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Research Article

Israel M. Kirzner and Entrepreneurship in the Context of the Economics Theories of Mises and Hayek

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Abstract

This study examines Israel Kirzner's theory of entrepreneurship within the Austrian School tradition. The author argues that Kirzner's concept of "entrepreneurial alertness" rests on two foundational pillars: Ludwig von Mises's praxeology (human action) and Friedrich Hayek's theory of knowledge (dispersed and imperfect information). Mises provides the universal dimension, alertness as an inherent potential in all purposeful human action, since every acting individual is capable of noticing opportunities. Hayek provides the historical and epistemic framework, where knowledge is incomplete, dispersed, and inconsistent among individuals, which creates market gaps and profit opportunities that make alertness economically meaningful. As a result of this study, an example of an alternative theoretical scheme for entrepreneurship theory has been presented.

Keywords *Israel M. Kirzner, Entrepreneurship, Alertness, Market process, Austrian economics*

JEL Codes *B53, B41, B29*

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Araştırma Makalesi

Mises ve Hayek'in İktisat Teorileri Bağlamında Israel M. Kirzner ve Girişimcilik

Öz

Bu çalışma, Israel Kirzner'in girişimcilik teorisini Avusturya İktisat Okulu geleneği içerisinde incelemektedir. Yazar, Kirzner'in "girişimci uyanıklığı" kavramının iki temel sütun üzerine dayandığını ileri sürmektedir: Ludwig von Mises'in prakseolojisi (insan eylemi) ve Friedrich Hayek'in bilgi teorisi (dağınık ve eksik bilgi). Mises, uyanıklığın tüm amaçlı insan eylemlerinin doğasında bulunan bir potansiyel olduğunu ve eylemde bulunan her bireyin fırsatları fark edebilme kapasitesine sahip bulunduğunu savunarak evrensel boyutu ortaya koymaktadır. Hayek ise bilginin bireyler arasında eksik, dağınık ve tutarsız olduğu tarihsel ve epistemik çerçeveyi sunmaktadır. Bu durum, piyasa boşluklarının ve uyanıklığı ekonomik açıdan anlamlı kılan kâr fırsatlarının ortaya çıkmasına neden olmaktadır. Çalışmanın sonucunda, girişimcilik teorisi için alternatif bir teorik çerçeve örneği sunulmaktadır.

Anahtar Kelimeler: *Israel M. Kirzner, Girişimcilik, Uyanıklık, Piyasa süreci, Avusturya İktisat Okulu*

JEL Kodları: *B53, B41, B29*

1. Introduction

In recent years, the Austrian School of economics, which has become the subject of more comprehensive research, has contributed to the development of economic science through the innovations it has introduced. Carl Menger, the pioneer of the Austrian School tradition, placed the individual at the center of socio-economic phenomena in the 1870s and introduced *subjective value theory* into the field of economics. Subsequently, figures such as Eugen von Böhm-Bawerk and Friedrich von Wieser, toward the end of the nineteenth century, developed the theory of capital and interest and put forward the structure of *roundabout production*. The line of thought represented by Ludwig von Mises and Friedrich August von Hayek, which became particularly prominent between the two world wars and still constitutes the core of Austrian economics today, was further developed through the former's emphasis on *human action* and the latter's discussions of the *theory of knowledge*. However, both the replacement of theoretical contributions by practical solutions during periods of crisis such as the Great Depression of 1929 and the dominance of the English-speaking world diminished the influence of the Austrian School during this period. Nevertheless, the revival of this tradition would begin in the 1970s with Murray Rothbard, Israel Meir Kirzner, and Ludwig Lachmann (Levent, 2024, p. 2). This study examines Kirzner's *theory of entrepreneurship*.

Before proceeding to examine Kirzner's theory of entrepreneurship, a few points must be noted. This study addresses a largely unexplored area, as it engages with Kirzner's theory of entrepreneurship and the two foundational pillars on which it rests: Mises and Hayek. However, in our view, the scope can be expanded not by reducing the theory to history, but through empirical explanations of its conceptual elements. Therefore, the aim of this study is to open up Kirzner's theory of entrepreneurship to historical and institutional contexts in other words, to expand micro-level statements through macroeconomic conditions. Kirzner's concept of entrepreneurial alertness does not hold meaning on its own; it requires certain supporting conditions to be put into practice. This study emphasizes that Kirzner's theory of entrepreneurship must possess both *universal* and *historical* dimensi-

ons, and that one cannot make sense without the other. In other words, *entrepreneurial action* can only be understood through the interplay of socio-economic conditions and subjective-cognitive processes.

2. Literature Background

The factors determining economic growth have been examined throughout history from various perspectives, and entrepreneurship has gradually assumed an increasingly central role among these factors over time. The concept of the entrepreneur was first defined by Richard Cantillon in his work *Essai sur la Nature du Commerce en Général* (1755) as a person engaged in commercial activity in the face of uncertainty under competitive market conditions. Although Adam Smith (1776) did not develop a systematic concept of entrepreneurship in the modern sense, he indirectly addressed entrepreneurship through the figure of the undertaker -the actor who risks capital and organizes the production process. According to Smith, the *division of labor* constitutes the fundamental source of increased productivity. For this reason, innovation is viewed as a result of specialization and capital accumulation rather than the entrepreneur's individual creative intervention. These early definitions of entrepreneurship were later systematically developed by Johann H. von Thünen and Joseph A. Schumpeter in the German tradition; by Alfred Marshall, Frank Knight, and Theodore Schultz in the neoclassical tradition; and by Carl Menger, Ludwig von Mises, and Israel M. Kirzner in the Austrian tradition (Link & Hebert, 1988, p. 41; Wennekers & Thurik, 1999, p. 31). Within this framework, two main approaches to entrepreneurship are advanced in the literature: (1) within the Austrian tradition, entrepreneurial action is explained through the ''low level of perceived uncertainty" and the fact that some individuals recognize opportunities better than others; and (2) in the tradition of Knight (1921) and Schumpeter (1934), it is expressed less in terms of perceiving opportunities than in terms of the individual's "willingness to bear" the uncertainty he or she faces (McMullen and Shepherd, 2006, p. 133).

