ISSN: 2278-3369
International Journal of Advances in Management and Economics
Available online at www.managementjournal.info

RESEARCH ARTICLE

The Financial Strategy Process under the Influence of Cognitive Biases

Felipe D Paiva[1*], Karim M Thomé[2], Milena RC de M Silva[1], Thais S Alves[1]

[1] *Federal Center for Technological Education of Minas Gerais (CEFET-MG), Brazil.*

[2] *University of Brasilia (UnB), Brazil.*

*Corresponding Author: Email: ***fpaiva@dcsa.cefetmg.br***

Abstract

The financial management of an organization is focused on the maximization the owners' of richness. For this, one of the challenges presented is the administration of financing strategic decisions, which constitutes in defining the adequate proportion of the capital from debts and equity capital that the company should use. Thus, from the design of an optimum construction of the capital structure, the company may be capable of minimizing its capital costs, therefore contributing with the leveraging of its value. It is known that the cost of debts is less onerous than using own capital. However, Brazilian companies, systematically, use little debts to cover its investment decisions, thus maintaining low financial leveraging capacity and, consequently, weakening its competitive capacity, even presenting various theories suggesting a more equilibrated structure of the sources. Considering this, a discussion of the reason for this behavior from the managers was promoted. The explanation found for this fact is supported by the concepts of limited rationality, defended by behavioral finances. The arguments presented by behavioral finances are very enlightening and convincing in explaining the strategic decision making process used by the financial manager.

Keywords: *Financial behavior, Strategy, Cognitive.*

Introduction

The current scenario of the global financial crisis, added to the challenges of fierce global competition for consumer, only exacerbates the need of efficient and effective decisions made by firms, especially those of strategic nature. For this, these decisions need to be well grounded, to be able to act synergistically with the central focus of financial management, which is the maximization of enterprise value, therefore, resulting in the generation of profits for the owners.

However, achieving this goal will depend essentially on the ability of financial managers in allocating monetary resources in assets that provide greater returns than the total cost of the company's stock. Thus, funding decisions will have an important strategic role, which will be responsible for deciding the choice of the best deals of resources and the proper ratio of debt and equity.

As commented by Famá and Grava [1], several studies on capital structure have been built, but many questions remain open. According to them, which is already known until this date, although it does provide a north to scholars and administrators, this issue continuous cloudy, and many studies still need to be made.

One of the bets that finance scholars have done is to investigate the decision-making process of capital structure in light of behavioral finance, which according to Macedo Junior [2], it is a theory that merges the "economics concepts, finance and cognitive psychology in an attempt to build a more detailed model of human behavior in financial markets."

The impugnment of the most famous model of capital structure, created by professors Modigliani and Miller (M & M) in 1958 and 1963, follows the assumptions of this model as well, due to the gap between the theoretical provisions thereof and the empirical results presented. But the main point of the neck of the M & M theory, it is the fact that individuals are treated as homo economic us, i.e. people who decide under conditions of unlimited rationality. Since the opposite of this concept the main reason for existence of behavioral finance [3, 4].

Thus, as recommended in behavioral finance, the human (manager) must be seen in a humanistic perspective, because people are not machines, but individuals with feelings, weaknesses, and limitations as recommended by Simon [5] . The decisions will be constantly subject to the influence of cognitive biases. According Barbeado and Camilo-da-Silva [6], the brain is instinctively adapted to solve problems related to our survival and not to optimize financial decisions. Therefore, decision strategies do not always demonstrate perfect rationalism, because the human (manager) will always be subject to ambush orchestrated by our own mind.

Therefore, this paper proposes to undertake a theoretical essay aiming to elucidate the intricacies of decision-making that involves the theory of capital structure, and how this is influenced in derivations of the limitations of the human mind.

Strategy

Incorporated into the word of the administration from the second half of the last century, the concept of strategy, is present in the daily business. Word of military origin, which conceptually means “the art of drawing plans for a war”, the theory of strategy initially caused refute among administrators, claiming that it was an unnecessary tool, since the companies had walked, and well, until the first half of the century, without its use. But over time, these were realizing the importance of having a tool capable of dealing with the inconsistencies of the business world and not only have goals that, according to Ansoff [7], when treated alone are insufficient as decision rules for guide the strategic reorientation in that it adapts to new challenges, threats and opportunities.

Despite the apparent similarity of goals and strategies, Ansoff [8] clarifies the difference between the concepts, stating objectives representing the purposes that the company is trying to achieve, while the strategy is the means to achieve these ends.

To Ansoff and McDonnell [3], strategy can be briefly defined as a set of patterns of decision making, which serve to guide the performance of an organization. As for Chandler Jr. [9], strategy is to the determination of the basic goals for a long-term horizon, where companies should establish lines of action adoption and application of resources to reach these goals. Also find still more expanded some settings, such as Mintzberg and Quinn [10] appraise strategy as “a pattern of decisions in a company determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving those goals, and defines the range of business the company should engage the kind of economic and human organization it purports to be and the nature of economic and non-economic contribution it intends to provide to its shareholders, customers and communities”.

