# Do we share?

## An experimental report on the behavior of students facing embezzlement.

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# 1. Introduction

Having a significantly private financial problem usually is not yet the end of one's own career, one could think. But the truth is, our behavior towards private financial problems will decide if it is our career's end. From an impartial point of view there are two main choices. Either we keep the information in secret and try to solve the problem alone, or we reveal our financial needs to somebody who could support us personally and technically. This might be our supervisor, a very good friend or our partner.

In his dissertation in 1952, sociologist Donald R. Cressey, the innovator of the *fraud triangle* Wells (2005), interviewed over 200 inmates in prisons over the U.S. who were all sentenced for white-collar crime. Cressey found out that all of these had at some point in their career had a private financial problem. And nobody but themselves knew about it. Instead of revealing it to somebody else, they kept it secret and tried to solve it on their own. All of the inmates had embezzled money or funds from their companies, which then had finally caused their fall. As a result, Cressey (1971) came to an expressive statement. Objectively, one could say that all embezzlers had at least had one person who could have helped them solve their problem. But in every each case, no one did speak to someone else; they all classified their problems as *non-shareable*.

The paper develops an experiment which tests the behavior of an employee who faces such a dilemma situation. The goal is to find out if employees nowadays still classify their financial problem as *non-shareable* or if they have broadened their wisdom, and thus reveal the information to somebody.

To conduct an experiment of the like, it is important to first break down the circumstances from reality to a theoretical angle of vision. This split up and the optimal solution for the experiment are developed and analyzed in chapter two of this paper. The third chapter then, takes by means of the two arguments of overconfidence and loss aversion the experiment back to a realistic environment. The so-called *framing* of the experiment is here explained in detail and will help the reader understand the application of the conducted experiment and at the end of the chapter hypotheses are stated, which will be compared later to the results of the experiment. The results are assembled and discussed in the fourth chapter. Finally, in chapter five the paper comes to its conclusion. In the appendix all results are listed in tables, and screenshots of the experiment are displayed.

# 2. The Body of the Experiment

In this chapter, the body of the experiment is developed and explained with the aid of the game theory. This means that the real scenario is converted into a scenario in which different hypotheses can be tested.

Depending on player 1's decision, the experiment is a game of either one or two players. Player 1 can either choose Q (quiz) and take part in a quiz or choose NQ (no quiz) and activate player 2 instead. The quiz consists of three questions taken from different intelligence tests, and player one only succeeds if he answers all three questions correctly. Player 2, once activated, does not take the quiz, but only decides in favor of or against player 1 by either playing Up (u) or Down (d). Player 2 receives a payoff of 12 regardless of his decision. In fact, he is indifferent. The game tree for the experiment is shown in Figure 1. The numbers in the brackets, at the end of each branch stand for the different payoffs which the players will receive, (player 1/ player 2).

*Figure 1: Game tree*
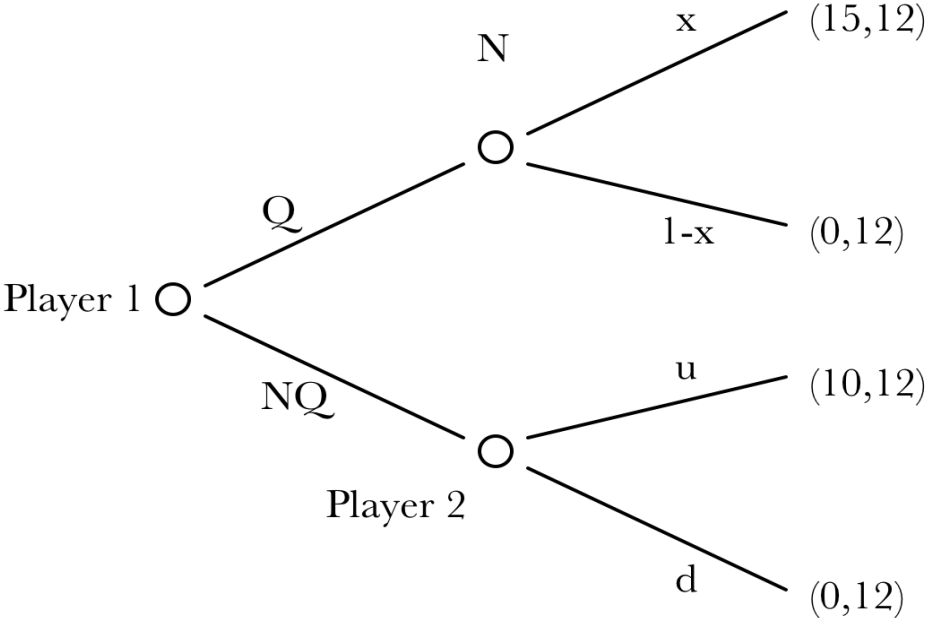


In order to find the optimal solution for the game, we call the probability with which player 1 believes he will win the quiz b(x); the probability with which player 1 believes that player 2 will play u is called b(u).

