

THE AUSTRIAN THEORY OF ENTREPRENEURSHIP: ORIGINALITY AND PROFESSIONAL ENGAGEMENT BY ISRAEL KIRZNER

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Abstract

Considering Kirzner's professional engagement posture in a context of crisis and subsequent reorganization of the Austrian School, the article investigates if there is originality in Kirznerian contribution to the theory of entrepreneurship he had presented. Therefore, a synthesis of the Kirznerian theory is presented, as well as an analysis of some of its precursors identified by Kirzner himself. It is argued that Kirznerian theory of entrepreneurship is a product of the simultaneous presence of Misesian and Hayekian contributions contrasted to Neoclassical microeconomics. Thus, the main originality in Kirzner proposition was adopting the approaches of Mises and Hayek as complementary ones on a framework designed based on the backdrop offered by traditional theory and correcting flaws pointed out by Kirzner. It is the merger of these three elements under the Kirznerian view that simultaneously allows all aspects of entrepreneurship theory.

Keywords: Israel Kirzner. Austrian School. Entrepreneurship. Professional Engagement.

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I. INTRODUCTION

Israel Kirzner is recognized as one of the leading names in the movement that became known as Austrian Revival, the resurgence of Austrianism from the 1970s after its fall in prestige in the mid-20th century (Vaughn 1994; Chamilall and Krecké 2002). The author is considered one of the leaders of this movement, helping to retake the importance of Austrianism for Economics, by: having brought new attention to the Austrian theory of the market process with the publication of "*Competition and Entrepreneurship*" in 1973; have obtained institutional support at New York University for students interested in Austrian School (AS) (Boettke 1995); have made an intellectual and academic effort in the development of Austrian ideas (Rizzo 2002, 2014).

According to Barbieri (2001, 2008), Kirzner's efforts helped to consolidate and advance AS's research agenda at the time. This statement can be justified, mainly, by the fact that Kirzner proposed a theory of entrepreneurship to explain the market process, placing a new research program in Austrian tradition. Such an agenda would be consolidated with the publication of his book of 1973 (Salerno 2002, Boettke and Sautet 2013, 2015, 2018a).

In the preface to that, Kirzner (2013 [1973]) wrote that there was a recovery of the interest in microeconomics at that time. However, those discussions were undermined by the

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centralization in traditional price theory, admitting the economic system in equilibrium, ignoring the idea of the market as a process. In the criticisms of conventional theory, therefore, it remains the emphasis about an already coordinated market, maintaining Austrian position neglected. Precisely the one that, for Kirzner, would not fall into the errors pointed out among the various approaches discussed. In this way, in defense of the entrepreneurial function Kirzner ended up contrasting his proposition to traditional microeconomics, the latter characterized mainly by the need to analyze the economy in equilibrium (Kirzner 2013 [1973]).

Despite the importance attributed by the economic literature to the entrepreneurship theory presented by Kirzner, as well as the existence of elements of this theory in his previous works, the author did not admit his originality contribution as his own. Rather, he pointed out this proposition as the development of Mises and Hayek's ideas about the market process (Kirzner 2015c [1967], 2015b [1986], 2015d [1995], 1997a). This was done mainly in works after the "*Competition and Entrepreneurship*". That's because, while the article that originated the book recognizes the joint contribution of the pair Mises-Hayek (Kirzner 2015c [1967]), in the book published in 1973 Kirzner credited his improvements mainly to the development of Misesian ideas (Kirzner 2013 [1973]), rarely referring to Hayek. In the preface to the Brazilian edition Kirzner even pointed out his work as the development of Mises' ideas, without mentioning Hayek (Kirzner 2012).

However, for Boettke and Sautet (2013) this book did more than develop the ideas of authors who inspired Kirzner. In this interpretation, the originality of the work consisted in the fact that the author had "opened the door of the modern theory of market process by going beyond Mises's and Hayek's respective views. Kirzner's goal was to reconstruct market theory". Thus, "Kirzner's theory presents a truly endogenous approach to economic change, providing an explanation for the generation of knowledge and its link to innovation in markets" (Boettke and Sautet 2009). According to Rizzo (2014), Kirzner have spelled out of the dispersed set of Misesian ideas, and, according to Garrison (2002), he had as much credit as Mises for the theory of entrepreneurial activity. Even more, for Boettke and Sautet (2018a), the Kirznerian entrepreneurship theory, resulting of the understanding of market as a process, recovered the human component for economic analysis (ignored in the traditional perspective focused on equilibrium).

According to Koppl (2002), there is evidence both for and against the idea that the theory of entrepreneurship is entirely at the Misesian work. In this way, two possible interpretations for the role of Kirzner in the theory of entrepreneurial activity are highlighted. The first one is that he just developed the insights that can be found in Mises's or Mises and Hayek's works, as Kirzner himself asserted. The second one is that he actually have made original contributions, as other authors argue. Thus, the use that this article makes of the term "originality" refers to something unprecedented, which has no counterpart in the works that preceded Kirzner.

Some works sought to discuss characteristics or theoretical implications for Kirznerian thesis of the entrepreneurial function, but none of them sought to evaluate what is the value added by Kirzner to the theory of entrepreneurship presented by him.³ The authors who followed this path were Douhan *et al.* (2007), at briefly analyzing the Austrian legacy in

³ Chamilall and Krecké (2002), Garelo (2002), Lewin (2002), Koppl (2002), Holcombe (2003), Jakee and Spong (2003), Douhan *et al.* (2007), Foss and Klein (2010), Klein and Briggeman (2010), Boettke and D'Amico (2010), Callahan (2010), Horwitz (2010), Shockley and Frank (2011), McCaffrey (2014) and Korsgaard *et al.* (2016).

Kirzner's theory. However, this is done in a parallel way to the central objective of that article, namely, to study the theoretical relationships between the Kirznerian approach and that of the Neoclassical economics (Douhan *et al.* 2007). Therefore, there is no concern in that work to highlight what essentially Kirznerian contribution is.

The conclusion of Douhan *et al.* (2007), however, serves as a guide for the present research, particularly, that Kirzner's main contribution was to make the entrepreneurship theory accessible to a wider audience (Douhan *et al.* 2007, 221-22). This hypothesis is based on the perception of Kirzner's professional engagement posture, defended by Kirzner himself (Kirzner 1989), and for which he is also recognized (Vaughn 1992, 1994). The term "professional engagement" highlights that Kirzner sought to discuss different topics in the light of Austrianism with the rest of the profession, unlike other members of AS who have adopted an isolationist position (Angeli 2018, 692-95).

