



IMPACT OF OVERCONFIDENCE ON DIRECTORS DECISION MAKING

Zain Ullah

Assist Prof, City University Peshawar

Uzain15@cusit.edu.pk

Imran Khan

Lecturer, University of Swat KPK

Muhammad Tariq

Independent Researcher

Muhammادتariq83@gmail.com

Abdul Waheed Khan

Senior Auditor, Accounts General Office Peshawar, KPK, Pakistan

ABSTRACT

To take decisions under uncertainty in the organizational sector, is largely related to the behavior of the economy. The failures or achievements in the market have an impact on the operational strategies established by a company's executives. This article focuses the impact of overconfidence in decision making; this behavior affects the rationalization and analysis of the decisions that are going to be taken against a situation. Based on this, a reflexive analysis of the impact of overconfidence in the decision-making under the uncertainty by the company's executives have been made.

Keyword: *Overconfidence, decision making, bias, uncertainty, executive.*

Introduction

The concept of decision making has been studied in different fields of research, the psychologist have been interested in clarifying the inherent motives of the individual for taking one ruling over another and why some people have greater difficulties than others to choose. Economists focus on the decisions of producers, consumers and investors; whose

choice managed the economy of a country or organization. The administrators aim to improve decision-making of the directors of companies (Ullah, Rahman, & Khalil, 2018).

As for governments, in the sixties, decision-making centered on the acquisition of weapons, through defense planning, at an effective cost; from there the Political science has been interested in analyzing the decision-making behavior of the politicians of a country (Rafael Landívar University, 2013).

As evidenced, the concept of decision-making has been of interest to different fields of study over time, as it affects the lives of human beings in their daily life, including the financial aspect which is important since it is the science that allows money management, maximizing the assets of company (Ullah, Rehman, & Khan, 2020). Specifically, this reflection article addresses different theories of decisions and biases that may exist when performing this behavior, such as having overconfidence, focusing specifically on managerial ones, in scenarios of risk and how it could affect an organization. This analysis will be made in the light of some existing theories from the administrative and psychological approach. Considering what previously mentioned how overconfidence in decision making is addressed? Under scenarios of uncertainty for the achievement of the companies objectives by the managers?

In the first instance, it will address the general definitions of the concept of overconfidence, through which the different general theories and related academic articles will be presented. Then the concept of decision making in scenarios of uncertainty and the cognitive and emotional tools that the human being possesses and how are they used in organizations from a managerial point of view. Finally, a general conclusion and a reflection, taking into account the most relevant aspects and concepts of each one of the cited authors.

Theoretical Reference

Decision Making Concept

The decision-making process is a process in which the human being at the time of choosing a choice between two or more alternatives or ways of solving situations in all contexts, work, family and sentimental; It is a process that occurs constantly, the difference lies in the way a decision is made, since there is a large amount of information and according

to the reasoning or experience of each one (Ullah, 2019). Individual decision making is a process characterized by the use of reasoning and thinking to solve a current or potential problem; to do this activity it is necessary to know, understand, analyze a problem to give it a solution without importing the complexity of the situation; some are simple and are fixed quickly and easily. But in other cases there may be consequences with serious repercussions, which leads to the realization of a more structured process in order to have more security in what is going to be executed (Ullah, 2016).

On the other hand, Marquez, M and Rodríguez, M (1998) argue that decision-making is a different process from the stimulus and response mechanism (classical conditioning), without However, they have a certain relationship since the process begins with the stimulus, continues with a deliberation to make the decision and ends with the answer; within this process you can include certain rational and irrational behaviors. It is important to note that decision making is not the same as conclusion; first is a deliberative process and involves the will of the individual, while the second is an act rational and implies using the cognitive processes of the human being (Márquez & Rodriguez, 1998).

Decision Making Under Certainty

Certainty is the ideal situation to make decisions since there is total security about what is going to occur, although it should be noted that it is not a common situation. Taking into account the different alternatives, it is taken into account to execute the one that gives more security (Ullah, 2017). Making decisions under certainty is only possible when the individual has the information necessary to carry out what you intend, all variables and data are known, To achieve this it is necessary to follow the following steps (Harvard Business school, 2014):

1. Define the situation that the individual must face
2. Find information about the situation and its possible solutions.
3. Analyze the variables that influence the situation and thus make a real assessment.
4. Identify possible alternatives and make assessment to insure the feasibility of specific methodology.