For the analytic calculation of the optimal strategy, we equate b(x) with b(u). Here, the two different payoffs for player 1 come into calculation. We already know that player 2 receives a payoff of 12 regardless of his decision. Player 1 receives a payoff of 15 for winning the quiz, and a payoff of 10 if he activates player 2 who then chooses *up*. So *x* is worth 15 and *up* is worth 10. Since the other two scenarios do not pay off at all, they can be neglected. Player 1 will be indifferent between playing Q and NQ if and only if:

$$15b(x) = 10b(u)$$

which leads to:

$$b(x) = \frac{2}{3}b(u)$$

We can tell by this calculus when it is a good idea to play Q, and when it is better to play *NQ*. Thus, the optimal strategy (S*) for an average player reads as follows:

$$S^* = \begin{cases} Q \text{ if } b(x) \geq \frac{2}{3}b(u) \\ NQ \quad \text{else} \end{cases}$$

If player 1 estimates his chances of solving the quiz, b(x), greater than or equal to $\frac{2}{3}$ b(u), he should play Q and take the quiz. When he thinks his chances are less than $\frac{2}{3}$ b(u), the optimal solution would be to play *NQ* and activate player 2.

Now it is important to take a closer look at b(x) and b(u) in order to find out the optimal solution for an average player. Regarding the current design, b(x) will particularly vary for different players. In order to reduce the variability we provide additional information on the success rate of the quiz. Before deciding whether or not to play Q, player 1 is told that 14% of the members of a representative reference group have won the quiz. It is now up to player 1 to assess his chances of solving the quiz. Here we assume that all players are average players. Average in this context means that player 1 is able to solve the quiz with a probability of 14%. b(u) expresses player 1's assumption about how likely player 2 is to play *up*. There are three different scenarios: In the first scenario player 2 will play u because he is motivated by pure altruism or holds preferences for equal payoffs. In the second scenario player 2 does not care about player1's payoffs. He will thus be indifferent between playing u and d. He makes his decision a random one and simply flips a coin. The third scenario features a player 2 who is spiteful towards player 1 for one reason or the other; this player 2 will thus play *down*.

To calculate the equilibrium of this experiment, we apply the assumption of rational expectations which means that in the equilibrium all believes are correct. Consequently, player 1 anticipates his subjective probability of winning the quiz equal to the objective probability. Given b(u)= 0.14, it is optimal for player 1 to play NQ iff:

$$0.14 \geq \frac{2}{3}b(u)$$
$$b(u) \geq 0.21$$

This inequality has a huge impact on an average player 1 who knows his chances of winning the quiz is 0.14 and who makes the usual assumptions about player 2's behavior. When we recall the three scenarios concerning player 2, we receive three different probabilities with which player 2 will play *up:* the probability *1* for the altruistic player or those who have preferences for equality; *0.5* for the indifferent player who flips the coin and *0* for the spiteful one. This leads to the conclusion that player 1 should always play *NQ,* if he assumes player 2 is either altruistic, inequality averse or indifferent. Why?

For this prediction, we determine the minimum number of indecisive players we need so that b(u) is greater than or equal to 0.21. We only take spiteful and indecisive players into account, no altruistic ones. Under the rather loose assumption that spiteful players 2 constitute less than 58% of all players 2, it is always an optimal strategy for player 1 to choose NQ[1]. Looking at the observation results from the experiment, we can note ex post that the actual probability of player 2 playing *up* was 0.65. This validates the calculus from above. In the assumption mentioned above we didn't take altruistic or inequality averse players into account. So it is not possible to reach a figure greater than 0.5.[2] This result, allows us to conclude, that altruistic or inequality averse players did take part in the experiment and the assumption above receives further validation. Here, NQ is the optimal strategy for yielding the sub-game perfect equilibrium of NQ.

In reality we sometimes find different behaviors than the theory suggests. This deviation from the standard theory can be explained by other motives. The two main motives which influence player 1's decision will be now discussed. Firstly, we have to think about a potentially spiteful player, who is somewhere out there. This spiteful player has a larger impact on player 1 than we can assume from just looking at the theoretical side. Player 1 often

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[1] So, there is the probability b(*u)* of 0.21 for the optimal solution and the probability 0.5 for an indecisive player 2 for playing "*up*". This yields in 42 percent (0.21/0.5). In fact, when there are more than 42 percent of all player 2s who flip a coin, we receive a probability for playing *up* which is greater than 42 percent. By implication this means if less than 58% are spiteful players it is already the optimal strategy to play *NQ.*

[2] When we take no spiteful players into account we can only reach exactly 0.5, as the probability for the indifferent players who flip a coin.

overestimates the chance of meeting a spiteful player 2, which often leads him to believe that playing Q is the better strategy.

This assumption is explained by the theory of loss aversion: People are usually more afraid of losing something than they hope to gain something of the same value. Kahneman, Knetsch and Thaler (1991) use the example of a passionate wine connoisseur. He purchases a bottle of nice Bordeaux at the price of 10 US$, the value of which then rises to 200US$. Now the connoisseur will drink the Bordeaux, but would be unwilling to sell it in an auction, because he fears to gain less than the 200 US$ the bottle is worth, nor would he purchase another bottle at this high price. Kahnemann and Tversky (1984) call this asymmetry of value *loss aversion*. This theory explains why there is a player 1 who originally plans to play NQ, but is driven by loss aversion to play Q instead. In our terms, he assumes that the probability of b(u) is less than the calculated 0.21. He simply fears a spiteful player 2 and as a result estimates individually b(u) = 0.

The second motive is explained by the theory of overconfidence. This theory implies that people have a subjective consciousness of their own skills. The important fact here is that this leads people to overrate their abilities, and thus make wrong decisions. Odean (1999) states that the human being tends to overestimate predictions of the future, and thus is likely to believe in outcomes that are actually quite vague. This comes along with the "better than average" effect and the illusion of having control over the particular situation the human being is exposed to Odean (1999).

Thus, player 1 assumes his chances of solving the quiz are higher than the results from the reference group suggest. With the help of these two theories, the paper tries to explain the behavior of an occupational fraudster in the business world.