Therefore, a deeper understanding of Kirzner's specific contribution to the construction of the Austrian theory of entrepreneurship remains a gap in studies regarding the history of the Modern Austrian School. Thus, the article proposes to investigate, considering Kirzner's professional engagement posture in a context of crisis and subsequent reorganization of AS, if there is originality in the Kirznerian contribution to the entrepreneurship theory presented by him.

The rest of this article is organized as follows: the second section presents a synthesis of the Kirznerian theory of entrepreneurship, while the third section analyzes the precursors of it that are pointed out by Kirzner himself. The fourth section discusses whether there is any original contribution by Kirzner to the theory entrepreneurial activity, and the fifth section presents the conclusions of the article.

II. THE KIRZNERIAN THEORY OF ENTREPRENEURSHIP

This section is based on the book "*How Markets Work: Disequilibrium, Entrepreneurship and Discovery*", published by Kirzner in 1997. The choice of this material is based on the fact that Kirzner have proposed in it a synthesis of his own thesis on entrepreneurship into six items, which provide the mains insights of this theory. Those items are the following:

- (i) There will always be inconsistency between the plans of the market participants, whether present or future (Kirzner 1997a).
- (ii) The incompatibility of agents's plans can take the form of over-optimism, when agents expect selling at higher prices or paying less and their plans are frustrated, resulting in price disequilibrium in the market, leading to the reformulation of plans (Kirzner 1997a).
- (iii) The incompatibility of agents's plans can take the form of over-pessimism, when agents sell for less or pay more than they should, resulting in more than one price for the same commodity, allowing an opportunity for pure profit. This may awaken the entrepreneurial alert for the correction of this price differential, generating the tendency for this opportunity to be taken advantage of (Kirzner 1997a).
- (iv) If consumer preferences, available resources, and technical possibilities are considered to be frozen in time, it is entrepreneurial action that promotes equal prices for the same product on the market (Kirzner 1997a).

(v) In the course of correcting the wrong decisions on the market, reallocation of economic resources occurs, from less productive uses to more productive ones, allowing for new discoveries in this process (Kirzner 1997a).

(vi) "In the real world of incessant changes [...] these corrective tendencies may be partly or wholly frustrated or interrupted. In addition, these tendencies, operating in different parts of the everchanging market, may interrupt and confuse each other. But the direction of the powerful forces of entrepreneurial discovery will be shaped and molded by the above-described systematic and corrective processes of error, disappointment, discovery, and surprise" (Kirzner 1997a, 46).

Thus, the Kirznerian theory of entrepreneurship is concerned with the economic relations that occur in a state of disequilibrium, characterized by the incompatibility of plans between individuals in the market. These relationships are coordinated through entrepreneurial activity, a function derived from alertness - an individual intuition - regarding a possibility of gain in the market. Entrepreneurial action occurs due to the existence of a previous error, characteristic of the disequilibrium, generating the need to review individual plans. This reorientation arises from frustration in the market, in relation to what was expected in the planning, or because the actions carried out there did not eliminate previously existing profit opportunities.

Hence, this action is a decision taken to correct the errors that were verified after the decisions of the previous period, promoting the reallocation of resources in the economy. However, this also allows the discovery of new possibilities of gain, either by new perceptions or by change of action of other individuals. In this sense, there is a tendency for profit opportunities to cease, and with that, the space for the entrepreneurial function ends when all plans and decisions are completely coordinated, the state of equilibrium.

However, as decisions in the real world are made during continuous changes, without someone coordinating them, they go from and to each other systematically, imposing the impossibility of full compatibility between them. In this way, new opportunities appear, leading to the consecutive revisions of plans, maintaining only the trend of coordination in the market.

Therefore, central elements in Kirzner's theory of entrepreneurship can be considered: (1) the state of disequilibrium, such that pure profit opportunities exist; (2) the equilibrium as compatibility of plans (actions and expectations); (3) the alertness of the entrepreneurial function to perceive an opportunity for pure profit; (4) the trend towards extinction of pure profit (from decision/allocation errors); (5) the tendency to discover new profit opportunities; (6) the tendency to equilibrium in the economy; (7) the impossibility of equilibrium in the real world.

III. THE PRECURSORS OF THE KIRZNERIAN THEORY OF ENTREPRENEURSHIP

This section presents the contributions that preceded the Kirznerian theory of entrepreneurship pointed out by Kirzner himself. Additionally, the traditional theory of prices was included, as criticized by the author, since it was used as a comparative basis in this discussion. Thus, the section is divided into three subsections: (i) the Kirznerian description of traditional microeconomic theory of prices; (ii) Mises's contribution; and (iii) Hayek's ideas. This is so because Kirzner points out that there are three paths to economic theory based on the

subjectivism proposed by Carl Menger, the founder of AS, namely: (1) the “*mainstream economics*”, which has limited too much the degree of subjectivism in economic analysis; (2) the “*radical subjectivism*”, which greatly increased the degree of subjectivism in the interpretation of economic phenomena; and (3) the “*modern Austrian revival*”, initiated by Mises and Hayek, whose entrepreneurial view of the market process admits an adequate level of subjectivism, a level that can be considered as intermediate in relation to the other two paths (Kirzner 2015d [1995]).

Thus, paths (1) and (3) shared, in addition to subjectivism, the belief that the market generates systematic forces in promoting tendency towards equilibrium. However, regarding the functioning of the market, Kirzner (1997a) believes that the views of Mises and Hayek explain a new Austrian paradigm for the theory of prices, opposite to that of the mainstream. For Kirzner, Mises and Hayek resumed a discussion about the market that had been left aside in the 1930's by the Neoclassical theory, when the latter joined the analysis of equilibrium under the condition of perfect competition (Kirzner 1997a). So, two concepts for the market coexisted in the middle of the 20th century. The one embraced in the 19th century, as a real place where exchanges take place, and the substitute, adopted by the mainstream, considering it a final state of things that cannot be changed by individual actions. The substitution of a view for another was consolidated with the advent of Keynesianism, which defended the smooth functioning of the market as a particular result of the economy (Boettke and Sautet 2018a).

