winning color has already been selected but nobody knows what the winning color is.

Click on Next if you understood your task and are ready to proceed.

\section*{Instrukciók a pénzügyi döntéshez}

A következō feladatban arrơl fog dönteni, hogyan osztana szét pénzt Ôn ès a párja kōzōtt. Ez azt jelenti, hogy az Ön döntése nem határozza meg, hogy On és párja mennyi pénzt keres ebben a feladatban. On keresete ebben a feladatban tehát párja döntésétôl fugg.

Három féle opció lesz felkinảlva a pénzt szétosztásra. Lesz olyan opció is, amely tartalmazza az imént bemutatott második lutrit, amelyben a zöld és narancssärga golyök közott kellett vàlasztania

Emlêkeztetjok, hogy az imént bemutatott második lutri már le van jätszva. Ez azt jelenti, hogy a nyertes szin mâr ki van húzva, bár Ön még nem tudja melyik szin nyert. Senki nem tudja (a komuteren kivil), hogy melyik szint huizták ki.
Kattinson a Tovább gombra, ha megértette a feladatot és készen all a folytatäsra.

\section*{Next}

Instructions for financial decision
Your next task is to divide money between you and your partner. This means that your decision will not determine how much money you and your partner get. In fact, your earnings from this task depend on your partner's choice.

You will have three options to select from and one option will involve lottery\#2.
Recall that lottery\#2 has already been played. This implies that the winning color has already been selected but nobody knows what the winning color is.

Click on Next if you understood your task and are ready to proceed.

Pénzügyi döntés: Válasszon \(A, B\) és \(C\) opciók közül!

Emlékeztetjük, hogy az Ön döntése határozza meg, hogy Ön és párja mennyi pénzt keres ebben a feladatban.
\begin{tabular}{|l|l|l|}
\hline \begin{tabular}{l} 
A \\
Opció
\end{tabular} & ÖN kap egy jegyet, ami biztosan fizet Önnek 1000 Ft -ot és PÁRJA is kap egy jegyet, ami biztosan fizet neki 1000 Ft -ot. \\
\hline \multicolumn{1}{|c|}{\begin{tabular}{l} 
VAGY \\
B \\
Opció
\end{tabular}} & \begin{tabular}{l} 
ÖN kap egy jegyet, ami biztosan fizet Önnek 1500 Ft -ot és PÁRJA is kap egy jegyet, ami 1000 Ft-ot fizet neki, ha a párja által \\
kiválasztott szint húzzák majd ki a második lutrin.
\end{tabular} \\
\hline \multicolumn{1}{|l|}{\begin{tabular}{l} 
VAGY \\
C Opción
\end{tabular}} & ÖN kap egy jegyet, ami biztosan fizet Önnek 1500 Ft és PÁRJA is kap egy jegyet, ami biztosan fizet neki 500 Ft - ot. \\
\hline
\end{tabular}

Jelölje választását:
A
- B
- C

Next
Financial Decision: Choose between A, B and C
Recall that your decision will determine how much money you and your partner get.
Option A: You get a ticket that gives you a sure 1000 HUF and your partner gets a ticket that gives him/her a sure 1000 HUF.

Option B: You get a ticket that gives you a sure 1500 HUF and your partner gets a ticket that gives him/her a sure \(\mathbf{1 0 0 0}\) HUF if his/her winning color will be selected on the lottery.

Option C: You get a ticket that gives you a sure 1500 HUF and your partner gets a ticket that gives him/her a sure 500 HUF.

Make your choice:
- A
- B
- C

\section*{Pénzügyi döntés: Válasszon A, B és C opciók közül!}

Emlékeztetjük, hogy az Ön döntése nem határozza meg, hogy Ön és párja mennyi pénzt keres ebben a feladatban. Ön keresete ebben a feladatban csak párja döntésétől függ. Döntése ezen a feladaton tehát hipotetikus.
\begin{tabular}{|c|c|}
\hline A Opció & ÖN kap egy jegyet, ami biztosan fizet Önnek 1000 Ft -ot és PÁRJA is kap egy jegyet, ami biztosan fizet neki 1000 Ft -ot. \\
\hline \multicolumn{2}{|r|}{VAGY} \\
\hline B Opció & ÖN kap egy jegyet, ami biztosan fizet Önnek 1500 Ft -ot és PÁRJA is kap egy jegyet, ami 1000 Ft -ot fizet neki, ha a párja által kiválasztott színt húzzák majd ki a második lutrin. \\
\hline \multicolumn{2}{|r|}{VAGY} \\
\hline C Opció & ÖN kap egy jegyet, ami biztosan fizet Önnek 1500 Ft és PÁRJA is kap egy jegyet, ami biztosan fizet neki 500 Ft - ot. \\
\hline
\end{tabular}