In the next chapter the paper will elucidate the development and the *framing* of the experiment.


# 3. Framing of the Experiment

For the research of Donald R. Cressey's dissertation (1971) about embezzlers, Cressey excluded all fraudsters who accepted jobs only for the purpose of misappropriation, with the intention to discover the reasons for "trusted employees" to commit occupational fraud. His study led him to the development of the commonly known "fraud triangle" (see Wells, 2005, p. 23). He proved that every employee who becomes an embezzler firstly requires a

motivation to commit a white-collar crime, for instance a perceived financial need. Secondly, there needs to be an opportunity to embezzle assets from a company; this usually happens if the person is in a trusted position and has specific information about a company's accounts or access to restricted areas. Last but not least, every fraudster has to justify his obvious misbehavior. It is important to stretch here that for an employee all three premises must coincide to provide the framework for committing occupational fraud.

What happens before an employee adopts a career as a fraudster? There is one constraint that is particularly noticeable and has an impact on the behavior of the embezzler, which therefore will play a major role in this experiment: When Cressey interviewed the inmates he noticed in every single case that the embezzler had a private financial problem, which had tempted him to commit fraud. The embezzler had classified his private financial problem as *"non-shareable"* (see Cressey, 1971, p. 35). The dilemma derives from the fact that all inmates had classified their *"non-shareable"* problem as chronically non-shareable, even to people who might have helped the future embezzlers to solve their financial problem. Cressey himself reported:

> *"In all cases of trust violation encountered, the violator considered that a financial problem which confronted him could not be shared with persons who, from a more objective point of view, probably could have aided in the solution of the problem"*

(Cressey, 1971, p. 34).

To analyze why people don't share their secrets, and especially why they don't address someone who might be in the position of helping them, will be evaluated and analyzed in the experiment.

We now get to the point where the theoretical part of the experiment is put back into a real life situation; it receives its so-called framing. The first mover (player 1) in this experiment is an employee in a major corporation in the accounting department and the second mover (player 2) is his head. As it is described above, the behavior of an employee who is facing the challenge of revealing his secret is under investigation. In the experiment the employee finds himself in the unpleasant situation of an embezzler. He has no choice; he is set to this situation. The employee is told that he is a loyal and reliable staff member at a major corporation in the accounting department. He has worked there for about ten years. In order to solve a private financial problem he decided to misuse his trusted position inside the company. The employee is also told that he has just embezzled about 10,000 € from the company's banking account. Nothing too sophisticated for an accounting specialist, when we keep in mind his technical skills to transfer the money from the company's account to his

private one without anyone noticing. This fact is due to the theory evaluated by Cressey (1971) where only "*trust violators*" are possible embezzlers. It is important to add that nobody else, neither the head of his department nor any audit firm, has noticed his embezzlement.

Player 1 faces two opportunities in the experiment. He can either try to fix the problem on his own, or he can go to the head of his department and confess the misuse of trust and power bestowed on him. The first alternative is designed to follow the prediction of the overconfidence theory meaning that embezzlers overestimate their own future performance. Overconfident people might think: "I messed up, but it is likely that I can fix it on my own without having to let someone know". The payoff structure for this alternative is tied to a significant constraint. If the employee thinks he is able to fix the problem or somehow overcome his occupational fraud he has to answer three questions in a quiz accurately. The quiz is designed with questions, which are taken from different intelligence tests[3]. Right before the participant has to make a decision, an example question is displayed. If he passes the quiz without any mistake, he receives 15,000 €. This is a final 5,000 € surplus if we take the embezzled 10,000 € as the initial endowment. If he answers one or two questions inaccurately, he receives 0 €, keeps the debt and the problem of his act of embezzlement (see the game process of the experiment with the framing in Figure 2).

Playing the quiz in the given scenario would picture the motivation of an embezzler who assumes the costs of revealing non-shareable information with a spouse, friend, coworker or head of department too high. Costs might seem like huge losses in reputation within the family or department; shame might be too high to overcome on the way of confessing. In some cases embezzlers tend to think they will get fired after confessing or, even worse, that the spouse might want to get divorced. The other alternative in the game is to disclose his action to his head of department.

If the participant takes this choice, it comes with the add-on of choosing between four pre-formulated messages to the other participant, who impersonates the head of department. It is notably clear that in the experiment employee and employer don't know each other and no further information (like age or gender) can be sent to the supervisor.