Recent studies on the Austrian School of economics have been enriched by the extent to which the theoretical paradigm has come to incorporate an empirical transformation (Smith 2023, 502). In this sense, the development of Kirzner's concepts of *entrepreneurship and alertness* has also taken place within this intellectual enrichment. A central point in the study by McMullen and Shepherd is their definition of the first stage of entrepreneurship as attention and third-person opportunity, and the second stage as evaluation and first-person opportunity. Whereas attention and third-person opportunity depend on whether an individual can perceive change in the environment as an opportunity, evaluation and first-person opportunity emphasize the subjective processes that enable the individual to assess these opportunities on his or her own behalf. This important insight of McMullen and Shepherd is significant for the universal and historical dimensions of entrepreneurship that will be discussed in the second section of our study. For although Kirzner, by remaining within the Misesian line, formulates a *theory of entrepreneurship inherent in action*

and thereby universalizes the concept of alertness as a potential present in all individuals, this alone is not sufficient for entrepreneurial action. In addition to individuals being alert to changes in their environment (those in a state of complete ignorance will not be able to proceed to the stage of the subjective evaluation of opportunities), it becomes crucial that these opportunities for change be affirmed in terms of their own subjective perceptions. In other words, the opportunities seen by everyone will not be transformed into entrepreneurial action for everyone.

When another study on the concept of alertness is considered, three complementary conceptualizations are encountered: Alert scanning and search, alert association and connection, and evaluation and judgment. Scanning and search are a cognitive process that evaluates whether new information represents an opportunity by relating pieces of information that were previously unconnected to one another. Association and connection enable the individual to establish original linkages by minimizing multiple alternatives and possibilities. Evaluation and judgment, by contrast, refers to the enactment of decisions regarding a potential profit opportunity after passing through the first two stages. In this final dimension, the authors draw inspiration from the study by McMullen and Shepherd discussed in the previous paragraph. Its importance for our study lies in the fact that the cognitive processes identified in the first two dimensions -gathering information from the environment and relating these pieces of information to one another- can be transformed into entrepreneurship only when combined with the evaluation and judgment presented in the final dimension.

A recent meta-analysis on entrepreneurship has synthesized 125 studies affecting entrepreneurial alertness and has produced a comprehensive result. In this study, no significant relationship was found between entrepreneurial alertness and demographic antecedents such as the age of entrepreneurs or firms. When examined in terms of antecedents associated with personality traits, variables such as education, creativity, entrepreneurial attitude, entrepreneurial experience, entrepreneurial passion, entrepreneurial self-efficacy, networks, openness, prior knowledge, risk-taking, norms, firm size, entrepreneurial intentions, innovativeness, opportunity recognition, and performance were found to be statistically positively related (Araujo et al., 2023).

When the conceptual trajectory of the notion of alertness is examined, the distinction between the *discovery theory of opportunities* and the *creation theory of opportunities* comes to the fore. The discovery theory of opportunities maintains that opportunities emerge as a result of exogenous shocks in existing industries or objective changes in the market (such as price changes that generate opportunities for all actors), and that entrepreneurs differ in their ability to recognize these opportunities. By contrast, the creation theory of opportunities refers to the entrepreneur's assigning new meanings to existing objective features, subjectively interpreting information, and thereby creating an opportunity that did not previously exist (Valliere, 2023, p. 432). Taking this distinction into account, Valliere states that Kirzner defined entrepreneurial alertness merely as ''the ability to notice previously overlooked opportunities without engaging in search" whereas later studies focused on in-

dividuals who pay sufficient attention to what is happening in order to discover the opportunities presented in the world. In this way, the concept of attention was incorporated into the literature. Arguing that the concept of attention can be divided into cognitive capacity and structural influences, Valliere explains the former as individuals' perceiving changes in the external environment in the form of internal dissatisfaction or moral legitimacy, while the latter refers to the informal cultural norms or formal mechanisms that individuals use to direct the allocation of their attention (Valliere, 2023, p. 433). The significance of this distinction for our study lies in the fact that entrepreneurial alertness must now be considered together with internal effects (subjective) and external elements (objective). Indeed, Valliere notes that recent studies employ schemata in order to cope with the volume and complexity of sensory information, and that making sense of the world reduces the burden of attention (Valliere, 2023, p. 433–434).

Another study characterizing perceptions of the individual in relation to entrepreneurial behavior, using GEM (Global Entrepreneurship Monitor) data, constructed three different dependent variables: Nascent entrepreneur (the owner of a new business who has not paid salaries, wages, or any other form of compensation for more than three months), new entrepreneur (the owner of a new business who has paid salaries, wages, or some other form of compensation for no less than three months and no more than forty-two months), and established entrepreneur (the owner of a business who has been paying salaries, wages, or other compensation for more than forty-two months) (Koellinger et al., 2007, p. 506–507). This distinction within entrepreneurial processes is important for differentiating between individuals who are in the process of starting a new business (nascent) and those managing a very young firm (new). Koellinger and his colleagues developed two models for each of the three dependent variables. While the independent variables in the first model included only country of residence, age, income group, education, and current employment status, the independent variables in the second model included all indicators, together with six perceptual variables such as whether individuals believe that they possess the knowledge, skills, and experience necessary to start a business, whether the region in which they live offers good opportunities for starting a business, fear of failure, and expectations of optimism and pessimism. The results of the study revealed a positive correlation between entrepreneurial confidence, the individual's subjective belief that he or she possesses sufficient knowledge and ability for entrepreneurship, and entrepreneurial behavior. Although evolution, history, culture, and the institutional framework contribute to shaping the character of entrepreneurial behavior, entrepreneurial behavior may largely be driven by overconfident self-perceptions, leading individuals to overestimate their abilities and to think in terms of I can. For this reason, individual perceptions of ability and risk may differ from actual ability and risk perceptions (Koellinger et al. 2007, 522). Although the study prepared by Koellinger and his colleagues suggests that different entrepreneurial perceptions may emerge under the same environmental conditions, it also clarifies the inseparable relationship between the cognitive and external conditions of entrepreneurial behavior.

Within this framework, it is also necessary to address Joseph Alois Schumpeter's concept of entrepreneurship, which has frequently been compared in the literature. According to Schumpeter (1937), the entrepreneur embodies the principle of *creative destruction* which involves the creation of new products, new production techniques and new markets. As Munyo and Veiga (2022) emphasize, Schumpeter was the first thinker to argue that economic development is an endogenous process generated by entrepreneurial activity. Schumpeter identified entrepreneurship with innovation, defining only those who bring about innovation as true entrepreneurs. The entrepreneur/innovator is the primary agent of economic change and the architect of the process of creative destruction. Therefore, by introducing innovations that transform the existing economic equilibrium, the entrepreneur generates new profit opportunities and, consequently, economic growth (Munyo & Veiga, 2022).