However, the numerous concepts related to strategy converge when the word is competitiveness. Montegomery and Porter [11] present this idea directly and concisely stating that “strategy is the deliberate search for a plan of action to develop and adjust the competitive advantage of a company”. The derivation of the need for a company to build its administration ruled under a plan of action with the purpose to achieve a competitive advantage over its competitors is the result of the ultimate goal of any organization is to maximize its value, which therefore results in the generation wealth for their owners.

School of Cognitive Strategy

The cognitive school confronts the mechanistic thinking of the process of strategy formulation. For Mintzberg et al. [12], the cognitive school strategic stress the discussion of the formulation of the strategy, showing that it is the result of a mental process of the mind of the manager.

As Machado-da-Silva et al. [13], the study of the influence of decision-making by the manager, while being provided with limited information processing and able to be influenced from their values and experiences, has been mainly performed within the so-called cognitive approach to strategy in defending that strategy formulation is not a simple result of deliberate rationality of managers, but mainly as a cognitive elaboration

According to Mintzberg et al. [12], are assumptions of cognitive school:

- A formulation of strategy is a cognitive process that takes place in the mind of the strategist;
- The strategies emerge as prospects;
- The strategies are difficult to realize; and
- It is necessary to understand the human mind, so that one can understand the formulation of the strategy

According to Stefano [14], the cognitive school highlights some stages of the strategy formation process, periods of conception of the strategy, reformulation of the existing strategies, and adhesion to existing strategies, due to cognitive fixations. Being of fundamental importance in understanding the human mind to understand the formation of strategies for managers.

For Machado-da-Silva [13], during the development of strategic thinking, are incorporated into organizational forces that restrict the scope of the rational model, the manager is influenced by mental "storms" and organizational forces that restricted a possible optimal decision.

Financial Strategic Decisions

According to Sousa and Menezes [15], strategies in the field of finances have as a bid the defining of institutional goals as well as the functional advances, and the delineation of the ways intended to use in order to achieve the expected results, considering the different levels of priority. Thus, the success and the perpetuity of an organization run through the quality of strategic decision making that its managers will adopt when required. According to Cheng and Mendes [16], the strategic decisions will be responsible for defining the steps of long term plan and the selection among alternatives of future actions considering a certain expected scenario.

It must be clear that the corporation decisions, independently of the area or sphere in which they are performed will always resound in the economic results of the company. It is of vital importance that the organizational culture incorporates this philosophy to reach a business success. According to Helfert [17], the administration process of an initiative requires the elaboration of a continuous series of economic decisions. These decisions start specific movements of financial resources that give support to the business.

As stated by Assaf Neto [18], the process of strategic deciding of a financial manager is focused on big decisions, such as investment and financing strategies. In this decision scope, Helfert [17] includes yet a third point of view; however, this has an operational nature, because it deals with ordinary decisions of daily life of a financial manager.

Still, according to Helfert [17], the generation of value to actionists will depend essentially of an effective management of those three decision areas, which will be responsible for:

- Selecting, implementing and monitoring of investments upon an economic analysis and an effective administration;
- Conducting all business operations in a profitable way through adequate compensations and efficient use of all allocated resources;
- Selecting and defining the mix of monetary resources that will be used, evaluating the risks incurred from these decisions.