According to Boettke and Sautet (2011b), the background of Kirznerian ideas is composed of these two existing views for the theory of prices that were presented to him during his period as a graduate student at New York University. The traditional one, based on Stigler [1946], and that of Mises [1949], both in opposition to the Keynesian macroeconomics. Although the merit of opposing the macroeconomic domain, traditional microeconomic theory lacked explanation of price formation in a model where everyone is considered a price taker in the equilibrium situation. It is in this sense, the reconstruction of the concepts of competition and market, that Kirzner jointly considered the works of Mises and Hayek. Hence, by interpreting the market as a competition process, rather than as an equilibrium analysis, the comprehension about the market would be returning to the ideas of the 19th century, of competition seen as an attempt to overcome among individuals in the search for profit (Boettke and Sautet 2018a). And the key to this was in the way that agents learn from their participation in the market. Their participation takes place in a deliberate manner, based on the expectations that precede their decision-making, while their learning is an unintended consequence, the result of carrying out those actions.

For Boettke and Sautet (2013), Kirzner takes from Mises the notion of *homo agens* and the entrepreneurial function, while adopting Hayek's proposal for knowledge dispersed in society, in which the economic problem is the coordination of individual plans (Boettke and Sautet 2013). That is why Kirzner (1997a, 19) argued that “[t]he theory of entrepreneurial discovery [...] offers a synthesis of Misesian and Hayekian insights which places Austrian understanding of the market process in an entirely different framework from that of contemporary mainstream micro-economic theory”. Therefore, it can be argued that it is not only the contributions of Mises and Hayek that led to the formulation of Kirzner's proposal for an entrepreneurial role. It was also important Kirzner's comprehension of the concept of the market adopted by the

mainstream, from which Kirzner sought to depart, defending the idea of a market process that is driven by purposeful and speculative action.

Traditional theory from the perspective of Kirznerian theory of entrepreneurship

Traditional theory is important to Kirzner not just for its predominance in Economics, since the author stated, in the presentation of the entrepreneurial function, that both the Austrian view and conventional theory share a common methodological principle. They are theoretical approaches consistent with methodological individualism, starting the analysis with the individual decision making to understand the joint result of different decisions (Kirzner 2015c [1967]). However, traditional theory would admit observable economic results, such as prices and quantities, as a starting point, whereas for Kirzner these are the phenomena to be explained (Kirzner 2013 [1973]).

Kirzner presented the traditional economic theory of prices, in general, as an explanation for the changes in the allocation of resources in the market from exogenous events. Such changes would affect the economy, which goes from the equilibrium point initially admitted to a new state of equilibrium believed from the expected consequences of changes in objective data. In this way, conventional theory would eventually describe the different conditions necessary for the economy to transition between different points of equilibrium (Kirzner 2015c [1967], 2013 [1973]).

In this way of looking at the economy, Kirzner highlighted three fundamental problems: (i) the limitation of individual decisions to the problems of resource allocation by the economic agent (Kirzner 2015c [1967], 2013 [1973]); (ii) the unrealism of the hypotheses admitted to support the economic analysis based on the state of equilibrium (Kirzner 2013 [1973]); (iii) the concept of competition supported, in which cease individual attempts to overcome among individuals, taking the competitive process in an economic equilibrium situation as ended (Kirzner 2013 [1973]).

The first point derived from the nature of the individual decision-making process, since the economizing agent would only passively promote adjustment in decisions to reconcile his purposes to the situations faced (Kirzner 2015c [1967]). This agent is identified by Kirzner as originating from Robbins's proposition on the allocation of economic resources, because he considered that ends and means would already be given. The problem with this conception was to ignore the purposeful action in individual decisions, constrained to the existence of previously admitted ends (Kirzner 2015c [1967]). Thus, Kirzner understood that traditional economic theory considered individual decision as a computational problem (Kirzner 2015c [1967]), excluding learning and deliberation.

The second point of Kirzner's critique of traditional theory pointed to the unreality of the admitted hypotheses. According to Kirzner, the assumption of perfect knowledge, besides being unrealistic, brought with it the immediate presence of a state of equilibrium in the economy (Kirzner 2013 [1973]). Mainly because in equilibrium the plans of all individuals converge, excluding any possibility for the realization of pure gains. There is no possibility of frustration or any other type of surprise, such that it is not needed for the agents's decisions to be coordinated in resource's allocation, because they would already be previously coordinated in their plans. As there would be no unawareness, the market alone would be completely

efficient, regardless of the entrepreneurial function for mutual coordination between individuals (Kirzner 2013 [1973]).

The third point criticized by Kirzner in the conventional approach was the conceptualization of competition as a state of affairs that ends competition between agents. The traditional price theory is concerned with the possible equilibrium states generated by different objective data sets in the economy (Kirzner 2015c [1967]). Thus, when assuming the state of equilibrium as a starting point, it ended up excluding the entrepreneurial function, since the possibilities of discovery and creativity are eliminated, and there is no way to incorporate endogenous changes in the sequence of events in the market. In this perspective, Kirzner stated that the only possibility of genuine changes, not anticipated by agents, would occur from exogenous events (Kirzner 2013 [1973]).

Having understood traditional economic theory in this way, and criticizing the points highlighted above, Kirzner sought inspiration on theoretical interpretations that: (i) expanded the role of the agent in the decision-making process; (ii) adopted more realistic assumptions; and (iii) understood competition as a dynamic competitive process. Kirznerian economic thought understood that traditional theory have started from a state of equilibrium, excluded opportunities for profit and eliminated the entrepreneurial function. This perception led him to the contributions of Mises and Hayek, theoretical formulations for the functioning of the market that are also opposed to those of conventional theory. However, according to Vaughn (1992), although Kirzner criticized the Neoclassical theory, his criticisms would be aligned with it, in an attempt to discuss the nature of the common points between the two approaches.

Misesian theory from the perspective of Kirznerian theory of entrepreneurship

Mises's importance for the Kirznerian theory of entrepreneurial activity became clear when Kirzner indicated his book "*Competition and Entrepreneurship*" as the development of Misesian ideas (Kirzner 2012). Taking Mises's "*Human action*" and "*Profit and Loss*" in consideration, Kirzner did not claim any originality over any insight into the market process for himself. In his own opinion, he deserved credit for the version for presentation of the theory (Kirzner 2013 [1973]).

Three contributions by Mises that served as essential bases for Kirzner in the theory of business action in the market process will be highlighted here: (i) the purposeful human action of the economic agent (*homo agens*); (ii) the concept of the market as an active competition process; and (iii) the idea of an entrepreneurial function - a speculative action in the pursuit of pure profits.

