

*Dominika Korzeniowska\**

## **TYOLOGY OF CORPORATE LIQUIDITY MANAGERS FROM BEHAVIORAL FINANCE PERSPECTIVE**

**Abstract.** The paper presents a typology of professionals who deal with liquidity management in enterprises and is based on meta analysis of the results of the qualitative research led by the author. This typology reflects managers' susceptibility to selected decision traps and their reflection about non-economic determinants that may influence decision-making process.

**Keywords:** decision traps, behavioural finance, liquidity management.

**JEL:** D03, D81, G02

### **1. INTRODUCTION**

Behavioural finance is often associated with the behaviour of capital market investors (Zielonka 2003: 1–44). It seems however, that such a perspective is not fully comprehensive (Graham, Harvey, Puri 2013). Behavioural finance is currently becoming more often perceived also in the context of financial management in enterprises (Gajdka 2013: 10–14). While speaking about financial management, it is worth mentioning that its immanent element is decision-making (Szyszka 2013: 37–58). Decision-making cannot be considered without the aspects of rationality or lack of rationality of that process (Simon 1986: 209–212). At the core of neoclassical theory of finance there is a paradigm of *homo economicus*, based on the rationality of human choices, whereas behavioural finance examines mechanisms that interfere with this rationality (Baker, Wurgler 2013: 385–387).

The liquidity management based on the normative model (consistent with the neoclassical approach), where the assumption of human rationality dominates, is widely recognized and described in financial literature (Sierpińska, Wędzki 1999, Michalski 2010, Kreczmańska-Gigol 2010). Various ratios, methods and models have been invented to help to assess liquidity and to indicate how to maintain or improve it. Nevertheless, more and more researchers are becoming interested in cognitive or behavioural phenomena that may better

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\* Społeczna Akademia Nauk w Łodzi, [ddkorzeniowska@gmail.com](mailto:ddkorzeniowska@gmail.com)

explain why people's choices are not always fully rational (descriptive approach) (Tyszka 1986, Russo, Shoemaker 1989, Kahnemann, Slovic, Tversky 1982). There are currently quite a lot of branches of science that explore rationality disorders. Those are i.e. managerial sciences (Nosal 2001), cognitive psychology (Strelau 2004), decision theory (Tyszka 1986) or economic psychology (Zaleśkiewicz 2012). Recently, this group has also been backed by behavioural economy and behavioural finance. Researchers have identified many mechanisms that violate the assumptions of human rationality. It should be noted though that such kind of research is often conducted in the form of experiments where people are subject to some actions to evoke their certain reactions (Strelau 2004: 357–368). This is performed under predefined conditions, enabling the control of relevant research factors that are later thoroughly analyzed. Thus, such a research centres upon determining whether a mechanism actually occurred or not, regardless of what the subject thinks about it. There is a deficit of research and studies on how decision-makers perceive these phenomena, what they think about them and whether they are aware of their existence and the impact on human decisions, including their own.

The research done by the author of this article aims to address that need. It focuses on how people professionally prepared to financial management (including liquidity management), and making such kind of decisions every day, react to certain mechanisms identified by behavioural finance and behavioural economy and what their opinions about the presence of such occurrences in decision-making process are.

Detailed results of the aforementioned research (concerning the opinions and reactions of respondents on each studied phenomenon) can be found in other articles published by the author (Korzeniowska 2012, Korzeniowska 2015). The subject of this paper is a typology of people managing liquidity in enterprises comprising two aspects:

- a) their susceptibility to selected decision traps<sup>1</sup> and
- b) the level of self-awareness of the mechanisms related to the decision maker, occurring in the liquidity management process of the company.

This typology can be treated as a kind of synthesis of observations emerging from the study. It has been formed as a result of the analysis of the responses to all interview questions. It reflects the overall (objective and subjective) attitudes of the respondents to non-economic determinants of decision making in the domain of liquidity management.

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<sup>1</sup> Decision traps are the factors responsible for an inaccuracy of probability assessment of events, for which we make our choices.

## 2. RESEARCH METHODOLOGY

Due to the fact that the research touched upon a new, not yet well recognized subject matter, and the research questions required a thorough understanding of how the respondents perceive, understand and assess the problem, it was done by means of qualitative method (Flick 2010, Konecki 2000, Silvermann 2009) and a technique was in-depth interview with standardized list of required information (Babbie 2004: 327–330). The interview also contained some extra exercises (tests) to enable a more objective way of verifying respondents' susceptibility to selected decision-traps.