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3 It should be mentioned that we had several research assistants at Passau University play a quiz, which featured eight different questions, in advance. A new three-question quiz was then assembled from the first quiz, which was so difficult that only 14% of the research assistants were able to solve it. These research assistants have been are the representative group you might recall from the previous chapter. Not necessary to mention that research assistants in the field of Economics are more experienced in terms of mathematical tasks then regular students. The fact that only 14% of the assistants have passed the quiz is revealed to the participant before his choice.
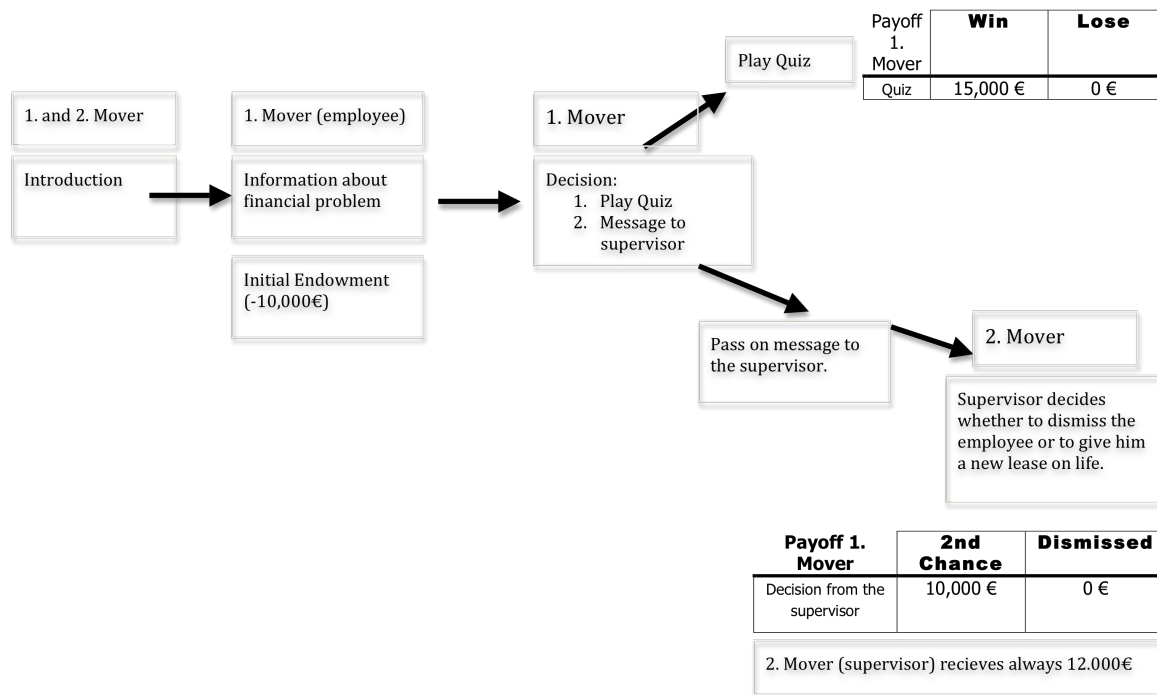
This is done in order to evaluate the level of trust which is put to the decision of the head of department, which will be explained shortly: The four available messages display four different characteristics. They range from being deeply humbled and confessing the action to fully trying to convince the supervisor of being innocent. All four messages are displayed as well with an example question from the quiz on screen before the participant has to decide about his future behavior. The second mover (supervisor) then has the choice to whether dismiss his employee now that he is in possession of the information that the employee misused the power entrusted to him and committed occupational fraud, or give his loyal employee the possibility to work overtime for the next six month. The supervisor receives an independent salary (12,000 € in this experiment), and it is clearly stated that the decision of the supervisor has no impact on his own remuneration. Recall the fact that player 2, who is now the head of department may be indifferent between two possible ways he can play. In case the supervisor dismisses his employee, the participant would earn 0 €. However, if the head of the department decides otherwise and honors the revealing of the misuse associated with a second chance for the employee, he would end up with the opportunity to pay back his embezzlement by working overtime (which is worth the 10,000 €). The type of message chosen might influence the supervisor's decision. The supervisor is actually not aware of the

fact that the participant chooses one out of four different types of messages[4]. He can only see the actual message he receives.

The employee now faces the challenge of having to make a decision. What would you expect people to choose? Three formulated hypotheses will be tested during the experiment.

**Hypothesis 1: Subjects play according to theoretical prediction.**

If overconfidence and/or loss aversion influence player 1s' decisions we expect a significant deviation from the game theoretic prediction.

**Hypothesis 2 a: Men tend to play the Quiz more often than women do.**

This hypothesis is based on the theory of overconfidence, see especially Odean (1999), and on the assumption that men tend to withhold information about their needs and anxieties strongly compared to women, who tend to share everything with their friends, see Tannen (1990) and Tousignant (1987).

**Hypothesis 2 b: Business students are more likely to be overconfident.**

This hypothesis is strongly based on the theory of overconfidence, which basically states that business employees as well as business students always overestimate their own skills, see Camerer and Lovallo (1999).

The outcome of the hypotheses and various other results of the performed experiment will be discussed in the next chapter. To the best of my knowledge, there hasn't been any comparable experiment in experimental economics that has put the participants, students in this case, into the dilemma of deciding whether to reveal the problem or to keep it a secret.

# 4. Results and Discussion

In the beginning of this chapter it has to be stated that usually actual payoffs are paid to the participants of an experiment, but that was not the case here. The seminar during which the experiment conducted allowed only the use of hypothetical payoffs. Without doubt, this constraint might affect the outcome and behavior of the participants. Nevertheless, we can see in the results, that the acquired data is valid and helpful for further research in the field of occupational fraud. The experiment took place at Passau University in January 2010. It was part of the curriculum in the seminar in experimental economics under the stewardship of the chair of Prof. Dr. Graf Lambsdorff. The experiment was programmed and conducted with the software z-Tree (Fischbacher 2007). The first mover (employee) had no contact to the

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4 I admit this may have led to biases with respect to the behavior of the supervisor.

second mover (employer) and they didn't know each other. To ensure this, the experiment was played in two different computer labs in two different locations at the University. All the participants in the experiment were students from Passau University. They were mainly from the departments of Business, Cultural Studies, Economics, Law and Information Technology.

As table 1 illustrates, only 57.5% of the participants decided to admit their misuse of trusted power and went to the head of the department. This is an absolute number of 23 that did decide not to take the Quiz and try to receive a payoff of 15,000 €. Still 42.5 % of the participants decided to prove their abilities in the quiz. These 42.5 % are a significant deviation from our game theoretic prediction, which assumes that all participants should act in line with the optimal strategy and admit their misuse. The first hypothesis is therefore proved wrong and the theories of overconfidence and loss aversion seem to have a strong impact in this sample.