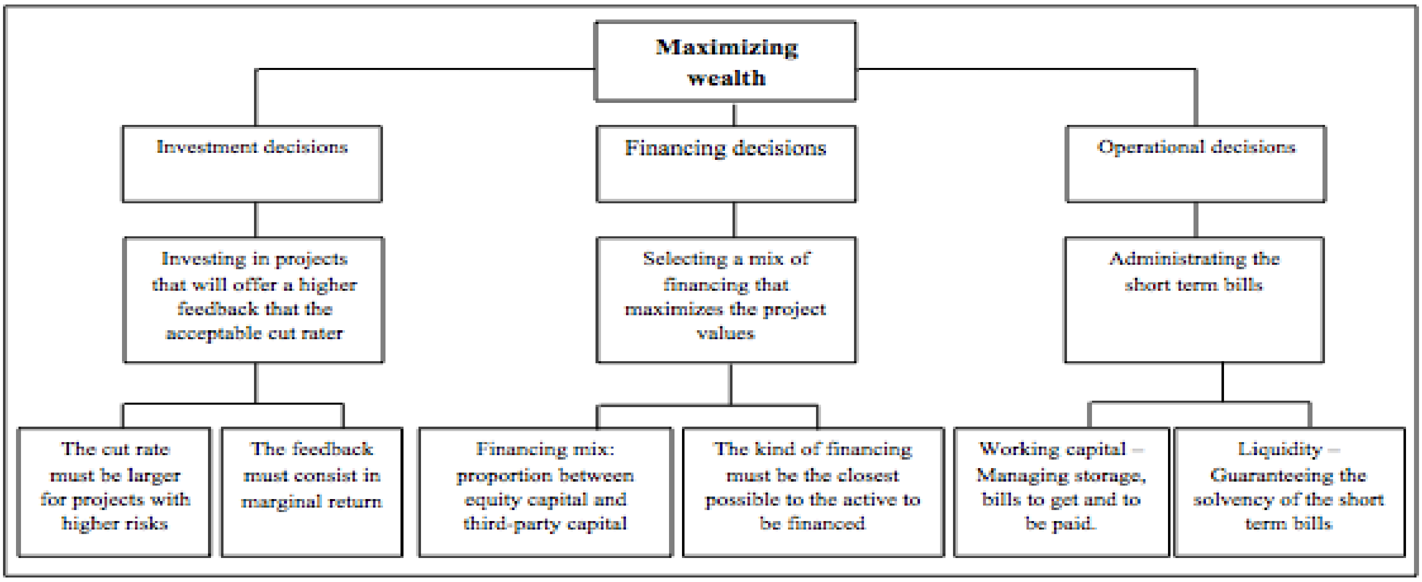

Fig. 1: Financial decisions in the wealth generation process
Source: Adapted Damodaran [19]

Financing Decisions

The financing strategic decisions summed up will have their focus on the allocation of monetary resources in actives that will promote higher feedback than the total cost of the capital of the company. Thus, the financing decisions will have an important role when deciding among the best offers and for the ideal proportion between equity and debts. And, the main goal of this decision is firmed on the choice of the mix of resources to be used, because an optimum construction of the capital structure will be capable of minimizing the capital costs of the company, being it determined according to the weighing between the resources volume and their costs, which contributes to the leverage of its value.

According to Famá, Barros and Silveira [20], the cost of debts is less onerous than equity capital, considering that the former demands a liquid obligation with a due date for the company, while the latter consists of a residual right of the cash flow. Nevertheless, it must be highlighted that the use of debts collaborates with a higher risk for the companies.

As stated by Matias [21], the challenge of the "capital structure" topic is focused on verifying which one would be the best resources proportion that a company should adopt willing to promote the best risk-feedback relationship that these sources would generate and also contribute to a higher and crescent value making.

That is, the searching for the optimal capital structure aims the maximization of the company value which will have the contribution of the financial management, as the average weighted capital cost is minimized.

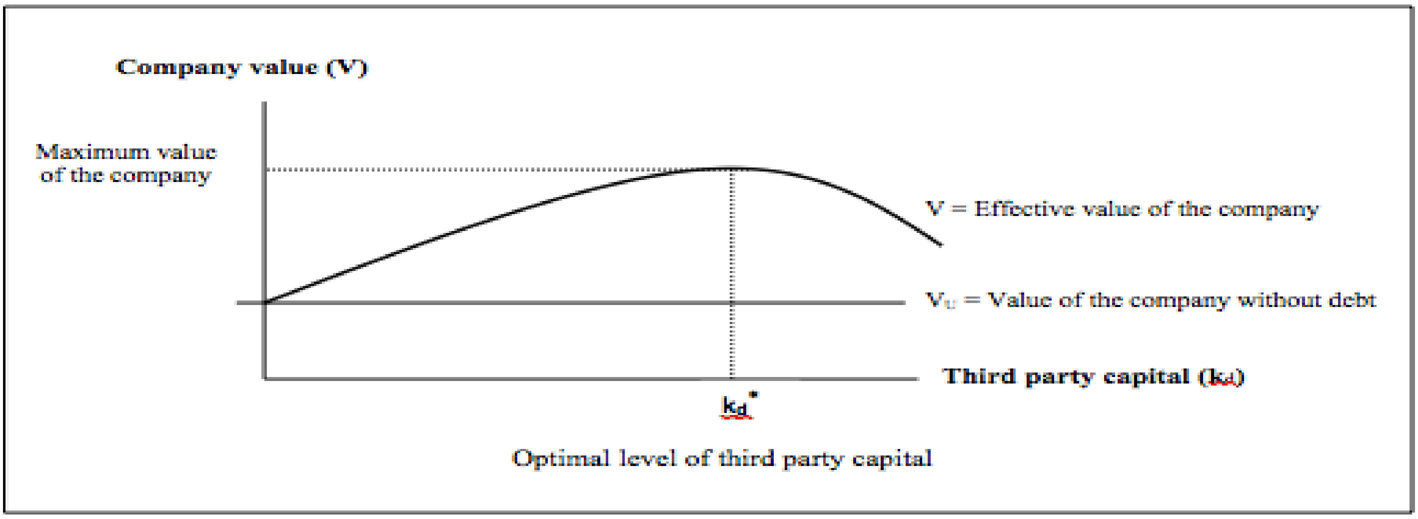

Fig. 2: Optimal capital structure
Source: Adapted Shinohara [22]

However, these theoretical propositions seem not to have been considered plentifully for the Brazilian companies. According to Assaf Neto [23], the organizations have been using little debts to ballast their investment decisions, keeping their ability to leverage low, which weakens their competitive capacity.