The following decision-traps were the subject of the research:

- related to human memory: primacy effect and recency effect that describe people's tendency to overestimate the first and last data or piece of information received (Tyszka 2000: 33–36);

- derived from the functioning of the human thinking process: conjunction effect (Tyszka, Zaleśkiewicz 2001: 224–226), contrast effect (Tyszka 2000: 30–33), framing (Tversky Kahneman, 1981: 453–458) and heuristics (Tversky, Kahneman 1974: 1124–1131);

- implied by mood or emotions: rose-tinted glasses effect or dark-tinted glasses effect that distort people's assessment under the influence of their current mood (Tyszka 2000: 42–44);

- arising from a desire to reduce negative emotions: illusion of control (Langer, 1975: 311–328), self-deception and "sour grapes" effect (Tyszka 2000: 189–196);

- being a consequence of prejudice and stereotypes (Nelson 2003: 52–66);

- resulting from inadequate assessment of one's knowledge and competencies (overconfidence) (Lichtenstein, Fischhoff 1977: 159–183), risk aversion (Slovic, Peters 2006: 322–325) and locus of control (Ng, Sorensen, Eby 2006: 1057–1087);

- time pressure (Ariely, Zakay 2001: 187–207).

The research was conducted between June 2011 and February 2012 in the province of Łódź. The gathered data included 36 interviews (recorded using a tape recorder) complemented with notes reflecting non-verbal reactions of the respondents. According to the methodological recommendations on qualitative methods, interviewees were diversified in terms of several aspects (Charmaz 2006: 13–42). There were people of both sex, different age, holding positions such as CFO, chairman, chief accountant (professionals dealing with financial management in their daily work life) etc. employed in companies from different industries, of different sizes, with economic background (education, courses, trainings), minimum of 2-year work experience and who made decisions related to liquidity of the company.

This paper contains the answer to the following research question: What are the types of interviewees in terms of their attitude towards the company's liquidity determinants, associated with the decision maker?

The research hypothesis was that it would be possible to identify among the respondents a managerial type who is irrational and unaware of the existence of the decision-traps. In other words such a type of person is susceptible to errors in decision-making and is not aware of it.

### 3. TYPOLOGY

Analysis of the respondents' answers concerning all examined mechanisms allowed to identify six types of managers:

- aware rationalist / reflective cyborg,
- unaware rationalist / non-reflective cyborg,
- conscious but irrational / ordinary man,
- unconscious and irrational / naïve,
- unreasonable and die-hard,
- explorer (eager to learn) / irrational but flexible.

Aware rationalist is a person who demonstrates low susceptibility to decision traps and also has a previous reflection on the existence of examined mechanisms. It should be noted, however, that none of the respondents solved the simple tests without errors. One respondent was good enough to only make errors in two out of all the tests taken. (Resp. 30, M, senior, chairman<sup>2</sup>). What is interesting, those two tests were concerned with illusion of control and overconfidence. It seems that in this case the term "cyborg" is quite accurate as it reflects above-average mathematic, logic and memory skills. Therefore the mind of this interviewee could be compared to a high-end PC with a good processor and RAM. This does not mean, however, "a resistance" to human weaknesses, which aren't strictly related to the ability of processing data (like illusion of control and overconfidence). This type is also aware of certain non-rational mechanisms, which may occur while making decisions regarding liquidity, acquired during his or her professional life. What's more, such respondents already had certain pre-interview reflections and sometimes even admitted to having tried to counteract, eliminate or at least minimize the impact of such mechanisms on their own decision making abilities. Below are some examples illustrating the state of their awareness about the determinants in question:

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<sup>2</sup> Respondent number (i.e. Resp. 17), sex: male (M) or female (F), age (young, senior), job title (CFO, CEO, chief accountant etc).

“You have to know how to switch off this ‘circus of emotions’. It is dangerous, especially the optimism. Pessimism in liquidity management may only result in inefficient use of capital that could be better operated. Excessive optimism is a matter of company’s survival or death. [...] It depends on how good somebody is at what they do. If they are good, emotions shouldn’t have any impact. The greater susceptibility to emotions, the worse the liquidity management becomes. I try to turn the emotions off. [...] I really don’t care if someone is yelling at me or smiling at me. It doesn’t matter. I’m trying to look at it objectively. The person who deals with finance should always be able to give simple answers. [...] We must be able to give answers like “yes” or “no”. [...] Do you mean that I’m trying to rationalize it for myself? To explain this somehow to myself, that I did the right thing? It is natural to do so... But these are some PSYCHOLOGICAL TRAPS. You have to be able to turn this off, or at least try to turn such thinking off” (Resp. 17, M, young, CFO).

This respondent’s opinions denoted quite a deep reflection about his own way of making decisions. Moreover, this manager was the only one who used the term “psychological traps” which surprisingly accurately summed up the theme of the whole interview.