52.4% of the male employees preferred to go the head of the department, and the other 47.6 % decided to take the quiz. This number alone gives no clear answer to hypothesis 2a. However, this changes when we compare these to the 36.8% of female employees who decided positively on the option to try the quiz. We have a large number of women who decided to share their challenging situation with their supervisors, namely 63.2 %. This outcome might contain information about the differences in the behavior and the evaluation of the given situation between women and men. Women seem to be more open to share their information. Experimental evidence exists for some gender-specific effects. Hypothesis 2a is thus proved positive (see table 1), and further research on and discussion about reasons for this is required.

Other reasons than overconfidence or loss aversion might add to the specific details of the design of the experiment. In the experiment the participant is confronted with the theft of company assets. The participants might think that they would never commit a criminal act in real life, and therefore decide for the "official" decision and talk to the supervisor knowing that they didn't do anything wrong. This might be a weak point in the framing of the experiment. However, this detail is due to the fear of losing too many data on the behavior of fraudsters[5]. On the other side the knowledge about a quiz which only 14% of the research assistants have passed might raise curiosity in the participants and lead them to give the quiz a "try". They might argue that they wouldn't lose anything because payoffs and the initial endowment are hypothetical.

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5 If the framing allowed the participant to decide in the first place to either embezzle or reveal his information before committing fraud, many more participants would be needed to gain enough data about the behavior of fraudsters because many would choose not to embezzle.

When we take a more detailed look at the differences of the results of the different genders, we can see an interesting outcome. When we consider the age of the participant in addition to their gender, we can find more clear tendencies. We find that there are differences between "younger" and "older" men or women. As a result we see that "older" women and "younger" men tend to be honest and communicate their dilemma situation to the head (see table 2). On the other hand we find that "younger" women and "older" men tend to take the chance on solving their problem alone and therefore decide to play the quiz. This might reflect the overconfidence of "older" men and the will of "younger" women to achieve something special in their lives. "Younger" men, however, are more aware of their lack of experience and might lack self-esteem. "Older" women are more experienced and tranquil when it comes to a dilemma situation than "younger" women. The age of male participants ranges from 19 to 28 years and that of female participants from 20 to 25. The terms "older" and "younger" must therefore be used carefully, however they display a realistic figure when we take into account the range of ages of students in Germany[6].

15 business students took part in the experiment, and it is under the focus of research to test if business students behave the way the underlying theories of overconfidence or loss aversion suppose. It is quite astonishing to see a result that shows numbers entirely different from those that could be expected. 60% of the business students decided to talk to their supervisor and denied the way of self-fulfillment. This high number is allegeable by one crucial reason.

In this sample, loss aversion was less pronounced among business students than expected, which led them to a higher belief in the positive behavior of their supervisors, which again motivated them to admit their misuse. The theory of overconfidence plays no important role here, see the two students who won the quiz were business students and therefore had no misleading overconfidence in their abilities. Coates (2009) found similar results for financial traders who were driven stronger by the will to take a risk than by overconfidence in their own abilities. Hypothesis 2b is as a result proven wrong. The business students in this experiment were not driven mainly by overconfidence.

The underlying theory by Cressey only says that the inmates did not share the information with persons who could help them solve the problem. This emphasizes the decision of the business students and all the other students who went to their supervisor even more. It is obvious that it is quite a demand on a participant to go to his supervisor instead of going to a good friend and share the "non-shareable".

In addition to the results from hypothesis 2a, we examine the behavior of the participants

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[6] To test this hypothesis, I carried out "standard probit regressions". The results confirm the above mentioned line of arguments strongly. However, analyzing the results in all statistical depth was not expected by the chair. The aim of the seminar was to set up, program and execute the experiment.

from the other fields of study and compare their results to the behavior of the business students. We can say that there is a tendency for economic students to take the quiz and behave overconfident compared to the behavior of the business students. This is quite stupendous, because economic students should be aware of calculating the expected payoffs the right way and should behave fully rational. They obviously overestimate their own abilities to solve insoluble quizzes or are more loss averse.

In addition, it is quite interesting to see that 100% of the Law students decided to share the information with their head of department; no other field of study decided as unified. Of the 17 students who took the exam, only 2 solved the quiz correctly.

This is about 12% of the participants, which is a number close to the one that was communicated to the participants before[7]. It is necessary to mention here that the two winners of the quiz were amongst the six business students who decided to take the quiz. This is one third of the commonly regarded as "overconfident" people. Hypothesis 2b receives thus another contradiction (see table 3).

In spite of all that, it has to be mentioned that the variety of the four different messages had a huge impact on the supervisor's decision. It could be a weak point of the experiment that the four different types of messages are not shown to the head of the department. The supervisor only receives the message selected by the employee. Nevertheless, the ex post analysis shows clearly that the effect intended by the different characteristics of the messages was achieved. The two types of message that communicated a humbled and regretting employee who asks for a second chance were replied positively in around 65% of the cases (see table 4). The third type of message that stated complications in the case was denied in 100% of the decisions by the supervisor. Message type four, which would have communicated innocence and denial of the action, was never selected by an employee. Being honest and straightforward seems to pay off (see different types of messages in screenshots).