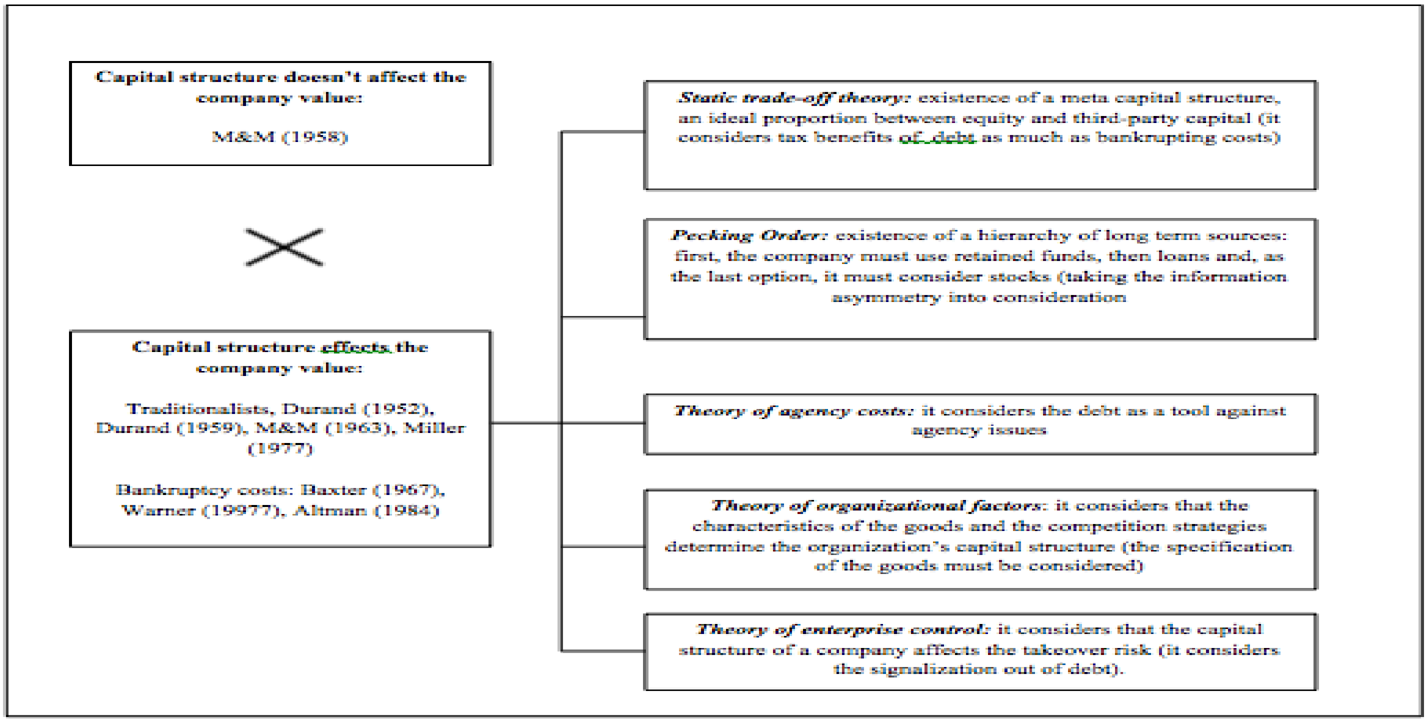

Fig. 3: Researches in capital structure
Source: Santos [24]

The largest use of equity capital in the capital structure of the Brazilian companies doesn't depend of their size and a clear unavailability of the managers regarding the use of debts put this discussion in a dense theoretical field of difficult understanding. Some of the main academic debates are displayed on Fig.3.

As a result of prior researches, financial researchers are put in a position to try and understand the matter of the limited rationality of the managers regarding to decision making in the financing field. According to Perobelli and Famá [25], the concept of limited rationality of the administrators is studied by the Behavioral Financing theory, which puts some cognitive bias as a way to limit managers to the use of an optimal solution for certain issues.