\section*{Jelölje választását:}
- A
- B
- C

Next

Financial Decision: Choose between A, B and C
Recall that your decision will not determine how much money you and your partner gets. In fact, you earnings from this task depend on your partner's choice.

Option A: You get a ticket that gives you a sure 1000 HUF and your partner gets a ticket that gives him/her a sure 1000 HUF.

Option B: You get a ticket that gives you a sure 1500 HUF and your partner gets a ticket that gives him/her a sure \(\mathbf{1 0 0 0}\) HUF if his/her winning color will be selected on lottery\#2.

Option C: You get a ticket that gives you a sure \(\mathbf{1 5 0 0}\) HUF and your partner gets a ticket that gives him/her a sure 500 HUF.

Make your choice:
- A
- B
- C

Pénzügyi döntés: Válasszon \(A, B\) és \(C\) opciók közül!


Jelölje választását:
QA
- B
- C

Next

Financial Decision: Choose between A, B and C
Recall, your decision will determine how much money you and your partner get.
Option A: You get a ticket that gives you a sure 1000 HUF and your partner gets a ticket that gives him/her a sure \(\mathbf{1 0 0 0}\) HUF.

Option B: You get a ticket that gives you a sure 1500 HUF and your partner gets a ticket that gives him/her a sure \(\mathbf{1 0 0 0}\) HUF if his/her winning color was selected on lottery\#2.

Option C: You get a ticket that gives you a sure 1500 HUF and your partner gets a ticket that gives him/her a sure \(\mathbf{5 0 0}\) HUF.

Make your choice:
- A
- B
- C

Pénzügyi döntés: Válasszon \(A, B\) és \(C\) opciók közül!


Jelölje választását:
A
B
C
Next

Financial Decision: Choose between A, B and C
Recall that your decision will not determine how much money you and your partner getl. In fact, you earnings from this task depend on your partner's choice.

Option A: You get a ticket that gives you a sure 1000 HUF and your partner gets a ticket that gives him/her a sure 1000 HUF.

Option B: You get a ticket that gives you a sure 1500 HUF and your partner gets a ticket that gives him/her a sure \(\mathbf{1 0 0 0}\) HUF if his/her winning color was selected on lottery\#2.

Option C: You get a ticket that gives you a sure 1500 HUF and your partner gets a ticket that gives him/her a sure 500 HUF.

Make your choice:
- A
- B
- C

Mennyiért adná el partnere a B Opciót?

Függetlenül attól, hogy melyik opciót választotta az iménti pénzügyi döntésében becsülje meg, hogy mi az a minimum összeg amiért partnere eladná a B Opcióban található jegyet?

Emlékeztetjük, hogy a B Opció szerint partnere kap egy jegyet, amely 1000 Ft nyereményt ad neki, ha a második lutrin (ahol a zöld és a narancssárga golyók közül kellett választani) a partner "nyerõ színét" húzzák majd ki a kalapból. Ha nem a partner nyerő színét húzzák majd ki a kalapból, akkor partnere 0 Ft-ot kap. Tájékoztatjuk, hogy senki sem tudja, hogy milyen színt húznak majd ki.
Adja meg, hogy becslése szerint mi az a minimum ár, amelyen partnere eladná ezt a jegyet. Csak 0 és 1000 között egész számot adhat meg.
\(\square\)

Ha készen van kattintson a Tovább gombra.

\section*{Next}

Estimate your partner's sales price for option B.
Regardless of your choice for the financial decision, provide your best guess on your partner's minimum sales price of the ticket involved in option B.

Recall, option B offered a ticket that gives him/her a sure 1000 HUF if his/her winning color will be selected on lottery\#2.