Considering the differences arising from the theories of Kirzner and Schumpeter, emerges between Schumpeter's depiction of *creative destruction* and Kirzner's concept of *alertness*. While in Schumpeter's view the entrepreneur is an innovative individual, in Kirzner's view, entrepreneurial activity is carried out by the person who recognizes existing price differences before others do. In other words, he defined the entrepreneur more clearly as an actor who recognizes the changing prices and profit opportunities inherent in the nature of the competitive market process. Believing that his own concept of the entrepreneur has been misunderstood, Kirzner states that he does not deny the boldness, creativity, and innovativeness found in Schumpeterian entrepreneurship (Kirzner, 2009, p. 9). In addition, he argues that the development of new inventions is a supportive element that advances capitalism in the Schumpeterian manner. However, he also maintains that not every element that supports capitalism necessarily takes the form of creative innovations, it may also proceed through the recognition of profit opportunities within existing enterprises (Kirzner, 2009, p. 6–7). According to Kirzner, the fundamental difference between the two entrepreneurs is that Schumpeterian entrepreneurship generates a disequilibrating creativity not in the given world, but in a different world that it creates. By contrast, his own understanding of entrepreneurship operates within a framework of alertness that follows the process of equilibration (Kirzner, 2009, p. 3). Ultimately, Kirzner argued that the concept of alertness could even encompass Schumpeterian creativity insofar as it may serve as the sole explanation for all market dynamism.

The concept of entrepreneurship theoretically advanced by Kirzner, together with its fundamental building block, alertness, has, when examined in the relevant literature, been approached from a historical perspective. In other words, whereas in earlier studies the concept of alertness was treated primarily in the Kirznerian sense as the recognition of profit opportunities and price changes in the environment, in later studies it came to manifest itself not as a passive alertness to environmental changes, but rather as the environmental identification of opportunities and the establishment of connections among creative relationships. This shift from the earlier Kirznerian perspective can be defined in

terms of entrepreneurs being understood not as *pure entrepreneurs* who act immediately in the face of new opportunities, but as actors who make evaluations regarding opportunities and possess a structure capable of developing over time (Tang et al., 2012, p. 8). Accordingly, this study seeks to render Kirzner's concept of entrepreneurship intelligible within the market process and then to discuss its universal and historical dimensions on the basis of Mises's theory of action and Hayek's knowledge-based approach. At the end of the discussion, an example concerning the theoretical framework of entrepreneurship will be presented.

In the first section of the study (2), the transition from the static structure of neoclassical economics to the dynamic structure of the Austrian School of economics will be presented. The main emphasis here is that Austrian economics focuses not on the point of equilibrium itself, but on the role of knowledge and time in the process leading up to equilibrium. In the second section (3), an attempt will be made to show how Kirzner's concept of entrepreneurship develops along the Misesian and Hayekian line. In this way, the study's central claim concerning the universal and historical dimensions of entrepreneurship will be discussed. In the third section (4), an illustrative framework concerning the theory of entrepreneurship as interpreted through the Mises–Hayek line will be presented.

3. Market Process and Concepts of Competition

In this section, the basic assumptions of neoclassical economics will first be addressed conceptually, and it will be emphasized that they rest on a static understanding detached from action (praxis) and the process of knowledge. Then, the concepts of market process and competition will be discussed specifically within the framework of Austrian economics -particularly through the thought of Mises and Hayek. In this way, the fundamental bases of Kirzner's concept of entrepreneurship, which will be examined in the following section, will be presented.

Neoclassical economics generally rests on three fundamental assumptions: (1) methodological individualism, (2) methodological instrumentalism, and (3) methodological equilibrium (Arnsperger and Varoufakis, 2006). *Methodological individualism* holds that the socio-economic phenomena under examination should be analyzed at the level of the individual. Although a more advanced version of this assumption is methodological subjectivism, it differs from methodological individualism. For placing the individual at the center of social and economic processes is not the same as grounding these processes in individuals' subjective perceptions. The second assumption, *methodological instrumentalism* states that individuals have certain ends (utility and profit maximization) and that the most appropriate means (expenditure and cost minimization) should be employed to achieve these ends. This assumption treats individuals as possessing a given preference basket and proceeds through a process of maximization. Finally, *methodological equilibrium* seeks to bring into balance, through the market mechanism -prices- the given preference sets of individuals placed at the center of social and economic phenomena. The validity of

these assumptions has been supported by the homogeneity of all goods and by individuals' possession of perfect information. Accordingly, the stability of preferences (given objectives), the assumption that the sole motive is the maximization of utility and profit, and the equilibrium model in which supply and demand are equalized constitute the fundamental tenets of neoclassical economics (Fine, 2017, p. 41). In this way, consumer -demand- and producer -supply- theories have become the basic principles taught in all textbooks, complementing one another and even being used in place of one another.

These assumptions of neoclassical economics reduce human beings to a given basket of preferences, thereby removing them from the process of thought and action. When the homogeneity of goods and the assumption of perfect information are added to the given nature of the order of preferences regarding the satisfaction of individual needs, neoclassical economics' market structure perfect competition emerges. According to neoclassical economics, perfect competition is thus defined as the point where prices reach equilibrium in the most efficient manner. However, the *market process* will point to an area where individuals change their behavior over time through the acquisition of information (Oğuz, 2001, p. 75). Thus, economics will transform from a *static* field where everything is known in advance into an unknowable -yet predictable- *dynamic* process. Individual behavior will change depending on both time and the behavior of other individuals. Furthermore, individuals will gain new experiences as a result of market behavior and learn from them. Consequently, dynamism emerged as a result of the development of the concepts of *information and time* in contrast to the static nature of neoclassical economics. From the perspective of economists, the focus has shifted from the equilibrium point of neoclassical economics to the process leading up to equilibrium. At this point, before addressing Israel M. Kirzner's concept of entrepreneurship, we will examine what Hayek and Mises have said, respectively, about the roles of knowledge and time. This will shed light on the two foundational pillars upon which Kirzner built his theory.