The basis of Misesian theory is human action, a purposeful behavior that the individual carries out to achieve his goals (Mises 1998 [1949]). The decision to act results from the existence of a discomfort that one wants to remove when an intended result in the action is expected and may change the situation (Mises 1998 [1949]).

With this in mind, Mises compared his definition of economic agent with that one used in Neoclassical economics. In Mises's view, conventional theory admitted a reactive agent, based on the framework of ends and means that preceded him, so that his single role would be to maximize his own satisfaction, as well as reacting to changes in conditions that are around him (Mises 1998 [1949]). The Misesian agent, on the other hand, was called *homo agens* because of his characteristic of acting actively in pursuit of his purposes, recognizing that his actions take

place in an environment of uncertainty, without guaranteeing the expected results (Mises 1998 [1949]). While every action is based on individual anticipation, it would always be subject to error, since its results occur in an uncertain future, however close it might be (Mises 1998 [1949]).

Therefore, in Mises, actions are always imbued with purpose and speculation by the individual in the decision-making process, which recognizes the hostility of the uncertain environment. Kirzner (2013 [1973]) stated that it was human action as explained by Mises that served him to oppose Robbinsian economization. Kirzner (2015c [1967]) argued that Mises's *homo agens* differs from *homo economicus* in his ability to actively transform his own structure of ends and means. In this instance, the restrictions faced by individuals relating to the ends are not seen as limiting barriers, but as obstacles to be overcome – what is done deliberately in the search for new possibilities of profit.

As an opportunity for profit occurs in the situation of mismatch between the use of economic resources and the most urgent desires of consumers, it becomes a reward for those who promote greater coordination in this situation (Mises 2008 [1951]). In the Misesian approach, the entrepreneur is responsible for adjusting the allocation of economic resources to the interests of consumers. This character is responsible for serving consumers in the best possible way for two inseparable reasons, making profits and avoiding losses (Mises 2008 [1951]). Because the market's profit and loss system defines who will continue to compete, as a test of survival, so that individuals only remain as entrepreneurs because of their own capacity in relation to the others (Mises 2008 [1951]).

Mises clarified that the basic activity of entrepreneurs is decision making (Mises 2008 [1951]). Thus, it showed that the character of the entrepreneur is a theoretical illustration for the entrepreneurial function that is performed by all agents in the economic system. According to Mises (1998 [1949]), all individuals are entrepreneurs and speculators in real life. Thereby, the entrepreneurial function would be a specific economic function to act under uncertainty (Mises 1998 [1949]). It is this condition that makes entrepreneurial action a driver of the economic system, in the pursuit of profit (Mises 1998 [1949]).

The use of the entrepreneur by Mises (1998 [1949]) allowed him to compare the economic system in two states: in equilibrium, that is presented under the name of Evenly Rotating Economy, and in the market process. Therewith, he argued that there is only room for the entrepreneur in the second case, because in the first one he would be excluded due to the absence of opportunities to act, given the inexistence of profit. Kirzner (1997a) also used this characterization of equilibrium as an “imaginary construction” that leaves no room for the entrepreneur.⁴

The market cannot be admitted to be in equilibrium because that point is never reached in the real world, since the market process is inherently competitive. Competition as a process by which individuals seek to overcome themselves in the pursuit of profit allows the most able ones to survive in carrying out that task. And the result of this competition, for Mises, is the market, understood as a process in which agents interact in the search for the improvement of their individual conditions. The market would allow, through competition, an agent to achieve

⁴ In Misesian theory the method of imaginary constructions is presented as a manner to analyzing phenomena, comparing the conditions under which it is assumed and the conditions existing in the real world. This is necessary due to the impossibility of carrying out experiments in the social sciences (Mises 1998 [1949]).

his purposes, while at the same time, it would allow other agents to achieve theirs (Mises 1998 [1949]).

This conceptualization of the market, taken in opposition to the admission of the Neoclassical economics of competition as a state of affairs in which there is no more rivalry, has been fundamental to Kirzner's economic thought. For Kirzner (2013 [1973]), the realization of opportunities in the market depends on the competitors guaranteeing more and more advantages in the options they offer over time, with each one trying to anticipate the others. In the absence of this competition, in a state of affairs where all decisions are complementary, as in equilibrium, the competitive process ends.

According to Kirzner (1997a), the title of Mises's main book, "*Human Action*", reflected the author's emphasis on purposeful action that will always be speculative under the awareness of the condition of uncertainty. "For Mises the analytical unit is the human act, and the essential feature of the human act is its speculative entrepreneurial dimension" (Kirzner 1997a, 32-33). In this sense, Kirzner took from Mises the concept of the entrepreneur as a speculative figure who, when acting under the uncertainty of the real world, has no guarantee of the results he expects in the market.

Kirzner has interpreted his contribution as the development of Mises' ideas because he took on the Misesian proposal that every human action has an analytical function of speculation if taken in an environment of uncertainty. Accepting this position, Kirzner presented the imaginary figure of the "pure entrepreneur", to designate the portion of the individual decision resulting from the state of alert, as if no resource was necessary for the individual (Kirzner 2013 [1973]).

The theoretical contributions of the Misesian framework used by Kirzner adhere to the central elements of the Kirznerian entrepreneurship theory. Mises's contribution is verified: (1) the existence of a state of disequilibrium where there are opportunities for profit; (2) equilibrium as a mutual adjustment of agents in the market by the end of the competition - without explaining the convergence of individual plans/expectations; (3) the perception of profit opportunities that lead to purposeful human action - without highlighting a human characteristic for this, such as the Kirznerian alertness; (4) the trend towards market equilibrium - as a tool to understand the process; and (5) the impossibility of equilibrium in the real world due to the condition of uncertainty.

Hayekian theory from the perspective of Kirznerian theory of entrepreneurship

The influence of Hayek's works on Kirzner's theory of entrepreneurial activity is seen, mainly, in the conceptualization of equilibrium, in the role of the dispersion of knowledge during the market process, and in competition as a process of discovery.

For Hayek, traditional economic theory was able to admit equilibrium because it assumed that it would exist objective information for individuals's decision making, such as technology and preferences. However, this would have ignored that the agent establishes an individual action plan that guides his decision-making process considering the decisions of other individuals. Thus, each decision would be based on a contingent action plan, since there is no guarantee that third party plans will be carried out (Hayek 1948a).

