CONTROL AND THE ILLUSION OF CONTROL
IN THE FINANCIAL DECISIONS OF ENTREPRENEURS

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INTRODUCTION

The financial market, despite the global crisis, is one of the most dynamically developing markets in Poland. The current activity of organizations and their chance for further development is connected with continuous decision-making processes that are supposed to further the set objectives. Present-day entrepreneurs are becoming more confident and it seems that less can surprise them. The sense of power, knowledge and control gives them certain kind of freedom of action. At the same time this freedom manifests itself in majority of cases in the erosion of rational thinking. The result of achieving such a state may be a tendency to limited rationality in the decision situation. Although in everyday life there exists the possibility of changing decisions or correcting mistakes, there are areas in which an impulsive, irrational decision can be irreversible and can lead to serious consequences. As far as the situation of enterprises is concerned, such consequences may result in considerable financial losses. Due to the constantly changing environment, the decision-making ability of enterprises is gaining importance [Czerwonka and Gorlewski 2012]. In recent years, in the era of the global crisis, on many occasions the decision could be binding and therefore influence the company’s well-being.

CONTROL AND THE ILLUSION OF CONTROL

Control is one of the last stages in the manager’s work, covering as well the monitoring of the process of achieving planned goals and verification of individual elements of the decision process so that the effects of these activities are maximized. Control is thus
defined as a comparison of the present state with the required and expected state for a given activity or thing [Szczepankowski 2002]. One can state that control is a set of actions defined as the feedback on company’s management. On the basis of information and data collected during the work, the entrepreneur takes intervention actions. After the control process, the conclusion stage takes place which may be of particular importance in the case of irregularities [Vollmuth 1996]. The controlling process can be divided into four main stages [Griffin 2004]: setting standards, measuring results, comparing results with standards and evaluating the outcomes. During this process two main control functions are implemented, categorized by their purpose [Szczepankowski 2002], i.e. a protective (preventive) function designed to protect the enterprise against negative consequences of decisions made and a creative (inspiring) which is responsible for stimulating activities aimed at improving the company’s operations. These functions determine the tasks and expectations facing the decision-makers in enterprises.

Control in the theory of decision, in contrast to its standard role as a stage closing a given activity, takes on significance at the very beginning of the problem. However, the existence of control determines whether the decision maker feels dominant over the situation at a given moment. Then the risk of the illusion of control arises [Czerwonka and Gorlewski 2012]. The illusion of control is the conviction of having sense of control over the outcome but actually not having it [Matuszczak 2005]. This phenomenon is one of the basic behavioral determinants of decision making process and is closely related to the phenomenon of overconfidence [Tyszka 2004, Zielińska and Ostrowska 2013]. One of the most important studies carried out in this field was made by Ellen Langer who defined the illusion of control as a “subjective belief of the individual that the chance of personal success is disproportionately higher than the objective probability would warrant” [Tyszka 2004]. In order to verify this tendency Langer carried out an experiment in which she noticed, among other things, that dice players behave as if they are controlling the outcome of the toss. They try to throw the dice softly if they want low numbers or throw hard for high numbers. In addition, the participants of study preferred to bet on the results of future throws, rather than guessing the result of the previous throw. It is plain to see that people are bolder when they feel they have control over the future course of events.

The illusion of control as a phenomenon related to the limited rationality of entrepreneurs is influenced by several factors [Tyszka 2004]:

1. Choice – many entrepreneurs while making their own choice in a given field feel a greater impact on the course of events than if it were to happen at random. Amos Tversky and Chip Heath [1991] confirmed this in their research. They gave two tasks to the participants of the study: one of them related to the stock randomly selected from the “Wall Street Journal” quotation table and it had to be guessed whether the price of this stock would go up or down the following day. The second task was based on the same rules, but it was to guess whether the price of this stock was higher or lower on the previous day, without looking into the history of quotations from the stock exchange. 70% of the subjects chose the first task, i.e. preferred the situation in which it may seem they can influence the result.

2. Sequence of results – if a financial decision is confirmed by positive effects several times in a row, the entrepreneur may be under the illusion that he has control over these
events, regardless of whether these results were random or not. The decision maker is sure that he knows the solution to a given problem and controls the given situation what he can notice in the observed results.