3.1. Praxeology and Theory of Knowledge

Hayek first drew a distinction between the social sciences and the natural sciences, thereby dividing knowledge into objective and subjective knowledge (Hayek, 1945, p. 521). The subjective knowledge that emerges within the social sciences arises based on the individual perceptions of individual subjects. Objective knowledge, on the other hand, corresponds to the objective facts defined by the natural sciences (Hayek, 1979, p. 27). Emphasizing the role of subjective knowledge which encompasses the conscious activities of human action between these two types of knowledge, Hayek brings practical knowledge to the forefront. However, he states that this type of knowledge is not complete but rather incomplete, dispersed and inconsistent among individuals (Hayek 1979, 29). For Hayek, the fundamental issue here is how the "social integration of knowledge dispersed among individuals" can be achieved. In other words, it is the problem of utilizing knowledge that no one possesses as a whole (Oğuz, 1999, p. 97). At the same time, the coordination of individual behaviors emerging over time within the market process must ensure the alig-

nment of future expectations. According to Hayek, neoclassical economics has resolved this through *pure equilibrium analysis*. Pure equilibrium analysis reduces the society's data (datum) to the individual's data (data), presenting a specific scenario where the society's plan aligns with the individual's plan (Hayek, 1937, p. 36). As mentioned in the preceding paragraphs, treating the individual as a given preference basket and assuming they possess perfect information would, according to Hayek, lead to pure equilibrium analysis. However, with his discovery of the role of information, Hayek redefined equilibrium as the mutual consistency of expectations and plans.

Hayek argued that neoclassical economics found a solution to the problem of the disorder of knowledge through its pure equilibrium analysis. His own solution to this problem was that everyday/practical knowledge must converge toward common expectations. In other words, the harmony among minds in the face of differing sensory experiences will emerge through the classification or conceptual systems attributed to external stimuli (Hayek, 1979, p. 29). This situation points to a conceptual system that, while imbued with different meanings by various modes of mental perception, intersects within a shared spectrum of perception. According to Hayek, the conceptual system that coordinates human activities is price (Hayek, 1945, p. 526). Prices will possess much of the necessary information without requiring details of others' perceptions. However, the role of prices will emerge not within the optimality of a specific time frame but within the dynamism of adapting to change. Hayek's analysis does not imply either the homogeneity of goods or that individuals possess perfect information. According to him, as a result of the practical knowledge individuals acquire through their subjective perceptions, classes with similar plans and expectations will emerge. Thus, individuals with similar expectations will ascribe common conceptual systems to one another. In other words, subjective perceptions will give rise to concepts and behavioral patterns corresponding to common expectations through market prices. In this sense, the concept of competition will not refer to a given state, as in neoclassical economics, but to a dynamic process in which each individual's subjective perceptions are transmitted to the market through competition and expectations are reconstituted.

For Mises, economics was a subfield of *praxeology*. Praxeology asserts that individuals have specific ends and that the best means must be employed to achieve these ends. In this sense, human action is conscious and purposeful behavior (Mises, 1998, p. 13). The prerequisites for action are in order, a state of dissatisfaction and uneasiness, *the desire to alleviate that dissatisfaction*, and the power and conditions necessary to fulfill that desire (Mises, 1998, p. 15–16). According to Mises, the motive that drives human action is dissatisfaction or deficiency. Otherwise, if individuals were in a complete or perfect state, they would have no motive to act. The state of dissatisfaction will trigger individuals' desires and beliefs aimed at resolving this situation. In other words, ends serve as an element that alleviates the perceived dissatisfaction. However, the existence of power and conditions is necessary for this element to alleviate the perceived dissatisfaction. This statement implies that the means to achieve the ends aimed at resolving the state of dissatisfaction must be

available. Consequently, individuals will move from the realm of thought to the realm of action, operating within a framework of mutual reconciliation.

Following these brief explanations of Mises's theory of praxeology, it is necessary to address the relationship between action and the element of *time*. It is action that gives humans the concept of time and makes them aware of the passage of time (Mises, 1998, p. 100). While action is related to process, it cannot be the subject of a static analysis. Depending on this, the issue of *uncertainty* will also arise from the relationship between action and time. In a situation where there is no uncertainty, just as in neoclassical economics' assumption of perfect information, action will not occur. Thus, action refers to a situation where the most appropriate plans are determined (the specification of ends), yet the outcome at the moment of implementation (the use of means) cannot be precisely predicted (Tang et al., 2021, p. 11–12). In this sense, according to Mises, entrepreneurship should be discussed within the context of individual behavior that engages in action under conditions of uncertainty arising over time. According to him, regarding changes occurring in the market process, the entrepreneur assumes uncertainty by speculating on unknown future conditions (Bylund, 2020, p. 358). Therefore, his success or failure depends on the accuracy of predicting uncertain events (Mises, 1998, p. 288). However, in Mises's framework, entrepreneurship is linked to capital ownership but is treated as *capitalist-entrepreneurship*. In this sense, entrepreneurship is the function of determining the use of production factors and directing resources (Horwitz, 2019, p. 25). The connection between entrepreneurship and property in Mises's work emphasizes that only property owners can bear uncertainty and that *pure entrepreneurship* poses a contradiction for the real market (Salerno, 2008, p. 193). In contrast, Kirzner's concept of entrepreneurship, which will be discussed in the next section, points to a model of *pure alertness* that involves no opportunity cost.

As previously noted, both Hayek's theory of knowledge and Mises's theory of action focus on the process leading up to equilibrium rather than the equilibrium point itself. Hayek, seeking to overcome the lack of knowledge in individuals' economic activities, emphasized the alignment of everyday knowledge with common expectations. In this sense, instead of the neoclassical assumption of perfect information, he introduced the concept of individuals engaging in discovery to achieve specific ends in the market process. When it comes to Mises, the discussion centers on behaviors determined within uncertainty as a result of the relationship between action and time. The need for means to achieve ends formed by dissatisfaction paved the way for the transition from a static human structure to a dynamic competitive process. In other words, action will signify a constantly changing and renewing state within the market process, as opposed to a given, static analysis. Thus, the capitalist-entrepreneur is defined as a speculator who recognizes this change, restricts current consumption, and assumes risk by utilizing these monetary savings (Rothbard, 2023, p. 278). The next section will address Kirzner's concept of entrepreneurship, which draws upon both Hayek's theory of knowledge and Mises's analysis of the relationship between action and time.