5. Select the option to carry out.
6. Evaluate the results obtained to verify if they were as expected and depending on this take the necessary measures.

Decision Making Under Uncertainty Scenarios

Uncertainty can be interpreted as ignorance of the future, from the context of business, it has a high relationship with risk since it is produced by the variability of the future events and their ignorance. It is a moment in which an individual can be seen in a total, partial or null degree of ignorance of what will happen. (Velez, 2003).

Several authors who define risk and uncertainty as synonyms or at the same level. However, it is found that uncertainty can generate risks, but the risk itself should be understood as the possibility of something happening that will have an impact on the objectives of the company (Khan, Ullah, & Ali, 2019). risks that may materialize with the information when making decisions, while uncertainty is based on the basis that there is no information available to determine whether to assume, manage or transfer the risks; you just don't know what will happen.

So far it is understood that decision-making under scenarios of uncertainty are the choices to be made through a concrete action whose outcome is unknown and which may not involve a risk, due to the absence of information on the part of the person in charge take the action, this action and / or decision can be routine (The one of the day to day and it is normal within its functions) or special (those that are not of the normal course or are not of the day a day).

Thus, managers are repeatedly faced with decision-making under uncertainty scenarios, for which some authors recommend some techniques that allow the achievement of the company's objectives (Pacheco, 2003):

1. *Risk analysis*: When making decisions, we are interested in knowing the magnitude of the risk that we assumes to choose the action to be carried out.

2. *Decision trees*: Method for solving problems through a process of ramification that allows estimating alternatives to solve problems, which is based on the separation of estimates and costs.
3. *Preference theory*: It is based on the notion that individual's attitudes will vary towards risk, as some people will only be willing to take lower risks and others want to take higher ones.

Biases and Heuristics.

Now, decision-making under scenarios of uncertainty by managers or decision makers, are carried out through heuristics, biases and anomalies, since these individuals in their actions face scenarios of ignorance of information, therefore, decision-making can be carried out through heuristics like the *overconfidence* bias (Pacheco, 2003). Defining the concept of "heuristics", according to the Dictionary of the Royal Dutch Academy (RDA) as the "*way to find the solution to a problem by non-rigorous methods, such as trial and error, empirical rules, etc.*" (RDA, 2017).

This concept can also be understood as the "*mental shortcuts in which individuals tries to reduce the complex tasks of evaluating probabilities and predicting values. Therefore, instead of going through a mathematical process, people get away by their intuition, feeling, affection, or some other psychological attribute and not mathematical models.*" (Shefrin, 2010).

Humans are exposed to many psychological biases, but one of the most consistent powerful and widespread is overconfidence, most individuals when making decisions, are expose to overconfidence bias and normally having the following traits (Johnson & Fowler, 2011):

1. Exaggerated personal qualities and abilities.
2. An illusion of control over all events and Invulnerability.
3. Aversion to risk.

Overconfidence

Overconfidence can lead to “errors of judgment” in decision-making because it can lead to overestimate one’s own or underestimate the capabilities of others, improperly assess the difficulty of a task, or being averse to possible risks (Johnson & Fowler, 2011). Apparently overconfidence is a general characteristic of human nature, which could indicate that regardless of the information available for the decisions, with certainty, there will be a confidence bias, since in the end the decision-makers are human and behave as such, regardless of their broad experience or professional trajectory, this is a tendency found in individuals without matter the degree of pressure in decision-making, as they may tend to act as individuals who isolate themselves and lock themselves in their vicious circle of self-sufficiency (H. & Clemente Reza, 2006), although self-confidence in average terms can be beneficial, it is also true that it can generate high costs in terms of consequences.

Among the negative aspects of overconfidence, without underestimating the benefits of the same at the time of making decisions to achieve the objectives of the companies, it can lead to faulty evaluations and suboptimal behaviors, this takes on special relevance to scenarios of impartial decisions since it could be the best strategy considering that these decisions must be made in competition and uncertain scenarios (H. & Clemente Reza, 2006) Similarly, it has been observed that overconfidence prevails over accurate assessment methods when making decisions. Overconfidence can become a competitive advantage when it comes to obtaining resources but the benefits may not be obtained under scenarios of conflict and uncertainty. The objective achievement can be attain by whoever deploys an attitude of full confidence (H. & J. Clemente Reza G., 2006).