Estimate the minimum sales price of your partner's. The entered number must be an integer between 0 and 1000 .

Click on continue if you are ready to proceed.

\section*{Mennyiért adná el partnere a B Opciót?}
```

Függetlenül attól, hogy melyik opciót választotta az iménti pénzügyi döntésében becsülje meg, hogy mi az a minimum összeg amiért partnere eladná
a B Opcióban található jegyet?
Emlékeztetjük, hogy a B Opció szerint partnere kap egy jegyet, amely 1000 Ft nyereményt ad neki, ha a második lutrin (ahol a zöld és a narancssárga
golyók közül kellett választani) a partner "nyerõ színét" húzták ki a kalapból. Ha nem a partner nyerõ színét húzták ki a kalapból, akkor partnere 0
Ft-ot kap. Tájékoztatjuk, hogy senki sem tudja (a komputeren kivül), hogy milyen szint húztak ki.
Adja meg, hogy becslése szerint mi az a minimum ár, amelyen partnere eladná ezt a jegyet. Csak 0 és 1000 között egész számot adhat
meg.
\square
Ha készen van kattintson a Tovább gombra.

```
```

Next

```

Estimate your partner's sales price for option B.
Regardless of your choice for the financial decision, provide your best guess on your partner's minimum sales price of the ticket involved in option B.

Recall, option B offered a ticket that gives him/her a sure 1000 HUF if his/her winning color was selected on lottery\#2.

Estimate the minimum sales price of your partner's. The entered number must be an integer between 0 and 1000.

Click on continue if you are ready to proceed.

\section*{Miként látja viselkedését?}

Önzően viselkedtem a pénzügyi döntésemben, ahol pénzt kellett magam és párom között elosztani.
- Nagyon nem értek egyet Nem értek egyet Egyetértek Nagyon egyetértek

Segitökészen viselkedtem a pénzügyi döntésemben, ahol pénzt kellett magam és párom között elosztani.
\(\bigcirc\) Nagyon nem értek egyet \(\bigcirc\) Nem értek egyet Egyetértek \(\bigcirc\) Nagyon egyetértek

\section*{Next}

Reflect on your behavior
1. I behaved selfishly in the financial decision when I had to allocate money between me and my partner.
- Strongly disagree
- Disagree
- Agree
- Strongly agree
2. I behaved helpfully in the financial decision when I had to allocate money between me and my partner.
- Strongly disagree
- Disagree
- Agree
- Strongly agree

\section*{Vége van a kísérletnek}

Köszönjük szépen, a kisérletnek vége! Az alábbi tételeket kereste ebben a kísérletben.
```

Keresete jegyének eladásán: 1 Ft
Keresete párja minimum jegyeladási árának megbecslésén: 300 Ft
Keresete a pénzügyi döntésen: }1000\textrm{Ft
ÖSSZKERESETE 1801 Ft.
Ezen összkeresetét is írja fel a kisérleti azonositója mellé a post it-ra.
He felirta kísérleti azonositóját és összkeresetét zárja be a böngészõ ablakát és várjon, amíg arra kérjük, hogy álljon sorba fizetése felvételéhez.

```

The experiment is over!
Thanks for participation. You earn the following items:
From selling your ticket: 1 HUF
Guessing your partner's minimum ticket price: 300 HUF
On your financial decision: 1000 HUF
Your total payment is: 1801 HUF
Please write down your total payment on the sticky note. Close the browser and line up to get paid.

\section*{C. Zusammenfassung}

Bisherige Forschung hat bestätigt, dass Menschen eigennützige Interpretationen von zukünftiger Unsicherheit entwickeln wenn sie ihnen erlaubt, den Spielraum auf Kosten der anderen Person auszunutzen. Diese Arbeit baut auf dieser Erkenntnis auf und untersucht die Zweideutigkeit in Bezug auf das Timing der Unsicherheitauflösung - entweder ex post (Zweideutigkeit wurde bereits vor der Wahl aufgelöst, aber das Ergebnis ist noch ungewiss) oder ex ante (Zweideutigkeit wird nach der Wahl aufgelöst). Im Laborexperiment bestehend aus Diktatorspiel mit zwei Variabeln (die Lotterieauflösung: ex post oder ex ante, und die Role in der Aufteilungsentscheidung: Diktator oder Empfänger), 249 Probanten haben eine Wahl getroffen. Die Resultate zeigen, dass Zweideutigkeit viel eher motiviertes Denken in ex ante Stellung erlaubt. Die fehlenden exakten Wahrscheinlichkeitswerte und die Tatsache, dass die Unsicherheit erst zu einem späterem Zeitpunkt gelöst wird in der ex ante Stellung gewähren Menschen die Freiheit Fakten so zu interpretieren wie es ihnen passt um eigenes Weiterkommen zu sichern.