4. The Universal and Historical Dimensions of Entrepreneurship in Kirzner

In this section, before addressing Kirzner's conception of entrepreneurship, we will first examine how he proceeds by centering Mises's view of praxeology and Hayek's theory of knowledge. We will then discuss the relationship between entrepreneurship and the market process. While Mises's conception of purposeful human action points to a universal dimension in the sense that alertness can potentially be found in every individual, Hayek's knowledge problem reveals that this potential is shaped through historical and institutional elements such as institutions, trust relations, predictability, capital accumulation, experience, education, social networks, state infrastructure, and market conditions. In this way, the universal and historical dimensions of entrepreneurship, as implied by the title, will become clear.

Kirzner's conception of entrepreneurship is not limited to a description of individuals who identify profit opportunities in the market process. This approach is rooted more deeply in Mises's praxeology and Hayek's theory of knowledge. On the one hand, the theory of praxeology grounds entrepreneurship in action, thereby making it universal; on the other hand, the theory of knowledge explains how entrepreneurship proceeds within a process of dispersed information and market disequilibrium. Thus, in Kirzner's framework, entrepreneurship is linked both to a universal dimension derived from the general logic of human action and to a historical framework determined by epistemic conditions.

According to Kirzner, subjectivism did not fully emerge with Menger (Kirzner, 2001, p. 121). This is because Menger's price theory is based on perfect knowledge and given individual needs (Kirzner, 2003, p. 48). Menger's (2009, p. 29) statement that ''individual needs arise from drives and our drives are embedded in nature" indeed corresponds to Kirzner's (2001, p. 71) assertion of ''the validity of facts independent of human will." Characterizing this perspective as static subjectivism, Kirzner argues that individuals will transform into automatic machines without transitioning through expectations and preferences. According to Kirzner, the economizing man will act within the framework of perfect information and given decisions. However, the static worldview does not provide a suitable foundation for the entrepreneurial discovery that Kirzner would later articulate. This is because the given purposeful arrangements already predetermine the choices to be made. In this sense, the first choice process will be expanded by Hayek's contributions regarding knowledge and learning, while the second choice process will be expanded by Mises's dynamics of human action (Kirzner, 2001, p. 129).

Static subjectivism does not provide a sufficient foundation for the emergence of Kirzner's concept of entrepreneurship. Similarly, when examining the price-quantity relationship in neoclassical economics, the allocation of resources within the optimality of the equilibrium point is already taken into account. However, during moments of disequilibrium, the interaction of individual decisions regarding price and quantity on the market and the extent to which this interaction can be successful is more important (Kirzner, 1973,

p. 6–7). By placing the process rather than equilibrium, and imperfect information rather than perfect information at the center, Kirzner has made the entrepreneur the fundamental element that facilitates market coordination. In this sense, the concept of competition has also transformed unlike neoclassical perfect competition into a space where market actors align their plans with one another and where competitors constantly test one another. For if no one offered more attractive opportunities than others and all decisions were in harmony with one another, competition would not function as an active force; the market process would cease, and competition would vanish (Kirzner, 1973, p. 13). Thus, the concepts of the market process and competition have been redefined and have formed an inseparable structure.

4.1. Entrepreneurial Alertness and Entrepreneurial Action

Kirzner's concept of entrepreneurship becomes clear when considered alongside the theory of *dynamic subjectivism* that developed within the Mises-Hayek framework and the redefinition of the concepts of the market process and competition. As mentioned in the previous section, according to Mises, human action is purposeful and employs means to achieve those ends. Mises argues that economic life consists of interacting agents and involves the dimension of time. In this sense, while static subjectivism emphasizes the given purposeful sequence, dynamic subjectivism emphasizes that the purposeful sequence cannot be predicted in advance and that alternative futures can be created. In this process, Mises portrays an entrepreneurial speculator who anticipates consumer demands better than others. Kirzner, following in Mises's footsteps, remained faithful to the view that entrepreneurship serves as the driving force of the market process due to its inherently speculative and uncertain nature (Bylund, 2020, p. 356). Kirzner approached the concept of entrepreneurship not as a distinctive quality of a specific group or class, but as a universal and omnipresent function (Boettke and Coynes, 2003, p. 23). Thus, entrepreneurship is inherent in action. This conclusion will form the foundation of the concept of alertness in Kirzner's theory of entrepreneurship. It will also highlight the universal dimension of the concept of entrepreneurship.

According to Kirzner, the competitive market process is, in fact, entrepreneurial. The entrepreneur, by the very nature of the competitive market process, is aware of changing prices and profit opportunities (Kirzner, 1973, p. 15-17). In response to a lack of coordination, entrepreneurial individuals will, through alertness, perceive and evaluate opportunities that others cannot see (Oğuz, 2001, p. 80). However, before moving on to the discovery process, it is necessary to emphasize how the concept of pure entrepreneurship is illuminated within Mises's theory of human action. If Kirzner emphasizes the concept of entrepreneurship as an inevitable aspect of human action, then entrepreneurship also has a universal dimension, which lies in the concept of alertness. Kirzner (2009) states that he seeks to articulate the purest form of entrepreneurship and that this encompasses all other theories of entrepreneurship (Schumpeter foremost among them). Therefore, what is universal is the potential for entrepreneurial alertness, which exists as a latent capaci-

ty in every human being. This potential corresponds not to a type corresponding to any historical condition, but to the acting man. Consequently, according to Kirzner, the pure entrepreneur also points to a direction where there is no opportunity cost (Cengiz, 2018, p. 24). No actor requires any specific asset to participate in the market; it is sufficient for them to know the price at which consumers can purchase goods and the source and price from which production factors can be acquired (Kirzner, 1973, p. 19). This process will facilitate the transformation of the potential entrepreneurial acumen possessed by every actor in the market into entrepreneurial action that identifies opportunities.