People who display overconfidence behaviors achieve the objectives in a faster and more effective way, avoiding conflict which can generate higher costs in competing scenarios, in other words, there may be more than natural tendency to make decisions based on the overconfidence biases, taking into account that it is a human and natural phenomenon of individual’s actions (Ullah, 2016).

Confidence is an essential ingredient for success, in a wide range of activities such as work, social life, relationship, and the most relevant for this case in business; Similarly, Most of the authors suggest that overconfidence, understood like that mental state of believing that

you have more skills and / or competencies than the rest of the individuals, although this may not be a reality, but it can be very useful to increase ambition, morale, determination in pursuit of business goals, the persistence or credibility that lead to compliance on many occasions with a “Self-fulfillment prophecy” (Pérez Salazar, 2008) that exaggerated trust really increases the probability of success. However, overconfidence can lead individuals to make evaluations defective, propose or execute under the premise of unrealistic expectations and carry out risky decisions (Pérez Salazar, 2008).

The foregoing is relevant since rational decisions only work in limited circumstances (information symmetry), but the frequency of decision-making in scenarios without information, encourages the need for executives with the ability to react to problems by solving problems based on their strategic knowledge, which it encourages the overconfidence bias (Pérez Salazar, 2008).

In accordance with the above, this theory can be applied to the field of decisions that managers in different companies and when making investment decisions, although managers can be considered rational people, when it comes to taking decisions, It is also true that on some occasions these managers and directors, at the time of acting do not have enough information or may present that even with the information they do not have the will to review it. In all cases, although the directors of the companies are considered professionals, regardless of the information provided, they will not cease to be humans who are permanently influenced by “subjective elements, preferences, beliefs, intuition, external pressures, emotions, greed, fear, moods and customs” (Graham and Harvey, 2001) that may lead to decision-making not being fully based on the rational elements or available information, if not, they are led by cognitive aspects (Useche Arévalo, 2014).

When making decisions, they may behave as follows: 1) loss aversion; 2) Disposition affect, 3) Overconfidence, 4) *confirmation bias* (Shefrin, 1999).

It is observed that in the market, business and managerial world there are two bases For decision-making, the first “*is based mainly on projections and on the forecast of possible future behavior of the business and its environment, variables that in to a large extent they are not under the control of the company nor are they predictable with precision*”, this form of decision making is carried out under assumptions of "hyper-rationality", through the which the parties involved assume that (financial) markets are efficient and, Consumers assume that

managers make optimal decisions and technically calculated looking for the maximization of the value of the companies, for this, use theoretical tools such as the calculation of the Net Present Value (NPV) or the Internal Rate Return (IRR), all these financial indicators that allow them to rationalize the information for decision-making (Useche Arévalo, 2014).

Second, you can find the approach called "*corporate finance based behavior (CFBB)*", which refers to behavior based on experience of businessmen, of value judgments and mistakes of human nature. In others, managers or people in general trust their intuitive part for the decision making (Useche Arévalo, 2014).

Influence of Overconfidence in Decision Making

In accordance with the different theories set forth in the previous paragraph, the main object of this section is to explain the heuristic or theory of behavior called *overconfidence* in decision-making taking into account that the resolution of behavior-based problems and their resolution may be more or less impacted due to the overestimation of the knowledge of professionals compared to reality (Chaz Sardi & El Alabi, 2012).

Overconfidence relates the coincidence or discrepancy between subjective success (What is believed) and objective success (What is), which presents a person in conducting a set of tasks. Thus, "*when subjective success predominates over objective success be observed the bias of "overconfidence", in the opposite case, when subjective success is less than the target success, the bias is "under-confidence"*". (Macbeth & Valeria., 2009).

The theory of "Over Confidence" behavior can be understood as "*a tendency by which people tend to believe that their abilities for certain activities are greater than those of the common individual*" (Useche Arévalo, 2014, p. 103).

Overconfidence in decision-making in the business environment tends to be more frequent in managers with a long career, where the decision results tend to be extremely positive or negative. These depend on experience, since they have been learned by trial and error; learning process, through which the experiences of failure seek to eliminate the scenarios of uncertainty (Useche Arévalo, 2014).

At this point it is important to present the positive and negative aspects of overconfidence, in making decisions in uncertain scenarios, but not before having clarity in

the definition of confidence that according to the Dictionary of the Royal Spanish Academy of Language, this is defined as the “*firm hope that one has of someone or something; safety that someone has in himself and / or the presumption and vain opinion of himself*”. So things, We can understand overconfidence as excessive or exaggerated security about one’s own self which may or may not have any objective foundation or depend exclusively on a subjective reasoning (moral, social, professional, etc.) (RAE, 2017).