\section*{D. Statement under oath}

Ich versichere, dass ich die Diplomarbeit ohne fremde Hilfe und ohne Benutzung anderer als der angegebenen Quellen angefertigt habe, und dass Ich die Arbeit in gleicher oder ähnlicher Form noch keiner anderen Prüfungsbehörde vorgelegt habe. Alle Ausführungen der Arbeit die wörtlich oder sinngemäß übernommen wurden, sind als solche gekennzeichnet.

Wien, Januar 2016
Marija Lojanica Mirošnjikov

\section*{E. Curriculum Vitae}

\section*{Marija Lojanica Mirošnjikov}

Bulevar umetnosti 19/2/13, 11070 Belgrade lojanica@yahoo.com Mobile phone: +381 693530892
Born on Feb 1, 1978. in Kragujevac, Serbia.

\section*{Education:}

\section*{2016}

Since March 1999
1997/98
1997

Expected to graduate with Diploma in Psychology (Mag. rer. nat.)
Studies of psychology at the University of Vienna, Austria
Mount Hood Community College in Gresham, OR, USA (Major: Psychology and Marketing)
Graduation at Cascade Locks High School in Cascade Locks, OR, USA

\section*{Work experience:}

\section*{Kraft Foods / Mondelez Intl, Belgrade}

July 2008 - Present

\section*{HR Manager Sales, EAM}

Feb 2014 - Present
As member of Leadership Team, partner with department heads in 3 offices (with special focus on Sales organization), by providing outstanding HR expertise on topics of: people strategy, talent acquisition, talent management, succession planning, match organizational design to business needs (incl. any organizational changes), organizational development, engagement and coaching.
- Leading Organization and Talent Agenda for Business Unit East Adriatic Markets
- Responsible for creating \& implementing HR strategies in business units in Serbia, Croatia, Slovenia
- Talent acquisition for senior roles, if those could not be filled from within
- Leading sales capabilities \& leadership agenda with internal and external sales force and distributors/partners
- Networking with other locations in Central Europe area to ensure placement of talent in challenging regional roles
- Coaching and advanced management training programs for Leadership Team

HR Business Partner, Talent \& Organizational Effectiveness, Sales and Marketing, EAM Nov ' 11 - Jan '14
Strategic HR Partner to Sales and Marketing departments in organizational development (includes recruiting, employee and team development, talent management, optimal organization structure, remuneration, team motivation and team building)
- Performance management and development, sourcing \& staffing, talent management, training, knowledge management, development and consultancy for all employees at three offices in ex-Yugoslavia
- Employee Communication and proactive advocacy of corporate culture and values of the company
- Managed organizational (re)design and career counselling to employees
- Managed \& resolved employee relations issues through strong partnerships with line management, including employee staffing, communications, issue resolution, performance improvement, HR process execution \& policy interpretation
- Built individual \& team capability through design and execution of team building events, team interventions, individual development planning
- Key hires: Sales Managers and Key Account Managers for various countries, Brand Managers, Customer Marketing Managers, Sales Analysts, Supply Chain staff, Talent bench strength for both Sales and Marketing