Last, but not least, it is to be examined which gender was more successful in maximizing their payoffs. And it becomes evident that Odean's (1999) research results were right. Women do better than men in maximizing their payoffs, even in this experiment, where two men won the quiz and therefore received 15,000 € each. No woman won the quiz, but women still achieved the higher average payoff (see table 5). The average per capita payoff for a woman in the experiment was 5,236 €, and the counterpart for the average man was around 3,809 €. It is quite important to announce that the supervisor, who affected the payoff structure in 57.5 % of the cases in the experiment, did not know if "his" employee was a man or a woman. Still, the women managed to receive a higher average per-capita payoff (see table 6).

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[7] Recall the 14% from the „reference group" in chapter two.

# 5. Conclusion

Comparing the empirical data created by Cressey (1971) in the 1950's with the behavior of the students in the 2010 experiment leads to an astonishing result. From a societal and entrepreneurial point of view this experiment is a positive sign regarding the appearance of a tendency towards a more honest and humbled behavior and attitude among the participants. A total of 57.5 % of the participants who revealed their difficult situation is an outstanding number compared to the data collected by Cressey. In his research each inmate decided to keep his challenge in secret.

The outcomes about "younger" and "older" male and female students would be a quite challenging field to examine in further experiments. It is now the next step to ask and to conduct research on the questions if the figures evaluated in this experiment are confirmed under real circumstances in corporations. The two theories of overconfidence and loss aversion might help evaluating the motivation behind an individual embezzler. Overall, we can conclude that business students did not tend to overestimate their future behavior or were not as distinctively loss averse as standard theory would predict.

Regarding gender, it is quite obvious, that even in this little experiment women gained the higher average per capita payoff directly compared to men, even though two male participants were proved right in fully trusting their ability of solving the problem alone.

The author would like to close with a few words on behalf of himself:

This experiment was conducted in the curriculum of a seminar at Passau University. It helped the examiner to make progress in the field of experimental economics and the field of study of occupational fraud. However, it is most desirably and of great importance to conduct an experiment with a larger sample and real payoffs. These will then control the wider range of interpretations of the decisions made by the participants. If you are interested in supporting such an experiment or other further research on this topic, please do not hesitate to contact the author.

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# Appendix

## Screenshots:

Excerpts of the most important screens from the experiment.

*I. Employee's Screenshots*

Stell dir bitte vor, dass du ein Mitarbeiter in einem großen Unternehmen bist. Du bist in einer sehr guten Position und arbeitest schon zehn Jahre in dieser Abteilung mit Erfolg und dein Abteilungsleiter vertraut dir.

Deine private Schulden lassen dich Nachts nicht mehr länger schlafen und als Vertrauensperson sind dir die Zugangsdaten zum Firmenkonto vertraut und bekannt. Nachdem du Tage überlegt hast, überweist du 10.000 Euro auf dein privates Konto. Niemand aus deiner Abteilung hat es bemerkt. Ebenfalls hat der Wirtschaftsprüfer von deiner Handlung keine Kenntniss genommen. Du bist nun erst einmal erleichtert, da du deine privaten Schulden begleichen konntest und dein Lebenspartner nichts davon mitbekommen hat.

Weiter

Nun stellt sich für dich die Frage, wie es weitergehen soll. Du hast nun zwei Möglichkeiten.

**1.Möglichkeit:**

Entweder versuchst du auf eigene Faust das Problem zu lösen. Du hoffst, dass die Not der Situation dich ganz neue Seiten deiner Kreativität entdecken lässt und du in der Lage sein wirst ein neues gewinnbringendes Geschäftsfeld zu entwickeln. Dieses wird dir und der Firma weit mehr als die dir notwendigen 10.000 Euro wieder einbringen welche du dann idealerweise zur Begleichung in deiner Abteilung und zu deinen zusätzlichen privaten Nutzen einsetzen kannst.

**2.Möglichkeit:**

Oder du gehst direkt zu deinem Abteilungsleiter und übermittelst ihm deine Handlung. Dein Abteilungslieter nimmt hier am Experiment teil und hat zuvor eine E-Mail von einem Mitarbeiter der Internen Revision erhalten dass drei, vier Kontobewegungen seltsam sind und ihn gebeten diese zu überprüfen. Dies geschieht aber immer nach Bilanzprüfungen und beunruhigt den Abteilungsleiter in der aktuellen Situation überhaupt nicht. Er ahnt von nichts.

Beide Möglichkeiten werden auf den folgenden Seiten genauer erläutert.

Weiter

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**Bedingungen und Folgen für deine Entscheidung.**

**1.Möglichkeit:**

Wenn du dich entschließen solltest auf eigene Faust zu handeln musst du im nächsten Schritt ein Quiz beantworten. Dieses besteht aus drei Fragen welche du alle richtig beantworten musst. An der Universität Passau haben 16 % der wissenschaftliche Mitarbeiter erfolgreich bestanden. Auf der nächsten Seite wirst du eine Beispielfrage sehen.

Wenn du dieses Quiz erfolgreich bestehst und alle drei Fragen richtig beantwortet hast bekommst du 15.000 €.

Ein bestandenes Quiz bedeutet also, dass Du dein Schuldenproblem auf eigene Faust gelöst hast.

**2.Möglichkeit:**

Wenn du dich entschließen solltest zum Abteilungsleiter zu gehen hast du die Möglichkeit ihm eine von vier vorformulierten Nachrichten zu übermitteln, welche du auf der nächsten Seite sehen wirst. Dieser hat dann zwei Alternativen. Entweder bringt er dein Verhalten zur Anzeige und kündigt dir. In diesem Falle erhältst du 0 €.