Mises's praxeological approach makes it possible to understand entrepreneurship as a universal dimension of human action. In Hayek, as mentioned earlier, the fact that knowledge is incomplete, dispersed, and inconsistent enables the entrepreneur to recognize information asymmetries in the market and discover opportunities that others have not yet seen. Consequently, Hayek's problem of knowledge demonstrates that the market process must be understood as a process of discovery and learning, rather than a static equilibrium mechanism. Thus, the problem of knowledge will serve as the driving force behind pure entrepreneurial acumen, rendering it functional. In other words, Kirzner's concept of the entrepreneur as inherent in action will be integrated with Hayek's conceptualizations of market competition and the continuously evolving processes of discovery and learning (Foss and Klein, 2009, p. 2). Through the exercise of alertness in a competitive market, entrepreneurial discoveries will emerge. In Hayek, the question of ''why coordination is necessary" transforms into the question of ''how coordination proceeds" in Kirzner. Therefore, the dynamic efficiency of the market economy will be realized through the entrepreneurial discovery process, which directs the coordinated tendency of individual actions (Espinosa et al., 2020, p. 296).

These approaches demonstrate that opportunities do not exist objectively for everyone, but can vary subjectively depending on individuals' knowledge and experience. Furthermore, the fact that entrepreneurial alertness manifests differently in each individual's actions in addition to its universal dimension also reveals that it is a capacity that can be learned and developed. Conceptually, innate entrepreneurial alertness can only be transformed into an individual ability through prior knowledge, industry experience, education, and social interaction. In short, Kirzner's concept of entrepreneurial alertness exists as an inherent potential within human action, enabling the recognition of opportunities arising from the dispersed nature of information and transforming them into entrepreneurial action.

5. An Example of a Theoretical Framework of Entrepreneurship

Kirzner's explanation of the concept of entrepreneurship within the Mises-Hayek tradition can be better illustrated with the help of a schematic example. This will clarify the distinction between entrepreneurial alertness and entrepreneurial action.

In studies incorporating the schema, the conceptualizations that have emerged have primarily been defined in terms of entrepreneurial framework conditions, individual attributes, attention, opportunities, capability, intention, and activity. A key point is that entrepreneurial framework conditions are mutually determined by national framework conditions, and both are shaped by social, cultural, economic, and political institutional framework conditions. This is because individuals are born into a world with pre-existing institutional ties (Hodgson, 2006, p. 7). However, institutions stem both from objective structures located out there and from subjective will residing in the human mind (Hodgson, 2006, p. 8). Therefore, all stages of entrepreneurial decisions will be mutually determined by the conditions of the historical-institutional legacy.

Another key point that emerges in entrepreneurial decision-making is that cognitive psychologists emphasize cognitive frameworks rather than individual traits (Baron, 2006, p. 112). The effort to explain entrepreneurial action through cognitive characteristics seeks to provide an explanatory answer to questions such as ''Why do some people become entrepreneurs while others do not?" ''Why do some people notice opportunities while others do not?" and ''Why are some entrepreneurs more successful than others?" The answers sought to these questions are explained through cognitive processes such as prospect theory, signal detection theory, regulatory focus theory, or counterfactual thinking (Baron, 2004, p. 237). Similarly, personality traits and social networks that trigger entrepreneurial alertness also play a significant role. Among personality traits, creativity and optimism have been considered; among social networks, elements such as weak ties, action set, partnership, and inner circle have been considering (Ardichvili et al., 2003, p. 118). Gaglio and Katz (2001) on the other hand, conceptualize Kirznerian entrepreneurial alertness as a cognitive schema that guides opportunity identification rather than information seeking. According to the authors, alert individuals are more sensitive to signals of market disequilibrium, more resistant to framing effects, more oriented toward objective truth, and more inclined to see the profit potential of events by breaking the existing means-ends framework.

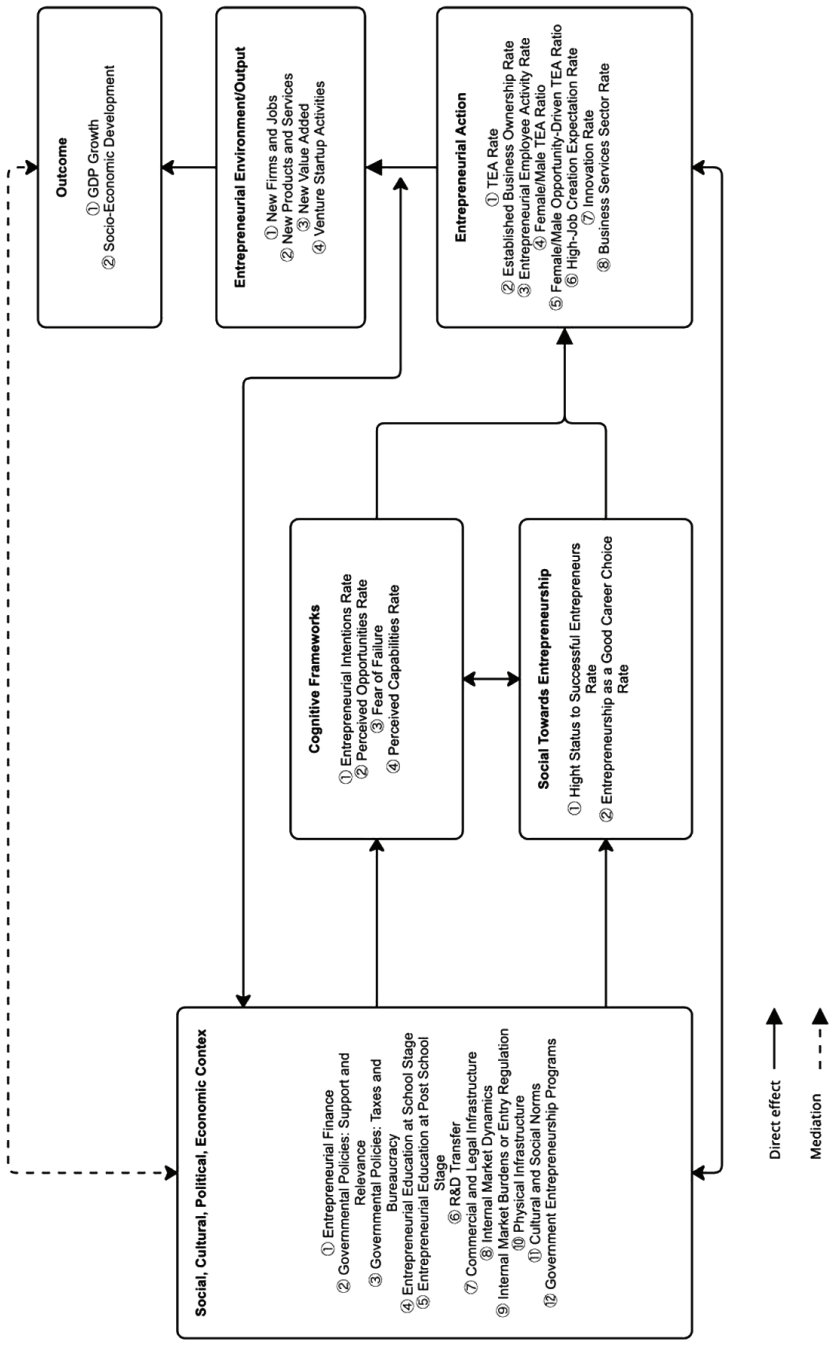
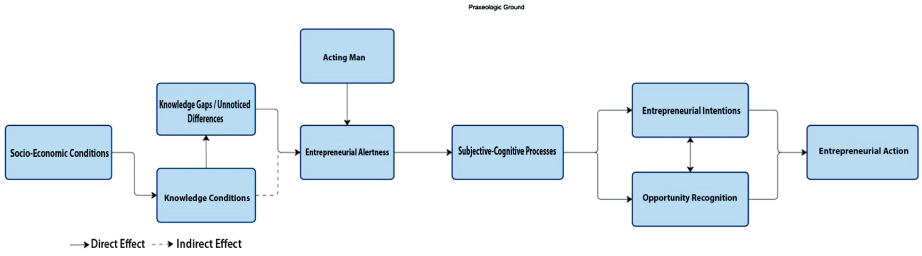