Behavioral Finance

The differences found between the theoretical and the empirical concepts, eventually stimulate construction of behavioral finance models. The emergence of this theory was, and remains, the subject of earnest discussions, mainly because it simply challenges one of the basic pillars of modern financial theory, the efficient markets hypothesis (EMH). According to Aldrighi and Milanez [26], the EMH is supported in the following assumptions:

- Perfect competition: there are sufficient number of participants in the markets of financial assets to prevent that, the isolate decision of one of them, affects prices;
- Investors have stable preferences, they form rational expectations and maximize their expected utilities;
- Investors' expectations are homogeneous because it supposes that they are rational and have equal access to information and markets;
- New information about financial assets emerge randomly, allowing instantaneous adjustments in the investors portfolios;
- There is no frictions: the assets are homogeneous, evenly divisible and they do not include transaction costs; and
- Agents can process optimally all available information.

In opposition to the concept of unlimited rationality suggested by the efficient markets hypothesis, Simon [27] says that there are differences between "real man" and "economical man" and, that, it shall analyse human decisions based in the limited rational capacity. However,

the behavioral finance have gained support among academics based on theories of Kahneman and Tversky [28].

According to Kimura, Basso and Krauter [29], while the modern financial theory is based on maximizing the expected utilities, the behavioral finances establish that some economical variables cannot be described by the equilibrium conditions of the modern theory, considering that the financial agents make decisions, sometimes, not compatible with attitudes based in rational expectations.

The theory of expected utility, which permeates the major theories of modern finances, professes that the investor evaluates the involved risk in its decisions based on the change of its wealth level, and gains and losses have symmetrical weights. Contrary to this idea, Kahneman and Tversky [28] suggests a new risk-utility curve (prospect theory), showing that decisions have as reference, the gains and relative losses; and that perception because of loss will always be bigger than the feeling generated because of gain. Therefore, the curve is concave in the context of gains and convex in the area relating to losses.

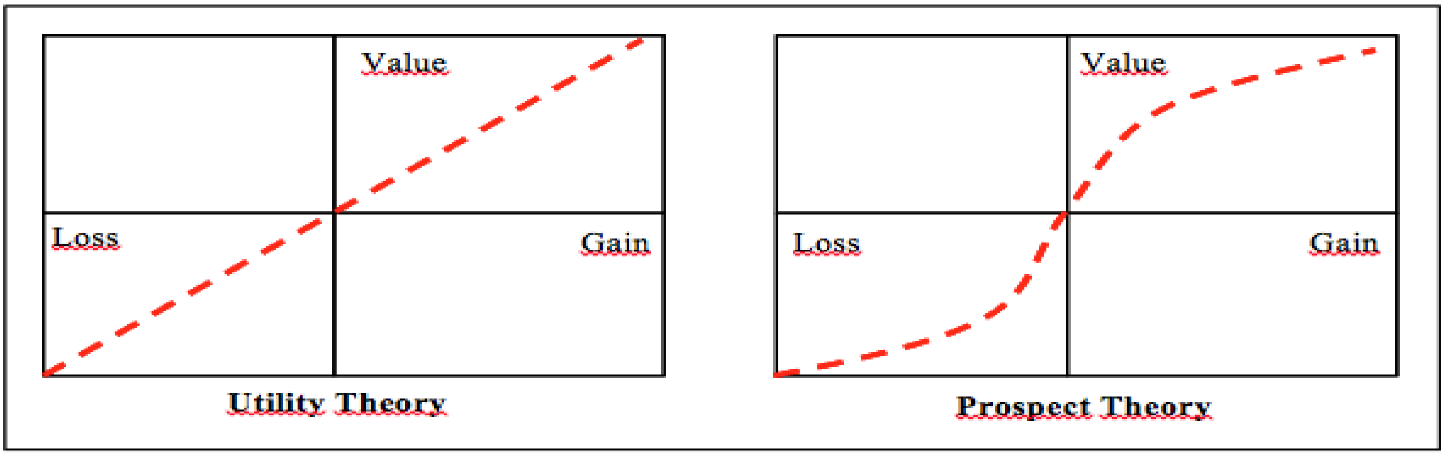

Fig. 4: Utility theory versus prospect theory

Source: Rogers et al. [30]

"A rational decision-market process, in which it aims selecting the best alternative, should pass through the following phases: (i) adequate definition of the problem; (ii) identification of the criteria and decision weights; and (iii) generation of alternative for each criterium. However, as the human capacity to formulate and solve complex problems is not sufficient enough to fulfill requirements of full rationality, the decisors operate within the delimited rationality." (Barbedo; Camilo-DA-Silva [6]).

Also according to Barbeado and Camilo-da-Silva [6], decisions are made in particular instances (biases), unlike the unlimited rational process, where decisions optimization is based in logic, probabilistic and mathematical reasons. Thus, it sees that decisions are constantly influenced by psychological "anchors", simplifying the decision process, aiming to expedites it.

For Kahneman and Tversky [28], there are three typical examples of cognitive biases which might interfere in the decision process, limiting the individual rationality, what can, however, influences it to make decisions contrary to desired. They are:

Certainty Effect

Individuals are unable to effectively evaluate an event when this has some uncertain outcome. Thus, people usually valorise much more the absolute certainty because they cannot understand very well the dynamic of the expected result.