Oder dein Abteilungsleiter respektiert deine Offenheit und bietet dir an durch Überstunden in den nächsten Monaten die veruntreuten 10.000 € wieder zurück zu erarbeiten. Du erhältst augenscheinlich bei einem kooperativen Chef 10.000 €.

Weiter

**Beispielfrage bei Wahl der 1.Möglichkeit:**

Bitte setze die folgende Zahlenreihe fort!

3 6 18 15 45 48 144  ?

Die Lösung ist 141.

Mann muss erst drei addieren, dann drei multiplizieren, dann drei subtrahieren und wieder multiplizieren. Nun fängt man wieder von vorne in der Reihenfolge an.

**Mögliche Nachrichten, die an den Chef geschickt werden können, bei Wahl der 2. Möglichkeit:**

1. Nachricht: Ich habe letzte Woche Geld entwendet. Ich bitte um eine neue Chance.

2. Nachricht: Chef, es tut mir sehr leid und ich bitte mein Verhalten zu entschuldigen. Ich konnte einfach nicht anders.

3. Nachricht: Die Sache ist sehr kompliziert und ist nicht so einfach zu beschreiben.

4. Nachricht: Ich sehe hier ganz klar einen Komplott gegen mich. Ich werde schon seit geraumer Zeit gemobbt.

[ Weiter ]

## Zusammenfassung

Zusammenfassend lässt sich für dich sagen: entweder entscheidest du dich für den Alleingang mit verbundenem Quiz und die möglichen 15.000€ oder 0€.

Oder für den Gang zum Abteilungsleiter, verbunden mit dem Senden einer Nachricht.

Je nach Beurteilung erhältst du 0€ oder 10.000€.

[ Weiter ]

Bitte entscheide dich nun für eine der beiden Handlungsalternativen.

- ○ auf eigene Faust handeln und 15.000€ oder 0€ erhalten
- ○ mit dem Abteilungsleiter sprechen und 10.000€ oder 0€ erhalten

Entscheidung bestätigen

Quiz:

Bitte beantworte die folgenden drei Fragen. Du hast dafür 3 Minuten Zeit.

1 .Wie lautet die vollständige Paarung?.

Archiv: Buch

Buch = ?.

- ○ Kapitel
- ○ Papier
- ○ Stil
- ○ Autor

2. Ein Jäger findet eines Morgens vor seiner Hütte eine Bärenfährte. Er verfolgt sie 10 km nach Süden, 15 km nach Osten und dann nochmals 10 km nach Norden. Dann endlich stellt er den Bären und erlegt ihn. Erstaunt stellt er fest, dass er wieder bei seiner Hütte ist.

Welche Farbe hat der Bär?

- ○ schwarz
- ○ weiß
- ○ schwarz/ weiß
- ○ braun

3. Bitte setze die Zahlenreihe fort.

3 2 4 1 4 ; ?.

Antworten absenden!

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Messages:

Du hast dich entschieden, mit deinem Abteilungsleiter zu sprechen.

Als Mitarbeiter erhältst du nun die Möglichkeit deinem Abteilungsleiter eine Nachricht zu schicken.
Wähle bitte eine der vier unten aus!

- ○ Ich habe letzte Woche Geld entwendet. Ich bitte um eine neue Chance!
- ○ Chef, es tut mir sehr leid und ich bitte mein Verhalten zu entschuldigen. Ich konnte einfach nicht anders.
- ○ Die Sache ist sehr kompliziert und ist nicht so einfach zu beschreiben.
- ○ Ich sehe hier ganz klar einen Komplott gegen mich. Ich werde schon seit geraumer Zeit gemobbt.

[ Weiter ]

Questionaire:

Bitte beantworte um das Experiment abzuschließen folgende Fragen zur statistischen Auswertung. Deine Eingaben bleiben selbstverständlich anonym.

| Geschlecht: | ○ männlich |
| | ○ weiblich |
| Alter: | |
| Studiengang: | ○ Kulturwirtschaft |
| | ○ BWL |
| | ○ VWL |
| | ○ Jura |
| | ○ Lehramt |
| | ○ Medien und Kommunikation |
| | ○ Informatik |

[ Weiter ]

Um eine Zahl einzugeben, führe den Cursor bitte auf das entsprechende Feld.

After the employee decided to send a message:

Einer deiner Mitarbeiter teilt dir mit, dass er letzte Woche 10.000€ zur Begleichung von privaten Schulden aus der Firmenkasse entnommen hat. Du hast nun zwei Alternativen.

1. Alternative

Entweder gibts du ihm die Chance durch Überstunden die entwendeten 10.000€ in den nächsten drei Monaten zu erarbeiten. Dies erscheint dir sinnvoll da dein Mitarbeiter dir die letzten zehn Jahre immer loyal gegenüber war und es bestimmt nur eine einmalige Angelegenheit gewesen ist.

2. Alternative

Oder du informierst die Personalabteilung und strebst eine Kündigung gegenüber deinem Mitarbeiter an.

Wichtig: Beide Entscheidungen sind legitim und liegen in deiner Entscheidungsgewalt. Der Vorstand ist mit beiden Alternativen einverstanden und es ensteht auch keine direkte Auswirkung auf den Unternehmensgewinn oder dein Gehalt.

Ihr Mitarbeiter übermittelt dir bezüglich des Sachverhaltes die folgende Nachricht:

**Ich habe letzte Woche Geld entwendet. Ich bitte um eine neue Chance.**

Wie gehst du mit dieser Information über den Sachverhalt und der Meinung ihres Mitarbeiters um? Gibts du ihm eine zweite Chance oder nicht?