Now, regarding the concept related to decision making, it is important to establish its meaning and scope at the managerial level. Taking into account that the decisions making is one of the aspects having greatest impact on the companies or any type of institution (Pacheco, 2003)

Decision Making in Managers.

Decision-making in companies implies on the part of managers knowing multiplicity of areas of knowledge, in addition, know the strategy, technique and implicit procedure in making decisions and knowing how to apply them in their daily work. It's important to put attention on Decision-making can be understood as “*selecting a course of action*” (Pacheco, 2003), but these alternatives depend on the technical knowledge of the in charge of taking them, know how to handle uncertainty and have confidence in the resolution of plurality of problems in professional practice It is emphasized that although the daily activity of the managers is related to the decisions making, these can be classified in two ways, the first called routine decisions and the other so-called special decisions. According to studies, 95% of the decisions made frequently are called routine (Monge Pacheco, 2003).

Reflection

Decision-making is a process in which all individuals have the ability to analyze and choose between two or more options to give a solution to everyday situations, in all areas of the human life. From the moment the day starts; as beings rational situations are constantly presented easy or complex that must be resolved in a span of time. To carry out this process, the knowledge information and the own experience or that of others and thus execute what is intended.

The decision-making process begins with a stimulus, for example a question, a situation or a problem that leads to develop an analysis, which starts from the cognitive tools of the human being and experiences which is way of learning and with the collection of these, a definitive solution is given. There are two types of decisions, the first are those that are made under certainty, which implies that there is certainty of what is going to happen. According to what is observed in everyday life, to imply a positive response to a situation presented; we humans are always in constant search of favorable actions for daily living.

To achieve this type of decision it is necessary to have prior information about what is going to be resolve and in this way mitigate or lessen the negative consequences. What is achieved with greater ease in simple decisions, where there is no high risk of obtaining negatives results? The second type are those decisions that are made in scenarios of uncertainty, which human beings are exposed to, there is complete ignorance of the consequences of the choice that is chosen. It is noteworthy that not knowing about the future the likelihood of a negative impact on the individual's life.

When there is uncertainty there is risk, they are concepts that go hand in hand since at the not knowing the future there is uncertainty of the determination to be made, since it could be negative for the human being or group of people, since the required information is not available to choose. This scenario tends to occur in decisions that are of importance, since you are where you are most exposed to winning or losing.

As for the steps to make decisions, in general the human being avoids the maximum risks, however there are people who do assume them, since they prefer to take new experiences instead of staying where they are; this depends on what the individual wants. Human beings are constantly analyzing risks, especially in the important decisions, especially those that are accurate or fast, do not carry out an exhaustive study, since they choose their action based on the information they already have. As for the tree of decision, it is a good tool to carry out, especially in those that have to do with monetary or organizational resources.

Human beings when making decisions, sometimes use heuristics such as hunches or hunches, because they do not have the information necessary to choose a solution. Which would be fine when under certainty, as long as that in uncertainty implies a high risk.

One bias has to do with overconfidence, which although has positive aspects already that implies that the individual has confidence in himself, which optimizes the results in the actions individuals perform. However, being very confident, in scenarios of uncertainty can lead to high risks as intuition and experience play an important role and the consequences may lead to an inadequate evaluation of the solutions to be given.

An individual who is overconfident tends to think that the opinion of others is less important, since they believe they are absolutely right for what they say, which could affect decisions positively or negatively, but this depends solely on your experience, which has been learned through trial and error of life trajectory that has generated learning and in this way they try to avoid uncertain scenarios. This learning experience and trajectory applies to organizations, since their Managers must know the strategies and procedures of the company and apply them to their work and this information helps them take a course of action. Yet they are human and overconfidence or the use of heuristics can risk the financial part and the choices that do depends on the company or work team.

Most of the manager's decisions are governed by being routine, since by their capacities, learning and trajectory gives them elements to trust themselves and give quick solutions, sometimes without measuring the consequences. Responding to the initial question, when collecting the information it can be concluded that the overconfidence under uncertainty scenarios is appropriate as long as the manager has a track record, experience and adequate learning to take decisions, reducing risk. This could be achieved by performing an analysis and a decisions tree, based on these, take a concrete action, especially when they have to make decision regarding financial matters.

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