Figure 1. GEM conceptual framework

Source: *GEM 2015/2016 Global Report*

As a given in Table 1, for studies on entrepreneurship frameworks, the Global Entrepreneurship Monitor (GEM) provides a significant empirical dataset regarding both the framework conditions for entrepreneurship and entrepreneurial behavior and attitudes. Many authors who have recently studied entrepreneurship have attempted to classify the datasets included in the GEM under the concepts mentioned in the preceding paragraphs (Levie and Autio 2008; Bosma and Levie 2010; Ramos-Rodríguez et al., 2015). Additionally, in the 2011–2014 version of the GEM project, concepts such as basic requirements (e.g., healthcare and secondary education), efficiency enhancers (e.g., higher education and technological readiness), and innovation were incorporated. In addition to these, the impact of employee entrepreneurial activity within established firms has been included to facilitate a comparison between firms and the entrepreneurial profile. In the conceptual framework after 2015, social values toward entrepreneurship and individual attributes shaped by psychological, demographic, and motivational factors have also been included. All the explanations listed in both the previous paragraphs and this paragraph influence entrepreneurial activity. The variables constituting entrepreneurial activity, as mentioned in the introduction, are categorized as nascent, new, and established according to organizational life stages. In terms of activity type, these include high-growth, innovative, and internationalization; while in terms of sectors of activity, they are specified as total early-stage entrepreneurial activity. Consequently, both the socio-cultural environment in which entrepreneurial framework conditions and national framework conditions are determined, as well as the entrepreneur's individual or cognitive characteristics, will influence the positive or negative outcomes of entrepreneurial activities. At the end of all these processes, entrepreneurial output and socio-economic development output will emerge.

Table 2. Theoretical conceptual model of entrepreneurship



In this study, as presented Table 2, an illustrative schema has been proposed by considering the Misesian and Hayekian foundations upon which Kirzner's concept of entrepreneurship is based. The ontological foundation of this illustrative schema is constituted by Mises's concept of purposive action. This concept indicates that purposiveness a capacity common to all human beings possesses the potential for entrepreneurial alertness. Because humans are acting beings, they possess the potential to direct themselves toward as-yet-unrecognized possibilities. The acting human is born into socio-economic historical conditions and is shaped by the institutions within which they exist. At this point,

Hayekian conditions of knowledge take on great importance. This is because the incomplete, dispersed and inconsistent nature of knowledge serves as a functional catalyst for alertness. However, this statement should be understood not as the cause of the emergence of entrepreneurial alertness, but as what renders it economically meaningful and functional. Knowledge conditions are not the ontological cause of alertness. The ontological foundation of alertness is Misesian human action. However, Hayekian dispersed, incomplete, and inconsistent knowledge conditions are what render this alertness economically meaningful. In other words, the problem of knowledge creates a structure of gaps, while alertness establishes the capacity for economic vision within these gaps. Even if an individual possesses knowledge about certain facts, they may not realize what opportunities this knowledge presents under current conditions. For this reason, the diagram emphasizes the indirect influence between the conditions of knowledge and alertness. *Information-knowledge* refers to information that an individual possesses but which has not yet guided their actions; *action-knowledge* on the other hand, refers to the process of grasping the opportunity inherent in that information and translating it into action. According to Kirzner (2005), entrepreneurial alertness is the fundamental mechanism that facilitates the transition between these two levels of knowledge. In short, the universal capacity of the acting individual in Mises, when confronted with the dispersed and incomplete nature of information in Hayek, makes Kirznerian entrepreneurial acumen possible. This alertness, in turn, facilitates the recognition of opportunities and the formation of entrepreneurial intent through subjective-cognitive processes. This constitutes not so much a condition that drives the entrepreneur into action as the final condition of the mental process. At the end of the process, entrepreneurial alertness will be shaped by subjective-cognitive processes, and entrepreneurial action will emerge. Attention must be paid to the importance of human action within the ontological structure of this entire process, and to socio-economic and informational conditions within its historical context. Consequently, the gaps arising from the incomplete, dispersed and inconsistent nature of knowledge produce differences and imbalances that have not yet been recognized. Entrepreneurial alertness refers to sensitivity to these gaps within the framework of existing informational conditions. For this reason, alertness involves not merely an extension of the existing stock of knowledge but also considering the differences arising from the problem of knowledge. Thus, entrepreneurial alertness is a specific form of perception oriented toward opportunity differences within the dispersed world of knowledge, shaped by human action on a praxeological foundation.