○ Ich dulde die Handlung und honoriere die Informationsübermittlung
○ Ich kann die Handlung meines Mitarbeiters nicht akzeptieren und werde ihn fristlos entlassen.

[ Bestätigen ]

The Head received as well a questionnaire and a short notice about his remuneration of 12.000 €.

Tables:

*Table 1: Decision and Gender*

| Decision and Gender | | | | | |
|---|---|---|---|---|---|
| | | | Gender | | Total |
| | | | Man | Woman | |
| Quiz | | Number | 10 | 7 | 17 |
| | | % Within gender | 47,6% | *36,8%* | 42,5% |
| Revealing | | Number | 11 | 12 | 23 |
| | | % Within gender | *52,4%* | *63,2%* | 57,5% |
| Total | | Number | 21 | 19 | 40 |
| | | Men/ Women | 52,5% | 47,5% | 100,0% |

*Table 2: Average Age*

| Average Age | | | | | |
|---|---|---|---|---|---|
| | | | Average Age | Difference | Std. Deviation |
| Quiz | | Man | 23,8 | 0,8 | 2,6 |
| | | Woman | 22,42 | 1,15 | 1,51 |
| Revealing | | Man | 23 | 0,8 | 1,94 |
| | | Woman | 23,58 | 1,15 | 1,31 |
| Range of Age | | Man | 19-28 years | | |
| | | Woman | 20-25 years | | |

*Table 3: Decision and Field of Study*

| | | | Field of Study | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Decision and Field of Study | | | | | | | | | | |
| | | | Culture | Business | Economics | Law | Education | Media | IT | Total |
| Quiz | | Number | 3 | 6 | 5 | 0 | 0 | 2 | 1 | 17 |
| | | % Within Decision | 17,6% | 35,3% | 29,4% | 0% | 0% | 11,8% | 5,9% | 100% |
| | | % Within field of study | 37,5% | 40,0% | 62,5% | 0% | 0% | 66,7% | 100% | 42,5% |
| Revealing | | Number | 5 | 9 | 3 | 4 | 1 | 1 | 0 | 23 |
| | | % Within Decision | 21,7% | 39,1% | 13,0% | 17,4% | 4,3% | 4,3% | 0% | 100% |
| | | % Within field of study | 62,5% | 60,0% | 37,5% | 100% | 100,0% | 33,3% | 0% | 57,5% |
| Total | | Number | 8 | 15 | 8 | 4 | 1 | 3 | 1 | 40 |
| | | % Within Quiz | 20,0% | 37,5% | 20,0% | 100% | 2,5% | 7,5% | 2,5% | 100% |
| | | % Within field of study | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

*Table 4: Profits according to the selected Message*

| | | | Type of Proposal | | | | |
|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | Total |
| Profit | 0 | Number | 4 | 0 | 4 | 0 | 8 |
| | | % | 40,0% | 0% | 100,0% | 0% | 0,35% |
| | 10000 | Number | 6 | 9 | 0 | 0 | 15 |
| | | % | 60,0% | 100,0% | 0% | 0% | 0,65% |

*Table 5: Profit and Field of Study*

**Profit and the Field of Study**

| | | | Field of Study | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Culture | Business | Economics | Law | Education | Media | IT | |
| Profit | Got Fired or (lost Quiz) | Number | 7 (3) | 6 (4) | 6 (5) | 1 (0) | 0 (0) | 2 (2) | 1 (1) | 23 |
| | | % Within Profit | 30,4% | 26,1% | 26,1% | 4,3% | 0% | 8,7% | 4,3% | 100,0% |
| | | % Within Field of Study | 87,5% | 40,0% | 75,0% | 25,0% | 0% | 66,7% | 100,0% | 57,5% |
| | | % Within Total | 17,5% | 15,0% | 15,0% | 2,5% | 0% | 5,0% | 2,5% | 57,5% |
| | 2'nd Chance | Number | 1 | 7 | 2 | 3 | 1 | 1 | 0 | 15 |
| | | % Within Profit | 6,7% | 46,7% | 13,3% | 20,0% | 6,7% | 6,7% | 0% | 100,0% |
| | | %Within Field of Study | 12,5% | 46,7% | 25,0% | 75,0% | 100,0% | 33,3% | 0% | 37,5% |
| | | % Within Total | 2,5% | 17,5% | 5,0% | 7,5% | 2,5% | 2,5% | 0% | 37,5% |
| | Won Quiz | Number | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| | | % Within Profit | 0% | 100,0% | 0% | 0% | 0% | 0% | 0% | 100,0% |
| | | %Within Field of Study | 0% | 13,3% | 0% | 0% | 0% | 0% | 0% | 5,0% |
| | | % Within Total | 0% | 5,0% | 0% | 0% | 0% | 0% | 0% | 5,0% |
| Total | | Number | 8 | 15 | 8 | 4 | 1 | 3 | 1 | 40 |
| | | % Within Profit | 20,0% | 37,5% | 20,0% | 10,0% | 2,5% | 7,5% | 2,5% | 100,0% |
| | | %Within Field of Study | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% |
| | | % Within Total | 20,0% | 37,5% | 20,0% | 10,0% | 2,5% | 7,5% | 2,5% | 100,0% |

*Table 6: Per capita Profit and the Range of Age*

|  |  | Per capita Profit | |
| --- | --- | --- | --- |
|  |  | Man | Woman |
|  | Per capita | 3.809 € | 5.263 € |
|  | Total | 80.000 € | 100.000 € |
|  | Total number | 21 | 19 |