Thus, Hayek reconsidered the implications of admitting the existence of a state of equilibrium, arguing that it occurs through the full compatibility of plans between economic

agents. Hence, the convergence to a state of equilibrium would depend on all plans being able to correctly predict future market conditions, that such plans are based on the same expectations regarding exogenous events, as well as having the same anticipations as the plans of others members of the economy. From that perspective, equilibrium would imply that individuals reach the same conclusions in their economic assessments (Hayek 1948a).

In Hayek's thinking, those individual plans are based on the "relevant knowledge" of each agent, in a way that any change would imply changes in the plans (Hayek 1948a). For example, when acting, each individual would be indicating to society – that is, to other agents - his personal plan. And that would increase individuals's knowledge of the existing economic possibilities, since such a plan is being carried out. As the other agents also have their plans, new information can make them revise their planning, according to their own interests in relation to the plans observed in the actions of other individuals. This dynamic sets up a process of communication of plans between agents that disseminates knowledge among individuals (Hayek 1948c).

But Hayek did not approach knowledge only as an objective issue, in the sense that traditional theory has. Rather, he used a broader concept, also involving the tacit knowledge that agents have, which is often not amenable to transmission (Hayek 1948a). Hence, the author argued that the knowledge considered by him would also be composed of a portion with a contextual character, of time and place - subjective - proper to the individual as to the best form of its use (Hayek 1948c). For this reason, it would often be inaccessible to external observation.

Thereby, the success of individual plans could not only depend on the predictive capacity of each agent, but also on the success of other agents in carrying out their plans. There is no guarantee that the individual plans are compatible with each other, or that all of them will be carried out as expected, opening the possibility of such plans to be frustrated. This frustration would prevent complete coordination among decisions, and with that the economy would be out of equilibrium. For Hayek, in the absence of perfect knowledge, disequilibrium becomes the rule, not the exception - different of what is admitted by the traditional economic theory (Hayek 1948a).

That is the main reason why Hayek criticized the assumption of perfect knowledge, because departing from that, to solve the problem of the economic order became a logic exercise. The best way to use the means available to reach the ends would simply be a direct consequence of such an assumption (Hayek 1948c). This would not occur if economic analysis considered relevant individualized knowledge, such that individual planning and actions were also relevant. Assuming information as subjective, the different agents could not be expected to interpret it in the same way (Hayek 1948b).

Then, the proposed economic problem understood by Hayek would be about how to guarantee the efficient use of existing resources when the relevant knowledge under its possibilities of use is dispersed, particular and contextual. Soon, society would be faced with the task of coordinating the use of this knowledge to its best advantage. In Hayekian thinking, this could only be achieved when agents individually decided on the best use of their knowledge, which would be expanded and revised in the light of interaction with other agents (Hayek 1955). And this would generate a tendency towards equilibrium, which in the Hayekian view is nothing more than a tendency to coordinate knowledge through its use in economic activity (Hayek 1948a).

Kirzner directly cited Hayekian texts in the definition of equilibrium as compatibility of plans and expectations among economic agents (Kirzner 2015c [1967]). Thus, equilibrium is understood in Kirznerian thinking in the same way as Hayek puts it: a state of perfect plan compatibility, in which all opportunities for gain were explored and there is no frustration. For Kirzner, Hayek's identification of equilibrium as a state of full compatibility among expectations provides the necessary element for equilibrating process takes place: learning (Kirzner 1997a). In addition, the positions of Hayek would promote the comprehension about the pattern of changes of agent's decisions, that can be explained by shifts in the individual's knowledge (Kirzner, 2015b [1986]).

In an article of 1968, Hayek argued that information in the economy needs to be discovered, and that it would come about through competition among individuals. Since knowledge is particularized in Hayekian thought, it would turn up when the market signals attractive possibilities through the price system. These opportunities would persuade the agent to reveal his knowledge when carrying out his actions (1978 [1968]). In addition, this would still allow the advantage of communicating to other individuals in society about the inherent potential to this knowledge then disseminated. Therefore, competition would be responsible for allowing these discoveries.

Kirzner used this same argument in his book published in 1989 In it, the understanding of the market as a process of discovery is central. According to Kirzner: “[e]ach market transaction is the outcome of simultaneous discoveries by the parties involved. But, in addition, the total pattern of income distribution, and the total output of the market society, must both be recognized as being discovered outcomes” (Kirzner 2016 [1989]). In addition to referring to the use of the term “discovery procedure” to the 1968 Hayekian article, Kirzner used the notion of discovery to explain the concept of speculative action that he had used in his entrepreneurship theory (Kirzner 2016 [1989]).

Considering the influence of Hayek's works on Kirznerian economic thought, it is also possible to identify a relationship among Hayekian ideas and central elements of Kirzner's theory of entrepreneurial activity, since the following elements are present: (1) the predominance of disequilibrium situation – without emphasizing pure profit opportunities, but took as possibilities of mutual gains open to agents in the market; (2) the equilibrium as compatibility of plans - based on actions and expectations; (3) the tendency to equilibrium - as a process of economic coordination through knowledge; and (4) the impossibility of equilibrium situation in the real world.

IV. KIRZNER'S CONTRIBUTION TO THE AUSTRIAN THEORY OF ENTREPRENEURSHIP

Once Kirzner's *“Competition and Entrepreneurship”* is considered the first consolidated version of the Austrian theory of entrepreneurship, and that this book started a research agenda for the Austrian School, one can evaluate what was added by the author to this theme. This is relevant to the extent that Kirzner himself argued that he had only developed Mises and Hayek's ideas for market process (eg Kirzner 2015c [1967], 2015b [1986], 2015d [1995], 1997a). As Koppl (2002) recalled, the Kirznerian stance was always for the defense that the theory of entrepreneurial activity would be all in Mises's work, repeating the phrase “[i]t's all in Mises”. However, other interpretations suggest that Kirzner did more than just develop previous ideas.

Some of these interpretations are limited to contradicting that Kirzner was only developing the Misesian ideas. Koppl (2002) argued that a possible interpretation is that Mises was restricted to the analysis of individuals with value scales based on his personal knowledge, whereas Kirzner would be adding a praxeological element to change that knowledge, and consequently, changes in the hierarchy of values. For Boettke (2014), Kirzner dedicated his career to the study of Misesian ideas, but not constrained to that, because he also has developed them. Rizzo (2014) argued that Kirzner was original in promoting a coherent theory based on Mises's ideas, while Garrison (2002) stated that Kirzner has as much merit as Mises in developing an Austrian theory of entrepreneurship.