Yet, the respondents quoted below openly admitted that they were prone to certain mechanisms and it seemed they did not do it without awareness:

“I tend to do this ... that is... I know about certain things but I ignore them. Besides, at school every student learns their favourite subjects first, and then all the others. The same thing applies to decision-making. First you make the easiest decisions. Those which are the most difficult you postpone, perhaps because you want to prepare yourself for them or to think about a solution, but difficult decisions are not made hastily” (Resp. 11, M, senior, owner).

“Avoiding difficult situations is a rather subconscious human behaviour. A person who is a CFO performs their duties in a conscious way. He is programmed to examine the causes of the poor condition of a company. Therefore people who would be more at risk of such psychological traps, while approaching the issue of liquidity and looking for poor financial standing of a business, would be the owners of companies who are both ‘the rudder and the master’. These people do not feel the same responsibility as someone who is hired by somebody else to carry out certain tasks. In such case it is the business owner who is subject to those mental, subconscious pressures and not a full-time employee” (Resp. 25, M, senior, owner).

The second distinguished type is the unaware rationalist. These people did not make many mistakes while solving simple tests (thus they presented some extraordinary abilities of logical and mathematical thinking), but at the same time they did not always understand the essence of the mechanisms associated with being a decision-maker, indicated by the interviewer (in particular self-

deception) and did not have previous knowledge about the occurrence of such mechanisms and their impact on decisions concerning liquidity.

An explicit example of their rationalism is the way they solved the test related to regression to the mean. It has been proven that people tend to ignore regression to the mean when making choices. Those respondents managed to avoid this error. Nevertheless, as far as the other mechanisms are concerned they were saying the following:

“I am aware of the question, but I’d rather not think about it too much ...” (Resp. 21, M, senior, owner).

“I don’t deal with such people, I’ve never thought about it so what I say here is rather presumptuous. It’s hard to say whether I reflect upon my decisions, I surely do ...” (Resp. 21, M senior, owner).

“This is just an internal reflection, which just popped into my mind, just now” (Resp. 31, F, senior, president).

Another type of managers recognized in this study is the self-conscious, but rather irrational. Such type can also be called “an ordinary man”. Those people made quite a lot of cognitive errors while solving the tests, but they seemed to be aware of their human imperfections. They correctly understood psychological mechanisms that appeared during the interview. Therefore, presumably, these were not completely new and unknown issues for them, unsupported by previous considerations. Some of them even gave the impression of being resigned to the fact that they were imperfect in certain areas and had not always been acting in a fully rational way.

“I think this has an impact. Sometimes I act on the spur of the moment, triggered by an impulse. I know this may not be entirely rational, but I give myself the right to make mistakes” (Resp. 3, F, senior, owner).

“It is probably true. People always look for excuses. Everyone prefers to live in some kind of comfort, which they create for themselves, rather than in the real world where there are plenty of problems and uncertainties. But this is wishful thinking” (Resp. 6, M, senior, president who understood the mechanism).

“Of course! [...] My mood doesn’t affect that. On the other hand it certainly affects what kind of person I am, what qualities I have and what solutions I’m able to find. Whether I behave like an icebreaker or look for a solution that will be a compromise. [...] But it certainly consists of numerous relations, whose interactions we might even be unaware of. I am aware that there are plenty of different things that influence what decision is made at a given moment” (Resp. 16, M, young, Vice-president).

“Yes. I often wonder about that. For someone from the outside, what we’ve done might seem irrational, but there are a lot of things that influence our decisions... Often they cannot even be justified economically” (Resp. 16, M, young, Vice-president).

Another type of manager is called unconscious irrational and perhaps the best name for this kind of person would be “naïve”. They made many mistakes in the tests, and also did not have any previous reflection on the influence of behavioural mechanisms on the area of liquidity management.

“I have no idea. I’ve never thought about it” (Resp. 5, M, young, owner).

“I’m just answering.... These are answers of the top of my head, but these are my principles” (Resp. 7, M senior, owner).

“No, I haven’t needed that” (Resp. 9, F, senior, Finance and Accounting Director.).

It is not advisable however to generalize and say that these respondents had no reflection on any of the analyzed mechanisms. Rather, their consideration was fragmented and poorly established. Lack of such reflection (or low level of reflection) manifested mainly in erroneous understanding of the mechanism being described i.e. they equated self-deception with deception.

Next type, which is irrational and unreformable (die-hard), describes the people that firmly denied the existence of any behavioral effects on their decisions.