3. Knowledge of the problem – the more a problem seems to be known (repetitive), the more it strengthen the sense of illusion of control among entrepreneurs. The media is full of information about investing. Radio stations, TV channels are constantly broadcasting current stock quotes and one group of stock exchange indices is very often repeated. There are hundreds of articles on investing on the internet. It gives an impression, not only to entrepreneurs, that availability and knowledge of the problem is broad and traceable. At the same time, psychologists [Zielonka 2011] have observed that people are usually overconfident about their knowledge and skills. They underestimate the risk and overestimate their abilities.

4. Information – the more information the investor is burdened with, the more the illusion of control grows. The willingness to deepen knowledge grows with the acquisition of further information but simultaneously with the possession of a certain amount of information each additional piece of it no longer exerts the same impression on the decision-maker as at the first time and it is treated as of lesser importance. According to Matuszczak any further information in a given field does not deepen the knowledge of the entrepreneur but increases his sense of control [Matuszczak 2005].

5. Commitment – the more involvement the investor shows, the greater is the illusion of control. This is a very important factor, especially in connection with the individual characteristics such as passion, devotion, sentiment or knowledge of the subject. The greater entrepreneur’s commitment to the task, the greater sense of control and impression that nothing should surprise him anymore.

In summary, the illusion of control is an illusion that appears in the entrepreneur’s mind. In addition, there are a number of factors that heighten the sense of control, that is why a special attention should be paid when making financial decisions. In the further part of the article the empirical assessment of control was conducted and the existence of the phenomenon of the illusion of control and its determinants on the group of financial directors of Polish enterprises was verified.

RESEARCH METHOD

The aim of the paper is to assess the level of control and the degree of illusion of control. For this purpose a CAWI (Computer Assisted Web Interview) survey was conducted on a group of persons employed in enterprises and responsible for financial decisions. The criteria used in the selection of the surveyed companies were: the scope of the company’s activity, the size of the enterprise and the type of industry. Due to the expert nature of the study, 84 opinions were obtained. This result should be treated as a success due to the limited availability of the interviewees occupying high positions.

The selection of the surveyed enterprises was done in such a way to maintain the structure consistent with the European Union regulations from the Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises. On their basis, a micro-enterprise is defined as an enterprise that employs
fewer than 10 persons and whose annual turnover does not exceed EUR 2 million. A small enterprise is defined as an enterprise that employs fewer than 50 persons and whose annual turnover does not exceed EUR 10 million. A medium-sized enterprise is defined as an enterprise that employs fewer than 250 persons and whose annual turnover does not exceed EUR 50 million. Enterprises that annual turnover exceeds EUR 50 million and employ more than 250 persons are considered as large.

Based on a study conducted by the Central Statistical Office, it was observed that in the first half of 2016 the number of registered entities in the REGON system amounted to 3.78 million. Among the active enterprises, the vast majority were micro – enterprises (96%). In the study described in this paper, the structure of enterprises was set according to the Central Statistical Office and more than 50% of the surveyed companies were micro – enterprises.

The questions in the survey were in order to characterize the behavior of the CFOs and people in management positions who make significant financial decisions. In the case of some of the questions, projection techniques were used to provide an in-depth analysis of the phenomenon under investigation and consisted in people’s inclination to transfer their own features, thoughts or attitudes to assessed people, things and phenomena.

In order to better understand the issue discussed, a survey was conducted electronically using a questionnaire published on the Internet. Respondents were people who were decision-makers in the financial matters of the company. The questionnaire asked questions about the key financial decisions for the company. Then, the data was subjected to a preliminary analysis in order to reject the questionnaires with contradictory or incomplete answers. The final data obtained was analyzed using statistical methods.

In the study a group of 84 people took part, with a balanced gender structure (55% women and 45% men). A higher percentage of women reflected the constantly growing activity of women in managerial positions, especially in small and medium-sized enterprises. According to the “Woman in Business 2017” research carried out by Millward Brown for Grant Thornton International, 40% of women in Poland were in a managerial position and 24% occupied the position of Financial Director. For comparison, in Germany only 3% of women have the same position. Such model of results can also be observed in the Forbes Magazine competition for the Polish Financial Director of the Year. Among the 15 winners of the competition, three of them are women [Forbes 2014]. Noteworthy is the fact that according to the report’s data based on CBOS research [Starczewska-Krzysztofsz 2011], business owners usually choose people of the same gender to manage a company because they put more trust in them.