Other interpretations showed that Kirzner transcends the conjugation of the ideas of Mises and Hayek. Boettke and Sautet (2013) argued that Kirzner presented a theory that can explain endogenous changes in the economy through the generation and dispersion of knowledge in the markets. Thus, according to Boettke and Sautet (2009) and Horwitz (2010), Kirzner's theory of entrepreneurial activity would have solved the Hayekian problem of knowledge. The Kirznerian contribution would serve as an explanation for the coordination of individuals through the dissemination of knowledge, explaining the emergence of a social order. Boettke and Sautet (2018a) also argued that the readmission of the human element in economic discussion is credited to the Kirznerian theory, suppressed in traditional theory in its emphasis on equilibrium conditions.

According to the evidence presented in the third section, neither Mises and Hayek's individual contributions, nor Kirzner's dissatisfaction with traditional theory, are enough, individually, to contemplate all elements of the Kirznerian theory of entrepreneurship. At the same time, it can be admitted that Kirzner's works prior to 1967 anticipated aspects of this theoretical proposition. An example of this is that his first book, *"The Economic Point of View"* exposed criticism to Robbinsian economization (Kirzner 2009 [1960]); his second book, *"Market Theory and the Price System"*, presented the entrepreneur as intermediary between supply and demand (Kirzner 2011 [1963]); and his third book, *"An Essay on Capital"*, discussed the role of error in reviewing plans and expectations (Kirzner 2010 [1966]). This observation might lead to the conclusion that there are properly Kirznerian theoretical elements during the construction of the entrepreneurship theory until 1973, but this is not the case.

Kirzner's early works are influenced by the Mises-Hayek pair, as can be seen in his first three books. The first is derived from Kirzner's PhD dissertation advised by Mises and concluded by defending that economic analysis is geared to the logic of human action, an idea originally Misesian in Economics (Kirzner 2009 [1960]). The second was a microeconomics textbook based on the Austrian version of the market process in opposition of Chicago School and MIT textbooks (Boettke and Sautet 2011a). But without departing from the traditional theory (Vaughn 1994).⁵ The third book brought together the ideas of Böhm-Bawerk and Mises for the explanation of capital and interest (Boettke and Sautet 2010). In this work, Kirzner states an understanding of the capital from the logic of human action, based on a Misesian framework, but also referring to Hayek's work on the formulation of plans and subjectivity in objective economic data's interpretation (Kirzner 2010 [1966]).

⁵ This is explained when Kirzner himself recognized that in the textbook there is an emphasis on the state of equilibrium that he would later abandon. Because the handbook explores a Hayekian explanation for how the market process converges to equilibrium, while in later works entrepreneurial activity is emphasized in order to show how the market process is directed (Boettke and Sautet 2018c).

Similarly, Kirzner saw his book of 1973 – the one which consolidated a first version for Austrian theory of entrepreneurship – as an attempt to bring Mises and Hayek ideas for the rest of the profession. Repeating something that Kirzner claimed to have done in his 1963 textbook, to build a bridge between the Austrian and Neoclassical approaches to microeconomics (Boettke and Sautet 2018c).

Despite the validity of positions of Kirzner (and other prominent authors) in a debate about the Kirznerian contribution to Austrian entrepreneurship theory, it is argued here that is possible to integrate these different views. Despite being a recognized position in the literature that Kirzner combines the ideas of Mises and Hayek, this initiative can be pointed out as the originally Kirznerian contribution to the Austrian theory of entrepreneurial activity.

Thus, the interpretation here offered is that the Austrian theory of entrepreneurship arose when Kirzner brought together the elements offered simultaneously by the Misesian and Hayekian contributions contrasted with the Neoclassical microeconomics. So, the main originality in the Kirznerian proposition was to adopt the approaches of Mises and Hayek as complementary under the same framework, the latter designed based on traditional theory and the correction of the flaws pointed out by Kirzner. It is argued that it is the mixture of these three elements from the Kirznerian perspective that simultaneously allowed all aspects of the first Austrian theory of entrepreneurship consolidated in 1973.

The importance of this is due to Kirzner's own perception of the theoretical paths followed by Mises and Hayek. In Kirznerian economic thought, Mises did not pay attention to the learning process of individuals, whereas Hayek did not address the speculative character of the entrepreneurial function (Kirzner 1997a). Although Kirzner addressed these neglects from the different aspects that these authors sought to emphasize in their works, the fact is that, under this specific point of view, the approaches of Mises and Hayek are different. The recognition of this distinction led Kirzner (1997a, 18) to affirm that “[i]n terms of the positive theory of entrepreneurial discovery, the differences between Mises's understanding of the dynamic market process and Hayek's understanding of that same process, are less important than the congruence of these two ways of understanding markets”. Less important, but not nonexistent. This is consistent with the speculation made by Jakee and Spong (2003), that Kirzner sought to solve problems in traditional Economics based on the Austrian theory in order to reconcile the different methodological views of Mises and Hayek.

For Kirzner, the Mises and Hayek's works differ in some aspects but have total complementarity in the thesis of market process. Mises for emphasizing the entrepreneurial character of human action and Hayek for highlighting the role of knowledge. Having taken these contributions together was what enabled Kirzner to recognize the core of entrepreneurship: “the kind of processes involving the pure discovery of knowledge” (Boehm 1992). And this result was, for Kirzner (1997c), more important than the differences that could exist between Mises and Hayek's approaches.

In this sense, the theory of entrepreneurial activity put forward by Kirzner made the theory of the market process move beyond the individual positions that were taken by Mises and Hayek, as asserted by Boettke and Sautet (2013). At the same time, the Kirznerian theory was really a development of the ideas of Mises and Hayek, as proposed by Kirzner.

In this way, Kirzner's main contribution to the Austrian theory of entrepreneurship, highlighted here as the fact that made him original, can be attributed to the systematization of a

theoretical version of the market process aligning the Misesian and Hayekian theoretical elements, taking “these two ways of articulating a theory of market process turn out to be two sides of the same coin” (Kirzner 1997a, 18). Which is consistent with Kirzner's perspective on his theory of entrepreneurial activity, as a particular version of the theory of the market process (Kirzner 2013 [1973]).