\section*{Specialist Management and Organization Development, EAM}

\section*{Jan ' 10 - Oct ' \(\mathbf{1 1}\)}
- Recruited high calibre people for 3 locations (Belgrade, Ljubljana, Zagreb)
- Developed and managed annual training and development programs while owning the budget
- Supported employees across three sites for training \& organization development needs
- Built individual \& team capability through design \& execution of team building events, team interventions, individual development planning
- Managed Performance Management process and supported Talent Management processes
- Supported effectively communication flow and onboarding of new hires
- Provided HR expertise to line managers to increase capability to manage employees fairly and consistently
- Key hires: Accountants, Finance Analysts, Sales Analysts, Brand Managers, Demand Planning / Logistics / Supply Chain staff
- Managed Compensation \& Benefits practices such as Market Surveys \& Salary Reviews, Incentive Plans and Stock Options, Reward\&Recognition Program, Benefits
- Evaluated position descriptions to ensure correct grading structure
- Prepared compensation proposals for new hires/promotions ensuring competitive compensation
- Managed annual short and long term incentives, merit increases, salary / grade updates, compensation surveys
- Implemented HR and people-related processes for performance evaluation \& appraisals, payroll management, compensation schemes
- Ensured tailor-made training and development for employees
- Managed Performance Management process, incl. onboarding of all employees to company standard in this area
- Recruited high caliber people to maintain competitive human resource in the company

\section*{Kraft Foods International, Vienna}

Aug 2005- June 2008
Finance Department Associate, East Adriatic Markets
Feb 2007- June 2008
- Managed cross-charging between Vienna and LLEs (Serbia and Croatia): communication with outsourced accounting on invoice issuing and back-up maintenance
- Supported issue resolution on returned invoices for cross-charging

\section*{Internal Controls Associate, East Adriatic Markets}

Oct 2005- Jan 2007
- Revised existing policies and procedures concerning Marketing and Sales preparing for internal audit
- Established internal audit controls for marketing activities
- Held workshops for marketing staff on process requirements and audit preparation

\section*{Internship Human Resources, EEMEA}

5 months spanning 2005-2007
- Training coordination: interaction with hotels on offers and logistics, contact with embassies
- Recruitment: communication with candidates, CV screening, exposure to interview process
- Archiving

Translation for St. Anna Children's Hospital, Vienna
2002-2008
- Simultaneous interpreter of psychological and medical consultation between patients with leukaemia and their families and personnel of the hospital (German - Serbian)

Qualitass Education, Kragujevac, Serbia
2001-2007
- Correspondent for contacts abroad
- Consultant for implementation of ISO quality standards

\section*{Skills:}

Languages:
Serbian Mother tongue
English Fluent, written and spoken
German Fluent, written and spoken
Spanish Advanced, written and spoken
Russian Basic, written and spoken

\section*{Other skills:}

Software proficiency: MS Office package, SAP for HR
Lead auditor for Quality Management System -ISO 9001 appointed auditor for ISO 9001 in EVROCERT, Belgrade```


[^0]:    ${ }^{1}$ Note, coefficients (betas) are on the log odds scale.

[^1]:    Egy kalapban összesen 60 darab golyó van, és a golyók lehetnek piros -ak vagy kék eek. Ez azt jelenti, hogy csak a golyók ósszszáma ismert ( 60 darab), de az ismeretlen, hogy ebböl hány darab piros golyó és hány darab kẻk golyỏ van a kalapban. Egy vëletlen folyamat dönti el, hogy pontosan hàny darab piros és pontosan hảny darab kék golyó van a kalapban, ami kiadja az ōsszes 60 darab golyót. Ez azt jelenti, hogy minden lehetsëges kombināclóban elōfordulhatnak a piros ès kèk golyök, amig osszesen 60 -at adnak ki. Az is ismert toväbbä, hogy a golyök teljesen egyformảk, csak színükben kưlönböznek.
    Mielōtt lejătszák e lutrit (Lutri \#1) válassza ki a "nyerō szinét"! A lutri lejátsszȧsa azt jelenti, hogy a kalapböl véletlenszerūen kihuiznak egy golyót és megnézik, hogy mi a kihúzott golyó szine. Onnek tehát ki kell vallaszzania, hogy a piros vagy a kêk színnel tud nyemi ezen a lutrin. Azaz meg kell tippelnie, hogy melyik szint fogják kihúzni. A kovetkezō oldalon megtudja, hogy mit nyerhjet, ha eltalàlja a kihuzott szint. Elötte azonban kid kell vâlasztania a nyerō szinét. Tảjekoztatjuk, hogy senki sem tudja, hogy milyen szint húznak majd ki.
    A "nyerō szinem" legyen a:

    - piros
    kék
    Nex