Effect of Loss Aversion

Agents tend to be risk averse when they face two gain possibilities with the same expected utility, and tend to be risk takers when the same possibilities present themselves in the losses domain.

Isolation Effect

To simplify the decision process, agents generally do not consider the majority of the characteristics of each option, and they focus their analyse to components that distinguish the options.

Another factor, for behavioral finance as limiting for rational decisions, is the aversion of repentance feeling. Thus, trying to anticipate what will cause unwell-feeling, an individual limits its decision capacity, as the escape process and causing, according to Rogers et al. [30], cognitive moldings, which restrict its actions and what makes that it ignores historical data and, mainly, statistical probabilities.

Decision-Making Process

Decision making can be defined as the identification and evaluation of possible solutions to a given problem, followed by a choice among possible alternatives. Simon [31] divides the decision process very simply, in three stages: "discover the occasions that should be taken to identify possible courses of action and to decide between one of them".

Faced with a situation that requires the individual to make a decision, the brain tries to make the best possible choice. According to the neurologist and neurobiologist Damasio [32] "well decide is choosing an answer that is advantageous to the organism, directly or indirectly, in terms of survival and quality of that survival".

Miller and Starr [33] argue that the decision maker aims to achieve a goal, and it chooses the action that he believes will help you get over it, using for this purpose, private resources controlled by himself, called strategy. However, the choice cannot make it achieve its goal due to factors that are not accessible to the individual. It is known that the decision process is not purely emerged in rationality. For that to happen, the emotions should be ignored when deciding what is humanly impossible. According to Simon [34], rationality is limited due to the inability to understand and to the imperfections of the human mind in relation to knowledge. "Rationality requires a complete and unreachable, knowledge of the exact consequences of each choice. In fact, human beings have only a fragmentary knowledge of the conditions surrounding its action, and slight perception of regularities of phenomena and laws that would allow you to generate future consequences based on knowledge of current circumstances." (Simon [34]).

Simon [34] also states that human rationality operates within the confines of a psychological environment that requires the individual a list of factors over which it must base their decisions. Due to this fact, many possible options are excluded from the decision-making process, which proves the existence of an additional factor limiting rationality.

Besides the influence of rationality factors, there are still many other factors that weigh in the decision making process. Can highlight the emotions between them, abstracted knowledge of the environment, social conventions, ethical decision maker's imagination and still the same. Miller and Starr [33] who claims the information necessary to complete a decision are inaccessible to individual.

Simon [27] describes the mental process of decision as the meeting results which can solve the problem. Persists in the option as the same approaches the goal of the individual, and, the manager seeks another direction of research to find a specific clue that makes it something far from the goal of the decision maker. Simon [27] also points out that: "after that presents a problem, if we can find a solution for it, we make a decision that will guide all other decisions on the subject." (SIMON [27]). This statement can be interpreted as the influence of the experiences lived by an individual in their decisions.

Assessing psychological aspects of the human being, Damasio [32] seek to explain more thoroughly the mental development of a decision. The scholar proposes that emotions and feelings are closely linked to the decision-making process, and certain aspects of them are indispensable for rationality. According to the neurologist reasoning system automatically derives the extent of emotional system. Such emotion directly plays various roles in the reasoning process, for example, reveal certain premise or keep in mind the processes that must be considered when a decision. Damasio [32] also points out that "feelings drive us in the right direction, take them to the appropriate place in the area of decision making where we can take advantage of the tools of logic."

During his research, Damasio [32] developed a hypothesis to explain in detail the decision process and prove that emotions can help it, rather than necessarily harm you. This hypothesis is called Somatic Marker Hypothesis. This proposition corroborates with the description of Simon, mentioned earlier, about the mental process of a decision. The process occurs mostly in the frontal cortex of the brain, but involves reactions throughout the body. The scholar said that the decision maker must be aware of the situation, different options of action and the consequences of each alternative. When the share options are not available to the decision maker, it has its own strategy to produce valid inferences among which an option is selected the appropriate response.

According to Damasio [32], when deciding the purpose of the action to be performed, the brain reproduces the scenarios, visual and auditory, analyzed the various options and their consequences. He states that: "in our consciousness, the scenarios are made up of multiple imaginary scenes, not exactly a continuous film, but pictorial images of key moments in these scenes, jumping from one to the other in rapid juxtaposition." (Damasio [32]). During this process kicks in the somatic marker. Damasio [32] states that the evil result associated with the right answer choice arises, the decision maker has a nasty gut feeling. This feeling is brought about by the Somatic Marker, and this brings together your attention this negative result and feels right repudiation of possibility analyzed. Damasio [32] argues that the label "acts as an automatic alarm signal which says: attention to the dangers of choosing the action that will have this result". When the opposite occurs, juxtaposes an incentive. With the help of the somatic marker the individual can complete its decision, or decrease the options of choice for the analysis of costs and benefits is carried out considering the details of each. It is also important to note that the hypothesis developed by Damasio [32] applies only in cases of individuals with no psychological change.