“No no no. [...] My whim has nothing to do with that. There's neither randomness nor succumbing to the mood where it comes to making decisions. In general, this might happen among ordinary people, but not for financiers, because in the end everything can be calculated. For Mr Smith, who wants to invest his grandmother’s inheritance, emotions are important but in enterprises, where economic calculation prevails, it is not necessarily so” (Resp. 32, M, young, CFO).

The last type of manager is irrational reformable. Representatives of this group can be defined as people who are prone to decision traps, but are also aware of their own deficiencies. Moreover, it was observed that in the course of the interview their way of thinking changed. After each question one got the impression that the interview acted as a stimulant that prompted a more profound reflection, aroused the interest and desire to deepen their knowledge in the near future.

“For sure! I assume that it does not matter whether someone has 5,10,15 or 20 years of experience. At each stage one should train in all possible fields, because: I may be using old methods, I might not know something that I could learn precisely from such training. Even such fields as economic psychology can help a lot. All is changeable and evolves and nothing is fixed once and for all. I would like to continue learning. I participate in accounting courses every year and I would opt to include such issues into those trainings” (Resp. 24, F, senior, chief accountant).

It is worth mentioning that these respondents, when the interview ended, often asked where courses or trainings about behavioural aspects of decision making are organized.

#### 4. SUMMARY

Six types of managers, in respect of their attitude to non-economic determinants of decision-making, were identified. They were: aware rationalist, unaware rationalist, conscious but irrational (ordinary man), unconscious and irrational (naïve), unreasonable and die-hard and explorer (eager to learn) though irrational.

The aware rationalist was a person who dealt well with solving short tasks, was able to harness the rules of logic to explain the motives of the choices made, and also presented an earlier reflection on the studied mechanisms, their influence on the decision-making processes and measures that allow to avoid biases. Unconscious rationalist is a name for someone who did not make many mistakes when solving simple tests (possessed above average ability of logical thinking and mathematic skills), but at the same time did not always understand the essence of the mechanisms influencing a decision maker, raised in the course of the interview (for example, self-deception) and had no prior knowledge about their occurrence and impact on decisions concerning liquidity of enterprises. Aware but irrational (“ordinary men”) made some logical errors but were aware of their human limitations. Some representatives of that type seemed to agree with the fact that in certain areas they did not always act in a fully rational manner. Another type, which is unconscious irrational (also called naïve) describes individuals who proved susceptibility to traps included in the tests. The justifications for the choices that these respondents presented during the interview seemed to be almost textbook examples of how certain mechanisms work. Moreover, they did not have a former knowledge about the existence of such phenomena and their influence on liquidity decisions. The type called unreasonable unreformable describes people who strongly denied the existence of any behavioural factors influencing their decisions, although they made errors in simple tests. The last type, named explorer, was represented by managers who made mistakes in tests, but the interview stimulated their self-reflection and a desire to broaden their knowledge.

Analysis of the gathered material allowed the author to acknowledge that the research hypothesis is true. Among the respondents, the type called “unconscious irrational” has been identified. This means that to improve the quality of such people’s decision making, it would be advisable to educate them about how behavioural factors influence their choices, not only because they committed cognitive biases but also because they were unaware of them.

This study may help to formulate recommendations for the improvement of training for specialists who deal with financial management in enterprises. The results, pertaining to liquidity management (strongly embedded in the mainstream of economics and finance), behavioural finance and behavioural economics (which are the implementation of the output of psychologists on the ground of economics and finance) and the psychological decision theory (dealing with the psychological aspects of making various decisions), may provide the necessary basis for deepening the analysis on a similar subject in the future or the implementation of a number of new avenues of research.

The typology of managers proposed here may also serve in the future as a basis for further exploration of this issue, but this time from quantitative perspective. Knowing the potential types of managers identified in this research it will be possible to explore (by applying quantitative methods) the distribution of those types within the population.

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Dominika Korzeniowska

## TYPOLOGIA MENEDŻERÓW ZARZĄDZAJĄCYCH PŁYNNOCIĄ W PRZEDSIĘBIORSTWACH W KONTEKŚCIE FINANSÓW BEHAVIORALNYCH

**Abstrakt.** Artykuł prezentuje typologię profesjonalistów zajmujących się zarządzaniem płynnością w przedsiębiorstwach powstałą w wyniku meta analizy wyników badania jakościowego przeprowadzonego przez autorkę. Typologia ta odzwierciedla podatność badanych na wybrane pułapki decyzyjne oraz poziom refleksji menedżerów na temat pozaekonomicznych determinantów wpływających na podejmowanie decyzji.

**Słowa kluczowe:** pułapki decyzyjne, finanse behawioralne, zarządzanie płynnością

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