This would be an Austrian version for the price system and the functioning of the market built as a counterpart of traditional theory. This contrast have maintained methodological individualism and distinction between classes/agents in the economic system, in order to focus on each one's performed economic function in the respective decision making. A systematization that is presented in a specific format, along the lines of traditional theory. As Kirzner stated: “I claim, indeed, that the “alertness” view of entrepreneurship enables us to have the best of both worlds: we can incorporate entrepreneurship into the analysis without surrendering the heart of microeconomic theory” (Kirzner 2015a [1985], 146-47). Kirzner himself recognized this complementarity when he stated that: “[h]aving a neoclassical background on the one hand and yet having a fell that Mises was seeing things that others hadn't seen; I [Kirzner] tried to come to grips with it ”(Boettke and Sautet 2018c, 728).

According to Boettke and Sautet (2018b), Kirzner used the logic of the existing market structure in the traditional microeconomic theory of prices and replaced *homo economicus* with *homo agens*. With this, Kirzner provided a scientific basis for the market process based on the same elements that legitimize the theory of the market and the price system under the Neoclassical framework (Boettke and D'Amico 2010).

It could be argued that the definition of alertness was an originally Kirznerian contribution. While it is verifiable that the concept appears initially in Kirzner's works, the idea is widely dispersed in Mises's considerations of the role that the entrepreneur performs in the economic system when acting under the condition of uncertainty. Kirzner clarifies that the entrepreneurial activity in the Misesian work does not depend on the exchange of something that is attributed less value for what is more valued, rather, it is due to the exploitation of a price differential for the same product.

In this sense, there was a Kirznerian effort to synthesize this attribution in the form of an element that is presented as inherent to all individuals in decision making. An analytical categorization of the function responsible for identifying ends and means. This contribution advanced the notion of the economic agent, from that based on Robbins to the derivative of the Misesian conception, the *homo agens*, which is endowed with at least two additional capacities: propensity to discovery and learning (Kirzner 2013 [1973]).

This consideration allowed Kirzner to gather the recovered ideas from Mises and Hayek, respectively, about the entrepreneur's purposeful action in the uncertain market and the unintended learning by participating in economic activity. In Kirznerian thinking, this illustrated the understanding of both authors about competition, which they put differently from that proposed in traditional theory. But Kirzner maintained the conventional understanding of competition as an accessory to his argument. Because it turns more evident how the Robbinsian economic agent would remain indefinitely in an initial disequilibrium situation because he is unable to discover or learn. Situation to which *homo agens*, being endowed with an alertness, is not subject, because “recognition of human purposefulness permits us to see the actions of people, the phenomena of social interaction, in terms of a

calculus of choice" (Kirzner 1979, 31). Therefore, although he repeatedly criticizes the decision-making of the traditional theory for being confined to the optimal calculation, Kirzner is not unaware that the process of choice runs through economic calculation but reinforces its subjective character.

This new characterization of the economic agent along the traditional lines also allowed the understanding of the market as a process, linking two moments in time by endogenous factors in the economy. It is admitted that the events in a period, especially the mistakes made in decision making, influence, without determining, what happens later. This would be due to human reason in revisioning plans, which is set in motion by the existence of new opportunities for gain from the economic disequilibrium of the previous period (Kirzner 1979). Thus, a Kirznerian attempt was made to show that economic dynamics are also set in motion by internal issues, derived from the unpredictable character of purposeful human action.

Additionally, it can be argued that after systematizing a theory of the market process based on the entrepreneurial function in 1973 Kirzner made marginal contributions to his theoretical proposal (Vaughn 1992, Jakee and Spong 2003). The emphasis on the existence of different types of errors to which entrepreneurial action is subject, as in cases of excessive optimism or pessimism (Kirzner 1997a); and the differentiation between induced variables and underlying variables in the economic system (Kirzner 1992 [1990]). Examples that do not appear explicitly in his 1973 book.

Kirzner's professional engagement for the Austrian theory of entrepreneurship

The originality of Kirzner's contribution to the Austrian entrepreneurship theory is about formatting a version for the theory of the market process, as interpreted here, and can be endorsed based on the work of Douhan *et al.* (2007) and Korsgaard *et al.* (2016). For Douhan *et al.* (2007), the main Kirznerian contribution was to expand the audience for the theory of entrepreneurship - and thereby increase the space for Austrian ideas. For Korsgaard *et al.* (2016), Kirzner got this larger audience for presenting a theory based on the Neoclassical framework. This can be reinforced when recalling that Kirzner is considered one of the main exponents of the Austrian Revival for having his approach associated with that of Neoclassical tradition (Vaughn 1992, 1994). For Vaughn (1994), Kirzner used a language that was familiar to the mainstream in his book of 1973.

This interpretation is even more important if one considers the paths followed by the Austrian School during and after the 1950's. As Boettke (1995) shows, after the economic debate on economic calculation in socialism, there were two views about Austrianism: it had already been absorbed by the mainstream or had ceased to exist. In other words, after the debate on economic calculation, the perception is that there was nothing that characterized AS as a particular approach with a unique relevant contribution. Part of this is due to a communication barrier, since some concepts used by Austrians refer to different ideas from those used by other economic approaches. Thus, Kirzner's proposition of a theory of entrepreneurial activity, trying to take Mises's ideas to the rest of the profession, can be read as part of the Austrian Revival because it helped to establish dialogue with other currents.

It is not difficult to note that the Kirznerian explanation of the entrepreneurial function always refers to the traditional theory of prices, since both are based on methodological individualism. In addition, Kirzner used the three economic classes of traditional theory

(consumers, producers and resource owners), analytically unraveled the decision-making process, admitted the existence of a state of equilibrium and a tendency for it to be achieved. This approximation between Kirzner's ideas about the market process and the traditional economic theory of prices can be read beyond the sharing of the same object and the same methodological pillar, based on the author's admission of a professional engagement posture.

As a result, it was highlighted Kirzner's attempt to bring Austrian ideas closer to both the didactic framework and the ideas used in the mainstream. An idea that has been defended by some followers of Austrianism, such as Kirzner himself.