To unravel that emotions play a decisive role in decision making, realizes the importance of the study of behavioral finance in unraveling the influences that suffers when the manager is about to make a decision.

Financial Strategical Decisions under Influence of Cognitive Biases

The theorical struggle initiated by the professors Modigliani and Miller (M&M) in 1958 when, in the seminal paper publication about capital structure, which was adjusted by them in 1963, when they considered the existence of income tax, it stills yield great discussions and stimulate new studies about it.

One of the contention points and that seems to strengthen the theorical assumptions of the behavioral finance is the efficient markets hypothesis. At least three points are fervently fought by the behavioral finance because the M&M model is based on the theory of expected utility, belief in the full rationality of the individuals and in the existence of symmetrical information system.

All of these reasons are categorically refuted by the behavioral finance and with well reasoned arguments, because it stills wonder about the research developed by Kahneman and Tversky in 1984 about prospect theory, consequently weakening the theory of expected utility developed by Von Neumann and Morgenstern.

The way to deny asymmetry of available information in the market is what leads to cause distortions among individuals perception about gains and losses. These two motifs, with another behaviors of human mind, may limitate rationality of people decisions, reflecting in the decisions adopted by managers during definition of strategy of capital structure of an organization.

According to Michaelas, Chittenden and Poutziouris [35], the capital structure decisions are influenced by three information bases: (i) aspects related to the manager (control necessity, risk propensity, experience, social norms, personal relations, beliefs and perceptions of the manager about debts); (ii) external context (mainly financial, economical, legal-legal, political, institutional and cultural); and (iii) characteristics of the internal structure (company age, size, operational risk, growth, profitability, actives composition, nature of transaction, relation level with suppliers, creditors, customers and management style). In the model, the cognitive decisions of the manager, besides being formed by personal characteristics, are also developed by the way the manager understand the internal and external factors of the company.

Another capital structure decision theory, where there are some traits of behavioral finance, is the pecking order which, according to Santos [24], it defends the existence of an asymmetry between information in the managers possession and those available in the market. Thus, the pecking order consist in adopting a ranking for funding sources adopted by the companies, from the existing information asymmetry. This clarifies the reason why managers prefer using internal funding sources, beyond the external.

In the other hand, there is the theory which suggests that the capital structure is influenced because of personal advantages, where in several occasions these are conflicting in relation to great decision. This is the agency theory which, according to Santos [24,36], such problem occurs because the objective of maximizing the owners wealth do not always maximize profitability opportunities of the managers. Therefore, in many cases, the capital structure is the fine line which separates the two blocks of interest.

Conclusions

The strategic decisions, in the context of finances, are related to investment and financing areas, and both have preponderant role in the process of maximizing the owners wealth. In the specific case of managing funding, it is clear that its primary contribution focuses in the capital structure decision process, i.e., in definition of proportions debts and of own capital, which should be used.

The study of capital structure is marked by seminal work of the professors Modigliani and Miller. It was possible, however, from the extensive literature review, certify that the M&M theory, one of the most widespread in this area, has significant flaws in development of their assumptions which, possibly, explain the gap between that theory and the empirical field.

In the most controversial aspect it, perhaps, focuses in the discussion of individual unlimited rationality on what the M&M model preaches. Therefore, according to discussions presented in this article, behavioral finances seem having convincing arguments about this theorical clash. Thus, it becomes intelligible to understand the reason why managers prefer using resources obtained from other people, if analysed from concepts entered by the behavioral finance.

With an argument quite applicable, sometimes irrefutable, behavioral finances present themselves as more coherent when they assume that the managers are human, no machines. However, under limitations and cognitive biases, during the process of taking decisions, behavioral finances may be considered strategic decisions.

Therefore, the study of behavioral finances provides several benefits to the development of financial strategic decisions, which may be very important in improving their performance. Thus, only the fact of managers knowing behavioral influences in markets may reduce the quantity of mistakes made by them in financial transactions. These arguments are because managers may predict their own mistakes and minimize the possibility of committing them again. However, the usage of behavioral concepts by professionals in the area is highly promising for the possibility of that it makes easier to understand the marked dynamic