Taking into account the age structure, almost 80% of respondents are young people up to 40 years of age. The European CFO Survey Autumn 2018 report also shows that Polish CFOs are among the youngest and the most ambitious entrepreneurs in the world. In the sample, over 14% of people are people between 41 and 60 years of age. Only 6% of respondents are people over 60 years of age.

In the sample under review, after the classification based on the company’s annual turnover (Fig. 1), 51.2% of micro enterprises and 27.4% of small enterprises were distinguished. Medium-sized enterprises accounted for 9.5% and large enterprises had a share of 11.9%. Based on 2018 analysis of the Polish Agency for Enterprise Development (PARP), micro enterprises accounted for 96.2% of the structure of all enterprises in Po-
land [Chaber et al. 2018]. Small enterprises represented the share of 2.8%, medium-sized enterprises 0.8% and large enterprises only 0.2%.

The study was constructed in such a way to present sectors reflecting the employment structure in Poland (Fig. 2). As it can be observed, the largest share belongs to construction companies followed by the service industry – 19.05% and finance – 17.86%. The trade sector is 10.71%. Other enterprises are administration – 8.33%, industry – 5.95%, science – 7.14%, and others – 11.91%. According to the CSO, the largest group among

![Division of enterprises by their size](image1)

**FIG. 1.** Division of enterprises by their size
Source: Own research.

![Division of the respondents by the sector of the enterprise](image2)

**FIG. 2.** Division of the respondents by the sector of the enterprise
Source: Own research.
SME enterprises in Poland is represented by the trade sector (30%), followed by construction companies (13.5%), industrial enterprises (11.1%), services, then companies dealing with medical care and social assistance. Other industries do not exceed a 5% share in the total number of enterprises. Worth noting is also the fact that this structure is very similar to the entire population of companies in the European Union. Thanks to this, the research allows a broad look at the decision-making problems of entrepreneurs regardless of the type of activity.

In order to assess the financial situation of the company, the respondents (decision makers in financial matters of enterprises) were asked to make a subjective assessment of the financial condition of the company (Fig. 3). Most of them (62%) assessed the financial situation of the company as good. As many as 18% of respondents rated it even very good what means that over 80% of respondents have a sense of self-confidence confirmed by the good results of their work.

![Subjective assessment of the company's financial situation](image)

FIG. 3. Assessment of the company’s financial situation
Source: Own research.

This question was asked because, as other studies have confirmed [Fesnak 2011], very often the positive results of financial decisions intensify the sense of self-confidence and, at the same time, weaken the rational action. A decision made many times and always bringing a positive result is with time regarded as easier and can be made without due attention. Therefore the individual’s overconfidence may lead to the risk of the illusion of control.

**CONTROL IN DECISION-MAKING SITUATIONS**

In order to assess the importance of control in decision-making situations of entrepreneurs a number of questions were asked about the overall assessment of the decision situation and about the degree of control over such a situation (Fig. 4). Half of the respondents, when making financial decisions in addition to their own opinion, refer also to the opinions of experienced colleagues from the industry. However, 32% of respondents
also pay attention to the opinions of recognized experts, stressing that obtaining such an opinion is complicated and requires intermediaries and also involves additional costs of expertises or analyzes. However, the most common reason that excludes the use of this source of information is quite a long time of waiting for the answer. For this reason, high results in obtaining opinions from business partners who already have extensive experience in this field are not surprising. It is also worth noting that 16% of respondents believe that they are able to make their own decisions based solely on their own opinions.

In the next step, the group of respondents was asked to determine if they believe that there are situations in the course of coordination of financial activities in the company that are beyond their control. The vast majority of respondents, as many as 66%, confirmed or definitely confirmed that in business there are many situations out of control (Fig. 5). Only 19% of the respondents declared that they did not have situations that would be beyond their control. This may be due to dynamic changes taking place in the company’s environment and the existence of many factors on which the company has a limited influence, and mindful, well-educated financial directors are aware of this. This would mean...
that the respondents have knowledge of their limited control over the coordination of the financial situation of the company.

On the other hand, however, the authors asked the respondents to assess whether they had moments when they were able to change the course of events in situations that they had the influence on (Fig. 6). The vast majority, as many as 72% of decision-makers confirmed that they had such a sense of agency. Only 5% of respondents had the opinion of not having impact on the situation. This result is opposite to the one presented in the previous question, in which a significant majority of entrepreneurs recognized that the business situation usually cannot be controlled.