Kirzner (1989) argued that the discussion between different economic currents would lead to scientific progress. And he explained (1997b) that the concern of scientists should not be to have their theories accepted by a growing audience, but that they should seek the validity of their scientific conclusions. Vaughn (1994) also defended the sharing of ideas between Austrians and other heterodox approaches. Koppl (2006) stated that Austrian participation in the economic debate among heterodox schools is necessary because, for him, this is where a new orthodoxy will arise. Boettke (2011), in the same line as Kirzner, considered important that Austrians seek theoretical bases common to other approaches to progress in economic understanding. Even more so because, Boettke continued, if Austrianism recognizes the importance of Mises and Hayek to the economics, it must take its ideas to a wider audience, and not confine them to its followers.

As shown by Angeli (2018), part of the members of the Austrian School adopted an isolation posture, dialoguing only with the members of this current of economic thought, without engaging with the rest of the profession in the economic debate. But the literature about Kirzner has already shown that he was a professional engaged in the Austrian theory of entrepreneurship for several reasons. Vaughn (1992) credited Kirzner for having constituted his work as a way of approaching the main economists at the time. Koppl (2002) argued that Kirzner contributed to economic theory by proposing one theory for entrepreneurship. Rizzo (2002) believes that Kirzner has a theory that goes beyond entrepreneurial action, configuring a theory of economics itself. Horwitz (2010), in the same vein, stated that Kirzner's solution to the Hayekian problem is a contribution to economic theory in general. For Douhan *et al.* (2007), Kirzner showed to the rest of the profession the importance of the role of the entrepreneur, and Korsgaard *et al.* (2016) argued that Kirzner sought to present his entrepreneurial role in a framework compatible with the Neoclassical economics, making it accessible to a wider range of researchers.

Most of Kirzner's works until 1973 also corroborate that the author was a professional engaged in theoretical discussion. His book of 1963 sought to provide an alternative to traditional microeconomics (Kirzner 2011 [1963]). An article published in the same year aim to counterpoint the hypotheses about economic growth (Kirzner 1963b). His book of 1966 rescued themes relevant for the "Cambridge Controversy" from an Austrian-Misesian point of view (Kirzner 2010 [1966]). In an article of 1967 on libertarian approaches to economic thought, he clarified the differences between Misesians and members of the Chicago School, while his best-known work that was published that year differentiated mainstream and Austrian normative analyzes (Kirzner 1967b, 2015c [1967]). In a text of 1971, Kirzner discussed the implications for the theory of economic development of the admission of the Austrian (Kirznerian) market process and the respective entrepreneur instead of Schumpeterian entrepreneur added to the

traditional theory (Kirzner 1971b). His article on advertising in 1972 sought to answer several criticisms of the topic (Kirzner 1972). In direct responses to the works of Becker and Buchanan, as well as in the reviews of the books of Briefs, Smyth, Shackle, Dewey and Manne, the Kirznerian willingness to engage in the economic discussions of various themes at the time from an Austrian point of view is seen (Kirzner 1962, 1963a, 1963c, 1964, 1965, 1967a, 1970, 1971a).

The book of 1973, *“Competition and Entrepreneurship”*, the theoretical contribution for which Kirzner became best known, had multiple motivations, in particular the rescue of the figure of the entrepreneur in economic theory and the debate on the theory of prices at the time (Kirzner 2013 [1973]). Therefore, Kirzner's professional engagement with the Austrian theory of entrepreneurship in this material can be understood as follows: agreeing with the absence of the entrepreneur in traditional economic theory, Kirzner found it mixed with the role of production within the three economic classes admitted in this approach. Analytically separating the role of the producer, between his productive function and speculative activity, Kirzner isolated an entrepreneurial function that is inherent to every decision-making process. A movement that is analytical, just like the one realized by the conventional theory between consumption, production and property of resources. In this identification, Kirzner showed that such a function is excluded from the economic analysis due to the admission of the state of equilibrium in the economy, in which only the productive role fits because he have already considered in advance all the information necessary for the decisions of the economic agents.

Flexing the hypotheses of economics to a case closer to reality, abandoning perfect knowledge and the situation of equilibrium, Kirzner explained the origin of economic dynamics: the entrepreneurial function. Under the condition of fallibility and dispersion of knowledge, inherent to the existing uncertainty in the disequilibrium, the Kirznerian entrepreneur, or the agent's entrepreneurial function, disseminates information and coordinates the economy. This allows the theory of the market process to have a more comprehensive explanatory power than that of the traditional economics, since the latter is confined to equilibrium, while the former admits the more general case of disequilibrium situation. With that, Kirzner provided the explanation for the tendency towards equilibrium in the economy, whether seen under the market process or under the traditional economics, entrepreneurial competition between economic agents.

V. Final remarks

This article sought to present the original contribution that Kirzner made to the Austrian entrepreneurship theory that he defended, based on the different interpretations existing in the economic literature about the author's role. For this, seven central elements were identified in the theory of entrepreneurial activity as it was summarized by Kirzner in 1997: (1) state of disequilibrium, where opportunities for pure profit exist; (2) equilibrium as compatibility of plans (actions and expectations); (3) alertness of the entrepreneurial function to perceive an opportunity for pure profit; (4) tendency towards the extinction of pure profit (from decision and allocation errors); (5) tendency to discover new profit opportunities; (6) tendency to equilibrium in the economy; and (7) impossibility of equilibrium in the real world.

These seven points were contrasted with the main characteristics of traditional economic theory criticized by Kirzner, as well as with the central elements of the contributions of Mises

and Hayek, which the author pointed out as the origin of his theory. In this verification, it was shown how the points listed in the Kirznerian thesis are not found exclusively in a single source.

It was argued that Kirzner's originality for the theory of entrepreneurship was to bring together the theoretical elements of Mises and Hayek's contributions under the same framework, similar to the mainstream one, although the author recognized different emphases in these theoretical propositions. From the point of view of a theory of the market process, the Kirznerian entrepreneurial activity theory advances in relation to the Misesian and Hayekian approaches when they are taken individually. Kirzner's version is able to explain, at the same time, both the purposeful action and the dissemination of knowledge in the economy through the entrepreneurial function of individuals. All this against the background of a theoretical-analytical economic system such as that used by traditional theory to explain the price system and the market functioning.

The originality of Kirzner's contribution was justified based on the professional engagement stance seen in the author's published works between 1960 and 1973. His theory of entrepreneurship was pointed out as a reflection of the theory of the market process, which was built against a backdrop based on conventional economic theory of prices. This format had the merit of allowing a greater dissemination of Austrian ideas, mainly about entrepreneurial activity, for economists from other areas, as it is founded on the same structure as traditional microeconomics.

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