The enrichment of the Austrian School of Economics through empirical transformation serves as a supporting element for the theoretical-empirical (universal-historical) approach that motivates this study. On the one hand, the tendency of theoretical approaches to remain at the micro level and to become abstracted from the real world, and on the other hand, the submersion of fields whose theoretical foundations have been neglected under purely empirical analyses, do not reflect the purpose of this study. It is for this reason that the main conclusion of the study is that Kirzner's abstract and individualist perspective

on entrepreneurship theory -that is, pure entrepreneurship- must be evaluated within the historical and institutional domain. Thus, the socio-economic conditions encompassing formal and informal institutions presented in Table 2 will constitute -in terms of historical process- the foundation of the concept of alertness. This is because the universality claim of alertness as presented in the study refers to the potential capacity to orient oneself toward opportunities in human action, not to the assumption that everyone is equally alert. In connection with this, entrepreneurship does not operate as a self-regulating order; rather, it requires substantial capital, specialized equipment, intellectual property, technical infrastructure, and often years of research and development. Moreover, entrepreneurship is shaped by broader conditions such as macroeconomic circumstances, industrial policy, labor markets, supply chains, and global competition. Likewise, Table 2 illustrates that even when socio-economic macro-level influences sufficiently activate entrepreneurial alertness, it cannot be transformed into entrepreneurial intentions or opportunity recognition without the supporting force of subjective-cognitive processes. For instance, fear of failure, the status value attributed to certain professions, or motivational factors shape the formation of entrepreneurial intention. The transformation of intentions into action, in turn, will give rise to entrepreneurship determined within a conjuncture of both historical-institutional and cognitive dimensions.

The schema presented in Table 2 is supported by studies examining the historical and institutional dimensions of entrepreneurship. Van Stel et al. (2005) demonstrated that the impact of entrepreneurial activity on economic growth varies according to countries' income levels, showing that TEA (total early-stage entrepreneurial activity) positively and significantly affects growth in wealthy countries while it can produce negative outcomes in poor countries. Complementing this finding, Valliere and Peterson (2009) stated that the contribution of high-growth-expectation entrepreneurs to economic growth only becomes evident in economies with advanced knowledge infrastructure and strong institutional structures. Similarly, Khyareh and Amini (2021) noted that opportunity-based entrepreneurship supports growth particularly in innovation-driven economies, whereas necessity entrepreneurship can have adverse effects on growth in factor- and efficiency-driven countries. Tran et al. (2025) demonstrated through the case of Vietnam that the contribution of entrepreneurship to growth does not emerge spontaneously but depends on the presence of complementary institutional conditions such as transparency, business support services, and a qualified workforce. Likewise, the empirical study titled "Entrepreneurial Action and Economic Growth: Causal Evidence Across Income Groups" (title subject to change), co-authored by us and planned for publication in the near future, also supports this distinction. In the analysis conducted on countries divided into three income groups, TEA is insignificant in the low-income group, significant at the 10% level in the middle-income group, and significant at the 5% level in the high-income group. These results indicate that capital-intensive countries such as Northern Europe and the United States offer a more favorable ground for the emergence of entrepreneurial opportunities and the development of entrepreneurial alertness toward these opportunities compared to

South Africa and South America. As also observed in empirical studies, entrepreneurial action emerges not solely as a result of changes in the market environment but through a supported institutional framework.

6. Conclusion

This study argues that Kirzner's *theory of entrepreneurship* can only be understood when the universal dimension of human action and the historical conditions of its realization are considered together. A review of recent studies on Kirzner's concept of alertness reveals that this analytical distinction must be addressed from a conciliatory perspective. This is because early Kirznerian entrepreneurial alertness posited that everyone possesses equal inclinations in the face of changing opportunities, whereas later studies demonstrate that not every profit opportunity translates into entrepreneurial action. The conclusion reached in this study is that a) alertness and action alone are insufficient to explain entrepreneurial theory, b) entrepreneurial behavior is shaped by both subjective perceptions and external conditions. Therefore, Kirzner's theory of entrepreneurship should be understood not merely as a passive alertness that discovers opportunities, but as the transformation of this alertness into entrepreneurial action within the context of subjective evaluation processes and historical conditions. In this study, the universal aspect of Kirzner's theory of entrepreneurship is examined through the concept of action-embedded alertness, while its historical aspect is addressed through dispersed information, institutional context, and the dynamic market process. Consequently, Kirzner's concept of entrepreneurship only gains meaningful context within a deep analysis of the theories of Mises and Hayek.

One of the study's original contributions is its attempt to systematically illustrate these relationships through a theoretical framework. In the proposed framework, Mises's concept of purposeful human action serves as the ontological foundation of entrepreneurial alertness, while Hayek's understanding of dispersed and imperfect information is treated as the epistemic framework within which this alertness becomes operational. Accordingly, entrepreneurial alertness is not a self-contained entrepreneurial behavior in and of itself, but rather a capacity that can transform into entrepreneurial intent and action only when combined with cognitive, institutional, and historical processes. For this reason, the theoretical schema offers an explanatory model that allows for the simultaneous consideration of the universal and historical dimensions of Kirznerian entrepreneurship.

However, this study has certain limitations. First, despite the empirical literature mentioned in the introduction, the study has remained largely theoretical in scope. However, the fact that existing empirical studies on the measurement of *entrepreneurial alertness* contain conceptual and methodological inconsistencies underscores the need for theoretical clarification. In other words, the rapid increase in empirical studies, particularly between 2005 and 2020, has led to certain issues regarding the clarity of the concept of alertness. Furthermore, inconsistencies have begun to emerge among findings due to the use of different scales and conceptual formulations. Moreover, the integration of applied studies

on digital transformation into entrepreneurial alertness has further complicated matters. The reason for the measurement problem lies in the lack of available data due to the theory's origins in the individual or micro-level, coupled with the fact that many studies rely on survey-based methodologies. The second limitation is that the theoretical framework example presented in the final section is open to interpretation in different ways by various disciplines. In particular, whether the relationship between entrepreneurial intent and opportunity recognition should be established as mutual or linear-causal remains an open area for discussion in future studies.

In conclusion, the main point this study seeks to emphasize is the identification of the ontological and epistemological limits of the Kirznerian approach within the Mises-Hayek tradition, and, consequently, the establishment of a universally valid scale for the concept of alertness. In this regard, entrepreneurship should not be viewed merely as the discovery of opportunities nor solely as a product of external conditions. Entrepreneurship is the concrete manifestation of the universal discovery potential (alertness) of human action under the conditions of historical knowledge and institutions. For this reason, while remaining within a theoretical framework, this study seeks to clarify the intellectual foundations upon which Kirzner's concept of alertness is based.

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