![Figure 6: Illusion of control](source)

Source: Own research.

The control over the situation is also of great importance when making decisions. As many as 92% of respondents think that better preparation for the task results in better control of the situation (Fig. 7). The result of this study well illustrates the phenomenon of the illusion of control. Respondents theoretically realize that many situations cannot be influenced, what proves their rationality. However, when they prepare themselves for

![Figure 7: The scope of preparation and control over the decision situation](source)

Source: Own research.
such situations and devote their time to it, they have a false sense of control. Commit-
ment is one of the five main qualities that strengthen the illusion of control. The more
the decision-maker puts his own work into the task, the more he gets the feeling that he
has anticipated all the scenarios. The mind then creates the illusion of mastery over the
situation.

Another factor that intensifies the illusion of control is passion for the issue within
which the decision problem arose (Fig. 8). The vast majority of respondents, as many
as 83%, confirm or definitely confirm that the more he likes the given issue, the better
decisions he makes in this area. This result indicates limited rationality in making fi-
nancial decisions because no matter how much the given issue is liked, this can not
affect the quality of the decision. It is a factor that additionally increases the illusion
of control.

![Diagram showing percent of respondents regarding their decision making based on their passion for the given issue]

**FIG. 8. A familiar issue and control over the decision situation**

Source: Own research.

Taking into account the high sensitivity of enterprises, the questions in which
there was a suspicion that the respondents may not want to admit their imperfections
were formulated as projection questions (Figs. 9 and 10). Almost half of the respond-
ents (49%) believed that there were real difficulties in controlling the financial sit-
uation in companies in the Polish business reality (Fig. 9). Due to the fact that the
question was projectional in nature, the entrepreneurs were actually asked about their
personal opinions and not opinions about others. Thus, the question reflects the real
difficulty of entrepreneurs to control the financial situation in the enterprise, although
it seems to them that if they prepare themselves better for the task, they control the
situation.

The vast majority, as many as 63% of respondents are aware of the fact that usually
the sense of control over the situation is illusory and has no real impact on decision sit-
uations (Fig. 10). The projection question was again used here to get a real assessment of
the situation by the respondents.

The respondents of this study are therefore mostly aware that in the case of finan-
cial decisions, the situation cannot be completely controlled. In fact, most of them have
a limited ability to control the financial situation of the enterprise in which they work. Nevertheless, around three-quarters of respondents say they can significantly affect a given event, e.g. by getting more information on a topic or through in-depth preparation.

CONCLUSIONS

Financial decisions are one of the most complex and difficult decisions in enterprises. In the analysis of these phenomena, both economists and financial psychologists stress the importance of a rational decision-making process. However, the research shows that limited rationality and the presence of such phenomena in the decision-making process as the illusion of control cannot be excluded.

FIG. 9. Assessment of real control over the decision-making situation in Poland.
Source: Own research.

FIG. 10. Assessment of real control over business cases in Poland
Source: Own research.
In addition, the illusion of control is strongly influenced by the characteristics of financial decisions such as the priority of decisions, time pressure and constantly changing environment which affects the decision-making process by having impact, for example, on the level of risk. In addition, the environment is the source of many barriers that appear in decision-making situations such as: lack of enough information. The internal environment obstacles are also of particular importance, for instance, the atmosphere in the team or individual characteristics of the financial director.

The conclusions from the conducted research enable even better understanding of the types of behavior of entrepreneurs in decision-making situations. This is especially important because running a business constantly requires making decisions that determine the future of the company. Thanks to the acquisition of more information in this field, Polish entrepreneurs may take into account these factors in everyday life which may prevent them from making bad financial decisions.

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Summary. The article concerns the phenomenon of control and illusion of control in financial decisions of Polish enterprises. The article identifies the main determinants of the illusion of control. The aim of the paper is to assess the level of control and the degree of illusion of control. For this purpose a CAWI survey was conducted on a group of persons employed in enterprises and responsible for financial decisions. The empirical part of the article presents an primary study conducted among financial directors which showed high results of surveyed entrepreneurs in the area of control and the observed phenomenon of the illusion of control in decision-making situations in the field of finance. At the same time, the main factors influencing the level of the illusion of control were verified.

Key words: control, illusion of control, rationality, decision-making process, financial decisions

JEL: D81, G11

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