References

1. Famá R, Grava JW (2000) Teoria da estrutura de capital: as discussões persistem. Caderno de Pesquisa em Administração. 1 (11): 35-47.
2. Macedo Junior JS (2003) Teoria do prospecto: uma investigação utilizando simulação de investimentos, Tese de Doutorado apresentada no Programa de Engenharia de Produção e Sistemas da Universidade Federal de Santa Catarina p. 59.
3. Modigliani F, Miller M (1958) The cost of capital, corporate finance and the theory of investment. American Economic Review. 48 (3): 261-297.
4. Modigliani F, Miller M (1963) Corporate income taxes and the cost of capital: a correction.American Economic Review. 53 (3): 433-443.
5. Simon HA (1979) Comportamento administrativo: estudo dos processos decisórios nas organizações administrativas, Rio de Janeiro: Fundação Getúlio Vargas.
6. Barbeado CHS, Camilo-Da-Silva E (2008) Finanças comportamentais: pessoas inteligentes também perdem dinheiro na bolsa de valores, São Paulo: Atlas.
7. Ansoff HI (1990) A nova estratégia empresarial, São Paulo: Atlas.
8. Ansoff HI, Mc Donnel EJ (1993) Implantando administração estratégica, São Paulo: Atlas.
9. Chandler Jr A (1962) Strategy and structure: charts in the history of industrial enterprise, Cambridge: MIT Press.
10. Mintzberg H, Quinn JB (2001) O processo da estratégia, Porto Alegre: Bookman p 58.
11. Montegomery CA, Porter ME (1998) Estratégia: a busca da vantagem competitiva, Rio de Janeiro: Campus p.5.
12. Mintzberg H, Lampel J, Ahsltrand B (2000) Safári de estratégia: um roteiro pela selva do planejamento estratégico, Porto Alegre: Bookman.
13. Machado-Da-Silva CL et al (1998) Mudanças e estratégia nas organizações: perspectivas cognitivas e institucionais, ENANPAD.
14. Stefano SR (2001) Estilos cognitivos e a formação de estratégia: uma reflexão crítica. Revista Eletrônica de Administração. 7 (3): 1-12.
15. Sousa AF, Menezes EJC (1997) Estratégia, crescimento e a administração do capital de giro. Caderno de Pesquisa em Administração. 2 (5): 37-51.
16. Cheng A, Mendes MM (1989) A importância e a responsabilidade da gestão financeira na empresa. Caderno de Estudos. 1: 12-24.
17. Helfert EA (2000) Técnicas de análise financeira: um guia prático para medir o desempenho dos negócios, Porto Alegre: Bookman.
18. Assaf Neto A (1997) A dinâmica das decisões financeiras. Caderno de Estudos. 9 (6): 9-25.
19. Damodaran A (2002) Finanças corporativas aplicadas, Porto Alegre: Bookman.
20. Famá R, Barro, Labc, Silveira AM da (2001) A estrutura de capital é relevante? novas evidências a partir de dados norte-americanos e latino-americanos. Caderno de Pesquisa em Administração. 8 (2): 71-84.
21. Matias AB (2007) Finanças corporativas de longo prazo: criação de valor com sustentabilidade financeira, São Paulo: Atlas.
22. Shinohara DY (2002) Estrutura de capital e sua relevância para a organização, SEMEAD FEA/USP.
23. Assaf Neto A (2003) Finanças corporativas e valor, São Paulo: Atlas
24. Santos CM (2006) Levantamento dos fatores determinantes da estrutura de capital das empresas brasileiras, Dissertação Mestrado em Administração das Organizações, Faculdade de Economia, Administração e Contabilidade da Universidade de São Paulo.
25. Perobelli F, Famá R (2002) Fatores determinantes da estrutura de capital: aplicação e empresas de capital aberto no brasil. RAUSP. 37 (3): 49-60.
26. Aldrighi DM, Milanez DY (2005) Finanças comportamental e a hipótese dos mercados eficientes. Revista Contemporânea de Economia. 9 (1): 20-34.
27. Simon HA (1955) A behavioral model of rational choice. Quarterly Journal of Economics. 69: 99–118.
28. Kahneman D, Tversky A (1979) Prospect theory: an analysis of decision under risk. Econometrica. 47 (2): 263-292.
29. Kimura H, Basso L, Krauter E (2006) Paradoxos em finanças: teoria moderna versus finanças comportamentais. Revista de Administração de Empresas. 46 (1): 41-58.
30. Rogers P, Securato JR, Ribeiro KC de S (2007) Finanças comportamentais no brasil: um estudo comparativo. Revista de Economia e Administração. 6: 49-68.
31. Simon HA (1972) A capacidade de decisão e liderança, Rio de Janeiro: Fundo de Cultura.
32. Damásio A (1996) O erro de Descartes: emoção, razão e cérebro humano, São Paulo: Companhia das Letras.
33. Miller DW, Starr MK (1972) A estrutura das decisões humanas, Rio de Janeiro: Fundação Getúlio Vargas.
34. Simon HA (1979) Rational decision making in business organizations. American Economic Review. 69: 493-513.
35. Michaelas N, Chittenden F, Poutziouris P (1998) A model of structure decision making in small firms. Journal of Small Business and Enterprise Development. 5 (3): 246-260.
36. Hneman D, Tversky A (1984) A choices, values and frames. American Psychologist. 39: 341-350.